THE IMPACT OF INTERNATIONAL FINANCIAL REPORTING STANDARD (IFRS) ADOPTION ON KEY FINANCIAL RATIOS – EVIDENCE FROM THE UK

Master’s Thesis

Aarhus School of Business

M. Sc. in Finance and International Business

Author: Pawel Punda (ID: pp88092)

Academic Advisor: Assistant Professor Dr. rer. pol. Rainer Lueg

June 2011
# List of Contents

Abstract ........................................................................................................................................... 3

1. Introduction.................................................................................................................................. 3

2. The impact of IFRS Adoption on Accounting Figures ................................................................. 7

   2.1. International Accounting Differences .................................................................................. 10

   2.2.1. Origin of National Differences ....................................................................................... 12

   2.2.2. Differences in Accounting System ................................................................................ 16

   2.2.3. Characteristics and Differences in National GAAP ....................................................... 17

   2.2. The Process of Harmonization ............................................................................................. 21

   2.3. The Differences between IFRS and UK GAAP Practices .................................................... 27

   2.4. Impact of IFRS adoption on accounting figures in UK ....................................................... 43

3. Research method, design and data ................................................................................................. 45

   3.1. Research method and design. ............................................................................................... 45

   3.2. Data ..................................................................................................................................... 46

4. Results ......................................................................................................................................... 53

   4.1. Differences between the UK-based and IFRS-based financial ratios.................................... 53

   4.2. Explaining the differences in financial ratios by financial statement items. .................... 54

   4.3. An Index of Conservatism .................................................................................................... 61

5. Summary and Conclusion ............................................................................................................ 65

References ......................................................................................................................................... 67

List of Tables .................................................................................................................................... 70
Abstract

Several researchers have investigated the economic consequences of an adoption of International Financial Reporting Standards (IFRS) (Lantto and Sahltström, 2009; Aisbitt 2006; Dunne et al., 2008; Ding et al., 2007; Clarkson et al. 2010; Goodwin et al. 2008). However, there is only scarce evidence how this mandatory adoption affected the company’s financial statement items. Building on Lantto and Sahltström’s (2009) evidence from code law regimes (Finland), this study examines the impact of IFRS adoption on key financial ratios under common law regimes for entities listed in the UK. The study contributes two novel insights to the debate: First, despite the fact that IFRS and UK GAAP are similarly shareholder-oriented – conversion from UK GAAP to IFRS leads to substantial differences in key financial ratios. Second, these differences in the UK are mostly driven by increase in net profit and current liabilities as well as decrease in equity. The same drivers of changes in key financial ratios cause the differences under code law in Finland (Lantto and Sahltström, 2009).

1. Introduction

From the 1st of January 2005 all UK listed firms (generally all EU listed companies) were obligated to adopt a more market-oriented International Financial Reporting Standards (IFRS). Despite the fact that, The International Accounting Standards Board (IASB) has been committed to working towards converging different accounting standards worldwide, we can still notice some differences between Domestic Accounting Standards (DAS) and IFRS. IFRS is shareholder-oriented and promote the fair value approach presentation by incorporating more information into the financial statements (Dunne et al. 2008). According to many recent papers, there is no doubt that IFRS adoption includes many benefits, instance g., higher comparability of financial statements among companies operating in different jurisdictions, lower transaction costs, access to international capital through facilitated cross-border listings, and greater international investment (Dunne et al., 2008; Aharony et al., 2010). Moreover, Barth et al. (2006) provide evidence that IFRS convey new information to the market. This assists investors in making informed decisions, predictions of a firm’s future financial performance and signal higher accounting quality through transparency. Therefore, IFRS would tend to reduce earnings manipulation and enhance stock market efficiency.
Consequently, as Ashbaugh and Pincus (2000) indicated in their study, due to IFRS implementation, analyst forecast errors are also reduced, and that is why, investors can more accurately predict a key variables. Moreover, there are indications that the implementation of IFRS reinforces stock market liquidity and leads to lower cost of capital and transaction costs, higher market value and better reputation (Iatridis, 2010). However, there is only scarce evidence showing how IFRS adoption has impacted a financial statements. In this case, a main goal of this thesis is to investigate the impact of International Financial Reporting Standards (IFRS) adoption on key financial ratios based on UK listed companies. UK companies have been chosen to this study, mostly because of the fact that, there is a growing number of papers stating that the United Kingdom Generally Accepted Accounting Principles (UK GAAP) and IFRS are quite similar (Ding et al., 2007; Lantto and Sahltström, 2009), as both are market-oriented. Due to this, IFRS adoption supposedly has no significant impact on UK firm’s financials. However, as there are some evidences, that the Continental Europe’s accounting principles, which are based on code law system, differ from IFRS (Lantto and Sahltström 2009), there is still scarce evidence showing whether there is a difference between accounting standards under common law system and International Financial Reporting Standards (IFRS). That is why, the aim of this study is to fill the gap in this area, and based on UK GAAP investigate if IFRS adoption has any impact on accounting numbers of companies which are operating under common law regime.

Widespread adoption of IFRS will result in a fundamental change in the business environment, since prior to 2005 companies followed a variety of country-specific Generally Accepted Accounting Principles (GAAP). The purpose of this thesis is to find out how this mandatory adoption of IFRS have affected a UK-listed company’s financial statements and a key financial ratios. To examine whether the differences between UK GAAP and IFRS exist, I follow Lantto’s process: First, I collect a dataset based on FTSE 250 company’s financial statements under UK GAAP and IFRS, which are found in a reconciliation statements at the date of transition to IFRS. Second, using this dataset, I calculate selected financial ratios under both reporting standards, and compare them to each other to investigate whether there are any differences. Third, I go into more details by analyzing UK GAAP-based and IFRS-based financial statement items and due to this, try to explain which financial statement items affected the changes in the financial ratios. Additionally, based on current literature, I try to investigate which standards may affect those changes. Last but not least, I try to show which
accounting system, on average, is more optimistic and produce higher net profit by calculating an Index of Conservatism.

Findings of this study provide a valuable information to investors and analysts as well as companies outside the EU, which still considering IFRS adoption and are not sure about the accounting consequences, and overall advantages and disadvantages.

The results of this study indicate that after the conversion from UK GAAP to IFRS, we can notice substantial changes in financial ratios. All three profitability ratios increased significantly: Operating Profit Margin (OPM) increased by 10.8%, Return on Equity and Return on Invested Capital (ROIC) by 27% and 11.4% respectively. Remaining two, Current Ratio (CR) and Price-to-Earnings (P/E) ratio have not reported such a significant change, but still have changed by 4.2% and -2.9% respectively. Lantto and Sahltström’s (2009) results, which were based on a country under code law system (Finland) show a similar pattern of changes. In their study, all three profitability ratios also increased after the conversion from UK GAAP to IFRS. OPM increased by 12%, ROE by 19% and ROIC by 9%. CR ratio reported slight decrease of 0.2%, PE ratio however, noted decrease of 11%. Moreover, my results show that the change in Operating Profit Margin is mostly caused by the change in Operating Income, which after the converting from UK GAAP to IFRS increased by 21%. The increase in Return on Equity, Return on Invested Capital, and decrease in Price-to-Earnings ratio is to high extent affected by very substantial increase in Net income (increased by 56%). Lastly, as no statistically significant change has been reported under Current Assets, we can state that the increase in Current Ratio can mainly be explained by increase in Current Liabilities, which after the conversion to IFRS increased by 1.9%. Similar finding were also reported by Lantto and Sahltström (2009) for countries under code law regime.

Generally, there is a number of IFRS standards based on fair value accounting, like for instance IFRS 2 – *Share-based payments*, IAS 39 – *Financial Instruments: recognition and measurement*, IAS 16 – *Property, plant and equipment* or IFRS 3 – *Business combinations* or IAS 38 – *Intangible assets*, which mostly affected the changes in financial ratios after the conversion to IFRS. For example, under UK GAAP goodwill might be capitalized as an intangible asset and due to this annually amortized. However, under IFRS capitalization with annual impairment review is required. Those, as well other issues and IFRS standards are described in more details in the subsequent section of the thesis.
The reminder of this thesis is organized as follows. In chapter 2 more information is provided about the background and main characteristics of high quality accounting, the purpose of introducing a common sets of international accounting standards worldwide, its threats and opportunities are also covered, as well as the worldwide process of harmonization. Moreover, in chapter 2 I give arguments that there should be a few, insignificant differences for UK-entities when converting to IFRS. For that, I explain existing differences between UK GAAP based and IFRS-based accounting standards as well as differences between UK GAAP (common law) and Continental GAAPs (code law). Chapter 3 provides a step by step process showing how the data for the study has been collected, tested and analyzed. The results of the study as well as the Index of Conservatism are presented in chapter 4. The thesis concludes with a summary and discussion of the findings and some indications of future developments.
2. The impact of IFRS Adoption on Accounting Figures

Accounting theory argues that financial reporting reduces information asymmetry by disclosing relevant and timely information (Sun and Soderstorm, 2007). In general,

“the objective of financial statements is to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions”\(^1\).

There is a widely held belief by proponents of International Financial Reporting Standards (IFRS), that financial statements prepared for this purpose meet the common needs of most potential users (Barth \textit{et al.} 2007). In principle, to provide a high quality financial statements, which satisfy the above description, a company needs to be aware who is the potential user. In particular, we distinguish the following types of users: shareholders, investors; creditors; suppliers and trade creditors; employees; competitors; government and public\(^2\). Moreover, every user require different type of information about the same item, as all of them have different needs, for instance, shareholders use the information from the financial statements in order to determine a company’s financial position, and whether or not they are going to invest or disinvest in it; creditors use the information provided in financial statements to assess the capability of a company to repay its debt in the long-term; suppliers want to assess the capability of the firm to repay their invoices in the short-term before they decide to grant short-term credit; employees use financial statement data to get an idea about the financial health of the company; government use financial statements for several purposes, including for determining taxable income, controlling compliance with regulation or making decisions about government grants to certain industries\(^3\). However, in most cases, not all the information required is likely to be included in the financial accounts, or is included, but in improper way. In principal, several common characteristics need to be satisfied. Jendrichovska (2008) states that accounting information needs to be directed to the particular user, and due to this several general points emerge about the necessary features and general qualitative characteristics of accounting. Qualitative characteristics are the attributes that are

\(^1\) http://www.ifrs.org
\(^3\) Ibidem, p. 21
crucial for decision usefulness (Obaidat A. 2007). According to Jendrichovska (2008), accounting information needs to be relevant, as the accounting report must give the user what he/she wants and be useful for decision-making purposes. Information has the quality of relevance when it influences the economic decisions of users by helping them to evaluate past, present or future events or confirming or correcting, their past evaluations. Other important aspect of high quality accounting are understandability and reliability of financial statements. According to Alexander et al. (2009), an essential quality of the information provided in financial statements is that it is readily understandable by users. For this purpose, users are assumed to have a reasonable knowledge of business and economic activities and accounting and a willingness to study the information with reasonable diligence. However, as they also point out, information about complex matters that should be included in the financial statements because of its relevance to the economic decision-making needs of users should not be excluded merely on the grounds that it may be too difficult for certain users to understand. Further, as noted above, to be useful, information must also be reliable. Information has the quality of reliability when it is free from material error and bias and can be depended on by users to represent faithfully that which it purports to represent or could reasonably be expected to represent. However, information may be relevant but so unreliable in nature or representation that its recognition may be potentially misleading. Jendrichovska (2008) also believes that the information should be complete and objective, as it should provide a total picture of the reporting business, which implies a large and complex collection of data. More importantly, according to her, reports should not be biased by personal perceptions (information contained in financial statements must be neutral). Another requirements is timeliness, as the information should be conveyed to the user in time for use to be made from it, because if there is undue delay in the reporting of information it may lose its relevance. However, the most vital aspect in her view is comparability of financial information, which generally brought about the idea of common accounting standards. Simply speaking, users must be able to compare financial statements of an entity through time in order to identify trends in its financial position and performance. More importantly however, users must also be able to compare the financial statements of different entities in order to evaluate their relative financial position, performance and changes in financial position. Hence, the measurement and display of the financial effect of like transactions and other events must be carried out in a consistent way for different entities. This is without doubt the

4 Ibidem, p. 142
crucial issue the IASB needs to focus on. Additionally, Alexander et al. (2009) list some other important qualitative characteristics (namely sub-characteristics) like, materiality, prudence and substance over form. In their view, the relevance of information is also affected by its nature and materiality. Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. However, as they believe, materiality provides a threshold or cut-off point rather than being a primary qualitative characteristic which information must have to be useful. Prudence is the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. If information is to represent faithfully transactions and other events that it purports to represent it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not merely their legal form.

A substantial number of qualitative characteristics can be identified and all of them have some stake in the overall result – high quality financial statements. In practice, it is hard to clearly state which characteristic is most important and which less, that is why, a balancing between qualitative characteristics is often necessary (Jendrichovska, 2008). Therefore, the aim of standard setters is to achieve an appropriate balance among the characteristics in order to meet the objectives of financial statements. However, the relative importance of the characteristics in different cases is a matter of professional judgment (Alexander et al. 2009). To satisfy all those aspects International Accounting Standards Board (IASB) is working to constantly develop and standardize financial reporting, so all financial statements can be understandable and capable to supply accurate and reliable information to all interested parties and due to this, give them a chance for better decision-making.

Sun and Soderstrom (2007) summon that historically, legal systems combined with other political and economic differences, created a vast diversity of accounting systems, which makes meaningful comparison of financial reports across borders difficult. Due to this, accounting practices, regulations and the mode of volume of regulations, were different. However, in today’s global economy, higher integration, instant communication, and a global capital market, this situation has changed sharply (Alexander et al. 2009). The speed of this process has increased considerably in recent years, as all listed companies within the European Union (EU) are using IFRS for their consolidated financial statements for year-ends.
beginning on or after 1 January 2005\textsuperscript{5}. According to Lantto and Sahltström (2009) about 7000 publicly traded European firms were obligated to adopt IFRS in 2005. For some companies this is radical change, which application requires a considerable effort. But, this considerable effort is going to be rewarded, because as Dunne \textit{et al.} 2008 state, the idea to adopt IFRS by UE countries is supported by the following benefits: improvements of investor protection, capital market more accessible for foreign investors, improved comparativeness, comprehensiveness, and quality of the financial information. However, those are only general and long-term effects caused by adoption of IFRS. To fully understand the reason of those long-term effects, an analysis in determining the impact of IFRS adoption on accounting numbers needs to be performed. To make this analysis more effective, first of all, the theoretical background and origins of national differences in accounting need to be introduced, as it will ease the understanding and reasoning of the differences in national GAAPs.

In the next sub-chapter I describe the reasons of international accounting differences in general and the global process of harmonization. Further, I focus on the reasons of international accounting differences between UK GAAP and IFRS by pointing out standards where differences are noticeable. This gives the reader better understanding of the general accounting principles under UK GAAP and IFRS as well as an indication of possible differences in financial statements numbers.

