

A Work Project, presented as part of the requirements for the Award of a Master Degree in Economics / Finance / Management from the NOVA – School of Business and Economics.

Equity Research Report
Johnson & Johnson

*A Legacy of Innovation and Steady
Growth*

Justin Jacob
57984

A Project carried out on the Master in (Economics/Finance/Management) Program, under the supervision of:

Professor Rosário André

January 24, 2025

Abstract

This equity research report, prepared as part of Nova SBE's Field Lab by Justin Jacob and Rupert Schuler, evaluates Johnson & Johnson (JNJ). Our valuation estimates a share price of \$183, indicating the stock is undervalued compared to its December 13, 2024 market price of \$146.62. A detailed relative valuation and sensitivity analysis across four scenarios support this conclusion. The report considers JNJ's operational resilience, ongoing litigations, and macroeconomic factors, providing a balanced assessment of internal and external influences on the company's intrinsic value.

Keywords: Drugs, Research & Development, Valuation, Litigations

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

This report is part of the Johnson & Johnson Equity Research report (annexed), developed by Justin Jacob and Rupert Schuler, and should be read as an integral part of it.

Table of Contents

1. COMPANY OVERVIEW	5
1.1. COMPANY STRATEGY	5
1.2. SHAREHOLDER STRUCTURE.....	6
1.3. STOCK PERFORMANCE	6
1.4. DIVIDEND POLICY	7
2. VALUATION	7
2.1. RATIO ANALYSIS	7
2.2. DISCOUNT RATE	10
2.3. EQUITY VALUATION	10
2.4. RELATIVE VALUATION.....	11
2.5. SENSITIVITY ANALYSIS.....	12
2.6. FOOTBALL FIELD ANALYSIS.....	14
2.7. VALUE AT RISK.....	14
2.8. MONTE CARLO SIMULATION	15
2.9. INVESTMENT RISK	16
BIBLIOGRAPHY	18

1. Company Overview

1.1. Company Strategy

Johnson & Johnson (JNJ) employs a multifaceted strategy to maintain its leadership in the healthcare sector. This strategy focuses on robust Investments in Research and development (R&D), strategic Mergers and Acquisitions (M&A), and the diversification of its supply chain.

Investment in Research & Development

JNJ consistently allocates substantial resources to R&D, aiming to outpace competitors through innovation. In 2023 the company invested approximately \$15.1 billion in R&D, representing about 18% of its sales (Johnson and Johnson, 2024). This commitment is projected to continue, with R&D spending expected to grow at a compound annual growth rate (CAGR) of 6.58% from 2023 to 2030. The primary focus areas include Pharmaceuticals, Oncology and Immunology, and Medical Devices.

Mergers & Acquisitions

JNJ adopts an agnostic approach to innovation, sourcing approximately 50% of its products externally. This strategy is exemplified by the 2020 acquisition of Momenta Pharmaceuticals for \$6.5 billion (Johnson and Johnson, 2020), enhancing JNJ's portfolio in immune-mediated diseases. In 2023, JNJ continued this trend with acquisitions such as V-Wave Ltd., a heart failure treatment developer, for up to \$1.7 billion (Johnson and Johnson, 2024). These acquisitions align with JNJ's strategy to expand its capabilities in high-growth markets and innovative therapeutic areas.

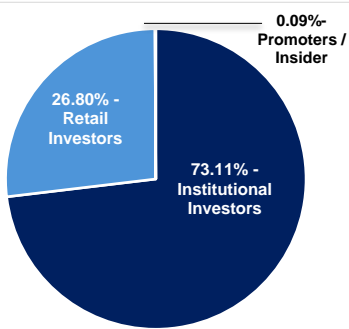
Diversification of the Supply Chain

JNJ is committed to enhancing its supply chain to ensure timely product delivery and responsiveness to demand fluctuations. In 2024, the company is among the top five companies in Gartner's Supply Chain Top 25 index (Gartner, 2024), attributed to its innovative practices and effective response to the COVID-19 pandemic and the following years after that. A notable example is the collaboration with Ethicon and Prisma Health to develop and distribute the VESper Ventilator Expansion Splitter, progressing from concept to launch in just ten days. Investments in technology have enabled uninterrupted manufacturing operations across many JNJ locations, even amid global challenges.

1.2. Shareholder Structure

Johnson & Johnson, listed on the NYSE since 1944, has 2.41 billion outstanding common shares, with 712.77 million held in treasury. Institutional investors, including asset managers and pension funds, control 73.11% of the floating stock. The top 5 institutional shareholders - Vanguard Group (9.60%), BlackRock (8.30%), State Street (5.58%), Geode Capital (2.33%), and Morgan Stanley (1.75%)—hold about 27.56%. Retail investors hold the remaining 26.80% and insiders hold a very low percentage. JNJ has a free float of 77%, higher than its peers (70-75%), which enhances liquidity and reduces volatility. The average trading volume over the last 12 months was 6.61 million shares. (Exhibit 1)

Exhibit 1: JNJ Shareholding Pattern



Source: Yahoo Finance

1.3. Stock Performance

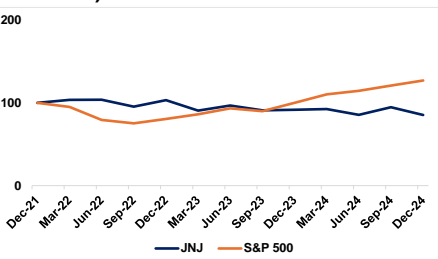
Analyzing Johnson & Johnson's stock performance over the past year highlights how legal liabilities and ongoing litigation, particularly around talc cases, continue to shape investor sentiment. Despite these challenges, JNJ has consistently demonstrated resilience, navigating external pressures while maintaining steady business growth and delivering value to shareholders.

