

Navigating Fair Value Accounting Research: A Bibliographic Analysis

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Abstract

This study aims to provide a critical review on fair value accounting (FVA) researches. FVA is the most emerging concept in accounting world. Many academicians are working in this field continuously and exploring the various dimensions. So, it was decided to summarize all these researches. It was also aimed to figure out the most dominant countries, organization who are working continuously in the area of FVA. Literatures which are published in highly ranked journals are used for the bibliometric analysis. Data for the bibliometric study was extracted from the Scopus. Research papers which are specifically researched in the field of FVA were used for the analysis. Results revealed that research on FVA is significantly increased over the years. Foreign countries like; USA, UK, and China are significantly contributing in FVA research. In this research work a summary of the previous researches according to the dimensions (area) which have been explored by the academicians is also provided. It was found that FVA is highly explored with earning management, value relevance, audit related matters, and debt level of companies.

Keywords: Fair Value Accounting, Historical Cost Accounting, Bibliometric Analysis.

Introduction

Fair value accounting (FVA) is the most common phenomenon for accounting researchers. Initially companies were using historical cost accounting to measure their assets and liabilities (Blecher, 2019). In 2006 FASB (Financial Accounting Standard Board) introduced SFAS 157 "Fair Value Measurement". This standard motivates corporates to measure their assets and liabilities at current market price known as fair value (Pobric, 2019). It also mandates companies to provide proper disclosures regarding their measurement methods and inputs used measuring the assets (Biljon & Scott, 2019). It was expected by the standards setters this standard will reflect more accurate picture of financial statements which will provide benefit to the investors in their decision making (Sawalqa, 2016).

SFAS 157 guides companies to classify their assets into three level according to the availability of active market. If market is highly active for a particular asset than classify that asset into level 1, if market is averagely active than classify that asset into level 2 (Mahieux, 2022), and if market is not active than classify that asset into level 3 (Hlatshwayo & Zulu, 2019) (Bao & Liu, 2018) (Altamuro & Zhang, 2013). If market is active than this standard will provide the accurate value of asset, but if market is not active and managers use their inputs to measure the assets than the reliability of asset will be questionable (Mohrmann & Riepe, 2019). These issues raised academicians' interest in FVA.

Many academicians are exploring various dimension of FVA. Some revealed that FVA was the responsible for 2008 global financial crisis (Anamaria & Madalina 2014). Cahyani & Firmansyah (2023) found no association between FVA and earning management. Scanlon & Lee (2011) described that companies who rely heavily on level 3 assets should disclose proper disclosure regarding fair value measurements. Biljon & Scott (2019) described the need for additional disclosures of biological assets to the users of financial statements. Alharasis et al. (2022) probed that increased fair value disclosure is the reason for high audit fees.

Researches on FVA is gradually increasing. Fair value accounting has some measurement issues due to its dependency on market inputs (Ibidunni & Okere, 2019) (Lim et al. (2017). This makes this area interesting and it attracts academicians to do more research. Many academicians are exploring various dimension of FVA and concluding significant results. Now it essential to figure out the dimension which have been explored by these researchers and summarize those researches. So, it was decided to summarize these researches and to find out the major dimension which have been explored. Later, it was realized that many countries and organizations are continuously exploring the FVA area. Due to this the researches on FVA are gradually increasing and publication on FVA is also increasing. So, it was also decided to figure out which country and organization are contributing significantly in FVA area.

Following researches were reviewed and a summary has been presented below:

Prologue: Does fair value accounting affect audit profession?

Examination of fair valuation inputs is a difficult task to perform. It takes lots of efforts of auditors to measure the fair value information. It motivates auditors to charge high audit fees (Alharasis et al. 2022). Alharasis et al. (2022) concluded that due the complexity of fair value measurement, it is hard for the auditors to examine the fair value information. Sometimes auditors appoint external valuer to examine this information. These externals charge very high price and auditor transfer these charges to the company. At last company pay higher audit fees to the auditors. Bhattacharjee et al. (2019) probed auditors should receive some guidance from the standard setter to examine the fair value inputs. Level 1 and level 2 inputs are more reliable than level 3 inputs. For examining level 2 inputs auditors make different adjustment decisions. Auditors agreed that unobservable inputs related to level 3 assets are subjective and difficult to implement (Mendes et al., 2018). Mendes et al. (2018) recommended that there is a requirement for improvement in existing control systems in firms, and standard-setter should improve the accounting estimates techniques. A clearer and more objective standard should exist to mitigate the audit risk. A detailed and structured guidance is required to examine the fair value inputs because the knowledge level of auditors for level 1 is higher but for level 2 and level 3 assets are low (Hermanson et al., 2017). Due to the higher-level knowledge for level 1 assets, auditors' frequency of encountering level 1 fair value estimates is higher than level 3. If auditors found that quantification of client evidence is low and client control risk is high, then auditors give more effort to subjective evidence to test management discretion.