\section{International Accounting Differences}

Although accounting standards are crucial determinants of financial reporting quality, they differ across countries producing differences in financial statements quality around the world. Simply, we can interpret international accounting differences as a different options adopted by different nations to address the same accounting issues (Alexander \textit{et al.} 2009). Dunne \textit{et al.} (2008) addressed some aspects, which to high extent may produce the international accounting differences. So, they believe that financial reporting is influenced by: the development of the capital markets in a country, the role of finance, the role of state, the accounting profession, commercial law and taxation. Further, Ding \textit{et al.} (2007), state that a commonly held belief is that such differences reduce the quality and the relevance of accounting information. Moreover, due to the differences in accounting systems, the

\textsuperscript{5} Ibidem, p. 16
comparability of financial information published by companies using different sets of standards is at a very low level and because of this low quality, which eventually is unfavorable for shareholders and other external stakeholders.

Companies are becoming more and more international, and to finance their international expenditures they are willing to raise capital on the different capital markets worldwide (Alexander et al. 2009). That is why, an increasing number of internationals insist on more harmonization of accounting standards, which, as it was mentioned earlier, would increase the comparability of financial information and would create more transparency for the users of financial information. As a result, the information asymmetry between stakeholders and the companies would decrease, which ultimately will enhance the market participant’s wealth by lowering the cost of capital and creating new opportunities for diversification. Briefly, both sides (companies as well as all external stakeholders) are better off.

The information provided by annual statements is used for decision-making purposes, and due to different accounting standards, legal systems, culture, this information may be communicated in a different way, and very often might me misleading when comparing financial statements under two different accounting standards (Daske et al. 2008). On the other hand, useful accounting information presented in annual reports, is the information which can be compared to the certain benchmark (i.e. other companies). To compare financial reports, which are the reflection of transactions and events as recorded under a particular accounting policy, it is crucial that the accounting policies do not differ to such an extent that the comparison of financial reports is meaningless. However, as it will be shown in the subsequent section, despite the widespread process of harmonization initiated by International accounting Standards Committee (IASC) and followed by International Accounting Standard Board (IASB) the national differences in accounting standards still play a role.

---

6 Ibidem p. 20
2.2.1. Origin of National Differences

As it was noted earlier, historically, accounting and reporting grew up largely independently and often very differently in different countries. Practice, regulation and especially the mode of regulation differed often very greatly.\(^7\)

Generally, according to Alexander et al. (2009), financial reporting is a way of communication between sender and receiver. In the past, this form of communication was straightforward, because it was only based on internal basis, for instance, owner of the company would get an insight into his/her income and capital. However, from the early 1800s, increasing number of companies encountered some problems to finance their new business activities and generally to grow, because of limited financial resources (Alexander, 2009). The solution was a capital market which enabled every firm to gather additional capital outside the company. Due to this, as more and more stakeholders were interested how the company is performing, how strong financially it is, external financial reporting started to evolve, to eventually satisfy all interested parties. However, at that time, the capital markets were not so integrated as they are today, moreover, every country have had different national characteristics and due to this, a standard setters have chosen accounting policies that best fitted their national environments. In this case, over the time, those national differences in financial reporting have become problematic due to the process of globalization of financial markets, because the external reporting provided only the information within the borders of a specific country (Alexander et al. 2009). That is why, the idea of harmonization of accounting standards appeared, with the main goal of building a new common standard reporting, which would be acceptable around the world, and which would provide forward-looking information that could improve the predictive ability of financial statements for users and enable a better analysis of company performance.\(^8\)

The recent empirical evidence suggest that the main causes of differences in accounting standards are: provision of finance, the existing legal system and cultural differences between societies. A further exploration of those factors can provide insight into differences in the economic consequences of changing accounting principles across countries. That is why, it is crucial to describe them in more details.


a) Provision of Finance

The difference in providers of finance creditors/investors versus equity/outsiders is the key cause if international differences in financial reporting. As it was noted earlier in this thesis, in the past companies faced the problem to develop and to finance new business activities. On one hand, companies in countries like Germany, France, Italy or Belgium relied on debt as an additional source of financing, and that is why, banks became the major supplier of extra funds in these countries. On the other hand, countries like United Kingdom or USA relied more on equity, thus shareholders provided a necessary funds. Due to this, as we can see now, in those countries capital markets are much more developed than in those where banks were a leading providers of capital.

In countries where equity is used by companies as a main source of additional financing, financial statements will have an investor or shareholder orientation, therefore the interest of this investor class dominate, and financial reporting is typically geared towards meeting the needs of these users, and due to this is required to provide a high quality accounting information to simply enable potential shareholders to make the best investment decisions. On the contrary, in countries where centralized and familial ownership prevail and where companies rely more on debt financing, lower accounting quality is identified (Alexander et al. 2009). The reason is that debt-oriented companies care only about creditors (banks) as they are considered to be the main recipients of corporate financial statements and that is why, create reports only to satisfy their needs, for instance, to show that they are able to pay off their debt. In this environment the primary users are less interested in detailed financial statements as they have direct access to detailed information regarding a company’s performance (Dunne et al., 2008). In contrast, a market-oriented companies which rely on equity to finance their business activities, and where every single shareholder is in part the owner of the firm, are required to include more information to, first of all, satisfy existing shareholders, and secondly, to attract new.

Generally, we can state that in those countries with the strong capital market influence and strong investor protection, the quality of accounting information is higher than in countries with a creditor orientation.

---

9 Ibidem, p. 23.
10 Ibidem, p. 23.
b) Existing Legal System

We can distinguish two existing legal systems: a common law system and a code law system, which were originated in different parts of the world.\footnote{Ibidem,p. 24.} Lantto and Sahltström (2009) investigated that the differences in legal systems to some extent produce the differences between IFRS and Generally Accepted Accounting Principles (GAAP) of continental European countries, and that is why, existing legal system is another very important and influential aspect which affect the differences in accounting standards worldwide.

The code law system originated in Roman law and has developed in continental Europe (in countries like, Germany, France, Italy, Belgium and so on). This system is characterized by a wide sets of rules which aim is to provide guidance in all possible situations. Due to this, a company’s law in this system is very detailed and heavily regulated. Moreover, accounting regulation in a code law countries is in the hands of government, and due to this the legal provisions govern, to varying degrees, the financial reporting process. In this case, in countries with code law system, the standards are not compulsory but they have an integrative and interpretative function with respect to the provisions of the law (Dunne \textit{et al.}, 2008). In contrast, the common law system, which was originated in England, can be simply described as a legal system that is developed case by case and does not prescribe general rules that could be applied in several cases. In general, in a common law situation accounting rules are not a part of the law, because accounting regulation is in hands of professional organization of the private sector. This means that financial reporting is less heavily regulated by statue and permits the exercise of judgment, although legal organization holds that compliance with accounting standards is necessary to satisfy the general requirements of the law (Dunne \textit{et al.}, 2008). Consequently, common law countries, which are characterized by an efficient equity market, are likely to exhibit greater shareholder protection and higher level of transparency than code law countries because their public shareholders are more willing to provide funding to companies (Ding \textit{et al.} 2007).

Moreover, in their study, Ding \textit{et al.} (2007) and Hope (2007) confirmed the importance of legal systems. They also reported that this fundamental difference in legal origin has an impact on the role played by accounting information. They explained that in common law countries firms deal with other parties such as investors at arm’s length, which generated demand for information on firm performance and that is why, we can expect a high
accounting quality in this case. On the other hand, in code law countries, there is a greater degree of insider owners, such as banks, who get the information directly from management – or may even participate in firm decision making through board membership (Hope, 2003). Consequently, accounting quality is lower than in countries with common law system. This legal system is a leading one in countries like, United Kingdom, United States, Australia, Canada or New Zealand.

c) Cultural Differences

According to Hope (2003) it is obvious that the environment in which firm operates affects financial reporting and disclosures. Finch (2009) defined culture as ‘the collective programming of the mind which distinguishes the members from one human group from another’. Moreover, he noted that each human group shares its own social norms, consisting of common characteristics, like for instance a value system. Generally, researches indicate that another cause of variation between national accounting systems are cultural differences. Furthermore, it is said that cultural differences is also a very important and influencing factor on reporting and disclosure behavior with regard to financial statements, as accounting values, which are based on unique social values in a particular country, affect accounting systems. There are huge cultural differences and there is no doubt that reducing those differences is a very demanding and time consuming process, even in the globalized and integrated economy. To show existing cultural differences, Hofstede (2008) in his large-scale cross-cultural study classified countries according to the cultural differences he observed in his study. In his view, the main cultural differences between countries are:

- Individualism versus collectivism
- Large versus small power distance
- Strong versus weak uncertainty avoidance
- Masculinity versus femininity

We need to be aware that local values still, to high extent affects financial reporting, and due to this produce differences between financial statements in different countries. However, this

---

impact is gradually reduced due to more and more globalized economy. Understanding the importance of cultural differences is a crucial factor which needs to be taken into account in the international accounting harmonization process, to eventually ensure the comparability of international financial reporting.

As the companies have become more and more internationalized, the national differences play a less significant role in financial reporting. Nowadays, for large companies the location of the company is no longer the sole influencing factor on the reporting behavior of the company\textsuperscript{14}. However, this is not always the case.

As this is not always the case, in the next part of the chapter 1 will analyze how this different economic and cultural factors shaped financial reporting practices and standards worldwide.

\textbf{2.2.2. Differences in Accounting System}

As we can conclude from the previous sub-chapters of this thesis, the differences in cultural, economic, legal and political environments produce different accounting systems, and obviously similar environments produce similar accounting systems. That is why, in this section I focus on differences in accounting systems by describing two elements that characterize accounting systems: the organization of accounting regulation and the organization of the accounting profession. Those two elements are very important factors showing how accounting systems have developed in particular countries, and due to this indicate the possible differences in financial reporting.

In countries where shareholders are the main providers of capital, we can expect that the financial statements are prepared in a way, in which information about a company’s financials is detailed and with a high quality. Due to this every potential investor or existing shareholder can, for instance, evaluate the company and based on the evaluation decide whether it is worth to invest or not. Generally, to make sure that the financial information provided by the company is trustful, professional accountants are hired to check the quality of the information on the shareholder’s behalf. And that is why, professional accountants have started to play a

major role in the standard-setting process.\textsuperscript{15} On the other hand, in countries with a credit orientation and code law system the government is a main user of financial information as in those countries the annual accounts are often used for tax purposes. Ding \textit{et al}. (2007) investigated that a stronger, more developed accounting profession is more likely to be associated with the development of more rigorous and sophisticated accounting standards, than in countries with a weak accounting profession. Taking into account all the information provided so far, we can state that there are countries in which accounting regulation is in the hands of the private sector, for example, the UK, the USA, the Netherlands or Australia. In these countries private standard setting goes together with a shareholders orientation of the financial information published, and in most countries, common law system. In contrast, there are countries in which the government plays a major part in accounting regulation, and this system is observed in many continental European countries. In those countries, detailed accounting rules are embodied in the law, normally the company law.\textsuperscript{16} However, due to compulsory introduction of IFRS a substantial number of countries with diverse backgrounds, now operate in similar settings with regard to accounting regulation (Dunne \textit{et al}. 2008). That is why, the is no doubt that for some countries (especially with credit orientation and code law system) the adoption of market-oriented IFRS may be problematic and more importantly, may produce some differences in accounting numbers (lantto and Sahltström 2009).

\section*{2.2.3. Characteristics and Differences in National GAAP}

In general, the difference in accounting systems produce different national or domestic accounting standards. To illustrate it more widely, and at the same time conclude the main causes of differences, we should consider the following points:

\begin{itemize}
  \item Shareholder orientation versus Stakeholder orientation
\end{itemize}

In countries with widespread ownership there is a need for high-quality published financial information (Alexander \textit{et al}. 2009). This is simply due to the fact that all existing as well as potential shareholders do not have access to internal information, which is necessary to evaluate a financial health of the company. Moreover, every shareholder is, to some extent a


\textsuperscript{16} Ibidem. p. 29.
co-owner of the company and has a legal right to be fully informed. On the other side, we have countries where companies are mostly financed by debt, and in these countries, financial statement information is usually not fully disclosed, as the main receivers are creditors and also the government.

- **Fairness versus Legality**

In common law countries the aim of financial reporting is a fair representation of the financial situation of the company. In the UK this is translated into the ‘true and fair view’. In contrast, in code law countries financial reporting is focused on compliance with the legal requirements and tax law.

- **Conservatism versus Accruals**

In countries in which financial reporting is more creditor-oriented (in most cases code law system), and used mostly for tax purposes, valuation values will be more conservative or prudent than in countries with a shareholder orientation (common law system) (Dunne et al. 2008). These two approaches may lead to a different choice in accounting practices. Generally, conservative accounting is often regarded as a system in which lower profits are reported than under the system driven by accrual accounting – anticipate no profits, but anticipate all losses (Watts, 2002). The most common practices of conservative accounting are: choosing LIFO as opposed to FIFO accounting for inventory, rapid write-offs of intangibles or expensing (as opposed of being capitalized) of start-up costs. It is worth noting, that due to the extensive use of depreciation and provisions, companies which use a conservative accounting, are able to increase results in periods with weak economic performance.

- **Consolidated Accounts**

In countries where financial reporting has a strong shareholder orientation, the practice of preparing and publishing consolidated financial statements emerged much earlier than in code law countries, which usually are creditor-oriented. Due to this, in the shareholder-oriented countries consolidated financial statements are much better developed.

---

17 Ibidem, p. 31.
18 Ibidem, p. 31.
• Deferred Taxation

In countries with no direct link between tax income and accounting income, the practice of recording deferred taxes on the balance sheet is well-established and common practice. For countries in which there is no strong link between accounting income and tax income, the practice of recording and calculating a deferred taxes is relatively new. What is more, in the individual accounts of companies in those countries the amounts recorded under deferred taxes will be rather small.19

In the 1980s through the enactment of the Fourth Directive in European Union countries and in the 1990s under the pressure if globalization of capital markets, national accounting practices started slowly to move towards each other (Alexander et al. 2009). This development is still going on and some differences have already become less noticeable or have almost disappeared for certain categories of companies or for certain financial statement items. Recently, more and more companies have sought dual listing (national GAAP and additionally IFRS), as this move has enabled them to enter the capital market abroad and due to this acquire more capital for further development (Ding et al. 2007). Also, a large number of multinational companies have fully switched to IFRS, as they perceive it as a long-term benefit. And, as empirical research results show, the capital markets usually react positively to the voluntary switch, as in general, capital markets believe that IFRS adoption results in a reduction in information asymmetry between firms and investors.20 Moreover, as more information is incorporated into the financial statements under IFRS, the financial information is becoming more predictable, which eventually improve accuracy of analyst’s earnings forecasts and due to this, investors are able to make a better as well as less risky investment decisions (Ashbaugh and Pincus, 2000).

