UNIVERSITY OF LJUBLJANA
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MASTER'S THESIS

CHALLENGES OF AUDITING FAIR VALUE MEASUREMENTS DURING INCREASED MARKET VOLATILITY

Ljubljana, November 2022 ALEKSANDRA BABUNSKA

AUTHORSHIP STATEMENT

The undersigned Aleksandra Babunska, a student at the University of Ljubljana, School of Economics and Business, (hereafter: SEB LU), author of this written final work of studies with the title "Challenges of Auditing Fair Value Measurements During Increased Market Volatility, prepared under the supervision of Prof. Marko Hočevar, Ph. D.

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LIST OF ABBREVIATIONS

ANR - Agency for Public Audit Monitoring

CF – Cash Flow

DCF – Discounted Cash Flow

EBIDTA - Earnings before interest, taxes, depreciation, and amortization

ECL – Expected Credit Loss

EFRAG - European Financial Reporting Advisory Group

EV – Enterprise Value

FASB - Financial Accounting Standards Board

FS – Financial Statement

FV – Fair Value

FVA – Fair Value Accounting

FVM – Fair Value Measurement

FVOE – Fair Value and Other Estimates

HC – Historical Cost

HCA – Historical Cost Accounting

IAASB - International Auditing and Assurance Standards Board

IAS – International Accounting Standard

IASB - International Accounting Standards Board

IFRS - International Financial Reporting Standard

IOSCO - International Organization of Securities Commissions

ISA – International Standards of Auditing

PCAOB - Public Company Accounting Oversight Board

SEC - Securities and Exchange Commission

SFAS - Statement of Financial Accounting Standards

SIR – Slovenian Institute for Auditing

SRS – Slovenian Accounting standards

INTRODUCTION

Background

Over the past two decades, financial markets have been growing rapidly and have become more globalized and deregulated. Organizations started having more complex structures in terms of their corporate and capital partnerships, which increased their overall exposure to risk, and there has been a great expansion of financial services available for investors globally (Turk, 2009). Such globalized events have to some extent, contributed to the development of the fair value (FV) model, allowing accounting to transcend the historical cost approach (Diana, 2009). The revolutionized environment and the transition in valuation models have also impacted the auditors' roles and responsibilities, approach, and functionality. The auditor's task has transformed from having a traditional and mechanized reporting role to exercising a significantly judgmental function in a holistic appraisal of the entity's evidence for their "fair" representation of items, which is usually highly subjective (Singh & Doliya, 2015).

Fair value accounting (FVA) became a pervasive method in financial reporting, under which assets and liabilities are measured at their current market value (Niranjan & Arindam Banerjee, 2017). With this approach, by accounting for the price that would be received for the disposal of an asset (or transfer of liability) in an orderly transaction between the buyer and the seller at the measurement date, the prepares aim to convey relevant information within the financial reports to the stakeholders (Toluwa & Power, 2019).

On the other end of the spectrum is historical cost accounting (HCA), which is apparently in sharp contrast to the FV concept (Pei-Gin, 2013). Under the historical cost approach, the underlying item is recorded at its original assessed cost and, as such, is past-oriented, without reference to current or future market prices, clearly defined and verifiable (Răscolean & Rakos, 2016).

During financial market distress, market asset prices may mirror the available liquidity rather than the asset's future cash flows. Consequently, determining the company's solvency based on market prices is not beneficial (Allen & Carletti, 2008). Even though many entities have recognized immense losses under FVA during volatile market periods, this approach is considered to create a particular connection to reality for those in favor of the FV concept. They believe that a value reflected only in terms of the item's cost does not provide a better image to investors regarding potential financial difficulties (Bonaci, Matis, & Strouhal, 2010).

As fair value measurements (FVMs) are a complex task for the preparers that involve future predictions regarding the market behavior and extensive level of judgment, they can be prone

to biases. Therefore, auditors must be wary of the key assumptions of the FVM process and the possible issues that may arise (Martin, Rich, & Wilks, 2006).

Auditing FVMs is challenging for financial and non-financial items, with the most common deficiency being the assessment of management's reasonableness behind their assumptions and methods (Glover, Taylor & Wu, 2017).

However, more than one aspect makes auditing FVMs a demanding task. Namely, there is a notable amount of estimation uncertainty, making it difficult to obtain an objective solution and motivating auditors to rely on third-party valuation specialists (Joe, Vandervelde & Wu, 2014). Also, from inspection reports issued by the Public Company Accounting Oversight Board (PCAOB), it is evident that there is a lack of auditors' knowledge and training in the FVM field, as well as a lack of adjustment and adaptation of the audit approach to the client's risk, especially to control risk and to the entity-level controls (PCAOB 2009; PCAOB 2012; PCAOB 2013).

Recently, the coronavirus outbreak dramatically changed our everyday lives in many areas and sectors, created new trends, and inspired society to rethink many aspects that were impacted by it (Al-Masoodi, Al-Kawaz & Abbas, 2020). In addition, it has been confirmed that COVID-19 is having an unprecedented effect on financial reports and the nature of the audit. More time and effort should be put into understanding and testing controls, performing physical stock observations, performing subsequent events, and being even more aware of potential fraud (Kaka, 2021). Huy (2022) conducted a qualitative study in which he developed a theoretical model with five factors that affect the audit quality in general in the context of coronavirus, such as (1) the audit fee, (2) determining the going concern assumption of the auditee, (3) availability of audit evidence, (4) audit human capital and (5) auditors' salaries (Huy, 2022).

With the economy becoming globalized and the access to immediately available information easy, the FV approach will continue to be a "hot topic" in the future (Marra, 2016).

Research questions

Many researchers suggest that since its adoption, the FV approach has imposed various difficulties upon auditors. Pannese & DelFavero (2010) have brought two main issues into the spotlight: (1) misinterpretation of the accounting and audit standards applicable for FVM and, thus, auditor's failure to properly assess the validity of management's estimations and (2) increased ambiguity concerning determining whether estimated prices reflect the economic reality, especially for items without an active market during the financial crisis and uncertain economic conditions (Pannese & DelFavero, 2010).

After the catastrophic global financial crisis in 2008-2009, the attention toward improving and developing better accounting and auditing standards has increased enormously. The crisis revealed financial statements fraud by large companies and, consequently, a lack of proper governance, integrity, and credibility. It also questioned the auditors' efficiency and expertise and their role in the contemporary environment of providing fair judgment (Alharasis, Prokofieva, Alqatamin, & Clark, 2020, p. 37-38).

Despite all the challenges that auditors face, they are still obliged to provide reasonable assurance regarding FVMs, and according to Bratten, Gaynor, McDaniel, Montague, and Sierra (2013), it is crucial to detect the source of the auditors' impediment in order to enrich the audit output (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). In their study, they have developed a theoretical framework for the audit deficiencies, relying on previous work by Bonner (2008). They segregate the audit deficiencies into three categories: environmental, task-specific, and audit-specific factors. This classification will be leading throughout the thesis and will set the foundation for the main research questions:

1. What are the deficiencies of FVM audit that Slovenian auditors face?
2. How are the auditing deficiencies additionally challenged by COVID-19 in Slovenia?

In addition to the main research questions, sub-questions were formulated in order to enhance the research process and to collect specific, sufficient, relevant, and reliable data:

1. What are the characteristics of FV?
2. What are the challenges of measuring FV?
3. How do the increased market volatility and uncertainty affect the FVM in Slovenia?

The target group for the sub-questions is certified valuation experts. The sub-questions are added to support the existing data from studies, standards, and guidelines and to confirm that the FV concept is understood. The main purpose of this set of questions is to provide the research with the latest data and insights into the current market situation in Slovenia and whether it has been substantially altered due to the general rough patch in the economy.

Purpose of the study

The main purpose of this study is to dig deeper into the auditors' practices about the FVMs audit and define the impediments they are facing, especially during increased market volatility. This research aims to reveal and clearly define the cardinal shortcomings of the FVM audit that might (or might not) be vague to auditors and, by highlighting the issues, to help them reform the audit approach. Even though the essentials of the audit approach are documented within auditing standards, numerous studies imply that there is an inconsistency in the practical application of the guidelines and that the human factor in the decision-making process plays a significant role (Singh & Doliya, 2015).

So, by having these challenges defined and investigated, this study could provide a foundation for understanding the complexity of FVM in Slovenia and mitigating the negative effect of the auditors' intrinsic limitations on audit quality. This, in turn, will be beneficial for auditors at all levels, especially for the new associates, as it will enable them to perform the audit with greater professionalism and better judgment. Consequently, the financial statements' users (mainly investors and regulators) will have more accurate and reliable information about the underlying entity.

The rest of the thesis is structured into four chapters. The first chapter explains the FV concept and the nature of the audit related to this area by emphasizing the deficiencies that are the focus of this thesis. Further on, the research methodology is briefly defined in the second chapter, while the results are presented and analyzed throughout the third chapter. The last chapter wraps up the thesis by outlining the most important conclusions and research limitations and points out suggestions for further research.

1 LITERATURE OVERVIEW

FVM is a widely used accounting concept applied throughout a range of International Financial Reporting Standards (IFRS), at different points of time, and in different markets where the availability of information significantly differs. In their journal article, Kašparovska, Gláserová & Laštůvková (2014) summarized all the financial reporting standards, both International Accounting standards (IAS) and IFRS, that allow the application of FVA (Kašparovská, Gláserová, & Laštůvková, 2014):

- IAS 11 Construction contracts
- IAS 16 Property, plant, and equipment
- IAS 18 Revenue
- IAS 36 Impairment of assets
- IAS 38 Intangible assets
- IAS 40 Investment property
- IAS 41 Agriculture
- IFRS 3 Business combinations
- IFRS 5 Non-current assets held for sale and discontinued operations
- IFRS 9 / IAS 39 Financial Instruments

According to Diana (2015), FV is also a part of IAS 2 Inventories, IAS 19 Employee Benefits, IFRS 1 First-time Adoption of International Financial Reporting Standards, IFRS 2 Share-based Payment, and IFRS 7 Financial Instruments: Disclosures (Diana, 2015).

The adoption of FVM has been challenging for many corporations and major financial institutions. To prevent any inconsistencies, the International Accounting Standards Board (IASB) has introduced a single standard, IFRS 13, which incorporates all the FVM requirements (EFRAG, 2012). This standard is the product of collaborative efforts between the IASB and the Financial Accounting Standards Board (FASB) to create a framework that converges on fair value measurement.

According to the EFRAG's (European Financial Reporting Advisory Group) assessment of the standard, the criteria of reliability, understandability, comparability, and relevance are fulfilled. This standard is not designed to give guidelines on whether to apply the FVM, but rather focuses on showing how to measure fair value (EFRAG, 2012).

The IFRS 13, Fair Value Measurement, replaces the fair value measurement provisions that are currently dispersed throughout different IFRSs by providing a single definition and framework of FVM, as well as detailed instructions for how to apply these provisions and how to disclose the related data. The IFRS 13 does not delete the present exceptions to various standards or adds new requirements for the fair value measurement of assets or liabilities. It merely: (1) represents a single source of guidance for implementing the FV model as allowed by other IFRSs; (2) clarifies the FV concept and the aim of such measurement, and (3) corroborates that the users of financial statements (FS) have a more accurate understanding of the FV and about the inputs used in the estimation (Diana, 2015).

1.1 Fair Value Characteristics and Measurement

Before delving into the specifics of FVMs, it is convenient to briefly point up the concept of historical cost (HC) opposing the FV approach.

1.1.1 Historical Cost vs. Fair Value Approach

In the past century, especially after the great depression, the HC was a preferred approach over FV due to beliefs that it is more reliable, verifiable, and based on objective principles (Markarian, 2014). Many researchers, like Littleton and Paton, favored the historical cost, as they claimed that the role of accounting is not to measure replacement cost, liquidation value, market values, and other valuation methods but rather to measure earnings power. As the historical cost is based on a transaction that occurred, it provides verifiable data and therefore is a sound foundation for accountability (Paton & Littleton, 1940).

Another key player supporting the HC approach was the U.S. Securities and Exchange Commission (SEC), one of the most influential dictators of accounting rules in the 20th century (Zeff, 2007). The prevailing ideology of the SEC at that time, fostered by one of its founding members, Robert Healy, was that accounting's role was to account and not to

provide opinions on value (Healy, 1938). As the HC approach was supported and recognized by many, in the following years, it was the only acceptable approach for determining value until the 1970s, when inflationary periods arose (Markarian, 2014).

The finance theory, especially its notion that financial markets are efficient, and their prices are a reliable depiction of value, is one of the main reasons why FVA rose in the 1980s and 1990s (Ramanna, 2013). In their study of the standard setters, members of the FASB, Ramanna and Allen, found out that those with a background in the financial services industry favor the fair value method. As they noted, this is because they use the fair value daily to prepare the balance sheet for risk-management purposes. Also, the profits recognized under FV accelerate the recognition of gains, and in the case of mergers and acquisitions, the impairment of goodwill determined by fair value methods imposes less drag on earnings, and in turn, it boosts M&A activity (Allen & Ramanna, 2012).

The favoritism of the HC approach was starting to be abolished with the issuance of the Norwalk Agreement, a joint Memorandum of Understanding between the IASB and FASB, signed in September 2002. The agreement stipulates that compatible and high-quality standards should be used for domestic and international financial reporting to lower the differences between standards (Banik, 2018). The introduction of the set of new standards, known as the IFRS, has exposed European corporations to a new concept of »fair value«, which was developed due to the Europeans' perception of flaws in their current historical cost accounting method. It was argued that the HC approach presents a depreciated value of prior purchases, which can be seen as deceptive and unrepresentative of the firm's true worth. Thus, fair value can contribute to accurately predicting this worth (Betakova, Hrazdilova-Bockova & Skoda, 2014).

The term “reliability” was replaced with “relevance” and “faithful representation”, as the standard setters aimed to present a piece of information in the financial reports that would be “decision-worthy” (Markarian, 2014). Since HC evaluation ignores the consequences of rising market prices, it leads to a systematic undervaluation of the assets. It gives less information, is less comparable, and is considerably less useful (Tabara, & Rusu, 2011). To be faithfully represented, IASB states that the depiction should be complete, neutral, and free from error (IASB, 2019). Previously, faithful representation was part of the definition of reliability alongside verifiability and neutrality. This reversal of definitions eradicates the possibility of trading relevance for reliability, as, in the past, it was argued that fair value is unreliable (Whittington, 2008). Also, verifiability was dethroned as a crucial qualitative characteristic because, as Lennard describes it, "it requires merely that different observers will reach consensus, and not that they either base their views on reliable evidence or what the method used for 'indirect verification' should be" (Lennard, 2007, p. 53).

In his study on the impact of flexibility in accounting on financial reporting, Ajekwe (2021) explains the inherent flexibility in financial accounting through the bold statement of the

IASB, written in Chapter 1: The Objective of General Purpose Financial Reporting of the Conceptual Framework:

> "To a large extent, financial statements that conform to the International Financial Reporting Standards are based on estimates, judgments, and models rather than exact depictions of reality".

By having this freedom with the accounting numbers, one can argue that the estimates are in the "grey" area, creating vast opportunities for manipulation (Ajekwe, 2021). However, in their book "The Financial Numbers Game", Mulford and Comiskey (2002) elaborate that flexibility exists due to specific conditions and circumstances across different industries, and its purpose is to provide support in the fair presentation of financial data and not a misleading one (Mulford & Comiskey, 2002).

Even though investors and relevant parties in Europe have been satisfied with the adoption of IFRS and seemed to agree that it will result in better financial reports, there were several controversies regarding IAS 39, Financial Instruments: Recognition and Measurement that allows the use of fair value measurements, and which ultimately had to be modified (Armstrong, Barth, Jagolinzer, & Riedl, 2010). The recognition and measurement notions in FVM are straightforward. However, complications arise when entities apply them in practice and hence, are the essence of the controversy, especially as they are believed to infuse volatility and contamination to the market (Fahnestock, & Bostwick, 2011). However, later on, the IASB took fair value accounting to another level and introduced IFRS 9: Financial Instruments, which replaced IAS 39, under which various measurement techniques were permitted (Pei-Gin, 2013).

1.1.2 Insights into IFRS 13

The concept of fair value, the framework for measuring fair value, and the required disclosures related to it are the main objective of IFRS 13, *Fair Value Measurement*, which was first published in May 2011.

IFRS 13 states that the basis for fair value measurement is the market environment rather than the entity characteristics. Even though there are several measurement methods to derive the fair value of an item, the main objective of FVM in each case is to evaluate the price (fair value) at which a transaction would take place between a seller and a buyer at the measurement date under present market conditions and considering the item's condition and characteristics at the measurement date. The item subject to FVM can be an asset or liability, which can be further accounted for on a standalone basis (e.g., financial instrument) or considered as a group of assets or liabilities (e.g., a cash-generating unit) (IASB, 2011).

The definition of fair value thus embodies many ideas. It makes it clear that fair value is an "exit" price; for instance, it refers to transferring a liability rather than a settlement. Also, it presumes a smooth transfer or sale (i.e., not a forced deal or a distressed sell), and the phrase "market players" is used explicitly, highlighting that fair value is a market-based theory. The last clarification by IFRS 13 is that fair value is defined as a current price at the measurement date (such as the acquisition date in a business combination or the period ending for recurring fair value measurements) (Grant Thornton, 2021).

The transaction takes place at the principal market for the underlying item, or in the case of a non-existent principle market, at the most alike and opportune one. The standard can be applied to non-financial assets, liabilities, and the entity's equity instruments, as well as to financial assets and liabilities with offsetting positions in market risks or counterparty credit risk (IASB, 2011).

