

The Impact of Different Predictive Accounting Methods on Firm Performance

Yue Yin *, Xuheng Zhang

The University of Waikato, Waikato Management School, Hillcrest Road, Hillcrest, Hamilton 3216, New Zealand

*Corresponding Author: Yue Yin (Email: 17751039129@163.com)

ABSTRACT

This study investigates the impact of various predictive accounting methods on firm performance. Predictive accounting, as an advancement from traditional accounting, enables managers to make more informed decisions by forecasting future financial metrics, thus enhancing resource allocation, risk management, and competitive positioning. Through a literature review of international studies, this paper examines predictive methods such as cash flow forecasting, historical trends, regression analysis, Monte Carlo simulations, and big data analytics. The study highlights how different predictive accounting approaches contribute to overall firm performance and presents practical insights for managers in choosing appropriate predictive methods aligned with firm-specific goals and market dynamics.

KEYWORDS

Predictive Accounting; Firm Performance; Monte Carlo Simulation; Cash Flow Forecasting; Big Data Analytics

1. INTRODUCTION

In today's society, predictive accounting has always been a crucial area of concern. In comparison to traditional accounting, predictive accounting plays a pivotal role in managers' response to risks and future business decisions. Predictive accounting is not only an academic field worth exploring but also an indispensable tool for managers in their operational endeavors.

Currently, numerous economists have examined the significance of predictive accounting and substantiated it through financial reports. However, there exists limited research on the diverse effects of various predictive methods on firm performance. I aim to concentrate on predictive selling and predictive costing to investigate the influence of different methods on business performance.

In the field of predictive accounting, numerous scholars have made significant research contributions. The concept of predictive accounting was initially proposed in the accounting field between 1950 and 1960. Subsequently, from 1970 onwards, several scholars gradually employed case analysis and model methods to demonstrate the significance of predictive accounting. For instance, William H. Beaver, John W. Kennelly, and William M. Voss's research team estimated loan default predictions through cash flow models and dichotomy classification tests while elucidating the decision effectiveness of predictive accounting. Furthermore, since 1980, more attention has been given by scholars to enhancing the accuracy of predictive accounting and its value in enterprises. Bryan Carsberg, John Arnold, and Anthony Hope mentioned in studies in accounting that predictive

accounting directly determines the practical application value of financial information while highlighting existing limitations within traditional accounting.

2. LITERATURE REVIEW

This paper studies the specific impact of predictive accounting on enterprise performance, which can not only help to understand the role of predictive accounting in modern enterprise management, but also guide enterprises how to make more effective use of predictive information to improve the overall performance of enterprises. The next section will look at what predictive accounting is, how it defines and enters a brief discussion of the impact of predictive accounting on firm performance

It is mainly reflected in the following five aspects

- A. Optimize the allocation of enterprise resources, and enable the management to make more reasonable financial planning through accurate financial forecasting (Badertscher 2012), thus reducing unnecessary financial expenses and enhancing the sustainable development of enterprises.
- B. Enhance the enterprise's risk control ability, predictive accounting through market analysis, help enterprises to identify potential financial risks, so that enterprises can respond to and avoid potential risks in the future more quickly. At the same time, it also enhances financial stability and reasonably avoids possible financial crises in the future through accurate prediction (Sorjonen & Ingre, 2021).
- C. Help the management to set more efficient performance appraisal goals, avoid the plan specified too floating to complete, and avoid too simple, so that employees have no motivation to move forward.
- D. Help enterprises to improve performance evaluation. Predictive accounting can not only help enterprises set appropriate performance goals, but also monitor and evaluate the completion of performance goals (Marton & Runesson, 2017). By comparing with the forecast indicators, timely adjust the objectives and operational strategies, so as to form a more suitable performance evaluation for the development of the enterprise and achieve a higher level of performance.
- E. Help enterprises to improve market competitiveness, through predictive accounting, enterprises can more efficiently judge market changes and consumer demand trends, so as to develop new products or improve old products to enhance customer stickiness, meet market demand, enhance market competitiveness.

These five aspects show that predictive accounting can not only optimize the allocation of internal management resources of enterprises, but also improve the core competitiveness of enterprises in the market, and finally promote the performance level of enterprises in an all-round way. After defining the terms, the next section will embark on how to collection information from 20 articles to obtain a more detailed understanding of the topic.

3. RESEARCH METHOD

3.1. Overview of Research Methods

This paper primarily employs a literature review methodology.

