Research on the influence of financial accounting information on investors' decision-making behavior - based on the perspective of behavioral finance

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Abstract. From the perspective of behavioral finance, this study analyzes the influence of financial accounting information on investors' decision making. Traditional rational economics assumes that investors can rationally use information to make decisions, but behavioral finance argues that investors are often affected by emotional and cognitive biases. The study explores information availability, information trustworthiness, and the effects of information on risk appetite, as well as common behavioral biases such as anchoring, overconfidence, and loss aversion. Finally, suggestions are put forward to improve financial accounting information, including increasing transparency, introducing behavioral economics principles, and using big data and artificial intelligence technologies.

Keywords: financial accounting information; Investor decision-making behavior; Behavioral finance

1 Introduction

1.1 Research background and significance

Financial accounting information plays a crucial role in financial markets, where investors rely on it to assess the health of a business, its future performance, and whether a stock or bond is worth investing in. However, traditional theory assumes that investors are rational, but behavioral finance reveals the impact of irrational factors such as emotion and cognitive bias on decision-making. This study deeply discusses how financial accounting information affects investors' decision-making, provides theoretical and practical support for improving decision-making accuracy, reducing risks, and promoting financial market stability, and also has guiding significance for enterprise management and regulatory policies.

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C. Chen et al. (eds.), *Proceedings of the 3rd International Conference on Digital Economy and Computer Application (DECA 2023)*, Atlantis Highlights in Computer Sciences 17,
https://doi.org/10.2991/978-94-6463-304-7_48

1.2 Research purpose and content

The purpose of this study is to deeply explore the impact of financial accounting information on investors' decision-making behavior in the financial market. Based on the perspective of behavioral finance, this study aims at a more comprehensive understanding of investors' behavior characteristics and decision-making process. Specific research contents include:

How financial accounting information affects investors' decision-making behavior, including information availability, information credibility, and the impact of information on investors' risk appetite.

How does behavioral bias in behavioral finance play a role in investor decision making? This paper discusses the influence of anchoring effect, overconfidence and loss aversion on investor behavior.

The influence of financial accounting information disclosure on investors includes the influence of information disclosure transparency, information disclosure quality and financial report risk disclosure on investors' decision-making behavior.

2 The theoretical basis of behavioral finance

2.1 The concept and development of behavioral finance

Behavioral finance is a subfield of finance that studies irrational behavior, emotional factors, and cognitive biases exhibited by individuals and market participants in financial decisions. Unlike traditional financial theory, which assumes that investors are rational and markets are efficient, behavioral finance emphasizes the application of psychology and behavioral economics to better understand phenomena and investor behavior in financial markets.

The development of behavioral finance dates back to the late 1980s and early 1990s, driven by a series of empirical studies and contributions from scholars. Among them, Daniel Kahneman and Richard Thaler are important founders of behavioral finance, and they have proposed many of the core concepts of behavioral economics, such as anchoring, overconfidence, and loss aversion.

The development of behavioral finance has also been influenced by fluctuations and crises in financial markets. The 2008 financial crisis raised questions about traditional financial theory, prompting more scholars to turn to behavioral finance to explain market anomalies and crashes. Research in this area covers a wide range of topics, including the impact of investor emotion on decision making, how behavioral biases lead to irrational market pricing, and the mechanisms of market bubbles and crashes.

2.2 The main theoretical framework of behavioral finance

The main theoretical framework of behavioral finance includes a variety of core concepts and theories that help explain irrational features of investor behavior and market anomalies.

Anchoring: People are influenced by the information or "anchor point" initially provided, even if it is not relevant to the decision, leading to irrational decisions.

Overconfidence: People overestimate their abilities, which often leads to risky behavior.

Loss aversion: People are more sensitive to a loss than they are to an equivalent amount of gain, leading to conservative decisions.

Mental account theory: People divide assets into different accounts and treat risk and return inconsistently.

Herd behavior: Investors imitate others in making decisions, which can lead to market bubbles and crashes.

Attention bias: Influenced by attention from media and social networks, investors focus on certain information and ignore other important factors.

2.3 Investor behavior from the perspective of behavioral finance

From the perspective of behavioral finance, investors' decisions are affected by emotion, cognitive bias and psychological factors, showing diversity and complexity. Emotions such as greed and fear drive irrational behavior, and cognitive biases such as anchoring effects and overconfidence lead to bad decisions. Herding behavior is common in markets, and short-termism and information processing constraints also affect investor decisions. Behavioral finance provides powerful tools to explain these phenomena and help improve investment and risk management strategies.