FV at initial recognition is the transaction price paid or received, bearing in mind that in some instances, other factors might influence the fair value at initial recognition. Such cases might be if the transaction is between related parties; forced sales when the seller is pressured to accept the price if they are experiencing financial difficulties; or the transaction takes place in an advantageous market, which is not the same as the principal market (IASB, 2011).

When evaluating fair value, the management should use appropriate measurement methods by obtaining sufficient information and maximizing the use of observable inputs while minimizing the latent ones. Observable inputs are the most likely to be gathered from exchange markets, dealer markets, brokered markets, and principal-to-principal markets, and sometimes they can be adjusted for a premium or a discount (IASB, 2011). Post-implementation field studies show that managers opt for Level 3 estimations regarding non-financial items because there is a limited number of comparable non-financial items and, most of the time, inactive markets (Filip et al., 2017).

According to paragraph 62 in IFRS 13, the three most widely used measurement techniques are the market approach, the cost approach, and the income approach:

1. The **market approach** uses readily available information and prices developed by market transactions of identical or similar assets or liabilities. When applying this approach, it is common to use multiples derived from a set of similar assets and selecting the appropriate one usually demands a high level of judgment (IASB, 2011). Theoretically, the standard's aim is most closely associated with this approach, and for instance, a market for an identical asset would be the stock market (Ghafeer & Abdul-Rahman, 2014).

2. The **cost approach** refers to the current amount needed to replace the operating capacity of an asset (e.g., replacement cost). This approach is most likely to be applied to measure the FV of tangible assets that are used together with other assets or liabilities. Instead of using a new asset, the cost is estimated using a different asset that would provide a comparable benefit while considering the "obsolescence" of the existing asset (IASB, 2011).

3. Under the **income approach**, future amounts (e.g., cash flows) are discounted to a single current amount, reflecting the current market expectations regarding future cash flows. The income approach can be applied through several techniques: (1) *present value techniques*, which incorporate future cash flow estimates that the underlying asset or liability would generate, expectations regarding potential changes in the amount or the timing of the cash flow which inhibits a certain degree of uncertainty, the time value of money represented through a risk-free interest rate, a risk premium and another relevant factor if any. Present value techniques bear uncertainty which is inherent in the cash flow estimates. Therefore, the FVM should include a risk premium on market participants' demand that would be in the amount that would compensate for the uncertainty; (2) *option pricing models* (e.g., Black-Scholes-Merton or lattice model and (3) *the multi-period excess earnings method*, which is most commonly used about intangible assets (IASB, 2011).

Applying fair value measurement principles is a global challenge affecting both emerging and developed economies, with the main concern being the lack of market information. Therefore, the IFRS Foundation engaged in developing educational guidelines to address the application of valuation techniques within the financial reporting framework (IFRS Foundation, 2012).

Multiple valuation approaches might be appropriate depending on the underlying item's characteristics and its external circumstances (e.g., a cash-generating unit). In such cases, the range of results should be analyzed in terms of reasonableness so that the final point estimate resembles the most representative fair value measurement of the whole estimated range. IFRS 13 prescribes that the application of the valuation technique should be consistent. However, it allows for a substitution of the method for another if such change contributes to a more representative point estimate of fair value. Some events that might initiate such change are the development of a new market or a change of the conditions within existing ones, the discovery of newly available information, a usage limitation of a currently available one, or an improvement of valuation methods. IFRS 13 can also be applied in circumstances when limited data is available (IASB, 2011).

In order to increase consistency throughout the FVMs and their related disclosures, IFRS 13 classifies the inputs to the valuation techniques into three levels, known as the *Fair Value*

Hierarchy (IASB, 2011). The fair value hierarchy aims to improve fair value disclosures, measurement consistency and comparability (Artemyeva, 2016).

1. Level 1 inputs are immediately available and, in essence, are the observable (quoted) prices in active markets between identical or similar items. They are available for many assets and liabilities and might be observed in several active markets. Due to this, the principal market should be determined (or at the most advantageous one), as well as whether the market can be entered for a transaction at the measurement date. Usually, no adjustment is made to Level 1 inputs unless it is convenient to adopt a different approach. For example, when an entity holds many similar assets or liabilities for which a quoted price is available but due to a large number of items, it is not accessible for each of them at the measurement date. In such cases, a matrix pricing can be applied and consequently, the FVM will be categorized lower on the hierarchy level (IASB, 2011).

2. Level 2 inputs are also observable inputs but are all other inputs than the quoted prices, which are directly or indirectly observable. When contractual terms are associated with an item, the inputs must be observable for the full term of the underlying item. Such inputs are quoted prices for similar items in active or inactive markets; other observable inputs include interest rates, yield curves, credit spreads or implied volatilities, and market-corroborated inputs. Level 2 inputs can also be adjusted due to factors related to the underlying item at the measurement date, such as its condition or location, the level of activity of the item's market, etc (IASB, 2011).

3. Level 3 are the unobservable inputs and are part of an environment where little or no market activity is detected at the measurement date. Because the FVM objective is that the transaction price is the exit price a market participant would pay/obtain, the inputs should reflect the market participant's assumptions that also account for risk regarding the item's pricing. Including risk adjustment when there is significant measurement uncertainty is of utmost importance. When the unobservable inputs are being determined, the entity should use the best available information obtained both internally and externally (IASB, 2011).

Level 1 inputs are given the higher priority within this hierarchy, while Level 3 inputs are given the lowest. There are cases when inputs from different levels are used for determining the FV for a particular asset. In such cases, the FVM will be categorized at the same level as the lowest level input that is significant to the whole measurement. When determining the fair value hierarchy of the measurement, IFRS 13 prioritizes inputs over valuation methods. Therefore, for example, a present value technique will be classified as Level 2 or Level 3 based on the used inputs that are significant to the measurement and their hierarchy level (IASB, 2011).

A crucial accounting component is value relevance, which evaluates whether financial disclosure contains information pertinent to investors (Ramli, Rahman, Marzuki & Marzuki, 2021). The hierarchy level was introduced within the Statement of Financial Accounting Standards (SFAS) 157: Fair Value Measurements (a FASB accounting standard) before IFRS 13 was adopted. In their study of the fair value hierarchy, Fornaro and Barbera (2007) made several key conclusions that confirm the hierarchy's contribution to the relevance and usefulness of the disclosed information. They found out that entities are more confident when making assumptions regarding Level 2 and Level 3 measurements, even though there might not be available data or active markets. Financial statement users are aware of the FVMs' scope, including whether they are based on observable or non-observable data. The hierarchy allows for disclosure of greater transparency and understanding of the level of subjectivity and judgment present in fair value measuring procedures and in the case of external audit, it provides auditors with a general framework which alerts them which inputs require closer inspection and testing due to incorporated subjectivity, uncertainty, and low reliability (Fornaro & Barbera, 2007).

Table 1. Degree of relevance by FV hierarchy level

Degree of Relevance	**Level**	**Information origin**	**Example**
Higher	1	Unadjusted quoted prices in active markets for identical assets and liabilities.	Investment in common shares of a listed company in the National Association of Securities Dealers Automated Quotations (NASDAQ)
Medium	2	Unadjusted quoted prices of assets or liabilities that 1) are similar and traded in active markets 2) are traded in more liquid markets and other observable inputs.	Investment in debt securities of companies that are not traded in an active market. FV is determined based on the equivalent bonds traded on the NYSE.
Lower	3	Market data are not sufficient. FV is determined on the basis of non-observable inputs that reflect the assumptions made by market participants and one or more valuation techniques.	Specialized machinery where there is little market data. FV is measured using the present value of projected future CF.

Adapted from Fornaro & Barbera (2007).

On the other hand, the fair value hierarchy questions the reliability trait of fair value, particularly regarding Level 3 items. However, in most cases, it improves the comparability and consistency of data, allowing companies to follow the same instructions for identification, classification, and utilization of the best data available for their measurement approaches (Kasyan, Santos, Pinho & Pinto, 2018).

Although establishing the FV hierarchy is a step in the right direction toward standardizing methods for determining FV, it does not affect the uncertainty associated with FV estimations, and many times, an entity-specific measurement offers more predictive information than market measurements that do not take into account individual managerial intents (Dvořáková, 2011).

Financial statements should contain disclosures regarding the fair value measurements. The disclosure requirement is applicable for assets and liabilities, measured at fair value after initial recognition in the balance sheet, regardless of their recurring or non-recurring nature. The valuation technique, as well as the inputs used, should be disclosed. Also, the effect on the profit or loss or the other comprehensive income should be disclosed when unobservable Level 3 inputs are used for a recurring FVM (IASB, 2011).

The information should be detailed enough to satisfy disclosure requirements, clearly summarized or broken down to provide clear explanations, and sufficient so that financial statement users can quickly process the quantitative data disclosed. IFRS 13 sets guidelines on what are the minimum requirements for information disclosure. For example, the following disclosures should be made: the reason for the fair value measurement; the fair value hierarchy level; for Level 2 and Level 3 measurements, a description of the valuation method and the inputs; justified reasons for transfers between Level 1 and Level 2 if any, for Level 3, a reconciliation between opening and closing balances; etc (IASB, 2011).

However, as of March 2021, the IASB, in collaboration with the IFRS Foundation, published an Exposure Draft, Disclosure Requirements in IFRS Standards – A Pilot Approach, in which it proposed amendments to the disclosure sections of IFRS 13 and IAS 19, Employee Benefits. The initiative aims to improve the disclosure conditions so that preparers of the financial statements can provide better information by applying them. The overall conclusion is that disclosures generally lack relevant information and might offer too much irrelevant one, which is ineffectively communicated (IASB, 2021). The IFRS Foundation proposed changes in the disclosures related to items measured at fair value in the balance sheet after initial recognition. For such assets and liabilities, both recurring and non-recurring, the following data should be provided:

- The degree of exposure to uncertainty arising from the underlying classes of items and disclosure of their overall significance, the method of how fair value was measured, and

how the changes in those measurements could impact the entity's position. For a better understanding, for each class of items, their nature, amount, and other relevant specifics, as well as their fair value hierarchy category, should be disclosed. Additional information that will also support the choice of the significant technique and inputs used in the measurement shall be provided.

- Provide a range of alternative fair value measurements for recurring measurement items with a supporting description of the uncertainty caused by significant inputs in the first place and provide a substitution for the inputs. Explain how the new alternatives would magnify or mitigate the effect of uncertainty. The reasons for change should be provided.

As of August 2022, the amendments have not been passed, and the proposal is still in its draft version, where the IASB and IFRS Foundation are revising feedback from across the standard-setting community. It should be noted that past events have shown that additional disclosures do not improve the fair value measurement deficiencies, as at its core is a battle between the qualities against the number of disclosures (Bukh, 2003).

1.2 Audit of Fair Value Measurement

The auditor must certify that the published financial statements provide a "true and fair" representation of the reporting entity's financial position and performance. However, in turbulent markets, significant adjustments to judgments on valuation may be necessary within a relatively short period. For corporations heavily exposed to collateralized debt markets, valuing these parts of their balance sheets is not easy (Woods, Humphrey, Dowd & Liu, 2009).

By their very nature, accounting estimates are difficult to audit, and the auditor may lack the necessary skills to understand the intricate finance-based modeling that underlies estimates of many items (Brown-Liburd, Mason & Shelton, 2014). However, from 2020 on, the audit of accounting estimates needs even more focus, not only due to the economic uncertainties brought on by the worldwide pandemic but also because the international auditing standard (ISA) for auditing estimates, ISA 540, has been updated with effect for financial periods commencing on or after 15 December 2019 (Pedersen, 2020).

1.2.1 Insights into Fair Value Measurement Audit ISA 540 (revised)

Accounting estimates are used to calculate the carrying amounts of assets, liabilities, income, and costs for the period or at a certain moment in time when such quantities cannot be measured precisely. International Standard on Auditing (ISA) 540 is applied for auditing accounting estimates. It is related to ISA 315, ISA 330, ISA 450, and ISA 500, which also give guidelines on accounting estimates. Accounting estimates may be in the form of fair

value, allowance for doubtful accounts, inventory obsolescence, warranty obligations, depreciation, potential litigation costs, long-term contracts, and provision for investment projects with inherent uncertainty regarding recoverability.

ISA 540 defines accounting estimates as determinants by management when certain monetary values are not readily available. Since these measurements are subject to estimation uncertainty, they inherit knowledge and information limitations, which can lead to a potential misstatement. In addition, the estimates can also be misstated due to higher complexity, subjectivity, and other specific inherent risk factors that depend on the nature of the accounting estimate. The auditor's professional skepticism is of utmost importance when there is a greater risk of estimation uncertainty, complexity, or subjectivity. Especially when there is a greater possibility of misstatement due to management bias or fraud (IAASB, 2019).

ISA 540 also emphasizes the requirement for control risk assessment, which will allow the auditor to determine further audit procedures – how much they can rely on the operating effectiveness of controls. The ultimate goal of the auditor is to evaluate the appropriateness of the selected method, the assumptions and data used, and the environmental surroundings of the entity. This appropriateness refers to compliance with the rules of the financial reporting framework and exercising consistent judgment with the goal of the valuation method (IAASB, 2019).

The audit procedure begins with the risk assessment procedures, which are done in the planning phase by understanding the entity, its environment, and its controls. Any specific transactions, regulatory factors, and other events that influence the nature of the accounting estimates should be recognized and understood by the auditor. In addition, the entity's governance should be inspected regarding how management identifies the need for and applies special skills and knowledge related to accounting estimates and its response to related risks. This sets the basis for the next step – identification of the risk of material misstatement. It is also important to understand the entity’s information system and how it aids the management in identifying and selecting designs of relevant methods, assumptions, and sources of data related to accounting estimates (IAASB, 2019).

When identifying and assessing the inherent risks, the auditor should consider the degree to which the underlying accounting estimate is subject to estimation uncertainty and how much it is affected by the complexity, subjectivity, or other risk factors such as the chosen method, assumptions, and data when making the estimate, as well as the management’s point estimate and related disclosures included in the financial statements. In cases when significant risk is determined, the auditor takes the audit to the next phase of understanding the entity’s controls and activities related to that risk (IAASB, 2019).

The next step is to perform substantive testing, in which, depending on the perceived degree of risk, the auditor should proceed with one of the three approaches defined in ISA 540:

a. obtaining audit evidence from events occurring up to the date of the auditor's report,
b. testing how the management made the accounting estimate by obtaining sufficient audit evidence to address the appropriateness of the chosen method, the significant assumptions, and data or
c. developing an auditors' point estimate or range.

ISA 540 states that the higher the evaluated risk of material misstatement is, the more compelling the supporting documentation should be, whether corroborative or contradictory. Various surveys have been conducted to check which of the approaches are used by auditors and the results are diverse, as there is no strict favoritism over one approach. However, there is a consensus that the Board should consider providing additional guidance, especially when the auditor should develop an independent estimate (Abernathy, Hackenbrack, Joe, Pevzner & Wu, 2015).

After the auditor has assessed the risk of material misstatement at the assertion level, they need to implement further procedures to gather appropriate audit evidence to disclose the underlying accounting estimate. As stated in the ISA 540's US equivalent, ASC 820, Level 3 inputs are considered less reliable and more complex than Level 2, and consequently, more disclosure is required. This may lead management to opt for Level 2 securities to avoid high information asymmetry and steer clear of possible unfavorable market behavior. (Abernathy, Hackenbrack, Joe, Pevzner & Wu, 2015). Such management activities and choices drive the auditor's price up as the auditor must understand the diverse and numerous disclosure requirements and the related risks of financial misstatements (Alharasis, Clark, & Prokofieva, 2021).

According to agency theory assumptions, the manager's goal is to maximize their compensations. Research shows strong managerial opportunism and judgment regarding the optional inputs of audited complex estimations, such as fair value measures. The auditor's role is to detect such biases and improve information quality (Honkamäki, Mättö & Teittinen, 2022). Management bias can be more easily detected when considering all accounting estimates in the financial statements in total rather than auditing a single accounting estimate. One accounting estimate may be individually reasonable, but in aggregate, the overall method, the data, and the assumptions used to estimate them may indicate a possible management bias. Also, there might be a pattern in the management's choice of the point estimate, as they might always lean towards the more favorable outcome (IAASB, 2019). When the auditor perceives an increased risk in the accounting estimates, additional evaluations should be done to consider the reliability of the data and the reasonableness of

management's assumptions and chosen assessment models (Christensen, Glover & Wood, 2010).

Based on the audit procedures performed, the auditor should determine whether the risk assessment remains appropriate and relevant, the necessary audit evidence has been gathered, and the management's decisions align with the reporting framework and the regulations. The auditor should confirm whether the accounting estimates are reasonable or misstated (IAASB, 2019). If there is a difference between the auditor's and management's point estimates, and the audit estimate is supported by appropriate evidence, such difference is defined as a misstatement (Prodanova et al. 2019).

Upon the auditor's request, the management should enclose written representations regarding the appropriateness of the applied method and the significant assumptions and data used to recognize the accounting estimates in the financial statements (IAASB, 2019).

FVMs, like any other accounting estimate, incorporate inherent risk due to factors such as estimation uncertainty, complexity, subjectivity, and their inter-relationships. These factors additionally challenge the estimation process. The valuation is performed when the item's cost or price is not straightforward or directly observed. Therefore, a certain method for deriving the value should be applied, as well as appropriate assumptions and data specified by the financial reporting framework. The chosen inputs should reflect the best available knowledge about the item, subject to the valuation (IAASB, 2019). The reasoning method in financial reporting must generally be coherent and consistent to prevent inconsistencies.

