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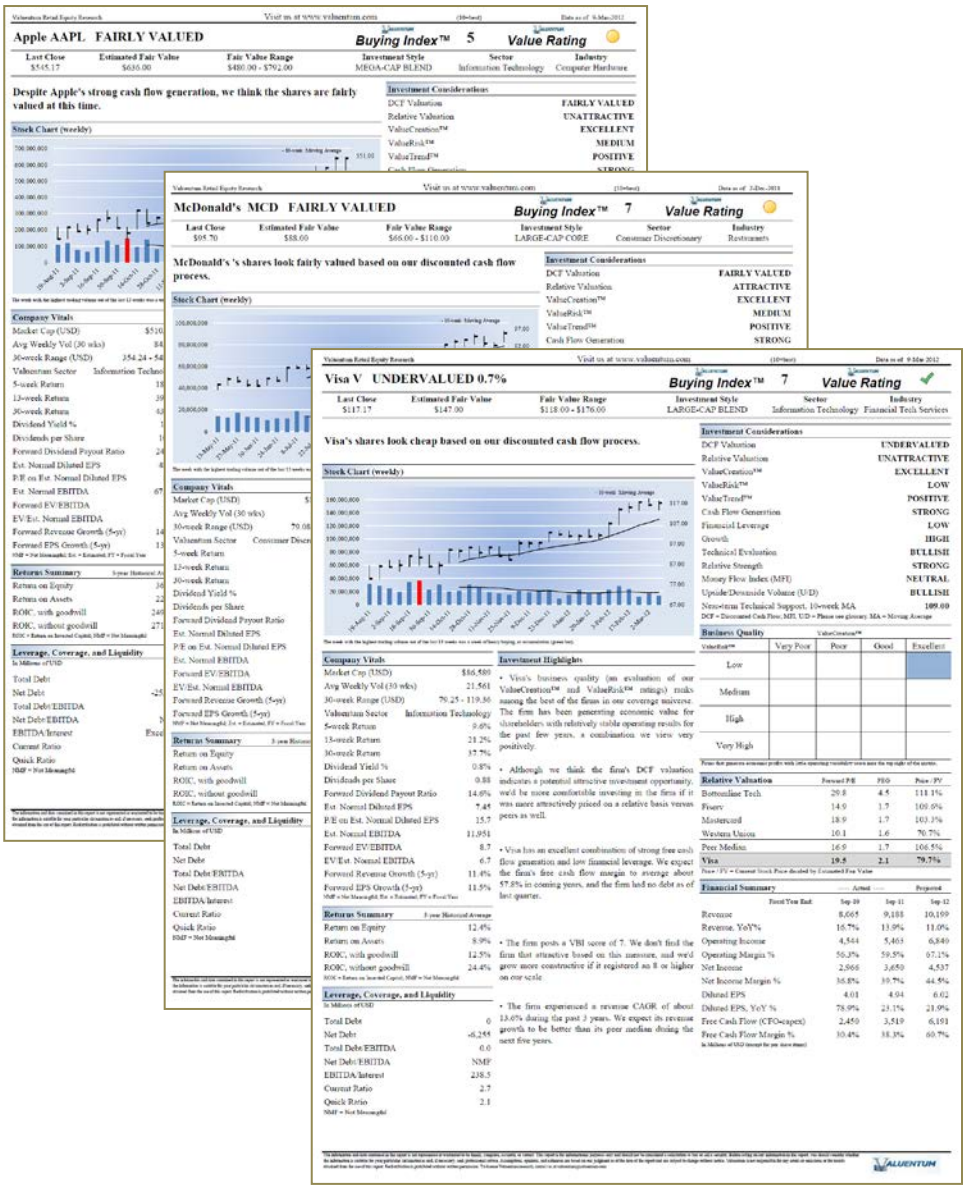
Valuentum *Ideas100*™

Announcing a New Tool for the Intelligent Investor!

