

The Research on the Investment Value of Healthcare Industry Based on Financial Analysis and Valuation Method: Case of CVS Health

Junxi Qin *

Department of Accounting and Finance, The Hong Kong Polytechnic University, Hong Kong, China

* Corresponding author: 23100775d@connect.polyu.hk

Abstract. This paper analyses the value of CVS Health's investment in the healthcare industry, comparing it to industry giants such as UnitedHealth Group, Cigna and Humana through financial analysis and valuation methods. The study reveals that CVS Health has adapted to market changes through expansion strategies and efficiency gains in the face of the challenges of an aging population and the COVID-19 pandemic. The article analyses CVS Health's net profit margins, gearing ratios, and operating income growth rates in detail, suggesting that it may be undervalued in the market and has high investment potential. The findings suggest that CVS Health has enhanced its market competitiveness and financial stability through effective cost management and market expansion strategies, which are important references for the healthy development of the healthcare industry and service model innovation.

Keywords: CVS Health, Financial Analysis, Valuation Methodology, Healthcare Industry, Investment Value.

1. Introduction

The healthcare sector has always been at the forefront of public and political discourse, and the field consists of many companies in which a dynamic competitive landscape has developed. Companies like UnitedHealth Group, CVS Health, Cigna, and Humana stand as industry giants, not only because of their massive market value, but also because of their profound impact on the health outcomes of far-reaching impact on the health outcomes of millions of people.

The growth and ageing of the global population have directly led to an increase in government and public concern over current levels of healthcare. The trend of drastic demographic shifts has led to a skyrocketing demand for healthcare services [1]. This trend has become even more pronounced with the further intensification of the COVID-19 pandemic, which put additional pressure on the already stressed healthcare institutions, testing their resilience to sudden epidemic shocks [2]. Governments around the world are responding with policies and support that emphasise access, affordability and quality of healthcare. In the United States, the Affordable Care Act and other healthcare reforms have reshaped the industry, creating both opportunities and challenges for insurers and healthcare providers [3].

Against this backdrop, UnitedHealth Group, CVS Health, Cigna and Humana are more than passive players, they are also shaping the future of healthcare through their strategies and innovations. Although CVS Health remains the leader in the space with the largest footprint of pharmacy operating units, as well as the ability to control pricing because of its pharmacy benefits management (PBM) business model and purchasing power [4, 5], the comparisons among these companies are also significant. They can reveal CVS Health's strengths and weaknesses relative to its competitors in the areas of service delivery, cost efficiency, market innovation, and customer satisfaction. For example, by analysing UnitedHealth Group's business diversification and extensive service network, CVS Health may be able to identify its own potential growth opportunities in certain service areas or shortcomings in existing services. Meanwhile, a study of the successful practices of Cigna's employer-focused health plan could provide CVS Health with insights into how to optimise its own health plan offerings. In turn, Humana's focus and effectiveness in Medicare Advantage plans [6] may shed light on CVS Health's service innovation and improvement strategies in the senior market.

Research in the healthcare industry has found that healthcare organisations can benefit from the concept that service innovativeness leads to new value propositions and high-quality innovative outcomes. Healthcare organizations can try to understand user-induced opportunities and risks, as well as user/patient problems, to provide new or improved healthcare services [7]. CVS Health can also learn from this, reflecting on its own shortcomings in healthcare innovation, to create more revenue to go for long-term investment and planning, and vigorously develop technology and innovation.

Such research will not only help CVS Health to adjust and optimise its internal processes and business strategies to enhance its competitiveness, but also contribute to service quality improvement and cost-effectiveness optimization across the healthcare industry. It serves as a valuable reference for other companies in the industry, helping to promote the healthy development of the entire industry and the innovation of service models.

This paper aims to provide insight into CVS Health's financial situation and investment valuation analysis. This paper will also be an important addition to the literature in the field of analyzing the investment value of the healthcare industry. Because from the results of the existing literature, there are few studies on the targeted analysis of CVS Health. The existing articles about it only analyze the retail model, and there are fewer analyses of the investment value of CVS Health. This paper can make up for the shortcomings and enrich the literature related to investment value analysis.