Considering the FVEs are measurements, it is safe to assume that there is inherent uncertainty by default because direct observation is impossible. Consequently, the item can be prone to a lack of precision in the measurement due to the limited availability of information regarding the item, and it cannot be easy to verify the inputs of the measurement process. There are also practical constraints related to obtaining information, such as the cost of obtaining it, which might outweigh its actual benefits. Such obstacles are usually the source of measurement uncertainty. Other measurement constraints that occur during the evaluation process are usually sources at a later stage of misstatement rather than estimation uncertainty. The inherent complexity of the accounting estimate may arise from the complexity of the valuation model (e.g., probability-based valuation, option pricing techniques…). Thus, complexity requires those charged with governance to have extensive knowledge when making an accounting estimate or hiring an external expert (IAASB, 2019).

1.2.2 Deficiencies of Fair Value Measurement Audit

There is practically universal agreement that using fair value accounting is not a simple act owing to the ambiguity in the accounting standards, the complexity of rules and instructions,

and the potential lack of active markets that impact its accuracy and reliability (Al Sawalqa, 2016). This is supported by the fact that auditing accounting estimates make up around 56% of the faults noted during PCAOB inspections between 2008 and 2015 (Pinello, Puschaver & Volkan, 2020). Failure to assess the reasonableness of management's estimation and to test the fair value indicators, excessive trust in the evidence obtained from the entity, and the possible failure to evaluate audit risk properly are the auditors' most common challenges and preoccupations (Chiriac, 2016).

Bratten, Gaynor, McDaniel, Montague, & Sierra (2013) (hereinafter "Bratten et al." or "Bratten's") summarized auditors' challenges into three categories: environmental, task-specific, and auditor-specific factors. The Bratten's theoretical framework is the basis for this thesis's main research questions. Following this sub-chapter, the three categories are explained in more detail.

1.2.2.1 Environmental Factors

Environmental factors are the general factors, for example, macroeconomic fluctuations, which externally surround the auditor. The individual auditor does not impact these factors; therefore, they do not reflect the audit or the audit subject. Regarding FVMs' audits, these factors can be classified into two broad categories: estimation uncertainty and strategic interactions between the audit firm and all relevant parties included in the audit (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Estimation uncertainty

Estimation uncertainty is the key characteristic that distinguishes the audit of FVMs from other audits. Financial statements are in danger of losing their value due to estimation uncertainty, and it is challenging for users to distinguish between high and low levels of estimation uncertainty. However, there is evidence that users can rely on the auditor's opinion to explain the inherent uncertainty in the financial reports (Szerwo, Axelton, & Gramlich, 2021). According to ISA 540, it is described as the intrinsic lack of measurement precision that accounting estimates are prone to (IAASB 2008). As such, it embodies two main components: measurement uncertainty and macroeconomic risks. In his study, Griffin determines two types of uncertainty, subjectivity and imprecision, and one reporting choice, disclosure.

Measurement Uncertainty

Measurement uncertainty is defined as the ambiguity in the estimation of an item. This is because experts can have different valuation approaches and methods, especially when the items are part of an illiquid market or have no market. In »mark-to-model« cases, managers

include inputs that require assumptions about future events or unknown factors that require judgment (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). Although precise probability information is seldom accessible when making risky choices, most psychology research addresses uncertainty about the likelihood of a future event occurring in the context of gambling (Einhorn, & Hogarth, 1985).

As already mentioned in this thesis, depending on the inputs, IFRS 13 standard categorizes FVMs into three levels for better consistency and comparability, known as the Fair Value Hierarchy (IASB, 2011). According to Griffin, the hierarchical levels are the main source of subjectivity which prevails in fair value estimates (Level 1 items having low subjectivity and Level 3 items having high subjectivity). In contrast, the selection of amounts from the range of possible values is the source of imprecision (the wider the range, the more imprecise the choice is) (Griffin, 2014).

Researchers have proposed a concept of a benchmark range of acceptable accounting risk with the idea of rejecting any accounting estimate about the future that falls outside the benchmark range. The estimates considered unacceptable for the reporting framework due to unacceptable high accounting risk are defined as "significant estimation uncertainty risk" in ISA 540 (Smieliauskas, Craig & Amernic, 2010). Another ambiguity also arises when managers can select multiple models and assign weights subjectively in addition to the measurement uncertainty created by model assumptions (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Macroeconomic risks

When the economic conditions are somehow volatile, the measurement uncertainty related to model selection may significantly exacerbate. Factors such as supply shocks, changes in capital market liquidity, etc., may further doubt the statistical characteristics of the model inputs, the validity of the chosen models, and the observed prices (which are a part of the Level 1 Hierarchy as observed inputs). In volatile markets, even the observed prices may be an inappropriate reference to fair value. This is because observed prices likely reflect distressed sale values in such circumstances (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Studies indicate that macroeconomic risks add to the measurement of uncertainty risk in terms of the lack of pricing information, evidence, and reliability (IAASB, 2008). The IAASB (2008) guidelines state that shifting from price inputs to appropriately-modeled values would be more acceptable and fairer during such volatile events (IAASB, 2008). In addition, this approach can be relevant for developing countries from where is evidence that financial markets may be underdeveloped due to the small number of listed companies, thus, a scarce assortment of Level 1 inputs (Bonić, Janković-Milić & Rupić, 2022).

Regulatory and Legal Influences

Other significant environmental factors are the regulatory and legal systems. These systems are created to set rules and supervise, enforcing a specific acceptable behavior and proper penalties if the rules are "broken". For example, IAASB is a regulator that sets standards, while PCAOB and CEAOB are supervisory bodies. Under EU legislation, Directive 2014/56/EU and Regulation (EU) No 537/2014 in particular, courts can enforce the rules and impose penalties via lawsuits. Studies have shown that good legal systems lead to improved FVMs and a better quality of FVM audits (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). Regulation generally aims to raise the standard of audit decision-making and create mechanisms for holding auditors accountable for inadequate audit results; by conducting inspections, the regulator determines whether the audit complies with regulations and improves the audit quality (Moroney, Knechel, & Dowling, 2019). In order to preserve audit quality, regulators are enacting stricter regulations aimed at limiting auditor tenure and regaining investor trust as well as the independence of the auditor. Examples include the European Union's (EU) decision in 2014 to implement mandatory audit firm rotation and the Sarbanes-Oxley Act of 2002 (SOX) in the US, both of which established harsher audit partner rotation standards (Ndaba, Harber, & Maroun, 2021).

Audit Firms' Relationships with Non-Regulatory Entities

Contrary to the relationships with legal bodies, which are obligatory, audit firms also voluntarily engage in agreements, whether in the form of formal or informal interactions, with auditees, competition, valuation experts, etc. Bratten et al. focus on the relationships with the auditee and the external valuation specialists. They concluded that compared to other existing relationships, they might contribute to greater misstatement due to their characteristics coupled with estimation uncertainty.

Relationship with the Auditee

An important aspect of this relationship is the "first mover" advantage. Management of the auditee is the "first mover", and the auditor determines the reasonableness of the estimates the management has provided. Management can exploit this advantage more easily during increased estimation uncertainty. Inspection reports conducted by the PCAOB show that when presented with multiple prices from third parties, the auditor is more likely to choose the one closest to the auditee's estimation (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). Wang & Tuttle (2009) find that less experienced auditors are more likely to accept the management's estimation under a renewed contract with the auditee rather than under a one-period contract. Therefore, this may influence the partner's decision in the audit firm on allocating the staff to the engagement, thus assigning staff of lower caliber to low-risk clients (Moroney, Knechel, & Dowling, 2019).

Also, the relationship with the auditee might strengthen as it lengthens, and the auditor might be prone to acting in favor of the management, thus impairing audit quality and audit independence. This supports the abovementioned regulation for mandatory partner/manager rotations (Tepalagul, & Lin, 2015).

However, this relationship is also affected by corporate governance strength and audit firm size. For example, Song, Thomas, and Yi (2010) stated that strong corporate governance contributes to the greater reliability of Level 3 FV assets (Song, Thomas, & Yi, 2010).

Relationship with External Valuation Specialists

Using external valuation experts can positively and negatively affect audit quality and financial reporting. Preparers and auditors can independently engage specialists, and if engaged simultaneously, such a relationship results in an unnecessary cost. Furthermore, regulators have also expressed concerns that auditors and auditees may over-rely on the expert's valuations. Regulators urge management to reassess their degree of understanding of the valuation model, assumptions, and the inputs used in the valuation.

To another extreme, there is a chance that both auditor and auditee rely on experts with similar data and methodologies, as well as rely on the same expert. Consequently, the estimates could be highly correlated, or the auditor’s independence could be impaired (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). According to PCAOB's inspection reports conducted in 2018 in the US, around 85% of the audits engaged four to five specialists in several areas of expertise (PCAOB, 2018).

However, the use of experts, in general, improves audit quality and reports. In their study, Barr-Pulliam, Joe, Mason, & Sanderson (2020) examined the relationship between specialists and auditors. Despite initial mistrust, lack of common understanding, and excessive control over the specialists’ work from the auditors’ side concluded that specialists’ input is increasingly vital to the audit engagement (Barr-Pulliam, Joe, Mason, & Sanderson, 2020).

1.2.2.2 Task-specific factors

The auditor's "task" is the set of duties when performing the FVOEs' audit. At the same time, the task complexity is comprised of the fundamentals of performance, and it is further separated into two dimensions: task difficulty and task structure. The task factors may interact with environmental factors, leading to management bias and, thus, increased difficulty of the auditor's task (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). Bonner (2008) defines task factors as those which impact the task and the auditor's performance while simultaneously increasing the processing demands (Bonner, 2008). As

the individual's processing capabilities determine the processing demands, more complex demands will lead decision-makers to opt for more simple decisions and strategies. This set of choices consequently leads to poorer performance (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Task difficulty

Task difficulty is increased by the economic and estimation uncertainties regarding the audit of FVOEs. In addition, the measurement approaches applied by the auditee's management can be quite complex, and the auditor may need to assess several approaches for each valuation. Things can be further complicated as the auditor may fail to understand the model's key risk inputs as they may lack the appropriate knowledge (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Humphrey, Loft & Woods (2009) find that even if the auditors understand the underlying management's model, determining its appropriateness is challenging, especially if the market conditions are changing or market data is unavailable (Humphrey, Loft & Woods, 2009). A critical review of the fair value literature indicates that fair value accounting's value relevance varies depending on the economic environment; during a market downturn, fair value declines because of uncertainty, information risk, and illiquidity (Toluwa & Power, 2019). Contrary to commonly held beliefs about the effectiveness of current financial markets in handling uncertainty and the inherent advantages of fair value, the disparity created by fair value increases with the degree of uncertainty (Boyer, 2007).

The task difficulty that arises from the auditee application of models is further compounded by the uncertainties of the proper applicability of audit standards for fair value and other estimates (FVOEs). The existence of more standards leads to an overload of information, which might negatively impact the ability of the auditor to detect a misstatement. There are not many studies on how standards affect the FVOEs audit. However, studies generally suggest that formal and structured guidance should reduce task complexity (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

In Chapters 1.1. and 1.2. of this thesis, the primary audit standard for FVOEs is ISA 540 (revised) Auditing Accounting Estimates and Related Disclosures, as well as IFRS 13 Fair Value Measurements, and their implications to the audit were discussed in detail.

Overall, the dynamic standards, the number of models used, and the degree of subjectivity contribute to increased processing demands and likely lower audit performance. The risk that these factors bring can be mitigated with the development of expertise. However, for this to be achieved, another important factor should be present: task structure (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Task structure

The ISA 540 (revised) standard is the starting reference for conducting a successful and high-quality audit. The standard requires the auditor to understand the entity and the environment, the entity's internal controls, as well as to identify and assess the risks of material misstatements and to design the responsive procedures to the evaluated risk (ISA 540 revised manual from the IAASB). As already stated, the standard offers three approaches, and the most common choice among auditors is to test the reasonableness of the management's model. This was concluded by Griffith, Hammersley & Kadous (2012) in their interviews conducted with audit partners, of which 90% confirmed that this is the approach they chose in the audit procedure. However, the disadvantage of this model is that even a small change in some model input or assumption can lead to materially affected reported net income (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

FVOEs, in their nature, are regarded as 'unstructured' due to realization uncertainty and lack of a standardized approach to evaluating solutions (Earley, 2002). This makes them highly complex because it demands from the auditor to have high cognitive skills, which in turn it may limit their ability to process information (Bonner, 2008). Possessing high cognitive skills is important as it contributes to implementing professional judgment at the highest possible level. As task-specific qualitative factors challenge the auditor, they must know the different valuation models and comprehend the management's rationale behind the weights of the various models they use (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Auditing standards and guidelines may add ambiguity to the already complex and unstructured task and may motivate auditors to adopt simplified decision strategies that might decrease their judgment. Standards may fail to provide auditors with directions in one important area – incorporation of the potential management bias. ISA 540 warns the auditor of the possible management bias and motivates them to properly address the management effect upon the measurement. However, it does not explicitly address the auditor’s responsibility in the process (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Opportunities and Incentives for Management Bias

As already mentioned, FVMs are subjective and have inherent estimation uncertainty. Consequently, the assumptions that management prepares regarding FVMs reflect their subjectivity. This makes it favorable for managerial manipulations and biases and burdens the auditor further (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013). Consequently, the audit function is also judgment-driven, as the auditor has to assess the underlying risk and materiality and determine whether the available evidence is appropriate and sufficient (Griffith, Kadous, & Young, 2014). Even though management bias can also be unintentional, ISA 540 (2019) suggests that the auditor has to exercise subjective judgment regarding the auditee’s management and be wary of financial statement items most prone to misstatement.

Numerous types of research prove the management's opportunistic behavior, most often related to stock options settings, loans, hedge assets valuations, impairments of goodwill, or delaying of assets write-downs. According to Ramanna and Watts (2012), managers, in line with incentives related to salary and/or reputation, exercise their discretion to minimize goodwill impairments (Ramanna & Watts, 2012). Choudhary (2011) presents evidence that companies choose valuation assumptions that decrease reported option values when stock options are expensed (Choudhary, 2011). Management bias is difficult for auditors to detect, especially in times of economic uncertainty, and scholarly research shows that this difficulty is largely due to task complexity. Since task complexity has a different impact on everyone, it is considered that auditor-specific characteristics alone or in combination with other factors influence audit quality (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

1.2.2.3 Interactions of auditor-specific characteristics with environmental and task factors

In addition to environmental and task factors, auditor-specific factors are the ones that directly affect the deficiencies in the FVOEs' audits. Research in the FVOEs field shows that most audit deficiencies arise from the auditor's interactions with environmental and task factors. Auditor-specific factors are in the form of knowledge, expertise, professional skepticism, and abilities related to information processing when there is environmental uncertainty and task complexity. The environmental and task factors usually increase the auditor's processing demands, which consequently influence the auditor's performance and might negatively affect the audit quality (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Knowledge and expertise

The auditor's knowledge and expertise in auditing complex areas are of crucial importance, and it applies to all audit team members. According to Bratten et al., insufficient access to information is the main reason auditors cannot form an opinion. Griffith, Hammersley & Kadous (2012) state that inexperienced auditors often do fair value audits who particularly lack knowledge and experience in accounting, auditing, and valuation. This, in turn, leads to an inability to comprehend management's models and estimates, as well as to validate and test them.

This lack of competency may be due to insufficient training or guidance at the firm level. With this in mind, audit firms, especially the Big 4 firms, provide a lot of accessible training material related to FVOEs. In addition to the available resources, practical methodologies should be adopted so that the users' skepticism and performance are increased and improved in practice. The knowledge of evaluating FVOEs must be complemented with experience and constructive feedback for the auditor to develop expertise, known as the problem-based

learning methodology (Carpenter, Durtschi, & Gaynor, 2011). Gaining consistent experience is a timely and complex process due to the valuation specifics across different engagements. The knowledge and experience gained in one area are not easily applicable to other areas. However, the auditor must approach and analyze the matter with expanded proficiency in finance, statistics, management, and markets (Pratt & Laro, 2005). The auditor's deficiencies regarding knowledge and expertise might be additionally challenged when valuation specialists are involved. Even though regulatory bodies (e.g., IAASB) encourage auditors to include external experts to understand the complexity of certain valuations, it might lead to an overreliance on them and a misunderstanding of their assumptions. In turn, the knowledge-sharing and development of expertise at the firm level may be additionally limited. In such cases, the auditor will not be able to productively engage in the valuation process and discuss it with the management's specialists. The result could be a cost to the audit quality (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Professional skepticism

Hurtt states that the auditor must exhibit professional skepticism for an effective audit (Hurtt, 2011). Professional skepticism is demanded to be applied in all circumstances, but it is especially important when auditing FVOEs, due to higher uncertainty and vague supporting documentation (IAASB, 2011). In Nelson's recursive model of professional skepticism, the auditor's knowledge is linked to the auditor's judgment/decision. The decision outcome, along with the response, creates the auditor's experience for further judgments. Nelson states that for the auditor to exercise professional judgment, they need to comprehend the relation between audit evidence and audit risk and recognize patterns that might imply greater risk. The auditor's experience positively affects skepticism and lack of it; it leads the auditor to accept the management's model and, thus, increases the risk of misstatement (Nelson, 2009).