- **An Invaluable Resource for Today's Financial Advisor and Portfolio Manager**
- **Forward-Looking, Easy-to-Compare Stock Reports on 100 of the Highest-Quality Firms**
- **Rankings Based on Competitive Advantages and Risk Profiles**
- **Valuentum Buying Index™ Ratings to Identify the Best Stocks To Consider Buying Now**
- **Independent Guidance from the Valuentum Analyst Team**
- **Updated Quarterly**

This publication can help you:

- **Build a new diversified portfolio of high-quality stocks from a variety of sectors**
- **Add solid companies to fortify your existing portfolio**
- **Identify investment gems**



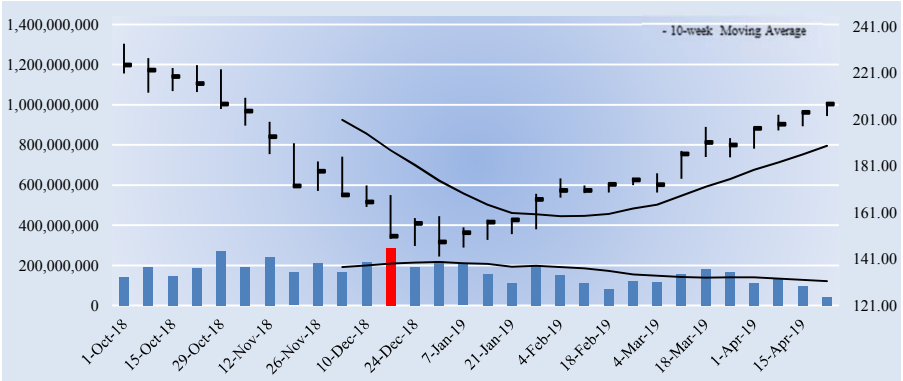
Apple AAPL FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$222.00	$178.00 - $266.00	MEGA-CAP VALUE	Information Technology	Computer Hardware

Apple's growing Services segment bodes well for its long-term gross margin performance, but iPhone pricing and cost pressures may be unavoidable in the near term.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**190.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$1,037,423
Avg Weekly Vol (30 wks)	166,138
30-week Range (USD)	142 - 233.47
Valuentum Sector	Information Technology
5-week Return	8.3%
13-week Return	33.2%
30-week Return	-9.0%
Dividend Yield %	1.4%
Dividends per Share	2.92
Forward Dividend Payout Ratio	25.4%
Est. Normal Diluted EPS	13.73
P/E on Est. Normal Diluted EPS	15.1
Est. Normal EBITDA	86,044
Forward EV/EBITDA	12.1
EV/Est. Normal EBITDA	10.6
Forward Revenue Growth (5-yr)	2.0%
Forward EPS Growth (5-yr)	5.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	41.0%
Return on Assets	15.0%
ROIC, with goodwill	219.8%
ROIC, without goodwill	280.0%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	114,483
Net Debt	-122,617
Total Debt/EBITDA	1.4
Net Debt/EBITDA	NMF
EBITDA/Interest	25.2
Current Ratio	1.1
Quick Ratio	2.4

NMF = Not Meaningful

Investment Highlights

• 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 decade has been a sight to behold. The company's execution remains top notch, and we expect it to continue to roll out innovative products in smartphones and wearable technology.

• Apple's rollout of future iterations of the iPhone should propel fundamentals higher. Though we're not embedding another blockbuster hit in our model, we wouldn't be surprised if Apple delivers another from its pipeline. It is expected to have a 5G-capable iPhone in 2020 following its settlement with Qualcomm.

• Apple's growing Services segment bodes well for its long-term gross margin performance, and the segment is on track to hit its goal of doubling its revenue from 2016-2020. Apple Pay is now accepted by ~60% of US retailers, and paid subscriptions totaled 330 million at the end of fiscal 2018. Wearables has been an area of strength, and Apple holds ~45% of global smartwatch market share, according to estimates.

• Investors should pay close attention to the firm's gross margin, which fell to just over 38% in fiscal 2018 from 40% in fiscal 2015 and is expected to remain below 40% in the near term. Pricing and cost pressures may be unavoidable, and currency exchange rates should not be ignored as Apple generates more than 60% of its revenue outside the US.

• Apple's cash hoard is more than some of the market caps of the largest firms in the S&P 500. It retains tremendous flexibility, but it plans to take its balance sheet to cash-neutral over time. Its dividend growth potential may be unmatched for now, and buybacks have become a focal point in its cash-neutral strategy.