One prominent example of this resilience was in 2017 when the company faced a 92.1% decline in net income due to the Tax Cuts and Jobs Act, which imposed a one-time provisional tax cost of \$13 billion. Despite this financial hit, JNJ sustained revenue growth, reinvested in core businesses, and upheld its commitment to dividend increases, reinforcing its reputation as a reliable income-generating stock for investors.

In addition to financial hurdles, JNJ has contended with numerous litigations, including product liability claims, intellectual property disputes, and government proceedings. These legal battles have periodically introduced volatility to the stock, yet JNJ's core business segments have continued to thrive. The pharmaceutical division has delivered robust growth in key therapeutic areas such as oncology, immunology, and neuroscience. Meanwhile, the MedTech segment, bolstered by strategic acquisitions like Abiomed, has expanded into high-growth markets, solidifying JNJ's leadership in innovation.

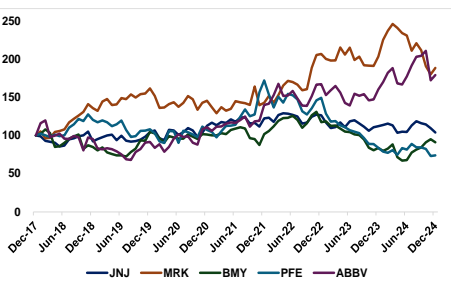
In early 2023, JNJ's stock outperformed the S&P 500 by 4.2%, but growing concerns about talc litigation and potential settlements weighed on the stock, causing it to decline to 8.9% below the S&P 500 by mid-year. In September 2023, JNJ announced a potential restructuring of its legal liabilities related to talc, sparking a recovery in its stock price from \$143.47 to \$170.45 by the month's end. However, the stock continued to trade at a 5.3% discount to the S&P 500, demonstrating the persistent impact of legal uncertainties despite the company's strong operational fundamentals. (Exhibit 2)

Exhibit 2: JNJ vs S&P 500 (Normalized Returns)



Source: Analyst Calculation

Exhibit 3: JNJ vs Peers (Normalized Returns)

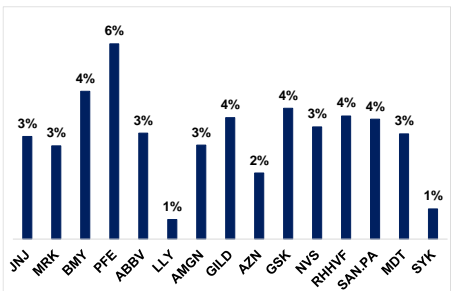


Source: Analyst Calculation

The stock has been trading in a range of \$140 - \$170 since December of 2021, showing a longer period of consolidation period, and has been able to hold its value in a range bound whereas its peers like Pfizer and Bristol Meyer Squibb are down 52% and 25% respectively. (Exhibit 3) Overall, Johnson & Johnson's ability to balance growth and manage risks underscores its position as a resilient industry leader. The company's diversified portfolio, commitment to innovation and growth organically and inorganically, and consistent dividend policy have enabled it to navigate challenges effectively while delivering value to shareholders.

1.4. Dividend Policy

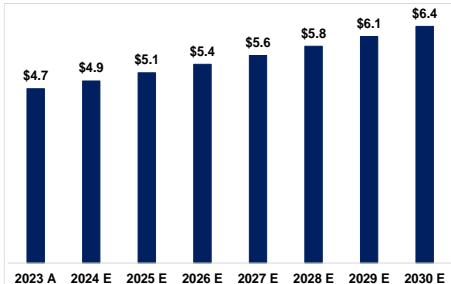
Exhibit 4: JNJ vs Peers (Dividend Yield %)



Source: Nasdaq

JNJ has defined a fixed policy regarding dividends, being paid every quarter. Dividend payouts have increased year-on-year, going from \$8.2 billion in 2015 to \$11.8 billion in 2023, with an average dividend payout ratio of 57.6%. In 2017, when JNJ's net income fell by 92.1%, from \$16.5 billion in 2016 to \$1.3 billion due to the Tax Cut and Job Act implemented in 2017, which resulted in a substantial increase in JNJ's dividend payout ratio of 297%. Following that, we can conclude that JNJ is keen on increasing its dividend per share, even when results decrease. During 2023, the annual dividend payments to its shareholders amounted to a total of \$4.7 per share. When comparing JNJ's dividend yield in 2023 with its peers, we can observe that Johnson & Johnson's stock is yielding a dividend of 3.09% slightly above its peers with an average yield of 2.78%. (Exhibit 4)

Exhibit 5: JNJ Dividend Forecast



Source: Analyst Calculation

The per-share dividend has grown at a 4.38% CAGR in the last five years and we estimate the company to grow at the same rate throughout our forecast period and declare a dividend payout of \$5.13 per share by 2025. (Exhibit 5)

2. Valuation

This section builds on the analysis of Johnson & Johnson's historical stock performance and dividend trends, detailing the methodologies, assumptions, and metrics utilized in the valuation model to estimate the company's share price.