Martin, Rich, and Wilks (2006) imply that written standards might also contribute to a lack of professional skepticism (Martin, Rich & Wilks, 2006). For example, ISA 540 determines that supporting evidence of managerial models should be obtained. This might lead the auditor to give greater weight that conforms to valuation models without questioning their validity. When considering the appropriate models, it results in overconfidence, thus making the auditor less skeptical (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Bonner (2008) defines environmental factors as those relating to the conditions and circumstances inherent to the environment, task factors as those affecting the nature of the auditor's task, and personal factors as those associated with the traits and characteristics the individual brings to the task (Bonner, 2008). The interaction between the abovementioned factor might contribute to an understanding of the FVM audit deficiencies and processing limitations which might be due to standards ambiguity, estimation uncertainty, and other influential factors:

Auditing standards ambiguity

There is a relatively high ambiguity when it comes to auditing standards, as they provide testing options but also guide auditors to obtain evidence that supports the management's evidence. This, in turn, decreases their skepticism and triggers motivated reasoning.

Motivated reasoning tends to conform to the evidence that supports a certain finding or a conclusion while ignoring the available information that might threaten the accepted assumption and its validity (Bamber, Ramsey & Tubbs, 1997). However, detailed guidance may also hinder effective decision-making. It encourages inexperienced auditors to approach tasks mechanically by following structured guidelines and engaging in a »check the box« mentality (Power, 2003).

Estimation Uncertainty

Studies have shown that even though auditors are uncertainty averse, their judgments are of lower conservatism. When making decisions related to estimation uncertainty, several other environmental factors (forecast risks, engagement risk, and auditors' bargaining power) impact the decision-making process of the auditors.

When examining misstatement subjectivity and misstatement precision regarding auditors' adjustment decisions for estimation uncertainty, it was found that when management has low incentives to misstate earnings, the auditors are more likely to waive an adjustment. In contrast, in the case of high management incentives, auditors are less likely to waive an adjustment (Cohen, Gaynor, Krishnamoorthy, & Wright, 2011).

As already pointed out throughout this thesis, another factor that affects auditors' judgments is estimation imprecision, which includes precise (point) estimates or less precise (range of possibilities) estimates. This adds to the complexity, as the value incorporates variability in future outcomes. The more subjective the estimate is (e.g., Level 3), the greater the influence of the estimate's imprecision on the auditor's judgment. In other words, auditors are prone to smaller adjustments when misstatements are imprecise (Bratten, Gaynor, McDaniel, Montague, & Sierra, 2013).

Psychology research shows that uncertainty has a negative effect on individuals' cognitive abilities. It tends to contribute to simplified strategies to complete the task, ignore relevant, useful information, and to auditors' overreliance on existing findings or management assumptions. Other influential factors arise due to psychological heuristics and biases, such as anchoring and adjustment, primacy, and the curse of knowledge. These go hand in hand with task complexity. Several factors (tools) can aid the audit quality of FVOEs. These tools can be in the form of explicit statistical training, guidance on precision calibration, etc. Providing explicit and well-structured guidance will help auditors understand the methods

used by external parties or help them prepare the estimate prior to observing available estimates.

1.3 Recent Economic and Global Events

Some researchers state that the main reason for the subprime mortgage crisis in 2008 was the fair value accounting practices. In light of the subprime crisis, the rating agency Standard&Poor (2008) has expressed their concern regarding the fair value measurement:

"We support the basic premise that fair value is a relevant basis for accounting for financial assets and liabilities. However, we recognize that accounting for assets and liabilities at theoretical market-price measures may produce results that could mask the underlying economics for certain businesses and activities, especially during volatile and uncertain economic and market conditions."

Crises like these divide the opinions among experts, regulators, and researchers on one side and the bankers and various market players on the other side whether FV accounting is the right approach or the historical costs approach is more reliable.

Probably one of the most notorious examples of audit function failure in the field of fair value assessments is the Lehman brother's case. Ernst & Young (E&Y) has been harshly criticized because it had not applied proper professional judgment when investigating the disclosures related to Lehman's accounting for sales and repurchases (Markarian, 2014). Even though it is believed that the fall of the Lehman Brothers was unavoidable due to overleveraged positions and very risky and illiquid items on the balance sheet, a better-managed audit process may have helped the difficulties to become apparent before the whole market worsened, allowing for the possibility of salvage (Tibman, 2009).

Another example is the collapse of Enron in 2001, which had off-balance-sheet transactions measured at fair value. These were complex financial instruments that required assumptions about uncertain future outcomes (Deakin, 2004). In addition, several studies suggest that accountants and auditors could not keep pace with the changes in the FVM area. Therefore, Enron's auditors could not understand the implications of the new mechanisms (Benston & Hartgraves, 2002).

1.4 COVID-19 Implications on Fair Value Measurement

The side effects of the spread of the coronavirus were of significant magnitude and had a terminal effect on many economic, commercial, and industrial activities worldwide. For the first time in forty years, the stock markets, especially the Dow Jones Index, experienced their sharpest decline; the oil demand was at its lowest point as it had ever been before,

unemployment rose, and overall production slowed down (Ali, Kareem, & Barrak, 2020). By affecting major economic and financial markets, it caused companies across different industries to experience regulatory and organizational challenges and changes in consumer behavior (Deloitte, 2021).

When considering COVID-19 impact on fair value measurements, three aspects play the main role: uncertainty and volatility, active markets, and financial statement disclosures (Accounting Standards Board, 2020).

All the burdens that the pandemic has imposed on the global economy must be considered when estimating the fair value of financial statements' items, and adequate disclosures should be prepared which will unfold the best available information (Imane, 2022). The International Organization of Securities Commissions (IOSCO) also emphasizes that current events impact the amounts measured and recognized in financial statements worldwide. Factors such as business and economic factors, industry-related factors, and government initiatives should be considered. In such an environment, it is very important to provide transparent disclosures to the financial statements, which would clearly explain the material impact on specific items (IOSCO, 2020). Every change of FVM must be transparently disclosed in the interim and annual reports (Accounting Standards Board, 2020). Significant changes in assumptions, both macro-economic and entity-specific, and their impact on financial statements compared to the previous period should be disclosed (Tokar & Kumar, 2020).

This paper has already outlined the complexity of the fair value measurement and its requirements for a significant dose of judgment even in the best times. Experts point out that COVID-19 makes the process even more demanding by contributing to greater estimation uncertainty, changes in cash flow forecasts, and decreased supply of observable inputs (KPMG, 2020). Some pre-pandemic observable inputs might require adjustments to reflect current events to be used for measurements during the pandemic until further notice (Grivas, 2020). This means higher unobservable inputs contributing to Level 3 fair value measurements and, with it, more disclosures that are required by IFRS 13 so that users of financial statements can better understand the coronavirus impact on the entity's FVMs (KPMG, 2022). The current situation violates the concept of "active market" because the volume of transactions decreases and, in turn, disrupts the market price, which is the definition of fair value (Pronobis & Venuti, 2020).

However, a decline in the volume does not imply that the market price is not fair value, and adjustments to the price can be made (PwC, 2020). Items recognized at fair value during periods of increased volatility may contribute to a violation of debt covenants, affecting the timely repayment of liabilities, or incur penalty payments and increase in interest rates which in turn impact the company's solvency and the "going concern" assumption (Liu, Pronobis & Venuti, 2020).

In general, the main accounting implications that should be considered concerning IFRS which may arise from COVID-19 are (Deloitte, 2021):

- Cash flow (CF) forecasts: related to the fair value measurements, CF estimates are important when using the income valuation technique. The pandemic installs a wide range of possible future outcomes and cash flow estimates and creates high uncertainty. Also, the macroeconomic variables that are part of the future CF estimates are highly unpredictable (e.g. government restrictions upon businesses and personal activities, new regulations, citizens' compliance with rules, etc.), and each company should properly account for them in their forecasts.
- Impairment of assets: the calculation of the impairment value is also subject to the forecast uncertainties related to the cash flows.
- Financial assets accounting: The pandemic caused the value of many financial assets to decrease, forcing companies to measure the relative impairment as accurately as possible.
- Contract changes: Potential changes in the contracts' terms and conditions may arise to cover possible adverse effects of COVID-19 (e.g. clients' contracts, employees' compensation agreements, lease contracts).
- Going concern assumption: A specific assessment of the current circumstances must be made so that companies can state that they are able to have the going concern status for at least the next 12 months from the reporting date. In order to do so, management has to make a judgment in relation to the potentially disrupted operations and demand for access to capital sources, contractual obligations in the span of 12 months, and potential solvency issues.

The greater the uncertainty caused by COVID-19, the greater the pressure is for companies to re-think their assumptions and inputs used in FVMs so that they can properly account for current events. As the environment may be highly unpredictable, information and inputs can change over time. Therefore, management should establish strong controls to ensure that up-to-date outcome is created and involve a significant amount of professional judgment. Regarding financial assets, management should determine the principal market for the items and whether there have been changes compared to the previous measurement. In contrast, for non-financial items, they should check the item's highest and best use by a market participant's ability to gain from its use. Also, companies should revalue their measurement techniques and adapt them to yield reliable outcomes. In many cases, when the discounted cash flow (DCF) model is used, the discount rate should be adjusted to reflect the potential risks (Accounting Standards Board, 2020).

The active markets are the source for quoted prices that are considered to be Level 1 inputs. If the trading volume and frequency decrease for a particular item, the entity must use

judgment to determine whether that is the case. Even if there has been a decrease, it may still be feasible to determine the estimate point which most accurately represents fair value and weigh it properly. Level 2 or Level 3 inputs can be used if no observable inputs can be detected (Accounting Standards Board, 2020).

COVID-19 elevates already existing risks related to fair value measurements, and because of it, even more, professional judgment should be applied, especially in determining risk premiums and other risk adjustments. KPMG (2022) outlined some of the areas where the risk is elevated:

- Economic activity: Countries and companies have imposed numerous measures to contain the virus, which in turn may negatively impact the overall economic activity regarding the production of goods and the supply and demand for those. However, not all industries are equally impacted, and therefore, the transportation and leisure sectors are the ones that are affected the most severely.
- Credit and liquidity risk: The higher uncertainty developed by the coronavirus outbreak has increased the credit and liquidity risks for many entities, and therefore the credit risk input used in the valuation process, both own and counterparty, may increase.
- Forecasting risk: Financial forecasts must account for the greater uncertainty related to the magnitude and duration of the pandemic.
- Foreign exchange risk: When operating with foreign customers and in foreign markets, entities must be wary of the possible adverse fluctuations in the foreign exchange rate.
- Commodity risk: There might be more severe and more frequent movements in the price of commodities.
- Increased government interventions

The pandemic imposes a greater burden on the auditor's task to provide high-quality audits because, given the greater uncertainties, the users of financial statements would rely even more on the auditor's opinion (Adio-Moses, 2021). The auditor is responsible for providing information on the COVID-19 implication and properly documenting it in the Audit Report (ACCA, 2020).

The Financial Reporting Council (2020) has been concerned with the delivery of high-quality audits, so it prepared a short list of recommendations for auditors. According to the list, the auditor should be aware of the following:

- Whether the auditor's risk assessment needs to be changed;
- How the auditor collects sufficient and adequate audit evidence while acknowledging that, particularly in group audit engagements, alternative procedures may need to be devised, and the intended audit strategy may need to be modified. To report or contemplate revising their audit conclusion, the auditor must be able to compile the required evidence;

- How the group auditor plans to assess component auditors' work in order to ensure that it complies with standards, taking into account whether other processes can be utilized, such as when travel is prohibited;
- Given the elevated level of uncertainty surrounding the global economy and the near-term prognosis for many companies, the auditor's evaluation of a company's ability to continue as a going concern and its prospects;
- The management's disclosures regarding COVID-19's effect on the company are adequate in that they adequately educate readers of the financial statements and describe the company's prospects and potential effects while acknowledging the significant degree of uncertainty; and
- The requirement for the auditor to reevaluate important areas of their audit due to the rapidly changing scenario, acknowledging that this evaluation will occur right up until the moment of signing the auditor's report and may require the management to provide additional evidence and information. The auditor will need to think about how to explain this in their report when the current conditions have significantly affected how the audit was delivered, for as by identifying this as an important audit item.

2 RESEARCH METHODOLOGY

This chapter focuses on the research approach and the rationale behind the chosen methods. Also, it gives information about the chosen interviewees and the data source. Due to privacy concerns, the name of the Audit firm, the names and personal data of interviewees and any other sensitive data will remain anonymous throughout this thesis.

2.1 Research Design

To investigate the research questions, a qualitative research method will be conducted, or more precisely, a case study. The nature of qualitative research is to give descriptive, exploratory, and explanatory answers to the research questions, rather than to quantify the observations (Strauss & Corbin, 1994). Qualitative data deals with meanings, which at their core, are a matter for making distinctions widely present in social practice and not just in particular individuals (Dey, 2003). There are three key areas that qualitative research focuses on: language as a driver that simplifies communication and interaction between individuals; explanation and illustration of the subjective connotations gathered and theory-building by developing patterns and associations that revolve around the gathered data (Tesch, 1990). However, the foundation for quality research is the underlying question which must be of great importance and allow for an in-depth exploration so that the findings can be trusted and understood (Fossey, Harvey, McDermott & Davidson, 2002).

Qualitative measures are less precise and standardized than quantitative (Dey, 2003, p. 29) and situationally constrained (Neuman, 2000). Its focus is on events, and interactive processes (Neuman, 2000).

The case study is a kind of qualitative research that examines a social phenomenon in its "native habitat," or the existing social structure. The researcher discusses and explains the social processes that develop among the participants. The aim of the case study is to obtain detailed data from the subjects of the case regarding their internal features and the surrounding situation, which enables us to link the actions of the individuals (micro level) with the large-scale structures (macro level) (Neuman, 2000). Put simply, case studies enable us to investigate multiple perspectives about a phenomenon from individuals, groups, organizations, etc. by understanding their personal experiences with the underlying topic of interest (Strauss & Corbin, 1994).

From the auditor's current perspective, this research looks at the theoretical idea of a "fair value audit" in its natural habitat, a Slovenian audit firm. Further, audit issues relating to FVMs keep repeating despite insights from previous research and efforts of regulators to enhance audit performance. Thus, greater knowledge from the auditors is important, and a deeper understanding of present audit methods is required. In addition, the valuation specialists are also investigated in their natural habitat to help the reader grasp the complex concept of fair value and understand why it may be difficult for auditors to assess it.

Much of financial performance is closely related to human behavior (Schumpeter, 1942). Behavioral finance is the field that studies how cognitive behavior impacts individuals' financial and economic decision-making processes (Baker & Nofsinger, 2010). Some of the general phenomena defined by behavioral finance are overconfidence, herding, prospect theory, cognitive dissonance, etc (Ricciardi & Simon, 2000). Unless these human actions are understood, the wide economic events will not be comprehensible to many, because even though people rationally go after economic interests, they often tend to be irrational and unreasonable (Akerlof & Shiller, 2009). Consequently, applying the case study method is convenient for providing answers, especially when the audit deficiencies may be influenced by high uncertainty, management bias and subjectivity, and the risk of the auditor conforming to these circumstances.

2.2 Sample Collection

To approach the case study gradually, the population was divided into distinct groups, otherwise known as strata. This implies that each stratum's elements (participants in the questionnaires) are grouped based on certain important characteristics (Parsons, 2014). Each stratum is mutually exclusive and there is no overlapping. The stratified approach increases

the efficiency of the sample design and allows the estimator to be more precise when further analyzing the data (Parsons, 2014).

The population is constituted of all the employees in the audit firm. It is worth noting that apart from audit and assurance services, the company offers services in tax and advisory. Based on the services offered by the company, the eligible population for this thesis was divided into two strata, valuation experts and auditors. Once the strata were defined, simple random sampling was applied to determine the final sample for the valuation experts, as all the valuation experts have the same knowledge, experience, and other relevant characteristics regarding the topic of interest. This gives them equal probabilities to be selected. On the other hand, auditors were sampled through purposive sampling, which is a non-probability sampling method. This method allows for a selection that is based on specific criteria and rationale in order to provide detailed knowledge regarding a phenomenon (McCombes, 2022). The specific criteria, in this case, is that interviewees are Senior Auditors with extensive knowledge and experience in auditing fair value measurements. The experience level can be defined as follows: University grads often begin their careers as Associates and advance to Senior Associates after three years of training and experience on the job. After a few more years of experience, they can be promoted to Assistant Manager, Manager, and Senior Manager. On the top of the hierarchical ladder are the Director and the Partner. To advance to even higher levels in the company, experience, and growth through time are crucial. Managers monitor audit teams' activities and facilitate their subordinates' professional growth. They are also responsible for the clients' projects and assigning them to the audit teams. Senior Managers have similar tasks but are regarded as more specialized and skilled than Managers. The partners determine the firm strategy and market position. Also, they have full accountability for the results of any engagements they manage.

2.3 Data Collection

For the data collection, an inductive approach is applied. While deductive conceptual frameworks are based on existing literature, the inductive framework is derived from qualitative data that encompasses interviewees' viewpoints. However, the inductive approach allows for a deductive framework to be incorporated to guide the data collection (Hennink, Hutter & Bailey, 2020). For the purpose of this thesis, the already existing deductive framework of social and subjective norms, behavioral patterns, and attitudes in the field of FVM audit is applied. At the same time, new concepts developed from the data that aid in answering the research questions are also included. To put it simply, the deductive framework is developed before the data collection, while the inductive model is obtained from the observed data (Hennink, Hutter & Bailey, 2020).