Initially, an extensive search and screening of academic platforms such as Google Scholar, Waikato Library, and JSTOR were conducted to examine the impact of different predictive methods on enterprise performance and compare traditional predictive methods with current approaches. The selected 20 most relevant papers were classified, coded, and analyzed in terms of research methods, reliability, and limitations of their findings. Finally, a comprehensive literature review was developed based on the reorganized and analyzed information.

3.2. literature Sources

To ensure the robustness of the paper's conclusions, it is imperative to meticulously select appropriate data and literature sources. The detailed description of these sources is provided below.

Literature sources:

3.2.1. Academic journals

In academic platforms such as Google Scholar, Waikato Library, and JSTOR, I will conduct meticulous screening by researching relevant keywords. Subsequently, I will prioritize referring to esteemed journals in the field of Accounting and Finance, including Journal of Accounting and Economics, The Accounting Review, and the Journal of Finance. Additionally, literature recommended by reputable academic associations (e.g., AAA) will be considered. Ultimately, a selection of 20 references with utmost relevance will be made.

To enhance the reliability of the literature during this process, some approaches can be employed. Firstly, utilizing peer-reviewed literature ensures that articles have undergone rigorous evaluation by industry professionals to meet specific academic standards. Secondly, considering the impact factor of journals becomes crucial as it serves as an important indicator for assessing the contribution level of each piece within its respective field; thus, prioritizing high-impact factor publications is essential. Lastly but not least importantly examining journal history along with publisher reputation and citation count can also aid in evaluating the quality of selected literature.

3.2.2. Dissertations and doctoral dissertations

Conduct a literature search using relevant keywords in academic databases such as ProQuest Dissertations & Theses.

The assessment of literature reliability aligns with that of academic journals, although the rationale for utilizing dissertations and doctoral theses differs from that of academic journals. This is because degree theses and doctoral dissertations place greater emphasis on comprehensive literature reviews and methodological elaboration within their research scope, resulting in lengthier and more academically-oriented discussions. On the other hand, academic journals prioritize refinement, innovation, and practical application. Therefore, incorporating dissertation and doctoral thesis research and analysis is an indispensable component.

3.2.3. Industry reports and white papers

Refer to the official websites of renowned consulting firms in the industry, such as PWC, or industry professional associations like AICPA, for accessing publicly released comprehensive financial analysis reports, financial forecasts, and industry white papers to acquire profound insights into the industry and prevailing market conditions.

During the inquiry process, assess the reliability of literature based on the reputation of publishing institutions, author qualifications, and accuracy of cited data and information sources.

3.3. Research Hypotheses

Hypothesis 1: There exists a positive correlation between the sophistication of predictive methods and firm performance

According to Gerhart & Feng (2021) Resource-Based Theory (RBV), it can be inferred that both the resources and capabilities of enterprises are crucial factors influencing enterprise performance. Accurate financial predictive ability is identified as one of the significant resources for enterprises, aiding in mitigating uncertainties and facilitating the development of effective corporate strategic plans.

Hypothesis 2: Distinct predictive methodologies are expected to exert varying impacts on firm performance

Drawing on the theory of industrial organization, Muhammad & AlHafidh (2020) analyzes the competitive environment and explores how different accounting predictive methods can have varying impacts across firms.

Hypothesis 3: The enterprise's emphasis on and support for predictive methods will significantly enhance enterprise performance

According to the organizational behavior theory proposed by Cherian & Pech (2021) in their work "Corporate Culture and Performance," it is evident that the support of enterprise structure plays a pivotal role in the development of any new technology or method, and enterprises that foster innovation are more likely to achieve breakthrough success in enhancing overall performance.

Hypothesis 4: the continuous enhancement of predictive methodologies will result in enhanced performance

According to Xie & Managi (2019), the timely perception and corresponding adjustment of enterprises to environmental changes are crucial factors for enhancing their competitiveness. In addition, continuously updating and developing predictive methods can serve as dynamic capabilities that enable enterprises to effectively respond to unknown changes in the market and improve performance.

3.4. Research Purpose

3.4.1. To evaluate the impact of different predictive methods

The specific impact of various predictive methods on the financial performance of enterprises is comprehensively analyzed, and their performance in different market environments is compared to determine the most accurate and easily implementable methods for specific circumstances.

3.4.2. Explore the impact of different firm sizes when applying different predictive methods

A comprehensive examination of diverse predictive methods suitable for different enterprises is instrumental in formulating tailored predictive schemes to accommodate variations in enterprise scale.