2.1. Ratio Analysis

Return on Invested Capital (ROIC): Johnson & Johnson's historical ROIC performance highlights its ability to sustain strong fundamentals despite market challenges. In the Innovative Medicines segment, ROIC improved from 6% in 2019 to 17% in 2022, driven by robust sales growth from blockbuster drugs such as *DARZALEX*, *STELARA*, and *TREMFYA*. However, ROIC declined sharply to 4% in 2023, primarily due to increased litigation expenses and preparation for upcoming patent expirations. Compared to peers, JNJ's average ROIC of 11% (2019–2023) aligns with the peer median of 12%. Competitors like Eli Lilly (19%) and Pfizer (25%) outperformed, benefiting from faster revenue growth in high

Table 1: Innovative Medicines Historical ROIC

Ticker	2019	2020	2021	2022	2023
JNJ(IM)	6%	11%	14%	17%	4%
MRK	5%	7%	11%	10%	8%
BMY	6%	-10%	9%	9%	12%
PFE	11%	7%	21%	25%	2%
ABBV	19%	6%	13%	15%	7%
LLY	24%	32%	24%	25%	19%
AMGN	20%	18%	14%	16%	12%
GILD	12%	0%	13%	10%	12%
AZN	5%	10%	0%	5%	10%
GSK	15%	15%	9%	13%	18%
NOVN	8%	10%	28%	7%	12%
ROG	30%	31%	31%	27%	22%
SAN.PA	4%	15%	7%	9%	6%
Mean	13%	12%	15%	14%	12%
Median	11%	10%	13%	12%	12%

Source: Analyst Calculation

demand therapeutic areas like oncology and immunology. (Table 1)

In the MedTech segment, ROIC declined from 16% in 2019 to 11% in 2023, reflecting challenges in recovering elective procedure volumes post-COVID-19 and supply chain disruptions. Except for Intuitive Surgical, JNJ's MedTech ROIC outperformed the rest of the peers in the segment underlining its competitive positioning in high-margin areas such as Electrophysiology within Interventional Solutions. (Table 2)

Looking ahead, JNJ's ROIC is forecasted to improve in both segments, showcasing the company's strategic resilience and operational efficiency. In the Innovative Medicines segment, ROIC is expected to rebound from 4% in 2023 to 22% in 2024, with further growth to 48% by 2030. This sharp recovery will be driven by robust contributions from blockbuster drugs such as *DARZALEX*, *TREMFYA*, and *CARVYKTI*, which are anticipated to offset the impact of biosimilar competition for patents expiring between 2024 and 2030. Additional factors driving this improvement include cost optimization, economies of scale, and declining capital expenditure intensity as prior R&D investments yield returns. Compared to peers, JNJ's forecasted ROIC of 48% (2030) outpaces the historical peer median of 13%, reflecting its diversified portfolio and strong pipeline. (Exhibit 6)

In the MedTech segment, ROIC is projected to rise from 12% in 2024 to 17% by 2030, supported by sustained growth in high-margin subsegments such as Electrophysiology and Advanced Surgery. Margin expansion from technological advancements and improved utilization of surgical platforms will also contribute to this growth. While JNJ's forecasted ROIC aligns closely with Intuitive Surgical (16%), it remains behind leaders like Boston Scientific (26%), indicating room for further operational leverage in MedTech. (Exhibit 7)

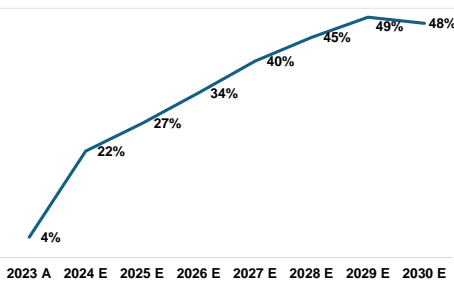
Several key factors drive JNJ's ROIC improvement during the forecast period. First, revenue growth in Innovative Medicines will be propelled by contributions from newer therapies and the introduction of high-margin oncology and immunology products. In MedTech, growth will be driven by technological advancements in surgical solutions and strong demand in interventional segments. Second, operating margin expansion, supported by cost optimization and strategic product mix adjustments, will significantly enhance profitability. Third, improved capital efficiency—achieved through reduced R&D intensity and better utilization of assets—will lower the capital requirements for sustaining growth. Fourth, proactive lifecycle management strategies will mitigate the impact of patent expirations, particularly for Stelara and Xarelto, ensuring stability in revenue streams. Lastly, litigation costs are expected to stabilize post-2025, freeing up resources for reinvestment.

Table 2: Medtech Historical ROIC

Ticker	2019	2020	2021	2022	2023
JNJ(MT)	16%	15%	15%	16%	11%
BSX	26%	0%	4%	3%	6%
ISRG	18%	12%	16%	11%	15%
MDT	6%	5%	7%	5%	5%
SYK	10%	6%	7%	8%	11%
Mean	15%	6%	8%	7%	9%
Median	14%	6%	7%	7%	8%