2. Method

2.1. Financial Analysis

Financial analysis is an important research method used to analyse the financial position of a business. It generally includes indicators such as total revenue, gearing ratio and so on. This paper focuses on financial analysis of CVS Health using net interest margin, gearing ratio and operating income growth rate.

2.2. Valuation Analysis

The valuation methodology analyses the intrinsic value of the stock. The main indicators include EPS, P/E TTM, P/E NTM, PEG Ratios and Expected EPS Growth Rates. The focus of the valuation analysis is on the comparison of the four indicators of UnitedHealth Group, CVS Health, Cigna, and Humana to analyse the valuation of CVS Health.

3. Results

3.1. Financial Analysis

3.1.1. Net Profit Margin

Over the ten-year period from 2014 to 2023, CVS Health's net profit margin experienced significant volatility, reflecting the Company's financial performance and response to various challenges in different markets and economic environments (Figure 1). Between 2014 and 2017, the Company's net profit margin grew gradually from 3.33% to 3.58%, a period of steady growth largely attributable to the Company's expansion strategy and efficiency improvement initiatives. However, the net profit margin unexpectedly turned negative (-0.31%) in 2018, mainly due to huge amortization expenses and one-off transaction costs associated with the highly-priced acquisition of Aetna. Moving into 2019-2021, the Company's business recovers and shows strong growth as the COVID-19 outbreak takes hold, with net margins reaching a high of 2.74% in 2021, mainly due to the large number of COVID-19 tests and vaccinations the Company provided during the outbreak, as well as increased investment in telemedicine and digital health services. By 2022, however, the net margin declined to 1.34%, likely impacted by the normalization of demand for healthcare services following the outbreak, but recovered to 2.33% in 2023, demonstrating the company's ability to adapt to market

shifts and its ongoing strategy of business realignment. This series of changes demonstrates CVS Health's dynamic strategy for responding to market challenges and seizing opportunities, as well as its ability to maintain financial stability in a changing healthcare environment.

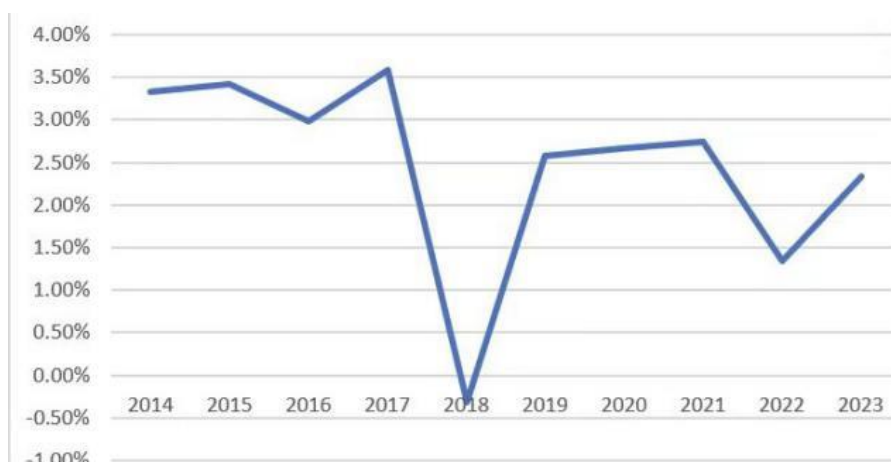


Figure 1. Net Profit Margin

3.1.2. Debt to Equity Ratio

Over the ten-year period from 2014 to 2023, CVS Health's gearing ratio undergoes a significant change, gradually increasing from 0.95 in 2014 to 2.26 in 2023 (Figure 2). This trend suggests that the company has gradually increased its debt levels over this period, which is closely related to its expansion strategy and large-scale acquisitions.

From 2014 to 2017, CVS Health's gearing ratio was relatively low, but has increased significantly since 2018, particularly in 2018, the year of the Aetna acquisition, when it jumped from 1.57 to 2.36. This acquisition not only significantly increased the company's total assets, but also increased its liabilities dramatically, primarily to fund the \$69 billion deal [8]. The acquisition aims to bring broader market coverage and enhanced competitiveness to the company by integrating insurance services with its drug retail and health services.