3.4.3. Analyze the influence of the frequency of using predictive methods on enterprise performance

This paper examines the impact of predictive accounting frequency on enterprise performance in the context of stable daily business activities, aiming to analyze the correlation between predictive method stability and enterprise performance.

3.4.4. Promote the combination of theory and practice

Regardless of the theory's utility, its practical significance is nullified if it cannot be integrated with real-world application. Hence, by amalgamating quantitative and qualitative methodologies, this empirical research proposes specific operational guidelines for enterprises while offering enhanced theoretical underpinnings on the rationale behind and selection of predictive accounting methods.

3.5. Summary

In the context of investigating the impact of various predictive methods on enterprise performance, it is anticipated that qualitative research methodologies will be employed to theoretical underpinning for the paper's orientation, thereby enhancing the accuracy and realism of its conclusions. Additionally, due attention will be given to both objective and subjective challenges that may arise during the research process, with scientific resolutions being adopted to address these difficulties more effectively. Ultimately, this study aspires to deepen comprehension regarding the relationship

between different predictive methods and enterprise performance while also offering practical value for decision-making in enterprises.

4. ANALYSIS AND DISCUSSION

Different predictive methods will more or less have different impacts on enterprise performance, and their impacts can be investigated through decision-making quality, resource allocation, risk management and other aspects. The following is a reference to 20 authoritative literatures, according to their evaluation of different methods of predictive accounting, so as to summarize the relevant impact on enterprise performance.

4.1. Cash Flow Forecast

Cash flow forecasting can help enterprises manage and forecast short-term cash needs more carefully and avoid operation interruption caused by sudden shortage of funds.

According to Chukwunwike & Okafor (2018) and Ugo & Egbuhuzor (2022), the authors both gave positive evaluation on the impact of cash flow forecasting on enterprise performance, and for the practical application of cash flow forecasting, There are great similarities in the views of the two literatures.

From Chukwunwike & Okafor (2018), we looked at the operations of ten banks listed on the Nigerian Stock Exchange between 2007 and 2016. This paper discusses whether cash flow index can predict the future performance level of enterprises. This paper pays more attention to the impact of enterprises' operation and investment on bank profits. Through the analysis of banks' annual reports and the application of multiple regression models, it is concluded that although cash flow has a positive correlation with corporate performance, the impact is not statistically significant. At the same time, it also shows that it is not possible to forecast only through cash flow, but also need to consider other financial indicators or combine other forecasting methods, so as to evaluate enterprise performance more comprehensively.

This paper fills part of the gap on the impact of cash flow forecasting on firm performance, especially for non-developed countries, which is of great importance, because the market environment and operation methods of developing countries are different from those of developed countries, so there is certain space for research and a new empirical perspective is provided. At the same time, the author also challenges existing theories, which will prompt the industry to update the correlation between cash flow forecasting and firm performance, reconsider its importance, and provide additional strategic planning ideas for business managers.

Similar to the previous paper, Ugo & Egbuhuzor (2022) studied ten pharmaceutical companies listed in Nigeria and analyzed their cash flow management as well as their performance. First of all, cash flow is very important for pharmaceutical enterprises, and cash flow management will directly affect the liquidity and operation ability of enterprises. The research period of this literature is from 2011 to 2020, and the data comes from the annual report of the company. Multiple regression analysis and paired Granger causality test are used to analyze the data and its reliability. The research results show that although cash flow management is an important part of enterprise operations, its impact on enterprise performance is not always positive or significant. For example, financing activities of some companies will negatively correlate the impact of cash flow on enterprise performance, so it is necessary to use more rigorous forecasting methods to reasonably evaluate enterprise performance.

The importance of this paper is reflected in the fact that the pharmaceutical industry in Nigeria is a capital-intensive industry with high cash flow management requirements, thus providing a valuable research perspective on industries with high cash flow. By using the research method of multiple regression analysis and paired Granger causality test, this paper provides more scientific and accurate

data to analyze the relationship between cash flow activities and enterprise performance, which enhances the credibility of the conclusions of the paper.

In conclusion, both articles suggest that companies should not rely solely on traditional cash flow management, but should develop more comprehensive forecasting strategies that take into account various financial aspects to enhance business performance. However, there are also shortcomings in the research of the two literatures. The common limitation lies in the selection of samples. The selection of ten companies in the same industry in Nigeria in the two papers may limit the universality of the research results, because different industries in different regions will be affected by different market environments, thus producing different research results. Therefore, the conclusions of the literature may be limited. In addition, Chukwunwike's research time selection includes the global financial crisis, so the conclusion of this period may have certain particularity. Moreover, although quantitative analysis was used in the study of Ugo, the lack of more literature studies may not prove the reliability of the research results and whether they have higher academic standards.

