

Trimming the Retail: The investment outlook for CVS's growth strategy

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Keywords

Capital asset pricing model, company valuation, CVS Health, expected return, free cash flow, weighted average cost of capital

Abstract

CVS Health Corporation owns the retail pharmacy chain and also owns CVS Caremark, the pharmacy benefits manager, and the Aetna health insurance provider (Kolakowski, 2023). Recent acquisitions in 2022 and 2023 include Oak Street Health, Inc., and Signify Health. CVS's proactive growth strategy aims to acquire health care firms across various sectors of health care, yet the management is not averse to divesting the firm of less profitable subsidiaries. In November 2021 the firm announced the closing of 300 stores per year through 2024. A decline in stock price of CVS would suggest analyzing whether the company is still a good long-term investment. A deeper study may be warranted, but seven methods should suffice to either reject CVS immediately or accept CVS for further consideration. The analysis includes the following:

The price-to-earnings ratio or P/E multiple approach for validating stock price.

Evaluating expected return of the stock with the capital asset pricing model (CAPM).

The corporate valuation model using free cash flows for stock-price valuation.

A review of the company's dividend history.

Comparison of the company's capital structure with its peers.

Evaluating the company's historical stock prices.

Review of the recent financial statements and the five categories of financial ratios to determine the overall health of the firm.

As a company with a large retail business unit, CVS stock would be considered a moderately conservative investment. A decision on long-term investing in CVS stock would consider the risk and potential returns. Subject to further scrutiny, this study accepts CVS as a potential investment choice. Although the acceptance is based on analysis, the author makes no guarantee of future results. This paper is the original work of the author and is not previously published.

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I. Introduction

In November 2021, CVS, the largest retail pharmacy chain in the United States, announced the planned closure of 300 stores per year through 2024, about 900 stores. CVS reported over 9,600 stores nationwide as of March 2023. What does this mean for the investor who is considering retail companies for investing? As retail and other industries have scrambled during declines in the stock market, the question should be considered seriously. CVS has realized declining stock prices since January 2022 (Finance.yahoo.com, c, no date). In this study, we shall consider a minimum investment horizon of ten

years to gauge CVS's past performance and expected future performance of its common stock. In general, long-term investing in established, healthy firms should result in a favorable return on one's investment.

Supply chain problems since 2021, accelerated inflation, restricted customer traffic during Covid-19, and rising interest rates may have had an effect on the company's profitability and its cash flow. A company representative listed factors determining store closings, such as "local market dynamics, population shifts, a community's store density, and ensuring there are other access points to meet the needs of the community" (Reinhard, 2023). The SEC.gov website shows a net of 306 store closings in 2022 (SEC.gov CVS 10K report, 8 February 2023, p. 87). The report emphasizes revenues and cash flows across the three business sectors. A decline in cash flow from operations occurred in FY 2022 – to \$16.2 billion from \$18.3 billion in FY 2021 (SEC.com, 10K report, statement of cash flows, 8 February 2023). Other concerns include the opioid litigation cost of \$5.8 billion in FY 2022, while loss on assets held for sale was nearly \$2.5 billion. The sale of business entities in 2022 included CVS's long-term care (LTC) business, which accounts for much of the write-down on the sale of assets. The firm also sold its international health care business domiciled in Thailand. In other operations, the cost of products sold combined with benefit costs increased year over year, a likely byproduct of rapid inflation in 2022; the increase totaled \$28.1 billion. Therefore, in FY 2022, total operating costs increased year over year by \$35.8 billion. These operational expense increases offset the increased revenues year over year and resulted in an operating decrease from FY 2021 to FY 2022; the decrease was \$5.4 billion. Nevertheless, in FY 2022, the company showed an operating income and net income of \$7.7 billion and \$4.1 billion, respectively (SEC.gov, CVS 10K report, 8 February 2023, p. 106).

The above financial facts are supported by CVS's strategic activities. The list in FY 2022 includes (SEC.com, CVS 10K report for FY 2022, 8 February 2023, pp. 132-133):

- Ongoing acquisition of Oak Street Health, Inc. (Oak Street) expected in 2023.
- Pending acquisition of Signify Health (Signify) expected in Q2 of 2023.
- The planned sale of CVS's long-term care (LTC) business and the write-down of assets for sale in the FY 2022 10K report.
- Divestiture in 2022 of bswift, the benefits technology and services firm, through sale to Francisco Partners (Finance.yahoo.com, a, 3 October 2022).
- Divestiture of PayFlex in 2022.
- Divestiture of CVS's Thailand health care business.