Slight fluctuations in gearing going into 2020 and 2021 reflect the company's financial strategy adjustments in response to the market uncertainty and operational challenges posed by the COVID-19 outbreak. During the outbreak, the Company was able to manage its financial position and debt levels by maintaining a stable revenue stream through the provision of COVID-19 testing and vaccination services, despite significant operational pressures.

By 2022 and 2023, as the market gradually recovers and the Company continues to restructure its business, gearing ratios are steadily increasing, suggesting that the Company is making progress in optimising its capital structure and funding strategy. It may also reflect the company's strategic need to continue investing in new health technologies and expanding its service network.

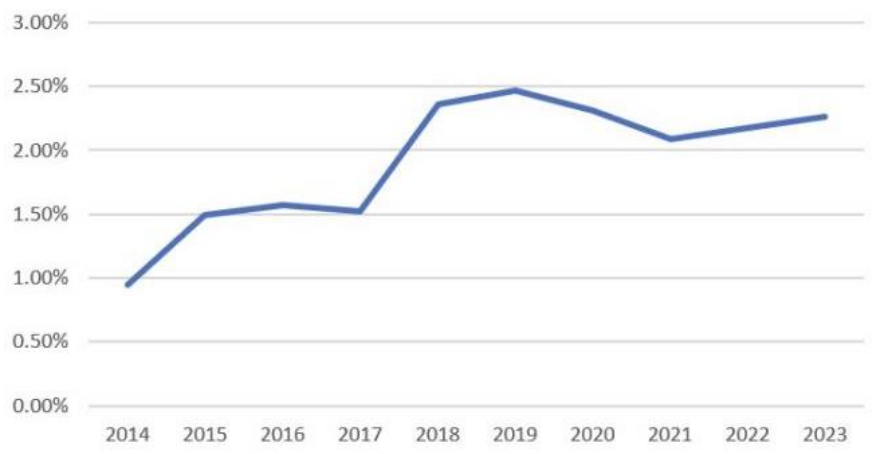


Figure 2. Debt to Equity Ratio

3.1.3. Revenue Growth Rate

CVS Health's revenue growth rate from 2014 to 2023 demonstrates the company's performance in different economic environments and its ability to adapt to market changes (Figure 3). The company's revenue growth rate has shown a fluctuating but generally increasing trend over the period.

Between 2014 and 2015, the Company's operating revenue growth rate remained at nearly 10 percent, a solid growth largely attributable to the expansion of the Company's traditional pharmaceutical retailing business as well as its initial explorations in the provision of healthcare services. Heading into 2016, the revenue growth rate increased significantly to 15.81%, reflecting the Company's initial success in integrating newly acquired businesses and expanding into health services.

Growth rates declined in 2017 and 2018, to 4.08% and 5.31%, respectively, during which time CVS Health faced the challenges of slower overall industry growth and increased competition in the market. However, the growth rate of operating income soared to 31.94% in 2019, a jump that was largely attributed to the completion of the company's large-scale acquisition of Aetna, a strategic move that significantly expanded the company's market reach and added new revenue streams [9].

Moving into 2020, the growth rate declined to 4.64% with the COVID-19 outbreak, but despite this, the Company managed to sustain continued business growth by increasing its COVID-19-related health testing and vaccination service [10]. In 2021 and 2022, as the outbreak gradually came under control and the economy recovered, the Company's growth rate gradually rebounded, reaching, respectively 8.69 percent and 10.39 per cent respectively.

By 2023, the growth rate will further increase to 10.95%, showing that the Company has successfully enhanced its market competitiveness and business growth potential in the post epidemic era through continuous business innovation and market expansion, such as strengthening digital healthcare services and personalized health solutions.