Relative Valuation

	Forward P/E	PEG	Price / FV
BlackBerry	NMF	2.1	92.1%
Cray	NMF	NMF	118.5%
Hewlett-Packard	9.4	NMF	70.8%
IBM	10.0	1.4	94.2%
Peer Median	9.7	1.7	93.1%
Apple	**18.1**	**2.2**	**93.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	229,234	265,595	254,971
Revenue, YoY%	6.3%	15.9%	-4.0%
Operating Income	61,344	70,898	65,004
Operating Margin %	26.8%	26.7%	25.5%
Net Income	48,351	59,531	56,321
Net Income Margin %	21.1%	22.4%	22.1%
Diluted EPS	9.21	11.91	11.49
Diluted EPS, YoY %	10.8%	29.3%	-3.5%
Free Cash Flow (CFO-capex)	51,430	64,121	60,159
Free Cash Flow Margin %	22.4%	24.1%	23.6%

In Millions of USD (except for per share items)

Structure of the Computer Hardware Industry — NEUTRAL

The computer hardware space, which spans the personal computer to the iPhone and iPad, is highly competitive. The industry 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 performance. Obsolescence may be an eventuality for some, and services revenue has become critical for others. We're neutral on the space.

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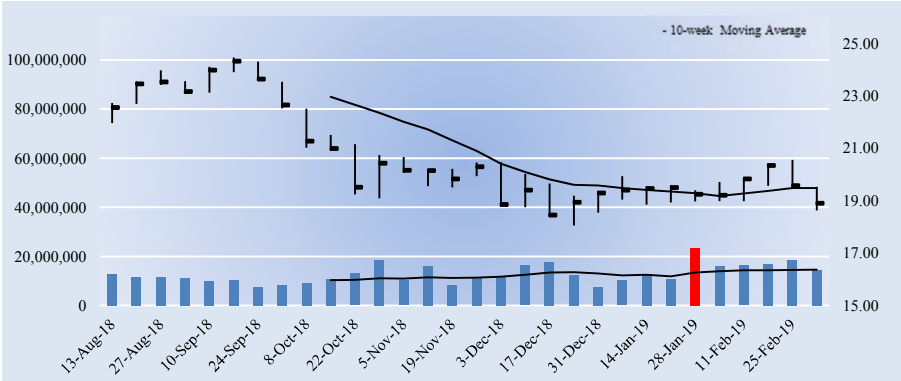
ABB ABB FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$23.00	$17.00 - $29.00	LARGE-CAP BLEND	Industrials	Electrical Equipment - industrial

ABB has agreed to sell an ~80% stake in its 'Power Grid' business to Hitachi, and it subsequently announced a cost-saving initiative aimed at simplifying its business model and structure.

Stock Chart (weekly)



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)	$40,427
Avg Weekly Vol (30 wks)	12,860
30-week Range (USD)	18.05 - 24.45
Valuentum Sector	Industrials
5-week Return	-1.3%
13-week Return	-0.5%
30-week Return	-16.4%
Dividend Yield %	4.4%
Dividends per Share	0.83
Forward Dividend Payout Ratio	61.3%
Est. Normal Diluted EPS	1.60
P/E on Est. Normal Diluted EPS	11.8
Est. Normal EBITDA	6,008
Forward EV/EBITDA	8.5
EV/Est. Normal EBITDA	7.5
Forward Revenue Growth (5-yr)	9.0%
Forward EPS Growth (5-yr)	13.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	14.0%
Return on Assets	4.8%
ROIC, with goodwill	11.4%
ROIC, without goodwill	23.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	8,618
Net Debt	4,461
Total Debt/EBITDA	2.9
Net Debt/EBITDA	1.5
EBITDA/Interest	11.5
Current Ratio	1.2
Quick Ratio	0.6

NMF = Not Meaningful

Investment Highlights

• ABB is a market leader across its power products and systems portfolio and is among the top 3 global providers in discrete automation, low voltage products, and process automation. The company has folded Baldor (electrical motors) and Thomas & Betts (low-voltage market) into operations. It was founded in 1883 and is headquartered in Switzerland.

• ABB's relationship with activist investor Cevian Capital may be worth watching. After defying pressure to spin off its 'Power Grids' division, ABB has since agreed to sell an 80% stake in the business to Hitachi. The deal will significantly impact revenue but should boost overall margin performance.

• Following its agreement with Hitachi, ABB announced a simplification program that is expected to result in $500 million in net cost savings through the medium-term. Other medium-term financial targets include 3%-6% comparable revenue growth per year, a 13%-16% operational EBITDA margin, basic earnings per share growth above revenue growth, and 100% conversion of net income to free cash flow.

• ABB is set to benefit from key growth areas, including power grid expansion, emerging market demand, energy efficiency initiatives, and automation business growth. It recently bought GE's Industrial Solutions business for $2.8 billion and expects annual cost benefits of $200 million from the deal, which will strengthen ABB's position in North America.