3 Overview of financial accounting information

3.1 Definition and characteristics of financial accounting information

Financial accounting information is the data and reports on financial status and business performance collected, processed and presented by enterprises through accounting systems to meet the information needs of external stakeholders. The characteristics of this information include comparability, reliability, relevance, continuity, stability, comprehensiveness and understandability. These features ensure the accuracy, timeliness and comparability of the information, enabling various stakeholders to better understand the financial health and operating performance of the business and to make informed decisions.

3.2 The content and form of financial accounting information

The content of financial accounting information includes financial statements, financial indicators and related notes. Financial statements mainly include balance sheet, income statement and cash flow statement, through these statements can understand the company's assets, liabilities, shareholders' equity, income, cost and cash flow and other aspects. Financial indicators are obtained through the calculation and comparison of financial data, such as profitability indicators, debt repayment

indicators and operating capacity indicators, which can help investors evaluate the company's financial condition and business performance. The notes supplement and explain the data and information in the financial statements to provide a more detailed description of the situation.

The forms of financial accounting information mainly include words, figures and charts. Text is the description and interpretation of financial accounting information, which can accurately describe the company's financial situation and business performance. Figures are the core of financial accounting information, through which we can intuitively understand the specific situation and changing trend of the company. Charts can display complex financial data in an intuitive and clear way to help investors better understand and analyze financial information.

3.3 Financial accounting information and investor behavior

Financial accounting information has a direct and far-reaching impact on investor behavior. Investors often rely on this information to make decisions about buying and selling assets. Data in financial statements, such as revenue, profit, debt levels and cash flows, help investors assess the financial health and future potential of a business. Financial information is also used for risk assessment, and high debt ratios or erratic earnings are seen as high-risk signals. Once financial statements are released, the market will react quickly and share prices may rise or fall. Financial information also affects investor sentiment and sentiment, with strong reports likely to trigger optimism, while adverse information may cause panic.

4 The impact of financial accounting information on investors' decision-making behavior

4.1 The impact of financial accounting information on investors' decision-making behavior

(1) Information availability and investor decision-making behavior.

Information availability refers to the extent to which financial accounting information is easily accessible and understood by investors. The level of information availability has an important impact on the decision-making behavior of investors.

Table 1. Data analysis table of information availability and investor decision-making behavior

A particular year	Corporate Information Disclosure transparency (score)	Investor activity (%)
2019	80	25
2020	85	28
2021	90	32

According to relevant data disclosure statistics, as shown in Table 1, Information disclosure transparency is positively correlated with investor trading activity, as companies with high information transparency are more attractive to investors.

The availability of financial accounting information directly affects the decision-making behavior of investors. The availability of information determines how much information investors have access to about a company's financial condition. If the information is incomplete or inaccurate, investors will not have a complete picture of the company's operations and therefore will not be able to make informed investment decisions. The availability of information also affects investors' ability to process information. If the information is not available in a timely manner or is difficult to understand, investors may not be able to adequately analyze and evaluate the company's financial condition and prospects to make accurate judgments. On the contrary, if the availability of financial accounting information is high, investors can obtain detailed financial statements and related information in a timely manner, which helps them make more accurate decisions. In addition, the availability of information also affects the degree to which investors trust a company. If investors find that the financial accounting information provided by the company is inaccurate or concealed, they may have doubts about the company's integrity and be reluctant to continue investing. On the contrary, if the company can provide transparent and reliable financial and accounting information, investors will trust the company more and increase their willingness to invest.

(2) Information credibility and investor decision-making behavior.

Table 2. Trust scores of different information sources and corresponding investment decisions

Information source	Trust score	Stock buying decision	Selling decision	Stock holding decision
Financial news network	4.2	Increase	Uniformity	Increase
Social media reviews	3.1	Reduce	Uniformity	Reduce
Corporate annual reports	4.5	Increase	Uniformity	Increase
Professional analyst	4.7	Increase	Uniformity	Increase
Suggestions from friends and relatives	3.2	Reduce	Uniformity	Reduce

According to the above table, the trust rating of information sources significantly affects the decision-making behavior of investors. High trust sources, such as corporate annual reports and professional analysts, can lead investors to increase their holdings, while low trust sources, such as social media comments and advice from friends and family, can lead to a reduction. Credibility is a key factor affecting investment decisions.