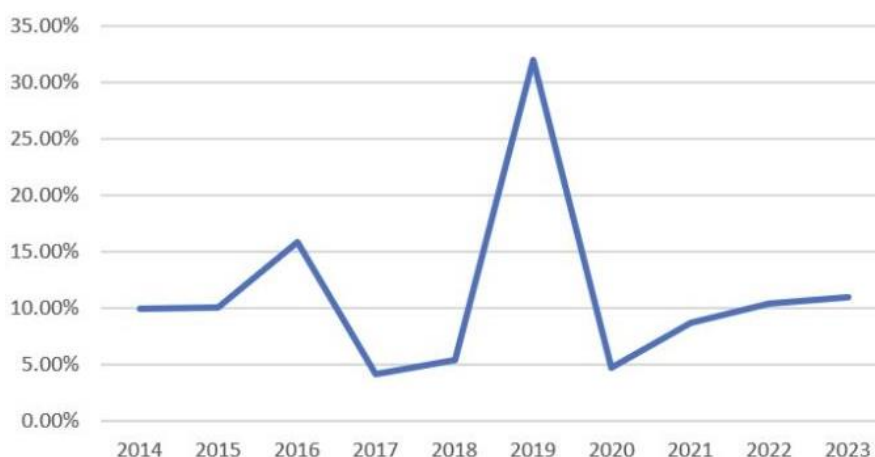


Figure 3. Revenue Growth Rate

3.2. Valuation Analysis

In the current competitive landscape of the healthcare and insurance industry, four companies - UnitedHealth Group, CVS Health, Cigna and Humana - are undoubtedly the industry leaders (Table 1). Not only do they hold a significant position in terms of market share, but they also seek to differentiate and lead in the highly competitive market through their different business models and strategic positioning.

Table 1. Four Companies Data

Company	EPS	P/E TTM	P/E NTM	Expected EPS Growth Rates	PEG Ratios
CVS Health	\$78.09	11.8	9.3	29.10%	0.12
Humana	\$24.73	14.5	21.4	-19.00%	-1.8
UnitedHealth Group	\$53.68	20.3	17.4	17.30%	1.59
Cigna	\$352.80	19.4	12.5	62.80%	-1.03

CVS Health has demonstrated its commitment and ability to strategically diversify by transforming itself from a retail pharmacy to providing more comprehensive health services and entering the insurance space. Its \$78.09 EPS is the highest among the four companies, and its P/E TTM of 11.8 and future decline to a P/E NTM of 9.3 suggests that its stock may be undervalued by the market compared to its earnings growth potential. Combined with an expected EPS growth rate of 29.1%, CVS Health shows great potential in its future earnings outlook. A PEG ratio of 0.12, well below 1, which is often seen as a significant indicator of stock undervaluation, suggests potential to attract investors.

Overall, the competitive status of these four companies in the healthcare and insurance industry reflects their respective strategic strengths and challenges. UnitedHealth Group and CVS Health demonstrate their position as market leaders due to their solid profitability and growth expectations. Cigna and Humana, on the other hand, show varying degrees of growth momentum and market challenges. Cigna's high growth expectations and its high EPS indicate strong earnings potential, but negative PEG ratios also imply market uncertainty about its future growth. Humana may need to evaluate its long-term strategy more cautiously in the face of declining earnings expectations.

4. Discussion

4.1. Financial Analysis

CVS Health's financial performance over the period from 2014 to 2023 demonstrates its ability to adapt and execute strategies in the face of dynamic market conditions and significant corporate activity. A detailed analysis of its net profit margin, gearing ratio and operating income growth rate provides a more complete understanding of the company's financial health and business trends.

First, changes in net profit margins reveal the volatility of the company's profitability. Despite a negative net profit margin (-0.31%) in 2018 due to the Aetna merger, the company has since recovered its net profit margin to 2.74% in 2021 through effective cost management and operational efficiency improvements. This volatility not only reflects the one-off financial pressure from M&A, but also demonstrates the company's success in subsequent integration and market expansion.

Second, the year-on-year increase in gearing, from 0.95 in 2014 to 2.26 in 2023, signals a more aggressive financial leverage policy to support the company's growth strategy. This increase is mainly to fund mergers and acquisitions and to scale up the business, which, despite increasing financial risk in the short term, brings the company a broader market and business diversification in the long term.

Again, an analysis of the growth rate of operating income shows that the company experienced varying degrees of growth in different years, with a peak of 31.94% in 2019 due to the acquisition of Aetna. Moreover, during the pandemic in 2020 and beyond, the company was able to quickly adjust its business model to leverage its network of pharmacies and health services to provide the public with necessary medical support, a flexibility and innovation that ensured continued revenue growth.