The acquisitions and divestitures resulted in two name changes of CVS's business sectors, shown in Table 1. Revenues and adjusted operating income from the business sectors are indicated in Table 1 as follows:

Sector	Description	Revenues	Adjusted Operating Income
Health Care Benefits	Insurance, benefits	\$91.4 billion	\$5.98 billion
*Health Services	Pharmacy and health solutions	\$169.2 billion	\$7.36 billion
*Pharmacy and Consumer Wellness	Prescription drugs, retail health and wellness products, general merchandise, and Minute Clinic	\$106.6 billion	\$6.71 billion
*Note: Health Services (formerly Pharmacy Services); Pharmacy and Consumer Wellness (formerly Retail/LTC). A fourth sector, staff-related business services known as Corporate/Other, does not qualify as a profit center. (SEC.gov, CVS 10Q report for Q1 2023, 31 March 2023, pp. 49-50)			

Table 1: CVS's basic business sectors by Revenues and Adjusted Operating Income realized in FY 2022 (SEC.gov, CVS 10K report for FY 2022, 8 February 2023, p.76).

The Pharmacy and Consumer Wellness sector includes prescription drugs in the pharmacy stores, as well as retail merchandise, yet is not the largest sector of the company by revenue. The 2022 10K report mentions expansion of its reach by Health Services that includes claims adjudication, which is part of pharmacy services, as well as acquisition of health service companies. By revenue and operating income, Health Services (i.e., pharmacy services and health services firms) is the largest sector at CVS. In spite of some reduction of store locations, the long-range investment outlook for CVS appears healthy.

Most of the seven selected tools of analysis are easily explained. We shall pay special attention to background information on the capital asset pricing model (CAPM) and the free cash flow (FCF) method. CAPM formulates expected return from the equation:

$$r = R_f + b(r_m - R_f), \text{ in which}$$

- r is the expected annual return of the common stock.
- R_f is the relevant risk-free rate assumed to be the 10-year US Treasury bond.
- b is the beta coefficient, a risk index that compares the firm's volatility relative to the volatility of the stock market, taken as 1.0.
- r_m is the market's expected annual return, generally about 10%.

An expected return at a given time should predict whether stock price will go up, or whether the stock may be overvalued in the marketplace.

The company's free cash flows (FCF) should measure the value of the company, from which the analyst derives the expected stock price. Free cash flow is the amount of cash flow available to investors after the company meets its operational needs. Other stipulations include the firm's meeting obligations for net fixed assets and net current assets (Zutter and Smart, p. 148). Company valuation estimates the present value of expected FCF for the indefinite future (Zutter and Smart, p. 307), as follows:

$$V_C = \frac{FCF_1}{(1+WACC)} + \frac{FCF_2}{(1+WACC)^2} + \dots + \frac{FCF_\infty}{(1+WACC)^\infty}, \text{ with terms defined as}$$

- FCF or expected future free cash flows.
- WACC, the weighted average cost of capital as the annual discount rate.
- Exponents and subscripts represent years counted as Year 1, 2, etc. to infinity.

The WACC equals the overall cost of capital expressed as a percentage. It refers to the weighted average interest and charges paid on loans, bonds, existing common stock, newly issued common stock, and preferred stock. Removing factors not related to CVS, such as no preferred stock and no new common stock, CVS's WACC derives from the equation

$$r_{AVG} = WACC = w_{CS}(r_{CS}) + w_D(r_D), \text{ in which}$$

- w_{CS} and r_{CS} are the weight and expected return of existing equity.
- w_D and r_D are the weight and expected return (interest rate) of long-term debt.

The WACC, which is the cost of capital expressed as a percentage, may be regarded as a discount rate, also known as an annual rate against the principle of the acquired capital. We may define acquired

capital as long-range funding obtained either through long-term debt or equity (stock in the company). The mix of various instruments of long-term debt and equity makes up the corporation's capital structure.