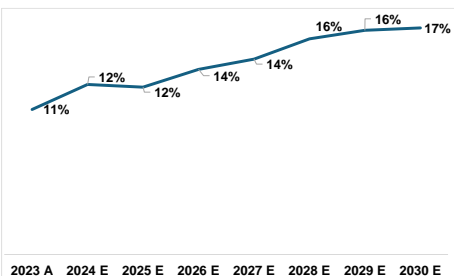
Source: Analyst Calculation

Exhibit 6: Innovative Medicines ROIC Forecast



Source: Analyst Calculation

Exhibit 7: Medtech ROIC Forecast



Source: Analyst Calculation

Table 3: Historical Return on Equity

Ticker	2019	2020	2021	2022	2023
JNJ	24%	24%	31%	23%	44%
MRK	37%	18%	39%	35%	1%
BMJ	10%	20%	19%	19%	27%
PFE	17%	10%	32%	36%	2%
ABBV	0%	186%	81%	72%	35%
LLY	75%	150%	76%	64%	49%
AMGN	71%	76%	73%	126%	136%
GILD	25%	1%	32%	22%	26%
AZN	10%	22%	0%	9%	16%
GSK	57%	42%	23%	33%	41%
NOVN	11%	15%	39%	10%	16%
ROG	47%	41%	46%	47%	40%
SAN.PA	5%	20%	9%	12%	7%
BSX	42%	-1%	7%	4%	9%
ISRG	18%	12%	16%	12%	15%
MDT	10%	7%	10%	7%	7%
SYK	17%	12%	14%	15%	18%
Mean	28%	40%	32%	33%	28%
Median	18%	19%	27%	20%	17%

Source: Analyst Calculation

Return on Equity (ROE): Johnson & Johnson’s historical ROE showcases the company’s resilience amid external challenges and its ability to sustain shareholder returns. In 2016, the company achieved a solid ROE of 21%, driven by strong performance in its Innovative Medicines and MedTech segments. However, in 2017, ROE dropped sharply to 5% primarily due to the Tax Cuts and Jobs Act, which introduced a \$13 billion provisional tax cost significantly reducing net income and overshadowing its operational strengths.

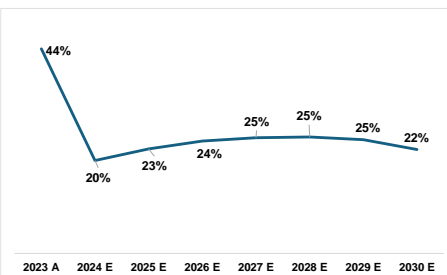
From 2018 to 2020, JNJ’s ROE rebounded to a stable range of 23-24%, driven by the success of blockbuster drugs such as Stelara, Darzalex, and Tremfya in the Innovative Medicines segment, as well as the recovery of elective procedures in MedTech. By 2021, ROE surged to 31%, fueled by high-margin growth in oncology and immunology therapies, along with the resurgence of demand in MedTech following the COVID-19 pandemic. In 2023, ROE peaked at an impressive 44%, reflecting record comprehensive earnings of \$30.4 billion, driven by existing drugs such as Darzalex and Stelara, and new product launches in oncology (e.g., Carvykti) and contributions from MedTech innovations like Abiomed.

JNJ’s historical ROE performance averaged 26%, aligning closely with the peer group mean of 28%. The company demonstrated lower volatility compared to peers such as Amgen and AbbVie, whose ROE fluctuated significantly due to reliance on specific blockbuster products. JNJ also outperformed underperformers like Pfizer, AstraZenca, Novartis, Saofi, and Medtronic PLC highlighting its superior operational efficiency and portfolio diversification. (Table 3)

Looking forward, our analysis estimates that JNJ’s ROE is expected to stabilize within a range of 20-25% during the forecast period. In 2024, ROE is projected to be around 24%, reflecting the impact of biosimilar competition for key drugs like Stelara and increased equity levels as retained earnings are reinvested into R&D. However, ROE is forecasted to recover from 2025 onwards, averaging around 24% by 2030, supported by robust growth in oncology, immunology, and high-margin MedTech subsegments such as Electrophysiology and Advanced Surgery. (Exhibit 8)

While share buybacks amplified ROE historically by reducing the equity base, the forecasted expansion of retained earnings reinvested into new product development and acquisitions is expected to increase the equity base, moderating the leverage effect. These disciplined capital allocation strategies reflect JNJ’s commitment to maintaining a balanced and sustainable capital structure. Compared to peers, JNJ’s forecasted ROE aligns closely with the industry mean of 28%. While slightly lagging behind industry leaders like Eli Lilly (49%), JNJ’s ROE significantly outpaces underperformers such as Medtronic PLC (7%), reflecting its consistent execution and balanced capital allocation.

Exhibit 8: Forecasted Return on Equity



Source: Analyst Calculation

2.2. Discount Rate

Capital Asset Pricing Model (CAPM) estimations for JNJ were based on an Equity Risk Premium (ERP) of 4.12%, sourced from Damodaran's "Equity Risk Premium" database (Damodaran, 2024), updated in July 2024. To represent the risk-free rate, the 10-year U.S. Treasury bond yield of 4.39% as of 13th December 2024 was used, as JNJ's cashflows are denominated in US dollars. (Federal Reserve of St. Louis, 2024)

Cost of debt: We estimated JNJ's cost of debt by using the Sovereign CDS spread from Damodaran's "Risk Premium for Other Markets" database (Damodaran, Country Default Spreads and Risk Premiums, 2024). With JNJ's AAA rating by Moody's, the company's credit default spread is 0.49% (World Government Bonds 2024). We applied this spread to the 10-year U.S. Treasury bond yield of 4.39%, which serves as the risk-free rate. By adding the credit default spread to the risk-free rate, we calculated JNJ's cost of debt to be 4.88%, reflecting the low-risk nature of its debt.

Cost of Equity: To estimate JNJ's cost of equity, we began by selecting the U.S. 10-year bond yield of 4.39% as the risk-free rate, since JNJ is a U.S.-based company. The equity risk premium was sourced from Damodaran's "Equity Risk Premium" database, with a value of 4.12%. To calculate the levered beta for JNJ, we used the bottom-up beta approach by analyzing the peer group of companies.

