

Waste Management (WM)

University of Missouri IFM Portfolio

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Highlights

- **2025 Sales Growth:** Revenue increased 14.2% YoY due to acquisitions, yield increases, and volume increases.
- **FCF Generation:** WM generated \$2.94B in FCF during FY2025 and projected \$3.8B for FY2026.
- **Catalysts:** Expansion into medical waste, renewable energy, and investment into automated recycling which can see substantial revenue from datacenters.
- **Risks:** High leverage, interest rates, inflation pressure, and premium valuation.

Investment Rationale & Risk

WM is an established, quality company with a large balance sheet that is being traded like a defensive stock. Management has shown that they can increase their margins and the business generates healthy FCF, making it a great defensive addition to the portfolio. Additionally, the stock has a low beta which supports the fund's beta target.

The key risks are liquidity and inflation. WM is highly leveraged due to the recent Stericycle acquisition. While not uncommon for this industry, WM has a D/E ratio of 3.51 and a current ratio of 0.89. Should inflation increase, margins will compress and affect profitability.

IFM Portfolio Recommendation

WM fits the fund's beta target but does not fit the fund's value target. However, an addition should be considered due to the defensive nature of the stock and the quality cash flows of the business, assuming the share price falls below \$200. The value target was intended to produce negative (or low) correlations with the market, which is closely satisfied by the low beta. If a purchase is authorized, the acquisition will be funded through a sale of another Industrials equity, likely Delta Air Lines (DAL), or a substitution with Republic Services (RSG).

Rating: Market Perform

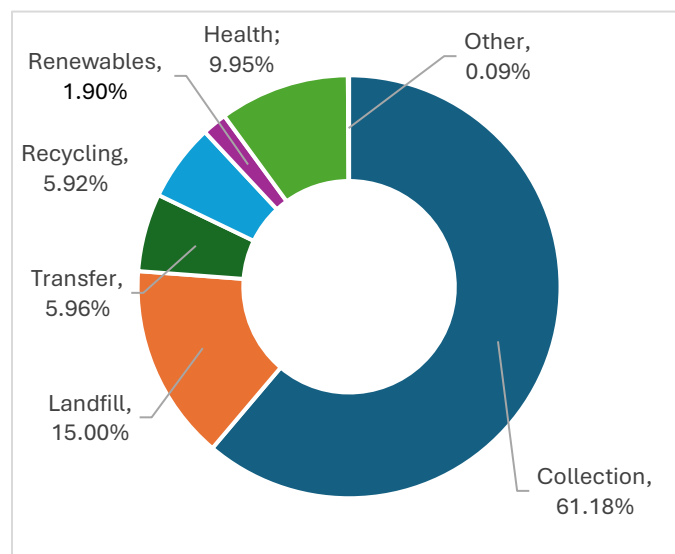
WM is a defensive, quality name in a volatile market with material growth potential.

| Summary | |
|-----------------------------|-------------------------------------|
| Ticker | WM |
| Sector | Industrials |
| Industry | Environmental and Facility Services |
| Rating | Neutral |
| Price Target | \$215 (-8.67%) |
| Current Price | \$235.42 |
| 52 week range | \$194.11 - \$248.13 |
| P/E | 35.08 |
| Beta (Percentile) | 0.53 (19%) |
| Market Cap \$B (Percentile) | \$94.85 (76.3%) |
| B/P (Percentile) | 0.09 (21.4%) |
| Ret 250 (Percentile) | -0.6% (35%) |
| EBITDA Yield | 8.59% |
| Dividend | \$3.30 |
| Dividend Yield | 1.50% |

Corporate Overview

Waste Management operates across six segments: collection (curbside and backend pickup from residential, commercial, and industrial clients), landfill (250+ engineered facilities processing 100M+ tons of MSW annually), transfer (340+ consolidation stations that compact and reload waste for transport), recycling (MRF-based sorting across single-stream, commercial fibers, debris, and specialty waste), renewable energy (landfill methane captured for RNG production), and healthcare (medical waste collection, treatment, and compliance for sharps and pharmaceuticals).

No single customer exceeds 1% of sales. Key suppliers are CNR (0.26%), TEX (1.06%), and ORCL (0.25%). Revenue is almost entirely North American, (94.87%) US, (3.84%) Canada and primary competitors are RSG, WCN, GFL, and CLH.



Corporate Governance

Waste Management has an ESG score of 4.88 and ranks in the 80th percentile of peers. 0.21% of the stock is owned by insiders. The board (neither staggered or classified) is 88.9% independent with no poison pill provisions or dual class shares. Their public accounting auditor is Ernst & Young LLP (EY).

Corporate Strategy

Waste Management has positioned itself for success by vertically integrating the waste management process and operating nationwide, affording them the benefits of scale like lower unit costs. The industry's asset-heavy nature creates high barriers to entry, granting Waste Management a durable moat. The company also continues to grow through acquisitions, like the recent Stericycle purchase, expanding into new revenue models. However, Waste Management faces external weaknesses in inflation, interest rates, commodity pricing, regulation, and labor costs. Margin compression is a real risk, as a highly leveraged company, rising interest rates directly increase the cost of debt, a key success metric for the business.

Regulatory hurdles around landfill permitting are costly and time-consuming, and compliance failures expose the company to litigation and fines. Finally, commodity pricing in recycling and natural gas, roughly 7.8% of total revenue, can have material effects on profitability.

Major Developments

The current administration has rolled back monopolistic scrutiny which catalyzed Waste Management's purchase of Stericycle and added over one billion dollars in revenue. Additionally, the integration of AI and robotics into the sorting of waste and logistics optimization has decreased operating costs and stands to continue to make companies more efficient. As technology improves, it's likely that companies will be less dependent on labor markets. Culturally, the industry is shifting into recycling and other ESG initiatives, where Waste Management is well positioned to grow.

| Board of Directors | | Leadership Team | |
|-----------------------|----------------|--------------------|-------------------------------------|
| Director | Role | Name | Title |
| James C. Fish, Jr. | Director (CEO) | James C. Fish, Jr. | CEO & Director |
| Kathleen Mazzarella | Chairman | John Morris | President & COO |
| William Plummer | Director | David L. Reed | EVP & CFO |
| Sean Menke | Director | Chuck Boettcher | EVP, Corp Dev & Chief Legal Officer |
| Victoria Holt | Director | Tara Hemmer | SVP & Chief Sustainability Officer |
| Andres Ricardo Gluski | Director | Kim Stith | Chief HR Officer |
| Weilert Maryrose | Director | John Varkey | SVP & CIO |
| Sylvester Bruce | Director | | |
| Chinn | Director | | |
| Tom Bene | Director | | |

Technical Analysis



WM saw very strong gains after November 2025 and experienced an upward trend until late March. Recently, the stock has fallen below its 50-day SMA (red). No fundamental news has surfaced, so this drop is likely to be purely technical. Currently the stock is experiencing support at the \$220 price point and resistance at the \$250 price point. Additionally, the 100-day SMA (yellow) has broken through the 200-day SMA (blue), indicating a possible up trend.



I don't believe the negative downtrend will persist for two reasons. Firstly, no company news has justified this decrease. A defensible argument is overvaluation concern, yet WM still trades at a modest EV/EBITDA discount relative to its peers (-5%). Lastly, the 100-day SMA has broken through the 200-day SMA. This signals a long-term price trend. Additionally, many equities have seen drops across the last few weeks due to the Hormuz oil supply shock, so this price action doesn't concern me in the long term. I expect the price to fluctuate between \$220 and \$250 until the company's next earnings date (April 28, 2026).

Momentum Analysis

Waste Management (WM) has a momentum percentile of 35.30%, indicating negative momentum. The stock has returned 2.63% in one year and -4.32% in the last month, and down -5.13% from its 52 week high. These figures are unsurprising considering the geopolitical environment. As an extremely large waste management company, I wouldn't expect the stock to have large momentum potential towards the upside or downside. My recommendation is based on cash flows and the defensive demand of the industry. It's important to note that while WM does have a low beta, recent price movement is likely tied to the overall market. The graph below compares the SPY against WM for the last few months, where the movement in the SPY is matched by movement in WM.

Relative Performance

Waste Management (WM) has underperformed the sector for the last year. The XLI has seen many economic tailwinds and received support from the current administration. I don't expect this trend to continue, especially if oil prices remain high. However, when compared against industry peers, WM has largely outperformed its competitors across the last year. Notably, Republic Services (RSG), which is an IFM holding, has underperformed Waste Management (WM) across the last year.

| Company | RET20 | RET250 |
|--|---------------|---------------|
| WASTE MANAGEMENT, INC. (XNYS:WM) | -4.32% | 2.63% |
| REPUBLIC SERVICES, INC. (XNYS:RSG) | -3.40% | -8.50% |
| WASTE CONNECTIONS, INC. (XNYS:WCN) | -2.39% | -14.70% |
| CASELLA WASTE SYSTEMS, INC. (XNAS:CWST) | -7.28% | -24.24% |
| GFL ENVIRONMENTAL INC. (XNYS:GFL) | -0.02% | -7.63% |
| CLEAN HARBORS, INC. (XNYS:CLH) | 4.96% | 48.28% |
| ENVIRI CORPORATION (XNYS:NVRI) | 12.75% | 251.59% |
| Sel Sector:Ind SS SPDR (ARCX:XLI) | -3.63% | 30.32% |
| <i>Peer Company Average</i> | <i>-1.73%</i> | <i>33.20%</i> |
| <i>Sector Average</i> | <i>-4.79%</i> | <i>30.72%</i> |
| <i>Sector 30th Percentile</i> | <i>-6.62%</i> | <i>11.36%</i> |
| <i>Sector Median</i> | <i>-4.72%</i> | <i>28.64%</i> |
| <i>Sector 70th Percentile</i> | <i>-2.32%</i> | <i>47.61%</i> |



Financial Statement Analysis

Waste Management has seen explosive revenue growth, considering the size of the company. Revenue has increased 14.24% from 2024, mainly due to the Stericycle integration which allows Waste Management to participate in the health waste management industry. Both pre-tax and after-tax operating income increased year-over-year, however, growth is slowing. The likely explanation is that Stericycle operated at lower margins than Waste Management. Over time, I expect these margins to improve. In total, net income increased a modest 4.83% for reasons stated previously. GAAP earnings per share saw a minor decrease of 1.62%. Dividends per share are increasing, and will likely continue to increase.

Historically, management has consistently increased payouts for shareholders and has already announced a \$3.86 dividend for FY2026. Additionally, the management team announced a three billion dollar share buyback program, which highlights the strong cash flow generation of the business. The reinvestment rate in 2024, as well as FCF, is negative due to the Stericycle acquisition. However, the profitability of the business led to positive free cash flows in 2025. Net profit margin saw a decrease from 2024 due to the lower operating margins of Stericycle. As the business continues to expand and create efficiency in the segment, the margin will improve.

Additionally, management has guided lower capital expenditures for FY2026, which will help margins, as well as investments in automation. ROIC saw an increase from 2024, indicating better internal efficiency. ROE dropped year-over-year, despite an increase in net income. This was caused by an addition of \$1.737 billion to the company's shareholder's equity, which was larger than the company's net income growth rate.

DuPont Analysis

Waste Management's DuPont shows a company that has a large ROE that is created with debt. The profit margin outperforms the sector median (10.87%). The ROA is lower than the sector median due to Waste Management's large asset base, which is demonstrated through a high equity multiplier (6.46), representing 2.54 times the sector median. Finally, the TAT is lower than the sector median (0.79) showing that the high ROE is caused by leverage.

| Adjusted DuPont Chart | | | | | |
|-----------------------|------------|--------|------------|--------|--|
| | | | ROE | 27.05% | |
| | | | Sector ROE | 20.21% | |
| | ROA | 6.72% | EM (t-1) | 4.03 | |
| | Sector ROA | 7.01% | Sector EM | 2.44 | |
| | | | | | |
| | PM | 11.88% | TAT | 0.57 | |
| | Sector PM | 10.87% | Sector TAT | 0.73 | |

| Unadjusted DuPont Chart | | | | | |
|-------------------------|------------|--------|------------|--------|--|
| | | | ROE | 32.81% | |
| | | | Sector ROE | 22.37% | |
| | ROA | 6.08% | EM (t-1) | 6.46 | |
| | Sector ROA | 7.62% | Sector EM | 2.54 | |
| | | | | | |
| | PM | 10.74% | TAT | 0.57 | |
| | Sector PM | 10.73% | Sector TAT | 0.79 | |

Asset Management

Waste Management's previous two years of asset management reflect the efficiency dip that happened during the Stericycle acquisition. The operating cycle saw a small increase of two days, which is likely since health care waste customers typically take longer to pay when compared against municipal contracts. The cash cycle almost doubled in the same period, which could be an issue if this trend persists. The fixed asset turnover ratio remained stable, which is a positive signal for the company.

| \$MM | 2024 | 2025 |
|-----------------------------------|--------------|-------------|
| Sales | \$22,063.00 | \$25,204.00 |
| <i>Growth Rate (YoY)</i> | 8.01% | 14.24% |
| Pre-Tax Operating Income | \$4,296.00 | \$4,712.00 |
| <i>Growth Rate (YoY)</i> | 12.23% | 9.68% |
| After Tax Operating Income | \$3,393.84 | \$3,722.48 |
| <i>Growth Rate (YoY)</i> | 12.23% | 9.68% |
| Adjusted NI | \$2,856.00 | \$2,994.00 |
| <i>Growth Rate (YoY)</i> | 13.29% | 4.83% |
| GAAP EPS | \$6.81 | \$6.70 |
| <i>Growth Rate (YoY)</i> | 20.32% | -1.62% |
| Adjusted EPS | \$7.08 | \$7.41 |
| <i>Growth Rate (YoY)</i> | 14.27% | 4.62% |
| DPS | \$3.00 | \$3.30 |
| Retention Ratio | 57.63% | 55.44% |
| Equity Reinvestment Rate | 59.63% | 80.90% |
| Total Reinvestment Rate | 463.72% | 25.41% |
| FCFF | \$(4,731.16) | \$2,797.48 |
| FCFE | \$1,439.00 | \$736.00 |
| PTOM | 19.47% | 18.70% |
| PTOM Adj | 19.47% | 18.70% |
| Net Profit Margin | 12.45% | 10.74% |
| ROIC | 7.70% | 8.18% |
| ROE | 33.27% | 27.10% |

Despite the acquisition and burden of integrating health care waste, the company's assets continue to be productive. Total asset turnover decreased due to the addition of assets onto the balance sheet, including goodwill. Invested capital turnover decreased substantially, due to the large amount of debt the company added to its balance sheet.