II. Literature Review

Some of the literature referenced in this study includes classical financial theory that is generally accepted as valid for analysis. Seven methods of analysis in this paper are based on such texts as Brigham, et. al., *Financial Management: Theory and Practice*, third Canadian edition (2017), and Zutter and Smart, *Principles of Managerial Finance, Brief*, eighth edition (2019). For example, the P/E multiple approach to valuation and the free cash flow method are derived specifically from Zutter and Smart (2019). Chapter Twelve of Zutter and Smart's text on "Leverage and Capital Structure" demonstrates the theory and practice of the firm's decisions regarding capital structure.

The most basic theory of valuation derives from discounted cash flow (DCF) and is explained in Zutter and Smart, Chapter Five, "Time Value of Money." Calculation of the present value of future expected cash flows is used to value companies, their operational projects, and their stock value. The principles of DCF are used in the methods for this study. A review of CVS's dividend policy involves application of the dividend relevance theory of John Lintner and Myron Gordon as presented by Zutter and Smart.

The various examples of company capital structures, including specific data on debt and equity, may be found in the website of the Securities and Exchange Commission, SEC.gov. In this website, the 10K and 10Q reports provide specific data and information regarding capital acquisitions through debt and equity. The CVS financial ratios derive from specific data gathered from the 10K report for FY 2021 and FY 2022.

Data sources include Finance.yahoo.com and Schwab.com for stock-price history; UsInflationCalculator.com for inflation historical data; Marketwatch.com for CVS's free cash flow figures on the cash flow statement; and NASDAQ.com for CVS's dividend history.

Finally, news articles provide support for some observations. For example, the decline of earnings per share (EPS) is mentioned as a reason for CVS's declining stock prices. Macroeconomic changes in 2021 and 2022 are chronicled by events such as accelerated inflation, interest rate increases, and retail losses. Some sources include *The Wall Street Journal*, Briefing.com, and Investopedia.

III. Research Methodology

This paper will address specific methods of financial analysis with the objective of evaluating the financial health, expected investment returns, and company and stock-price values. The seven selected methods follow specified procedures outlined in the cited literature, such as Zutter and Smart's *Principles of Managerial Finance, Brief*, Eighth edition (2019). The research methods are listed as follows:

- Applying the factors of the CAPM formula to calculate the expected annual return of the firm's stock. The factors may change so that a range of expected return may suffice for estimating whether the CAPM figure agrees with the current return on investment.
- Applying the price-to-earnings (P/E) multiple to measure investors' attitude toward investing in the firm's stock. Peer firms are recommended by Schwab.com for comparison of specific data.
- Valuing the company and expected stock price from free cash flows. The method uses discounted free cash flow for the next five years at a given growth rate, followed by a perpetuity formula from the end of year 2026 into the indefinite future. The sum of these two calculations discounted to present value would assign the firm's value from which its stock value may be assessed.
- Analyzing the firm's dividend history to determine its payout policy as a signal of optimism for future profitability. The method applies a time-value formula to compute dividend growth per year.

- A comparison of the firm's capital structure with peer companies. The capital structure weighs the mix of debt and equity for long-term capital that funds the company's investment in projects. Generally, the debt and equity proportions are similar for firms in the same industry, especially in the subject firm's peer group. The evaluator would decide whether the firm is taking on excessive debt compared to its peers.
- Comparing the S&P500 Index fund with CVS's price history and average annual returns over 10-year periods. A reasonable expectation of results may be suggested by price history to predict the next 10-year investment horizon.
- Financial ratio analysis to determine the financial health of the firm. The data is derived from the 10K report's financial statements. Further details will follow.

Much of the methods used in the research employ data from the audited financial statements, CVS's annual 10K report to the SEC.

IV. Findings

We shall examine the seven areas of assessment described in the Introduction.

IV.I. Company Stock Valuation Using P/E Multiples:

The formula for stock value using the price-to-earnings multiple simply multiplies the industry's P/E ratio by either the basic earnings per share (EPS) or the diluted EPS. Table 2 considers the diluted EPS as a conservative scenario, as the number of shares outstanding would be reduced if stockholders exercise their options or warrants.

Company	Diluted EPS	Industry Top 25 P/E ratio	Projected Value of stock = Pproj = EPS x P/E	5 May 2023 Market Value = Ps
CVS	\$3.14	31.09	\$97.62	\$70.68

Table 2: Stock valuation using average P/E Multiple for top 25 health care companies by market capitalization (Finance.yahoo.com, b, dated 5 May 2023, 10:33 AM CDT).