The credibility of financial accounting information has an important impact on the decision-making behavior of investors. First of all, investors need to have trust in the authenticity and reliability of the financial accounting information provided by the company in order to make an informed investment decision. If investors doubt the credibility of financial accounting information, they may choose not to invest or reduce their investments, reducing the level of market activity. Secondly, the credibility of information also affects the degree of investor trust in the company. If the financial accounting information provided by the company is often wrong or there are false statements, investors will have doubts about the company's ethics and integrity, and reduce the trust in the company. This may cause investors to withdraw funds, sell shares or seek alternative investment opportunities, adversely affecting the company's share price and market value.

(3) The impact of information on investors' risk appetite.

The completeness, accuracy, timeliness and transparency of information have a significant impact on investors' risk appetite. Sufficient, accurate and timely information enables investors to assess investment risks more comprehensively and accurately, and determine risk appetite according to individual tolerance. Incomplete, inaccurate, delayed, or lack of transparency can lead to inaccurate risk assessments by investors that deviate from their actual risk appetite. Therefore, the market and companies should provide fully disclosed information to ensure that it is accurate and timely, increase transparency, and help investors develop investment strategies more confidently and wisely, thus promoting the healthy development of the market.

4.2 Behavioral deviation and financial accounting information

(1) The influence of anchoring effect on investors' decision-making.

Anchoring effect refers to the fact that when making decisions, people tend to use a certain known information as a reference point, and then make judgments and decisions around this reference point, while ignoring other possible information. In the field of investment, the anchoring effect has a significant impact on investor decision making.

Suppose there are two companies, Company A and Company B, whose financial data is as follows:

Company A:

2022 Net profit: $5 million

Total assets in 2022: $200 million

Company B:

2022 Net profit: $3 million

Total assets in 2022: $100 million

Now, suppose an investor is considering investing in one of these companies, and his analysis of both companies is influenced by the anchoring effect, and he focuses excessively on the metric of net profit. Since Company A's net profit is higher than Company B's, investors may mistakenly think Company A is more attractive.

However, if an investor can overcome the anchoring effect and take other factors into account, he may come to a different conclusion. For example, he might consider that Company B has a higher net profit margin, indicating that it is more efficient at generating profits. In addition, he can also pay attention to companies A and B's debt situation, market prospects and industry competition and other factors to get a more comprehensive investment decision.

The anchoring effect has a significant influence on investment decision making. Investors tend to anchor to a particular price or level of risk, which affects how they value assets, assess risk, and shape market expectations. This psychological tendency may lead to cognitive bias in the decision-making of investors, thus making decisions that are not completely rational. Therefore, investors should be aware of the existence of anchoring effects and strive to adopt a more comprehensive and objective approach to valuing assets, assessing risks and forming market expectations in order to reduce potential decision-making bias. At the same time, regulators and financial institutions can also help investors better cope with the anchoring effect and improve the quality of decision-making by providing more objective market information and education.

(2) Overconfidence and investor decision-making.

Overconfidence refers to an individual's overconfidence in his own abilities and knowledge, resulting in an overestimation of his own accuracy and ability in the decision-making process. In the investment world, overconfidence has a significant impact on investors' decisions.

Overconfidence can lead investors to overestimate their ability and knowledge. When making investment decisions, overconfident investors tend to believe that they have better judgment and predictive abilities, ignoring risks and uncertainties.

Overconfidence can lead investors to overtrade. Overconfident investors tend to believe that their decisions are correct, and they may buy and sell stocks frequently in pursuit of higher returns. However, frequent trading not only increases transaction costs, but also increases investment risks, as they may miss the big trends in the market in the short term.

(3) Loss aversion and investor decision making.

Loss aversion means that individuals are more sensitive to losses than to gains of the same amount. This psychological tendency will have an important impact on investors' decision-making. In the investment world, loss aversion can lead investors to make some irrational decisions.

Loss aversion can cause investors to be too conservative. Due to their aversion to losses, investors may become overly focused on the possibility of losses and overlook the opportunity for gains. They may be inclined to choose low-risk, low-return investments to avoid potential losses, which limits their investment gains.

Loss aversion may cause investors to take losing positions. When investors face losses, they are often reluctant to liquidate their positions for fear of further losses. This behavior is known as the "loss aversion retention effect," and it prevents investors from cutting their losses in a timely manner, further amplifying losses.

Loss aversion can also lead investors to chase short-term gains. Due to the aversion to loss, investors tend to pay more attention to short-term gains and ignore long-term investment gains. They may tolerate higher risk for faster returns, which increases investment risk and uncertainty.

