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Republic Services RSG FAIRLY VALUED

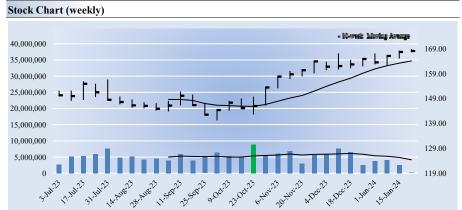
Buying Index™

6

Value Rating

Economic Castle
AttractiveEstimated Fair Value
\$170.00Fair Value Range
\$136.00 - \$204.00Investment Style
LARGE-CAP VALUESector
IndustrialsIndustrial Leaders

Republic Services is one of our favorite industrial companies. The garbage hauler has recession-resistant operations and pricing power.



The week with the highest trading volume out of the last 30 weeks was a week of heavy selling, or distribution (red bar)

Company Vitals	
Market Cap (USD)	\$53,309
Avg Weekly Vol (30 wks)	5,034
30-week Range (USD)	140.23 - 168.97
Valuentum Sector	Industrials
5-week Return	3.6%
13-week Return	14.8%
30-week Return	10.5%
Dividend Yield %	1.3%
Dividends per Share	2.14
Forward Dividend Payout Rati	o 38.6%
Est. Normal Diluted EPS	7.46
P/E on Est. Normal Diluted EF	PS 22.5
Est. Normal EBITDA	4,945
Forward EV/EBITDA	16.0
EV/Est. Normal EBITDA	13.1
Forward Revenue Growth (5-y	r) 6.6%
Forward EPS Growth (5-yr) NMF = Not Meaningful; Est. = Estimated; FY =	16.2% Fiscal Year

Returns Summary	3-year Historical Average
Return on Equity	14.1%
Return on Assets	5.0%
ROIC, with goodwill	10.1%
ROIC, without goodwill	24.3%
ROIC = Return on Invested Capital; NMF =	Not Meaningful

Leverage, Coverage, and Liquidity	
In Millions of USD	
Total Debt	11,638
Net Debt	11,494
Total Debt/EBITDA	3.0
Net Debt/EBITDA	3.0
EBITDA/Interest	9.8
Current Ratio	0.2

Quick Ratio

NMF = Not Meaningful

Investment Highlights

- Republic Services is the second largest provider of services in the domestic non-hazardous solid waste industry, as measured by revenue. The firm has ~355 collection operations in 40+ US states and Puerto Rico. It also owns and operates ~200 active solid waste landfills and ~240 transfer stations. The firm was founded in 1996 and is based in Phoenix, Arizona.
- The waste industry is characterized by solid revenue and earnings visibility thanks to the nature of the multi-year contracts utilized. The industry continues to consolidate, and roughly 35% of industry revenue is generated by private entrepreneurs.
- Republic Services is focused on developing the best vertically integrated market position as it works to increase density. The firm's disposal assets represent a long-term strategic benefit that will only become more valuable over time due to an increasingly onerous regulatory environment and continued citizens' group opposition to greenfield sites.
- Republic Services has meaningful pricing strength, which the firm sees as enabling margin expansion over time. Cost control measures will also be key. The firm owns the Apex landfill in Nevada, one of the largest in the world, which we view as the crown jewel of its waste disposal business.
- Republic Services completed its ~\$2.2 billion acquisition of US Ecology in May 2022 and material synergies are expected going forward. The firm is supported by its investment grade credit ratings (BBB+/Baa2/BBB).

FAIRLY VALUED
UNATTRACTIVE
EXCELLENT
LOW
POSITIVE
STRONG
HIGH
MODEST
BULLISH
STRONG
NEUTRAL
BULLISH

Near-term Technical Support, 10-week MA 164.00 DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality	ValueCreation TM			
ValueRisk TM	Very Poor	Poor	Good	Excellent
Low				
Medium				
High				
Very High				

Firms that generate economic profits with little operating variability score near the top right of the matrix.

Relative Valuation	Forward P/E	PEG	Price / FV
Danaher	27.6	2.8	97.1%
Honeywell	21.4	2.2	101.8%
Lockheed Martin	16.6	2.0	95.5%
Union Pacific	21.3	1.6	100.2%
Peer Median	21.3	2.1	98.7%
Republic Services	30.3	2.2	98.9%
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Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary	Actual		Projected	
Fiscal Year End:	Dec-21	Dec-22	Dec-23	
Revenue	11,295	13,511	14,862	
Revenue, YoY%	11.2%	19.6%	10.0%	
Operating Income	2,117	2,489	2,546	
Operating Margin %	18.7%	18.4%	17.1%	
Net Income	1,290	1,488	1,749	
Net Income Margin %	11.4%	11.0%	11.8%	
Diluted EPS	4.04	4.69	5.54	
Diluted EPS, YoY %	33.6%	16.1%	18.2%	
Free Cash Flow (CFO-capex)	1,472	1,736	2,029	
Free Cash Flow Margin % In Millions of USD (except for per share items)	13.0%	12.8%	13.7%	

Structure of the Environmental Services Industry

GOOD

The oligopolistic US non-hazardous solid-waste services industry is dominated by Waste Management, Republic Services and Waste Connections, which collectively generate over half of industry revenue and control an equal percentage of valuable disposal capacity. Most operators boast strong returns on capital and predictable cash flow streams, buoyed in part by real pricing expansion. The landfill business has significant barriers to entry, while Stericycle's niche in the medical-waste industry and US Ecology's monopolistic radioactive waste disposal assets are compelling. We like the structure of the group.



Republic Services RSG FAIRLY VALUED

Buying Index™

WALUENTUM Value Rating

Economic Castle Attractive

Estimated Fair Value \$170.00

Fair Value Range \$136.00 - \$204.00

Investment Style LARGE-CAP VALUE

Sector Industrials

6

Industry Industrial Leaders

Economic Profit Analysis

ValueCreationTM **EXCELLENT**

The best measure of a firm's ability to create value for shareholders is expressed by comparing its return on invested capital (ROIC) with its weighted average cost of capital (WACC). The gap or difference between ROIC and WACC is called the firm's economic profit spread. Republic Services' 3-year historical return on invested capital (without goodwill) is 24.3%, which is above the estimate of its cost of capital of 7.9%. As such, we assign the firm a ValueCreationTM rating of EXCELLENT. In the chart to the right, we show the probable path of ROIC in the years ahead based on the estimated volatility of key drivers behind the measure. The solid grey line reflects the most likely outcome, in our opinion, and represents the scenario that results in our fair value

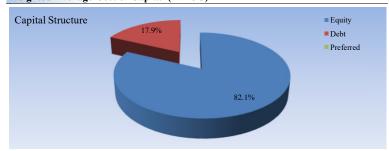
ROIC - WACC Spread, 3-year historical average	16.4%
ROIC - WACC Spread, 5-year projected average	20.0%

These spreads equal the firm's annual average ROIC (excluding goodwill) less its WACC.

ValueTrend™ **POSITIVE**

Republic Services receives a ValueTrendTM rating of POSITIVE, which is based on the company's trailing three-year performance. The firm's ROIC (excluding goodwill) increased to 25.2% last year from its trailing 3-year average of 24.3%. We expect ROIC (excluding goodwill) to be in the ballpark of about 34% by the end of our discrete forecast period, with upside potential to about 39% over that time period.