Consequently, IFRS adoption is a kind of win-win strategy, because converting to high-quality accounting standards like IFRS enables investors to make better investment decisions, and for companies it gives an opportunity to attract international capital, as they are able to increase a comparability of their financial information worldwide. Due to this, they can get an

19 Ibidem, p. 32
20 Ibidem, p. 35.
additional capital, which is necessary to grow faster. However, according to Brice (2009), there are also some other important long-term benefits from the point of view of the company:

- IFRS potentially better reflect the underlying economics of a transaction;
- IFRS facilitate improved communications with analysts, investors, financial markets and other users of financial statements;
- IFRS improves customer recognition;
- IFRS reduces the political costs of transacting business abroad
- the conversion process in an appropriate time to re-engineer information system, internal management reporting and internal performance measures;
- it is an excellent opportunity to ensure that financial information is obtained in the most effective and efficient way.

But, we need to be aware that disadvantages also exist. Barth et al. (2007) found that after IFRS adoption firms have higher variance of changes in net income, a higher ratio of variance of changes in net income to variance of changes in cash flows, higher correlation between accruals and cash flows, lower frequency of small positive net income and higher frequency of small losses. In general, the possible disadvantages of IFRS adoption are:

- the introduction of IFRS will change the reported results and financial position of the business and potentially introduce greater volatility into reporting thus making it more difficult to judge a company’s performance;
- IFRS conversion is likely to place additional burdens on existing resources;
- IFRS can be more complex to apply on an ongoing basis especially with rapid changes in requirements;
- generally, the conversion to IFRS will have a unique repercussions for each country, depending on how each national GAAP differ.21

According to many recent papers IFRS introduce a high quality accounting (Alexander et al. 2009; Dunne et al. 2008; Barth et al. 2007; Armstrong 2010; Iatridis 2010; Li 2010; Sun and Soderstrom, 2007). That is why, we can state that International Accounting Standards (IAS) can be defined as follows: ‘Financial reporting quality relates to the usefulness of financial statements for contracting, monitoring, valuation and other decision-making by investors,

---

creditors, managers, and all other parties connected to the firm’.

Generally, the more qualitative accounting standards, the more they are useful to all interested stakeholders. What is more, due to high quality standards, companies are also better off. It is worth to add that, empirical and theoretical evidence suggest that higher disclosure quality is generally beneficial for companies as it makes obtaining capital cheaper (Christensen et al., 2007). Moreover, as Iatridis (2010) noted in his study, the higher quality of IFRS financial reporting would enhance the credibility of firms financial statements, and would in turn provide lenders with more certainty and information about the ability of firms to timely meet their financial obligations, leading thus to better borrowing terms.

However, despite the global harmonization process of reporting practices, we can still notice some national influences of reporting practices (see Lantto and Sahlström, 2009), which means that there are still some challenges to face for IASB. There is no doubt, that due to those differences, the comparison of financial statements worldwide might be misleading, and all investors, analysts, managers should take it into account in their decision-making process.

The quality of accounting is determined by the quality of the accounting standards chosen (Sun and Soderstrom, 2007) and in this case, the IASB should continue to improve the quality of IFRS, so financial reporting under IFRS will become increasingly value relevant and reliable, and that all previously stated benefits are in place. This eventually will ease the process of elimination of national differences as more and more companies (as well as national regulators), will switch to IFRS to benefit from it.

The next sub-chapter provides a background of current international accounting development, a widely discussed topic of the last twenty-five years, namely, the process of harmonization, which long-term goal is to some extent eliminate the differences in reporting practices by providing a comparable financial information which is useful to all interested parties.

2.2. The Process of Harmonization

Proponents of harmonized international standards claim that if all firms follow the same set of accounting standards, external financial reports of firms would provide uniform disclosures and more useful accounting information to investors (Ding et al. 2007). Not only

---

the process of harmonization of financial reporting practices will reduce diversity, but also facilitate cross-listing and cross-border investment (Sun and Soderstrom, 2007). Sir David Tweedie the first and the current chair of the IASB, considered that a more uniform approach to standard setting would gain investor confidence and help multinationals achieve benefits in the preparation of their financial reports by using one approach to income measurement (Dunne et al. 2008). He argues that a company’s cost of capital would be reduced as a result of applying IFRS because investors would be able to understand all company’s reporting rules (Dunne et al. 2008). A further argument in favor of IFRS is that the provision of more forward-looking information may improve the ability of users to monitor management performance, as the introduction of fair value allows for better assessment of manager ability. Eventually, due to smoother communication between managers, shareholders and other interested parties, agency costs would become lower, which will lead to lower cost of debt financing (Iatridis, 2010). In general, to achieve all those benefits, the process of harmonization needs to accelerate and according to Das et al. (2009), this is going to happen in the coming years, as convergence initiatives are now working much more effectively than ever before. There is a number of definitions describing the process of harmonization. Jindrichowska (2004) describes accounting harmonization as a common movement among accounting regulators, standard-setters and educators in different nations towards the same goal. This clear description indicate that to achieve the goal and eventually introduce one set of accounting standards worldwide, a lot of different parties need cooperate closely with each other, and what is also very important, factors like, cultural differences need to be eliminated or at least minimized. That is why, even though the process of harmonization has started many years ago, the differences are still noticeable. Interestingly, as some researchers suggest, the national characteristics are so strong, that they are even visible under one accounting system (IFRS), for instance, IFRS do not prescribe a particular format for the presentation of the income statement. Consequently, as different formats of income statements are allowed, cultural differences may to some extent affect the income statement’s presentation under IFRS, which ultimately might decrease the level of comparability between countries (Hossfeld Ch., 2011).

From the 1970s on, a movement towards harmonization of financial reporting started slowly to emerge. First attempt of making financial reports more comparable across countries was made by the European Commission (EC). The Fourth Directive enacted in 1978, and the Seventh Directive, enacted in 1983, were the most influential directives during the early
stages of financial reporting convergence within the European Union. The most important effects of both directives are the adoption of TFV (True and Fair View) and relaxation of book-tax conformity for consolidated accounts (Sun and Soderstrom, 2007). Further, from the 1990s under pressure from multinational companies seeking dual listing to attract capital, the request of one set of GAAP to be applied, not only within EU, but worldwide emerged. However, as attempts for worldwide harmonization and standardization are undertaken, national institutional differences still influence, to some extent, the output of the financial reporting process. And that is why, there is still a lot to do, to minimize, and eventually eliminate these differences. The European Commission’s directives was the first step towards accounting harmonization and provide useful insight into the difficulties of the process.

Following the European Commission, The International Accounting Standard Board (IASB) and its predecessor the International Accounting Standard Committee (IASC) pursue the harmonization of fully transparent and equity market friendly international accounting system, which is widely viewed as reflecting a common law system (Ball et al. 1999). Generally, IASB is an independent, not-for-profit private sector organization working in the public interest. The IASB is responsible for the development and publication of IFRSs, including the IFRS for Small and Medium Enterprises (SMEs) and for approving interpretations of IFRSs as developed by the IFRS Interpretations Committee (formally called IFRIC). To improve financial communication, by providing reliable, understandable and comparable reports, which satisfy the interest of all the users of financial reports, the IASB engages closely with stakeholders around the world, including investors, analysts, regulators, business leaders, accounting standard setters, and the accountancy profession to create a set of financial reporting policies which require increased disclosure and strict choices of measurement methods (Ashbaugh and Pincus, 2000). In principal, the IASB’s objectives are:

- to develop, in the public interest, a single set of high quality, understandable and enforceable global standards that require high quality, transparent and comparable information;
- to promote the use and rigorous application of those standards;
- to take account of the special needs of SMEs and emerging countries;

---

23 Ibidem, p. 37
• to bring about convergence of national accounting standards, IAS and IFRS to high quality solutions.\(^{24}\)

In 1989 the Framework for the Preparation and Presentation of Financial Statements was issued by IASB. This conceptual framework which applies to the financial statements of all commercial, industrial and business reporting entities, is considered as a guide to standard setting, so that standards are formulated on a consistent basis and not in an ad hoc manner. Moreover, through the framework, the IASB is willing to identify good practices from which principles are derived. Due to this, all international standard-setters are able to comply with IFRS, and more importantly, introduce an accounting standards in their jurisdictions which are consistent with IFRS. Ultimately, the IASB’s conceptual framework is an effective tool to accelerate the global process of harmonization. In general, the purpose of the framework is stated as follows:

- To assist the board of IASB in the development of future IASs and in its review of existing IASs;
- To assist the board of IASB in promoting harmonization of regulations, accounting standards and procedures relating to the presentation of financial statements by providing a basis for reducing the number of alternative accounting treatments permitted by IASs;
- To assist national standard-setting bodies in developing national standards;
- To assist preparers of financial statements in applying IASs and in dealing with topics that have yet to form the subject of an IASs;
- To assist auditors in forming an opinion as to whether financial statements conform with IASs;
- To assist users of financial statements in interpreting the information contained in financial statements prepared in conformity with IASs;
- To provide those who are interested in the work of the IASB with information about its approach to the formulation of accounting standards.\(^{25}\)

Additionally, the Framework discusses the various assumptions of accounting statements to show the rules on which accounting standards are built. The underlying assumptions are:

\(^{24}\) [http://www.ifrs.org](http://www.ifrs.org)

accrual basis and going concern. As those are the fundamental aspects of IFRSs, it is worth to review them more closely.

In order to meet the objectives of IASB, financial statements are prepared on the accrual basis of accounting. Under this basis, the effects of transactions and other events are recognized when they occur (and not, like many recent accounting principles states, as cash or its equivalent is received or paid) and they are recorded in the accounting records and reported in the financial statements of the periods to which they relate. Financial statements prepared on the accrual basis inform users not only of past transactions involving the payment and receipt of cash but also of obligations to pay cash in the future and of resources that represent cash to be received in the future. Hence, they provide the type of information about the transactions and other events that is most useful to users in making economic decisions. Therefore, under IFRS, the financial events are likely to be incorporated in a more timely fashion in the financial statements (Iatridis, 2010). Another fundamental assumption is going concern. Generally, financial statements are normally prepared on the assumption that an entity is a going concern and will continue in operation for the foreseeable future. That is why, it is assumed that the entity has neither the intention nor the need to liquidate or restrain materially the scale of its operations. However, if such an intention or need exist, the financial statement may have to be prepared on a different basis and, if so, the basis used is disclosed.26

Both those assumptions as well as qualitative characteristics described at the beginning of chapter 2 are the cornerstones of all IASs. Due to this, all accounting standards are prepared in a way, that the information about company’s performance is reliable and of high quality. As many researchers suggest, IFRS adoption is beneficial for the company as this application is positively welcomed by investors. And again, this is mostly because of the fact that, based on IASB framework, IASs are created in a deliberate and standardized way, and are aimed to fully satisfy all interested parties. Moreover, what was also mentioned earlier, as all financial statements under IFRS include more reliable and high quality information, the company’s cost of capital will decrease, as it is less risky to invest in the entity which is transparent (Li, 2010 and Armstrong et al., 2010). More and more firms recognize this benefits, and that is why, not only in Europe but also on a worldwide scope more and more companies are switching to IFRS, for instance, Australia and New Zealand have now to comply with IFRS.

26 Ibidem, p. 141
Moreover, there are also some countries where the domestic GAAP is identical to the IFRS, for example, South Africa, Singapore, the Philippines and Hong Kong.\textsuperscript{27}

All in all, over 100 countries now use IFRS and there is no doubt that a worldwide use of IFRS increases and will be increasing in near future, since regulatory authorities in a number of countries have decided to move toward compulsory application of IFRS for listed groups. Alexander \textit{et al.} (2009) in his book listed those countries. Consequently, he noticed that IFRS adoption increases in Asia as well as in the Americas, for instance, in Korea, from 2009 any company can choose to apply IFRS, and from 2011 the adoption has become mandatory for all listed companies. Furthermore, from 2009 all Chinese central-level state-owned enterprises and large to mid-scale companies adopted new Chinese’s accounting standards that comply with IFRS. What is more, in Brazil, all banks need to comply with IFRS from 2009 onwards, and listed companies from 2010 onwards. This process is gradually spreading to different parts of the world. However, as Dunne \textit{et al.} (2008) noticed, there is a number of countries which still have not signed up to use the IASB’s standards. The US is one major economy that have not yet agreed to adopt IFRS. Instead, it kept its own standards issued by the Financial Accounting Standard Board (FASB). But, the Securities and Exchange Commission (SEC), which oversees the FASB, has been supportive of cooperation between the IASB and FASB to minimize differences between the different accounting rules. Consequently, significant progress towards the harmonization of international accounting standards has been made. This suggests that many commentators and companies have identified potential benefits of IFRS adoption (Dunne \textit{et al.} 2008).

This sub-chapter has provided a brief background of history and understanding behind current international accounting developments, with an emphasis on the increasing importance of IASB. Thirty years ago the EU started with the harmonization of financial reporting. The EU changed its accounting strategy in the mid-1990s and started to back the efforts of the IASC and later the IASB. The new accounting strategy of the EU, the acceptance by the International Organization of Securities Commission (IOSCO) of International Accounting Standards (IASs) for listing purposes and the change in the structure in the international standard setter in 2001 paved the way for the IASB to become a global standard setter.

\textsuperscript{27} Ibidem, p. 37
The process of harmonization is still continuing, and there is no doubt that it will take a lot of time and efforts to completely harmonize accounting standards worldwide. According to many recent papers, at this moment in time, we can still notice some differences between IFRS and national GAAP. In some cases, those differences are quite substantial, like for instance, between IFRS and continental Europe countries (see Lantto and Sahltström, 2009), but in other cases the logic says that the differences should be less substantial or not present at all, like in the case of IFRS and UK GAAP which are both shareholder-oriented. But, is this really the case? Is it really no differences between IFRS and UK GAAP? To find the answer for the this questions, in the next sub-chapter I take a closer look on IFRS and UK GAAP, and try to explain a possible differences in accounting standards, which eventually may have an impact in financial statements items.

2.3. The Differences between IFRS and UK GAAP Practices

In the previous chapter all attention was paid to IFRS, however, to investigate whether there are any differences between both accounting standards, we need also take a closer look into UK GAAP to be able to compare them, and ultimately detect possible differences.

The Generally Accepted Accounting Principles in the UK are the overall body of regulation establishing how company accounts must be prepared in the United Kingdom. Further, UK GAAP is not only responsible for establishing accounting standards, but also for UK Company law. Importantly, in the UK, similarly to IFRS, the chef standard setter is a private-sector organization named Accounting Standard Board (ASB), which issues standards called Financial Reporting Standards (FRSs).  