To calculate Johnson & Johnson's beta, we first analyzed peer companies by regressing their historical five-year returns against the S&P 500 to determine individual levered betas. These betas were then unlevered using each company's net debt-to-equity ratios and tax rates to isolate their business risk. We calculated an industry-wide unlevered beta of 0.54.

Next, we re-levered this unlevered beta using JNJ's capital structure, which includes a debt-to-equity ratio of 6.42% and a tax rate of 27%, resulting in a levered beta of 0.57 for JNJ. Finally, we applied this levered beta in the Capital Asset Pricing Model (CAPM) formula and the calculation yielded JNJ's cost of equity at 6.72%.

Using the derived cost of equity of 6.70% and cost of debt of 4.88%, we calculated JNJ's Weighted Average Cost of Capital (WACC). With the weight of equity at 94.96% and debt at 5.04%, and applying a tax rate of 27%, we arrived at a WACC of 6.56%. (Table 4)

Table 4: WACC Estimation

WACC Calculation	%
Risk Free Rate	4.39%
Beta (Levered)	0.57
Equity Risk Premium	4.12%
Cost of Equity (Re)	6.72%
JNJ Credit Rating	AAA
U.S. Credit Rating	Aa1
Sovereign CDS Spread	0.49%
Loss Given Default	0.00%
Cost of Debt (Rd)	4.88%
Debt %	5.04%
Equity %	94.96%
Tax	27.00%
WACC	6.56%

Source: Analyst Calculation

2.3. Equity Valuation

After evaluating JNJ's WACC and free cash flow projections until 2040, we estimated the terminal growth rate to arrive at the enterprise value. We derived this

by forecasting JNJ's Return on Invested Capital (ROIC) and reinvestment rate for 2040. Our estimates give a 21.31% ROIC for JNJ at an organizational level by 2040 and with a reinvestment rate of 11.54%, we arrived at a terminal growth rate of 2.46%.

Adjusted Present Value (APV): Using the Adjusted Present Value (APV) method, we estimated Johnson & Johnson's unlevered enterprise value at \$471.7 billion by 2025, discounting its unlevered free cash flows at a 6.62% unlevered cost of capital. Adding the value of the tax shield (\$4.7 billion), net debt, and non-operating cash flows brings the levered enterprise value to \$491.8 billion. After adjusting for net debt of \$14.5 billion, the equity value stands at \$477.4 billion, translating to a projected per-share value of \$191 by 2025. This represents a potential upside of 30% from the current share price of \$146.62. The APV method provides a clear breakdown, capturing JNJ's strong fundamentals, tax benefits, and growth potential. (Table 5)

Table 5: Share Price (APV Method)

Target Share Price - APV Method	
Particulars	USD
Enterprise Value (Levered)	\$491,873
Value of Net Debt	14,519
Equity Value	\$477,354
# of Shares Outstanding (in mn)	2,504
Price per Share (USD)	\$191

Source: Analyst Estimate

Discounted Cash Flows (DCF): Using the Discounted Cash Flow (DCF) method, we projected JNJ's Weighted Average Cost of Capital (WACC) annually from 2025 to 2040, leveraging the Debt/Enterprise Value and Equity/Enterprise Value ratios derived from the APV method. JNJ's WACC is forecasted to rise from 6.58% in 2025 to 6.80% by 2040, driven by the company's shift to negative net debt after 2028. This shift is due to growing excess cash surpassing debt obligations, reducing the benefits of the tax shield and slightly increasing WACC over time.

Table 6: Share Price (DCF Method)

Target Share Price - DCF Method	
Particulars	USD
Enterprise Value	\$473,028
Value of Net Debt	14,519
Equity Value	\$458,509
# of Shares Outstanding (in mn)	2,504
Price per Share (USD)	\$183

Source: Analyst Calculation

Applying this evolving WACC to forecasted cash flows, we calculated an Unlevered Enterprise Value of \$457.5 billion. Adding net debt and non-operating cash flows yields a Levered Enterprise Value of \$473.0 billion. After adjusting for net debt, we derived an Equity Value of \$458.5 billion, translating to an estimated per-share value of \$183 by 2025, representing a 25% potential upside from the current price of \$146.62. This analysis reflects JNJ's strong financial position and growth potential. (Table 6)

The difference in target share price using both the Adjusted Present Value and Discounted Free Cash Flow method is due to the present value of tax shield that is calculated in the adjusted present value method. The debt forecasted in JNJ's balance sheet allows the company to take advantage of tax shield as interest on debt is a tax-deductible expense, therefore the present value of tax shield increase the enterprise value under the APV method as compared to DCF method.

2.4. Relative Valuation

We conducted a relative valuation for Johnson & Johnson using a peer group of 16 companies identified in its 2024 Proxy Statement, spanning both the Innovative Medicines and MedTech segments (Johnson and Johnson, 2024). JNJ's peer

Table 7: Relative Group Multiples

Ticker	EV / Revenue	EV / EBITDA	P/E
JNJ	4.3x	14.6x	23.9x
MRK	4.6x	13.8x	18.8x
BMJ	3.3x	30.5x	0.0x
PFE	3.8x	38.2x	0.0x
ABBV	6.6x	20.1x	57.8x
LLY	19.0x	62.1x	89.5x
AMGN	6.1x	14.6x	34.4x
GILD	4.9x	25.6x	108.5x
AZN	4.7x	16.5x	32.0x
GSK	2.7x	12.4x	28.0x
NOVN	3.9x	9.9x	10.1x
ROG	3.9x	12.7x	18.8x
SAN.PA	2.6x	14.2x	24.8x
BSX	9.3x	38.7x	72.7x
ISRG	23.9x	74.6x	85.7x
MDT	4.0x	15.5x	26.9x
SYK	7.0x	28.3x	39.8x
Mean	6.7x	26.0x	39.5x
Median	4.6x	16.5x	28.0x