Weighted Average Cost of Capital (WACC)



Cost of Equity

Cost of Equity Assumption	8.5%
Estimated Equity Risk Premium	6.5%
Fundamental Beta (ERP multiplier)	0.7
Risk Free Rate Assumption	4.3%

After-tax Cost of Debt

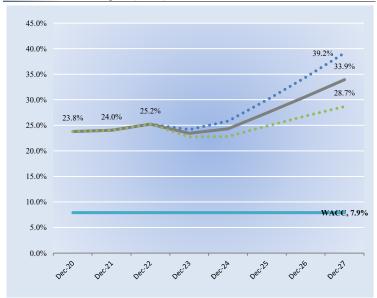
After-tax Cost of Debt Assumption	6.5%
Cash Tax Rate Assumption	18.8%
Cost of Debt Assumption	8.0%
Synthetic Credit Spread	3.67%
Risk Free Rate Assumption	4.3%
THE THE COST OF DEAD	

Cost of Preferred Stock	
Preferred Dividends	0
Value of Preferred Stock	0
Cost of Preferred Assumption	NA

Weighted Average Cost of Capital (WACC)

ERP = Equity Risk Premium

Return on Invested Capital (ROIC)



The graph above shows the firm's ROIC (excluding goodwill) compared with historical averages and its WACC

Assessment of Company Dividend Strategy

Key Strengths

Republic Services benefits significantly from its long-term disposal assets as these operations grow more attractive as time passes thanks to the increasing regulatory nature of the waste business, as well as citizen groups opposed to greenfield sites growing in number and strength. These disposal assets, including its Apex landfill in Nevada, which is the busiest facility in the US, represent the material barriers to entry that give the company a large portion of its mosty characteristics. Republic Services acquired US Ecology in May 2022 through a deal worth ~\$2.2 billion and material synergies are expected going forward, which should enhance its cash flow profile.

Potential Weaknesses

Republic Services' net debt load provides a large drag on its unadjusted Dividend Cushion ratio, though its investment grade credit rating (BBB+/Baa2/BBB) and the well-staggered nature of its maturity schedule provides it with some financial flexibility. Tuck-in acquisitions have the potential to impact the pace of dividend expansion going forward, as does the pace of its stock buyback program, but we continue to expect modest increases in its payout on the back of its stable, free cash flow generating operations. The nature of Republic Services' contracts (some are linked to CPI) and its ample pricing power help offset inflationary pressures, to a degree.

Note: Valuentum may provide an adjusted ROIC measure to better reflect the economic substance of a company's operations, as in the case of companies with negative invested capital.



Republic Services RSG FAIRLY VALUED

Buying IndexTM

Value Rating

Economic Castle
Attractive

Estimated Fair Value \$170.00 Fair Value Range \$136.00 - \$204.00 Investment Style LARGE-CAP VALUE

Sector Industrials

6

Industry
Industrial Leaders

Growth Analysis

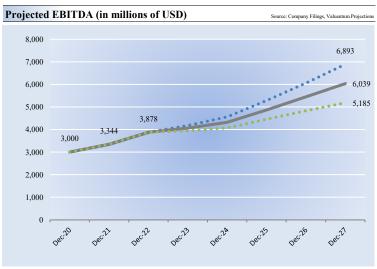
Revenue Growth				MODEST
		Last Fiscal Year Revenue	3-year Historical CAGR	5-year Projected CAGR
Republic Services	USD	13,511	9.5%	6.6%
Danaher	USD	31,471	20.7%	-0.2%
Honeywell	USD	35,466	-1.1%	4.9%
Lockheed Martin	USD	65,984	3.3%	3.2%
Union Pacific	USD	24,875	4.6%	3.1%
Peer Median			4.0%	3.2%
Industry Median			4.6%	4.5%

Republic Services' revenue expansion has been greater than the median of both its peer group and industry group during the past three years. We expect the firm's revenue expansion to outpace the median of its peer group and industry group during the next five years. Our growth assessment of each firm is based on the firm's 5-year forward revenue CAGR. Republic Services' future pace of revenue growth is MODEST, in our opinion.

In the chart above, we show our baseline forecast for revenue as well as potential upside and downside cases.

EBITDA Growth Last Fiscal Year 3-year Historical 5-year Projected **EBITDA CAGR** CAGR Republic Services USD 3,878 10.1% 9.3% 10,964 34.9% 2.6% Danaher USD 8 274 -1 2% 7.7% Honeywell USD Lockheed Martin -0.6% USD 8,620 7.3% Union Pacific USD 12,079 3.7% 5.7% Peer Median 1.6% 8.0% Industry Median

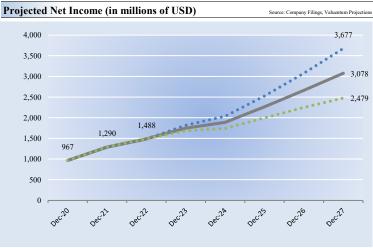
Republic Services' EBITDA expansion has been greater than that of both its peer group and industry group during the past three years. We expect the firm's EBITDA expansion to outpace its peer group and industry group during the next five years. Republic Services sports the highest expected EBITDA growth rate among peers.



In the chart above, we show our baseline forecast for EBITDA as well as potential upside and downside cases.

Net Income Growth				
		Last Fiscal Year Net Income	3-year Historical CAGR	5-year Projected CAGR
Republic Services	USD	1,488	11.5%	15.7%
Danaher	USD	7,209	33.8%	3.5%
Honeywell	USD	4,966	-6.8%	10.4%
Lockheed Martin	USD	5,732	-2.7%	8.9%
Union Pacific	USD	6,998	5.7%	6.1%
Peer Median			1.5%	7.5%
Industry Median			10.3%	7.6%

Republic Services' net income expansion has been greater than that of both its peer group and industry group during the past three years. We expect the firm's net income expansion to outpace its peer group and industry group during the next five years. Republic Services sports the highest expected net income growth rate among peers.



In the chart above, we show our baseline forecast for net income as well as potential upside and downside cases



Republic Services RSG FAIRLY VALUED

Buying Index™

Value Rating

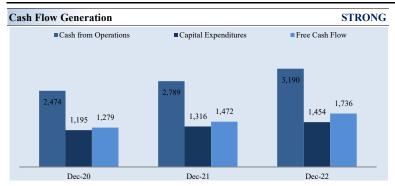
Economic Castle Attractive Estimated Fair Value \$170.00 **Fair Value Range** \$136.00 - \$204.00

Investment Style LARGE-CAP VALUE **Sector** Industrials

6

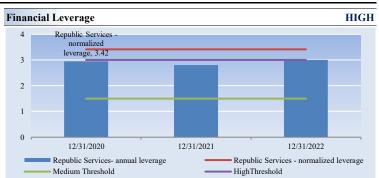
Industry
Industrial Leaders

Cash Flow and Financial Leverage Analysis



The bars above show the firms operating cash flow, capital expenditures, and free cash flow, respectively

Firms that generate a free cash flow margin (free cash flow divided by total revenue) above 5% are usually considered cash cows. Republic Services' free cash flow margin has averaged about 12.8% during the past 3 years. As such, we think the firm's cash flow generation is relatively STRONG. The free cash flow measure shown above is derived by taking cash flow from operations less capital expenditures and differs from enterprise free cash flow (FCFF), which we use in deriving our fair value estimate for the company. For more information on the differences between these two measures, please visit our website at Valuentum.com. At Republic Services, cash flow from operations increased about 29% from levels registered two years ago, while capital expenditures expanded about 22% over the same time period.



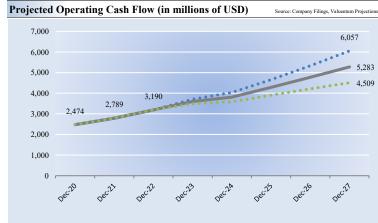
The bars above show the firm's annual debt-to-EBITDA. The red line shows the firm's normalized measure.

Firms that exhibit high leverage tend to be more risky than firms with relatively low debt loads, all else equal. We measure financial leverage by taking a firm's current total debt load and dividing it by the firm's trailing average 3-year annual EBITDA. Firms that are over 3 for this metric, we rate as having high leverage. Companies that have less than 1.5 turns of leverage (or a measure below 1.5), we rate as having low leverage. Republic Services' normalized debt-to-EBITDA measure of about 3.42 puts it in the HIGH camp.