Dunne et al. (2008) provide a key characteristics of UK GAAP, which are presented in Table 1. As we can see in the Table 1, and what was also noted in the previous sub-chapters, UK GAAP is based on common law, and what is also very important, is shareholder-oriented.
Table 1. Summary of UK reporting environment

<table>
<thead>
<tr>
<th>Subject</th>
<th>UK GAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major source of regulation</td>
<td>* Company Law</td>
</tr>
<tr>
<td></td>
<td>* Accounting Standards</td>
</tr>
<tr>
<td></td>
<td>* Stock exchange requirements</td>
</tr>
<tr>
<td></td>
<td>* Financial Services Authority (FSA)</td>
</tr>
<tr>
<td>Legal system</td>
<td>* Common law</td>
</tr>
<tr>
<td>Main users of annual reports</td>
<td>* Investors</td>
</tr>
<tr>
<td>Basis of accounting</td>
<td>* Accruals concept dominates</td>
</tr>
<tr>
<td>Economy and market structure</td>
<td>* Large open economy</td>
</tr>
<tr>
<td></td>
<td>* Well-developed capital market</td>
</tr>
</tbody>
</table>


These two crucial characteristics indicate that UK GAAP presents a high level of similarity to IFRS, as both have an investor focus and that is why, incorporate more information into the financial statements, which makes them more useful to investors, than for instance, continental Europe accounting standards. This statement is also consistent with results obtained by Ding et al. (2007) in their study, where they concluded that in nations with highly developed equity market we are more likely to observe standards similar to International Accounting Standards (IAS). So, their discovery may imply that there are no substantial differences between UK GAAP and IFRS. However, Christensen et al. (2007) provide an evidence that IFRS adoption by UK-listed firms provides a new information to the market, which rejects the belief that the switch to IFRS is a pure accounting translation with no impact on expected future cash flows. To find out if this is the case, I go through the most important standards under UK GAAP and IFRS and try to compare them. To perform the comparison I use a study published by PricewaterhouseCoopers (PwC)\(^\text{29}\).

\(^{29}\) PwC (2005), ‘IFRS/UK main differences indicator’, PricewaterhouseCoopers.
<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 1, Presentation of financial statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 18, Accounting policies</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 3, Reporting financial performance</td>
</tr>
</tbody>
</table>

Presentation of financial statements represents an attempt to cover several important aspects. The goal is to prescribe the basis of presentation of general purpose of financial statements, in order to ensure comparability both with the entity’s own financial statements of previous periods and with the financial statements of other entities.\(^{30}\)

In general, under both systems the main purpose of financial statements is to provide information about the financial position, the performance and the cash flow of an entity (PwC, 2005). Therefore, the main components of a set of IFRS financial statements are quite similar to those required by UK GAAP financial statements: a balance sheet, an income statement, a statement showing either all changes in equity or changes in equity other than those arising from capital transactions with owners and distribution to owners, a cash flow statement, and explanatory notes (including accounting policies). However, unlike UK GAAP, IAS 1 does not require the rigorous order or format in which items are to be presented in the financial statements. Under IFRS, there is only a list of items that are so different in nature or function that they deserve separate presentation on the face of the balance sheet and in the income statement.

One of the most substantial differences is that under IFRS disclosure of operating profit is not required. IAS 1 says that entities may strike a sub-total at operating profit, whereas under FRS 3 this is required.

What is more, under FRS 3, we can identify three categories of exceptional items (super-exceptional), which must be shown after operating profit even though they are often operating items. Under IAS 1 on the other hand, the total of the post-tax profit or loss of discontinued operations and the post-tax gain or loss recognized on the measurement to ‘fair value less costs of sale’ or on the disposal of the discontinued operations is shown after tax (PwC, 2005). Other exceptional items, that would be classed as super-exceptional under FRS 3, must be dealt with the appropriate operating line item. Clearly, this difference may result in higher profit figure under IFRS.

Another difference is that under IAS 1, it is required to present current and non-current assets and current and non-current liabilities as separate classification on the face of the balance

---

sheet, except when a liquidity presentation provides reliable and more relevant information. UK GAAP has specific rules on classification of assets and liabilities. Further, in contrast to UK GAAP, under IFRS it is required to disclose judgments in the process of applying accounting policies that have the most significant effect on the amounts recognized in the financial statements (for instance, management’s judgment in determining whether financial assets are held to maturity investments).

The last significant difference is that IAS 1 requires to disclose information regarding key assumptions about the future and other key sources of estimation uncertainty at the balance sheet date that have a significant risk causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year. However, FRS 18 requires a description of those estimation techniques adopted that are significant. So, an estimation technique is significant only if the range of reasonable monetary amounts is so large that the use of different amount from within that range could materially affect the view shown by the entity’s financial statements (PwC, 2005).

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 12, Income taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 19, Deferred taxation</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 16, Current taxes</td>
</tr>
</tbody>
</table>

Generally, IAS 12 is similar to FRS 16 in respect to current taxes, expect that IAS 12 requires current tax to be presented separately on the face of the balance sheet. What is more, IAS 12 requires current tax to be charged directly to equity if it relates to items that are also charged, or credited directly to equity. FRS 16 works in a bit different way, as it requires all current tax to be included in the Profit and Loss statement (PwC, 2005).

In respect to deferred tax, we can notice some more notable differences between IFRS and UK GAAP. Under IAS 12, deferred tax is recognized on the basis of taxable temporary differences between tax base and carrying value of assets and liabilities. There are included all timing differences and many permanent differences. However, FRS 19 recognizes deferred tax only as timing differences. Moreover, IAS 12 contrasts with FRS 19 in that it requires provision to be made for deferred tax on property revaluations31. This in general, may negatively affect a balance sheet (increase in liabilities) after switching to IFRS. As an effect,

---

31 Ensor Holding PLC – Transition to IFRS, pp.9.
a company’s total tax charge will increase, which ultimately will decrease profit calculated under IAS 12.

Another apparent difference noted by PwC (2005) is that IAS 12 does not allow the discontinuing of deferred tax and FRS 19 permits, but does not require, discontinuing of deferred tax.

Last but not least, IAS 12 requires a reconciliation of the total (current and deferred) tax charge to the standard tax charge. FRS 19 requires the reconciliation to be carried out for the current tax charge.

In summary, application of IAS 12 negatively affects financial statements of UK-listed companies. More specifically, due to increase in total tax charge, total profit is expected to be lower after the transition to IFRS.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 16, Property, plant and equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 15, Tangible fixed assets</td>
</tr>
</tbody>
</table>

In contrast to FRS 15, IAS 16 excludes from its scope property, plant and equipment classified as held for sale in accordance with IFRS 5, biological assets related agricultural activity, the recognition and measurement of exploration and evaluation assets and mineral rights and mineral reserves (they are, instead, covered under IFRS 5 – *Non-current assets held for sale and discontinued operations*, IAS 41 – *Agriculture*, and IFRS 6 – *Exploration for and evaluation of mineral recourses*). However, it is important to note that both IAS 16 and FRS 15 exclude investment properties.

PwC (2005) mention that IAS 16 capitalizes subsequent expenditures on an asset using the same criteria as the initial spend, that is, when it is probable the future economic benefits associated with the item will flow to the entity and the cost of the item can be measured reliably. If part of an asset is replaced, then the part it replaces is derecognized, regardless of whether it has been depreciated separately or not. FRS 15, on the other hand, requires capitalization of subsequent expenditure only when the expenditure improves the condition of the asset beyond its previously assessed standard of performance, which generally would have been reflected in the asset’s depreciation. Further, IAS 16 states that if fixed asset are acquired in exchange of a non-monetary asset, the cost of acquired asset is measured at fair value unless (a) the exchange transaction lacks commercial substance or (b) the fair value of assets received or given up cannot be measured reliably (PwC, 2005). A commercial
substance of a transaction can be identified if the future cash flows are expected to change significantly as a result of the transaction. If the fair value of the asset received is not reliably measurable, than fair value of the sold asset is taken. This is a new requirement for UK companies as FRS 15 does not contain similar rules and again, this may in some cases produce substantial differences on the financial statements between UK GAAP and IFRS, and due to this affect financial ratios.

Moreover, we can notice a key difference between IAS 16 and FRS 15 in adoption of a policy of valuation. In particular, IAS 16 requires revaluations to be at fair value. It states that fair value is usually determined from market-based evidence (for land and buildings), or a market value (for plant and equipment). All assets are depreciated at cost. However, under FRS 15 the value to the business model is used. Also, FRS 16 requires revaluations to current value, which could be defined as being the lower of replacement cost and recoverable amount. What is more, a simpler approach is used to recognizing revaluation losses under IAS 16 than under FRS 15. So, under FRS 15, all revaluation losses are charged to the profit and loss account. Under IAS 16 on the other hand, an increase in value should be accumulated in equity under “revaluation surplus”. If we have a previous revaluation surplus on the asset, than the revaluation loss is first charged against the surplus to the extent of that surplus, with the balance of the loss then being charged to the profit and loss account.

In summary, transition to IFRS may produce some changes mainly due to differences in valuation policy. In this case, balance sheet figures (equity) and eventually income statement (due to the balance between revaluation surplus and loss) might be affected.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 17, Leases</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>SSAP 21, Accounting for leases hire purchase contracts</td>
</tr>
</tbody>
</table>

Broadly speaking, the approach of IFRS and UK GAAP is quite similar. Under both standards, leases are required to be classified as finance leases and operating leases. Moreover, the definition of the finance lease is the same in both standards. However, it should be noted that under IAS 17 a quantitative test is not provided to test if lease is a finance lease (the 90% test), instead, additional guidance is provided to help deciding on whether a lease should be classified as a finance lease (PwC, 2005).

An important difference between UK GAAP and IFRS is that IAS 17 requires the land and building elements of a lease to be considered separately for the purpose of lease classification.
Except when title is expected to pass to the lessee at the end of the lease term, leases of land should normally be treated as an operating lease. The building element would then be classified as an operating or finance lease as appropriate. Simply speaking, there is a higher probability that leases of buildings are classified as finance lease under IAS 17 than under SSAP 21, where the land and building are considered together. Moreover, income recognition by lessors for finance leases is different under the two standards. Under IAS 17, it is required to use net investment method, however, SSAP 21 requires the net cash investment method to be used. This can eventually cause a materially different income recognition profiles, especially when the tax effects of a lease are significant. It is worth to add at the end that IAS 17 requires a number of detailed disclosures that are not required by SSAP 21 (PwC, 2005).

In summary, as a result of IAS 17, certain leases that were classified as operating leases under UK GAAP may have been re-classified as finance leases and due to this decrease the net income after the transition to IFRS.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 18, Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 5, Application Note G, Revenue Recognition</td>
</tr>
<tr>
<td></td>
<td>SSAP 9 (for long-term contracts)</td>
</tr>
</tbody>
</table>

Revenue is measured at fair value of the consideration received or receivable and represents amounts receivable for goods and services provided in the normal course of business.\(^{32}\) Generally, IFRS is consistent with UK GAAP in the case of revenue recognition, as Application Note G, which was issued in 2003, is consider to have moved UK accounting closer to IAS 18. However, it should be noted that the detailed illustrative guidance in IAS 18 for specific situations could lead to differences with UK GAAP in certain industries.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 19, Employee benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 17, Retirement benefits</td>
</tr>
</tbody>
</table>

In general, as with leases, there are similar rules regarding measurement and disclosure of retirement benefits under FRS 17 and IAS 19 (PwC, 2005). But, we can distinguish some

\(^{32}\) Ensor Holding PLC – Transition to IFRS, p. 10.
differences in the recognition of actual gains and losses and the presentation of items in the financial statements.

IAS 19, as well as FRS 17 require that defined benefit scheme assets and liabilities are valued at each balance sheet date to produce an asset or liability of recognition on the balance sheet. Moreover, all of the items recognized in the profit and loss account under IAS 19 are treated in a nearly identical way under FRS 17. However, one of the most important differences is that FRS 17 requires that pension assets and liabilities are shown net of any related deferred tax, this presentation is not possible under IAS 19 (PwC, 2005).

The accounting for defined contribution schemes is the same under IAS 19 and FRS 17. However, IAS 19 goes further than FRS 17 to consider accounting for and disclosure of other employee benefits such as wages and salaries, bonuses and termination benefits (PwC, 2005).

In summary, in most cases, IAS 19 and FRS 17 are very similar. However, due to one substantial difference (FRS 17 presents pension assets and liabilities net of any related deferred tax) balance sheet as well as income statement figures might be positively affected after transition to IFRS.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 32, Financial instruments: Disclosure and presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 4, Capital instruments</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 13, Derivatives and other financial instruments: Disclosures</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 25, Financial instruments: Disclosure and preparation</td>
</tr>
</tbody>
</table>

We can state that IAS 32 is a crucial standard, which to high extent have affected financial statements of UK listed firms. Under IAS 32, preference shares that are not redeemable and where distributions at the discretion of the issuer, are classified as equity. However, preference shares requiring the issuer to redeem for a fixed or a determinable amount at a fixed or determinable future date, or where the holder has the option redemption, are classified as liability. Under FRS 4, such instruments are classified as shares and are included in non-equity shareholders funds (PwC, 2005).

Moreover, IAS 32 states that the settlement of a preference shares (or other financial instrument) is contingent on uncertain future events beyond the control of the issuer as well as the holder, than the financial instrument have to be classified as liability by the issuer. But, if for instance, the contingent settlement provision is not proper or applies only in the event of liquidation of the issuer, it should be ignored and the financial instrument should be classified
as equity by the issuer. Further, under IAS 32, if the financial instrument is settled using an entity’s own equity shares, than it should be classed as a liability. However, the requirement is that the number of shares cannot vary in such a way that the fair value of the shares issued equals the obligation. This treatment is consistent with UITF 33 for non-shares capital instruments.

According to PwC (2005) document, another substantial difference between UK GAAP and IFRS is that under IAS 32, convertible debt is split between the equity conversion right (recognized in equity if there is no cash settlement option) and the debt (recognized in liabilities). However, under FRS 4, those items are generally regarded as liabilities, apart from the case where the share capital and debt components are capable of being transferred independently of each other (for example, bonds with separately tradable warrants).

Finally, it is worth to mention that under IFRS, financial instruments like short-term trade receivables and payables are initially recognized at fair value and that are usually stated at amortized cost. However, those financial instruments are only exempt from the requirement to disclose fair value when the carrying amount is a reasonable approximation of fair value. This kind of treatment cannot be identified under UK GAAP.

In summary, due to IAS 32 an equity as well as liabilities of UK-listed companies would increase in value. However, an increase in liabilities is less significant than it was reported under UK GAAP (due to split in convertible debt).

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 38, Intangible assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 10, Goodwill and intangible assets</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>SSAP 13, Accounting for research and development</td>
</tr>
</tbody>
</table>

Under both IFRS and UK GAAP, an intangible assets is an intangible non-monetary asset without physical substance (PwC, 2005). However, a wider range of intangible assets are recognized under IFRS, specifically in respect of business combinations (purchased intangible assets). So, under IAS 38, an asset is intangible when it is separable (which means capable of being sold separate from the entity) or arises from contractual or other legal rights. Similarly however, Under FRS 10, the assets have to be capable of being disposed of separately from the business (PwC, 2005).

In the case of FRS 10, an internally generated intangible asset is required to have a readily fixed market value before it can be recognized. But, IAS 38 allows internally generated assets
to be recognized if they meet criteria similar to those contained within SSAP 13 for development costs. Internally generated brands, publishing titles, customer lists, and similar items cannot be recognized, as they cannot be distinguished from the development of the business as a whole (PwC, 2005). Consequently, as they cannot be recognized as assets and due to this cannot be amortized, they are expensed immediately. Eventually, this will negatively affect an income statement.