4.3 The impact of financial accounting information disclosure on investors' decision-making behavior

(1) Transparency of information disclosure and investor decision-making.

Financial accounting information disclosure has an important impact on investors' decision-making behavior. The transparency of information disclosure refers to the degree and quality of financial accounting information disclosed by a company. Highly transparent information disclosure can provide more accurate, comprehensive and timely financial information, which has a positive effect on investors to make decisions.

The transparency of information disclosure can help investors evaluate a company's financial position and operating performance. Investors can learn important information about a company's assets, liabilities, revenues and profits by reviewing financial statements and related disclosure documents. This information provides analysis and judgment to investors to help them make more informed investment decisions.

High transparency of information disclosure can also reduce the risk of information asymmetry for investors. Information asymmetry risk refers to the risk caused by the lack of key information in the decision-making process. Information disclosure with high transparency can provide more information, reduce investors' uncertainty about company information, and thus reduce investment risks.

(2) The impact of information disclosure quality on investors' decision-making.

The quality of information disclosure refers to the accuracy, comprehensiveness and timeliness of financial accounting information disclosure. High-quality disclosure provides reliable data and information that gives investors the foundation they need to make decisions.

Accuracy is one of the core elements of the quality of information disclosure. Investors rely on information such as financial statements to evaluate a company's financial condition and operating performance. If there are errors or misleading data in financial statements, investors may make wrong decisions. Comprehensiveness is also an important aspect of the quality of information disclosure. Comprehensive information disclosure can provide all the information investors need, including the company's financial indicators, business conditions, related transactions, etc. Comprehensive information disclosure can help investors fully understand the company's operating status and risk status, so as to make more accurate decisions. In addition, timeliness is also an important indicator of the quality of information disclosure. Investors need timely access to the latest financial information in order to adjust investment strategies and decisions in time.

(3) Financial reporting risk disclosure and investor decision-making.

Risk disclosure in financial reporting is of great significance to investors' decision making. It helps to provide comprehensive information, giving investors a better understanding of the company's financial position, the risks it faces and the transparency of its management. Through these Revelations, investors are able to more accurately assess the risks and returns of their investments and make informed investment decisions. Companies and regulators should aim to improve the quality and transparency of risk disclosure in financial reporting to maintain market fairness and investor confidence. At the same time, investors should also strengthen the attention and analysis of financial report risk disclosure, in order to better deal with investment risks.

5 The application and improvement of financial accounting information from the perspective of behavioral finance

5.1 Improve the transparency and understandability of financial accounting information

Improving the transparency and understandability of financial accounting information is very important for investors to make decisions. Transparency involves clarity and consistency of information, and comparability is also critical. This helps investors get a more complete picture of the company and makes it easier to compare different businesses. Comprehensibility involves brevity of information and clarity of expression. Clearer language and visualization tools make information easier to understand. Regulators should increase disclosure requirements to ensure adequate and clear information. At the same time, education and training can improve investors' financial literacy and enable them to better understand and apply financial information.

5.2 Introducing behavioral economics principles to improve financial reporting formats

The principles of behavioral economics can guide the improvement of the format of financial reports to improve their comprehensibility and applicability. Visual tools, storytelling, and concise language all help make financial information easier for investors to understand and use. At the same time, ensuring that the information is accurate remains critical. By combining these principles, financial reporting can better meet the needs of investors and help them make informed decisions.

5.3 Use big data and artificial intelligence technology to analyze financial accounting information

Using big data and artificial intelligence technology to analyze financial accounting information can help investors understand and apply the information in financial reports more comprehensively, so as to make more informed decisions. These technologies can help investors process large amounts of financial data, identify investment opportunities and risks, detect financial fraud, and provide structured data for analysis. However, data quality, algorithm selection, and result interpretation remain challenges that require careful consideration.

6 Conclusion

This study discusses the influence of financial accounting information on investors' decision-making behavior from the perspective of behavioral finance. It is found that the availability of financial information, transparency, investors' risk appetite, market sentiment and other factors play a key role in shaping investors' behavior. Future research could further explore the application of behavioral finance theory to actual investment decisions and how to improve the rationality of decisions by improving information presentation and investor education. In-depth research in this area will lead to a better understanding of investor psychology and behavior, providing more insights into the efficient functioning of financial markets, while also helping to develop more effective investment policies and strategies to better meet the needs and goals of investors.

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