We may further observe that on 30 December 2022, CVS showed diluted EPS of \$3.14, a price of \$93.19 per share, and 1.3 billion shares outstanding. Stock value using the P/E multiple would be close to \$3.14 times the P/E, or \$93.19. Solving for P/E, one derives CVS's P/E at approximately 30 at the end of FY 2022. The steady decline in price and P/E from December through May would suggest declining investor confidence. The declines do not bode well for investors in the short term. The decline is partly due to acquisition financing and investing to acquire two health care firms, as well as other factors, but the long-term outlook is still quite positive, and the stock may be undervalued. Nervous investors may be overreacting (Briefing.com, 3 May 2023). A deeper analysis of company value and stock price will be considered next.

IV.II. Expected Return on Common Stock based on the CAPM:

The beta coefficient compares the firm's stock volatility and direction with the stock market, often stated as the S&P500 index fund. When the fund value increases by \$1, CVS, at a beta of 0.74, would likely increase by \$0.74. The recent range of beta for CVS from March to June 2023 was 0.60 to 0.74. Using beta at 0.74, the CAPM formula is:

$$r = 3.70\% + 0.74(10\% - 3.70\%), \text{ so } r = 8.4\% .$$

If we substitute 0.60 as the beta in the above equation, then the expected return would be 7.5%; therefore, the range of expected annual return on CVS common stock in mid-2023 was from 7.5% to 8.4%. The term-relevant risk-free rate in the CAPM is 3.70%, the rate of the 10-year Treasury bond accessed on 5 June 2023 (Finance.yahoo.com, c, 2023). This expected return range is reasonable for a conservative stock such as CVS and will be compared with the stock price history in subsection IV.VI.

IV.III. Free Cash Flow (FCF) Valuation of the Company and Its Share Value:

In the free cash flow (FCF) valuation method, the weighted average cost of capital (WACC) serves as the hurdle discount rate by which valuation occurs (Zutter and Smart, pp. 306-309). First, we would need to derive the WACC, which has two main components: long-term debt and equity.

The weighted average cost of capital is essentially the discount rate by which capital is acquired through long-term debt and equity from the sale of the firm's stock. We figure the weighted average cost of capital (WACC) from the following data table:

Net interest expense	\$2.287 B
Long-term debt	\$50.476 B
Stockholders' Equity	\$71.315 B
Capital Structure	41.44% LT Debt, 58.56% Equity

Table 3: Capital structure of CVS (SEC.gov, CVS, Consolidated Balance Sheet and Consolidated Statement of operations, 31 December 2022).

The cost of long-term debt is calculated from Table 3 as net interest expense divided by long-term debt, or

$$\text{Cost of LT Debt} = \frac{\$2.287B}{\$50.476B} = 4.53\%.$$

The cost of equity, r_s , may be derived from the Gordon Model of constant dividend growth. One would assume that recent history of dividends at CVS suggest three years, 2021 through 2023, at a dividend growth rate, g . The g is computed from the data in the dividend chart, Table 5, in subsection IV.IV, in which annualized dividends for FY 2021, FY 2022, and FY 2023 are \$2.00, \$2.20, and \$2.42, respectively. The dividend constant growth rate, g , is computed from the present value formula (Zutter and Smart, 2019, p. 193):

$$2.00 = 2.42(1 + g)^{-2}, \text{ resolving to } g = 10\%, \text{ in which}$$

- Present value is the annualized dividend of \$2.00 in FY 2021.
- Future value is the annualized dividend of \$2.42 in FY 2023.
- FY 2021 counts as Year 0.
- $(1+g)^{-2}$ represents the present value interest factor, or $1/(1+g)^2$.

Next, the computation for cost of equity as of 30 December 2022 derives from the Gordon model and would appear as follows (Zutter and Smart, 2019, p. 303):

$$r_s = \left(\frac{D_1}{P_0}\right) + g, \text{ resolving to } r_s = 12.85\%, \text{ in which}$$

- r_s is the cost of equity, assuming the cost of existing common stock, not new common equity.
- D_1 is \$2.42 times 1.1, or \$2.66, applying the 2022 dividend, D_0 , as \$2.42.
- P_0 is \$93.19 on 30 Dec. 2022.
- g is 10%.