Furthermore, under IFRS and UK GAAP it is required to perform annual impairment reviews for intangible assets with an indefinite life. The differences is that under IAS 38 an impairment review is only required when there is an indication of impairment. FRS 10 additionally requires an annual impairment review where the 20-year useful life presumption is rebutted. Moreover, in contrast to FRS 10, under IAS 38 it is also required to do an annual impairment review for an intangible asset that is not yet ready for use (PwC, 2005).

Importantly, FRS 10 allows internally-generated intangible assets to be capitalized at cost and amortized over its estimated useful life, however, revaluation of intangible assets is prohibited. In contrast, under IAS 38 an entity can choose either the cost model or revaluation model for each class of intangible assets as its accounting policy. Under cost model, after initial recognition the benchmark treatment is that intangible assets should be carried at cost less any amortization and impairment losses. On the other hand, under revaluation model, intangible assets may be carried at a revalued amount (based on fair value) less any subsequent amortization and impairment losses only if fair value can be determined by reference to an active market. Any revaluation gain/loss is recognized on the face of the income statement. Consequently, more volatility is incorporated into the financial statements (as the fair value is based on the market value, which may change very often and go in any direction).

Last but not least, in the case of research costs different treatment is also identified. Under IAS 38, research costs must be written off as incurred, whereas development costs should be capitalized where particular criteria are met. This contrasts with SSAP 13 where an entity may choose to capitalize development costs.

In general, the impact of IAS 38 is most likely to be due to the joint effect of capitalizing certain development costs (which were previously reported in the income statement) and prohibiting the capitalization of start-up costs or advertising costs (previously included in the

33 www.passacca.net
34 www.iasb.org
35 www.iasplus.com
balance sheet) (Dunne et al., 2008). Ultimately, this may lead to increased profit after the conversion from UK GAAP to IFRS.

In summary, the impact of IFRS depends on which accounting policy has been chosen (revaluation model or cost model). Moreover, due to possible capitalization of certain development costs, an income statements figures should increase after the transition to IFRS. However, due to extensive use of impairment reviews under IFRS, total equity is likely to decrease.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 39, Financial instruments: Recognition and measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 4, Capital instruments</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 5, Reporting and substance of transaction (de-recognition)</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 26, Financial instruments: Measurement</td>
</tr>
</tbody>
</table>

In general, Financial instruments are used to manage financial risk associated with the underlying business activities and the financing of those activities. IAS 39 covers the recognition, measurement and de-recognition of financial instruments, in addition to rules on hedge accounting. In the UK, we can distinguish FRS 4, which covers the recognition, measurement and presentation of shares and certain financial liabilities that are capital instruments. Moreover, we can also distinguish FRS 5 which covers recognition and de-recognition, but is specifically focused on derivatives. The definition of a financial instrument is the same as the FRS 13 definition, and generally we can notice that the scope is fairly wide, as it includes cash, debt and equity investments, loans, trade receivables, trade payables, certain provisions and derivatives (PwC, 2005).

A specific characteristic of IAS 39 is the fact that financial assets and liabilities are measured at fair value or amortized cost depending on which defined category they fall into under the standard. All derivative financial instruments are required to be recognized in the balance sheet at fair value on the contract date and are subsequently re-measured in the future periods at fair value. Changes in the fair value of derivatives that are not hedging instruments are recognized in the income statement. This inclusion of fair value accounting is a specific for IFRS and more importantly, may produce substantial differences in the income statements. Moreover, where a derivative financial instrument is designed as a hedge of the variability in

---

36 Ensor Holding PLC – Transition to IFRS, pp. 11.
cash flows of a recognized asset or liability, the effective part of any gain or loss on the
derivative is recognized directly in the hedging reserve. Any ineffective portion of the hedge
is recognized immediately in the income statement.\footnote{Ibidem, p. 11.}

In summary, due to more extensive use of fair value accounting in regard to IAS 39, we can
expect more volatility in the income statement figures. Consequently, an increase/decrease in
reported profit is dependent on capital market conditions.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IAS 40, Investment property</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>SSAP 19, Accounting for investment property</td>
</tr>
</tbody>
</table>

There are significant differences between IAS 40 and SSAP 19 in terms of the
measurement bases that may be used, and the recognition of gains and losses on revaluation
(PwC, 2005).
Under IAS 40, an entity can choose, for all investment property (with some exceptions),
between the fair value model and depreciated cost. On the other hand, under SSAP 19,
investment property is required to be carried at open market value and does not allow
depreciated cost model for investment properties. Moreover, when the fair value model is
applied under IAS 40, the carrying amount is not depreciated and all gains or losses arising
from changes in the asset’s fair value are recognized in the income statement. This differs
from SSAP 19 where a revaluation gain or loss is recognized in the Statement of Total
Recognized Gains and Losses (STRGL), unless it is a permanent deficit that should be
recognized in the profit and loss account.
What is more, when there is a change in use of the investment property, IAS 40 provides
detailed guidance for subsequent classification, for instance, investment property to be
developed for sale is reclassified as inventory and investment property to be owner-occupied
is reclassified as property, plant and equipment. There is no guidance in SSAP 19 on this
issue although properties would be similarly reclassified, but there are some differences in the
accounting for transfer values (PwC, 2005).
In summary, as the revaluation gains/losses are recognized on the face of the income statement under IAS 40 (in contrast to SSAP 19, where gains and losses are recognized in the STRLG), profit figure will be affected after transition to IFRS.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IFRS 2, Share-based payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>UITF 17, Employee share scheme</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>UITF 38, Accounting for ESOP trust</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 20, Share-based payments</td>
</tr>
</tbody>
</table>

In general, the scope of IFRS 2 is wider than UITF 17 as it relates to all share-based payments transactions, not just those made to employees.

IFRS 2 requires that for equity-settled transactions with employees (for instance, share options awards), the fair value of the employee services received should be measured by reference to the fair value of the equity instrument (for example, share option) at the grant date. In this case, a fair value is determined by the option pricing model. Under UITF 17, it is required to charge to the profit and loss account should as a minimum, be based on the differences between the fair value of the shares at the date of grant and the exercise price.

Under IFRS 2, the charge is spread over the vesting period, which differs to the requirement in UITF 17, where it is required to spread the charge over the performance period (PwC, 2005).

No distinction is drawn in IFRS 2 between vesting periods during which employees have to satisfy specific performance conditions and vesting periods during which there are no special requirements other than to remain in the entity’s employ. That is why, a vesting period in the context of IFRS 2 is different from a performance period referred to in UITF 17.

In summary, under both, IFRS and UK GAAP the treatment of Share-based payments is similar, so no substantial differences should be recognized after switching to IFRS.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IFRS 3, Business combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 6, Acquisitions and mergers</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 7, Fair value in acquisition accounting</td>
</tr>
<tr>
<td>UK GAAP</td>
<td>FRS 10, Goodwill and intangible assets</td>
</tr>
</tbody>
</table>
Generally, merger accounting means that the consideration for the combination and the net asset acquired are not recorded at fair value and consequently, no goodwill arises. So, under IFRS 3, merger accounting is not allowed and business combinations are required to be accounted for as acquisitions using the purchase method. However, under UK GAAP, merger accounting for business combinations is required in limited circumstances if some specified criteria are met.

According to PwC (2005), IFRS 3 applies to all business combinations except, (a) the formation of joint ventures, (b) combinations involving entities under common control, (c) combinations involving two or more mutual entities (d) business combinations brought alone by contract alone. FRS 6 does not have those exclusions.

Moreover, for acquisition accounting under both IFRS 3 and UK GAAP, from the date of acquisition an acquirer should incorporate into the income statement the results of operations of the acquiree and recognize in the balance sheet the identifiable assets and liabilities of the acquiree and any goodwill arising on the acquisition. However, some differences can also be identified, which eventually could lead to different accounting figures.

Namely, IFRS 3 requires that the acquiree’s intangible assets at the acquisition date should be recognized separately in the consolidated financial statements if they meet the definition of an intangible asset in IAS 38 and if their fair value can be measured reliably. Under IAS 38, there is a presumption that the intangible asset’s fair value can be measured reliably if it has a finite useful life. UK GAAP is not as rigorous as IFRS with regard to identifying intangible assets and does not rule out the possibility of many intangible assets being subsumed within goodwill.

Very interesting case is about the goodwill. Under both IFRS and UK GAAP, goodwill arising on an acquisition is treated as an asset. IFRS requires that business do not amortize purchased goodwill, but instead conduct an annual impairment review to assess the carrying value of the goodwill held on the balance sheet. Under IFRS 10, goodwill is amortized over its estimated useful life. Moreover, there is a presumption that the useful life of goodwill does not exceed 20 years, but it permits an indefinite useful life (with annual impairment reviews). Under this circumstances, some of the companies has had to reinstate previously written-off goodwill after transition to IFRS. Moreover, there is no definition of ‘negative goodwill’ under IFRS (PwC, 2005). Instead, the following term is used: ‘excess of acquirer’s interest in the net fair value of acquiree’s identifiable assets’, and is required to be taken to the profit or

---

38 Ensor Holding PLC – Transition to IFRS, pp. 9.
loss at the date of acquisition. However, under FRS 10, the term ‘negative goodwill’ exist and it is required that the negative goodwill up to aggregate fair value of the non-monetary assets acquired should be recognized in the income statement to match the depreciation of those assets. The balance is recognized in the income statement over the period likely to benefit.

In summary, under IFRS 3 goodwill amortization is prohibited, whereas FRS 10 permits goodwill amortization if the useful economic life of the purchased goodwill is less than 20 years. IFRS 3 requires annual impairment tests, whereas FRS 10 requires annual impairment tests on goodwill if the useful economic life of the goodwill is more than 20 years. That is why, it is expected that in most cases, intangible assets will increase after transition to IFRS (increase in balance sheet figures) and that income statement figures (generally profit) will decrease due to impairment.

<table>
<thead>
<tr>
<th>IFRS</th>
<th>IFRS 5, Non-current assets held for sale and discontinued operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK GAAP</td>
<td>FRS 3, Reporting financial performance</td>
</tr>
</tbody>
</table>

Under IFRS, assets classified as held for sale and the assets in a disposal group that are classified as held for sale are presented separately from other assets in the balance sheet. Moreover, the liabilities of disposal group classified as held for sale should be also listed separately from other liabilities. Under UK GAAP, there is no equivalent rule. What is more, under IFRS, an asset held for sale, or included within a disposal group that is held for sale, is not depreciated under IFRS 5. This is different than under UK GAAP where depreciation would continue until the asset was actually disposed of (PwC, 2005).

The definition of discontinued operations is also different under UK GAAP and IFRS. Under IFRS 5, a discontinued operation is a separate major line of business or geographical area of operations, or is a part of a single plan to dispose of a major line of business or geographical area of operations. Moreover, it could be a subsidiary acquired exclusively with a view to resale. However, FRS 3 in this case requires the discontinued operations to have a material effect on the nature and focus of the reporting entity’s operations.

Furthermore, under IFRS 5, an operation is classified as discontinued at the date the operation meets the criteria to be classified as held for sale or when the entity has disposed of the operation. In this context, ‘held for sale’ means that the assets must be available for immediate sale in its present condition and its sale must be highly probable (PwC, 2005). To be highly probable, management should be committed to a plan to sell and an active
programme to locate a buyer and complete plan should have begun. The sale should be completed within one year of the date of classification as held for sale. In general, we can notice that disposed operations may qualify as discontinued earlier that they would have done under UK GAAP as FRS 3 specifies a three month cut off period after the period end.

As PwC (2005) reported in their study, under IFRS 5, the total number, which should be disclosed in the income statement should consist (a) the discontinued operations post-tax profit or loss (b) the post-tax gain/loss recognized in the measurement of the fair value less costs to sell or on the disposal of the discontinued operations’ assets. A breakdown of this total number is required to be given on the face of the income statement or in the notes. Under FRS 3 on the other hand, it is required to disclose the split in the pre-tax figures on the face of the income statement.

In summary, despite of some differences in definition of discontinued operations between IFRS 5 and FRS 3, we should not notice any substantial differences in accounting numbers after the transition from UK GAAP to IFRS.

As there is a substantial number of standards, where we can notice some differences, there are also some, which have no impact on the income statement and the balance sheet at all. According to Dunne et al. (2008), these are: IAS 7 – Cash flow statements; IAS 8 – Accounting policies, changes in accounting estimates and errors; IAS 11 – Contractual contracts; IAS 14 – Segment reporting; IAS 20 – Accounting for government grants and disclosure of government assistance; IAS 24 – Related party disclosures; IAS 26 – Accounting and reporting by retirement benefits plans; IAS 30 – Disclosures in financial statements of banks and similar financial institutions; IAS 33 – Earnings per share; IAS 34 – Interim Financial reporting.

All in all, as we can see, there are a lot of similarities as well as differences in standards under UK GAAP and IFRS. That is why, in the next sub-chapter I try to discover what in most cases cause these existing differences.

After reviewing the most important and influential standards under UK GAAP and IFRS we can notice some similarities, however many differences also exist. Therefore, the question is, how those differences affect accounting numbers after the transition from UK GAAP to IFRS? Answer for this question is provided in the subsequent part of this thesis.
2.4. Impact of IFRS adoption on accounting figures in UK

What we can conclude so far, is the fact that UK GAAP and IFRS are quite similar. However, as we could notice in the previous sub-chapter, there are still some differences in accounting standards, which ultimately may produce differences in accounting figures. The arising question in this case is, how significant impact those differences might have on the income statement and balance sheet numbers in practice? Lantto and Sahlström (2009) provides an evidence that adoption of IFRS in continental European countries has an impact on their accounting figures. However, as the study also suggests, is the fact that IFRS and Domestic Accounting Standards (DAS) of continental European countries differ considerably, which might not be the case between IFRS and UK GAAP, as both standards have many common characteristics.

Asbitt (2006) found that, in UK, although there was a little overall effect of IFRS on FTSE 100 companies, the change in certain items could be significant. According to her study, the standards that have the biggest effect on net equity were IAS 19 – Employee benefits (7% impact), IAS 16 – Property, plant and equipment (with 11% impact), IAS 12 – Income taxes (with 6% impact), IFRS 3 – Business combinations (with 4% impact), and IAS 39 – Financial instruments: Recognition and Measurement (with 4% impact). Moreover, she also noticed that within these changes there were quite noticeable variations, for instance, a 113% standard deviation of goodwill or 79% standard deviation of IAS 16. We can also presume that in many cases the differences in accounting numbers between IFRS and UK GAAP might be caused because of possible errors at the first time adoption, as not all companies were equally prepared to the IFRS implementation process. As Dunne et al. (2008) discovered, the most problematic standards in implementation were: IAS 39, IAS 19, IAS 36, IAS 38, IAS 12, IAS 14/IFRS 8, IFRS 2 and IFRS 3. As they explained, most of these problems in implementation was because the accounting requirements were new and different and very often required fair values, external data or key assumptions to be made to implement these standards. What is more, users of IASB’s standards usually perceive them as a very complex, especially IAS 39, and due to this complexity, possible errors at the date of transition could be also possible.