Source: Analyst Calculation

group shows a significant range of valuation multiples, reflecting differences in business focus, segmental dynamics, and market positioning. EV/Revenue multiples range from 2.7x (GlaxoSmithKline) to 23.9x (Intuitive Surgical), and EV/EBITDA multiples span 9.9x (Novartis) to 74.6x (Intuitive Surgical). These discrepancies highlight the challenges of direct comparison, as Innovative Medicine companies like Sanofi and Novartis typically trade at lower multiples due to slower growth tied to patent expirations and reliance on mature product lines. Conversely, MedTech companies such as Intuitive Surgical and Boston Scientific command premium multiples due to their strong positions in high-growth markets. Additionally, investor confidence bolsters companies like AbbVie and Eli Lilly, given their leadership in oncology and immunology. (Table 7)

While median-based valuation offers a benchmark, JNJ stands apart as a diversified healthcare leader, excelling in both Innovative Medicines and MedTech segments. Our analysis identified peer group medians of 4.6x EV/Revenue, 16.5x EV/EBITDA, and 28.0x P/E. Adjusting for JNJ's projected 2025 net debt, these multiples imply an equity value translating to a share price range of \$178 to \$222, representing a potential upside of 21% and 51% by the end of 2025. (Table 8)

Table 8: Share Price (Relative Valuation Method)

Particulars	EV / Revenue	EV / EBITDA	P/E
Implied Enterprise Value	\$443,768	\$549,082	\$486,569
Net Debt	14,519	14,519	14,519
Implied Market Value	429,249	534,563	472,051
Shares Outstanding	2,408	2,408	2,408
Implied Value per Share	\$178	\$222	\$196

Source: Analyst Calculation

2.5. Sensitivity Analysis

Our sensitivity analysis explores how changes in terminal growth rates and WACC impact JNJ's price target and enterprise value. (Table 9 and Table 10) The DCF – Implied Per Share table reveals an estimated share price range of \$163 to \$216. Under the base case, with a WACC of 6.56% and a perpetuity growth rate of 2.46%, the implied share price is \$183. Optimistic assumptions, such as a 5.56% WACC and 3.46% growth rate, yield the highest estimate of \$216, while less favourable conditions, like a 7.56% WACC and 1.46% growth rate, resulting in the lowest estimate of \$163.

Table 9: Sensitivity Analysis – Enterprise Value

Sensitivity Analysis - Enterprise Value						
Perpetuity Growth Rate						
		1.46%	1.96%	2.46%	2.96%	3.46%
WACC	5.56%	428,403	449,794	476,366	510,267	555,025
	6.06%	427,235	448,409	474,688	508,176	552,319
	6.56%	426,076	447,038	473,028	506,108	549,646
	7.06%	424,928	445,679	471,384	504,062	547,006
	7.56%	423,790	444,333	469,757	502,039	544,397

Source: Analyst Calculation

Table 10: Sensitivity Analysis – Share Price

Sensitivity Analysis - Share Price						
		Perpetuity Growth Rate				
		1.46%	1.96%	2.46%	2.96%	3.46%
WACC	5.56%	165	174	184	198	216
	6.06%	165	173	184	197	215
	6.56%	164	173	183	196	214
	7.06%	164	172	182	195	213
	7.56%	163	172	182	195	212

Source: Analyst Calculation

To enhance our sensitivity analysis, we developed four distinct scenarios to evaluate their potential impact on JNJ's valuation and share price.

Bull Case: In this scenario, we anticipate accelerated revenue growth fueled by successful product launches, lower litigation costs, standout performances from key drugs like Darzalex and Stelara, and robust global healthcare spending.

Base Case: This assumes steady growth driven by forecasted performance across innovative medicines and MedTech segments, litigation expenses contained within expected limits, and strong contributions from pipeline drugs.

Bear Case: This scenario accounts for potential setbacks, including revenue declines due to biosimilar competition, higher litigation expenses, limited MedTech growth, and unfavorable macroeconomic conditions.

Economic Downturn Case: Here, we assume reduced global healthcare spending, rising interest rates leading to a higher cost of capital, and slower revenue recovery across all segments.

The resulting deviations in share prices under each scenario are outlined in the table below, highlighting the range of potential outcomes based on varying market dynamics and return on investors. (Table 11)

Table 11: Results from Scenario Analysis

Scenarios	WACC	Growth Rate	Share Price	Investor Return
Bull	5.56%	3.46%	216	47.21%
Base	6.56%	2.46%	183	24.88%
Bear	7.06%	1.96%	172	17.43%
Economic Downturn	7.56%	1.46%	163	11.47%
CMP	-	-	147	-