Given the capital structure in Table 3, the cost of long-term debt, and the value for cost of equity, the WACC for CVS is calculated as

$$WACC = (41.44\% \times 4.53\%) + (58.56\% \times 12.85\%) = 9.40\%.$$

Free cash flow (FCF) valuation computes the value of the entire company as the present value of expected FCF from now to the indefinite future using the annual WACC as the discount rate. This is restated as corporate value equivalent to the present value of expected FCFs using the WACC as the discount rate (Brigham, et.al., 2017, p. 649). Valuing the company may be derived by foreseeable FCF over a short range, such as five years, and then forecasting into the indefinite future from the end of the fifth year into the future. The method is known as the variable-growth model, as shown in Table 4. Note that Year 5, FY 2026, begins valuation into infinity by computing present value from a constant-growth perpetuity (Zutter and Smart, 2019, p. 308).

Prediction of yearly growth of the free cash flows for end of year 2026 through all years into the future would apply a growth rate, g_{INF} . Assume the long-term g_{INF} continues indefinitely from the end of 2026. Due to recessions and systematic risk, the g_{INF} will be assumed to fade to the long-term average inflation rate. Data may be derived from a table of inflation rates from 1914 to 2022 (<https://www.usinflationcalculator.com/inflation/historical-inflation-rates/>). The average inflation rate, or g_{INF} , is computed as 3.3% (the sum of all annual inflation rates divided by 109 years). The FCF for year 2026 forward to infinity would include (1) the FCF for year 2026, \$19,693, multiplied by the amount of 1 plus the previously computed growth factor g_{INF} , or $(1 + 0.033)$, which is \$20,343; and (2) application of the constant-growth formula.

Referring to Table 4, the nominal value of the annual free cash flows in perpetuity from year-end 2026 into the indefinite future would be \$333,492 (in millions). This final period shifts away from the five-year predictions and uses constant growth similar to the Gordon Model of dividend growth (Zutter and Smart, p. 303). The nominal value of growth from year-end 2026 in perpetuity computes as follows:

$$\begin{aligned} & \text{Nominal Value of FCF}_{2026} \text{ (in \$ millions)} \\ & = \frac{FCF_{2027}}{WACC - g_{INF}} = \frac{\$19693(1.033)}{0.094 - 0.033} = \frac{\$20343}{0.061} = \$333492 \end{aligned}$$

The FCF from 2026 to infinity is taken from the end of FY 2026 forward, for all future FCF. The value of the company, V_c , is then the sum of the present values of five years of predicted growth (in the right column) plus the perpetuity from the end of FY 2026 into the indefinite future.

Amounts are in USD in \$ millions				
*Fiscal Year	Nominal FCF \$	**PVIF = $1/(1+WACC)^i = 1/(1.094)^i$	Exponent i =	Present value of \$ FCF _i
2022	\$13,450	0.91408	1	\$12,294
2023	\$14,795	0.83554	2	\$12,362
2024	\$16,275	0.76374	3	\$12,430
2025	\$17,903	0.69812	4	\$12,498
2026	\$19,693	0.63814	5	\$12,567
2026→∞	\$333,492	0.63814	5	\$212,815
***V _C = SUM:				\$274,966
<p>*Note: The FCF in FY 2022 is given (marketwatch.com, 2023). FCF in 2022 may also be estimated from financial statements in SEC.gov (no date). In years 2023 through 2026, multiply the previous year by (1 + g_{FCF}), or 1.1, to derive the nominal FCF.</p> <p>**PVIF = present value interest factor, the multiplier for assigning present value of future cash flows (Zutter and Smart, 2019, pp.193, 308).</p> <p>***The precise value of V_C may differ, as figures are rounded to nearest dollar.</p>				

Table 4: Value, V_C, of CVS using FCF in the variable-growth model (Zutter and Smart, 2019, pp. 306-309).