Cash Flow from Operations

		Last Fiscal Year CFO	3-year Historical CAGR	5-year Projected CAGR
Republic Services	USD	3,190	10.7%	10.6%
Danaher	USD	8,519	29.2%	4.4%
Honeywell	USD	5,274	-8.6%	12.1%
Lockheed Martin	USD	7,802	2.2%	6.4%
Union Pacific	USD	9,362	2.8%	6.1%
Peer Median			2.5%	6.2%
Industry Median			3.7%	10.6%

Republic Services's cash flow from operations expansion has been greater than that of both its peer group and industry group during the past three years. We expect the company's cash flow from operations growth to outpace its peer group but be in line with the growth of its industry group during the next five years. Honeywell sports the highest expected cash flow from operations growth rate among peers.

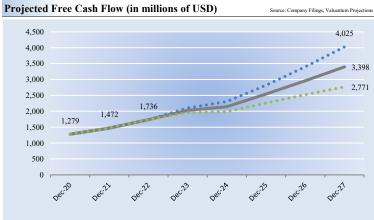


In the chart above, we show our baseline forecast for CFO as well as potential upside and downside cases.

Free Cash Flow (CFO-capital expenditures)

		Last Fiscal Year FCF	3-year Historical CAGR	5-year Projected CAGR
Republic Services	USD	1,736	14.9%	14.4%
Danaher	USD	7,367	30.5%	5.2%
Honeywell	USD	4,508	-9.4%	13.5%
Lockheed Martin	USD	6,132	1.7%	8.1%
Union Pacific	USD	5,742	3.7%	10.1%
Peer Median			2.7%	9.1%
Industry Median			3.0%	13.5%

Republic Services's free cash flow expansion has been greater than that of both its peer group and industry group during the past three years. We expect the firm's free cash flow expansion to outpace its peer group and industry group during the next five years. Republic Services sports the highest expected free cash flow growth rate among peers.



In the chart above, we show our baseline forecast for free cash flow as well as potential upside and downside cases.

Republic Services RSG FAIRLY VALUED

Buying Index™

Value Rating

 Economic Castle
 Estimated Fair Value
 Fair Value Range
 Investment Style
 Sector
 Industry

 Attractive
 \$170.00
 \$136.00 - \$204.00
 LARGE-CAP VALUE
 Industrials
 Industrial Leaders

Valuation Analysis

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ions				
3% (III)				
8.5%				
5.1%				

DCF Valuation Summary

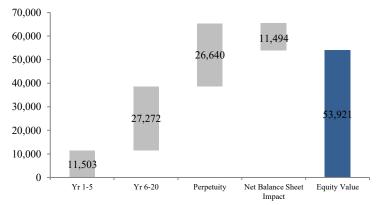
We think Republic Services is worth \$170 per share with a fair value range of \$136.00 - \$204.00. The margin of safety around our fair value estimate is driven by the firm's LOW ValueRisk™ rating, which is derived from an evaluation of the historical volatility of key valuation drivers and a future assessment of them. Our near-term operating forecasts, including revenue and earnings, do not differ much from consensus estimates or management guidance. Our model reflects a compound annual revenue growth rate of 6.6% during the next five years, a pace that is lower than the firm's 3-year historical compound annual growth rate of 9.5%. Our model reflects a 5-year projected average operating margin of 19.3%, which is above Republic Services's trailing 3-year average. Beyond year 5, we assume free cash flow will grow at an annual rate of 3.1% for the next 15 years and 3% in perpetuity. For Republic Services, we use a 7.9% weighted average cost of capital to discount future free cash flows.

Source: Company Filings, Valuentum Projections

Valuation Breakdown

In the chart below, we show the build up to our estimate of total enterprise value for Republic Services and the break down to the firm's total equity value, which we estimate to be about 53.92USD billion. The present value of the enterprise free cash flows generated during each phase of our model and the net balance sheet impact is displayed. We divide total equity value by diluted shares outstanding to arrive at our \$170 per share fair value estimate.

6



In Millions of USD

Enterprise Free Cash Flow				
	Fiscal Year End:	12/31/2020	12/31/2021	12/31/2022
Earnings before Interest		1,982	2,102	2,478
+ Depreciation		1,016	1,112	1,246
- Capital Expenditures		1,195	1,316	1,454
- Change in Working Capital		-68	-49	53
- Acquisitions		770	1,222	3,039
Enterprise Free Cash Flow (FCFF	")	1,102	725	-821
In Millions of USD				

Our future forecasts for key valuation drivers result in a future free enterprise cash flow stream. Above, we show how we calculate enterprise free cash flow and the historical performance of the metric for Republic Services. Over the next five years, we expect the firm's enterprise free cash flow to expand at about a -235% compound annual growth rate. During years 6 through 20, we expect the measure to grow at a 3.1% rate. Beyond year 20 (in perpetuity), we grow the firm's free cash flow at inflation (3%).

Company Metrics versus Peer and Industry Medians

Company Name	Valuentum Buying Index™	Forward Price-to- P/ Earnings	E on Est. Normal Diluted EPS	Price/Earnings-to- Growth (PEG), 5- year	Forward EV/EBITDA	EV/Est. Normal EBITDA	5-year Forward Earnings per Share CAGR	3-year Hist Avg ROIC, without goodwill	Dividend Yield %	Stock Price / Fair Value Estimate
Republic Services	6	30.3	22.5	2.2	16.0	13.1	16.2%	24.3%	1.3%	98.9%
Danaher	6	27.6	24.4	2.8	19.3	17.4	3.3%	29.6%	0.4%	97.1%
Honeywell	6	21.4	18.0	2.2	15.4	13.5	12.1%	55.2%	2.2%	101.8%
Lockheed Martin	7	16.6	15.1	2.0	13.1	12.3	10.6%	48.1%	2.8%	95.5%
Union Pacific	7	21.3	16.8	1.6	14.7	12.6	8.3%	13.5%	2.3%	100.2%
Peer Median	6.5	21.3	17.4	2.1	15.0	13.1	9.4%	38.9%	2.3%	98.7%
Industry Median	6.0	19.9	16.3	2.0	13.9	12.2	10.2%	21.6%	1.7%	100.4%

View back of report for a full list of industry constituents covered by Valuentum. VBI: Valuentum's ranking for the attractiveness of this investment at the date of the report.



Republic Services RSG FAIRLY VALUED

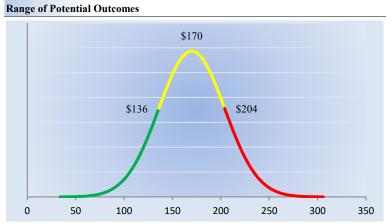
Buying Index™

Value Rating



Economic Castle Attractive Estimated Fair Value \$170.00 Fair Value Range \$136.00 - \$204.00 Investment Style LARGE-CAP VALUE Sector Industrials Industry
Industrial Leaders

Margin of Safety Analysis



Our discounted cash flow process values each firm on the basis of the present value of all future free cash flows. Although we estimate the firm's fair value at about \$170 per share, every company has a range of probable fair values that's created by the uncertainty of key valuation drivers (like future revenue or earnings, for example). After all, if the future were known with certainty, we wouldn't see much volatility in the markets as stocks would trade precisely at their known fair values. Our ValueRiskTM rating sets the margin of safety or the fair value range we assign to each stock. In the graph above, we show this probable range of fair values for Republic Services. We think the firm is attractive below \$136 per share (the green line), but quite expensive above \$204 per share (the red line). The prices that fall along the yellow line, which includes our fair value estimate, represent a reasonable valuation for the firm, in our opinion.

ValueRiskTM LOW

6

Republic Services receives a ValueRisk[™] rating of LOW based of the historical volatility of key drivers of economic value creation. The fair value range sets the margin of safety around our fair value estimate of the firm's shares.