Taking into account the results of Asbitt’s (2006) and Dunne’s (2008) study as well as information about existing differences between accounting standards covered in the previous sub-chapter, we can notice that standards which differ the most, and which as a result might have the most significant impact on accounting figures, are those where fair value accounting
is incorporated. The fair value accounting introduces some level of volatility into financial statements and due to this, it is highly probable that accounting numbers may violate up and down depending on the current market condition (Clarkson et al. 2010). That is why, despite the fact that IFRS and UK GAAP have a lot in common, possible, but not substantial differences in the financial statement items may exist.

In this study, I show the impact of IFRS adoption by calculating selected financial ratios. That is why, I set the following hypotheses:

**H1: Transition from UK GAAP to IFRS has no impact on Operating Profit Margin (OPM).**

**H2: Transition from UK GAAP to IFRS has no impact on Return on Equity (ROE).**

**H3: Transition from UK GAAP to IFRS has no impact on Return on Invested Capital (ROIC).**

**H4: Transition from UK GAAP to IFRS has no impact on Current Ratio (CR).**

**H5: Transition from UK GAAP to IFRS has no impact on Price-to-Earnings Ratio (P/E).**

In the subsequent part of this thesis, I investigate if this is really the case.
3. Research method, design and data.

3.1. Research method and design.

The goal of this thesis is to examine whether there are differences in accounting numbers, and due to this key accounting ratios after conversion from UK GAAP to IFRS. Moreover, I want to confirm Lantto and Sahltström’s (2009) statement, that there are no substantial differences between IFRS and accounting standards under common law regime. To do this, the ratios before and after the conversion need to be calculated, and eventually a statistical test need to be performed to check whether those differences are significant.

To perform the study, first of all, I calculate the differences between financial statement items, which I use later to calculate selected ratios. More specifically, I calculate the difference by subtracting a median value of every financial statement item under UK GAAP from the median values of financial statement items under IFRS. Further, I test the statistical significance of the differences. Secondly, I apply the same process to investigate the difference in the financial ratios.

To exhibit a full impact of IFRS adoption on UK-listed companies, I selected five financial ratios. Following Lantto and Sahltström (2009), I investigate - three profitability ratios: Operating Profit Margin (OPM), Return on Equity (ROE), Return on Invested Capital (ROIC); one liquidity ratio: Current Ratio (CR); and one market-based ratio: P/E ratio\(^{39}\). Generally, I calculate the difference between UK GAAP-based ratios and IFRS-based ratios (IFRS ratio – UK GAAP ratio), and test the statistical significance of the differences using non-parametric - Wilcoxon Signed-Rank Test. I did not calculate the Equity Ratio (ER), Gearing Ratio (GR) and Quick Ratio (QR) as Lantto and Sahltström (2009) did, because many reconciliation statements of FTSE 250 companies did not provide necessary data, so after including them to my study, the sample size would be much lower and due to this, less reliable.

Due to this two-step process, I will be able to explain how the financial statement items changed after the conversion to IFRS, and eventually, which of them caused the major changes in the selected financial ratios.

\(^{39}\) Note: P/E ratio was calculated using the historical prices (prices at the date of transition)
3.2. Data

In order to understand the impact of the new reporting regime the annual reports from a sample of UK-listed companies pre- and post-IFRS implementation were analyzed. Every entity which is moving from its national GAAP (in this case UK GAAP), is obligated to apply the requirements of IFRS 1 - *First time adoption of International Financial Reporting Standards*\(^{40}\), which determines the procedures that an entity must follow when it adopts IFRS for the first time. According to IFRS 1 an entity’s first IFRS financial statements are the first annual financial statements in which the entity adopts IFRS, by an explicit and unreserved statement in those financial statements of compliance with IFRS. Financial statements under IFRS are an entity’s first financial statements if, for example, the entity:

a) Presented its most recent previous financial statements:
   i. under national requirements that are not consistent with IFRS in all respects;
   ii. in conformity with IFRS in all respects, expect that the financial statements did not contain an explicit and unreserved statement that they complied with IFRS;
   iii. containing an explicit statement of compliance with some, but not all IFRSs;
   iv. under national requirements inconsistent with IFRSs, using some individual IFRSs to account for items which national requirements did not exist;
   v. under national requirements, with a reconciliation of some amounts to the amounts determined under IFRS;

b) prepared financial statements under IFRS for internal use only, without making them available to the entity’s owners or any other external users;

c) prepared reporting package under IFRS for consolidation purposes without preparing a complete set of financial statements;

d) did not present financial statements for previous periods.\(^{41}\)

Specifically, IFRS 1 requires first-time adopters to: (a) reconcile their equity reported under national GAAP to their equity under IFRS, both at the date of transition to IFRS and for the comparative period; (b) reconcile their most recent annual P&L reported under national

---

\(^{40}\)PwC (2005), “IFRS/UK GAAP main differences indicator”, PricewotfhouseCoopers,p.8

GAAP to the equivalent IFRS P&L\textsuperscript{42}. In principle, IFRS 1 requires all entities to produce a reconciliation report at the year of transition. The reconciliation (transition) report gives an insight into the impact of reporting under IFRS as it presents all financial statements, where the accounting numbers under UK GAAP and IFRS are compared to each other. The purpose of IFRS reconciliation statements is to prepare users of financial statements before the complete switch to the new set of standards. However, as Lantto and Sahlström (2009) noted in their paper, the IFRS 1 states only the minimum requirements of explanation on the transition process. They also mentioned that the Committee of European Securities Regulators (CESR) is providing the additional guidance regarding the transition to IFRS. But, as those guidelines are not mandatory, some countries apply it, some not, and some apply it only partly. Due to this, the transition reporting varies across countries, and as I encountered in my investigation, across companies within one country as well.

Generally, the reconciliation reports of UK entities usually present the full information of the transition from UK GAAP to IFRS. However, as Dunne \textit{et al.} (2008) noticed, although IFRS 1 requires reconciliations to be produced in such a way as to allow users to understand any material adjustments, it does not prescribe a specific layout, simply, the format of reconciliation statement varied greatly among firms. Consequently, I encountered a variety of presentations during the inspection of annual financial statements, which were found on the company’s websites. In 90\% of cases, the reconciliation of Cash Flow statement was not provided, as some of the companies noted, that the differences are “really small”\textsuperscript{43}. Moreover, from all the companies I reviewed 79\% showed all financial statement items, and the remaining 21\% released only the key numbers. What is more, only 65\% of firms present which particular standard affected the change, the rest show just the overall impact. Due to this, in many cases (35\%), the transition reports of UK companies do not provide enough data to investigate which particular IFRS standard caused the change. Last but not least, some entities do not keep the archival reports, so the easy access to the historical data, in this case reconciliation statements, is not provided at all. The reason of all this drawbacks ( - like for instance, not full and in many cases not readable reconciliation statements) might be the complexity of some of the standards under IFRS and the complexity of IFRS implementation process itself. This issue is addressed and confirmed through the interviews performed by Dunne \textit{et al.} (2008), where it is clearly stated that annual reports have increased in size and


\textsuperscript{43} Chemring Group PLC – Reconciliation statement, p. 14.
now typically include more complex information and due to this most entities encountered some problems with interpretation and eventually, application.

Table 2. Standards that cause problems for companies

<table>
<thead>
<tr>
<th>Standards that cause problems for companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAS 39 Financial Instruments: Recognition and measurement</td>
</tr>
<tr>
<td>IAS 19 Employee benefits</td>
</tr>
<tr>
<td>IFRS 2 Share-based Payments</td>
</tr>
<tr>
<td>IAS 12 Income Taxes</td>
</tr>
<tr>
<td>IAS 38 Intangible Assets</td>
</tr>
<tr>
<td>IFRS 3 Business Combinations</td>
</tr>
<tr>
<td>IAS 36 Impairment of Assets</td>
</tr>
<tr>
<td>IAS 14/IFRS 8 Segment Reporting/Operating Segment</td>
</tr>
<tr>
<td>IFRS 4 Insurance Contracts</td>
</tr>
<tr>
<td>IAS 41 Agriculture</td>
</tr>
<tr>
<td>IAS 21 The Effect of Changes in Foreign Exchange Rates</td>
</tr>
<tr>
<td>IAS 11 Constriction Contracts</td>
</tr>
</tbody>
</table>


IFRS implementation process is very complex (Dunne et al. 2008), and due to this cause a variety of problems for companies, especially at the first time adoption date. Table 2 lists all standards which were most problematic for UK companies, in order of most problematic standard first. As we can see, and what was also discussed in the previous chapter, the most problematic standards (IAS 39 – Financial instruments: Recognition and measurement, IAS 19 – Employee benefits, IFRS 2 – Share-based payments) are those, which produced the most significant differences in income statement and balance sheet items after conversion to IFRS. For instance, IAS 39 – Financial instruments: Recognition and measurement is particularly difficult because, not only is the standard very lengthy, it is also very technically difficult, with derivatives coming on the balance sheet for the first time and companies having to develop solutions to fair value all their derivatives contracts. Moreover, other problems may be caused because the accounting is new and different (IAS 19), because preparers and
auditors are not sure about the final requirements of a standard (IAS 39/IFRS 8), or because a lot of historical information need to be gathered, such as on research and development and goodwill (Dunne et al. 2008). Consequently, this issue needs to be taken into account while evaluating the final result of the study.

The data of the study was collected from the reconciliation reports, which were included into the company’s annual reports at the year of transition. However, not every company switched to IFRS in 2005. Most of them converted in 2004, however, there were some, which converted even earlier (2003). This early, which also means voluntary adoption of IFRS may be due to gaining some competitive advantage by exploiting potential benefits of IFRS adoption much earlier than competitors. But, there are also some companies which switched after the deadline (2006), which might be due to some specific business situations. But, as Lantto and Sahltström (2009) noted, this timing differences do not have any impact on further investigation.

In my study, all FTSE 250 entities were examined to build the sample, and only firms reporting all the information needed (i.e. accounting numbers under both, IFRS and UK GAAP, which are necessary to calculate selected ratios) were included. Moreover, the analysis is performed for a wide variety of organizations, such that the findings should not be specific to any industry sector. In addition, as financial, insurance and real-estate companies are subject to special regulation as they have particular types of assets and liabilities that are disclosed very differently from those of other companies (Christensen et al., 2007 and Iatridis, 2010), I excluded all banks, investment funds, insurance, and real-estate entities, as their financial numbers might distort the final result of the study. Eventually, after reviewing all annual reports and reconciliation statements of FTSE 250 companies, the final sample, which satisfied all my requirements consists of 101 firms (N=101).

However, as Lantto and Sahltström (2009) noticed, there are still some limitations on the data. More specifically, IFRS 1 describes a mandatory standards that need to be applied by the company, however, there are two categories of exception. First, IFRS 1 specifies a number of optional exceptions from retrospective application. First-time adopters can apply all, some or none of these optional exceptions. Second, IFRS 1 foresees mandatory exceptions from retrospective application. The list of both the optional and mandatory exceptions is as follows:

1) Optional exceptions:
   a) Business combinations;
   b) Employee benefits;
c) Cumulative translation differences;
d) Compound financial instruments;
e) Assets and liabilities of subsidiaries, associates and joint ventures;
f) Designation of previously recognized financial instruments;
g) Share-based payments transactions;
h) Insurance contracts;
i) Decommissioning liabilities included in the cost of property, plant and equipment;
j) Leases;
k) A financial asset or an intangible asset accounted for in accordance with IFRIC 12 – Service concession arrangements;
l) Borrowing costs

2) Mandatory exceptions:
   a) De-recognition of financial assets and financial liabilities;
   b) Hedge accounting;
   c) Estimates;
   d) Assets classified as held for sale and discontinued operations;
   e) Some aspects of accounting for non-controlling interests.

Due to the fact that the use of optional exceptions may vary across the sample companies, my results may provide unbiased picture about IFRS adoption by UK listed companies.
Table 3. Descriptive Statistic of financial ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial ratios calculated under UK GAAP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPE</td>
<td>0.1062</td>
<td>0.0862</td>
<td>0.1715</td>
<td>-1.8108</td>
<td>14.2765</td>
<td>-0.9373</td>
<td>0.5466</td>
</tr>
<tr>
<td>ROE</td>
<td>0.1853</td>
<td>0.1163</td>
<td>0.4793</td>
<td>5.6363</td>
<td>45.9332</td>
<td>-0.9314</td>
<td>4.1143</td>
</tr>
<tr>
<td>ROIC</td>
<td>0.2791</td>
<td>0.2477</td>
<td>0.7835</td>
<td>-4.1975</td>
<td>34.7576</td>
<td>-5.6961</td>
<td>2.8470</td>
</tr>
<tr>
<td>CR</td>
<td>1.7019</td>
<td>1.3488</td>
<td>1.4699</td>
<td>3.7745</td>
<td>19.7914</td>
<td>0.2177</td>
<td>11.2507</td>
</tr>
</tbody>
</table>

| **Financial ratios calculated under IFRS** | | | | | | | |
| OPE   | 0.1301 | 0.0955 | 0.1980 | -0.8376 | 10.5102 | -0.9504 | 0.8293 |
| ROE   | 0.2696 | 0.1477 | 0.6224 | 5.9618 | 47.6059 | -0.8974 | 5.4146 |
| ROIC  | 0.3732 | 0.2759 | 0.8242 | -3.5884 | 29.3323 | -5.6604 | 2.6940 |
| CR    | 1.7438 | 1.4060 | 1.4599 | 3.6560 | 19.0228 | 0.1942 | 11.2507 |

Differences between ratios calculated under UK GAAP and IFRS

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPE</td>
<td>0.0240</td>
<td>0.0093</td>
<td>0.0265</td>
<td>0.9733</td>
<td>-3.7663</td>
<td>-0.0131</td>
<td>0.2827</td>
</tr>
<tr>
<td>ROE</td>
<td>0.0843</td>
<td>0.0314</td>
<td>0.1431</td>
<td>0.3256</td>
<td>1.6727</td>
<td>0.0340</td>
<td>1.3003</td>
</tr>
<tr>
<td>ROIC</td>
<td>0.0941</td>
<td>0.0282</td>
<td>0.0407</td>
<td>0.6090</td>
<td>-5.4253</td>
<td>0.0358</td>
<td>-0.1530</td>
</tr>
<tr>
<td>CR</td>
<td>0.0419</td>
<td>0.0573</td>
<td>-0.0100</td>
<td>-0.1185</td>
<td>-0.7686</td>
<td>-0.0235</td>
<td>0.0000</td>
</tr>
<tr>
<td>P/E</td>
<td>5.5053</td>
<td>-0.4279</td>
<td>-18.3421</td>
<td>1.9688</td>
<td>4.5265</td>
<td>257.7778</td>
<td>-105.1088</td>
</tr>
</tbody>
</table>

Source: My own work based from the output from EXCEL.