In summary, Waste Management is recovering from a large acquisition, but I expect margins and efficiency ratios to improve.

Capital Structure

Waste Management currently has \$35.84 billion in debt, \$9.99 billion in shareholders equity, and \$45.84 billion in assets on its balance sheet. Management paid off \$21.75 billion in debt in FY2025, and management signaled that they will continue to lower their leverage, which is consistent with analyst expectations.

Additionally, when adjusting for deferred taxes and investment tax credits, Waste Management's D/E ratio is 2.49 for FY2025 and 3.03 in FY2024. In summary, Waste Management carries high leverage due to the recent acquisition activity but has been successful in paying off debt. I believe the company will continue to do so. Waste Management also has a healthy TIE ratio of 4.71, and investment grade bond ratings, indicating that debt payments will not be an issue in the future. The company's Altman Z-Score is also improving. The company has no recent history of fraud.

In summary, the company is recovering from a large, debt-financed acquisition, and management will likely continue to pay down debt.

Financial Projections

I used a weighted average sales growth approach to reach a projected 3.17% annual sales growth. This should account for both sales declines and large sales growth due to acquisitions. Historically, Waste Management has had very unpredictable sales growth ranging from -7.39% in 2015 to 17.83% in 2021. These fluctuations are largely due to acquisitions, which are demonstrated by \$17.647 billion in goodwill and other intangible assets.

| | 2024 | 2025 |
|------------------------------------|-------|-------|
| Operating Cycle | 59.46 | 61.35 |
| <i>Sector Median</i> | - | 107 |
| Cash Cycle | 7.73 | 13.30 |
| <i>Sector Median</i> | - | 58 |
| Fixed Asset Turnover | 1.27 | 1.24 |
| <i>Sector Median</i> | - | 6.26 |
| Total Asset Turnover | 0.67 | 0.57 |
| <i>Sector Median</i> | - | 0.79 |
| Invested Capital Turnover | 0.91 | 0.73 |
| <i>Sector Median</i> | - | 1.30 |
| D/E Ratio | 4.4 | 3.59 |
| <i>Sector Median</i> | - | 0.64 |
| D/A Ratio | 0.82 | 0.78 |
| <i>Sector Median</i> | - | 0.61 |
| Current Ratio | 0.76 | 0.89 |
| <i>Sector Median</i> | - | 1.21 |
| Quick Ratio | 0.73 | 0.85 |
| <i>Sector Median</i> | - | 1.05 |
| Cash Ratio | 0.08 | 0.06 |
| <i>Sector Median</i> | - | 0.30 |
| TIE Ratio | 5.90 | 4.71 |
| <i>Sector Median</i> | - | 7.59 |
| Cash Coverage Ratio | 9.20 | 7.72 |
| <i>Sector Median</i> | - | 10.95 |
| Altman Z-Score | 2.61 | 2.88 |
| <i>Sector Median</i> | - | 5.96 |
| Scaled Total Accruals | 0.08 | 4.7% |
| <i>Sector Median</i> | - | 4.3% |
| Scaled Net Operating Assets | 0.73 | 73.3% |
| <i>Sector Median</i> | - | 5.98% |

| Fundamentals (Op. Inc.) | Fundamentals (NI) | Arithmetic Average | Geometric Average | Regression (levels) | Regression (log) | Top Down Estimates (IBIS World) | Top Down Estimates (CE Est) | Analyst Estimates |
|----------------------------|----------------------|-----------------------|----------------------|------------------------|---------------------|---------------------------------------|--------------------------------|----------------------|
| 10.00% | 10.00% | 0.00% | 5.00% | 15.00% | 15.00% | 20.00% | 0.00% | 25.00% |

I decided to place the highest weight on analyst estimates because of their deep knowledge and research into the industry and company. The next highest weight was placed on IBIS World's industry sales estimates. Specifically, NAICS code 562111. This is because I trust the industry growth estimates from IBIS, and Waste Management represents 17.2% of the market share, therefore, industry growth reflects the company's

growth. No weight was placed on the CE's estimate because I thought an Industrials sector growth estimate was overly broad for Waste Management.

All sales projections are available for view in data appendix [1].

For FY2035, I predict sales to increase to \$34.39 billion (3.16% CAGR), adjusted pre-tax EBIT to increase to \$7.05 billion (4.11% CAGR), adjusted after tax EBIT to increase to \$5.57 billion (4.11% CAGR), adjusted net income to increase to \$4.05 billion (3.87% CAGR), EPS to increase to \$11.76 (4.44% CAGR), and the net profit margin to increase to 13.1% from 12.23%. The figures assume higher efficiency due to automation, combined with additional acquisition spending.

Working Capital and Reinvestment Projections

All projection graphs will be available to view in section [2] of the data appendix.

WM is entering a cash harvesting phase after the Stericycle acquisition. The model projects negative reinvestment rates for FY2026 (-38.77%) and FY2027 (-16.03%). This does not mean the business is shrinking. Instead, massive non-cash depreciation from new assets temporarily outpaces capital expenditures. WM also operates with a structurally negative NWC turnover (-20.46 in FY2026). The company collects cash from customers faster than it pays suppliers, which creates an interest-free funding mechanism. The reinvestment rate normalizes to a positive 3.66% in FY2028 as the integration concludes. Ultimately, this working capital management drives free cash flows. Management will use this cash to pay down debt and fund their \$3 billion share buyback program.

Capital Structure Projections

All projection graphs will be available to view in section [3] of the data appendix.

Overall, I expect book debt-to-equity to decrease over time. Management has shown initiative in this regard, lowering the D/E ratio from 4.4 to 3.59 in one year. Analysts expect this ratio to fall below 3.0 in FY2026. I expect the company's TIE ratio to remain stable through 2035, with marginal improvements, increasing to 5.08, due to automation and efficiency improvements.

The most material forecast change occurs within the company's short-term liquidity. The current ratio spikes from 0.89 in FY2025 to 1.31 in FY2026, driven by an explosion in the cash ratio from 0.06 to 0.72 over the same period. This is due to a mathematical result of the negative reinvestment rates projected in FY2026 and FY2027. Because Waste Management is temporarily pausing massive capital expenditures and generating cash from its supply chain, cash grows substantially on the balance sheet.

My cost of equity and WACC projections remain relatively stable, with marginal increases across ten years. Waste Management enjoys investment grade bonds and a low beta, providing a low WACC and low cost of equity. However, I expect the risk-free-rate and market risk premiums to increase for one main reason, government insolvency.

ROIC and Financial Cash Flow Projections

All projection graphs will be available to view in section [4] of the data appendix.

Waste Management maintains a strong economic moat, with projected ROIC (11.3% to 13.6%) and ROE (24.7% to 17.3%) comfortably exceeding the firm's cost of capital throughout the forecast. Driven by highly efficient working capital and constrained capital expenditures during the Stericycle integration, the company is entering a cash-harvesting phase, evidenced by management's \$3.86 billion FCF guidance for FY2026. I project FY2026 Free Cash Flow to the Firm (FCFF) at \$5.63 billion and Free Cash Flow to Equity (FCFE) at \$7.20 billion. These figures demonstrate the liquidity available to deleverage and execute the \$3 billion share buyback.

However, these projections exceed management's FY2026 FCF guidance of \$3.86 billion. This variance is expected. My model reflects a massive working capital release on the newly expanded revenue base and includes debt financing in the FCFE calculation. Conversely, management's guidance is a more conservative operating metric that includes one-time integration headwinds, such as severance and

system migrations. As these headwinds clear and capital intensity normalizes by FY2035, underlying cash flows stabilize near \$3.5 billion annually. Additionally, the firm will shift capital allocation to focus on shareholders, lowering the retention ratio down to 40.5% and increasing the dividend to \$7.00 per share.

Discounted Cash Flows Analysis

All discounted cash flow analyses will be available for view in section [5] of the data appendix.

My WACC DCF resulted in a target price of \$226.05, \$235.53, and \$14.46 for the growing perpetuity method, market multiple method, and liquidation method, respectively. The model assumes a 21% marginal tax rate, a 6.33% terminal WACC, and a 3% terminal growth rate. I only used the growing perpetuity method in my original valuation, since the other values resulted in very low price per share.

| WACC-DCF | | |
|---------------------------|--------|--------|
| Growing Perpetuity Method | 226.45 | 10.00% |
| Market Multiple Method | 235.53 | 10.00% |
| Liquidation Method | 14.46 | 0.00% |

After changing my multiple to EV/EBITDA, using a multiple of 15 and terminal multiple multiplier of 11,004.18, my price per share was \$235.53 for the market multiple method. I projected ROIC to remain stable around 13.4%, which is higher than WACC (6.33% simple average) across the projection period.

My DDM model resulted in prices of \$109.33, \$215.06, and \$31.37 for the growing perpetuity method, the market multiple method, and liquidation method, respectively. I used the growing perpetuity method and market multiple method in my final valuation.

| DDM | Price | Weight |
|---------------------------|--------|--------|
| Growing Perpetuity Method | 109.33 | 10.00% |
| Market Multiple Method | 215.06 | 10.00% |
| Liquidation Method | 31.37 | 0.00% |

The model assumes ROE to steadily decrease to 17.06% as the company de-levers and a stable retention ratio around 54.5%. I used analyst estimates and historical averages to project dividend growth rates and retention rates. The terminal growth rate was projected to be 3% and the terminal cost of equity was projected to be 7%, an average of previous projection years. I decided to use the growing perpetuity method in my final valuation because a material reason of why investors choose Waste Management is due to their consistent dividend payments and consistent dividend growth. In my market multiple method, I used the P/S ratio, assuming a multiple of 4, and multiple multiplier of 90.25. The market multiple method was included because I consider peer companies to be relevant to Waste Management's valuation, since they're very similar businesses.

My FTE model resulted in prices of \$250.88, \$97.89, and \$97.44 for the growing perpetuity method, the market multiple method, and liquidation method, respectively. I only considered the growing perpetuity method in my final valuation.

| FTE | | |
|---------------------------|--------|--------|
| Growing Perpetuity Method | 250.88 | 10.00% |
| Market Multiple Method | 97.89 | 0.00% |
| Liquidation Method | 97.44 | 0.00% |

This method is appropriate for a business like Waste Management that generates large amounts of cash flow. The terminal growth rate was projected to be 3% and the terminal cost of equity was projected to be 7%. Throughout the projection, the ROE remains substantially higher than the cost of equity, consistently more than double. Over the projection, the model assumes a negative reinvestment rate, which is consistent with the increasing dividends, share buybacks, and use of leverage that I've projected.

My APV model resulted in prices of \$206.11, \$13.72, and \$13.56 for the growing perpetuity method, the market multiple method, and liquidation method, respectively. I only used the growing perpetuity method in my final valuation. I consider the APV model to be useful in valuing Waste Management due to the large amounts of debt that the firm carries.

| APV | | |
|---------------------------|--------|--------|
| Growing Perpetuity Method | 206.11 | 10.00% |
| Market Multiple Method | 13.72 | 0.00% |
| Liquidation Method | 13.56 | 0.00% |

Interest tax shields are a material part of the business and should be included in valuations. The sum of these tax shields across the projection period is \$2.682 billion. Additionally, Waste Management issues investment grade bonds and carries a bankruptcy risk of 0.001%, which was pulled from Bloomberg's DRSK function. These facts support their use of debt and allow the business to borrow money at lower interest rates. The model assumes a 3% terminal growth rate and a 6.57% unlevered cost of equity.