4.2. Historical Trend Forecast

Historical trend forecasting is to predict the long-term trend of the enterprise and the development trend of the market through the historical data of the enterprise, so as to adjust the production plan and inventory level, so as to optimize the market operation and improve the performance of the enterprise. This paper focuses on the following three literature to explore the relationship between historical trend prediction and firm performance.

First, Qiu & Hu (2014) analyzed the relationship between data and enterprise performance by digitization of a series of publicly available company annual reports and using supervised learning models such as SVM. Studies have shown that these models can predict changes in a company's financial performance relatively accurately, and forecasting based on annual report data is one of the powerful ways to predict corporate performance.

This paper adopts the application of interdisciplinary methods, organically combines annual report data and supervised learning model, and provides a new perspective and tool for traditional financial forecasting analysis. At the same time, the industry has changed the understanding of the use of annual reports, which can not only be used as a standard for reviewing the financial situation of enterprises in the current year, but also can be used as forecast data, and enhance the ability of managers to make plans.

Secondly, Baik & Farber (2013) and Yeo & Grant (2018) explored in depth the influence of past operational efficiency on enterprise performance by using cutting-edge analysis and decision tree methods such as DEA and SFA respectively. Research shows that efficiency indicators show a positive correlation in predicting profitability, although sometimes the information lag leads to the accuracy of decision making.

Baik & Farber (2013) uses two advanced cutting-edge analysis techniques that are rare in similar literature. Therefore, it provides a brand new tool to evaluate the operational efficiency and performance level of enterprises, and takes into account the volatility characteristics of data to make the results more reliable. Second, the authors question the practicability of the findings, because the lag of information may not be able to better help decision makers make plans, leaving room for future researchers in the field.

According to the above three literature, the influence of historical trend prediction on enterprise performance is also positively correlated, and has a greater impact on enterprise performance. However, due to the lag of information, sometimes the time to reach a conclusion is not timely, so we can not completely rely on historical data information to make corporate strategic planning.

4.3. Prediction of Regression Analysis Model

Regression analysis is mostly used to predict the relationship between key business indicators and potential factors, so as to optimize the resource allocation of enterprises and improve the decision-making ability of managers. The following is a comparative analysis of five literature to determine the correlation between regression analysis model and enterprise performance.

The paper written by Wood (2006) explores which factors correlate with the performance levels of smes in the UK events sector. By using logistic regression method, the author finds that the age, promotion method and funding source of the enterprise will greatly affect the performance level of the enterprise.

Through the in-depth study of small and medium-sized enterprises, the study provides more theoretical insights into the aspects of small and medium-sized enterprises in this field, and a more comprehensive understanding of what decisive factors determine the performance of small and medium-sized enterprises. At the same time, the literature emphasizes the practical operation that can affect the performance, which has strong practical application value.

According to the research of Yousaf (2020) and Conyon & He (2017), this paper discusses in detail how innovation will affect enterprise performance. Through quantitative analysis, the data of two major software companies in Pakistan are analyzed, and the positive effect of innovation on enterprise performance is obtained, and the predictive ability of regression analysis model is affirmed. Through the research, the author emphasizes that in the fast-developing modern society, in order to adapt to the development trend, software companies need to enhance their innovation ability, so as to improve the overall performance level.

However, there are some shortcomings in the study of this paper. First of all, the selection of samples has regional and industry limitations, which leads to the uncertainty of the results. Therefore, the future research in this field can focus on expanding the sample range and conducting longitudinal research to make the results more convincing.

Wang & Cao's (2016) paper focuses on the relationship between innovation and intellectual capital and enterprise performance. By studying the data of Chinese high-tech companies and comparing three theoretical models led by regression model, it is concluded that regression model is the best predictive model. It is also concluded that relational capital (a part of intellectual capital) can significantly affect the level of enterprise performance.

Through the method of combining theory and practice, this paper further strengthens the basis of demonstration, and also puts forward guiding opinions for the practice of related industries. However, it is worth noting that the study was limited to high-tech companies in China, which may limit the generality of the findings due to the specific study area and the unique cultural background in China.