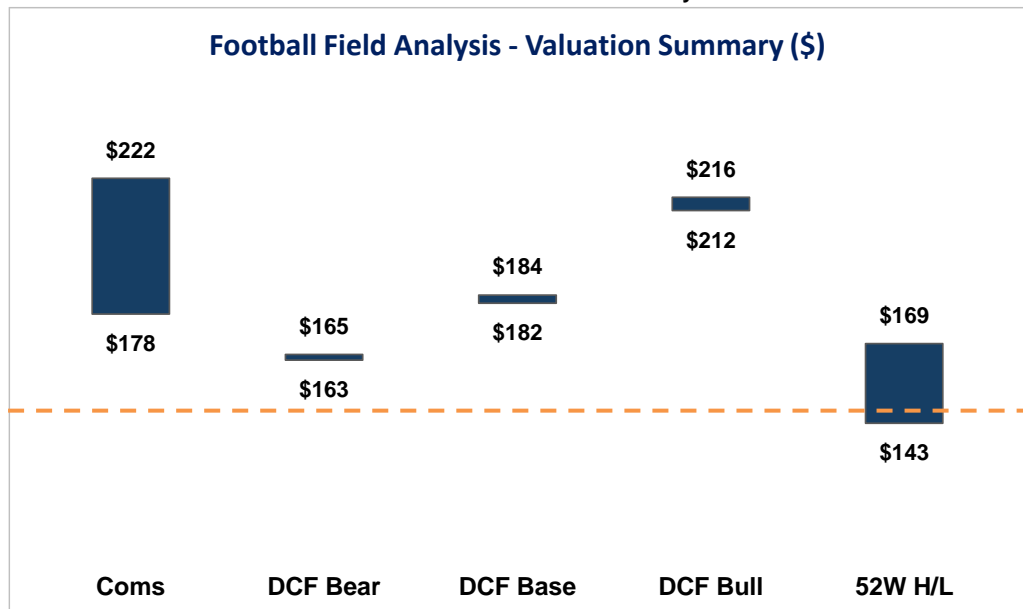
Source: Analyst Calculation

2.6. Football Field Analysis

The football field chart provides a dynamic overview of our estimates of Johnson & Johnson's valuation across multiple methodologies, including Relative Valuation, DCF-based Bull, Base, and Bear scenarios, as well as the stock's 52-week high and low range.

This below football field analysis highlights both the upside potential and downside risks. (Exhibit 9) As highlighted in the sensitivity analysis on the higher end, the stock demonstrates significant growth opportunities, particularly if JNJ delivers strong operational performance, benefits from favorable market conditions, or positive sentiment within the pharma and healthcare sectors prevails, as reflected in the comps and DCF bull case valuations. Conversely, the DCF bear case and historical price lows underscore potential risks, such as adverse market conditions or operational setbacks, that could lead to declines.

Exhibit 9: JNJ Football Field Analysis



Source: Analyst Calculation

2.7. Value at Risk

Table 12: VaR Estimates

Value at Risk (Historical)	
Mean	1.01%
Std Deviation	5.67%
Min	-18.38%
Max	18.76%
CMP	146.62

Source: Analyst Calculation

To evaluate the risk exposure of Johnson & Johnson's stock price, we developed a Value at Risk (VaR) model using historical monthly price data since 1980. This model estimates the maximum potential loss in JNJ's stock price over one month at varying confidence levels: 95%, 99%, and 99.5%. The analysis captures periods of heightened volatility, often linked to significant market events or company-specific developments, such as litigation risks or broader economic downturns. The table below summarizes the potential losses for JNJ's stock over the next month based on these confidence intervals. (Table 12 and Table 13)

Table 13: VaR Results at Various Confidence Intervals

Percentile	Confidence	VAR (%)	Stock Price	VAR (\$)
5.0%	95.0%	-7.9%	135.0	(11.6)
1.0%	99.0%	-13.2%	127.3	(19.3)
0.5%	99.5%	-15.3%	124.2	(22.4)

Source: Analyst Calculation

Table 14: Monte Carlo Simulation

Monte Carlo Simulation	
Mean	0.99%
Std Deviation	5.72%
Min	-20.26%
Max	25.61%
CMP	146.62

Source: Analyst Estimate

2.8. Monte Carlo Simulation

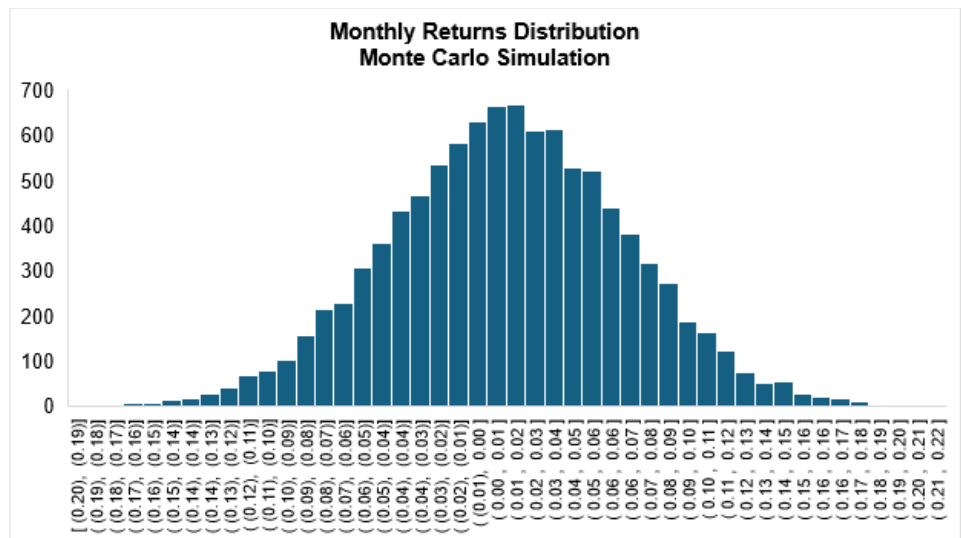
To enhance the insights from our Value at Risk model, we performed a Monte Carlo simulation using the sorted mean return derived from the VaR analysis. This simulation involves 10,000 simulations to evaluate the potential future price movements of JNJ's stock across various market scenarios. By leveraging this approach, we gain a probabilistic understanding of how JNJ's stock price might evolve under different conditions. Our findings reveal the expected stock price trajectory at varying confidence intervals, offering valuable insights into potential downside risks in a bear and economic downturn case over the next 30 days as explained in the sensitivity analysis. (Table 14) The results are summarized below in (Table 15) and a monthly return distribution in (Exhibit 10)