Market Multiples Pricing

| | Market Capitalization (\$MM) | Long-Run Growth Rate | After-Tax Operating Margin | Net Profit Margin | ROIC | ROE | Payout | Equity Beta | Effective Tax Rate | Depr. Rate | Reinvest. Rate | WACC |
|---|------------------------------|----------------------|----------------------------|-------------------|---------------|---------------|---------------|-------------|--------------------|----------------|----------------|--------------|
| WASTE MANAGEMENT, INC. (XNYS:WM) | \$93,848.00 | 9.65% | 13.52% | 10.74% | 10.09% | 29.69% | 49.26% | 0.53 | 20.93% | 11.36% | 15.06% | 6.37% |
| REPUBLIC SERVICES, INC. (XNYS:RSG) | \$66,904.00 | 7.61% | 16.41% | 12.89% | 10.21% | 18.31% | 35.41% | 0.51 | 17.54% | 11.62% | 11.99% | 7.03% |
| WASTE CONNECTIONS, INC. (XNYS:WCN) | \$57,989.00 | 9.56% | 14.23% | 11.37% | 8.32% | 13.37% | 34.64% | 0.41 | 24.07% | 13.01% | 9.23% | 4.77% |
| CASELLA WASTE SYSTEMS, INC. (XNAS:CWST) | \$5,534.00 | -6.88% | 2.09% | 0.43% | 1.38% | 0.50% | 0.00% | 0.84 | 39.70% | 16.7 | 0.50% | 6.94% |
| GFL ENVIRONMENTAL INC. (XNYS:GFL) | \$21,049.00 | 28.53% | 8.50% | 57.95% | 3.29% | 53.69% | 8.70% | 0.54 | 0.00% | 19.89% | 53.38% | 7.70% |
| CLEAN HARBORS, INC. (XNYS:CLH) | \$16,009.00 | 15.00% | 8.27% | 6.48% | 8.59% | 14.70% | 0.00% | 0.94 | 25.95% | 7.40% | 14.70% | 8.91% |
| ENVIRI CORPORATION (XNYS:NVRI) | \$1,634.00 | 10.00% | -1.23% | -7.48% | -1.37% | -50.29% | 0.00% | 1.72 | 0.00% | 8.21% | -50.29% | 9.66% |
| <i>Peer Company Average</i> | <i>\$37,567.57</i> | <i>10.50%</i> | <i>8.83%</i> | <i>13.20%</i> | <i>5.79%</i> | <i>11.42%</i> | <i>18.29%</i> | <i>0.78</i> | <i>18.31%</i> | <i>248.78%</i> | <i>7.80%</i> | <i>7.34%</i> |
| <i>Sector Average</i> | <i>\$57,410.61</i> | <i>13.65%</i> | <i>12.95%</i> | <i>11.87%</i> | <i>16.67%</i> | <i>38.82%</i> | <i>32.36%</i> | <i>1.07</i> | <i>19.26%</i> | <i>25.08%</i> | <i>27.37%</i> | <i>8.78%</i> |
| <i>Sector 30th Percentile</i> | <i>\$18,802.68</i> | <i>9.00%</i> | <i>7.93%</i> | <i>6.97%</i> | <i>9.96%</i> | <i>13.55%</i> | <i>15.44%</i> | <i>0.98</i> | <i>19.06%</i> | <i>14.03%</i> | <i>0.00%</i> | <i>8.07%</i> |
| <i>Sector Median</i> | <i>\$31,524.18</i> | <i>11.40%</i> | <i>13.13%</i> | <i>10.73%</i> | <i>13.35%</i> | <i>22.37%</i> | <i>30.28%</i> | <i>1.10</i> | <i>21.00%</i> | <i>20.73%</i> | <i>6.30%</i> | <i>8.77%</i> |
| <i>Sector 70th Percentile</i> | <i>\$73,425.00</i> | <i>14.50%</i> | <i>15.96%</i> | <i>15.09%</i> | <i>20.42%</i> | <i>32.77%</i> | <i>41.86%</i> | <i>1.25</i> | <i>21.00%</i> | <i>30.74%</i> | <i>33.56%</i> | <i>9.51%</i> |

| Company | RET20 | RET250 | P-S Ratio | P-E Ratio | Earnings Yield (E-P Ratio) | B/P Ratio | P-B Ratio | PEG Ratio | EV-Sales Ratio | EV-EBITDA Ratio | EBITDA Yield (EBITDA-EV Ratio) | EV-Assets Ratio (Tobin's Q) |
|---|---------------|---------------|-------------|--------------|----------------------------|-------------|--------------|-------------|----------------|-----------------|--------------------------------|-----------------------------|
| WASTE MANAGEMENT, INC. (XNYS:WM) | -5.26% | 1.63% | 3.51 | 28.91 | 3.46% | 0.11 | 8.86 | 3.04 | 4.46 | 14.80 | 8.59% | 2.71 |
| REPUBLIC SERVICES, INC. (XNYS:RSG) | -6.14% | -11.09% | 3.98 | 30.20 | 3.31% | 0.18 | 5.45 | 4.04 | 4.78 | 14.80 | 8.01% | 2.55 |
| WASTE CONNECTIONS, INC. (XNYS:WCN) | -3.76% | -15.90% | 4.77 | 37.87 | 2.64% | 0.18 | 5.44 | 3.56 | 5.74 | 17.10 | 6.66% | 2.73 |
| CASELLA WASTE SYSTEMS, INC. (XNAS:CWST) | -7.72% | -24.60% | 3.38 | 241.02 | 0.41% | 0.25 | 3.97 | 5.00 | 3.99 | 16.90 | 6.15% | 2.41 |
| GFL ENVIRONMENTAL INC. (XNYS:GFL) | -0.16% | -7.75% | 3.29 | 149.43 | 0.67% | 0.33 | 3.00 | 3.54 | 4.42 | 14.40 | 9.09% | 1.76 |
| CLEAN HARBORS, INC. (XNYS:CLH) | 6.83% | 50.93% | 2.08 | 30.85 | 3.24% | 0.22 | 4.52 | 1.50 | 2.43 | 12.40 | 9.66% | 2.27 |
| ENVIRI CORPORATION (XNYS:NVRI) | 11.22% | 246.82% | 0.65 | 0.00 | -15.91% | 0.17 | 5.72 | 0.00 | 1.38 | 10.70 | 15.73% | 1.44 |
| <i>Peer Company Average</i> | <i>-0.71%</i> | <i>34.29%</i> | <i>3.09</i> | <i>74.04</i> | <i>-0.31%</i> | <i>0.21</i> | <i>5.28</i> | <i>2.95</i> | <i>3.89</i> | <i>14.44</i> | <i>9.13%</i> | <i>2.27</i> |
| <i>Sector Average</i> | <i>-4.79%</i> | <i>30.72%</i> | <i>4.16</i> | <i>43.86</i> | <i>3.58%</i> | <i>0.17</i> | <i>14.13</i> | <i>3.88</i> | <i>4.97</i> | <i>24.75</i> | <i>5.49%</i> | <i>3.40</i> |
| <i>Sector 30th Percentile</i> | <i>-6.62%</i> | <i>11.36%</i> | <i>2.77</i> | <i>24.61</i> | <i>2.79%</i> | <i>0.09</i> | <i>0.09</i> | <i>2.37</i> | <i>3.25</i> | <i>15.79</i> | <i>4.35%</i> | <i>2.26</i> |
| <i>Sector Median</i> | <i>-4.72%</i> | <i>28.64%</i> | <i>3.73</i> | <i>31.01</i> | <i>3.22%</i> | <i>0.16</i> | <i>3.00</i> | <i>3.00</i> | <i>4.45</i> | <i>18.69</i> | <i>5.32%</i> | <i>2.61</i> |
| <i>Sector 70th Percentile</i> | <i>-2.32%</i> | <i>47.61%</i> | <i>5.21</i> | <i>35.80</i> | <i>4.06%</i> | <i>0.23</i> | <i>3.90</i> | <i>3.90</i> | <i>5.75</i> | <i>22.68</i> | <i>6.30%</i> | <i>3.62</i> |

Sector Averages Pricing

| Multiple | Benchmark Multiple Value | Denominator | Implied MVA | Debt | Implied MVE | Number of Shares | Implied Price per Share |
|-----------|--------------------------|-------------|-------------|-----------|-------------|------------------|-------------------------|
| P/S | 3.73 | 25,204.00 | | | 94,010.92 | 404.50 | 232.41 |
| P/E (ttm) | 31.47 | 2,708.00 | | | 85,220.76 | 404.50 | 210.68 |
| P/B | 6.20 | 9,991.00 | | | 61,944.20 | 404.50 | 153.14 |
| EV/S | 4.45 | 25,204.00 | 112,157.80 | 23,917.00 | 88,240.80 | 404.50 | 218.15 |
| EV/EBITDA | 18.97 | 7,717.00 | 146,391.49 | 23,917.00 | 122,474.49 | 404.50 | 302.78 |
| EV/Assets | 4.45 | 45,835.00 | 203,965.75 | 23,917.00 | 180,048.75 | 404.50 | 445.11 |

EV/EBITDA is the best comparison for companies in this industry because it ignores capital structure while focusing on operating earnings, which is why I allocated a 5% weight to this method in the final valuation. However, I believe sector comparisons are too broad to find the intrinsic value of Waste Management, which is why the final valuation weight is low.

Comparable Companies Pricing

| Multiple | Benchmark Multiple Value | Denominator | Implied MVA | Debt | Implied MVE | Number of Shares | Implied Price per Share |
|-----------|--------------------------|-------------|-------------|-----------|-------------|------------------|-------------------------|
| P/S | 3.24 | 25,204.00 | | | 81,534.94 | 404.50 | 201.57 |
| P/E (ttm) | 47.28 | 2,708.00 | | | 128,034.24 | 404.50 | 316.52 |
| P/B | 5.43 | 9,991.00 | | | 54,251.13 | 404.50 | 134.12 |
| EV/S | 3.76 | 25,204.00 | 94,767.04 | 23,917.00 | 70,850.04 | 404.50 | 175.15 |
| EV/EBITDA | 13.91 | 7,717.00 | 107,343.47 | 23,917.00 | 83,426.47 | 404.50 | 206.25 |
| EV/Assets | 2.18 | 45,835.00 | 99,748.94 | 23,917.00 | 75,831.94 | 404.50 | 187.47 |

I compiled the comparable companies from Bloomberg's relative valuation function. These companies are qualified peers because they all operate in the waste management industry, have similar business models, and capital structures. Waste Management ranks close to the average EV/EBITDA while being much larger than comparable companies, which is positive indicator. This caused me to place a weight of 10% on this approach in the final valuation.

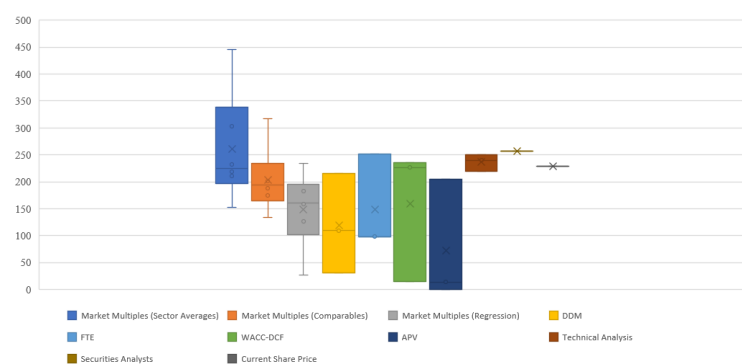
Regression-Based Pricing

All graphs will be available to view in section [6] of the data appendix.

No weight was placed on this method in the final valuation due to its inability to establish non-linear relationships or consider future growth. The regression resulted in price targets ranging from \$27.09 to \$234.20, with the best model being P/S, with an adjusted R squared of 0.44. The P/S regression resulted in a share price of \$163.43. All estimates resulted in the same conclusion; Waste Management is overvalued.

Valuation Summary

My final valuation resulted in a price target of \$215, rounded up from \$214.77. The current price is \$229.49. The analyst consensus price target was \$256.23 with a weight of 20%. Technical analysis resulted in a price target of \$236.37 with a weight of 5%. Market multiples (sector averages) accounted for 5% of the final valuation. Market multiples (comparables) accounted for 10% of the final valuation. DDM accounted for 20% of the final valuation, split evenly between the growing perpetuity method and the market multiple method. FTE accounted for 10% of the total valuation, all weighted on the growing perpetuity method. WACC-DCF accounted for 20% of the final valuation, split between the growing perpetuity method and the market multiple method. APV accounted for 10% of the final valuation, all weighted on the growing perpetuity method.



| Method | Min | Mean | Median | Max |
|------------------------------------|--------|--------|--------|--------|
| Market Multiples (Sector Averages) | 153.14 | 260.38 | 225.28 | 445.11 |
| Market Multiples (Comparables) | 134.12 | 203.51 | 194.52 | 316.52 |
| Market Multiples (Regression) | 0.00 | 127.53 | 158.45 | 234.20 |
| DDM | 31.37 | 118.59 | 109.33 | 215.06 |
| FTE | 97.44 | 148.74 | 97.89 | 250.88 |
| WACC-DCF | 14.46 | 158.82 | 226.45 | 235.53 |
| APV | 13.55 | 77.47 | 13.72 | 205.14 |
| Technical Analysis | 220.00 | 236.67 | 240.00 | 250.00 |
| Securities Analysts | 256.23 | 256.23 | 256.23 | 256.23 |

In totality, the model shows that Waste Management is modestly overvalued. This makes sense because Waste Management is benefiting from a flight to safety during the current market volatility. Analyst price targets are directionally optimistic but only imply an 11.65% one-year return. The total weight is 60% intrinsic and 40% external. I placed high emphasis on analyst targets because I believe it's important to incorporate the collective intelligence of professional analysts who possess deep knowledge of the company and industry.

Considering my price target is below the current share price, I recommend watching Waste Management until it falls below \$190 per share. After which, a buy should be considered, either funded through selling Delta Air Lines or swapping out Republic Services to avoid industry concentration.