The results shown in Table 3 illustrate descriptive statistics of all five financial ratios, which were calculated before and after the transition to IFRS. In particular, the mean and standard deviation (SD) of all financial ratios under UK GAAP and IFRS is provided. In addition, the minimum and maximum is displayed in order to provide some insight into the range between the ratios calculated under both standards. Finally, two measures are given to test whether the data is normally distributed: skewness, which measures the symmetry of the values around the mean and kurtosis, which indicates whether the distributions have bigger tails of more extreme observations than might normally be expected.

Similarly to Lantto and Sahlström (2009), the results indicate that the ratios are not normally distributed and there is a considerable variation in ratios, which may suggest that the impact of IFRS varies from company to company. This could be seen especially in the case of P/E ratio, where the gap between minimum and maximum figures is very big under both accounting standards. Due to the fact that, the distributions of ratios are non-normal (very high kurtosis and skewness), a simple t-test cannot be used to test the statistical significance between the differences, as the certain assumptions are not satisfied (e.g. normality). In this case, non-parametric test needs to be applied, as it does not require the data to be normally distributed. Consequently, to investigate whether the difference between the financial
statement items and financial ratios is statistically significant, a Wilcoxon Signed-Rank Test is used. This test is the non-parametric version of a paired samples t-test that does not assume normal distribution. What is more, as the data is not normally distributed, I will use median values in further investigation, as it will provide more accurate reflection of an average value in this case.
4. Results

4.1. Differences between the UK-based and IFRS-based financial ratios.

Table 4 shows the difference between median values of financial ratios before and after the transition to IFRS. It also shows the statistical significance of the differences at the 5 per cent level. The results clearly indicate that the differences in financial ratios exist, and what is more, they are statistically significant in all cases. Consequently, all five hypotheses are rejected. Moreover, the results based on code law regime country (Finland), obtained by Lantto and Sahltström (2009) are also displayed.

Table 4. Medians of financial ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>UK GAAP Median</th>
<th>IFRS Median</th>
<th>Difference</th>
<th>% change (Lantto)</th>
<th>%change</th>
<th>P-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPE</td>
<td>0.086</td>
<td>0.095</td>
<td>0.0093</td>
<td>12.0%</td>
<td>10.8%</td>
<td>0.000</td>
<td>Reject H1</td>
</tr>
<tr>
<td>ROE</td>
<td>0.116</td>
<td>0.148</td>
<td>0.0314</td>
<td>19.0%</td>
<td>27.0%</td>
<td>0.000</td>
<td>Reject H2</td>
</tr>
<tr>
<td>ROIC</td>
<td>0.248</td>
<td>0.276</td>
<td>0.0282</td>
<td>9.0%</td>
<td>11.4%</td>
<td>0.000</td>
<td>Reject H3</td>
</tr>
<tr>
<td>CR</td>
<td>1.349</td>
<td>1.406</td>
<td>0.0573</td>
<td>-0.2%</td>
<td>4.2%</td>
<td>0.022</td>
<td>Reject H4</td>
</tr>
<tr>
<td>P/E</td>
<td>14.672</td>
<td>14.244</td>
<td>-0.4279</td>
<td>-11.0%</td>
<td>-2.9%</td>
<td>0.020</td>
<td>Reject H5</td>
</tr>
</tbody>
</table>

Source: My own work based from the output from SPSS.

The evidence presented in Table 4 shows that all three profitability ratios are substantially higher after the conversion to IFRS, and all are statistically significant at 5% level. Moreover, in all cases the p-value is at a very low level. Return on Equity (ROE) increased by 27%, which is very large increase compared to changes in other financial ratios. That kind of percentage change, from the point of view of an investor, can make a difference while evaluating a particular company, and deciding whether it is worth to invest in it. Furthermore, Operating Profit Margin (OPM), and Return on Invested Capital (ROIC) also increased quite substantially after the conversion, reporting 10.8% and 11.4% increase respectively. Surprisingly however, nearly all profitability ratios (only OPE is slightly higher) calculated by Lantto and Sahltström (2009) – code law system, are lower than the results obtained in this study - common law system, as OPE, ROE and ROIC increased by 12.0%, 19.0% and 9.0% respectively.
In the case of Current Ratio (CR), the increase after the transition is not so substantial like for profitability ratios, but still the median value under IFRS is higher than under UK GAAP. On the contrary, the difference in CR ratio obtained in Lantto and Sahltström’s (2009) study, reported slight decrease (-0.2%) after switching to IFRS. The results also imply that P/E ratio is the one exception, as the difference is negative, which means that generally P/E ratio is higher under UK GAAP than it is under IFRS (however, in this case p-value is higher, so rejection of null hypothesis is not as clear as in the case of profitability ratios). Lantto and Sahltström (2009) also obtained a negative change in P/E ratio after the transition to IFRS, however, in this case the change was much more significant (-11.0%).

In general, the results from Table 4 indicate that there are differences in ratios calculated under UK GAAP and IFRS. Some of them are substantial and some of them are minor, but all of the differences are statistically significant. Furthermore, comparing to Lantto and Sahltström’s (2009) results, we can notice a similar pattern of changes in the ratios. Surprisingly however, in the case of profitability ratios the percentage change after the transition to IFRS is even more significant.

To find out what affected the change in the particular financial ratio, we should go into more details and investigate how the financial statement items have changed after the conversion to IFRS.

4.2. Explaining the differences in financial ratios by financial statement items.

As it was noted in the previous sub-chapter, there are statistically significant differences between UK GAAP-based and IFRS-based financial ratios. To check what cause those differences, the financial statement items, that were used to calculate the ratios need to be investigated.
Table 5. % change in financial statement items

<table>
<thead>
<tr>
<th>Financial statement items</th>
<th>Sum under UK GAAP</th>
<th>Sum under IFRS</th>
<th>%change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>56 558 561 367.00</td>
<td>55 452 032 022.00</td>
<td>-1.956%</td>
</tr>
<tr>
<td>Current Assets</td>
<td>27 698 968 624.00</td>
<td>28 566 782 637.00</td>
<td>3.133%</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>22 332 590 284.00</td>
<td>21 928 128 207.00</td>
<td>-1.811%</td>
</tr>
<tr>
<td>Operating income</td>
<td>4 714 761 240.00</td>
<td>5 662 764 727.00</td>
<td>20.107%</td>
</tr>
<tr>
<td>Net Income</td>
<td>2 508 051 387.00</td>
<td>3 238 437 771.00</td>
<td>29.122%</td>
</tr>
<tr>
<td>Shareholders equity</td>
<td>22 137 859 495.00</td>
<td>21 886 712 643.00</td>
<td>-1.134%</td>
</tr>
<tr>
<td>Invested capital</td>
<td>9 687 105 599.00</td>
<td>9 695 984 599.00</td>
<td>0.092%</td>
</tr>
</tbody>
</table>

Source: Own work based on Excel calculation.

Table 5 illustrates a sum and percentage change of selected financial statement items under UK GAAP and IFRS. All those items were necessary to calculate the ratios presented in Table 4. As we can see, on one hand, Revenue, Current Liabilities, and Shareholder Equity decreased after the transition to IFRS. But on the other hand, Current Assets, Operating Income, Net Income, and Invested Capital increased after the conversion. Especially, we should take a closer look into the Operating and Net Income as the increase of 20.107% and 29.122% respectively, is quite significant.

Table 6. Median of financial statement items

<table>
<thead>
<tr>
<th>Financial statement items</th>
<th>Median under UK GAAP</th>
<th>Median under IFRS</th>
<th>Difference</th>
<th>%change</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>415600000</td>
<td>338900000</td>
<td>-7670000</td>
<td>-18.455%</td>
<td>0.110</td>
</tr>
<tr>
<td>Current Assets</td>
<td>121700000</td>
<td>121700000</td>
<td>0</td>
<td>0.000%</td>
<td>0.179</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>110373000</td>
<td>112423000</td>
<td>2050000</td>
<td>1.857%</td>
<td>0.000</td>
</tr>
<tr>
<td>Operating income</td>
<td>286000000</td>
<td>345000000</td>
<td>5900000</td>
<td>20.629%</td>
<td>0.000</td>
</tr>
<tr>
<td>Net Income</td>
<td>128000000</td>
<td>199760000</td>
<td>7176000</td>
<td>56.063%</td>
<td>0.000</td>
</tr>
<tr>
<td>Shareholders equity</td>
<td>106114000</td>
<td>102600000</td>
<td>-3514000</td>
<td>-3.312%</td>
<td>1.122</td>
</tr>
<tr>
<td>Invested capital</td>
<td>57300000</td>
<td>57300000</td>
<td>0</td>
<td>0.000%</td>
<td>0.715</td>
</tr>
</tbody>
</table>

Source: My own work based on the output from SPSS

However, to have a more realistic view on the differences in financial statement items, we should concentrate on Table 6. Table 6 presents the median values of balance sheet and income statement items prepared under UK GAAP and IFRS, and the median values of the differences between them. The percentage change of median values is similar to the percentage change of sum values (see Table 5), however, is not completely the same. Moreover, the results from Table 6 are not as straightforward and obvious as those from Table 5, yet are more reliable as the median values are used. Those results are consistent with the outcome obtained by Goodwin et al. (2008). In their study, they indicated that after transition
from Australian GAAP (common law) to IFRS, on average, liabilities increased and equity decreased. However, as they noted, changes in earnings were not so obvious, as they were more volatile, reporting some increases as well as decreases. Furthermore, the results from Table 6 are also consistent with Lantto and Sahlström’s (2009) study, which on the other hand, was based on code law country (Finland). They stated that in general, after switching to IFRS all income statement items reported a positive change (increase in income statement profits) and balance sheet items a negative change (i.e. increase in debt and decrease in equity).

In Table 6, the percentage change of **Revenue** after the transition to IFRS is -18.455%, which means that the median value of Revenue is smaller under IFRS. However, this difference is not significant. So, this outcome states that usually there is no difference in Revenue between UK GAAP and IFRS, and more importantly, that Revenue does not have any impact on differences between ratios. As I discovered, 95% of companies in the sample have the same amount of Revenue reported under UK GAAP and IFRS. The remaining 5% were affected by IAS 18 – Revenue recognition, which focuses on changes in the rights and obligations under the contract between the customer and the seller\(^4\). This result is consistent with the information given in the previous chapter. As the sample is based on the companies from different industries and with different sizes, we can assume that those minor changes are variable due to specific businesses, where the Revenue could not have been recognized fully under IFRS.

In the case of **Current Assets**, the median difference under UK GAAP and IFRS is equal to zero. The statistical test confirms this result, reporting that there is no statistically significant difference between UK GAAP-based and IFRS-based Current Assets. However, it is worth to add here, that while collecting the data to the sample, I noticed some difference between Current Assets under UK GAAP and IFRS. But, what I could not find, was the pattern of the changes, for instance, 64% of companies have higher Current Assets under IFRS, 31% have lower, and remaining 5% have the same amount. So, in this case, we cannot simply state that the balance sheet items are always equal, higher, or lower. But, what we can state, is that this particular financial statement item is business sensitive, and in general, has small impact on financial ratios. This small 4.2% impact is reflected in Table 4, under Current Ratio (CR), which is calculated by dividing Current Assets by **Current Liabilities**. Furthermore, the difference between median values of Current Liabilities under UK GAAP

\(^{44}\) Mintz, S. M., ‘Proposed Changes in Revenue Recognition under US GAAP and IFRS’, *Accounting & Auditing*, p. 34-39
and IFRS is also fairly low. Generally, Current Liabilities under IFRS are 1,857% higher than those under UK GAAP (increase in short-term debt). Moreover, the difference is statistically significant. In this case, we can conclude that, as there is no statistically significant difference between UK GAAP-based and IFRS-based Current Assets, Current Ratio (CR) is mostly affected by Current Liabilities, which increased after the conversion to IFRS. This is also the case in Lantto and Sahltström’s (2009) results.

The results from Table 6 also show that, the difference in Operating Income under UK GAAP and IFRS is very high (20,629%) comparing to the previously mentioned financial statement items. Moreover, the difference is statistically significant at the 5% level. The reason for this substantial difference may be caused by favorable IFRS standards, like for instance, IAS 19 – Employee Benefits, or IAS 16 – Property, plant and equipment. One financial ratio affected by Operating Income is Operating Profit Margin (OPM), which is calculated by dividing Operating Income by Revenue. So, as the difference in Revenue under UK GAAP and IFRS is fairly low, but more importantly, is not statistically significant, we can state that the 20.629% increase in Operating Income caused 10.8% increase in this OPM. Again, this conclusion is consistent with Lantto and Sahltström’s (2009) results.

The highest percentage change was achieved by Net Income, which after the conversion to IFRS increased by 56.063%, and like in the case of Current Liabilities and Operating Income, the difference is statistically significant at the 5% level. This outcome is consistent with Lantto and Sahltström’s (2009) results as well as with the other empirical studies. Iatridis (2010) found that IFRS implementation is likely to exhibit a favorable impact on financial measures of firms, as profitability and growth appear to be higher. Further, according to Dunne’s et al. (2008) study, the implementation of IFRS increased the reported profit of companies in the UK by 48.51%. They indicated that the standards which have the greatest positive impact on IFRS net profit is IAS 40 – Investment property with 38.72% increase after the conversion to IFRS and IFRS 3 – Business combinations, with 29.73% increase. What is more, in their view, standards that also have a positive impact on net income are: IAS 32 – Financial instruments: Disclosure and presentation/IAS 39 – Financial instruments: Recognition and measurement (10.75%), IAS 10 – Events after balance sheet date (7.45%) and IAS 38 – Intangible Assets (6.53%). This may lead to the assumption that IFRS in less conservative than UK GAAP, mostly due to more extensive use of depreciation and provisions, which ultimately cause a higher Net Profit (usually in the periods with weak economic performance). Further, they also present standards with negative impact: IAS 12 – Income taxes (-9.51%), IAS 17 – Leases (-4.14%) and IAS 21 – The effect of changes in
foreign exchange rate (-2.09%). But despite this negative impact of some standards, the overall effect was an increase in net income under IFRS. Similarly, according to Lantto and Sahltström (2009), the standards which have the most significant impact on changes is the financial statement items and due to this the financial ratios are: IAS 19 – Employee benefits; IFRS 2 – Share-based payments; IFRS 3 – Business Combination; IAS 16 – Property, plant and equipment and IAS 32 – Financial instruments – disclosure and presentation. In addition, as it was noted earlier in this thesis, IFRS allows a new accounting treatments, which in most cases, were prohibited under previous GAAP, moreover, it brings some level of volatility by introducing a fair value accounting. For instance, IAS 40 – Investment property has affected the way the gains or losses on the revaluation of assets are accounted. More specifically, IAS 40 is the first international standard which introduces the possibility of applying a full fair value model when accounting for non-financial assets. Under this option the asset is not depreciated, and all valuation changes from one period to the next are treated as gain and losses and are reported in the income statement. However, under UK GAAP, these unrealized gains on investment properties would not have been disclosed in the income statement but would have been reported as a gain in the revaluation reserve (Dunne et al., 2008), which generally have made the reported net income lower than under IFRS. Further, the principle based nature of IFRS often relies on the judgment of preparers and therefore leaves management with some discretion e.g. on the impairment of some assets group (IAS 16/IAS 38). What is more, IAS 39 – Financial instruments: Recognition and measurement, states that all financial instruments must be carried out in financial statements at their current market value, which in effect brings the volatility to the income statement, and due to this, the income statement numbers are subject to changes over time and are only valid at the balance sheet date. In this case, any gains or losses that flow through the income statement are likely to be, to some extent, dependent on the performance of the capital markets. Moreover, this high volatility of earnings may not be good for firms which are in need of bank financing. Interestingly, in the case of IAS 10 – Events after balance sheet date, there is not so clear why the standard has had an effect on profit. As Dunne et al. (2008) noted, the IAS 10 definition of events after the post balance sheet date is very broad and therefore any increase in national GAAP profit following the application of IAS 10 is likely to be due to circumstances that are relevant to individual companies as opposed to change in accounting method. A few companies were chosen from the sample, and reviewed more closely. What was discovered, is that the application of IFRS 2 – Share-based payment in all cases significantly affected the net income. As one of the companies noted in their reconciliation statement:
“Under IFRS 2, the charge recognized in the income statement for share options, long term incentive plans and other share based payments will be based on the fair value of the awards, calculated using the option pricing model. This contrast to UK GAAP where the charge recognized was based on the intrinsic value of awards, being the difference between the market value of the shares at the date of the award and the option exercise price”\(^45\).