The paper written by Bakar & Tahir (2009) studied the data of 13 banks in Malaysia from 2001 to 2006, and adopted two statistical techniques, multiple linear regression and neural network, to predict the effectiveness of bank performance and other significant effects. It is found that when dealing with complex data, multiple linear regression analysis can still handle well and get accurate prediction results.

This paper provides multiple linear regression as an effective forecasting tool for bank managers, and through practice, it is suitable for the highly competitive and rapidly changing financial market environment. However, there are some limitations in the selection of data, the short time span may limit the comprehensiveness of the results, and there may be regional limitations in studying only Malaysian banks.

To sum up, the prediction of regression analysis model provides strong accuracy support, and the results obtained by using regression model and the corresponding strategic plan have a significant

positive relationship with enterprise performance. At the same time, data-based forecasting can also enhance the credibility of decisions and enhance the trust of investors and stakeholders.

4.4. Monte Carlo Simulation Prediction

Monte Carlo forecasting helps enterprises evaluate potential risks and financial impacts by simulating different risk scenarios. It is generally suitable for more complex risk assessment decisions and large-scale investment projects. The following three articles will provide a detailed analysis of Monte Carlo simulation prediction.

Belvardi & Abonyi (2012) discussed the application of Monte Carlo simulation in supply chain, and developed a framework by combining sensitivity analysis and model Carlo to predict and plan uncertainty and randomness in supply chain, so as to visually analyze the relationship between decision variables and key performance indicators. It is found that Monte Carlo simulation can not only deal with complex supply chain situations, but also support relatively simple decisions. In this way, decision makers can make better decisions and improve the overall economic efficiency of the supply chain.

This paper improves the sensitivity analysis and provides a new perspective and practical tool for the supply chain field. However, as the literature relies too much on the application of theoretical models and simulation data, the conclusions may be biased from the actual results, and the verification of the conclusions is insufficient, which may cause the applicability of the conclusions in the supply chain is not strong.

Fajartama & Faturohman (2021) combines modern portfolio theory with Monte Carlo simulation prediction and applies it to the investment optimization of financial products. By comprehensively considering the impact of COVID-19 on financial market, Fajartama & Faturohman provides more specific solutions to optimize and adjust the portfolio of financial products. Thus, enterprises can adapt to the random changes in the market and the changes in consumption choices made by consumers.

The author studied how to help financial companies make better investment decisions in a more complex market environment, and combined with the harsh reality of COVID-19, confirmed the complexity of the market environment, and showed that Monte Carlo simulation can make predictions through historical data, so as to make more scientific and rational strategic decisions in an uncertain environment. Improve business performance. However, the analysis based on COVID-19 alone may be special, and the conclusion may not be universal.

Moradi & Beigi (2020) and Wolff & Kuhl (2018) both use statistical methods of Monte Carlo simulation to improve the accuracy and practicability of financial forecasting. The first paper focused on predicting organizational failure and compared several models to conclude that the Monte Carlo model was more accurate. The second paper looks at Coney's valuation, aiming to generate a more accurate market value and exploring what additional value Monte Carlo simulations can bring to investors. The results show that Monte Carlo model has the stability and accuracy that other models do not have.

To sum up, Monte Carlo model is highly reliable as a forecasting model. However, according to the literature, it is still necessary to use other data analysis, such as the historical trend prediction mentioned above, to effectively combine the results to make the results more convincing, and the positive impact on enterprise performance cannot be ignored.

4.5. Forecast of Economic Indicators and Balanced Scorecard

Economic index forecasting enables enterprises to predict changes in the market environment according to macro economic data, so as to make timely adjustments to strategies. The balanced

scorecard, on the other hand, focuses more on non-financial indicators and helps enterprises to evaluate corporate performance from multiple dimensions, which helps to balance short-term goals and long-term strategies, so as to improve the overall performance of enterprises. Here, four relevant literatures will be analyzed for research and demonstration.

Two papers, Issah & Antwi (2017) and Kirshin & Tretyakova (2017), focus on macroeconomic variables and seasonal trends in the UK and Russia through firm studies. The first paper uses a multiple regression model to judge the impact of macroeconomic variables on firm performance by taking them as predictors. The research shows that there is a significant relationship between macroeconomic variables and firm performance, but there are also some differences between different industries. The second paper predicts the financial trend of enterprises by using seasonal sales indicators, adopts polynomial trend and seasonal adjustment model, and proves that under different macroeconomic conditions, its prediction accuracy is very high, and it also has positive correlation with the performance of enterprises.