Prologue: Does fair value accounting affect accounting information?

Initially companies were using cost method to measure their assets and liabilities. But now companies are using fair value accounting method to measure their assets and liabilities and this method improved the value relevance of accounting information (Nguyen & Tran, 2023). Khan et al.

(2019) examined the impact of recurring fair value versus amortized cost measurement for accounting purposes on the timeliness of insurers other than temporary impairments of non-agency residential mortgage-backed securities. They used 5,796 security-year observations of 1,590 NAMBS held by 352 PC insurers and 648 life insurers from 2007 to 2011. They found that P.C. (property-casualty) insurers record timelier other than temporary impairment of the Same NAMBS with NAIC (National Association of Insurance Commissioners) designation of 3 to 5 than life insurers. The author found weaker evidence of spillover effects to the timeliness than impairment of the same NAMBS with NAIC designations of 1 or 2. Pobric (2019) explored the application of FVA in Bosnia and Herzegovina. They found that the rate of application of FVA is shallow in Bosnia and Herzegovina. This study also documented that most of the companies in Bosnia and Herzegovina that adopted fair value measurement were financial and larger companies. The major cause for the low rate of adoption of fair value measurement in Bosnia and Herzegovina is that uncertainty in financial statements increases due to fair value measurement. Companies that have adopted fair value measurement in their financial statements do not provide sufficient information regarding the fair value hierarchy and inputs they used to measure assets. Georgiou (2018) described the usefulness of FVA for investors and analysts in their decision-making process. For this examination, they interviewed 24 investment analyses and others based in London in 2009/2010. The author found a considerable difference between the thought of investment analysts and standard-setter regarding the use of FVA in accounting literature. Standard setters imagine that FVA in companies' financial statements will help investors calculate the company's value. However, according to analysts, financial statements help investors analyze the company's performance, and there is no responsibility for financial statements to help investors value the company. Ramirez & Diaz (2018) described the utility of FVA from 6 different angles, i.e., balance sheet modeling, fair value model volatility, the relevance of fair value disclosures (value relevance literature), fair value relevance and other variables, fair value definition and its components & IFRS 13/ ASC 820 disclosure quality. They

found that level 1 and 2 assets are more value relevant, whereas level 3 are comparatively less value relevant.

Prologue: Is there any relationship between FVA and earning management?

Cahyani & Firmansyah (2023) investigates the effect that managerial skill and earnings management have on applying the FVA method. The study focused on the infrastructure, utilities, and transportation sectors. According to the findings of this study, a positive association exists between managerial skill and FVA. However, no association was found between earnings management and FVA. Zhang et al. (2020) explored the impact of earning management on stock mispricing after FVA in China. They took A-share listed companies in Shanghai and Shenzhen stock markets for this examination. The result revealed a negative relationship between earnings management and stock mispricing. Results also revealed that the stock mispricing would be lower if the earning transparency is higher in the companies' financial statements. Barth & Landsman (2018) described fair value earnings as disaggregating into components that can be used to assess firm value. This disaggregation is possible because fair value embodies the expected return on the firm's assets and the current expectation of future cash flows and risk. Yao et al. (2018) examined the association between FVA and earning persistence. A significant positive association between fair value financial assets and earning persistence was found. Furthermore, they revealed that the most reliable fair value level 1 assets are positively associated with earning persistence, but level 2 and level 3 assets are not associated with earning persistence due to lack of reliability.

Research Methodology

In order to provide a comprehensive overview of research related to FVA, a bibliometric analysis by using VOS viewer software was performed. This analysis is hybrid one using a bibliometric and pictorial analysis. Present research is aimed to answer the following questions:

RQ1 How is research on fair value accounting developed over the years?

RQ2 Which are the most contributing countries in the area

of FVA research based on number of documents published?

RQ3 Which organizations have made the most significant contributions to the field of FVA research based on the number of documents published?

RQ4 Which words are authors using repeatedly in their research, based on the number of times a particular word occurs in the abstract?