Data Appendix [1] – Sales Projections

| Fiscal Year: | Historical | | | Forecasting Period | | | | | | Transition Period | | | |
|--|-------------------|-------------------|------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 2024 | 2025 | T1M | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Income Statement | | | | | | | | | | | | | |
| <i>(see p. 27-52)</i> | | | | | | | | | | | | | |
| Sales (Net) | 22,063.000 | 25,204.000 | 25,204.000 | 26,080.840 | 26,894.562 | 27,733.673 | 28,598.963 | 29,491.251 | 30,411.378 | 31,360.213 | 32,338.651 | 33,347.617 | 34,388.063 |
| Cost of Goods Sold | 13,249.000 | 14,861.000 | 14,861.000 | 15,351.349 | 15,738.927 | 16,236.516 | 16,670.310 | 17,164.712 | 17,813.297 | 18,371.954 | 18,921.651 | 19,508.356 | 20,117.017 |
| Gross Profit | 8,814.000 | 10,343.000 | 10,343.000 | 10,729.491 | 11,155.635 | 11,497.156 | 11,928.653 | 12,326.538 | 12,598.081 | 12,988.259 | 13,417.000 | 13,839.261 | 14,271.046 |
| Selling, General and Administrative Expenses | 2,118.000 | 2,626.000 | 2,626.000 | 2,477.680 | 2,554.983 | 2,634.699 | 2,716.901 | 2,801.669 | 2,889.081 | 2,979.220 | 3,072.172 | 3,168.024 | 3,266.866 |
| <i>Research and Development Expense</i> | 0.000 | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| <i>Rental Expense</i> | 264.000 | 427.000 | | 260.808 | 268.946 | 277.337 | 285.990 | 294.913 | 304.114 | 313.602 | 323.387 | 333.476 | 343.881 |
| <i>Advertising Expense</i> | 0.000 | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| <i>Other SG&A Expense</i> | 1,854.000 | 2,199.000 | | 2,216.871 | 2,286.038 | 2,357.362 | 2,430.912 | 2,506.756 | 2,584.967 | 2,665.618 | 2,748.785 | 2,834.547 | 2,922.985 |
| Operating Income Before Depreciation (EBITDA) | 6,696.000 | 7,717.000 | 7,717.000 | 8,251.812 | 8,600.652 | 8,862.457 | 9,211.751 | 9,524.870 | 9,709.000 | 10,009.038 | 10,344.828 | 10,671.238 | 11,004.180 |
| Depreciation and Amortization | 2,400.000 | 3,005.000 | 3,005.000 | 3,116.374 | 3,175.476 | 3,193.069 | 3,244.393 | 3,291.046 | 3,499.093 | 4,161.119 | 3,554.037 | 3,758.516 | 3,953.439 |
| Operating Income After Depreciation (EBIT) | 4,296.000 | 4,712.000 | 4,712.000 | 5,135.438 | 5,425.176 | 5,669.388 | 5,967.358 | 6,233.824 | 6,209.907 | 5,847.919 | 6,790.791 | 6,912.721 | 7,050.741 |
| Interest and Related Expense | 728.000 | 1,000.000 | 912.000 | 1,076.265 | 1,143.960 | 1,202.940 | 1,207.890 | 1,204.620 | 1,195.140 | 1,248.690 | 1,294.725 | 1,338.302 | 1,432.869 |
| Nonoperating Income (Expense) - Total | 129.000 | 102.000 | 14.000 | -19.683 | -19.241 | -18.936 | -18.457 | -18.183 | -18.123 | -17.871 | -17.871 | 0.000 | 0.000 |
| Special Items | -239.000 | -388.000 | -388.000 | -150.500 | -150.500 | -150.500 | -150.500 | -150.500 | -150.500 | -150.500 | -150.500 | -150.500 | -150.500 |
| Pretax Income | 3,458.000 | 3,426.000 | 3,426.000 | 3,888.990 | 4,111.475 | 4,297.012 | 4,590.511 | 4,860.521 | 4,846.145 | 4,430.858 | 5,345.567 | 5,423.919 | 5,467.372 |
| Income Taxes - Total | 713.000 | 717.000 | 717.000 | 816.688 | 863.410 | 902.373 | 964.007 | 1,020.709 | 1,017.690 | 930.480 | 1,122.569 | 1,139.023 | 1,148.148 |
| Income Before EI and Noncontrolling Interest | 2,745.000 | 2,709.000 | 2,709.000 | 3,072.302 | 3,248.065 | 3,394.640 | 3,626.504 | 3,839.812 | 3,828.454 | 3,500.378 | 4,222.998 | 4,284.896 | 4,319.224 |
| Noncontrolling Interest - Income Account | -1.000 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Income Before EI&DO | 2,746.000 | 2,708.000 | 2,708.000 | 3,072.302 | 3,248.065 | 3,394.640 | 3,626.504 | 3,839.812 | 3,828.454 | 3,500.378 | 4,222.998 | 4,284.896 | 4,319.224 |
| Extraordinary Items | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Discontinued Operations | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Net Income (Loss) | 2,746.000 | 2,708.000 | 2,708.000 | 3,072.302 | 3,248.065 | 3,394.640 | 3,626.504 | 3,839.812 | 3,828.454 | 3,500.378 | 4,222.998 | 4,284.896 | 4,319.224 |
| Fully Diluted Shares Outstanding | 403.400 | 404.200 | 404.500 | 399.914 | 396.873 | 394.139 | 391.674 | 389.461 | 387.473 | 385.666 | 383.978 | 382.440 | 381.026 |
| EPS | 6.81 | 6.70 | 6.70 | 7.68 | 8.18 | 8.61 | 9.26 | 9.86 | 9.88 | 9.08 | 11.00 | 11.20 | 11.34 |
| DPS | 3.00 | 3.30 | 3.31 | 3.75 | 3.97 | 4.15 | 4.24 | 4.45 | 4.50 | 4.67 | 4.97 | 5.30 | 5.64 |

Data Appendix [2] – Working Capital and Reinvestment

| | | | | | | | | | | | | | |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Net Working Capital Expenditures: | | | | | | | | | | | | | |
| <i>(see p. 285-289)</i> | | | | | | | | | | | | | |
| Sales | 22,063.000 | 25,204.000 | 25,204.000 | 26,080.840 | 26,894.562 | 27,733.673 | 28,598.963 | 29,491.251 | 30,411.378 | 31,360.213 | 32,338.651 | 33,347.617 | 34,388.063 |
| Sales Growth Rate (y/y) | 8.0% | 14.2% | 14.2% | 3.5% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% |
| Operating Current Assets | 4,260.000 | 4,600.000 | 4,600.000 | 4,250.993 | 4,389.966 | 4,481.042 | 4,613.698 | 4,641.274 | 4,447.160 | 4,555.843 | 4,858.461 | 5,010.045 | 5,166.359 |
| - Operating Current Liabilities | 4,737.000 | 4,648.000 | 4,648.000 | 5,525.674 | 5,912.956 | 5,728.873 | 5,854.255 | 5,651.321 | 5,849.043 | 6,029.190 | 5,982.651 | 6,169.309 | 6,361.792 |
| = Net Working Capital | -477.000 | -48.000 | -48.000 | -1,274.681 | -1,522.990 | -1,247.832 | -1,240.557 | -1,010.046 | -1,401.883 | -1,473.347 | -1,124.189 | -1,159.264 | -1,195.433 |
| ΔNWC | | | | | | | | | | | | | |
| Acquisition Expenditures: | | | | | | | | | | | | | |
| <i>(see p. 282-284)</i> | | | | | | | | | | | | | |
| Cash Acquisitions | 7,488.000 | 395.000 | 395.000 | 92.460 | 96.630 | 182.710 | 275.050 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 |
| + Stock Acquisitions (MUST collect) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| = Acquisitions | 7,488.000 | 395.000 | 395.000 | 92.460 | 96.630 | 182.710 | 275.050 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 |
| Investment and Advances: | | | | | | | | | | | | | |
| <i>(see p. 34-35; 491-498)</i> | | | | | | | | | | | | | |
| Net Investment and Advancements | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

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| My Forecast | | | | | | | | | | |
|-------------|-------------|------------|---------------------------|-----------|----------|--------------------------|-------|---------|-----------------------|----------------------|
| Fiscal Year | Period | ANWC | Analysts' Forecasted CAPX | CAPX | Net CAPX | Analysts' Forecasted R&D | R&D | Net R&D | Capitalized SG&A Item | Net Capitalized SG&A |
| 2021 | Historical | -412.000 | | 1,904.000 | -206.000 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2022 | | -360.000 | | 2,587.000 | 437.000 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2023 | | 229.000 | | 2,895.000 | 694.000 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2024 | | 93.000 | | 3,231.000 | 831.000 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2025 | | 429.000 | | 3,227.000 | 222.000 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2026 | Forecasting | -1,226.681 | 2,705.15 | 2,705.150 | -411.224 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2027 | | -248.310 | 2,888.35 | 2,888.350 | -287.126 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2028 | | 275.159 | 3,067.79 | 3,067.790 | -125.279 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2029 | | 7.274 | 3,207.78 | 3,207.780 | -36.613 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2030 | | 230.511 | 3,321.25 | 3,321.250 | 30.204 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2031 | Transition | -391.837 | | 3,186.00 | -313.093 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2032 | | -71.463 | | 3,331.00 | -830.119 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2033 | | 349.158 | | 3,464.240 | -89.797 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2034 | | -35.075 | | 3,602.810 | -155.707 | | 0.000 | 0.000 | 0.000 | 0.000 |
| 2035 | | -36.169 | | 3,746.922 | -206.517 | | 0.000 | 0.000 | 0.000 | 0.000 |

| Forecasted Capacity Utilizations | | | | | | | | | | |
|----------------------------------|-------------|---------------------------|---------------|--------------|-----------------------|-------------------|--------------|---------------|----------------------|---------------------------|
| Fiscal Year | Period | Assumed Sales Growth Rate | CAPX to Sales | R&D to Sales | Reinvestment to Sales | Reinvestment Rate | NWC Turnover | PP&E Turnover | Total Asset Turnover | Invested Capital Turnover |
| 2021 | Historical | 17.83% | 10.62% | 0.00% | -3.90% | -33.92% | -40.85 | 1.23 | 0.61 | 0.80 |
| 2022 | | 9.85% | 13.13% | 0.00% | 2.92% | 17.83% | -24.65 | 1.32 | 0.68 | 0.89 |
| 2023 | | 3.70% | 14.17% | 0.00% | 5.16% | 27.78% | -35.84 | 1.26 | 0.65 | 0.88 |
| 2024 | | 8.01% | 14.64% | 0.00% | 70.06% | 463.72% | -46.25 | 1.27 | 0.67 | 0.91 |
| 2025 | | 14.24% | 12.80% | 0.00% | 4.58% | 25.41% | -525.08 | 1.24 | 0.57 | 0.73 |
| 2026 | Forecasting | 3.48% | 10.37% | 0.00% | -6.03% | -38.77% | -20.46 | 1.24 | 0.53 | 0.77 |
| 2027 | | 3.12% | 10.74% | 0.00% | -2.55% | -16.03% | -17.66 | 1.29 | 0.51 | 0.82 |
| 2028 | | 3.12% | 11.06% | 0.00% | 0.59% | 3.66% | -22.23 | 1.33 | 0.51 | 0.85 |
| 2029 | | 3.12% | 11.22% | 0.00% | 3.69% | 22.38% | -23.05 | 1.35 | 0.51 | 0.85 |
| 2030 | | 3.12% | 11.26% | 0.00% | 8.43% | 50.51% | -29.20 | 1.30 | 0.52 | 0.83 |
| 2031 | Transition | 3.12% | 10.48% | 0.00% | 5.08% | 31.48% | -21.69 | 1.28 | 0.51 | 0.82 |
| 2032 | | 3.12% | 10.62% | 0.00% | 4.37% | 29.68% | -21.29 | 1.28 | 0.50 | 0.83 |
| 2033 | | 3.12% | 10.71% | 0.00% | 7.90% | 47.65% | -28.77 | 1.25 | 0.49 | 0.80 |
| 2034 | | 3.12% | 10.80% | 0.00% | 6.39% | 39.02% | -28.77 | 1.22 | 0.48 | 0.79 |
| 2035 | | 3.12% | 10.90% | 0.00% | 6.12% | 37.79% | -28.77 | 1.20 | 0.47 | 0.79 |

| | Period | Cash Acquisitions | Stock Acquisitions | Investment in Intangibles & Net Other Assets | Total Investment Expenditures in Operating Assets | | Investment and Advances | | | Cash Balance |
|------|-------------|-------------------|--------------------|--|---|--|-------------------------|--|--|--------------|
| 2021 | Historical | 75.000 | 0.000 | -156.000 | -699.000 | | 0.000 | | | 198.000 |
| 2022 | | 377.000 | 0.000 | 122.000 | 576.000 | | 0.000 | | | 434.000 |
| 2023 | | 170.000 | 0.000 | -38.000 | 1,055.000 | | 0.000 | | | 548.000 |
| 2024 | | 7,488.000 | 0.000 | 7,045.000 | 15,457.000 | | 0.000 | | | 514.000 |
| 2025 | | 395.000 | 0.000 | 108.000 | 1,154.000 | | 0.000 | | | 310.000 |
| 2026 | Forecasting | 92.46 | 0.000 | -27.293 | -1,572.738 | | 0.000 | | | 5,146.646 |
| 2027 | | 96.63 | 0.000 | -248.009 | -686.814 | | 0.000 | | | 8,447.178 |
| 2028 | | 182.71 | 0.000 | -168.714 | 163.876 | | 0.000 | | | 9,933.749 |
| 2029 | | 275.05 | 0.000 | 809.385 | 1,055.096 | | 0.000 | | | 10,601.020 |
| 2030 | | 1500 | 0.000 | 726.753 | 2,487.468 | | 0.000 | | | 9,653.589 |
| 2031 | Transition | 1500 | 0.000 | 749.428 | 1,544.498 | | 0.000 | | | 11,128.679 |
| 2032 | | 1500 | 0.000 | 772.810 | 1,371.227 | | 0.000 | | | 12,357.326 |
| 2033 | | 1500 | 0.000 | 796.922 | 2,556.282 | | 0.000 | | | 12,975.536 |
| 2034 | | 1500 | 0.000 | 821.786 | 2,131.004 | | 0.000 | | | 15,295.876 |
| 2035 | | 1500 | 0.000 | 847.425 | 2,104.739 | | 0.000 | | | 16,909.761 |