• Service momentum is a key building block for profitable growth at ABB, and service order growth has been solid in recent quarters (up 7% in 2018). We like this increasing recurring revenue stream. As of the end of 2018, its total backlog was $13.1 billion, a figure that now excludes its 'Power Grids' backlog.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**HIGH**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Resistance, 10-wk MA	**19.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Ametek	19.2	3.0	121.0%
AO Smith Corp	18.6	2.5	97.8%
Eaton	13.4	1.7	91.2%
Rockwell Automation	19.2	1.9	114.8%
Peer Median	18.9	2.2	106.3%
ABB	**14.0**	**1.3**	**82.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	34,312	27,662	36,763
Revenue, YoY%	1.4%	-19.4%	32.9%
Operating Income	3,294	2,102	4,197
Operating Margin %	9.6%	7.6%	11.4%
Net Income	2,219	1,450	2,880
Net Income Margin %	6.5%	5.2%	7.8%
Diluted EPS	1.03	1.02	1.35
Diluted EPS, YoY %	18.2%	-1.7%	33.2%
Free Cash Flow (CFO-capex)	2,850	2,152	1,983
Free Cash Flow Margin %	8.3%	7.8%	5.4%

In Millions of USD (except for per share items)

Structure of the Industrial Electrical Equipment Industry — NEUTRAL

Demand for products in the industrial electrical equipment space is highly cyclical, and industry constituents are exposed to volatile raw-material costs, which at times can be difficult to pass along to customers. Product development and quality initiatives are sources of competitive strengths, but rivals often compete aggressively on price to gain share. The industrial electrical equipment market should grow at a GDP-like pace in the developed world and a multiple of that trajectory in emerging markets. We're neutral on the space.

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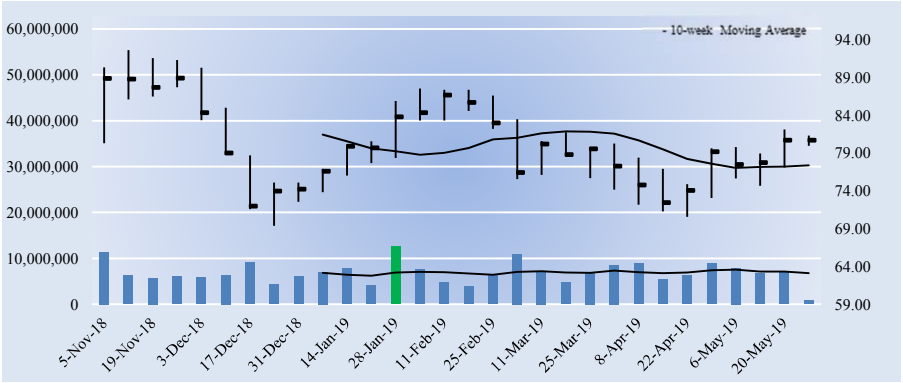
AmerisourceBergen ABC UNDERVALUED 2.9%

Buying Index™ 9 **Value Rating** ✓

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$104.00	$83.00 - $125.00	LARGE-CAP VALUE	Health Care	Healthcare Products

AmerisourceBergen is experiencing earnings momentum and has been rumored to be an acquisition target.

Stock Chart (weekly)



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Company Vitals

Market Cap (USD)	$17,777
Avg Weekly Vol (30 wks)	6,841
30-week Range (USD)	69.360001 - 92.589996
Valuentum Sector	Health Care
5-week Return	9.0%
13-week Return	-2.8%
30-week Return	-9.5%
Dividend Yield %	2.0%
Dividends per Share	1.60
Forward Dividend Payout Ratio	23.1%
Est. Normal Diluted EPS	7.68
P/E on Est. Normal Diluted EPS	10.5
Est. Normal EBITDA	2,582
Forward EV/EBITDA	8.4
EV/Est. Normal EBITDA	7.7
Forward Revenue Growth (5-yr)	4.1%
Forward EPS Growth (5-yr)	2.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	51.8%
Return on Assets	3.4%
ROIC, with goodwill	25.3%
ROIC, without goodwill	160.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,662
Net Debt	2,170
Total Debt/EBITDA	2.2
Net Debt/EBITDA	1.0
EBITDA/Interest	12.3
Current Ratio	0.9
Quick Ratio	0.5

NMF = Not Meaningful

Investment Highlights

• AmerisourceBergen is a pharmaceutical sourcing and distribution service company. The firm serves both healthcare providers and manufacturers, increasing their effectiveness and efficiency. The company's business model has tremendous earnings leverage. It was founded in 1985 and is headquartered in Chesterbrook, Pennsylvania.