Two questionnaire sets were developed for this thesis. Semi-structured and open-ended questions are asked during the interviews. The first questionnaire set targeted the valuation experts in order to provide an understanding of the fair value measurement process. The second questionnaire set is based on existing Bratten's framework and is additionally upgraded with questions that focus on current economic events. This framework identifies deficiencies with auditing fair value assessments and divides them into three groups: environmental factors, task factors, and audit-specific variables. Interview questions were prepared for each deficiencies group determined within the framework. The questionnaire can also deviate based on the interview flow and the data collected through the interviews with valuation experts. If a new and relevant concept is grasped by experts which could potentially give extra valuable information for this research, it is then also investigated through the auditor's perspective. The questionnaires can be found in Appendix I. The following Table 2. shows the participants in the interviews, the interview date, and the duration.

Table 2. Interview participants, dates and duration

Job Title Description	Date of Interview	Duration
Valuation Expert 1	25.01.2021	74 minutes
Valuation Expert 2	18.08.2022	68 minutes
Valuation Expert 3	03.10.2022	59 minutes
Senior Audit Manager 1	19.06.2021	47 minutes
Senior Audit Manager 2	12.09.2022	66 minutes
Audit Manager 1	13.12.2020	33 minutes
Audit Manager 2	11.11.2021	61 minutes
Audit Manager 3	08.08.2021	53 minutes
Audit Manager 4	11.08.2022	38 minutes
Audit Manager 5	30.09.2022	42 minutes
Audit Manager 6	04.10.2022	61 minutes

Source: Own work.

Each of the interview was recorded with a voice recorder. Before the interview was recorded, the interviewees were provided a brief introduction to make them aware of the study they will be contributing to. This introduction is also included in Appendix I, as part of the interviews. In the end, the interviews are transcribed and coded by hand. For each of the main codes determined, proper keywords which serve as sub codes were assigned. As a result, each main code has a corresponding sub code. The analysis of the interviews is done

in such way that each auditors' quote is coded and listed in an excel file. The data is further processed so that it can be filtered by deficiency or keywords.

3 RESULTS

This chapter of the dissertation elaborates the data gathered within the interview process. The first section explains the fair value characteristics and challenges related to the fair value measurements from the viewpoint of the specialists. In the following sections, the results obtained from the auditors are presented according to the incorporated Bratten's framework. They are further analyzed and linked to the theoretical background provided in chapter 1.

3.1 Fair value characteristics and challenges of fair value measurement

In order to understand what are the deficiencies that auditors face when auditing fair value measurements, it is important to understand the conceptualization of fair value theory. To do so, this thesis sought answers to the three sub-questions from external valuation specialists specializing in fair value measurements. Following in this section, the results obtained from the interviews are analyzed and the following questions are answered and backed by the literature background:

1. What are the characteristics of FV?
2. What are the challenges of measuring FV?
3. How do the increased market volatility and uncertainty affect the FVM in Slovenia?

"Lately, we are loading the financial statements with estimations. This puts a huge responsibility on us, the valuators, to perform our work carefully, thoroughly, and without errors, while at the same time considering all the inputs that could significantly affect the assessment of the value." (Valuation expert 3)

Depending on the input availability, they can be classified into Level 1, Level 2, and Level 3 inputs, which are identically defined as in IFRS 13. In addition to the input availability, the nature of the underlying object of fair value measurement is the other key factor that impacts the valuator's choice regarding which measurement method will be used – cost, market, or income approach.

To begin with, Level 1 inputs, which, by definition, are readily available and are observable (quoted) prices in active markets between identical or similar items, the valuators are experiencing limitations related to the market size. For example, the US stock market is highly developed and active, where many companies are quoted, and numerous transactions are recorded. In contrast, the Slovenian stock market is characterized by a shorter supply of

quoted companies since most of the Slovenian companies are small and not eligible to be listed. Therefore, only the big corporations which usually have multiple divisions are listed on the Slovenian market. When evaluating small companies, their activities are likely equivalent to the activities of one big company's division (and not the entire company), which would not be a proper market reference due to differences in the divisions' profitability. The lack of a more active market contributes to the fact that almost 90% of the Slovenian companies are valued under the DCF model because the model can yield a more precise estimation than the available market data.

When it comes to Level 2 inputs, the Slovenian Institute for Auditing (SIR) advocates the market approach for them. The market approach is a method of evaluating one company's value based on valuation multiples, computed from comparable public companies. This method can be performed in terms of a comparable company analysis, or a comparable transaction analysis. The most commonly used multiples are EV/EBITDA, EV/Revenue, EV/Gross Profit, Price-earnings ratio, Price-to-book ratio and dividend yield.

"*It is quite debatable whether Level 2 inputs are market approach because if you have a significant input which is not taken from the market, it can be easily classified as Level 3, as SIR demands multiples to be adjusted, especially when there is a different level of risk. For example, adjustments of multiples due to company's growth allowances for which not much information might be available."* (Valuation expert 2)

For Level 3 inputs, the income approach is used and most usually, the DCF method is applied. This method incorporates the least number of market inputs – the only market input is the discount rate, which is used to discount the company's future cash flow.

The valuation specialist should have enough knowledge and the ability to analyze numerous factors to assess which method is the most suitable in different circumstances, involving different assets and liabilities. For example, the real estate segment can be subject to different valuation methods, depending on the type of real estate asset. In Slovenia, the market approach is a satisfactory option for evaluating apartments. That is because many apartments are for sale on the market and they can be categorized based on location, size, type, and other relevant information. This makes them easily comparable; therefore, the market is considered a reliable assessment source. However, if the object of the valuation is a big shopping mall, there will likely be a lack of market inputs. In such cases, the evaluator opts for the income approach, where yields over time are considered, such as future rent payments and who will be the tenants.

"*The amount of future rent is plugged into the DCF model, and the discount rate should be determined, which could be problematic in the case of real estate. The risk-free part should be recognized and adjusted for the underlying amortization, and on top of that, the risk premium should be added in accordance with the type of real estate object. The result may*

be a noisy price distorting the overall price trend. I would say that a much better input would be the price per square meter for which a comparably large property was sold." (Valuation expert 2)

"*When you include market rents in your evaluation, the first question is what kind of space are you looking at? Suppose you are estimating a larger building when there are mostly small premises available on the market that have a higher average rent per square meter, and you apply that to 3,000 square meters building. In that case, the estimated value will turn out to be a lot. And the capitalization rate (CAP rate) estimate. Although some people choose the market approach and estimate the CAP rate, you need to consider two inputs for the same real estate to be able to calculate the market capitalization rate – both the level of rent and the level for how much it was sold for, which again is not often available."* (Valuation expert 1)

When evaluating banks, it seems like the market approach is suitable, as a satisfactory number of banks are listed on the stock exchange. However, it is a challenge, as there are certain requirements regarding the capital level, which vary in different countries and it is difficult to adjust. Consequently, valuators usually choose the net asset approach, because financial institutions have numerous fair value items, or the dividend growth model, where the dividend payment can be modified based on the capital requirements.

It often happens for valuators to be more conservative when using the income approach rather than being more optimistic. Theoretically, the market multiples reflect the market situation and if market conditions were not accounted for in the discount rate, but instead, some normalization was involved, the outcome will result in a higher discount rate and more conservative value. It is a generally accepted notion that it is better to have a more conservative approach because auditors also strive for it.

The third valuation approach stated in IFRS 13 is the cost approach. Valuators, in most cases, use it to determine the recoverable value of an asset, usually equipment. The goal is to derive the amount which will be the cost to recreate an asset, adjusted for technical and economic obsolescence costs. If this method is applied to companies' valuations, it is used to determine a company's worth from a balance sheet standpoint. To put it another way, a valuation specialist will calculate the entire enterprise value using the underlying worth of the company's assets net of its liabilities. By doing so, intangible assets that are not on the balance sheet, such as developed brands, must be accounted for. The cost approach might be more beneficial when there are liquidity issues, because if the DCF is negative, meaning the company is not worth more than its net tangible value, then it is probably more favorable to liquidate it than to continue its operations.

The most complex valuation is probably related to the application of IFRS 9 regarding financial instruments and accounts receivables. Receivables are, in a way, debt instruments,

not equity instruments, because they are pretty much evaluated from the point of view of whether they will be repaid, and the risk of non-payment is the essential component in such valuations. Three key matters should be considered such as the probability of a default, the amount of payment in the case of a default, and the total exposure. These inputs are used to calculate a certain estimation loss; however, complications arise as there is very scarce data for the probability of default for each client, or for the probability of repayment in case of a default. It is more convenient for banks to use this method, as they have a lot of customer-related data, which allows them to create statistical databases and monitor client performance. However, suppose a smaller company is evaluating its outstanding receivables. In that case, it probably will not have enough cases of defaulted customers for it to be able even roughly to estimate them. Overall, there is a lack of available data related to FV implication and IFRS 9 and it is more difficult to assess claims.

The interviewed valuation specialists had tackled another important aspect of the fair value measurements that lately had a significant impact on the assessment – COVID-19.

"*COVID-19 has made things very complicated. The problem with the pandemic was that there was much uncertainty, although now its effect has decreased compared to when it first started when you did not know what was going to happen.*" (Valuation expert 2)

Some industries were more severely impacted than others, especially airlines, cruises and transportation, energy equipment & services, hotels, restaurants & leisure, specialty retail, etc. Companies operating in such industries were experiencing bankruptcy or were on the edge of bankruptcy, a significant decrease in earnings and companies' stock value. The external valuator 1 recalled that as the news of the Carnival cruise ship broke out, they were in the middle of evaluating a Slovenian marina, which turned out to be a very demanding and time-consuming task, as the valuators involved in the engagement had to correct the business plans four times and at the time when the interview was taking place, they were still not finalized.

To begin with, the marina generally stores various types of boats; some are smaller, and some are bigger. There are many owners whose mindset has been differently affected by the COVID-19 situation. For example, some smaller boat owners might have not been able to continue paying expenses if the crisis have had a more severe impact on them and they could have easily retracted it at home. Regarding bigger boats, nothing much could have been done from the owners' side. The evaluator must consider all the potential risks and incorporate them into the valuation.

In this case, the evaluators have chosen the income approach. In their opinion, the market approach was more problematic alternative. They have calculated it under both approaches but neglected the market approach. The difficulty with the market approach was choosing the right Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA) as a

multiple. If the current EBITDA was used, which reflected the crisis, then there was the possibility of undervaluing the marina. Using the last year's EBITDA would have probably resulted in overvaluation. The income approach application has also not been so straightforward, as there were several recommendations for permissible actions during difficult times. One alternative was to adjust the discount rate for more risk factors, while the other was to adjust the cash flows, which are again based on the assumptions (e.g. when will they open again, when will it be the same again, etc.) and if you, for example, make a mistake for 6 months you will have a big impact on the value. If there are big losses in the second year, they will have a much more significant impact, rather than having big losses in the tenth year, because of the time value of money.

The Bank of Slovenia and the Office of the Republic of Slovenia for Macroeconomic Analysis and Development (UMAR) created different forecasts (V-shaped and U-shaped scenarios). regarding when the recovery from the pandemic will occur. It was soon clear that the U-shape scenario is irrelevant, and the marina itself did not have any severe negative effects, as customers were not retracting their boats as expected. They have also considered the available data from the 2008 crisis. Even though it is not the best comparability, it was the closest available fit to the present situation. The final version of the valuation was done based on the V-shape scenario and in addition, sensitivity analysis was also done by adjusting key variables.

"*With DCF, it is very difficult to determine how much you have to increase the discount rate in order to incorporate the COVID-19 risk; with the cash flows on the other side, I can more easily predict, for example, that the first 6 months there would be only expenses and some subsidies from the government, or in a worse scenario, that the company will not incur any revenue in a period of one year.*" (Valuation expert 1)

The kind of steps that the valuator takes to evaluate plans more critically and to decide how good different valuations are, essentially reflects the ingenuity of the appraiser. Valuators must be clever to look for data and solutions in every apparent and hidden corner. Very often, they also compare data and situations with other countries, previous crises, what happened in the first wave of the pandemic crisis, or even investigate the actions and operations that the company's biggest competitor conducts. It should be noted that in crises like these, there can be increased uncertainty and extensive market overreaction. Even though valuation specialists are not obliged to use different methods and to include them in their reports, it is a good practice do to it when evaluating items (especially when opting for DCF as a consequence of no other available market data) as this allows the valuator to do a cross-check and easily justify the chosen method in the end.

3.2 The audit process of fair value measurements

In order to provide a better understanding of the fair value measurement audit, this chapter explains the audit process of FVMs in general before dissecting the audit deficiencies. As a source for this chapter, the data gathered from the interview section Task Structure and the company's internal guidelines on audit procedures are used.

Regardless of the audit subject, each audit engagement starts with an analytical assessment and determination of the significance level of each financial statement line item. This allows the auditor to outline the accounts and disclosures with the highest risk of fraud or error. All the areas where some estimation is involved, usually are exposed to a higher risk of fraud. This is because estimations reflect the thought process of individuals and in this case, that would reflect the client's management intentions. The tendency of management to report certain values according to their own preferences is known as the management override of controls. In addition to identifying the risk areas, the auditor should learn how the management identified that an accounting estimate is required, how this estimation was made, and how management complies with the appropriate financial reporting framework. The results of accounting estimations used in the previous period's financial statements can be examined as part of a retrospective review. Last, but not least, the auditor should create and carry out audit processes to check accounting estimates for biases due to management conscious or unconscious error.

The abovementioned actions are documented in the company's internal audit guide for auditing accounting estimates which is adopted from ISA 540. This means the audit is proceeding in a systematic fashion since the auditors are following a defined set of steps. However, IFRSs and ISAs are more general in nature, giving less structure and greater space for flexibility. As noted throughout this thesis, they just serve as a guideline, with the specifics of how the standards should be applied being left to the discretion of professionals in the field. Since auditors and financial statement preparers have considerable autonomy in choosing a valuation technique, the standard does not specify one. In addition, the audit guidelines refer them to a specialist if they do not have the expertise to value the asset.

"*When we assess these FV areas and their possible impact, we usually go for a test of details, not a test of controls because there are practically no controls here. You test internal controls where you have a large population. By testing the data, I will be able to find out what this FVM is made of and if it is Level 3, I must make sure that this model is suitable. Most of the time, the auditor makes his own point assessment based on the assumptions used by the company. They try to estimate the FVM in the right way to get a range of values, and if the value they audit is within this range, they can tolerate it, and if it is not, then there is a problem.*" (Audit Manager 4)

As a result, the company's internal audit guide is consistent with ISA 540 and provides three methods for substantive testing, two of which are more prevalent. Examining management's underlying assumptions and forecasting models is the first step in verifying the estimate's

accuracy. The alternative is to calculate a range or point estimate on your own. Auditors prefer to combine all approaches because it is difficult to judge how logical some inputs are, even if they seem correct at first. The goal is to test the mathematical accuracy of the calculation, which means the auditor is making their own assessment in the end.

Critical thinking, alternative hypothesis generation, and creating one's own realistic expectations are all highly valued at the audit company, as is the practice of verifying the underlying assumptions. This eliminates the possibility of anchoring. If management does not have the expertise to provide a sufficient calculation, or if they fail to prepare one, the auditor will explain the significance of building their own model and push management to consider the assumptions. In order to save time, just management's model and assumptions may be examined. This might be because management's estimates and justifications are often well-established and consistent, or because management's model has already been examined and approved in the previous year. This is for example the case of real estate valuations, as they are valued once every three years. Choosing the second alternative solely without putting management's presumptions to the test is quite unusual.

3.3 Audit deficiencies of fair value measurements

In this chapter, the results obtained from the interviews are presented in accordance with the theoretical framework and in the exact order as developed in the existing literature. In addition, the estimation uncertainty segment is supplemented with the questions and findings related to the COVID-19 pandemic. With the data collected from the interviews, the main research questions are answered:

1. What are the deficiencies of FVM audit that Slovenian auditors face?
2. How are the auditing deficiencies additionally challenged by COVID-19 in Slovenia?

3.3.1 Estimation uncertainty

The estimation uncertainty is considered as the increased ambiguity related to the client’s future performance and the risk of the occurrence of undesirable economic events, leading to market distress. With the unprecedented circumstances that have arisen due to the coronavirus, the degree of uncertainty has heightened and imposed even greater challenges upon management, valuation specialists, and auditors. According to the existing literature, Level 2 and Level 3 of the FV hierarchy were already burdening the auditors with additional responsibilities to provide assurance over the validity of FV items. As the estimation is based on future predictions, they are characterized by higher management subjectivity. In addition, no past transaction can be related to the estimation, which will serve as solid audit evidence. Many institutions, regulators, and corporations were demanding a greater amount of

professional skepticism to be applied in the audit process of obtaining and evaluating the obtained evidence. Auditors are more skeptical in their procedures whenever management's estimations are being assessed. They must confirm that there is no management bias and that the obtained data is substantiated with facts.

"*Obtaining sufficient audit documentation has always been tricky, but the real question is whether it is high-quality. The lack of sufficient and reasonable audit evidence may impact the auditor's opinion and result in modifications to the opinion issued in the final auditor's report.*" (Audit Manager 1)

It is good practice for the auditor to perform a sensitivity analysis if it was not obtained from the management or the valuation specialist in the case of an external valuation.

If the company is larger and it has an Internal Audit department, it is considered that its internal controls are more reliable and consequently, that the data obtained would be of greater quality. Internal Auditors challenge the management's estimations and can compare current estimation models with previous ones and check their consistency, thoroughly test established controls and investigate the segregation of duties within all departments involved in the process. In addition, such companies most probably have advanced risk management departments that provide developed business continuity plans for mitigating possible adverse outcomes, especially during economic distress.