To find out the answer of the following questions data was extracted from the Scopus. “Fair Value Accounting”, “Fair Value Accounting and Audit Related Matters”, “Fair Value Accounting and Reliability”, “Fair Value Accounting and Value Relevance”, “Fair Value Accounting and Earning Management”, “Fair Value Accounting and Debt Policy” were the search terms used to extract the data. This search yielded 549 articles. Articles who were not related to fair value accounting and were not in English language were removed. This amounted 492 articles. Later the title, abstract, and keywords of each paper were examined by one of the authors to ensure that each article related with paper theme. For the bibliometric analysis VOSViewer software was used to construct and visualize bibliometric networks.

Graphical summary of review of literature

FVA is an emerging concept. Researches on FVA is gradually increasing. In this section it was analyzed that from 2000 to 2023 how researches on FVA are increasing. Table 1 shows the years and the number of publications in different years.

Table 1: Publication of Research Papers in Different Years

Year	Publication
2000-2005	39
2006-2010	79
2011-2015	151
2016-2020	164
2021 and above	59

(Source: Scopus)

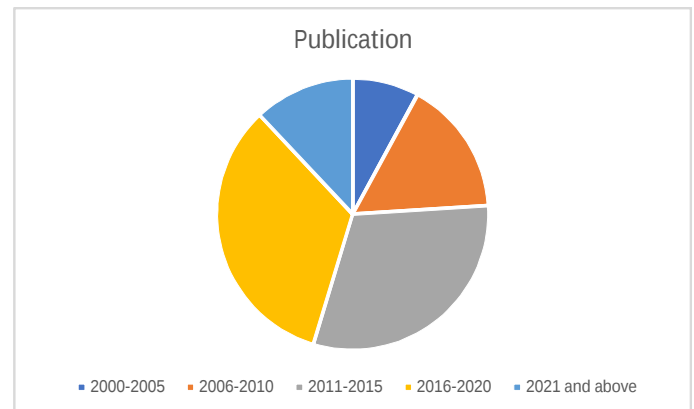


Figure 1: Publication of Research Papers in Different Years

Table 1 shows that Publication of research papers on FVA is gradually increasing. In 2000-2005 only 39 research papers were published, but in 2006-2010 79 research papers were published. A large increment of publication on FVA can be seen in 2011- 2015 (151). In 2016-2020 164 research papers published. This trend is showing that academicians are showing their interest in FVA and researches on FVA are gradually increasing over the years.

Most dominant countries in FVA research

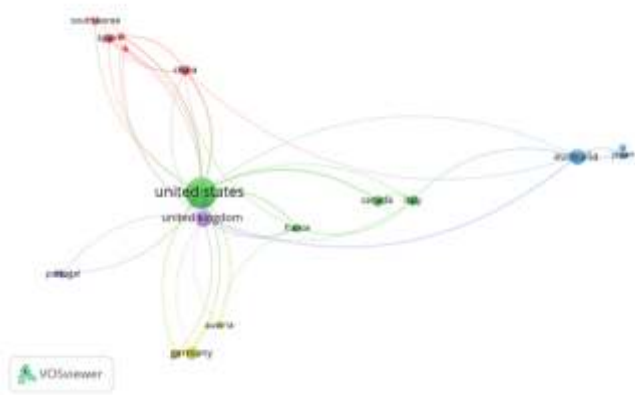
Table 1 concludes that academicians are showing their interest on FVA and researches on FVA is gradually increasing. In this section we are analysing about the most contributing countries who have done a lot of research work in the area of FVA.

Table 2: Most Dominant Countries in FVA Research

S.N.	Country	Documents
1.	United States	165
2.	United Kingdom	49
3.	Australia	40
4.	Germany	28
5.	Canada	22
6.	China	19
7.	Italy	17
8.	Spain	15
9.	Netherland	13
10.	France	13

(Source: Scopus)

Figure 2: Most Dominant Countries in FVA research



(Output: Vosviewer)

Figure 2 shows the most contributing country based on number of publications on FVA. Table 2 shows that United States is the most contributing country (165 documents) who have done a lot of research work in the area of FVA. United Kingdom got the second position with 49 articles and Australia got the third position with 40 articles. Germany (28), Canada (22), China (19), and Italy (17) these countries are also contributing significantly in the area of FVA.

Most dominant organizations in FVA research

In this section it was examined who are the most contributing organizations, which are doing a lot of researches on FVA. Table 3 shows the most contributing organization in the area of FVA.