Data Appendix [3] – Capital Structure Projections

UNIVERSITY OF MISSOURI IFM PORTFOLIO | SPRING 2026

| | | Book Values of Debt, Preferred Equity, and Common Equity | | | | | | | | |
|------|---------------------------|--|----------------|--------------------|----------------|---------------------|--------------------------------------|-------------------------|-------------------|--|
| Year | Adj. Total Funds Invested | Adj. Debt | Adj. Preferred | Adj. Common Equity | Weight of Debt | Weight of Preferred | Weight of Debt + Weight of Preferred | Weight of Common Equity | Debt-Equity Ratio | |
| TTM | 37,068.00 | 23,917.00 | 0.00 | 13,151.00 | 65% | 0% | 65% | 35% | 1.82 | |
| 2026 | 39,729.39 | 25,421.33 | 0.00 | 14,308.06 | 64% | 0% | 64% | 36% | 1.78 | |
| 2027 | 42,067.28 | 26,732.00 | 0.00 | 15,335.28 | 64% | 0% | 64% | 36% | 1.74 | |
| 2028 | 43,433.30 | 26,842.00 | 0.00 | 16,591.30 | 62% | 0% | 62% | 38% | 1.62 | |
| 2029 | 44,862.36 | 26,769.33 | 0.00 | 18,093.03 | 60% | 0% | 60% | 40% | 1.48 | |
| 2030 | 46,099.95 | 26,558.66 | 0.00 | 19,541.29 | 58% | 0% | 58% | 42% | 1.36 | |
| 2031 | 48,807.64 | 27,748.66 | 0.00 | 21,058.98 | 57% | 0% | 57% | 43% | 1.32 | |
| 2032 | 51,085.89 | 28,771.66 | 0.00 | 22,314.23 | 56% | 0% | 56% | 44% | 1.29 | |
| 2033 | 53,928.73 | 29,740.04 | 0.00 | 24,188.69 | 55% | 0% | 55% | 45% | 1.23 | |
| 2034 | 58,038.07 | 31,841.54 | 0.00 | 26,196.53 | 55% | 0% | 55% | 45% | 1.22 | |
| 2035 | 61,404.02 | 33,453.54 | 0.00 | 27,950.48 | 54% | 0% | 54% | 46% | 1.20 | |

| Year | Cost of Debt | Cost of Preferred | Risk-Free Rate | Market Risk Premium | Marginal Tax Rate | Unlevered Equity Beta | Levered Equity Beta |
|------|--------------|-------------------|----------------|---------------------|-------------------|-----------------------|---------------------|
| TTM | 4.39% | 0.00% | 4.35% | 4.87% | 21.00% | 0.44 | 0.53 |
| 2026 | 4.50% | 0.00% | 4.35% | 4.87% | 21.00% | 0.44 | 0.53 |
| 2027 | 4.50% | 0.00% | 4.36% | 4.87% | 21.00% | 0.44 | 0.53 |
| 2028 | 4.50% | 0.00% | 4.36% | 4.87% | 21.00% | 0.44 | 0.53 |
| 2029 | 4.50% | 0.00% | 4.37% | 4.87% | 21.00% | 0.44 | 0.53 |
| 2030 | 4.50% | 0.00% | 4.37% | 4.87% | 21.00% | 0.45 | 0.53 |
| 2031 | 4.50% | 0.00% | 4.38% | 5.00% | 21.00% | 0.45 | 0.53 |
| 2032 | 4.50% | 0.00% | 4.38% | 5.00% | 21.00% | 0.45 | 0.53 |
| 2033 | 4.50% | 0.00% | 4.38% | 5.00% | 21.00% | 0.45 | 0.53 |
| 2034 | 4.50% | 0.00% | 4.39% | 5.00% | 21.00% | 0.45 | 0.53 |
| 2035 | 4.50% | 0.00% | 4.39% | 5.00% | 21.00% | 0.45 | 0.53 |

Data Appendix [4] – Cash Flow Projections

| Fiscal Year: | Historical | | | Forecasting Period | | | | | | Transition Period | | | |
|--|--------------------|------------------|------------------|--------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|------------------|------------------|
| | 2024 | 2025 | TTM | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Free Cash Flow from the Firm: <i>(see p. 380-382)</i> | | | | | | | | | | | | | |
| Adjusted After-Tax Operating Profit (NOPAT) | 3,393.840 | 3,722.480 | 3,722.480 | 4,056.996 | 4,285.889 | 4,478.817 | 4,714.213 | 4,924.721 | 4,905.827 | 4,619.856 | 5,364.725 | 5,461.050 | 5,570.086 |
| - ΔNWC | 93.000 | 429.000 | 0.000 | -1,226.681 | -248.310 | 275.159 | 7.274 | 230.511 | -391.837 | -71.463 | 349.158 | -35.075 | -36.169 |
| - Net CAPX | 831.000 | 222.000 | 222.000 | -411.224 | -287.126 | -125.279 | -36.613 | 30.204 | -313.093 | -830.119 | -89.797 | -155.707 | -206.517 |
| - Net R&D | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| - Net Capitalized SG&A Items | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| - Acquisitions | 7,488.000 | 395.000 | 395.000 | 92.460 | 96.630 | 182.710 | 275.050 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 |
| - Investment in Intangibles and Net Other Assets | 7,326.000 | -100.000 | -100.000 | -27.293 | -248.009 | -168.714 | 809.385 | 726.753 | 749.428 | 772.810 | 796.922 | 821.786 | 847.425 |
| = Free Cash Flow from the Firm (FCFF) | -12,344.160 | 2,776.480 | 3,205.480 | 5,629.733 | 4,972.703 | 4,314.941 | 3,659.117 | 2,437.253 | 3,361.329 | 3,248.629 | 2,808.443 | 3,330.046 | 3,465.346 |
| Free Cash Flow to Equityholders: <i>(see p. 351-357)</i> | | | | | | | | | | | | | |
| Adjusted Net Income | 2,856.000 | 2,994.000 | 3,082.000 | 3,242.485 | 3,417.807 | 3,564.076 | 3,795.461 | 4,008.494 | 3,997.077 | 3,668.749 | 4,373.498 | 4,435.396 | 4,469.724 |
| - ΔNWC | 93.000 | 429.000 | 0.000 | -1,226.681 | -248.310 | 275.159 | 7.274 | 230.511 | -391.837 | -71.463 | 349.158 | -35.075 | -36.169 |
| - Net CAPX | 831.000 | 222.000 | 222.000 | -411.224 | -287.126 | -125.279 | -36.613 | 30.204 | -313.093 | -830.119 | -89.797 | -155.707 | -206.517 |
| - Net R&D | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| - Net Capitalized SG&A Items | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| - Acquisitions | 7,488.000 | 395.000 | 395.000 | 92.460 | 96.630 | 182.710 | 275.050 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 | 1,500.000 |
| - Investment in Intangibles and Net Other Assets | 7,326.000 | -100.000 | -100.000 | -27.293 | -248.009 | -168.714 | 809.385 | 726.753 | 749.428 | 772.810 | 796.922 | 821.786 | 847.425 |
| + (Net Debt Issued - Debt Repayments) | 642.330 | 448.670 | -752.000 | 2,380.330 | 2,083.670 | 2,107.000 | 1,895.330 | 1,895.330 | 2,862.000 | 2,862.000 | 2,862.000 | 2,862.000 | 2,862.000 |
| + (Preferred Dividends + New Preferred Stock Issued) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| = Free Cash Flow to Equityholders (FCFE) | -12,239.670 | 2,496.670 | 1,813.000 | 7,195.552 | 6,188.290 | 5,507.200 | 4,635.695 | 3,416.356 | 5,314.579 | 5,159.522 | 4,679.215 | 5,166.392 | 5,226.985 |

Data Appendix [5] – WACC DCF (Left) and DDM (Right)

(see p. 380-397)