The interviewed auditors are unified in their responses and display favoritism of the Level 3 fair value inputs over the Level 2. In Slovenia, the multiples used in the market approach are calculated based on foreign companies, which can be quite a misfit due to their size and the trading volume of the foreign market. Level 3 incorporates higher measurement uncertainty and management subjectivity, but auditors are more comfortable reviewing modeled values, than relying on unpredictable market movements.

"*Considering that at the moment, the circumstances are uncertain, often the market prices of the stocks do not reflect the FV. People (buyers) react recklessly, especially now that there is a global pandemic and I think it is wiser to use another approach than the market approach. The crypto market has been the biggest proof of this behavior.*" (Senior Audit Manager 1)

Even if the auditor accepts Level 2, in the case of estimating their own point estimate, they may opt for certain normalization, which also represents a subjective judgment, and end up having a different range outcome than the client's one. Such normalizations usually lead to re-classifying Level 2 inputs into Level 3.

However, the type of financial statement item disclosed as a fair value item is also important in deciding which measurement method will be chosen. For example, when estimating the

expected credit losses (ECL), the IFRS 9 framework demands organizations to create estimates based on the best evidence available regarding past events, present conditions, and future economic predictions. Such measurements are riskier and more complex than, for example, the evaluation of an investment property, and therefore, the related risk of material misstatement is higher.

If a significant material uncertainty exists, it may further become a going concern issue for the client, which is probably the greatest challenge for auditors and management in the case of the COVID-19 pandemic and complex fair value estimations. This does not, however, imply that a major uncertainty automatically exists. The heightened risk of considerable doubt regarding an entity's capacity to continue as a going concern also depends on the nature and circumstances of the business, and the industry in which it works.

The greater the perceived uncertainty, the more likely the auditors will emphasize the matter in their reports. Also, the clients' prepared annual reports incorporated a section on the coronavirus, summarizing its impact, future expected effects, and other relevant implications.

3.3.2. Regulatory and legal influences

The Slovenian auditors are subject to international accounting standards (IFRS) and the Slovenian accounting standards (SRS), which are almost entirely adopted from the IFRSs and are determined by SIR. In accordance with the Auditing Act, Slovenian auditors follow the ISA, and other relevant rules issued by the Agency for Public Audit Monitoring (ANR).

Over the past few years, the regulations have tightened. The audit has been under increased public and governmental pressure due to historical events like accounting scandals. As a result, the audit must now adhere to stricter criteria than in the past. Such higher criteria mainly apply to obtaining sufficient and reliable supporting evidence. In the case of fair value audits, the stricter evidence requirement is regarding the underlying management assumptions.

"*ANR often emphasizes that the auditors are not documenting their findings appropriately and sufficiently. Inspections have shown that the auditors usually fail to document how they made sure the valuation is correct and what procedures were conducted in order to prove the accuracy of the expert's work. Very little evidence is provided regarding the experts' capabilities, their ethical practices, and their independency (since the management's assessments are biased).*" (Senior Audit Manager 2)

Auditors used to face high pressure from the Agency, as the agency's goal, according to auditors, was to punish any misbehavior and non-compliance with standards. However, in

the past few years, the collaboration between the agency and the audit firms has improved, as the agency started helping and guiding the auditors regarding what actions to take when faced with an audit challenge.

"*Very often in practice, we come across problems that we do not know how to solve and now we can easily turn to the regulator, as we know they have the resources to help us. Furthermore, we feel confident that they will assist us."* (Audit Manager 3)

What makes the auditors perplexed at times are the accounting standards. The IFRSs are principle-based, meaning they are not strictly determined and are open to interpretation. They allow for much professional judgment and usually lead to different interpretations by auditors and preparers. Also, the fact that the fair value concept is scattered into more than one accounting standard, depending on the item subject to FVM, might additionally impede the process. This requires more effort to be put in by interested parties to offer a high-quality valuation. In addition to the accounting standards, there are also auditing standards. Both sets of standards determine the audit engagement scope and guide the auditors toward implementing the correct procedures. However, the audit of fair value measurement in practice is often more complex and unique for which there is no straightforward answer or example in the standards. For example, ISA 540 offers three approaches to substantive testing from which the auditor can choose. If one approach is suitable for testing for example investment properties for one client, it does not necessarily mean that the same approach can be applied to testing investment properties for another client. In addition, more than one approach can be used at once. If one approach, for example, testing the management's assumptions will not provide enough assurance, and the auditor still has doubts regarding the relevance and accuracy of the management's assumptions, then the auditor will develop its own estimates. Therefore, the standards allow the auditors to have different perceptions and ways of applying them and to rely on their professional judgment heavily.

3.3.3 Audit firm relationships with external parties

The audit firm has contractual relationships with the auditee and the valuation specialist, which impact the audit engagement of FVMs.

Relationship with the auditee and management bias

Before pointing out the effect of the relationship between the auditor and the auditee, it is noteworthy to mention that most Slovenian companies do not have complex fair value items in their statements, as is the case with US companies, for example. It is also more common for clients to report the fair value changes through the other comprehensive income statement, rather than reporting it in the income statement. Therefore, clients, especially smaller companies, usually do not have expert employees who are experienced in fair value

measurements. This might lead to valuations of poor quality, as the auditee might not be consistent in the valuation model over the years, due to a lack of knowledge.

One of the main concerns is whether the auditor can maintain their independence and not become subject to behavioral biases, such as conforming to the management's assumptions. Management can be quite persuasive with their chosen methods, especially if the subject valuation would have extra benefits for them, for example, bonuses linked to the company's profitability at the year-end date. The items reported at fair value through the profit and loss statement can highly influence the year-end profits. This increases the risk of the client reporting overstated revenues in their income statement. The auditor needs to think critically and be prepared to deal with such potential risks.

"The management's advantage in preparing reported values prior to the audit (first-mover advantage). may jeopardize the audit quality. For this reason, an assessment of the realization plan must be made. If the actual values are deviating by more than 20%, of the planned ones, then the planning is wrong, and it must be investigated." (Audit Manager 6)

On the other side, larger clients employ an external specialist to make the fair value measurements or have an in-house valuation expert. Such clients usually have financial assets such as investments in other companies, real estate, and various financial instruments for which it is desirable to have a valuation done by an expert. The auditors feel more comfortable when an experienced specialist backs up the valuation work. If the fair value measurement is complex, the auditor will also engage a specialist to assist them in the audit. As there is the possibility of a management bias, the specialist also aids in detecting it quicker and more precisely.

If the auditor's estimation differs from the management's, the auditor performs procedures to investigate the differences and understand the rationale behind the auditee's assumptions. This investigation takes place in the form of long discussions and numerous questions from the auditor's side. If the auditee provides reasonable and enough evidence, then the auditor accepts them, and no modifications are needed to the model. However, if the auditor is not convinced and perceives a significant management bias, a sensitivity analysis could be performed to deal with the management's subjectivity. This analysis will show whether the impact of the auditee's assumptions is of material significance, resulting in an audit misstatement. If yes, the auditee will have to make all the necessary changes, so there is no material misstatement reported in the financial statements.

The auditor might also perform a retrospective review by checking the estimates from the prior year as a basis for the model's consistency and accuracy of this year's numbers. Inconsistency is shown as altering the valuation model or its parameters, for example, using a 6% growth rate in the fair value model, while a 3% rate in the budgeting process for other items. Retrospective checks will enable the auditor to understand management's intentions

and define whether the management's preferences are optimistic, conservative, or indifferent.

The negotiation process between the auditor and the auditee can be lengthy, where a lot of patience and understanding are required from both parties. It also might be that the management is unconsciously biased and has no secret agenda behind the assumptions. Therefore, the auditor's role is to carefully inspect the valuation models and keep a professional attitude toward resolving any mistakes and disagreements with the client.

Even though it is the moral responsibility of the auditor to provide assurance of the fairness and transparency of the financial statements, they are also performing their own cost-benefit analysis. The amount of time and the type of procedures an auditor will perform to test the fair value model is highly dependent on the audit fee. Making own point estimates requires more time and effort, than testing the management's assumptions and the auditor will not be willing to perform procedures that are out of the pay range. However, if the auditor feels that making their own estimates is necessary, they will do it regardless of the audit fee. Auditors must have reasonable justifications behind the audit opinion they issue and in addition, are not willing to jeopardize their reputation and work ethics.

Relationship with the valuation specialist

As already mentioned, auditors may engage valuation specialists in auditing fair value measurements to assist them in the evaluation. Many internationally known audit companies (e.g. PwC, KPMG, EY, etc.) also offer financial services and therefore have valuation specialists the auditor can employ to conduct the valuation. The interviewed auditors confirmed that they often use the specialists employed in their company or reach out to specialists of the same company in another country. It is common for such international companies to use the experts within their companies, regardless of the country they operate from, as they are already familiar with the internal methodology and may have more expertise regarding complex fair value items, as they most probably have experience with bigger and more complex markets. Usually, auditors seek the valuator's support in assessing investments, financial instruments, expected credit loss, and takeovers.

The involvement of an expert should be considered in the planning phase of the audit, which allows for easier collaboration management. This way, the specialist is also timely informed of what is expected from them and the time by which their findings are required. When giving instructions to the expert, the auditor gives him all the important information about the auditee and the industry that only the auditor is familiar with. The valuation specialist is aware of the model and calculating process, but the result would be unreasonable without the proper accounting-related factors. The auditor and the specialist must continuously collaborate and communicate to ensure the procedure is effective and the result is correct When the auditor and their expert collaborate externally in meetings with the client and their

external specialist, disagreements over a specific solution may occur, but they must be resolved.

"SIR has issued a guideline on valuations, "Slovenian business and financial standard 7 – Review of the Appraisers' reports", that can also serve as a checklist for the auditor to evaluate the work of the valuation specialist. By doing so, the auditor can check whether the specialist is eligible to perform the valuation. In addition, it can satisfy the regulator's requirements for providing sufficient and reasonable audit evidence." (Audit Manager 5)

The auditor would demand an explanation for each input used in the valuation to ensure a proper assessment is conducted. This will enable the auditor to understand the specialist's criteria and rationale behind the outcome. Good coordination is critical in this process, as the auditor is fully responsible for the audit and the expert's work.

3.3.4 Task difficulty

Several aspects contribute to the complexity of the FVMs audit, upon which auditors mutually agree. The nature of the financial statement item is the first criterion that sets the tone for the difficulty of the task. In addition, auditors pointed out other influential factors: small market volume, high subjectivity and uncertainty, and standards ambiguity and related knowledge.

The nature of the item subject to the valuation and the small market volume are closely related. The valuation can contain observable and less observable inputs, making the latter harder to understand. For the valuation to be quite straightforward, observable inputs should be involved, as well as more generic items that are traded on a constant basis (e.g. stocks). As already discussed, the Slovenian market is characterized by a small trading volume; consequently, it can hardly reflect the true fair value. This fact, by default, creates inputs that are less (or not at all) observable (Level 2 and Level 3 hierarchical inputs). It is common for auditors to face FVMs that are quite technical due to the incorporation of such inputs. Conducting tests to assess the model might be difficult even when the auditor is aware of the logic behind the computation.

"*When faced with complex valuation models, the greatest impediment to the auditor is their scientific competence. Many auditors do not lack methodology skills but sufficient statistical and mathematical skills to challenge the estimations. In such cases, the specialists are the most reliable source for checks of FVMs because not even finance people have sufficient knowledge. Such a typical example is the measurement of financial instruments"* (Audit Manager 3)

The scarcity of market transactions makes unique assets and liabilities as there is no market information available for comparison. This creates high subjectivity inherent in the management's assumptions of the underlying item. Also, as they are based on future expectations, the final output is characterized by high uncertainty, because it is difficult to verify the credibility of the future cash flow forecasts. Also, due to the pandemic, especially when it began, the audit became even more demanding and had to be performed robustly.

In addition to financial instruments, especially financial derivatives which can be difficult to benchmark when exchanged over-the-counter (i.e. in a voluntary transaction among parties involved) rather than on the market, auditors determine goodwill, patents, and investments in affiliate companies as the most complex fair value measurements to audit. Intangible assets, including goodwill and patents, are highly subjective since they are generated internally and hence impossible to measure. For example, when one company acquires another company's business, it is not easy to identify and value intangible assets. Inter-company loans are also among the most challenging areas. These are loans between two affiliated firms that must be valued at fair value since the loans are not usually carried out in accordance with market circumstances. Finally, valuations of real estate property held for sale are also believed to be difficult.

Last but not least, auditors perceive the standards as ambiguous and as additives to the task intricacy. Even though the standards provide guidance and offer directions by outlining the framework within which auditors can function, they allow for a lot of professional judgment. All the parties involved in the process might have their own interpretations, which might not necessarily be wrong, but maybe lead in different directions, making it hard to follow. However, as each valuation is unique, it seems reasonable that the guidelines do not specify every potential valuation approach. To include everything would make the standard too detailed, too vast, and too complicated.

3.3.5 Knowledge and expertise

Before the interim audit begins, the partner and the senior audit managers develop the plan for the upcoming season. This involves dedicating team members to audit engagements and setting up the exact timeline for the audit. In accordance with the complexity of the client, the exact number of senior associates, associates, and new joiners is determined. In this planning phase, whether a specialist would be needed is also known and their time and input are also properly accounted for in the plan. Usually, most of the fair value measurements are perceived as significant matters compared to other audit areas; therefore, specialists would be involved. Fair value measures are usually audited by auditors with at least the Assistant Manager level of experience. Fair value audit tasks that do not need much judgment may be delegated to less experienced staff, even trainees included, provided they are constantly supervised by someone who does understand the model. Many members of the audit team,

including the partner and the expert, go through the fair value measurements before they are approved. However, auditors are being pushed into uncharted seas as a result of the current climate of uncertainty.

Auditors with a long audit career are equipped and expert enough to perform high-quality audits. Learning how to conduct a fair value audit takes time and practice. Auditors with less expertise learn about fair value through working with more veteran individuals who act as mentors and delegate routine responsibilities to the inexperienced. When auditing a fair-value item, junior auditors must be confident to seek help from more experienced colleagues when they realize they lack the necessary expertise. It is a widespread misunderstanding that having performed the audit many times previously makes them experts in the field. Each valuation of fair market value has its own quirks and complexities.

Consequently, a great deal of practice is necessary to develop skills in fair valuation. Every auditor should feel free to consult a coworker or a professional for clarification on any challenging topic. This is also true of more qualified auditors; however, they are more likely to realize their own limits and seek assistance when necessary. Internal communication between the audit team and the members responsible for developing fair value models and underlying assumptions is essential. Not only does it help with comprehension, but it also gives auditors a leg up when questioning the client's management.

One of the challenges that audit companies face is the high fluctuation of experienced employees that leave the companies. This leads to a higher number of new joiners and, relatively young and inexperienced auditors upon which the auditing firm must rely to conduct the audits.

In order to facilitate the learning process, auditors are required to attend IFRS training that is designed to keep them up-to-date. However, these sessions tend to focus more on the theory behind IFRS than the practical application. The concept is easy to grasp but putting it into practice may be challenging. Also, there is specialized in-house fair value training, but auditors admit that they picked up much of what they know through on-the-job experience.

3.3.6 Professional skepticism

As part of the audit of fair value measures, auditors use professional skepticism. All the financial statement items should be audited with a healthy dose of skepticism. However, the inclusion of management's assumptions and subjectivity call for even more scrutiny. There is more to question since there is more possibility for error, more potential for judgment, and more adoption of ideas or methods from the outside, so each auditor must account for the client's possible goals and interests. In addition, the COVID-19 pandemic has put even

greater pressure on auditors to use professional skepticism and further imposed practical challenges on its application due to the remote working environment.

When deciding whether to take on a new client, audit firms evaluate the level of risk posed by that business and place it in one of three categories: low, moderate, or high. By identifying the most significant risks in advance, auditors may focus their efforts on where they will do the most good. As a result, actions are taken to control the risk. The larger the risk, the more stringent the paperwork must be, and the deeper auditors should look at the records.

Along with the auditor's natural skepticism, the audit process and documentation requirements also instill a healthy dose of skepticism. Concerns raised by auditors in challenging management's assumptions, the presence or absence of discussion of pertinent problems, and the underlying evidence to accept the chosen fair value model are all aspects of the audit process that must be documented. The audit firm offers a professional judgment framework that details what an auditor should do during an audit, down to the necessary documentation and considerations. In these uncertain times, it is also important to focus on the trustworthiness of audit evidence obtained electronically.

"*Auditors should think about the potential for bias in the direction of management. Management may reveal a lot of information and data, but close attention should be paid to what it could be hiding. We should not take the management's word that everything is the same as last year just because they claim it is*." (Audit Manager 2)

There are few real-world instances to illustrate how auditors should practice professional skepticism, particularly amid a pandemic and beyond. The pandemic might be the right time to reevaluate the methods for conducting in-depth assessments and calculating variations. The significance of maintaining a healthy dose of professional skepticism in the present climate is difficult to overstate. Auditors believe that the lessons acquired during this period of uncertainty will continue to be applicable long after the epidemic has passed since remote work is not going away anytime soon.

3.3.7 Cognitive impairments and processing demands

This study contradicts the finding of Bratten et al (2013) that auditors prefer to opt for a more straightforward approach when confronted with higher processing demands. Auditors are confident in their ability to conduct a thorough fair value audit despite the complexity of the process and challenges such as fair value's inherent subjectivity and uncertainty. The valuation specialist is indeed crucial to the process. To what extent an auditor requires an expert is, of course, a consequence of the difficulty of the fair value estimate. However, as was said before, FVMs are often sophisticated, needing the involvement of an expert in most instances.