In summary, CVS Health's financial reflect strong adaptability and strategic foresight in a complex industry environment. The company has used its M&A strategy to successfully expand its footprint and market share, while enhancing its profitability and market competitiveness through effective cost control and service innovation. The rising gearing ratio, while increasing financial risk, reflects the company's strategic investment in pursuing long-term growth. Taken together, these financial performance metrics demonstrate CVS Health's solid foundation as a leader in the healthcare industry and its potential for future growth.

4.2. Valuation Analysis

In terms of financial performance, CVS Health's lower P/E ratio and higher expected growth rate make it a potential value investment option in the short term. In contrast, UnitedHealth Group's stable growth expectations and strong market position make it a solid choice for long-term investors, despite its higher P/E ratio. Cigna's negative PEG ratio may suggest that the market is sceptical about its future growth, while Humana may need to adjust its strategy going forward to meet the challenge.

From an investor's perspective, choosing to invest in these companies requires a thorough analysis of their respective business models, market trends, policy risks, and financial health. For example, CVS Health's business transformation and market positioning may enable it to capitalise on the growing trend of integrated health services, while UnitedHealth Group's diversification and large scale provide the basis for steady growth. Cigna and Humana, on the other hand, will need to focus on market dynamics and policy changes to maintain their competitiveness in specific market segments.

Investment decisions should also consider a variety of factors, including macroeconomic conditions, industry trends, corporate governance, and competitive strategies. For example, changes in healthcare policies can have a significant impact on companies whose primary source of revenue is the Medicare and Medicaid programmes [11]. Additionally, technological innovations, such as the development of telemedicine, may change the competitive landscape of the industry, affecting the business models and market positions of these companies [12].

Ultimately, the future competitiveness of these companies will depend on their ability to continue to innovate in a changing market environment and how they respond to policy changes and shifting consumer preferences. Regardless, the growth and competition of these companies will have a profound impact on the future direction of the healthcare industry.

4.3. Challenges and Opportunities

CVS Health plays a critical role in the US healthcare and insurance sectors. With the company's transformation from a traditional retail pharmacy business to a broader healthcare provider, including its entry into the insurance market through the acquisition of Aetna, CVS Health has not only strengthened its own market competitiveness, but has also created new opportunities for itself in a growing market for integrated healthcare services. The company's current financial health, low price-to-earnings (P/E) ratio, and expected high growth rate seem to bode well for its potential market growth, but this is all based on being able to effectively address both internal and external challenges.

First, from an internal operational perspective, CVS Health must ensure that its expansion strategy does not lead to an overdiversification of resources that would affect the company's core business. While business diversification can reduce the company's exposure to the risk of market homogeneity, overexpansion may result in the company's inability to effectively integrate new businesses, which could affect overall operational efficiency. In addition, as a large chain with operations in multiple states, CVS Health needs to remain flexible in different market environments to adapt to differences in regulations and market demand across regions.

Second, one of the biggest external challenges facing CVS Health as a healthcare provider is the ever-changing healthcare policy environment. Every major change in U.S. healthcare policy, particularly as it relates to Medicare and Medicaid, could have a profound impact on the Company's profitability. For example, if new healthcare policies reduce reimbursement rates for certain services, CVS Health may find the profitability of some of its businesses squeezed. Healthcare policy uncertainty is particularly acute in the current political climate, requiring CVS Health to consider a variety of possible policy changes in its strategic planning.

The impact of the COVID-19 pandemic on the healthcare industry cannot be ignored. Not only has it changed the demand for healthcare services, but it has also accelerated the development of technological applications such as telemedicine. CVS Health has already invested in this area, but must continue to dedicate resources to stay ahead of the technology curve to meet the long-term changes in consumer behaviour. However, rapid changes in technology and consumer privacy concerns are potential risk factors for any company investing in telemedicine and E-Health services.

Despite the challenges facing CVS Health, the opportunities are just as significant. As consumer demand for one-stop healthcare services increases, companies have the opportunity to offer a broader range of health services through their retail shops, including health screenings for disease prevention, chronic disease management and urgent care services. This service model not only provides convenience to consumers, but also helps to strengthen CVS Health's customer loyalty and market share. In addition, CVS Health's position in the market for personalized healthcare products and

services is likely to be further strengthened as people become more conscious of their health and healthy lifestyles.