Revenue Volatility 11.5%
Gross Margin Volatility 12.4%
Earnings (EBI) Volatility 12.4%
Cash Flow (FCFF) Volatility Greater than 50%

Fair Value Range 20.0%

The Fair Value Range sets the premium or discount on our estimate of the firm's fair value

Upside and Downside Probabilities

Probability (fair value < \$0)

Probability (fair value > 2x current share price)

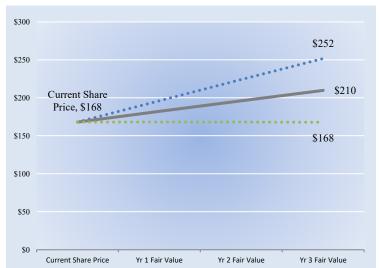
Less than 0.1%

0.00%

We strive to answer a few questions that investors often ask: 1) What are the chances of a total loss of investment in this company? and 2) What is the chance that the company is really worth twice what I paid for it? The probability (fair value < 0) strives to answer the first question. It indicates the chance that the firm may encounter insolvency based on the characteristics of its cash flow stream, capital structure, and risk profile. The probability (fair value > 2x current share price) strives to answer the second question. It is our best estimate of whether investors are participating in a half-off sale by buying the company's shares at current prices.

Future Path of Fair Value

We estimate Republic Services' fair value at this point in time to be about \$170 per share. As time passes, however, companies generate cash flow and pay out cash to shareholders in the form of dividends. The chart to the right compares the firm's current share price with the path of Republic Services' expected equity value per share over the next three years, assuming our long-term projections prove accurate. The range between the resulting downside fair value and upside fair value in Year 3 represents our best estimate of the value of the firm's shares three years hence. This range of potential outcomes is also subject to change over time, should our views on the firm's future cash flow potential change. The expected fair value of \$210 per share in Year 3 represents our existing fair value per share of \$170 increased at an annual rate of the firm's cost of equity less its dividend yield. The upside and downside ranges are derived in the same way, but from the upper and lower bounds of our fair value estimate range.



The graph above shows the expected future fair value of the firm's shares relative to its current stock price.

Republic Services RSG FAIRLY VALUED

Buying Index™

Value Rating

Economic Castle Attractive

Estimated Fair Value \$170.00

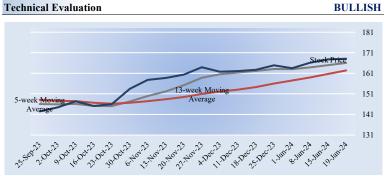
Fair Value Range \$136.00 - \$204.00

Investment Style LARGE-CAP VALUE

Sector Industrials

Industry Industrial Leaders

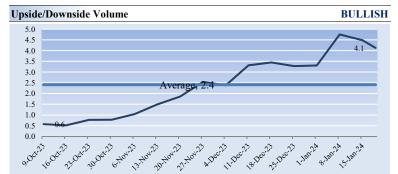
Technical Analysis



The firm's near-term moving average (5-week, grey line) and medium-term moving average (13-week, red line) are shown in the chart above. Typically, when a shorterterm moving average crosses a medium- or longer-term moving average from below, it represents a bullish signal. If the short-term moving average crosses from above, traders often view this as bearish. Republic Services's 5-week moving average resides above its 13-week measure, indicating a BULLISH trend. We'd grow wary of the firm's technicals should its 5-week moving average drop below its 13-week moving average, as the firm's 30-week uptrend could be threatened if this occurs.



In the chart above, we pinpoint the heaviest accumulation or distribution week of the firm, determined by the week with the highest trading volume during the past 30 weeks. A heavy accumulation (buying) or distribution (selling) week often determines the future near-term direction of the firm's share price, as money managers continue to move in or out of the stock in the days and weeks ahead driving the stock up or down, respectively. For Republic Services, the week with the highest trading volume out of the last 30 weeks was a week of heavy buying, or accumulation (green bar). Such market activity could indicate a reversal of a downtrend or further confirmation of the firm's uptrend.



The level and trend of the Upside/Downside (U/D) volume ratio reveals whether institutional participation has been bullish or bearish as of late. Republic Services's U/D volume ratio of 4.1 is not only greater than 1 but also is better than its trailing average, indicating BULLISH institutional interest during the past several weeks.



6



The Money Flow Index (MFI) is an oscillator that uses price and volume to measure buying and selling pressure. Chartists often look for overbought (above 80) and oversold (below 20) levels to warn of unsustainable near-term price extremes. Republic Services' MFI of 70 is neutral, suggesting the firm's stock is neither overbought nor oversold at this time. However, a score over 50 tends to favor bulls. The MFI can also be used to gauge the strength or weakness of a firm's price trend. In Republic Services' case, its stock price and money flow neither reveals a bullish nor bearish divergence, further supporting our neutral view on its money flow action.

Relative Price Strength **STRONG**

A firm's relative price strength can be assessed over any number of time horizons. We show the firm's performance over the past 5 weeks, 13 weeks, and 30 weeks below. In arriving at our relative strength rating for each company, we assess the past 13 weeks, which includes the market's reaction to the firm's most recently reported quarter, where applicable, and other more recent economic events. During the past 13 weeks, Republic Services' shares returned 14.8%, while the market benchmark returned 10.4%. We think Republic Services' 13-week relative price performance is STRONG.

5-week Company Performance	3.6%
5-week Market Benchmark Performance	5.1%
5-week Relative Performance vs. Market Benchmark	-1.6%
13-week Company Performance	14.8%
13-week Market Benchmark Performance	10.4%
13-week Relative Performance vs. Market Benchmark	4.5%
30-week Company Performance	10.5%
30-week Market Benchmark Performance	12.2%
30-week Relative Performance vs. Market Benchmark	-1.8%

Timeliness Matrix TM Equity Valuation							
Relative Strength	Overvalued	Fairly Valued	Undervalued				
Strong							
Neutral							
Weak							

Firms that are undervalued and currently showing near-term pricing strength score near the top right of the matrix.

Companies that are undervalued and showing near-term relative price strength could represent timely buys, as the stock may be attractive to both value and momentum investors. A cross section of the firm's equity valuation and its relative share price strength is shown in the matrix above. We tend to prefer undervalued stocks that have strong pricing momentum, also called Valuentum stocks.



Republic Services RSG FAIRLY VALUED

Buying Index™

6

Value Rating

 Economic Castle
 Estimated Fair Value
 Fair Value Range
 Investment Style
 Sector
 Industry

 Attractive
 \$170.00
 \$136.00 - \$204.00
 LARGE-CAP VALUE
 Industrials
 Industrial Leaders

Pro Forma Income Statement

In Millions of USD (except for per share items)					
	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24
Total Revenue	10,154	11,295	13,511	14,862	15,828
Cost of Goods Sold	6,101	6,647	8,052	8,997	9,580
Selling, General and Administrative Expenses	1,053	1,263	1,529	1,709	1,819
Other Operating Expenses	1,159	1,268	1,441	1,610	1,715
Operating Income	1,841	2,117	2,489	2,546	2,715
Unusual items	0	0	0	0	0
Operating Income, including unusual items	1,841	2,117	2,489	2,546	2,715
Interest Expense	(356)	(315)	(396)	(396)	(396)
Other Non-operating Income	(343)	(227)	(262)	3	3
Pre-tax Income	1,143	1,575	1,832	2,154	2,323
Income Taxes	173	283	344	404	436
Income after tax	970	1,292	1,488	1,749	1,887
Minority Interest and Equity Income	(2)	(2)	0	0	0
Net Income, excluding extra items	967	1,290	1,488	1,749	1,887
Income Available to Common, excluding extra items	967	1,290	1,488	1,749	1,887
Diluted Earnings per Share, excluding extra items	3.02	4.04	4.69	5.54	6.01
Diluted Weighted Shares Outstanding	319.8	319.4	317.1	315.5	313.9

Source: Company Filings, Xignite, Valuentum Projections

Note: Pro forma data in discounted cash-flow valuation may reflect significant adjustments from GAAP accounting data, including cash (not effective) tax rates and other analytical adjustments on a backward-looking and forward-looking basis. No individual data, by itself, found in this report should be used to make any investment decision.