The audit company where the interviews took place is a major company that serves a wide variety of customers, making it an ideal candidate for conducting fair value analyses due to the quality of its database. Auditors' knowledge and tools allow them to verify the experts' assumptions and provide an unqualified opinion in the audit report. Understanding one's own skill level and knowing when an FVM is too difficult are both important in this case.

The auditor may provide a qualified opinion or even a disclaimer of opinion if he or she fails to gather adequate evidence for a specific item. If the necessary information is lacking, the audit report might be delayed. If there are too many unanswered questions or a crucial piece of audit evidence is missing, the deadline cannot be reached, and the audit cannot be conducted.

While the auditor can never guarantee the complete accuracy, the information provided in the audit report might help ease concerns. Many complex estimations pertaining to fair value are described in detail in the audit report. A summary of the data and analysis used to reach this result is provided, along with a brief discussion of the factors that were considered and the remaining uncertainty.

The auditors' ability to conduct a qualitative fair value audit is also influenced by consumers' expectations of financial statements. Although the public may place its trust in the declared fair value, accountants cannot guarantee that this will really occur. However, transparency is offered by sharing the client's thoughts and the reasoning behind the assumptions examined and validated by the auditors. By providing more information up front, you may help consumers avoid being let down when the actual results are presented.

In the past several years, there has been a noticeable shift toward a more formalized audit that places more importance on disclosures and documentation. The auditors approve of this development and have asked for even greater formalization, including in the interaction with the expert. This was even more apparent in the last two years during the pandemic. The auditors value the employment of specialists and believe there will be an increased need for professionals with specialized expertise in the future.

CONCLUSION

This dissertation focuses on auditing fair value measures at a Slovenian audit company. Based on interviews with auditors who have experience assessing fair value items, the study delves into auditors' perspectives on the audit process and their strategies for addressing audit shortcomings raised by Bratten's (2013) methodology. The company's internal audit guide was also used for further information. After conducting interviews and reviewing

relevant documents, the data was analyzed to provide insight into the following research topic.

Prices in an active market are most indicative of what constitutes a fair valuation. When there is a large enough number of trades, the market is considered "active," and reliable price data may be obtained consistently. Prices are considered Level 1 inputs of the fair value hierarchy as they are regarded as observable. Level 2 and Level 3 are less observable (or not observable at all), meaning they are derived based on some model. The Slovenian stock market is characterized by a shorter supply of quoted companies since most of the Slovenian companies are small and not eligible to be listed. The lack of a more active market contributes to the fact that almost 90% of Slovenian companies are valued under the discounted cash flow model (DCF) because the model can yield a more precise estimation than the available market data. The usage of the DCF model corresponds to the Level 3 inputs, while for Level 2 inputs, the market approach is suitable. Valuation experts agree that choosing the right inputs for the DCF model (or any model) is challenging and reflects the appraiser's ingenuity. They must be clever enough to make reliable valuations, even when there is increased uncertainty and extensive market overreaction.

Auditors agree that there is no universal way to audit fair value measurement, as was also identified by Bratten's findings (2013). Even though auditors agree that the standards offer task structure, they also agree that they are principle-based which means that are open to interpretation. However, Bratten also argued that there is a lack of directional guidance, with which auditors do not seem to agree, as there are clear directions on what approaches should be applied for substantive testing of FVMs.

Auditors consider auditing FVMs to be quite a demanding process. The task's difficulty stems from the inherent subjectivity in management's assumptions and the unpredictable macroeconomic conditions over which the auditors do not have control and to a lesser degree, from the technical and sophisticated nature of fair value assessments. The level of uncertainty increases proportionally with the unobservability of inputs used in the model. The auditors regard Level 2 and Level 3 inputs of the fair value hierarchy as more complex with a higher degree of subjectivity.

However, in times of increased market volatility, auditors prefer Level 2 and Level 3 inputs, as they do not think the market value (Level 1) reflects the true fair value of items. In such cases, having insufficient data is not an issue, according to the auditors. With fewer data points to work with, they bring in an expert who has more information at their disposal. The expert has the necessary knowledge and expertise to determine fair value. Thus, with the specialist's assistance, the auditor can almost always successfully audit the client's model and assumptions and arrive at an accurate fair value.

Auditors report that, due to rising social and regulatory pressure, audit and accounting standards have tightened over the last several years. Also, the auditors feel they are under closer scrutiny during the whole audit. There is regulatory pressure felt by the auditors as shown by stricter regulations and tighter monitoring. However, lately, they are also experiencing help from the regulator when faced with complex tasks. The regulator offers guidance and solutions for solving the task more quickly, rather than just "punishing" them.

The fair value audit is subject to its own unique set of more stringent standards and procedures. Accounting standards give a clear and well-defined structure, but fair value measurement audits are often more sophisticated and one-of-a-kind than what is required by the standards. A method that meets the standards in one client's testing may not fare as well in another client's testing of the same item. Thus, auditors are free to form their own opinions on how to apply the standards and are expected to depend significantly on their own professional judgment. As already acknowledged in the existing literature (Bratten, 2013), professional skepticism is a must in a fair value audit, and auditors know it. The auditors are regularly reminded in the audit firm to constantly use professional skepticism; lately, with the regulatory pressure and increased uncertainty due to the pandemic, they are even more skeptical than they were in the past.

Before discussing the implications of the auditor-auditee relationship, it is important to emphasize that most Slovenian firms do not have complicated FV items in their statements. Because of this, customers, particularly smaller businesses, often lack skilled workers who are skilled in fair value measures. As a result, the auditee may not be consistent in the valuation methodology over time, leading to low-quality values. On the other side, larger clients with more sophisticated FVMs may have an in-house employed expert. However, regardless of their size and resources, each client is likely to hire external valuation specialists to do the valuation. The auditors feel more comfortable when an experienced specialist backs up the valuation work. Auditors are more at ease knowing that an expert supports the valuation process. The auditor may also hire a professional to help them with the audit if the fair value assessment is very complicated. With managerial bias always a possibility, the expert's help allows for faster and more accurate detection of it. The auditors' perception of the difficulty of a FV assessment will vary from item to item, although FVMs with a high degree of complexity are often encountered. Usually, auditors seek the valuator's support in assessing investments, financial instruments, expected credit loss, and takeovers. Auditors notice that they need assistance from experts and more experienced colleagues to conduct a thorough audit of fair values. By doing so, they guarantee that the audit team has the knowledge to examine models and assumptions effectively.

Auditors feel that the management's advantage in preparing reported values prior to the audit (first-mover advantage). may jeopardize the audit quality. The auditor's ability to avoid behavioral biases like adhering to management's expectations is a major topic of concern because management can be quite persuasive when they stand to gain anything from the

subject valuation—for instance, incentives tied to the company's profitability as of the year's end.

There can often be misunderstandings between the auditor and the auditee when there is a difference in estimations. The auditor and his expert may arrive at a different conclusion from management when they do their own fair value computation. Management will need to modify its assumptions if an auditor's sensitivity analysis reveals that such assumptions are unjustified and increase the risk of material misstatement. Thus, the negotiation process can be lengthy, requiring a lot of patience and understanding from both parties. In addition, even though it is the auditor's ethical duty to ensure the financial statements are fair and transparent, they will also do their own cost-benefit analysis. There is a strong correlation between the audit fee and the time and effort spent testing the fair value model.

PCAOB inspection reports revealed that auditors often lacked the knowledge to provide an audit opinion on fair-value items (PCAOB, 2012; PCAOB, 2013). The interviewed auditors are affected by this as well. Auditors must seek assistance from a coworker or an expert if they feel stuck. A fair value audit should always include at least two people, even if the auditors are quite well in fair value assessments. Cooperating with a more experienced auditor provides training for newer auditors in the fair value auditing process. In order to prevent testing of fair value items to be carried out by personnel with little expertise, auditors take special care to train and oversee newcomers. Becoming an expert in fair value is difficult and needs a great deal of experience owing to the complicated nature and unique characteristics of fair value measures. Even if you have some background in valuing certain fair value problems, it does not indicate you have enough background to handle others.

The interviewed auditors mutually agree on the numerous challenges that are present in the audit of fair value measurements. However, despite the many challenges they have encountered, they are confident in their ability to do a quality audit of fair value measures. In order to accomplish this though, they need access to resources, such as collaborations with more experienced colleagues and external experts, guidelines, related training, proper engagement planning, and sufficient time to perform a high-quality assessment.

DISCUSSION

The following two sections provide information regarding the research’s shortcomings and outline the possibilities for future research. With that being written, this final chapter wraps up this dissertation.

Limitations to the research

It should be noted that this study has some limitations. The study's overall goal is to provide light on the auditor's perspective on the FVM audit process and any gaps or flaws that auditors may have seen. Auditors' perspectives are central to this study, emphasizing their thoughts, feelings, and impressions. This, however, may make it harder for certain shortcomings in the research to become clear. For instance, prior studies have shown that auditors do not successfully identify or address managerial bias. In addition, some research suggests that auditors may not be enough skeptical of their work. Although several interview questions touched on these topics, we cannot conclude from these findings whether auditors fail to identify management bias or fail to show adequate professional skepticism. To avoid biasing the results of the research, auditors are less likely to reveal their own failure during an interview, unless of course the auditors never fail.

Nonetheless, the research demonstrates that auditors prioritize professional skepticism throughout the audit of fair-value items. Additionally, they acknowledge that the possibility of management bias is one of the primary issues that makes the audit difficult. So, it is safe to say that the participants in this research agree that these shortcomings exist. Moreover, the findings from the other deficiencies demonstrate that the auditors were forthright and honest throughout the interviews. For instance, they are aware of their own lack of knowledge and need experts' assistance.

The interviews were conducted over an extended period of two years during the one-of-a-kind coronavirus pandemic. This might have had a stronger influence on the auditor's perspective on the inherent uncertainty at the beginning than it had in the end. Also, it may have contributed to a more devastating outlook on the whole situation than it was in reality, as no one of the participants has been in such a situation before.

The sample size is too small, and that is another limitation of this research. To ensure accuracy, only auditors with extensive expertise in assessing fair value measures were chosen. Experienced auditors were preferred since there is a greater chance that they will be acquainted with (nearly) every part of the fair value audit, including testing assumptions, engaging with the expert, and questioning management. An auditor who has just completed some basic audit work on occasion while working under the supervision of a more experienced colleague does in fact have some expertise with auditing fair value goods. However, his insights would be less useful for this research. However, there were still notable variations in the respondents' experiences and perspectives, even though they were all well-qualified. As a group, the respondents' tenures varied widely (from 5 to 25 years) and so did their levels of expertise in auditing fair value. While this sample only contains the auditors with the greatest expertise in auditing fair value measures from one Slovenian audit firm, their opinions are representative of the firm.

Suggestions for future research

There is room for further research into the auditing of fair value measures. This study's results are typical for one Slovenian audit firm. This investigation may also be conducted in other organizations. It may be beneficial for the company to learn how auditors in different locations see the audit of fair value measures and the accompanying problems. To better comprehend the auditor's viewpoint on the fair value audit, it might be helpful to research this issue at different accounting firms, cities, and other countries. Also, this research reveals that auditors agree that IFRS rules on fair value offer a well-defined basic framework, but that its practical implementation is subject to different interpretations. In the future, the study might be directed at enhancing IFRS and ISA standards to the point where they better serve their intended functions and provide auditors with greater direction.

The results of this research showed the participants' perspectives during a global pandemic. Now that we are in the aftermath of the pandemic, there are new, more threatening events on the horizon, such as the war between Russia and Ukraine and the expected energy crisis. The effects of these events have so far pushed society into a major transition towards sustainable energy production and increased the overall cost of energy and living in general. It is expected to have even more severe effects and disrupt the global economy as high energy prices will have long-term implications, in the form of higher debt burden and business failures. These new circumstances may create new challenges for auditors and the effects may be unprecedented and are yet to be visible. Further research may unravel additional deficiencies that have not been known so far.

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APPENDICES

Appendix 1: Povzetek (Summary in Slovene language)

Ocenjevanje poštene vrednosti je postalo razširjena metoda v finančnem poročanju, po kateri se sredstva in obveznosti ocenjujejo po njihovi trenutni tržni vrednosti (Banerjee, 2017). Cilj ocenjevanja poštene vrednosti je oceniti vrednost, po kateri bi se izvedla redna transakcija za prodajo sredstva ali prenos obveznosti med udeleženci na trgu na dan ocenjevanja vrednosti pod trenutnimi tržnimi pogoji (tj. izhodna cena na dan ocenjevanja vrednosti z vidika udeleženca na trgu, ki ima v lasti sredstvo oziroma obveznost). Da bi povečali skladnost, primerljivost in doslednost pri ocenah poštene vrednosti in z njimi povezanih razkritjih, MSRP 13 razvršča vložke v izbrane tehnike ocenjevanja v tri ravni – raven 1, 2 in 3, ki sestavljajo hierarhijo poštene vrednosti (MSRP 13, 2011)

- Vložki ravni 1 so kotirane cene (neprilagojene) na delujočih trgih za enaka sredstva ali obveznosti, do katerih lahko podjetje dostopa na datum merjenja,
- Vložki ravni 2 so vložki, ki niso kotirane cene, vključene v raven 1, in jih je mogoče neposredno ali posredno opazovati za sredstvo ali obveznost,
- Vložki ravni 3 so neopazovani vložki za sredstvo ali obveznost, ki se uporabijo v primeru, da ustrezni opazovani vložki niso na voljo, s čimer se omogočijo okoliščine, v katerih obstaja majhna tržna dejavnost, če sploh obstaja, za sredstvo ali obveznost na datum merjenja.

V času težav na finančnih trgih lahko tržne cene sredstev odražajo razpoložljivo likvidnost in ne prihodnjih denarnih tokov sredstva. Posledično ugotavljanje solventnosti podjetja na podlagi tržnih cen ni koristno (Allen in Carletti, 2008). Čeprav so številni subjekti priznali ogromne izgube pri uporabi pristopa merjenja poštene vrednosti v turbulentnih tržnih obdobjih, velja, da ta pristop ustvarja določeno povezavo z realnostjo za tiste, ki podpirajo koncept poštene vrednosti (Giorgiana, Matis, & Strouhal, 2010). Ker so meritve poštene vrednosti za pripravljavce zapletena naloga, ki vključuje prihodnje napovedi v zvezi z obnašanjem trga in obsežno stopnjo presoje, so lahko nagnjeni k pristranskosti. Zato morajo biti revizorji previdni glede ključnih predpostavk in možnih težav, ki se lahko pojavijo pri revidiranju poštene vrednosti (Martin, Rich in Wilks, 2006). Vendar pa je revizija FVM zahtevna naloga zaradi več razlogov. Obstaja namreč precejšnja negotovost ocenjevanja, ki otežuje pridobitev objektivne rešitve in motivira revizorje, da se zanesejo na strokovnjake za vrednotenje tretjih oseb (Joe, Vandervelde & Wu, 2014). Tudi iz inšpekcijskih poročil, ki jih je izdal Odbor za nadzor računovodstva javnih podjetij (PCAOB), je razvidno pomanjkanje znanja in usposabljanja revizorjev na področju poštene vrednosti, pa tudi pomanjkanje prilagajanja revizijskega pristopa tveganju naročnika, predvsem obvladovanju tveganja in kontrolam na ravni subjekta (PCAOB 2009, PCAOB 2012, PCAOB 2013)

Strokovnjaki poudarjajo, da je zaradi COVID-19 proces še bolj zahteven, saj prispeva k večji negotovosti, spremembam napovedi denarnega toka in zmanjšani ponudbi opazovanih vložkov (KPMG, 2020). Večja kot je negotovostzaradi COVID-19, večji je pritisk na podjetja, da ponovno razmislijo o svojih predpostavkah in vhodnih podatkih, uporabljenih

pri meritvah poštene vrednosti,da bi lahko pravilno upoštevali trenutne dogodke. Pandemija še bolj obremenjuje revizorjevo nalogo zagotavljanja kakovostnih revizij, saj bi se zaradi večjih negotovosti uporabniki računovodskih izkazov še bolj zanašali na revizorjevo mnenje (Adio-Moses, 2021)

Bratten, Gaynor, McDaniel, Montague in Sierra (2013) so izzive revizorjev razvrstili v tri kategorije: okoljski dejavniki, dejavniki, specifični za nalogo, in dejavniki, specifični za revizorja. Dejavniki okolja so splošni dejavniki, na primer makroekonomska nihanja, ki revizorja obkrožajo od zunaj. Posamezni revizor ne vpliva na te dejavnike; zato ne odražajo revizije ali subjekta revizije. Revizorjeva "naloga" je sklop dolžnosti pri opravljanju revizije poštene vrednosti. Obenem je kompleksnost naloge sestavljena iz osnov uspešnosti in je nadalje ločena na dve dimenziji: težavnost naloge in struktura naloge. Brattenov teoretični okvir je osnova za glavna raziskovalna vprašanja te dispozicije. Poleg dejavnikov okolja in nalog so dejavniki, specifični za revizorja, tisti, ki neposredno vplivajo na pomanjkljivosti v revizijah poštene vrednosti. Dejavniki, specifični za revizorja, so v obliki znanja in izkušenj, poklicnega skepticizma in sposobnosti, povezanih z obdelavo informacij, kadar obstaja negotovost okolja in zapletenost nalog. Raziskave kažejo, da večina revizijskih pomanjkljivosti izhaja iz revizorjeve interakcije z okoljem in dejavniki naloge.