| | Forecasting Period | | | | | Transition Period | | | | |
|--|--------------------|-----------|-----------|-----------|-----------|-------------------|-----------|-----------|-----------|-----------|
| | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Growing Perpetuity Method: | | | | | | | | | | |
| <i>(see p. 306-318)</i> | | | | | | | | | | |
| Adjusted Pre-Tax Operating Profit | 5,135.44 | 5,425.18 | 5,669.39 | 5,967.36 | 6,233.82 | 6,209.91 | 5,847.92 | 6,790.79 | 6,912.72 | 7,050.74 |
| - Taxes | 1,078.44 | 1,139.29 | 1,190.57 | 1,253.15 | 1,309.10 | 1,304.08 | 1,228.06 | 1,426.07 | 1,451.67 | 1,480.66 |
| = Adjusted After-Tax Operating Profit | 4,057.00 | 4,285.89 | 4,478.82 | 4,714.21 | 4,924.72 | 4,905.83 | 4,619.86 | 5,364.73 | 5,461.05 | 5,570.09 |
| Reinvestment Needs | | | | | | | | | | |
| - ΔNWC | -1,226.68 | -248.31 | 275.16 | 7.27 | 230.51 | -391.84 | -71.46 | 349.16 | -35.07 | -36.17 |
| - Net CAPX | -411.22 | -287.13 | -125.28 | -36.61 | 30.20 | -313.09 | -830.12 | -89.80 | -155.71 | -206.52 |
| - Net R&D | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Net Capitalized SG&A Items | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Acquisitions | 92.46 | 96.63 | 182.71 | 275.05 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 |
| - Investment in Intangibles and Net Other Assets | -27.29 | -248.01 | -168.71 | 809.39 | 726.75 | 749.43 | 772.81 | 796.92 | 821.79 | 847.43 |
| = Total Reinvestment | -1,572.74 | -686.81 | 163.88 | 1,055.10 | 2,487.47 | 1,544.50 | 1,371.23 | 2,556.28 | 2,131.00 | 2,104.74 |
| = Free Cash Flow from the Firm (FCFF) | 5,629.73 | 4,972.70 | 4,314.94 | 3,659.12 | 2,437.25 | 3,361.33 | 3,248.63 | 2,808.44 | 3,330.05 | 3,465.35 |
| PV | 5,300.35 | 4,407.14 | 3,597.80 | 2,868.64 | 1,795.67 | 2,320.79 | 2,107.34 | 1,710.36 | 1,905.01 | 1,861.73 |
| Continuing Value (PV) | 58084.737 | | | | | | | | | |
| Market Value of the Operating Assets | 95,312.28 | | | | | | | | | |
| + Non-Operating Assets | 1,812.64 | | | | | | | | | |
| = Debt | 5,524.00 | | | | | | | | | |
| + Preferred Equity | 0.00 | | | | | | | | | |
| = Market Value of the Levered Equity | 91,600.92 | | | | 60.94% | | | | | |
| = Number of Shares | 404.50 | | | | | | | | | |
| Price Per Share | 226.45 | | | | | | | | | |
| Modelling Assumptions | | | | | | | | | | |
| Marginal Tax Rate | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% |
| ROIC | 11.28% | 12.68% | 13.64% | 14.41% | 14.71% | 13.75% | 12.52% | 14.14% | 13.59% | 13.27% |
| Total Reinvestment Rate | -38.77% | -16.03% | 3.66% | 22.38% | 50.51% | 31.48% | 29.68% | 47.65% | 39.02% | 37.79% |
| Adj. P-TFEBT Growth Rate | 8.99% | 5.64% | 4.50% | 5.26% | 4.47% | -0.38% | -5.83% | 16.12% | 1.80% | 2.00% |
| WACC | 6.21% | 6.22% | 6.25% | 6.27% | 6.30% | 6.37% | 6.38% | 6.40% | 6.40% | 6.41% |
| Adj. Invested Capital | 33,803.74 | 32,841.11 | 32,720.55 | 33,482.34 | 35,667.36 | 36,899.96 | 37,949.57 | 40,174.19 | 41,963.19 | 43,715.25 |
| Terminal Growth Rate | | | | | | | | | | 3.00% |
| Terminal WACC | | | | | | | | | | 6.32% |
| Market Multiple Method: | | | | | | | | | | |
| <i>(see p. 303-306)</i> | | | | | | | | | | |
| Adjusted Pre-Tax Operating Profit | 5,135.44 | 5,425.18 | 5,669.39 | 5,967.36 | 6,233.82 | 6,209.91 | 5,847.92 | 6,790.79 | 6,912.72 | 7,050.74 |
| - Taxes | 1,078.44 | 1,139.29 | 1,190.57 | 1,253.15 | 1,309.10 | 1,304.08 | 1,228.06 | 1,426.07 | 1,451.67 | 1,480.66 |
| = Adjusted After-Tax Operating Profit | 4,057.00 | 4,285.89 | 4,478.82 | 4,714.21 | 4,924.72 | 4,905.83 | 4,619.86 | 5,364.73 | 5,461.05 | 5,570.09 |
| Reinvestment Needs | | | | | | | | | | |
| - ΔNWC | -1,226.68 | -248.31 | 275.16 | 7.27 | 230.51 | -391.84 | -71.46 | 349.16 | -35.07 | -36.17 |
| - Net CAPX | -411.22 | -287.13 | -125.28 | -36.61 | 30.20 | -313.09 | -830.12 | -89.80 | -155.71 | -206.52 |
| - Net R&D | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Net Capitalized SG&A Items | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Acquisitions | 92.46 | 96.63 | 182.71 | 275.05 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 |
| - Investment in Intangibles and Net Other Assets | -27.29 | -248.01 | -168.71 | 809.39 | 726.75 | 749.43 | 772.81 | 796.92 | 821.79 | 847.43 |
| = Total Reinvestment | -1,572.74 | -686.81 | 163.88 | 1,055.10 | 2,487.47 | 1,544.50 | 1,371.23 | 2,556.28 | 2,131.00 | 2,104.74 |
| = Free Cash Flow from the Firm (FCFF) | 5,629.73 | 4,972.70 | 4,314.94 | 3,659.12 | 2,437.25 | 3,361.33 | 3,248.63 | 2,808.44 | 3,330.05 | 3,465.35 |
| Continuing Value | | | | | | | | | | ##### |
| Market Value of the Operating Assets | 117,377.35 | | | | | | | | | |
| + Non-Operating Assets | 1,812.64 | | | | | | | | | |
| = Debt | 23,917.00 | | | | | | | | | |
| + Preferred Equity | 0.00 | | | | | | | | | |
| = Market Value of the Levered Equity | 95,272.99 | | | | | | | | | |
| = Number of Shares | 404.50 | | | | | | | | | |
| Price Per Share | 235.53 | | | | | | | | | |
| Modelling Assumptions | | | | | | | | | | |
| Marginal Tax Rate | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% |
| ROIC | 11.28% | 12.68% | 13.64% | 14.41% | 14.71% | 13.75% | 12.52% | 14.14% | 13.59% | 13.27% |
| Total Reinvestment Rate | -38.77% | -16.03% | 3.66% | 22.38% | 50.51% | 31.48% | 29.68% | 47.65% | 39.02% | 37.79% |
| Adj. P-TFEBT Growth Rate | 8.99% | 5.64% | 4.50% | 5.26% | 4.47% | -0.38% | -5.83% | 16.12% | 1.80% | 2.00% |
| WACC | 6.21% | 6.22% | 6.25% | 6.27% | 6.30% | 6.37% | 6.38% | 6.40% | 6.40% | 6.41% |
| Adj. Invested Capital | 33,803.74 | 32,841.11 | 32,720.55 | 33,482.34 | 35,667.36 | 36,899.96 | 37,949.57 | 40,174.19 | 41,963.19 | 43,715.25 |
| Terminal Multiple Value (Asset Multiple Assumed) | | | | | | | | | | 15.00 |
| Terminal Multiple Multiplier | | | | | | | | | | 11,004.18 |
| Liquidation Method: | | | | | | | | | | |
| <i>(see p. 305)</i> | | | | | | | | | | |
| Adjusted Pre-Tax Operating Profit | 5,135.44 | 5,425.18 | 5,669.39 | 5,967.36 | 6,233.82 | 6,209.91 | 5,847.92 | 6,790.79 | 6,912.72 | 7,050.74 |
| - Taxes | 1,078.44 | 1,139.29 | 1,190.57 | 1,253.15 | 1,309.10 | 1,304.08 | 1,228.06 | 1,426.07 | 1,451.67 | 1,480.66 |
| = Adjusted After-Tax Operating Profit | 4,057.00 | 4,285.89 | 4,478.82 | 4,714.21 | 4,924.72 | 4,905.83 | 4,619.86 | 5,364.73 | 5,461.05 | 5,570.09 |
| Reinvestment Needs | | | | | | | | | | |
| - ΔNWC | -1,226.68 | -248.31 | 275.16 | 7.27 | 230.51 | -391.84 | -71.46 | 349.16 | -35.07 | -36.17 |
| - Net CAPX | -411.22 | -287.13 | -125.28 | -36.61 | 30.20 | -313.09 | -830.12 | -89.80 | -155.71 | -206.52 |
| - Net R&D | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Net Capitalized SG&A Items | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Acquisitions | 92.46 | 96.63 | 182.71 | 275.05 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 |
| - Investment in Intangibles and Net Other Assets | -27.29 | -248.01 | -168.71 | 809.39 | 726.75 | 749.43 | 772.81 | 796.92 | 821.79 | 847.43 |
| = Total Reinvestment | -1,572.74 | -686.81 | 163.88 | 1,055.10 | 2,487.47 | 1,544.50 | 1,371.23 | 2,556.28 | 2,131.00 | 2,104.74 |
| = Free Cash Flow from the Firm (FCFF) | 5,629.73 | 4,972.70 | 4,314.94 | 3,659.12 | 2,437.25 | 3,361.33 | 3,248.63 | 2,808.44 | 3,330.05 | 3,465.35 |
| Continuing Value | | | | | | | | | | 0.00 |
| Market Value of the Levered Operating Assets | 27,953.15 | | | | | | | | | |
| + Non-Operating Assets | 1,812.64 | | | | | | | | | |
| = Debt | 23,917.00 | | | | | | | | | |
| + Preferred Equity | 0.00 | | | | | | | | | |
| = Market Value of the Levered Equity | 5,848.79 | | | | | | | | | |
| = Number of Shares | 404.50 | | | | | | | | | |
| Price Per Share | 14.46 | | | | | | | | | |
| Modelling Assumptions | | | | | | | | | | |
| Marginal Tax Rate | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% | 21.00% |
| ROIC | 11.28% | 12.68% | 13.64% | 14.41% | 14.71% | 13.75% | 12.52% | 14.14% | 13.59% | 13.27% |
| Total Reinvestment Rate | -38.77% | -16.03% | 3.66% | 22.38% | 50.51% | 31.48% | 29.68% | 47.65% | 39.02% | 37.79% |
| Adj. P-TFEBT Growth Rate | 8.99% | 5.64% | 4.50% | 5.26% | 4.47% | -0.38% | -5.83% | 16.12% | 1.80% | 2.00% |
| WACC | 6.21% | 6.22% | 6.25% | 6.27% | 6.30% | 6.37% | 6.38% | 6.40% | 6.40% | 6.41% |
| Adj. Invested Capital | 33,803.74 | 32,841.11 | 32,720.55 | 33,482.34 | 35,667.36 | 36,899.96 | 37,949.57 | 40,174.19 | 41,963.19 | 43,715.25 |
| Liquidation Method Used (1=Book Value, 2=Earnings) | | | | | | | | | | 45,835.00 |
| Current Book Value of Assets | | | | | | | | | | 45,835.00 |
| Assumed Inflation Rate | | | | | | | | | | 3.00% |
| Assumed Average Age of Assets | | | | | | | | | | 7.10 |
| Liquidation Value (Book Value Approach) | | | | | | | | | | 81,844 |
| Liquidating FCF | | | | | | | | | | 7.59 |
| Liquidating WACC | | | | | | | | | | 7.00% |
| Liquidating Period | | | | | | | | | | 2.00 |
| Liquidation Value (Earnings Approach) | | | | | | | | | | 27,953.15 |

(see p. 323-348)

| | Forecasting Period | | | | | Transition Period | | | | |
|-----------------------------------|--------------------|--------|--------|--------|--------|-------------------|--------|--------|--------|--------|
| | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Growing Perpetuity Method: | | | | | | | | | | |
| <i>(see p. 206-219)</i> | | | | | | | | | | |
| Forecasted Dividends Per Share | 3.75 | 3.97 | 4.15 | 4.24 | 4.45 | 4.50 | 4.67 | 4.97 | 5.30 | 5.64 |
| Continuing Value (PV) | 78.03 | | | | | | | | | |
| Price Per Share | 109.33 | | | | | | | | | |
| Modelling Assumptions | | | | | | | | | | |
| ROE | 24.66% | 23.89% | 23.24% | 22.88% | 22.15% | 20.45% | 17.42% | 19.60% | 18.34% | 17.06% |
| Retention Ratio | 53.75% | 53.90% | 54.11% | 56.25% | 56.76% | 56.38% | 50.91% | 56.34% | 54.33% | 51.92% |
| Dividend Growth Rate | 13.64% | 5.87% | 4.53% | 2.17% | 4.95% | 1.12% | 3.78% | 6.49% | 6.49% | 6.49% |
| Levered Cost of Equity | 6.94% | 6.94% | 6.94% | 6.95% | 6.95% | 7.03% | 7.03% | 7.03% | 7.04% | 7.04% |
| Terminal Growth Rate | | | | | | | | | | 3.00% |
| Terminal Cost of Equity | | | | | | | | | | 7.00% |
| Market Multiple Method: | | | | | | | | | | |
| <i>(see p. 305-306)</i> | | | | | | | | | | |
| Forecasted Dividends Per Share | 3.75 | 3.97 | 4.15 | 4.24 | 4.45 | 4.50 | 4.67 | 4.97 | 5.30 | 5.64 |
| Continuing Value | | | | | | | | | | 361.00 |
| Price Per Share | 215.06 | | | | | | | | | |
| Modelling Assumptions | | | | | | | | | | |
| ROE | 24.66% | 23.89% | 23.24% | 22.88% | 22.15% | 20.45% | 17.42% | 19.60% | 18.34% | 17.06% |
| Retention Ratio | 53.75% | 53.90% | 54.11% | 56.25% | 5 | | | | | |

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Data Appendix [5] – APV (Left) and FTE (Right)