(10=best) Data as of 19-Jan-2024 Valuentum Retail Equity Research

Republic Services RSG FAIRLY VALUED

WALUENTUM . Buying Index™

6

WALUENTUM . Value Rating

----- Projected -----



Estimated Fair Value Sector **Economic Castle** Fair Value Range **Investment Style** Industry \$136.00 - \$204.00 LARGE-CAP VALUE Attractive \$170.00 Industrials Industrial Leaders

----- Historical -----

Pro Forma Balance Sheet

In Millions of USD (except for per share items)					
	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24
Assets					
Total Cash (including marketable securities)	38	29	143	1,087	2,084
Inventory	59	72	97	106	112
Accounts Receivable	1,328	1,508	1,983	2,166	2,292
Other Current Assets	96	101	134	134	134
Total Current Assets	1,522	1,711	2,357	3,494	4,621
Gross Fixed Assets	18,777	20,037	22,516	24,086	25,751
(Accumulated Depreciation)	(9,832)	(10,550)	(11,497)	(12,867)	(14,326)
Net Property, Plant, and Equipment	8,945	9,487	11,019	11,219	11,425
Goodwill, Net	12,046	12,826	14,452	14,452	14,452
Intangibles, Net	173	260	347	347	347
Other Long-term Assets	748	671	878	878	878
Total Assets	23,434	24,955	29,053	30,390	31,723
Liabilities					
Accounts Payable	779	910	1,222	1,352	1,422
Other Current Liabilities	1,341	1,506	1,727	1,827	1,906
Current Portion of Long-term Debt	162	0	442	442	442
Total Current Liabilities	2,282	2,416	3,391	3,620	3,770
Long-term Debt	8,668	9,356	11,196	11,196	11,196
Other Long-term Liabilities	4,000	4,205	4,780	4,780	4,780
Total Liabilities	14,950	15,976	19,367	19,596	19,747
Preferred Stock	0	0	0	0	0
Shareholders' Equity					
Common Stock and Additional Paid in Capital	2,745	2,793	2,846	2,846	2,846
Retained Earnings	5,752	6,476	7,356	8,431	9,578
Other Equity	(13)	(289)	(517)	(483)	(448)
Total Shareholders' Equity	8,484	8,979	9,686	10,794	11,976
Total Liabilities and Shareholders' Equity	23,434	24,955	29,053	30,390	31,723

Source: Company Filings, Xignite, Valuentum Projections

Note: Pro forma data in discounted cash-flow valuation may reflect significant adjustments from GAAP accounting data, including cash (not effective) tax rates and other analytical adjustments on a backward-looking and forward-looking basis. No individual data, by itself, found in this report should be used to make any investment decision.



Republic Services RSG FAIRLY VALUED

Buying Index™

6

Value Rating

----- Projected -----

 Economic Castle
 Estimated Fair Value
 Fair Value Range
 Investment Style
 Sector
 Industry

 Attractive
 \$170.00
 \$136.00 - \$204.00
 LARGE-CAP VALUE
 Industrials
 Industrial Leaders

----- Historical -----

Pro Forma Cash Flow Statement

In Millions of USD (except for per share items)

In Millions of USD (except for per share items)					
	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24
Cash from Operations					
Net Income	970	1,292	1,488	1,749	1,887
Depreciation and Amortization	1,159	1,228	1,389	1,514	1,603
Deferred Income Taxes	0	0	0	0	0
Operating Gains Or Losses	346	269	313	300	300
Changes in Working Capital	0	0	0	25	20
Cash Flow from Operations	2,474	2,789	3,190	3,588	3,809
Cash from Investing					
Purchase of Property, Plant, Equipment	(1,195)	(1,316)	(1,454)	(1,570)	(1,665)
Other Investing Cash Flows	(728)	(1,150)	(2,969)	0	0
Cash Flow from Investing	(1,923)	(2,466)	(4,423)	(1,570)	(1,665)
Cash from Financing					
Issuance (Retirement) of Stock	(95)	(252)	(204)	(267)	(265)
Issuance (Retirement) of Debt	120	542	2,165	0	0
Dividends Paid	(523)	(553)	(593)	(675)	(739)
Other Financing Cash Flows	(115)	(67)	(24)	0	0
Cash Flow from Financing	(612)	(329)	1,344	(942)	(1,004)
Foreign Exchange	0	0	0	0	0
Net Change in Cash	(61)	(7)	111	1,087	1,140

Source: Company Filings, Xignite, Valuentum Projections

Note: Pro forma data in discounted cash-flow valuation may reflect significant adjustments from GAAP accounting data, including cash (not effective) tax rates and other analytical adjustments on a backward-looking and forward-looking basis. No individual data, by itself, found in this report should be used to make any investment decision.



Republic Services RSG FAIRLY VALUED

Buying Index™

Value Rating



Economic Castle
Attractive

Estimated Fair Value \$170.00 Fair Value Range \$136.00 - \$204.00 Investment Style LARGE-CAP VALUE **Sector** Industrials

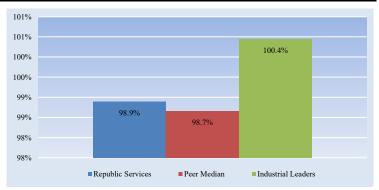
6

Industry Industrial Leaders

Industrial Leaders

Industrial Leaders FAIRLY VALUED

We think the Industrial Leaders industry is fairly valued at this time. The industry's market cap is trading between 80% and 120% of our estimate of its fair value based on our DCF process. Although we use a firm-specific ValueRisk™ measure to determine whether a firm is undervalued or overvalued based on our DCF process, we consider an industry to be undervalued if it is trading below 80% of our estimate of its fair value and overvalued if it is trading at over 120% of our estimate of its fair value. We think these fair value ranges are appropriate given the diversification benefits of holding a basket of stocks. Although there may be individual opportunities within the Industrial Leaders industry, we don't find the industry as a whole attractive based solely on valuation.



The above bar chart reveals the price/fair value of the company, its peers, and the industry as a whole.

Shaded blue denotes that the firm has earned the highest rating for that respective category.