CVS Health is expected to continue along the path of expansion and diversification. As the company gradually integrates its retail and insurance businesses, it will be able to offer more personalized and efficient healthcare solutions to meet the needs of different consumers. Meanwhile, the company's continued investment in health technology, particularly its exploration of big data and artificial intelligence applied to personalized medicine and predictive health management, will help maintain its leading position in the highly competitive healthcare market.

However, to achieve these goals, CVS Health needs to ensure that its internal structure supports the rapidly changing market environment and technological advances. This includes a reasonable investment in scientific and technological research and development. CVS Health is already doing this on an ongoing basis. Not the least of which is that CVS Health has invested 325 million on digital health care in 2019. Until now, CVS Health has continued to invest in technology. At the same time, CVS Health needs to focus on talent. As David Casey, Vice President, Workforce Strategies, and Chief Diversity Officer said, "CVS Health recognizes the important role externships, which offer on-the-job training with classroom instruction, play in building a pipeline of future skilled talent." [13].

In terms of financial management, CVS Health should continue to focus on cost control while looking for new sources of revenue. Although its current financial metrics show strong profitability and growth, the company must remain financially flexible and robust in the face of increasing competition in the market to address possible future market volatility.

Investors considering an investment in CVS Health should carefully analyse its most recent Form 10-K and other financial reports to understand the company's strategic direction, financial health and potential risk factors. As the healthcare industry and regulatory environment continue to evolve, staying on top of the latest developments is critical to predicting CVS Health's business trajectory and stock performance.

In short, CVS Health is in a period of transition that is fraught with challenges and opportunities. If the company can successfully respond to shifts in healthcare policy, rapid advances in technology, and changes in the marketplace and consumer behaviour, it will be able to leverage its diversity and innovation to dominate the healthcare landscape in the future.

5. Conclusion

This study takes an in-depth look at CVS Health and its key competitors in the healthcare industry, such as UnitedHealth Group, Cigna, and Humana, and how they have been able to maintain and enhance their market position through strategies and innovations in a complex market environment. A detailed analysis of these healthcare giants reveals that they have effectively strengthened their market share amidst stiff competition by enhancing their service offerings, improving cost efficiencies, driving market innovations, and optimising customer satisfaction.

These companies have demonstrated strong market resilience and foresight in the application of technology-driven solutions, such as telemedicine services. However, despite the many achievements, the study also reveals some shortcomings, particularly in terms of the accessibility and degree of customization of services. These limitations may affect the speed and depth of a company's expansion in each market, which in turn affects overall patient satisfaction with its services.

In the long run, the healthcare industry is expected to continue to experience rapid change as technology further develops and consumer demand continues to evolve. Companies must continue to invest in innovative technologies, such as artificial intelligence, big data analytics and the Internet of Things, which can help predict disease trends more effectively, optimise service supply chains and enhance the patient interaction experience. In addition, firms must enhance their understanding of consumer behaviour and tailor their services based on these insights, which will be key to their ability to sustain a competitive advantage.

While this study gained many valuable insights and conclusions, there were some shortcomings in the research process. The study focuses primarily on a few large firms, ignoring the role of smaller or emerging firms in innovation and market dynamics, which can lead to a biased understanding of the competitive landscape of the industry. Secondly, as this study focuses on quantitative data and market performance analysis, qualitative analysis of consumer behaviour and preferences may not be sufficient, which may affect the overall grasp of market demand and consumer expectations. These limitations suggest the need for a more comprehensive approach and multiple sources of data in future studies to improve the accuracy and applicability of the study.

In summary, this study reveals the urgent need for healthcare firms to enhance their social responsibility and public trust while improving operational efficiency and customer service, such as building consumer trust through increased transparency in data management and enhanced privacy protection, as well as enhancing their social image by actively participating in health education and disease prevention activities. At the same time, policy support from government and industry regulators can have a profound impact on corporate strategy, emphasizing the need for collaboration between healthcare companies, capital market participants and policymakers. Such collaboration not only helps policymakers to accurately formulate industry policies, but also creates more growth opportunities and reduces operational risks for firms. Taken together, these findings provide healthcare firms with clear directions for improving their strategies and industry regulators with valuable insights that can help guide firms towards more effective business strategies and drive the industry in a more sustainable and innovative direction.

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