Two assumptions in Table 4 determine company value: the growth rate of free cash flows from 2022 to 2026, and the growth rate of FCF from the end of 2026 through infinity. We could say that the growth rate for all time would reasonably approach the average historical inflation rate, or 3.3%. The growth of FCF for the next five years should be easier to predict, even without insider information. 10% growth in FCF from 2022 to 2026 seems feasible based on recent history, even with the drop in growth from 2021 to 2022. The value of the stock (V_S) is next calculated from the value of the company (V_C), value of debt (V_D), and value of preferred stock (V_{PFD}). The equation is

$$V_S = V_C - V_D - V_{PFD}, \text{ in which}$$

- V_C is \$274.966 billion (from Sum, Table 4)
- V_D is value of all Debt, or \$156.960 billion (SEC.gov, CVS 2022 Consolidated Balance Sheet, no date).
- V_{PFD} is zero; there are no preferred stocks (SEC.gov, CVS Consolidated Balance Sheet, no date).

$$\text{Then } V_S = \$274.966B - \$156.960B - \$0 = \$118.006B.$$

The number of shares of common stock outstanding at the end of FY 2022 was 1.3 billion shares (SEC.gov, CVS Consolidated Balance Sheet, no date). Dividing V_S by number of outstanding shares at the end of FY 2022, the value per share of stock, which may be regarded as expected stock value, would be

$$PS = \frac{\$118.006B}{1.3B \text{ shares}} = \$90.77 \text{ per share.}$$

The expected value from free cash flows was \$90.77 per share, while the price of common stock per share on 30 December 2022 was \$93.19. However, the stock price has steadily declined since 30 December. Indeed, CVS's stock price dropped in Q1 and Q2. In keeping with management's announcement (Reinhard, 2023), CVS closed a net of 306 stores in 2022 (SEC.gov, CVS 10K report for FY 2022, p. 87). In

spite of these negative factors, CVS's financial health appears sound from the perspective of cash flows and sales across its three business sectors (SEC.gov, CVS 10K report for FY 2022, pp. 106-111).

IV.IV. Review of the Company's Dividend History

We may consider the decisions of the company management with regard to dividends to judge whether management considers the stock to be undervalued (Zutter and Smart, 2019, p. 533). An optimistic dividend payout policy would likely validate this. Recent dividend history for CVS shows a steady rise in dividends from 2010 to 2017, followed by constant dividends from 2017 through 2020. However, from 2021 through the first quarter of 2023, dividends rose again. Using the time-value formula similar to the previous computation of g in subsection IV.III, the constant dividend growth is calculated for three-time intervals between 2010 and 2023:

$$PV = FV(1 + g)^{-N}, \text{ in which}$$

- PV is "present value" taken as earliest year in the range, or year 0,
- FV is "future value" taken for the last year in the range,
- g is the growth rate of dividends,
- and N is the exponent for the annual number of years from year 0 to year N in the selected time interval.

Annualized dividends are given in Table 5 below in reverse-date order:

Year	Dividend	Year	Dividend
*2023	2.42	2016	1.70
2022	2.20	2015	1.40
2021	2.00	2014	1.10
2020	2.00	2013	0.90
2019	2.00	2012	0.65
2018	2.00	2011	0.375
2017	2.00	2010	0.35

*Note: Year 2023 annualized dividend is projected as 4 times the first quarterly dividend from the NASDAQ data.

Table 5: CVS annualized dividend history, 2010-2023 (NASDAQ.com, no date).

From 2021 to 2023, with the \$0.605 dividend in Q1 of 2023 projected to the year's dividend total of \$2.42, the new dividend growth trend suggests the following:

$$2.00 = 2.42(1 + g)^{-2}, \text{ resolving to } g = 10\%.$$

Therefore, after zero growth of dividends from 2017 to 2021, CVS took a more optimistic dividend payout policy, with g now at an apparent 10%. Signaling theory would suggest reasonable optimism by management (Zutter and Smart, 2019, p. 533).

IV.V. Comparison of the company's capital structure with its peers

Table 6 compares CVS to a small group of peer firms in its industry, as follows.

Amounts are USD in \$ millions					
Company - Ticker Symbol	Long-term Debt	Total Equity	LT Debt-to-Equity Ratio	*Capital Structure	FY Ending Date
CVS - CVS	\$50,476	\$71,315	70.78%	LTD 41.44%	31 Dec 2022

				S 58.56%	
Elevance - ELV	\$26,349	\$36,394	72.40%	LTD 42.00% S 58.00%	31 Dec 2022
Cigna - CI	\$28,100	\$44,885	62.60%	LTD 38.50% S 61.50%	31 Dec 2022
Humana - HUM	\$9,034	\$15,370	58.78%	LTD 37.02% S 62.98%	31 Dec 2022
**McKesson - MCK	\$5,080	(\$1,792)	-	LTD 155% S -55%	31 Mar 2022
Walgreens-Boots - WBA	\$10,615	\$29,366	36.15%	LTD 26.55% S 73.45%	31 Aug 2022
*Note: Capital Structure is Long-Term Debt + Equity = LTD + S = 100%.					
**McKesson had an equity deficit in FY 2022 through 31 Mar 2022.					