| | Forecasting Period | | | | | Transition Period | | | | |
|---|--------------------|----------|----------|----------|----------|-------------------|----------|----------|----------|----------|
| | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| (see p. 398-419) | | | | | | | | | | |
| Growing Perpetuity Method: | | | | | | | | | | |
| <i>(see p. 396-318)</i> | | | | | | | | | | |
| Adjusted Pre-Tax Operating Profit | 5,135.44 | 5,425.18 | 5,669.39 | 5,967.36 | 6,233.82 | 6,209.91 | 5,847.92 | 6,790.79 | 6,912.72 | 7,650.74 |
| - Taxes | 1,078.44 | 1,139.29 | 1,190.57 | 1,253.15 | 1,309.10 | 1,304.08 | 1,228.06 | 1,426.07 | 1,451.67 | 1,480.66 |
| - Adjusted After-Tax Operating Profit | 4,057.00 | 4,285.89 | 4,478.82 | 4,714.21 | 4,924.72 | 4,905.83 | 4,619.86 | 5,364.73 | 5,461.05 | 6,170.09 |
| Reinvestment Needs | | | | | | | | | | |
| - ΔNWC | -1,226.68 | -248.31 | 275.16 | 7.27 | 230.51 | -391.84 | -71.46 | 349.16 | -35.07 | -36.17 |
| - Net CAPX | -411.22 | -287.13 | -125.28 | -36.61 | 30.20 | -313.09 | -830.12 | -89.80 | -155.71 | -206.52 |
| - Net R&D | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Net Capitalized SG&A Items | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Acquisitions | 92.46 | 96.63 | 182.71 | 275.05 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 |
| - Investment in Intangibles and Net Other Assets | -27.29 | -248.01 | -168.71 | 809.39 | 726.75 | 749.43 | 772.81 | 796.92 | 821.79 | 847.43 |
| - Total Reinvestment | -1,572.74 | -686.81 | 163.88 | 1,055.10 | 2,487.47 | 1,544.50 | 1,371.23 | 2,556.28 | 2,131.00 | 2,104.74 |
| - Free Cash Flow from the Firm (FCFF) | 5,629.73 | 4,972.70 | 4,314.94 | 3,659.12 | 2,437.25 | 3,365.33 | 3,248.63 | 2,808.44 | 3,330.05 | 3,465.35 |
| - Interest Tax Shields | 240.23 | 252.62 | 253.66 | 252.97 | 250.98 | 262.22 | 271.89 | 281.04 | 300.90 | 316.14 |
| - Capital Cash Flows (CCF) | 5,869.96 | 5,225.32 | 4,568.60 | 3,912.09 | 2,688.23 | 3,627.55 | 3,520.52 | 3,089.49 | 3,630.95 | 3,781.48 |
| Continuing Value (PV) | 57598.125 | | | | | | | | | |
| Present Value of the Discounted CCFs | 87,081.78 | | | | | | | | | |
| - IC x s | 0.00 | | | | | | | | | |
| - Market Value of the Levered Operating Assets | 1,812.64 | | | | | | | | | |
| - Non-Operating Assets | 5,524.00 | | | | | | | | | |
| - Debt | 0.00 | | | | | | | | | |
| - Preferred Equity | 0.00 | | | | | | | | | |
| - Market Value of the Levered Equity | 38,370.42 | | | | | | | | | |
| - Number of Shares | 404.50 | | | | | | | | | |
| Price Per Share | 204.11 | | | | | | | | | |
| Modeling Assumptions | | | | | | | | | | |
| Bankruptcy Cost (BC) | 13,003.50 | | | | | | | | | |
| Probability of Bankruptcy (π) | 0.01% | | | | | | | | | |
| Marginal Tax Rate | 21.00% | | | | | | | | | |
| Cost of Debt | 4.50% | | | | | | | | | |
| Projected Debt | 25,421.33 | | | | | | | | | |
| ROIC | 11.28% | | | | | | | | | |
| Total Reinvestment Rate | 38.77% | | | | | | | | | |
| Adj. P.T. EBIT Growth Rate | 8.99% | | | | | | | | | |
| Unlevered Cost of Equity | 6.48% | | | | | | | | | |
| Adj. Invested Capital | 33,803.74 | | | | | | | | | |
| Terminal Growth Rate | 5.75% | | | | | | | | | |
| Terminal Unlevered Cost of Equity | 6.57% | | | | | | | | | |
| Market Multiple Method: | | | | | | | | | | |
| <i>(see p. 395-396)</i> | | | | | | | | | | |
| Adjusted Pre-Tax Operating Profit | 5,135.44 | 5,425.18 | 5,669.39 | 5,967.36 | 6,233.82 | 6,209.91 | 5,847.92 | 6,790.79 | 6,912.72 | 7,650.74 |
| - Taxes | 1,078.44 | 1,139.29 | 1,190.57 | 1,253.15 | 1,309.10 | 1,304.08 | 1,228.06 | 1,426.07 | 1,451.67 | 1,480.66 |
| - Adjusted After-Tax Operating Profit | 4,057.00 | 4,285.89 | 4,478.82 | 4,714.21 | 4,924.72 | 4,905.83 | 4,619.86 | 5,364.73 | 5,461.05 | 6,170.09 |
| Reinvestment Needs | | | | | | | | | | |
| - ΔNWC | -1,226.68 | -248.31 | 275.16 | 7.27 | 230.51 | -391.84 | -71.46 | 349.16 | -35.07 | -36.17 |
| - Net CAPX | -411.22 | -287.13 | -125.28 | -36.61 | 30.20 | -313.09 | -830.12 | -89.80 | -155.71 | -206.52 |
| - Net R&D | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Net Capitalized SG&A Items | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Acquisitions | 92.46 | 96.63 | 182.71 | 275.05 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 |
| - Investment in Intangibles and Net Other Assets | -27.29 | -248.01 | -168.71 | 809.39 | 726.75 | 749.43 | 772.81 | 796.92 | 821.79 | 847.43 |
| - Total Reinvestment | -1,572.74 | -686.81 | 163.88 | 1,055.10 | 2,487.47 | 1,544.50 | 1,371.23 | 2,556.28 | 2,131.00 | 2,104.74 |
| - Free Cash Flow from the Firm (FCFF) | 5,629.73 | 4,972.70 | 4,314.94 | 3,659.12 | 2,437.25 | 3,365.33 | 3,248.63 | 2,808.44 | 3,330.05 | 3,465.35 |
| - Interest Tax Shields | 240.23 | 252.62 | 253.66 | 252.97 | 250.98 | 262.22 | 271.89 | 281.04 | 300.90 | 316.14 |
| - Capital Cash Flows (CCF) | 5,869.96 | 5,225.32 | 4,568.60 | 3,912.09 | 2,688.23 | 3,627.55 | 3,520.52 | 3,089.49 | 3,630.95 | 3,781.48 |
| Continuing Value | 57598.125 | | | | | | | | | |
| Present Value of the Discounted CCFs | 115,013.46 | | | | | | | | | |
| - IC x s | 0.00 | | | | | | | | | |
| - Market Value of the Levered Operating Assets | 115,013.46 | | | | | | | | | |
| - Non-Operating Assets | 1,812.64 | | | | | | | | | |
| - Debt | 23,917.00 | | | | | | | | | |
| - Preferred Equity | 0.00 | | | | | | | | | |
| - Market Value of the Levered Equity | 92,096.10 | | | | | | | | | |
| - Number of Shares | 404.50 | | | | | | | | | |
| Price Per Share | 132.72 | | | | | | | | | |
| Modeling Assumptions | | | | | | | | | | |
| Bankruptcy Cost (BC) | 0.00 | | | | | | | | | |
| Probability of Bankruptcy (π) | 0.01% | | | | | | | | | |
| Marginal Tax Rate | 21.00% | | | | | | | | | |
| Cost of Debt | 4.50% | | | | | | | | | |
| Projected Debt | 25,421.33 | | | | | | | | | |
| ROIC | 11.28% | | | | | | | | | |
| Total Reinvestment Rate | 38.77% | | | | | | | | | |
| Adj. P.T. EBIT Growth Rate | 8.99% | | | | | | | | | |
| Unlevered Cost of Equity | 6.48% | | | | | | | | | |
| Adj. Invested Capital | 33,803.74 | | | | | | | | | |
| Terminal Growth Rate | 5.75% | | | | | | | | | |
| Terminal Multiple Value (Asset Multiple Assumed) | 11,004.18 | | | | | | | | | |
| Terminal Multiple Multiplier | 1.00 | | | | | | | | | |
| Liquidation Method: | | | | | | | | | | |
| <i>(see p. 393)</i> | | | | | | | | | | |
| Adjusted Pre-Tax Operating Profit | 5,135.44 | 5,425.18 | 5,669.39 | 5,967.36 | 6,233.82 | 6,209.91 | 5,847.92 | 6,790.79 | 6,912.72 | 7,650.74 |
| - Taxes | 1,078.44 | 1,139.29 | 1,190.57 | 1,253.15 | 1,309.10 | 1,304.08 | 1,228.06 | 1,426.07 | 1,451.67 | 1,480.66 |
| - Adjusted After-Tax Operating Profit | 4,057.00 | 4,285.89 | 4,478.82 | 4,714.21 | 4,924.72 | 4,905.83 | 4,619.86 | 5,364.73 | 5,461.05 | 6,170.09 |
| Reinvestment Needs | | | | | | | | | | |
| - ΔNWC | -1,226.68 | -248.31 | 275.16 | 7.27 | 230.51 | -391.84 | -71.46 | 349.16 | -35.07 | -36.17 |
| - Net CAPX | -411.22 | -287.13 | -125.28 | -36.61 | 30.20 | -313.09 | -830.12 | -89.80 | -155.71 | -206.52 |
| - Net R&D | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Net Capitalized SG&A Items | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| - Acquisitions | 92.46 | 96.63 | 182.71 | 275.05 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 | 1,500.00 |
| - Investment in Intangibles and Net Other Assets | -27.29 | -248.01 | -168.71 | 809.39 | 726.75 | 749.43 | 772.81 | 796.92 | 821.79 | 847.43 |
| - Total Reinvestment | -1,572.74 | -686.81 | 163.88 | 1,055.10 | 2,487.47 | 1,544.50 | 1,371.23 | 2,556.28 | 2,131.00 | 2,104.74 |
| - Free Cash Flow from the Firm (FCFF) | 5,629.73 | 4,972.70 | 4,314.94 | 3,659.12 | 2,437.25 | 3,365.33 | 3,248.63 | 2,808.44 | 3,330.05 | 3,465.35 |
| - Interest Tax Shields | 240.23 | 252.62 | 253.66 | 252.97 | 250.98 | 262.22 | 271.89 | 281.04 | 300.90 | 316.14 |
| - Capital Cash Flows (CCF) | 5,869.96 | 5,225.32 | 4,568.60 | 3,912.09 | 2,688.23 | 3,627.55 | 3,520.52 | 3,089.49 | 3,630.95 | 3,781.48 |
| Continuing Value | 37,601.22 | | | | | | | | | |
| Market Value of Equity Claim on the Operating Assets | 1,812.64 | | | | | | | | | |
| + Non-Operating Assets | 39,413.86 | | | | | | | | | |
| + Market Value of the Levered Equity | 404.50 | | | | | | | | | |
| + Number of Shares | 97.44 | | | | | | | | | |
| Price Per Share | 4.15 | | | | | | | | | |
| Modeling Assumptions | | | | | | | | | | |
| ROE | 24.66% | | | | | | | | | |
| Equity Reinvestment Rate | -121.91% | | | | | | | | | |
| Net Income Growth Rate | 8.30% | | | | | | | | | |
| Levered Cost of Equity | 6.94% | | | | | | | | | |
| Book Value of Adj. Equity Capital | 14,308.06 | | | | | | | | | |
| Weight of Debt + Weight of Preferred | 64% | | | | | | | | | |
| Assumed Inflation Rate | 3.00% | | | | | | | | | |
| Assumed Average Age of Assets | 7.10 | | | | | | | | | |
| Terminal Weight of Equity | 81.84% | | | | | | | | | |
| Liquidation Value (Book Value Approach) | 37,601.22 | | | | | | | | | |
| Liquidating FCFE | 7,000.00 | | | | | | | | | |
| Liquidating Levered Cost of Equity | 2.00 | | | | | | | | | |

Data Appendix [6] – Regression

| Regression Estimation | | | | | | | | | | | | | | |
|--------------------------------|-------------------------|----------------------|-------------------|-------------------|--------|--------|-------------|-------------|------------|---------------|---------------|---------|--------------------|--------|
| Regression | Regression Coefficients | | | | | | | | | | | Adj R2 | Predicted Multiple | |
| | Intercept | Long-Run Growth Rate | ATOM | Net Profit Margin | ROIC | ROE | Payout | Equity Beta | Tax Rate | Depr. Rate | Reinvest Rate | | | WACC |
| P/S | -0.8460 | 5.0879 | | 25.5997 | | | -0.7985 | 1.1663 | | | | | 0.4420 | 2.62 |
| P/E (ttm) | 36.7754 | 69.5244 | | | | | -21.9965 | -29.3806 | 8.9836 | | | | -0.0130 | 27.23 |
| P/B | -14.1137 | 22.9393 | | | | | 68.4916 | -5.5076 | 1.2999 | | | | 0.8233 | 6.41 |
| EV/S | -5.1621 | 7.1747 | 21.0744 | | | | | | | 1.6292 | 68.4795 | | 0.3097 | 2.99 |
| EV/EBITDA | 30.0362 | 51.3708 | | | | | | | | -287.9276 | 10.1794 | 15.1596 | 413.6532 | 0.2932 |
| EV/Assets | 0.7304 | 1.8294 | | | 2.3170 | | | | | -15.6331 | -0.1227 | 1.0592 | 71.8114 | 0.1096 |
| | | | | | | | | | | | | | | |
| Company Data to Fit Regression | | | | | | | | | | | | | | |
| | Long-Run Growth Rate | ATOM | Net Profit Margin | ROIC | ROE | Payout | Equity Beta | Tax Rate | Depr. Rate | Reinvest Rate | WACC | | | |
| WASTE MANAGEMENT INC | 9.65% | 13.52% | 10.74% | 10.09% | 29.69% | 49.26% | 0.53 | 20.93% | 11.36% | 15.06% | 6.37% | | | |

| Multiple | Benchmark Multiple Value | Denominator | Implied MVA | Debt | Implied MVE | Number of Shares | Implied Price per Share |
|---------------------|--------------------------|-------------|-------------|-----------|-------------|------------------|-------------------------|
| P/S | 2.62 | 25,204.00 | | | 66,108.03 | 404.50 | 163.43 |
| P/E (ttm) | 27.27 | 2,708.00 | | | 73,849.44 | 404.50 | 182.57 |
| P/B | 6.42 | 9,991.00 | | | 64,093.99 | 404.50 | 158.45 |
| EV/S | 2.99 | 25,204.00 | 75,285.81 | 23,917.00 | 51,368.81 | 404.50 | 126.99 |
| EV/EBITDA | 4.52 | 7,717.00 | 34,875.80 | 23,917.00 | 10,958.80 | 404.50 | 27.09 |
| EV/Assets | 2.59 | 45,835.00 | 118,650.88 | 23,917.00 | 94,733.88 | 404.50 | 234.20 |
| Combination Model 1 | | | | | 23,917.00 | 404.50 | 0.00 |
| Combination Model 2 | | | | | 23,917.00 | 404.50 | 0.00 |

Non-Operating Assets and Shares

| | | |
|--|-----------------|--------|
| Cash and Marketable Securities | 310.00 | |
| Value of Cross-Holdings | 1,012.70 | |
| Balance Sheet Value for Cross-Holdings | | 779.00 |
| Valuation Multiple for Cross-Holdings | | 1.30 |
| Pension Assets | 5.00 | |
| Net Operating Losses | 485.940 | |
| Unutilized Assets | 0.00 | |
| Litigation Liabilities | 0.00 | |
| Value of Minority Interests | 1.00 | |
| Balance Sheet Value for Minority Interest | | 1.00 |
| Valuation Multiple for Minority Interest | | 1.00 |
| Value of Non-Operating Assets | 1,812.64 | |
| (see p. 423-441) | | |
| <i>Balance Sheet Figures (MRQ)</i> | | |
| Common Shares for Primary EPS | 403.10 | |
| Common Shares for Fully Diluted EPS | 404.50 | |
| Number of Common Shares for Valuation | 404.50 | |