Market Cap (USD-

Company Name	Ticker	mil)	Investment Style	DCF Valuation	Relative Valuation	ValueCreation™	ValueRisk™	ValueTrend™	Technicals	Relative Strength
3M	MMM	57,728	LARGE-CAP VALUE	FAIRLY VALUED	NEUTRAL	EXCELLENT	LOW	NEGATIVE	BULLISH	NEUTRAL
Amphenol Corp	APH	56,704	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	MEDIUM	POSITIVE	BULLISH	NEUTRAL
Boeing	BA	139,795	LARGE-CAP GROWTH	FAIRLY VALUED	UNATTRACTIVE	VERY POOR	MEDIUM	POSITIVE	BULLISH	STRONG
Canadian National	CNI	82,450	LARGE-CAP CORE	FAIRLY VALUED	ATTRACTIVE	GOOD	MEDIUM	NEGATIVE	BULLISH	STRONG
Caterpillar	CAT	155,961	LARGE-CAP CORE	FAIRLY VALUED	ATTRACTIVE	EXCELLENT	LOW	POSITIVE	BULLISH	NEUTRAL
Cavco	CVCO	2,852	MID-CAP VALUE	FAIRLY VALUED	ATTRACTIVE	EXCELLENT	LOW	POSITIVE	BULLISH	STRONG
Corning	GLW	26,104	LARGE-CAP VALUE	FAIRLY VALUED	NEUTRAL	POOR	MEDIUM	NEGATIVE	BULLISH	WEAK
CSX Corp	CSX	73,768	LARGE-CAP CORE	FAIRLY VALUED	NEUTRAL	GOOD	LOW	POSITIVE	BULLISH	STRONG
Danaher	DHR	167,499	LARGE-CAP VALUE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	MEDIUM	NEGATIVE	BULLISH	STRONG
Deere	DE	107,637	LARGE-CAP CORE	FAIRLY VALUED	ATTRACTIVE	POOR	LOW	POSITIVE	BEARISH	WEAK
Eaton	ETN	95,154	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	LOW	POSITIVE	BULLISH	STRONG
Emerson Electric	EMR	55,219	LARGE-CAP VALUE	FAIRLY VALUED	NEUTRAL	VERY POOR	LOW	NEGATIVE	BULLISH	WEAK
Fastenal	FAST	36,930	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	MEDIUM	NEGATIVE	BULLISH	STRONG
FedEx	FDX	69,386	LARGE-CAP VALUE	FAIRLY VALUED	ATTRACTIVE	GOOD	LOW	NEGATIVE	BULLISH	NEUTRAL
General Dynamics	GD	70,259	LARGE-CAP VALUE	FAIRLY VALUED	NEUTRAL	EXCELLENT	LOW	POSITIVE	BULLISH	STRONG
General Electric	GE	133,608	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	MEDIUM	POSITIVE	BULLISH	STRONG
Honeywell	HON	134,933	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	LOW	NEGATIVE	BULLISH	NEUTRAL
Illinois Tool Works	ITW	80,266	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	LOW	NEGATIVE	BULLISH	STRONG
Lockheed Martin	LMT	121,041	LARGE-CAP VALUE	FAIRLY VALUED	ATTRACTIVE	EXCELLENT	MEDIUM	NEGATIVE	BULLISH	WEAK
Northrop Grumman	NOC	71,739	LARGE-CAP CORE	FAIRLY VALUED	ATTRACTIVE	EXCELLENT	MEDIUM	NEGATIVE	VERY BEARISH	STRONG
Parker-Hannifin	PH	60,483	LARGE-CAP VALUE	FAIRLY VALUED	ATTRACTIVE	EXCELLENT	LOW	NEGATIVE	NEUTRAL	STRONG
Parsons Corp	PSN	7,197	MID-CAP BLEND	FAIRLY VALUED	NEUTRAL	EXCELLENT	MEDIUM	POSITIVE	BULLISH	NEUTRAL
Raytheon Tech	RTX	120,343	LARGE-CAP VALUE	FAIRLY VALUED	ATTRACTIVE	GOOD	LOW	NEGATIVE	BULLISH	WEAK
Republic Services	RSG	53,309	LARGE-CAP VALUE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	LOW	POSITIVE	BULLISH	STRONG
Roper Technologies	ROP	57,838	LARGE-CAP GROWTH	FAIRLY VALUED	UNATTRACTIVE	POOR	MEDIUM	NEGATIVE	BULLISH	STRONG
TE Connectivity	TEL	44,894	LARGE-CAP CORE	FAIRLY VALUED	ATTRACTIVE	EXCELLENT	LOW	POSITIVE	BULLISH	STRONG
Union Pacific	UNP	138,179	LARGE-CAP CORE	FAIRLY VALUED	ATTRACTIVE	GOOD	LOW	POSITIVE	BULLISH	NEUTRAL
United Parcel Service	UPS	141,860	LARGE-CAP VALUE	FAIRLY VALUED	NEUTRAL	EXCELLENT	LOW	NEGATIVE	BULLISH	NEUTRAL
Waste Management	WM	72,438	LARGE-CAP CORE	FAIRLY VALUED	UNATTRACTIVE	EXCELLENT	MEDIUM	POSITIVE	BULLISH	STRONG

Valuentum's Full Page Stock Report

DCF Valuation

Shows whether the firm is undervalued, fairly valued, or overvalued based on our DCF process and by how much.

Valuentum Buying Index (VBI)

Provides insight into the timeliness of an investment opportunity. We rank firms from 1 to 10 based on rigorous fiancial, valuation, and technical analysis. A 10 represents one of our top picks.



Valuentum Value Rating (VVR)

Indicates whether we think a firm is undervalued, fairly valued, or overvalued on the basis of our DCF process.



Investment Considerations

Evaluates firms on 12 different measures, from the firm's growth and cash flow generation to the stock's money flow index and upside/downside volume. We reveal technical support and resistance levels.

Business Quality

for shareholders

operations.

compared wth the

underlying risk of its

Investment Highlights

analysis of its financial

and technical strengths

Relative Valuation

Comparison of the

peers.

firm's PE, PEG, and

Price/FV ratios versus

Our opinion of the

and weaknesses.

company, including

Summary of the firm's

ability to create value

30-week Price and **Volume Action**

Displays the last accumulation or distribution week of the stock and historical price and volume action.

Company Vitals

industry and other

relevant company

Normalized EPS

Estimation of the

firm's normalized

earnings measures

valuation mutliples.

corresponding

and EBITDA

and the

Shows sector.

information.

Visit us at www.valuentum.com Valuentum Retail Equity Research Apple AAPL UNDERVALUED 3 Buying Index™ Value Rating Economic Castle Highest Rated Estimated Fair Value Investment Style MEGA-CAP VALUE Investment Consideration Apple is as much a brand as it is one of the most innovative companies

Stock Chart (weekly) ValueCreationTM ValueRiskTM 1.800.000.000 ValueTrendTM 116.00 Cash Flow Generation 111 1,200,000,000 Technical Evaluatio 800,000,000 Relative Strength Company Vitals

Apple is as much a brand as it is one of the world's

most innovative companies. The firm is no longer

known for its iPods and personal computers, as the

proliferation of the iPhone over the past several years

has been a sight to behold. The company's execution

remains top notch, and we enter it it to continue to out innovative products in technology, its most recent many product launch.

UNDERVALUED Relative Valuation UNATTRACTIVE EXCELLENT LOW POSITIVE STRONG MODEST BULLISH STRONG Money Flow Index (MFI) NEUTRAL Upside/Downside Volume (U/D) BULLISH Near-term Technical Support, 10-week MA 112.00 ited Cash Flow; MFI, U/D = Please see glos

ansimess Saumis				
/alueRisk TM	Very Poor	Poor	Good	Excellent
Low				
Medium				
High				
Very High				
irms that generate economic	profits with little oper	eating variability scor	e near the top rigi	at of the matrix.
Relative Valuation	K	Forward P/E	PEG	Price / FV
		220	272.00	00.20/

· Criticism over the firm's dependence on sales of the	Firms that generate economic profits with little ope	postine specialistic score	a near the top riv
iPhone gained momentum in fiscal 2016, as the second quarter of the fiscal year marked the first	Relative Valuatio	Forward P/E	PEG
quarterly sales decline in 13 years. High levels of	BlackBerry	-53.0	NMF
demand for the iPhone 7 and multiple safety issues at	Cray	49.4	0.9
rival Samsung have eased concerns for the time being.	Hewlett-Packard	9.0	NMF
· Apple's rollout of future iterations of the iPhone	IBM	11.7	2.6
should propel its fundamentals higher. Though we're	Peer Median	10.4	1.8
not embedding another blockbuster hit in our model,	Apple	14.0	2.0
we wouldn't be surprised if Apple delivers another one	Price / FV = Current Stor vided by	y Estimated Fair Va	lue
from its pipeline. Perhaps only a dream five years ago, the popularity of the new Apple Watch is now worth	Financial Summar	Actual	
watching, though it has yet to catch fire in the eyes of	Fiscal Year End:	Sep-14	Sep-1

I cet teleditiit	10.4	E 1-0	001010	
Apple	14.0	2.0	79.3%	
Price / FV = Current Stor vided by I	Estimated Fair Val	lue		
Financial Summar	Actual		Projected	
Fiscal Year End:	Sep-14	Sep-15	Sep-16	
Revenue	182,795	233,715	215,485	
Revenue, YoY%	7.0%	27.9%	-7.8%	
Operating Income	52,503	71,230	63,313	
Operating Margin %	28.7%	30.5%	29.4%	
Net Income	39,510	53,394	48,329	
Net Income Margin %	21.6%	22.8%	22.4%	
Diluted EPS	6.45	9.22	8.34	
Diluted EPS, YoY %	13.6%	42.8%	-9.5%	
Free Cash Flow (CFO-capex)	49,900	69,778	47,138	
Free Cash Flow Margin %	27.3%	29.9%	21.9%	