Table 6: Comparison of long-term debt-to-equity ratios of peers among large-capitalization health care companies (SEC.gov, 2023). Peers suggested by Schwab.com (2023) except Walgreens-Boots Alliance (WBA).

Table 6 compares peers of CVS according to Schwab.com (2023), and also includes Walgreens-Boots Alliance (WBA). These firms rank in the highest 50 health care firms according to size by market capitalization (finance.yahoo.com, b, 2023). Among this group of peer firms in health care, CVS and Walgreens-Boots have the largest retail presence. With the exception of McKesson, which carried an equity deficit as of March 2022, the firms are reasonably equivalent in capital structure. Not including McKesson, CVS currently carries the most debt-to-equity, although its capital structure by proportion of long-term debt and equity is not extreme. Among the six peers listed, we may discard McKesson (MCK) to derive a reasonable average long-term debt-to-equity ratio of 60.14% (sum of ratios, excluding McKesson, divided by 5). CVS at 70.78% has a ratio that is greater than the modified average ratio by 10.64%.

IV.VI. Charting of the company's historical stock prices

The overall pattern of stock price for CVS would suggest a future recovery and perhaps a good long-term return on investment. An inspection of the CVS historical price graph shows CVS returns compared to the S&P500 Index Fund as follows:

Firm or Fund	Start 1 Jan 1993	*End 31 Dec 2002	Start 1 Jan 2003	*End 31 Dec 2012	Start 1 Jan 2013	*End 30 Dec 2022
CVS	\$11.3326	\$12.945	\$12.1363	\$49.99	\$51.7125	\$93.19
Avg gain/yr.		1.423%		31.19%		8.021%
S&P500 Index ^SPX	\$442.11	\$879.82	\$861.59	\$1,426.19	\$1,525.92	\$3,839.50
Avg gain/yr.		9.900%		6.553%		15.162%
*Note: End-date data from separate source (finance.yahoo.com, c, 2023).						

Table 7: CVS vs. ^SPX (S&P500 Index Fund) closing prices in three 10-year intervals (Schwab.com, 2023). Prices determine average annual returns per 10-year interval.

The most recent 10-year interval, 1 January 2013 through 30 December 2022, shows a stock-price gain of 80.208%, averaging a gain of 8.021% per year. Price quotes were \$57.7125 in 2013 and \$99.13 in 2022. It should be noted that the CAPM range of expected return between 7.5% and 8.4% appears to match the most recent 10-year period, 8.021%.

IV.VII. Assessing the firm's financial statements and the overall financial health from five financial-ratio categories

The five categories of financial ratios derived from the CVS financial statements follow.

Ratio	FY 2021	FY 2022	Ratio	FY 2021	FY 2022
Liquidity Ratios:			Profitability Ratios		
Current	88.50%	94.19%	*OPM	4.52%	2.40%
Quick ratio	62.31%	66.81%	*NPM	2.71%	1.29%
Avg coll'n period	30.5 days	30.9 days	Diluted EPS	\$5.95	\$3.14
Activity Ratios:			*ROA	3.40%	1.82%
Inventory turnover	9.90	10.31	*ROE	10.49%	5.82%
Total Assets turnover	1.25	1.41	Market Ratio:		
Debt Ratios:			P/E Ratio	17.34	29.68
Debt ratio	67.65%	68.76%			
Debt/equity	2.10	2.21			
Times int. earned	5.27x	3.39x			
*Note: OPM, operating profit margin; NPM, net profit margin; ROA, return on total assets; ROE, return on equity.					

Table 8: Financial ratios for CVS (SEC.gov, CVS 10K report, FY 2022, 8 February 2023).