Glavni namen magistrskega dela je poglobiti se v prakse revizorjev pri revidiranju meritev poštene vrednosti in opredeliti ovire, s katerimi se soočajo, zlasti v času povečane volatilnosti trga. Cilj je razkriti in jasno opredeliti bistvene pomanjkljivosti revizije merjenja poštene vrednosti, ki bi revizorjem lahko bile nejasne, ter jim s poudarjanjem najpogostejših izzivov pomagati pri prenovi revizijskega pristopa. Čeprav je bistvo revizijskega pristopa dokumentirano v revizijskih standardih, številne študije kažejo na nedoslednost pri praktični uporabi smernic in na to, da ima človeški faktor v procesu odločanja pomembno vlogo (Singh & Doliya, 2015)

Kot raziskovalna metoda je bila izbrana študija primera, ki je bila izvedena v obdobju od januarja 2021 do novembra 2022 in je vključevala dva intervjuja kot metodo zbiranja podatkov s polstrukturiranimi in odprtimi vprašanji. Populacijo sestavljajo vsi zaposleni v revizijski družbi. Na podlagi storitev, ki jih ponuja podjetje, je bila populacija, ki je bila primerna za to nalogo, razdeljena v dve skupine, cenilce in revizorje. Poglobljeni intervjuji so bili izvedeni osebno, v angleškem in slovenskem jeziku. Prvi sklop vprašalnikov je bil namenjen strokovnjakom za vrednotenje, da bi zagotovili razumevanje procesa merjenja poštene vrednosti. Drugi sklop vprašalnikov temelji na obstoječem Brattenovem teoretičnem okviru in je dodatno nadgrajen z vprašanji, ki se osredotočajo na aktualna gospodarska dogajanja.

Cenilci trdijo, cene na delujočem trgu najbolj nakazujejo, kaj sestavlja pošteno vrednost. Ko obstaja dovolj veliko število poslov, se trg šteje za "aktivnega" in zanesljive podatke o cenah je mogoče dosledno pridobiti. Za slovenski borzni trg je značilna manjša ponudba borznih

družb, saj je večina slovenskih podjetij majhnih in ne morejo kotirati. Manjša aktivnega trga prispeva k dejstvu, da je skoraj 90 % slovenskih podjetij vrednotenih po modelu diskontiranih denarnih tokov (v nadaljevanju DCF), saj lahko ta model poda natančnejšo oceno od razpoložljivih tržnih podatkov. Uporaba modela DCF ustreza vložkom 3. ravni, medtem ko je za vložke 2. ravni primeren tržni pristop. Strokovnjaki za vrednotenje se strinjajo, da je izbira pravih vložkov za model DCF (ali kateri koli model) zahtevna in odraža ocenjevalčevo iznajdljivost. Cilj je, da je vrednotenje čim bolj zanesljivo, zlasti kadar obstaja povečana negotovost in obsežna pretirana reakcija trga. Vendar pa imajo revizorji v času povečane volatilnosti trga raje vložke 2. ravni in 3. ravni, saj menijo, da tržna vrednost (1. raven). ne odraža prave poštene vrednosti postavk.

Revizorji ocenjujejo, da je revidiranje poštene vrednosti precej zahteven proces. Revizorji se strinjajo, da ni univerzalnega načina za revidiranje merjenja poštene vrednosti, kot so ugotovili tudi Bratten, Gaynor, McDaniel, Montague in Sierra (2013). Čeprav se revizorji strinjajo, da standardi nudijo strukturo nalog, se strinjajo tudi, da temeljijo na načelih, kar pomeni, da so odprti za razlago. Vendar pa je Bratten tudi trdil, da primanjkuje smernic, s čimer revizorji očitno ne strinjajo, saj obstajajo jasna navodila o tem, katere pristope je treba uporabiti za vsebinsko testiranje poštene vrednosti. Koraki postopka revizije so dokumentirani v notranjerevizijskem priročniku podjetja za revidiranje računovodskih ocen, ki je prevzet iz ISA 540 in zagotavlja tri metode za preizkušanje podatkov, od katerih sta dve bolj razširjeni. Preučevanje temeljnih predpostavk vodstva in modelov napovedovanja je prvi korak pri preverjanju točnosti ocene. Druga možnost je, da sami izračunajo razpon ali točkovno oceno. Revizorji raje kombinirajo vse pristope, saj je težko presoditi, kako logični so nekateri vložki, čeprav se na prvi pogled zdijo pravilni. Cilj je preizkusiti matematično točnost izračuna, kar pomeni, da revizor na koncu sam presodi. Revizija poštene vrednosti mora vedno vključevati vsaj dve osebi, tudi če sta revizorja precej dobra pri ocenjevanju poštene vrednosti. Sodelovanje z bolj izkušenim revizorjem omogoča usposabljanje novih revizorjev za proces revidiranja poštene vrednosti. Da bi preprečili, da bi preverjanje poštene vrednosti izvajalo osebje z malo strokovnega znanja, revizorji še posebej skrbijo za usposabljanje in nadzorovanje manj izkušenih sodelavcev. Postati strokovnjak za pošteno vrednost je težko in zahteva veliko izkušenj zaradi zapletene narave in edinstvenih značilnosti meril poštene vrednosti.

Vsa področja, kjer gre za neko ocenjevanje, so običajno izpostavljena večjemu tveganju goljufij. To je zato, ker ocene odražajo miselni proces posameznikov in v tem primeru bi to odražalo namene poslovodstva stranke. Težnja vodstva, da poroča o določenih vrednostih glede na lastne želje, je znana kot zaobide običajne zahteve (management override of controls). Poleg opredelitve področij tveganja mora revizor ugotoviti, kako je poslovodstvo zaključilo, da je potrebno narediti računovodsko oceno, kako je bila ta ocena narejena in kako poslovodstvo ravna v skladu z ustreznim okvirom računovodskega poročanja. Zaradi pomanjkanja tržnih transakcij so sredstva in obveznosti edinstvena, saj ni na voljo tržnih informacij za primerjavo. To ustvarja visoko mero subjektivnosti, ki je neločljivo povezana

z vodstvenimi predpostavkami o postavki. Ker temeljijo na prihodnjih pričakovanjih, je za končni rezultat značilna velika negotovost, saj je težko preveriti verodostojnost napovedi prihodnjih denarnih tokov. Tudi zaradi pandemije, zlasti ko se je začela, je revizija postala še zahtevnejša in jo je bilo treba opraviti robustno. Zato je treba vse postavke računovodskih izkazov revidirati z zdravo dozo skepticizma. Zaradi kompleksnosti revizije revizorji vključijo strokovnjaka, ki ima na voljo več informacij. Izvedenec ima potrebno znanje in izkušnje za določitev poštene vrednosti. Revizor lahko s pomočjo strokovnjaka skoraj vedno uspešno revidira naročnikov model in predpostavke ter pride do natančne poštene vrednosti.

Revizorji so si enotni, da je pridobivanje revizijskih dokazov od naročnika lahko težavno, vendar pa je pravi izziv oceniti, ali so le-ti zanesljivi in kakovostni. Regulator od revizorja zahteva, da svoje ugotovitve zadostno dokumentira, pri čemer so njegovi kriteriji zelo strogi.

Anketirani revizorji se medsebojno strinjajo o številnih izzivih, ki so prisotni pri revidiranju merjenja poštene vrednosti. Vendar pa so kljub številnim izzivom, s katerimi so se srečali, prepričani v svojo sposobnost kakovostne revizije meril poštene vrednosti. Da bi to dosegli, pa potrebujejo dostop do virov, kot so sodelovanje z izkušenejšimi kolegi in zunanjimi strokovnjaki, smernice, s tem povezano usposabljanje, ustrezno načrtovanje sodelovanja in dovolj časa za izvedbo visokokakovostne ocene.

Appendix 2: Interview questionnaire for valuation experts

Dear valuation expert,

Thank you for allowing me to interview you. Especially a big thank you in advance for contributing to the development of my master's thesis. Before we begin, I would like to briefly explain the purpose of this interview and my thesis in general. The existing literature emphasizes numerous shortcomings regarding the Fair Value Measurement audit, known as "the audit deficiencies", hence this is the focus of my thesis. Examples include that valuations are quite complex, contain a high degree of estimation uncertainty and that managers make subjective choices when valuing at fair value. These deficiencies can relate to the auditor, but also to the properties of the audit itself or the audit environment. So, in order to better understand the audit process and the potential deficiencies, I would like to get a picture of how valuation experts perceive the fair value measurements, their characteristics and challenges. The answers will aid in the development of this thesis and could positively influence auditors in performing an audit with overall better quality.

If any of the questions would be unclear or need an additional explanation, please let me know. If everything else is clear, we can now start with the interview.

Introduction

I would like to ask you to introduce yourself, possibly in the following order:
- Name.
- Age
- How long have you had experiences with fair value measurements?

Questions

1. What is FV? How it is measured (brief explanation)?
2. Is FV measurement more relevant approach in times of crisis than historical cost?
3. How does FV measurement assure that a fair and faithful representation of financial statements is given?
4. What makes the FV measurement complex? What determines which measurement approach will be chosen?
5. How are inputs for models and valuations selected when there is a certain freedom of choice?
6. Which sectors are the ones that are the most affected by fair value measurements in Slovenia?
7. What are the challenges (deficiencies). of determining the FV in Slovenia?
8. Is the fair representation additionally challenged during more volatile times when using FVM? How reliable is the FVM during COVID-19 pandemic?
9. From your experience, do you think that companies correctly incorporate the uncertainty factor in their measurements?
10. If not, what do you think the consequences might be in the near feature and in the long-run?

11. Is this uncertainty increased due to COVID-19? Have you witnessed until now a case where the FV drastically changed due to COVID-19?
12. Which factors should you be the most aware of when determining Level 2 and Level 3 FV? Is their measurement further complicated due to COVID?
13. Is there one measurement approach (market, cost, income approach). in particular that is more suitable than the others in general or it depends on the industry, the entity...)?
14. Which measurement approach is the most suitable for investment property valuation? Do you think the Slovenian market reflects a fair and acceptable FV?
15. Do you think there is enough information in the real-estate market for a measurement to be done more accurately? What about other important sectors?
16. Do you think the benefits of this availability of information can be offset if there is not enough evidence about it? (related to the auditor's requirements for evidence and proper documentation)
17. Is there any group of assets/liabilities that are especially affected by COVID-19 when determining their FV?
18. Do you think the IFRS guidelines for determining FV are understandable enough?
19. Do you think IFRS 13 leaves too much room for interpretation of FV and therefore increased subjectivity when determining FV?
20. Are there significant differences between IFRS 13 and SRS 16?
21. How does IFRS 13 works in combination with IFRS 9?
22. What do you think are the challenges (deficiencies). for auditors when auditing FV measurements? Is it additionally complicated during COVID-19 times?

Appendix 3: Interview questionnaire for auditors

Dear auditor,

Thank you for allowing me to interview you. Especially a big thank you in advance for contributing to the development of my master's thesis. Before we begin, I would like to briefly explain the purpose of this interview and my thesis in general. The existing literature emphasizes numerous shortcomings regarding the Fair Value Measurement audit, known as "the audit deficiencies", hence this is the focus of my thesis. Examples include that valuations are quite complex, contain a high degree of estimation uncertainty and that managers make subjective choices when valuing at fair value. These deficiencies can relate to the auditor, but also to the properties of the audit itself or the audit environment. By asking you several questions regarding these deficiencies, I try to get a picture of how auditors experience these deficiencies, whether they recognize themselves in them, or perhaps not. The findings of this research will contribute to you, as well as to the associates, to recognize these deficiencies when they occur. This will lead to a timely response to potential risks and to an overall better quality of the audit. The interview is divided into 2 main sets of questions – one relating to Environmental and Task factors and the other to Audit-specific factors.

The existing literature describes 3 factors that are key to audit deficiencies – task factors, environmental factors, and audit-specific factors. Following, the interview is built on these 3 main factors.

If any of the questions would be unclear or need an additional explanation, please let me know. If everything else is clear, we can now start with the interview.

Introduction

I would like to ask you to introduce yourself, possibly in the following order:
- Name.
- Age
- How long have you been employed in this audit firm?
- How long have you had experiences with auditing fair value valuations?

Environmental and Task factors

Task difficulty

1. What makes fair value valuations so complex in your opinion?
2. Do you ever come (and how often). across fair value valuations that are not easy to check/audit?
3. What are the financial statements' FV items that are the most complex and the most difficult to audit?
4. Do you have the resources to audit the valuation models that the management has applied?
5. In light of current economic events (increased uncertainty), do you think fair value audit rules and guidelines contribute to a better understanding of fair value valuations and management's underlying assumptions?
6. According to existing literature, task difficulty can be mitigated by developing expertise. How feasible it is to really become an expert in the audit of FVM?

Task structure

1. Does the audit of complex fair value valuations follow a certain structure?
2. Can you be flexible in your approach or is every audit of FVMs attached to a fixed framework?
3. Do the standards allow you to involve a considerable amount of professional judgment?
4. How many approaches are there for substantive testing of FVM and which one do you most commonly choose? Why?

Regulatory and legal influences

1. What reporting & audit standards should be followed during the audit of complex fair value valuations?
2. How do you experience these rules – are the standards clear? Does it ever come down to your own judgment/interpretation when choosing which standard to use?
3. Do you think the rules are achieving their goal? Are the rules/standards realistic? Or do they add even more ambiguity to an already so complex task?
4. Is there specific supervision of the fair value audit? How do you experience this supervision?
5. Do you experience pressure from the regulator?

6. ISA 540 offers different approaches to substantive testing: Testing management's assumptions & Make an independent estimate yourself. How is it determined which approach is chosen?
7. Which of the two methods is used the most?
8. Do you think that you often opt for the simpler strategy when auditing fair value valuations?
9. Do you choose to test management's assumptions more often instead of making an independent estimate yourself?

Environmental factors – factors that surround the auditor

Estimation uncertainty – two factors: measurement uncertainty and macroeconomics factors

1. How is it determined which measurement method should be used in a complex fair value valuation for which the regulations prescribe several possible methods?
2. Is it clear which method/model should be used?
3. When auditing FVM estimated with the "mark-to-model" method (where more subjectivity is involved), how often do you rely on the management estimation? Is audit evidence easily and sufficiently obtained in such circumstances?
4. How are inputs for models and valuations selected when there is a certain freedom of choice?
5. In general, is there enough information available from the client, which will satisfy a fair and faithful representation in the financial statements? Is this availability additionally challenged during the covid-19 pandemic?
6. Valuation experts think that level 2 and level 3 FVMs are more reliable choices during increased market volatility. Do you support this opinion from the perspective of auditing these measurements?
7. During increased market volatility, would you still rely on market prices, even though they may incorporate biased information? Your decision/opinion is based on what?
8. Do you think certain modifications should be done in the way FVM audit is performed due to the pandemic (as in terms of how it affects uncertainty)?
9. Were the clients implementing different methods in order to reflect the market conditions as of the BS date? How were they doing it?
10. Were clients properly assessing whether certain assets had to be impaired (Estimates of future cash flows and earnings are likely to be significantly affected by direct or indirect impacts.).
11. In light of current economic events (the pandemic), do you notice that it is becoming increasingly difficult to guarantee the reliability of fair value valuations?
12. Can you provide me with examples of situations in which the valuation of fair value incorporates even more uncertainty or is even more complex than normal?

Relationships with External Parties

1. Do you think that the management's advantage in preparing reported values prior to the audit can result in a disproportionately effect on the audit quality of FVOEs because management could exploit this first-mover advantage more easily when there is greater estimation uncertainty?
2. Can you tell me any examples of problems or conflicts between the auditors and the client regarding fair value valuations that you might have experienced lately?
3. How are any disagreements about fair value valuations dealt with?

Management biases:

1. There is a lot of uncertainty in the estimates. Management assumptions are often subjective in nature. How do you deal with this subjectivity?
2. How do you deal with the possibility of management bias?
3. From your personal experience, do you agree that the reliability of Level 3 fair value assets is greater in firms with strong corporate governance?
4. Do you notice that managers are consciously or unconsciously biased in their valuations?
5. Are there items that require extra attention because there is a high probability that management will use subjective judgment in their valuations?

Relationship with a valuation specialist

1. Are external valuation specialists used (and how frequently). when auditing FVMs?
2. Was the need for experts higher due to the pandemic?
3. Can you describe how the collaboration process is - do you instruct them, do you guide them, or do you give them freedom?
4. How do you deal with the work they provide? Do you trust their expertise, or do you still use a great deal of professional judgment before accepting their work?
5.

Auditor-Specific factors

Knowledge and expertise in fair value valuations:

1. Do you think the people in the audit team involved in fair value valuations have sufficient experience and knowledge in this area?
2. Does it ever happen (and how often). that someone is working on it who does not have enough knowledge and experience?
3. Valuation at fair value is versatile and requires knowledge of several aspects: economics, statistics, financial analysis, and management. How prepared are the assurance teams for this at your firm?
4. How did you acquire this knowledge and how were you prepared for fair value valuations: training, study?
5. How do you view the audit of fair value valuations compared to the audit of other items?

6. What is the importance of experience when auditing complex fair value valuations compared to auditing other items?

Professional critical attitude:

1. What is the importance of professional scepticism in the audit of complex fair value valuations compared to the audit of other items?
2. Do you notice that other members of the audit team involved in fair value valuations have extra professional scepticism?

Cognitive Impairments:

1. The fair value audit is a versatile activity. In addition, a lot of information has to be processed: assumptions of management, regulations, and many valuation models. In addition, there are factors such as uncertainty and complexity that make the fair value audit more difficult. Do you think it is within the capabilities of the auditor to perform a good quality audit at your firm?
2. Finally: What could be improvements to increase the quality of the fair value audit in general and in times of economic distress?