Table 15: Results of Monte Carlo Simulation

Percentile	Confidence	VAR (%)	Stock Price	VAR (USD)
5.0%	95.0%	-8.4%	134.2	(12.4)
1.0%	99.0%	-12.1%	128.8	(17.8)
0.5%	99.5%	-13.6%	126.6	(20.0)

Source: Analyst Calculation

Exhibit 10: Returns Distribution



Source: Analyst Calculation

2.9. Investment Risk

Johnson & Johnson faces several operating and macroeconomic risks that could significantly impact on its performance in the next 12 months.

One of the most pressing uncertainties revolves around the settlement of the talc-related lawsuits. While the company has proposed settlements, the final resolution remains uncertain and could result in higher-than-anticipated costs. These lawsuits also have reputational consequences, potentially damaging JNJ's brand and leading to increased scrutiny of its products. Moreover, ongoing and future litigations related to product liability, patent challenges, or regulatory compliance could require JNJ to increase its provisions for legal settlements, creating an additional burden on its cash flows. (World Government Bonds 2024)

The broader macroeconomic environment poses considerable risks. The U.S. stock market, which reached record highs in 2024, is at risk of a correction. This concern is amplified by the potential for new policies and trade tariffs under the recently elected U.S. president taking office in January 2025. Additionally, persistent inflationary pressures and the possibility of higher interest rates could increase JNJ's cost of capital, thereby impacting valuations and financial flexibility. A potential recession, triggered by declining consumer spending and global economic uncertainties, could also reduce demand for JNJ's MedTech products and pharmaceuticals in certain markets.

Global supply chain disruptions remain a challenge for the healthcare sector, and JNJ is no exception. Rising geopolitical tensions, especially in regions critical to JNJ's manufacturing and distribution networks, could delay product launches, increase raw material costs, or disrupt inventory management. The company's ability to manage and diversify its supply chain efficiently will be critical in mitigating these risks.

Changes in healthcare regulations, particularly in the U.S. and Europe, present another significant risk. Proposals to cap drug prices or alter reimbursement policies could affect JNJ's profitability, especially in its pharmaceutical division. In addition, greater scrutiny from regulators could delay product approvals or lead to costly compliance issues.

Competition within the pharmaceutical and MedTech segments remains intense. JNJ's blockbuster drugs like Stelara and Darzalex face patent expirations shortly, and the introduction of biosimilars could erode their market share. Furthermore, competitors in the MedTech space, particularly high-growth companies like Intuitive Surgical, may continue to capture market share, pressuring JNJ's growth in this segment.

The convergence of these risks underlines the importance of closely monitoring

external developments that could impact JNJ's cash flows and valuation. Our sensitivity analysis in the DCF model highlights how changes in WACC or terminal growth rates could shift the implied share price between \$170 and \$229, depending on market conditions. JNJ's ability to navigate these risks through operational efficiency, legal settlements, innovation, and supply chain diversification will be pivotal in delivering value to shareholders.

Bibliography

- Damodaran, Aswath. 2024. *Country Default Spreads and Risk Premiums*. January 5. https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html.
- . 2024. *Equity Risk Premiums*. December 1. <https://pages.stern.nyu.edu/~adamodar/>.
- Federal Reserve of St. Louis. 2024. *Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity*. December 11. <https://fred.stlouisfed.org/series/DGS10/>.
- Gartner. 2024. *The Gartner Supply Chain Report*. Stamford: Gartner, Inc.
- John Hopkins School of Medicine. 2024. *Diabetes and Heart Disease*. n.a. n.a. Accessed December 12, 2024. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/diabetes/diabetes-and-heart-disease>.
- Johnson and Johnson. 2024. *Johnson and Johnson Acquisitions*. August 20. <https://www.jnj.com/media-center/press-releases/johnson-johnson-to-acquire-v-wave>.
- . 2020. *Johnson and Johnson Acquisitions*. August 19. <https://www.jnj.com/media-center/press-releases/johnson-johnson-to-acquire-momenta-pharmaceuticals-inc-expanding-janssens-leadership-in-novel-treatments-for-autoimmune-diseases>.
- . 2020. *Johnson and Johnson Press Release*. August 19. <https://www.jnj.com/media-center/press-releases/johnson-johnson-to-acquire-momenta-pharmaceuticals-inc-expanding-janssens-leadership-in-novel-treatments-for-autoimmune-diseases>.
- Johnson and Johnson. 2024. *Notice of Annual Meeting and Proxy Statement 2024*. New Brunswick: Johnson and Johnson, 81. https://www.sec.gov/Archives/edgar/data/200406/000020040624000024/jnj-20240311.htm#i224338ee806e418b9fa0ce31fa156426_3824.
- Moody's Corporation. 2024. *Moody's Company Ratings*. May 13. https://www.moody's.com/research/Moodys-Ratings-assigns-Aaa-ratings-to-Johnson-Johnsons-sr-Rating-Action--PR_490104.
- World Government Bonds. 2024. *World Government Bonds*. 12 13. Accessed 12 2024. <https://www.worldgovernmentbonds.com/country/united-states/>.