Table 3: Most Dominant Organizations in FVA Research

S.N.	Organizations	Publication
1.	Graduate School of Business, Stanford University, Stanford United States	4
2.	Stanford University, United States	4
3.	Faculty of liberal arts and professional studies, York university, Toronto, Canada	3
4.	Ted Rogers School of Management, Ryerson University Toronto, Canada	3
5.	Business School, Victoria University, Melbourne Australia	3
6.	Department of Accounting, National Taiwan University Taiwan	3
7.	University of Notre Dame, Unites States	3

(Source: Scopus)

Figure 3: Most Dominant Organizations in FVA Research



Table 3 shows the most contributing organizations who have done a lot of research work in the area of FVA. Graduate school of Business, Stanford, United States and Stanford University USA are the most contributing organizations with 4 publications on FVA. Table 2 revealed that USA is the most contributing country in the area of FVA and Table 3 revealed that Graduate school of Business, Stanford, United States and Stanford University, USA are the most contributing organizations and these two organizations are also situated in USA. Results of Table 3 are supporting the results of Table 2. Faculty of liberal arts and professional studies, York university, Toronto, Canada (3 Publications), Ted Rogers School of Management, Ryerson University, Toronto, Canada (3 Publications),

Business School, Victoria University, Melbourne Australia (3 Publications), University of Notre Dame, Unites States (3 Publications) all these organizations are also contributing significantly in the area of FVA.

Most repeating keywords:

In this section it was examined what are the most occurred

keywords in the FVA researches. Higher occurrence of keywords reveals that these are the most emerging areas in the area of FVA, in which various academicians are doing their research work. Table 4 shows the most occurring keywords:

Table 4: Most Repeating Keywords

S.N.	Keywords	Occurrence
1.	Fair Value Accounting	182
2.	Fair Value	90
3.	IFRS	34
4.	Value Relevance	27
5.	Financial Crisis	25
6.	Accounting Standard	23
7.	Earning Management	21
8.	Historical Cost	18
9.	Financial Reporting	18
10.	Reliability	15

(Source: Scopus)

Figure 4: Most Repeating Keywords (Output Vosviewer)

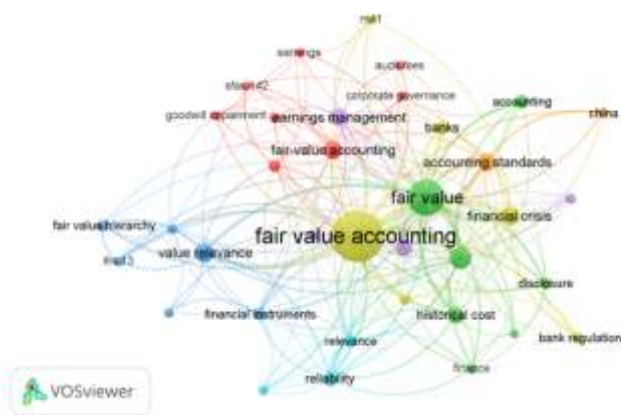


Table 4 shows the most occurred keywords. This analysis is based on abstract. Fair value accounting is the most repeating keyword, it occurred 182 times. Fair value is the second most repeating keywords, it occurred 90 times. IFRS which occurred 34 times is the third most repeating keywords. Value relevance occurred 27 times, financial crisis occurred 25 times, accounting standard occurred 23 times, and earning management occurred 21 times. The occurrence of these keywords is indicating that these are the

research area of FVA in which various academicians are doing their research work.

Conclusion

The present research work attempts to provide a critical review on fair value accounting. This study aims to review prior researches on FVA. It was found that researches on FVA is gradually increasing. In 2000-2005 only 39 research articles on FVA published but in 2016-2020 164 research articles published on FVA. This increment in publication is showing that researches on FVA is significantly increasing over the years. FVA is the most controversial accounting method. It can increase the volatility of income majorly. Also, the valuation method provided in IFRS 13 is not able to provide the reliable value of assets. This motivates the academicians to explore the area of FVA. This is the reason for the significant increment of the researches on FVA.

It was also revealed that foreign countries like USA, UK, and China are doing more research on FVA. USA was the first country who issued a separate standard on FVA "SFAS 157" in 2006. In this standard first-time a separate definition for fair value accounting was given. In SFAS 157 the valuation method of FVA was also defined. This

standard also provided valuation method of an asset. Different terminologies like market participant, principal market, most advantageous market, bid ask spread, were also defined. Significant contribution by Indian academicians in the area of FVA could not be found. It was also investigated what are the most recurring keywords in FVA research. Fair value accounting, IFRS, accounting standards, value relevance, financial crisis were the most repeating keywords. This repetition indicates the dimension which are being explored by the academicians. In this research work a summary of the previous researches according to the dimensions (area) which have been explored by the academicians is also provided. It was found that FVA is highly explored with earning management, value relevance, audit related matters, and debt level of companies.

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