· Investors should pay close attention to the firm's Return on Equity 36.8% gross margin, which is expected to fall to 37.5%-38% in fiscal 2016 from 40% in fiscal 2015. Pricing and 19.3% Return on Assets ROIC, with goodwill cost pressures may be unavoidable. A slight step back ROIC, without goodwill ROIC = Return on Invested Capital; N

\$675,472

180.295

1.2%

2.28

7.3%

9.55

12.2

89.47 - 118.69

Information Technology

Leverage, Coverage, and Liquidity Total Debt 64,462 Net Debt -141.204 Total Debt/EBITDA 0.8 Net Debt/EBITDA EBITDA/Interest Current Ratio Quick Ratio

Market Cap (USD)

Valuentum Sector

5-week Return

13-week Return

30-week Return

Dividend Yield %

Dividends per Share

Est. Normal Diluted EPS

Est. Normal EBITDA

Forward EV/EBITDA

Returns Summary

EV/Est. Normal EBITDA

Forward Dividend Payout Ratio

P/E on Est. Normal Diluted EPS

Forward Revenue Growth (5-yr)

Forward EPS Growth (5-yr)
NMF = Not Meaningful: Est. = Estimated: FY = Fiscal Year

Avg Weekly Vol (30 wks)

30-week Range (USD)

fiscal 2016 should not be a major conce vestors given Apple's massive cash position and impressive track record

· Apple's cash hoard is more than some of the market capitalizations of the largest companies in the S&P 500. The company retains tremendous flexibility in this regard, and we continue to expect dividend increases and share buybacks.

Structure of the Computer Hardware Industry The computer hardware space, which spans the personal computer to the iPhone and iPad, is highly competitive. The indu is characterized by frequent product introductions and rapid technological advances that can cause dramatic market share shifts. Though some firms benefit from a strong brand, participants often price aggressively, pressuring margins. Firms are also subject to potential component shortages/disruptions, which can punish perform some, and services revenue has become critical for others. We're neutral on the space

VALUENTUM

77.3%

75.9%

Returns Summary

3-year averages of the firm's key return measures, including return on invested capital, with and without goodwill.



Page 1

Leverage, Coverage, and Liquidity

A snapshot of the company's financial health.



Financial Summary

A summary of the proforma financial statements found in the extended report.

About Valuentum

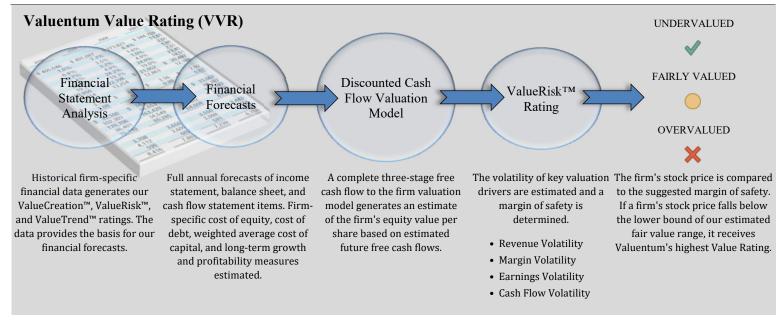
@Valuentum, we strive to stand out from the crowd. Most investment research publishers fall into a few camps, whether it be value, growth, income, momentum, chartist or some variant of the aforementioned. We think each in its own right holds merit, but we think the combination of these approaches can be even more powerful. After all, stock price movements aren't just driven by investors of the value or growth variety, but by all market participants. Therefore, we look at stocks from a variety of investment perspectives in order to better understand and identify ideas. We want to provide relevant information.

The core of our process is grounded in rigorous discounted cash flow analysis and incorporates the concept of a margin of safety. We offer a fair value estimate for each company and provide a relative valuation assessment in the context of a company's industry and closest peers. A cross section of our ValueCreationTM and ValueRiskTM ratings provides a financial assessment of a company's business quality, while our ValueTrendTM rating offers insight into the trajectory of a firm's economic profit creation. The Economic Castle rating measures the magnitude of future economic value generation, and the Dividend Cushion ratio assesses the financial capacity of a company to keep raising its dividend.

Our analysis doesn't stop there. We also offer a technical evaluation of the stock as well as other momentum indicators. We not only want to reveal to readers which firms may be undervalued, in our view, but we also want to provide readers with information to help them assess entry and exit points. Most research publishers focus on arriving at a target price or fair value estimate, but may fall short of providing a technical assessment to bolster buy and sell disciplines. We strive to go the distance and provide readers with answers--not half the story.

An explanation of our approach would not be complete if we didn't describe our ideal stock idea. We're looking for companies that are undervalued--both on a DCF basis and versus peers--have strong growth potential, have a solid track record of creating economic profits for shareholders with reasonable risk, are strong cash flow generators, have manageable financial leverage, and are currently showing bullish technical and momentum indicators. For dividend growth ideas, we look for companies that have both the capacity and willingness to keep raising the dividend.

Can such stock ideas exist? Subscribe to Valuentum to receive our best investment ideas and analysis on hundreds of stocks, dividends, ETFs and more.



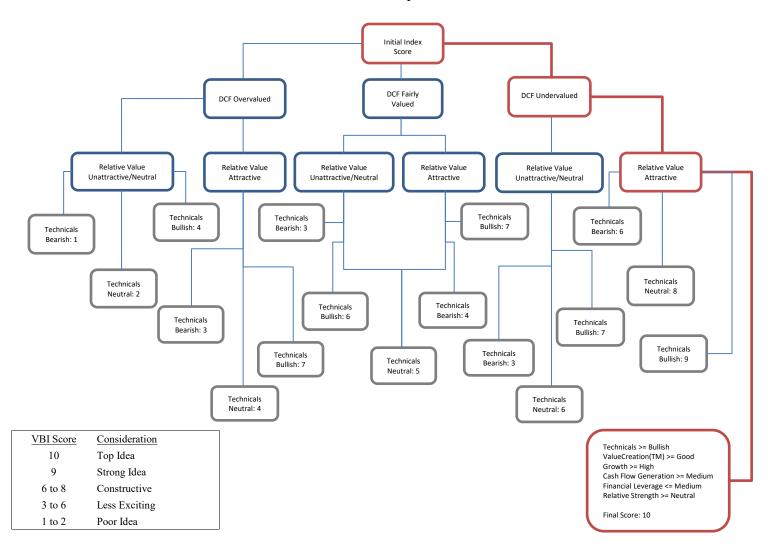
Methodology for Picking Stocks - Valuentum Buying IndexTM (VBI)

@ Valuentum, we like to look at companies from a number of different perspectives. The Valuentum Buying Index (VBI) combines rigorous financial and valuation analysis with an evaluation of a stock's technicals to derive a rating between 1 and 10 for each company. The VBI places considerable emphasis on a company's discounted cash-flow (DCF) valuation, its relative valuation versus peers (both forward PE and PEG ratios), and its technicals in order to help readers assess entry and exit points on the most interesting ideas.

Let's follow the red line on the flow chart below to see how a company can score a 10, the best mark on the index. First, the company would need to be 'undervalued' on a DCF basis and 'attractive' on a relative value basis. The stock would also have to be exhibiting 'bullish' technicals. The firm would need a ValueCreationTM rating of 'good' or 'excellent', exhibit 'high' or 'aggressive' growth prospects, and generate at least a 'medium' or 'neutral' assessment for cash flow generation, financial leverage, and relative price strength.

This is a tall order for any company. Stocks that don't make the cut for a 10 are ranked accordingly, with the least attractive stocks, in our opinion, garnering a rating of 1. Most of our coverage universe registers ratings between 3 and 7, but at any given time there could be large number of companies garnering either very high or very low scores, especially at market lows or tops, respectively.