The charge amount is linked to the overall market condition, and at that time, most companies were positively affected by this standard. We can conclude that more extensive use of fair value accounting under IFRS leads to higher volatility of accounting numbers and due to this positive changes in the net income numbers (when market conditions are good) after conversion from UK GAAP.

Further, Table 6 also shows that Shareholder Equity value decreased by 3.312\% under IFRS. Again, this outcome is consistent with Lantto and Sahltström’s (2009) results. Moreover, based on their study, Dunne et al. (2008) confirmed that the net equity of the average UK listed company is lower under IFRS. More specifically, they stated that net equity under IFRS is only 85.61\% of its value calculated using national GAAP, thus the reduction in the net equity in the balance sheet was -14.39\%. They indicated that this reduction in IFRS net equity in the UK was mainly attributable to the effect of IFRS 3 – Business combinations (-11.26\%), IAS 19 – Employee benefits (-6.20\%), IAS 38 – Intangible assets (-2.39\%) and IAS 12 – Income taxes (-1.99\%). Importantly, they also noted that the large reduction in net equity may have implications for companies wishing to raise additional finance if the strength of their balance sheets has been eroded, with higher gearing levels and greater perceptions of risk, which may be a huge disadvantage especially for the companies which are more reliable on bank financing.

However, in my study, not only the difference in net equity is not so substantial, but also this minor change is not statistically significant at the 5\% level. As Aisbitt (2006) discovered in her study, the overall effect on company’s equity seems to vary, which suggest that the effect is attributable to company’s individual accounting policies and circumstances rather than national differences in accounting. This may implicate that there is no particular pattern in changes in equity in the UK, and this in fact might be a reason that the negative change in this

\(^{45}\) Next PLC reconciliation statement (2004), p. 4
study is not statistically significant. Moreover, she also presented which balance sheet items according to her study, may have the most significant impact on equity. Those with the highest possible impact are: Retirement benefits obligations, Property, plant and equipment (e.g. revaluations), Deferred Tax assets, and Goodwill and Intangible assets, which to some extent, is consistent with the Dunne’s et al. (2008) and Lantto and Sahltström’s (2009) results. Aisbitt’s findings are also reflected in this study, showing that the impact of IFRS is different across all companies. From all of the sample companies, which represent all industries, the equity under UK GAAP is higher in 76% cases, than under IFRS. Similarly, 24% of all companies reported higher equity under IFRS than under UK GAAP. None of all companies have equal value under the equity figure. So, in most cases, the equity is higher under UK GAAP, but due to some specific circumstances might be lower. However, it is worth noting, that in general, the differences in equity under both accounting systems are not so substantial, which is also reflected in Table 6.

Taking into account the fact that, in this study, UK GAAP-based and IFRS-based differences in Shareholders Equity are not statistically significant, this finding clearly demonstrates that the 27% increase in Return on Equity (ROE) after the conversion to IFRS, is mostly affected by net income, and only some individual accounting policies, may to some extent increase, or decrease equity, which eventually could have some impact on ROE.

The last financial statement item, which is investigated in this study is Invested Capital, and as we can see in the Table 6, there is no difference between IFRS and UK GAAP. The reason for this outcome is very simple to justify. Nearly every company in the sample, as a reconciliation statement reported only income statement and balance sheet, announcing that there were no changes in a cash flow, or the changes were minor. So, to get a company’s Invested Capital, which is necessary to calculate Return on Invested Capital (ROIC) ratio, I used the cash flow statement which was present in a annual reports at the date of transition (under IFRS). In this case, we can simply conclude, that the 11.4% increase in ROIC (net income/invested capital) after the conversion to IFRS was affected solely by net income.

The last financial ratio which is investigated in this study, is market-based Price/Earnings (P/E) ratio. Table 4 shows that after to conversion to IFRS the median value of P/E ratio decreased by 2.9%.To calculate this figure we need to divide a company’s share price (price at the transition date) by earnings per share. As the share price under UK GAAP and IFRS is the same for the particular company, the only item which affected the negative change are
earnings per share, which on the other hand, are affected by net income\textsuperscript{46}. So, the negative change in P/E ratio is easy to explain. As share price is constant, and the net income increased after the conversion to IFRS, logically, the P/E ratio needs to be lower than under UK GAAP, which is the case in this as well as Lantto and Sahltström’s (2009) study.

In summary, after reviewing Table 6, we can state with certainty that there are differences in accounting numbers between UK GAAP and IFRS. What is more, especially at the year of transition, the results under IFRS were favorable for all companies, as they net income increased significantly, which eventually may lead to a higher share price. What is worth to mention again, is the fact that IFRS presents a fair value accounting, which can have a positive impact on particular company when the economy is booming (what was the case at that period of time), and negative when the economy is going down. Moreover, the results from Table 6 also show, that in countries where common law system prevails (UK GAAP), the changes in financial ratios after switching to IFRS present the same pattern of changes as countries with code law system. Surprisingly however, in many cases (i.e. ROE, ROIC and CR), the changes in financial ratios in countries under code law system, are less substantial than those under common law system. This result contrasts with Lantto and Sahltström’s (2009) statement, that in countries where common law system prevails (i.e. the UK), the changes after the transition to IFRS should be minor or not present at all.

In the next sub-chapter I try to confirm my results by calculating an index of conservatism, which simply will indicate which accounting system (UK GAAP versus IFRS) is more conservative and which is based more on accrual accounting.

### 4.3. An Index of Conservatism

In this chapter a further analysis is performed by introducing a Conservative index, which is going to show, based on sample companies, which accounting standards are more conservative.

As it was noted in chapter 2, a conservative accounting is often regarded as a system in which lower profits are reported than under system driven by accrual accounting (overestimating costs and underestimating profits). Briefly speaking, we can say that the conservative accounting is less optimistic than accrual accounting.

\textsuperscript{46} Note: Earnings per share = Net income/Shares outstanding
Conservative index, which was developed by Grey (1980) is very useful in examining whether there are material quantitative differences in profits and equity reported under IFRS as compared to those reported in accordance with national GAAP (Dunne et al., 2008). In the previous sub-chapter it was demonstrated that the ratios calculated under UK GAAP and IFRS differ, moreover, in some cases they differ significantly. What is more, It was examined which particular financial statement item affected those differences, especially differences in net income. However, to double-check the validity of the previous results and confirm the negative change in equity and positive change in net income, and at the same time find the answer which accounting system is more optimistic, the conservative index is used. Ultimately, by performing this test, we will find the answer which accounting system on average, produces higher net income, which could be a good indication for analysts or investors while evaluating a particular company.

To examine the extent of differences in profit reported using UK GAAP and IFRS, the index is calculated as:

\[ 1 - \left( \frac{\text{Profit IFRS} - \text{Profit UK GAAP}}{\text{Profit IFRS}} \right) \]

Accordingly, to assess the extent of the differences in equity reported using UK GAAP and IFRS, the index is calculated as:

\[ 1 - \left( \frac{\text{Equity IFRS} - \text{Profit UK GAAP}}{\text{Equity IFRS}} \right) \]

In general, index value greater than 1 means that UK GAAP earnings are less conservative (more optimistic) than those under IFRS. By contrast, an index value of less than 1 means that UK GAAP earnings are more conservative than under IFRS. Eventually, if the index value is equal to 1, it states neutrality between UK GAAP-based and IFRS-based figures.

The above equations are used to calculate an index values for net income (income statement figure) and equity (balance sheet figure) for all sample companies. Then, the index values are
averaged across the companies, moreover, median and standard deviation are also calculated. The results are reported in Table 7.

Table 7. Index of Conservatism

<table>
<thead>
<tr>
<th>Financial statement item</th>
<th>Mean</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income</td>
<td>0.75</td>
<td>0.92</td>
<td>0.08</td>
</tr>
<tr>
<td>Equity</td>
<td>1.13</td>
<td>1.01</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Source: Own work based on Excel calculation.*

In particular, Table 7 shows that, on average, profits reported under IFRS for the sample companies were higher than that reported using UK GAAP (less conservative), as the index value is less than 1 (0.75). This may suggest that IFRS has quite significant impact on the reported profits of UK companies and more specifically, that net income increased after the conversion to IFRS. Consequently, this finding confirms the results reported in Table 6, where we can see that net income under IFRS is higher than under UK GAAP (56.063% increase), which means that UK GAAP is more conservative.

A similar analysis of equity was conducted and results are also presented in Table 7. As we can see, the index value for equity is higher than 1, which means that effect of IFRS implementation was to decrease total equity. This means that in respect to equity, IFRS is more conservative. Again, this finding confirms the result from Table 6, where we can see a slight decrease in equity value after the conversion to IFRS. The one drawback is, that the reported in Table 6 decrease in equity is not significant, which means that, on average, we cannot state that the equity under IFRS is lower than under UK GAAP. However, what we also know from the previous chapter, is the fact that the overall effect on company’s equity seems to vary, which suggest that the effect is attributable to company’s individual accounting policies and circumstances, rather than material differences in accounting. That is why, the result is not so obvious like in the case of net income, however, it gives us the indication which direction most probably the equity will follow after the conversion to IFRS.

All in all, the results from the index of conservatism confirmed the results from the previous sub-chapter, which in general make it more reliable. So, in this place, we can state with certainty that, although IFRS and UK GAAP are quite similar, as both are market-oriented, the adoption of IFRS has an impact on UK company’s financial statements figures and due to this on key financial ratios. That is why, the hypotheses stated at the beginning of this thesis...
should be rejected, as there is an evidence that the adoption of IFRS has some impact on accounting numbers of UK-listed companies.
5. Summary and Conclusion

This study provides evidence on differences in accounting numbers after the compulsory switch from UK GAAP to IFRS. UK-listed companies have been chosen to this study because still, there is a widely held belief that in general, there is no difference between UK GAAP and IFRS, as both are shareholder-oriented (Ding et al. 2007; Lantto and Sahltström, 2009). However, as there is no convincing evidence showing whether IFRS implementation affected UK firms financials, the study is performed to ultimately fill this gap.

In this study I presented how key financial ratios changed after the conversion from UK GAAP to IFRS. Moreover, I also showed which financial statements items have had the most significant impact on those changes. I also presented and compared the differences in the ratios between common law legal regime (UK GAAP) and code law legal regime (Finland) based on the results obtained by Lantto and Sahltström (2009). Further, based on existing literature I discovered which international standards might cause the differences after the transition. Lastly, based on my results, I calculated an index of conservatism to show which accounting system is less conservative, and due to this produce higher net profit on the face of the income statement.

The result of the present study indicate that despite the fact UK GAAP and IFRS are very similar in many respects, there are significant and in many cases very sizeable differences in accounting numbers, and due to this key financial ratios after the conversion from UK GAAP to IFRS. More specifically, all profitability ratios increased substantially after the transition. The following liquidity ratio noted less significant, but still quite substantial increase, however, one market-based ratio (P/E ratio) noted slight decrease after the conversion to IFRS. What is more, the obtained results indicate that the increase in profitability ratios and decrease in P/E ratio are due to very high income statement profits under IFRS. This statement is consistent with Lantto and Sahltström (2009); Dunne et al. (2008); Iatridis (2010) and Aharony et al., (2010), who stated that after the transition to IFRS, profitability and growth would be higher. This statement is also confirmed by index of conservatism, which indicates that IFRS is less conservative (produce higher profits) than UK GAAP. Moreover, the results also indicate that increase in liquidity ratio is mostly affected by a slight increase in current liabilities. Generally, most of those differences are caused by more rigorous requirements concerning certain accounting issues (such as: goodwill, research and
development expenses, measurements and disclosure of financial instruments and asset revaluation), and more importantly, by more extensive use of fair value accounting under IFRS, which produce more accurate information about the entity’s current situation, however, it introduces more volatility into income statement and balance sheet figures and therefore, accounting numbers under IFRS are more sensitive to changes in the overall market conditions. Importantly, this study contradicts the statement that in countries where common law system prevails (shareholder-orientation), the impact of mandatory IFRS adoption is minor. Interestingly however, my findings show that, not only we can notice some visible impact of IFRS adoption on the UK firm’s financials, but this impact in many cases (ROE, ROIC and CR), is even more substantial than for countries under code law system. (Finland).

Furthermore, in both cases (common law and code law), the changes in the ratios are due to the changes in the same financial statement items (increase in net and operating income, increase in current liabilities and decrease in equity).

However, it should be noted that there are still some limitations on the data. First of all, as it was stated in this thesis, IFRS 1 describes a mandatory standards that need to be applied by the company, but there are also standards which are optional for the first-time adopters. Due to this, the application of optional standards may vary across the sample companies, which as a result may not provide the whole truth about IFRS adoption by UK-listed companies. Secondly, as the annual reports under IFRS have increased in size and in general, include more complex information, first-time adopters may encounter some problems with interpretation, and consequently, potential errors might have occurred. This two issues need to be taken into account in further investigations.
References


PwC (2005), ‘IFRS/UK main differences indicator’, PricewotherhouseCoopers.


Web pages:


www.londonstockexchange.com

http://finance.yahoo.com

http://www.eurojournals.com/finance.htm
http://www.ifrs.org
http://www.wordiq.com
www.iasplus.com

www.passacca.net

www.iasb.org
www.accaglobal.com
List of Tables

Table 1. Summary of UK reporting environment
Table 2. Standards that cause problems for companies
Table 3. Descriptive Statistic of financial ratios
Table 4. Medians of financial ratios
Table 5. % change in financial statement items
Table 6. Median of financial statement items
Table 7. Index of Conservatism