Projection Assumptions

| Fiscal Year: | Historical | | | | Forecasting Period | | | | | Transition Period | | | | |
|--|------------|------------|------------|------------|--------------------|------------|------------|------------|------------|-------------------|------------|------------|------------|------------|
| | Hist. Med. | 2024 | 2025 | 11M | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Expense Assumptions | | | | | | | | | | | | | | |
| (see p. 327-331) | | | | | | | | | | | | | | |
| Sales | 26,080,840 | 26,894,562 | 27,733,673 | 28,598,963 | 29,491,251 | 30,411,378 | 31,360,213 | 32,338,651 | 33,347,617 | 34,388,063 | | | | |
| Growth Rate (y/y) | 3.7% | 8.0% | 14.2% | | 3.5% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% | 3.1% |
| Cost of Goods Sold (% of Sales) | 61.6% | 60.1% | 59.0% | 59.0% | 58.9% | 58.5% | 58.2% | 58.2% | 58.2% | 58.2% | 58.2% | 58.2% | 58.2% | 58.5% |
| Gross Margin | 38.4% | 39.9% | 41.0% | 41.0% | 41.1% | 41.5% | 41.5% | 41.7% | 41.8% | 41.9% | 41.9% | 41.9% | 41.9% | 41.5% |
| R&D (% of Sales) | 0.0% | 0.0% | 0.0% | | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Rental Expense (% of Sales) | 0.9% | 1.2% | 0.7% | | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% | 1.0% |
| Advertising Expense (% of Sales) | 0.0% | 0.0% | 0.0% | | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Other SG&A Expense (% of Sales) | 9.3% | 8.4% | 8.7% | | 8.2% | 8.2% | 8.2% | 8.2% | 8.2% | 8.2% | 8.2% | 8.2% | 8.2% | 8.5% |
| Total SG&A (% of Sales) | 10.3% | 9.6% | 10.4% | 10.4% | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% | 9.5% |
| Depreciation & Amortization (% of PP&E Open Bal) | 13.4% | 13.8% | 14.8% | | 14.6% | 15.1% | 15.3% | 15.5% | 15.6% | 15.4% | 17.5% | 14.5% | 14.5% | 14.5% |
| Tax Rate (% of Pretax Income) | 23.4% | 20.6% | 20.9% | 20.9% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% |
| Nonoperating Income (Expense) (% of Sales) | -0.2% | 0.6% | 0.1% | 0.1% | -0.1% | -0.1% | -0.1% | -0.1% | -0.1% | -0.1% | 0.0% | 0.0% | 0.0% | 0.0% |
| Special Items | -150,500 | -239,000 | -388,000 | -388,000 | -150,500 | -150,500 | -150,500 | -150,500 | -150,500 | -150,500 | -150,500 | -150,500 | -150,500 | -150,500 |
| Noncontrolling Interest (% of EBIT) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Extraordinary Items | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Discontinued Operations | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| GAAP Pre-Tax Operating Margin (PTOM) | 17.4% | 19.5% | 18.7% | 18.7% | 19.7% | 20.2% | 20.4% | 20.9% | 21.1% | 20.4% | 18.6% | 21.0% | 20.7% | 20.5% |
| GAAP Net Profit Margin | 10.0% | 12.4% | 10.7% | 10.7% | 11.8% | 12.4% | 12.7% | 13.0% | 12.9% | 12.6% | 11.2% | 13.1% | 12.8% | 12.6% |
| Adjusted Net Profit Margin | 11.9% | 12.9% | 11.9% | 12.2% | 12.4% | 12.7% | 12.9% | 13.3% | 13.6% | 13.1% | 11.7% | 13.5% | 13.3% | 13.0% |
| Reinvestment Requirement Assumptions for Working Capital | | | | | | | | | | | | | | |
| (see p. 285-289, 331-333) | | | | | | | | | | | | | | |
| Receivables (% of Sales) | 14.6% | 16.7% | 16.1% | 16.1% | 14.2% | 14.3% | 14.2% | 14.2% | 13.8% | 12.7% | 12.6% | 13.0% | 13.0% | 13.0% |
| Days Sales Outstanding in Receivables | 53.3 | 61.0 | 58.7 | 58.7 | 51.9 | 52.2 | 51.7 | 51.8 | 50.2 | 46.4 | 46.2 | 47.5 | 47.5 | 47.5 |
| Inventories (% of Sales) | 0.8% | 0.9% | 0.9% | 0.9% | 0.8% | 0.8% | 0.8% | 0.7% | 0.8% | 0.7% | 0.8% | 0.8% | 0.8% | 0.8% |
| Days Sales in Inventories | 4.9 | 5.7 | 5.5 | 5.5 | 5.4 | 5.2 | 5.0 | 4.7 | 4.9 | 4.4 | 4.3 | 5.1 | 5.1 | 5.1 |
| Accounts Payable (% of Sales) | 6.9% | 9.3% | 7.4% | 7.4% | 9.2% | 9.0% | 8.7% | 9.0% | 7.7% | 7.7% | 7.7% | 7.0% | 7.0% | 7.0% |
| Days Sales in Payables | 41.4 | 56.4 | 45.9 | 45.9 | 57.0 | 56.0 | 54.0 | 56.2 | 48.1 | 48.2 | 48.1 | 43.7 | 43.7 | 43.7 |
| Operating Cycle in Days | 56.4 | 66.7 | 64.3 | 64.3 | 57.3 | 57.3 | 56.7 | 56.4 | 55.1 | 50.8 | 50.4 | 52.6 | 52.6 | 52.6 |
| Cash Cycle in Days | 21.2 | 10.3 | 18.4 | 18.4 | 0.4 | 1.3 | 2.7 | 0.3 | 7.0 | 2.6 | 2.3 | 8.9 | 8.9 | 8.9 |
| Prepaid Expenses and Other Current Assets (% of Sales) | 1.1% | 1.7% | 1.3% | 1.3% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% |
| Intangible Assets (% of Sales) | 49.0% | 79.9% | 70.0% | 70.0% | 66.4% | 62.8% | 59.6% | 60.0% | 60.0% | 60.0% | 60.0% | 60.0% | 60.0% | 60.0% |
| Other Assets and Deferred Charges (% of Sales) | 4.5% | 4.5% | 4.6% | 4.6% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% |
| Income Taxes Payable (% of Sales) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Accrued Expenses and Other CL (% of Sales) | 11.5% | 12.2% | 11.0% | 11.0% | 12.0% | 13.0% | 12.0% | 11.5% | 11.5% | 11.5% | 11.5% | 11.5% | 11.5% | 11.5% |
| Deferred Taxes and Investment Tax Credit (% of Sales) | 10.7% | 12.8% | 12.5% | 12.5% | 12.5% | 11.7% | 11.4% | 11.3% | 10.5% | 10.1% | 10.0% | 10.5% | 10.5% | 10.5% |
| Other Liabilities (% of Sales) | 16.9% | 17.3% | 16.3% | 16.3% | 16.9% | 16.9% | 16.9% | 16.9% | 16.9% | 16.9% | 16.9% | 16.9% | 16.9% | 16.9% |
| Working Capital Schedule | | | | | | | | | | | | | | |
| Accounts Receivable | 3,687,000 | 4,055,000 | 4,055,000 | 4,055,000 | 3,710,527 | 3,844,610 | 3,927,349 | 4,057,944 | 4,058,118 | 3,867,142 | 3,965,294 | 4,204,025 | 4,335,190 | 4,470,448 |
| Inventories | 206,000 | 225,000 | 225,000 | 225,000 | 227,495 | 222,621 | 220,888 | 212,566 | 229,262 | 215,081 | 214,227 | 266,373 | 274,684 | 283,254 |
| Prepaid Expenses and Other Current Assets | 367,000 | 320,000 | 320,000 | 320,000 | 312,970 | 322,735 | 332,804 | 343,388 | 353,895 | 364,937 | 376,323 | 388,064 | 400,171 | 412,657 |
| Accounts Payable | 2,046,000 | 1,867,000 | 1,867,000 | 1,867,000 | 2,395,973 | 2,416,663 | 2,400,832 | 2,565,374 | 2,259,827 | 2,351,735 | 2,422,765 | 2,263,706 | 2,334,333 | 2,407,164 |
| Income Taxes Payable | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Accrued Expenses and Other Current Liabilities | 2,691,000 | 2,781,000 | 2,781,000 | 2,781,000 | 3,129,701 | 3,496,293 | 3,328,041 | 3,288,881 | 3,391,494 | 3,497,308 | 3,606,424 | 3,718,945 | 3,834,976 | 3,954,627 |
| Net Operating Working Capital (NWC) | -477,000 | -48,000 | -48,000 | -48,000 | -1,274,681 | -1,522,990 | -1,247,832 | -1,240,557 | -1,010,046 | -1,401,883 | -1,473,347 | -1,124,189 | -1,159,264 | -1,195,433 |
| ANWC | 93,000 | 429,000 | 0.000 | 0.000 | -1,226,681 | -248,310 | 275,159 | 7,274 | 230,511 | -391,837 | -71,463 | 349,158 | -35,075 | -36,169 |
| NWC to Sales | -0.9% | -2.2% | -0.2% | -0.2% | -4.9% | -5.7% | -4.5% | -4.3% | -3.4% | -4.6% | -4.7% | -3.5% | -3.5% | -3.5% |
| Reinvestment Requirement Assumptions for Net Fixed Assets | | | | | | | | | | | | | | |
| (see p. 279-284, 331-333) | | | | | | | | | | | | | | |
| Capital Expenditures | 1,571,000 | 3,231,000 | 3,227,000 | 3,227,000 | 2,705,150 | 2,888,350 | 3,067,790 | 3,207,780 | 3,321,250 | 3,186,000 | 3,331,000 | 3,464,240 | 3,602,810 | 3,746,922 |
| Research and Development Expense | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Net Capitalized SG&A Items | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Cash Acquisitions | -427,500 | 7,488,000 | 395,000 | 395,000 | 92,460 | 96,630 | 182,710 | 275,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 |
| Stock Acquisitions | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Investment in Intangibles and Net Other Assets | 11,000 | 7,326,000 | -100,000 | -100,000 | -27,293 | -248,009 | -168,714 | 809,385 | 726,753 | 749,428 | 772,810 | 796,922 | 821,786 | 847,425 |
| Total Operating Fixed Investment Expenditures | 2,770,317 | 2,736,971 | 3,081,786 | 3,081,786 | 2,770,317 | 2,736,971 | 3,081,786 | 3,207,780 | 3,321,250 | 3,186,000 | 3,331,000 | 3,464,240 | 3,602,810 | 3,746,922 |
| Less Depreciation and Amortization | 3,116,774 | 3,174,776 | 3,193,069 | 3,244,393 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 |
| Total Operating Net Fixed Investment Expenditures | -346,457 | -437,805 | -111,283 | -111,283 | -580,729 | -554,875 | -210,260 | -183,266 | -269,796 | -105,046 | 40,954 | 173,194 | 311,764 | 455,876 |
| Investment and Advances Expenditures | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total Fixed Investment Expenditures | -346,457 | -437,805 | -111,283 | -111,283 | -580,729 | -554,875 | -210,260 | -183,266 | -269,796 | -105,046 | 40,954 | 173,194 | 311,764 | 455,876 |
| Sale of Property, Plant & Equipment | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Depreciation Schedule | | | | | | | | | | | | | | |
| Operating Net Plant, Property & Equip | 21,337,000 | 21,018,236 | 20,827,740 | 20,885,171 | 21,123,608 | 22,653,812 | 25,840,719 | 24,510,600 | 25,920,803 | 27,265,096 | 28,771,660 | 29,740,039 | 31,841,539 | 33,453,539 |
| Less Depreciation and Amortization | 3,116,774 | 3,174,776 | 3,193,069 | 3,244,393 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 | 3,291,046 |
| Plus Capital Expenditures | 2,705,150 | 2,888,350 | 3,067,790 | 3,207,780 | 3,321,250 | 3,186,000 | 3,331,000 | 3,464,240 | 3,602,810 | 3,746,922 | | | | |
| Less Sale of Property, Plant & Equipment | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Plus Acquisitions | 92,460 | 96,630 | 182,710 | 275,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 | 1,500,000 |
| Closing Net Plant, Property & Equip | 21,018,236 | 20,827,740 | 20,885,171 | 21,123,608 | 22,653,812 | 25,840,719 | 24,510,600 | 25,920,803 | 27,265,096 | 28,771,660 | 29,740,039 | 31,841,539 | 33,453,539 | 35,065,539 |
| PP&E Turnover | 1.08 | 1.18 | 1.18 | 1.18 | 1.24 | 1.29 | 1.33 | 1.35 | 1.30 | 1.28 | 1.28 | 1.25 | 1.22 | 1.20 |
| Debt and Equity Utilization Assumptions | | | | | | | | | | | | | | |
| Notes Payable Issuance (Reduction) | 0.000 | 0.000 | | | 862,000 | 862,000 | 862,000 | 862,000 | 862,000 | 862,000 | 862,000 | 862,000 | 862,000 | 862,000 |
| Long-Term Debt - Issuance | | | | | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 |
| Scheduled Debt Maturities to Current (For Reference Only) | | | | | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 |
| Long-Term Debt - Maturity to Current (Projection) | 1,521,000 | 876,000 | | | 773,000 | | | | | | | | | |