The Best Ideas Newsletter portfolio puts the VBI into practice.



Glossary

Estimated Fair Value. This measure is our opinion of the fair equity value per share of the company. If our forecasts prove accurate, which may not always be the case, we may expect a firm's stock price to converge to this value within the next 3 years.

Fair Value Range. The fair value range represents an upper bound and lower bound, between which we would consider the firm to be fairly valued. The range considers our estimate of the firm's fair value and the margin of safety suggested by the volatility of key valuation drivers, including revenue, gross margin, earnings before interest, and enterprise free cash flow (the determinants behind our ValueRiskTM rating).

DCF Valuation. We opine on the firm's valuation based on our DCF process. Firms that are trading with an appropriate discount to our fair value estimate receive an UNDERVALUED rating. Firms that are trading within our fair value range receive a FAIRLY VALUED rating, while firms that are trading above the upper bound of our fair value range receive an OVERVALUED rating.

Relative Value. We compare the firm's forward price-to earnings (PE) ratio and its price/earnings-to-growth (PEG) ratio to that of its peers. If both measures fall below the peer median, the firm receives an ATTRACTIVE rating. If both are above the peer median, the firm receives an UNATTRACTIVE rating. Any other combination results in a NEUTRAL rating.

ValueCreation™. This is a proprietary Valuentum measure. ValueCreation™ indicates the firm's historical track record in creating economic value for shareholders, taking the average difference between ROIC (without goodwill) and the firm's estimated WACC during the past three years. The firm's performance is measured along the scale of EXCELLENT, GOOD, POOR, and VERY POOR. Those firms with EXCELLENT ratings have a demonstrated track record of creating economic value, while those that register a VERY POOR mark have been destroying economic value.

ValueRisk™. This is a proprietary Valuentum measure. ValueRisk™ indicates the historical volatility of key valuation drivers, including revenue, gross margin, earnings before interest, and enterprise free cash flow. The standard deviation of each measure is calculated and scaled against last year's measure to arrive at a percentage deviation for each item. These percentage deviations are weighted equally to arrive at the corresponding fair value range for each stock, measured in percentage terms. The firm's performance is measured along the scale of LOW, MEDIUM, HIGH, and VERY HIGH. The ValueRisk™ rating for each firm also determines the fundamental beta of each firm along the following scale: LOW (0.85), MEDIUM (1), HIGH (1.15), VERY HIGH (1.3).

ValueTrend™. This is a proprietary Valuentum measure. ValueTrend™ indicates the trajectory of the firm's return on invested capital (ROIC). Firms that earned an ROIC last year that was greater than the 3-year average of the measure earn a POSITIVE rating. Firms that earned an ROIC last year that was less than the 3-year average of the measure earn a NEGATIVE rating.

Cash Flow Generation. Firms' cash flow generation capacity are measured along the scale of STRONG, MEDIUM, and WEAK. A firm with a 3-year historical free cash flow margin (free cash flow divided by sales) greater than 5% receives a STRONG rating, while firms earning less than 1% of sales as free cash flow receive a WEAK rating.

Financial Leverage. Based on the firm's normalized debt-to-EBITDA metric, we rank firms on the following scale: LOW, MEDIUM, and HIGH. Companies with a normalized debt-to-EBITDA ratio below 1.5 receive a LOW score, while those with a measure above 3 receive a HIGH score.

Upside/Downside Volume. Heavy volume on up days and lower volume on down days suggests that institutions are heavily participating in a stock's upward advance. We use the trailing 14-week average of upside and downside volume to calculate an informative ratio. We rank each firm's U/D volume ratio along the following scale: BULLISH, IMPROVING, DETERIORATING, and BEARISH.

Investment Style. Valuentum uses its own proprietary stock-classification system. Nano-cap: Less than \$50 million; Micro-cap: Between \$50 million and \$200 million; Small-cap: Between \$200 million and \$2 billion; Mid-cap: Between \$2 billion and \$10 billion; Large-cap: Between \$10 billion and \$200 billion; Mega-cap: Over \$200 billion. Blend: Firm's that we think are undervalued and exhibit high growth prospects (growth in excess of three times the rate of assumed inflation). Value: Firm's that we believe are undervalued, but do not exhibit high growth prospects. Growth: Firms that are not undervalued, in our opinion, but exhibit high growth prospects. Core: Firms that are neither undervalued nor exhibit high growth prospects.

Company Vitals. In this section, we list key financial information and the sector and industry that Valuentum assigns to the stock. The P/E-Growth (5-yr), or PEG ratio, divides the current share price by last year's earnings (EPS) and then divides that quotient by our estimate of the firm's 5-year EPS growth rate. The estimated normalized diluted EPS and estimated normalized EBITDA represent the five-year forward average of these measures used in our discounted cash flow model. The P/E on estimated normalized EPS divides the current share price by estimated normalized diluted EPS. The EV/estimated normalized EBITDA considers the current enterprise value of the company and divides it by estimated normalized EBITDA. EV is defined as the firm's market capitalization plus total debt, minority interest, preferred stock less cash and cash equivalents.

Business Quality Matrix. We compare the firm's ValueCreation™ and ValueRisk™ ratings. The box is an easy way for investors to quickly assess the business quality of a company. Firms that generate economic profits with little operating variability score near the top right of the matrix.

Timeliness Matrix. We compare the company's recent stock performance relative to the market benchmark with our assessment of its valuation. Firms that are experiencing near-term stock price outperformance and are undervalued by our estimate may represent timely buys.

Range of Potential Outcomes. The firm's margin of safety is shown in the graphic of a normal distribution. We consider a firm to be undervalued if its stock price falls along the green line and overvalued if the stock price falls along the red line. We consider the firm to be fairly valued if its stock price falls along the yellow line.

Return on Invested Capital. At Valuentum, we place considerable emphasis on return on invested capital (both with and without goodwill). The measure focuses on the return (earnings) the company is generating on its operating assets and is superior to return on equity and return on assets, which can be skewed by a firm's leverage or excess cash balance, respectively.

Technical Evaluation. We evaluate a firm's near-term and medium-term moving averages and money flow index (MFI) to assign each firm a rating along the following scale: VERY BULLISH, BULLISH, NEUTRAL, BEARISH, and VERY BEARISH.

Stock Price Relative Strength. We assess the perfomance of the company's stock during the past quarter, 13 weeks, relative to an ETF that mirrors the aggregate performance of constituents of the stock market. Firms are measured along the scale of STRONG, NEUTRAL, and WEAK. Companies that have outperformed the market index by more than 2.5% during this 13-week period receive a STRONG rating, while firms that trailed the market index by more than 2.5% during this 13-week period receive a WEAK rating.

Money Flow Index (MFI). The MFI is a technical indicator that measures buying and selling pressure based on both price and volume. Traders typically use this measure to identify potential reversals with overbought and oversold levels. We use a 14-week measure to rank firms along the following scale: EXTREMELY OVERBOUGHT (>90), OVERBOUGHT (80-90), NEUTRAL (20-80), OVERSOLD (10-20), EXTREMELY OVERSOLD (0-10).



Disclosures, Disclaimers & Additional Sources

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RSG Rating History	Price	Fair Value	VBI
19-Jan-24	\$168.12	\$170.00	6
29-Nov-23	\$159.54	\$161.00	6
7-Jul-23	\$150.33	\$154.00	5
23-Dec-22	\$130.77	\$132.00	3
5-Aug-22	\$141.90	\$132.00	6
8-Oct-21	\$125.64	\$112.00	6
15-Apr-21	\$104.02	\$104.00	6
23-Nov-20	\$97.78	\$99.00	6
21-Jul-20	\$85.59	\$80.00	7
10-Jan-20	\$91.01	\$94.00	7
3-May-19	\$83.26	\$74.00	7
25-Mar-19	\$80.61	\$68.00	5
28-Jan-19	\$76.95	\$65.00	7
24-Dec-18	\$71.43	\$63.00	4

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