However, both articles need to consider their limitations. The first paper is industry-specific, and while macroeconomic variables in more than one industry are studied, the dynamics and micro-factors within each industry may differ, and these factors may affect the actual impact of macroeconomic variables on individual firms. Secondly, the second paper did not consider the external environment and failed to fully consider the special market environment changes, such as sudden political changes and global economic crisis.

Chen (2010) and Chang & Lee (2013) studied how BSC can be applied in different organizational and management contexts to enhance the ability to predict and evaluate business performance. The first paper focuses on how to use BSC to predict the uncertainty of the external environment of enterprises and deal with it; the second paper focuses on the case analysis of the integration performance in the service supply chain, and uses BSC as an analytical means to evaluate the overall business process, customer relationship and innovation degree of the supply chain, and makes quantitative analysis of non-financial indicators. This will help the management to formulate the strategy for the next year.

Compared with financial indicators, the non-financial indicators provided by the Balanced Scorecard are not decisive factors affecting enterprise performance, although some non-financial indicators can be quantified and can only be used as auxiliary data for forecasting. Therefore, the financial index forecast has a stronger impact on enterprise performance.

4.6. Artificial Intelligence and Big Data Forecasting

In all walks of life today, artificial intelligence seems to have become an inescapable topic. The same is true of predictive accounting, where AI can process large amounts of data through a large number of computer algorithms, draw conclusions quickly, and form automated processes that greatly reduce labor costs, while being able to respond to changes in the market in a timely manner. However, as the technology is still immature, the practical application of AI remains to be verified. The following are two relevant literatures on the relationship between artificial intelligence prediction and enterprise performance.

Krulicky & Horak (2021) and Chatterjee & Bag (2023) analyze the impact on business performance through AI and big data forecasting, respectively. The similarity between the two literatures is that both of them are of great help to the improvement of decision-making efficiency of enterprises, and the speed of predictive analysis also directly affects the overall improvement of enterprise performance. The difference between the two literatures is that artificial intelligence focuses more on analyzing financial data, while big data emphasizes analyzing the market as a whole and various cross-business data to enhance the operational capabilities of enterprises.

However, both AI and big data have one of the most important limitations: instability. Although the advent of artificial intelligence and big data is shocking, it has not existed for a long time, and many operating processes are not mature, and it still needs to spend labor and time for repeated debugging. Therefore, although AI and big data have a positive correlation with the impact on enterprise performance, they are not recommended as the main forecasting tools, but still need to be used as auxiliary and combined with other forecasting methods, so as to help stable improvement of enterprise performance.

5. CONCLUSION

In order to explore the impact of different forecasting accounting methods on enterprise performance, this paper extensively reviews and summarizes numerous existing literatures, including cash flow forecasting, historical trend forecasting, regression analysis model forecasting, Monte Carlo simulation forecasting, economic indicator forecasting, balanced scorecard forecasting and artificial intelligence forecasting. It is found that regression analysis model and Monte Carlo prediction have the most significant effect, followed by economic indicator prediction, but both need to combine historical trend prediction to make the results more accurate, and other methods can be used as AIDS to make the conclusions more convincing.

Secondly, by comprehensively evaluating a large number of existing academic literature and research, this paper establishes a solid research theoretical foundation and clarifies the importance of predictive accounting to enterprise performance. Through different forecasting methods, it shows the advantages and limitations in practical application. For example, cash flow forecasting is better for short-term financial forecasting, while historical trend forecasting is more suitable for enterprises to make long-term decisions. Both the regression analysis model and Monte Carlo show a high degree of accuracy in the predicted results, with Monte Carlo having a more valuable position for more complex market environments.

In addition, this paper finds that different forecasting accounting methods need to take into account the specific environment and scale of enterprises, because this will affect the applicability of forecasting methods. Therefore, managers need to consider the internal and external environment factors comprehensively when choosing different forecasting methods.

In the selection of methodology, this paper adopts the literature review method, through extensive collection of relevant literature and inductive analysis to build a research framework. Literature review method has stronger theoretical foundation and extensive reference value, but it is also necessary for the analysis of empirical data. Therefore, the conclusions of this paper can be verified by empirical methods in future related studies to further enhance the reliability of the study.

In conclusion, this paper provides practical guidance on how to choose forecasting methods and what impact it will have on firm performance. In the future, predictive accounting will undoubtedly be an indispensable part of enterprise management and financial decision-making, and there is still value for further research on the conclusion of this paper.

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