The ratios provide a quick glance at CVS's financial health. Most of the ratios appear normal, but with signals of the reported decline in profitability in FY 2022. The net profit margin (NPM), for example, shows the decline due to increased costs of operations in 2022, the opioid litigation, and the write-down of LTC assets held for sale. The profitability ratios should rebound if CVS's new companies increase profits. Cash flow should also improve. As mentioned, in the short run, the projected lower EPS in FY 2023 aggravated investors' concerns and a possible overreaction (Briefing.com, 3 May 2023).

V. Discussion and Conclusions

The rationale for acquisitions, divestitures, and store closings in a short period of time may determine whether CVS's strategy is stable. To the optimist aware of CVS's rapid growth and stability over several years, the changes may suggest a proactive optimism during changing times. From the risk-averse investor's viewpoint, such changes may suggest management's cavalier attitude toward the firm's profitability factors: EPS, OPM, and net profit. This study's analysis of free cash flow and the other methods suggest the former conclusion; namely, the stock is undervalued, market share will grow, and the stock price will rise again.

The P/E multiple method reflects the downward trend in CVS's stock price and mirrors investors' attitudes. It provides a good tool for short-term trends. If the investor is interested in quick results, then CVS stock would not be a good investment at present. However, this study considers the longer investment horizon to be more favorable.

Among the seven methods for this study, the free cash flow valuation gives the strongest indication of CVS's financial health and future growth prospects. Assuming the accuracy of five-year growth at 10% and growth into the indefinite future at 3.3%, the company showed an intrinsic stock value over \$90 per share at year-end 2022 and is therefore undervalued. The current drop in the EPS, which is caused by acquisitions, divested entities, and litigation, is not likely a permanent condition. Depending on the

synergy of Oak Street and Signify with CVS, the added market share should increase revenue and operating income, leading to a turnaround.

The recent restoration of growth in dividend payouts may account, in part, for the apparent company value that exceeds what would be indicated by its stock price. Theoretically, the new growth in dividends is a positive signal with regard to earnings and company value. One may question why CVS changed its dividend payouts from very optimistic growth from 2010 to 2017 to a constant annualized dividend from 2017 to 2021. The company changed again to dividend growth of 10% from 2021 to 2023. In the first case, years 2010 to 2017, this is answered partly from growth optimism. In the second case, the constant dividends may have been an attempt to save funds for a period of strong company growth. For example, from 2017 to 2018, CVS acquired Aetna insurance, signing the agreement on 28 November 2018. The cost of acquisition was \$78 billion (Cournoyer, 2020). By this logic, the firm may have moved to constant dividends in order to service the debt. The company's capital structure appears sound; CVS is not taking undue chances with debt.

Ratio analysis reveals the bad year for CVS, 2022, with the drop in profitability ratios and times interest earned. Nevertheless, earnings should settle the declines as the company rebounds. First quarter net income in 2023 was 9.3% lower than Q1 in FY 2022, but with no more litigation payments (SEC.gov, CVS 10Q report, 3 May 2023, p. 2). Investors with a long-term outlook should not be alarmed. In fact, the investment horizon would likely suggest whether investing in CVS stock is a good idea. For example, an inspection of the CVS historical price graph shows stable gains for the two most recent ten-year investment periods.

In conclusion, financial analysis suggests a turnaround in the company's profits, even as CVS reduces some of its retail profile and expands its other sectors.

VI. Limitations and Potential Further Research

The free cash flow method is perhaps vulnerable to an error in growth predictions. For example, the five-year projected growth rate derived from dividend growth is based on a very short timeframe, from 2021 to 2023. CVS has a recent history of variable dividend policy. However, free cash flow growth from 2019 to 2022 averaged 10.6%, even with negative growth in 2022 (Marketwatch.com, 2023).

This study relies on audited financial reports to the SEC. However, corporations may manipulate financial reporting in their favor, in spite of auditors and regulations (Foldy, B., 2 June 2023).

Although this study concludes that CVS's stock price is undervalued, continued risky acquisitions and divestitures may further reduce the firm's profitability. More study would be warranted with regard to CVS's new acquisitions. Specifically, Oak Street and Signify's activities will affect earnings. Further research may be done with other financial tools, such as DuPont analysis to determine financial leverage, the return on total assets, and return on common equity. The ratio analysis in this study considered some quick measures that could have included additional ratios that assess liquidity, profitability, and the other financial categories.

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