• AmerisourceBergen expects the US pharmaceutical market to grow at a 7.1% compound annual growth rate from 2015-2020, to be driven by secular demographic changes, expansion of coverage, new brand drug launches, and a renewed focus on value.

• Fiscal 2019 is expected to be a solid year for AmerisourceBergen. The company is targeting revenue growth in the mid-single digit range in the year, with adjusted earnings per share expected in the range of $6.70-$6.90. The company no longer provides explicit guidance for its forecast of generic drug inflation, but it expects such deflation in fiscal 2019 to be on par with the end of fiscal 2018 (~7%).

• AmerisourceBergen is looking for growth via the animal health market, a fragmented marketplace with potential in both the companion animal and production animal areas. Expanding access to the evolving drug category of biosimilars and follow-on biologics in the US market is another area for growth potential.

• The firm recently signed a strategic relationship with Walgreens. The 10-year distribution deal strengthens nearly every aspect of its business. We expect platform leverage (domestic and international) as a result. It also recently settled a US government probe into pre-filled syringes for $625 million.

Investment Considerations

DCF Valuation	**UNDERVALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Support, 10-week MA	**77.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Cardinal Health	8.9	1.2	64.7%
Henry Schein	19.2	4.3	100.0%
McKesson	9.1	5.4	77.3%
Patterson	15.4	0.8	84.9%
Peer Median	12.2	2.7	81.1%
AmerisourceBergen	**11.7**	**2.3**	**77.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	153,144	167,940	179,024
Revenue, YoY%	4.3%	9.7%	6.6%
Operating Income	2,020	1,687	2,065
Operating Margin %	1.3%	1.0%	1.2%
Net Income	364	1,658	1,517
Net Income Margin %	0.2%	1.0%	0.8%
Diluted EPS	1.64	7.53	6.92
Diluted EPS, YoY %	NMF	NMF	-8.1%
Free Cash Flow (CFO-capex)	1,038	1,075	1,782
Free Cash Flow Margin %	0.7%	0.6%	1.0%

In Millions of USD (except for per share items)

Structure of the Healthcare Products/Distributors Industry — NEUTRAL

The healthcare distributors industry is made up of wholesale medical equipment products distributors, serving the dental, medical and animal health markets, and wholesale drug providers, which distribute pharmaceuticals, medical products/services, and other healthcare technologies. Both sub-spaces are highly competitive and continue to experience growth as a result of the aging population, increased healthcare awareness, and the proliferation of medical technology and testing. Participants face pricing pressure from both customers and suppliers as a result of competition. We're neutral on the group.

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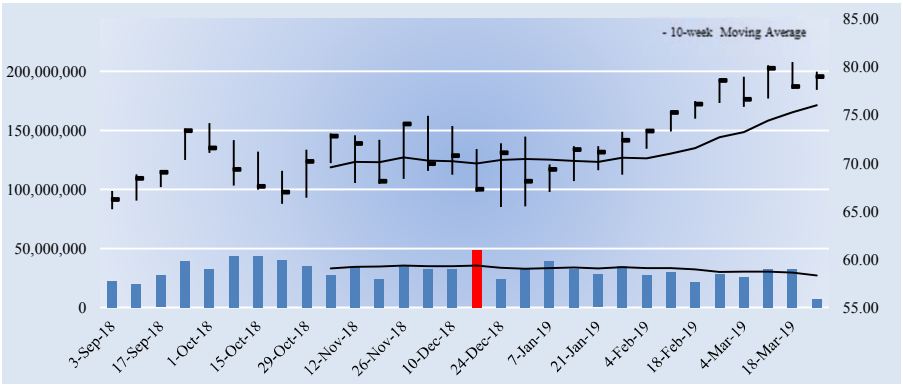
Abbott ABT FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$68.00	$54.00 - $82.00	LARGE-CAP CORE	Health Care	Pharmaceuticals - Big

Abbott continues to enhance its international presence, and recent acquisitions have improved its positioning in attractive growth markets.

Stock Chart (weekly)



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Company Vitals

Market Cap (USD)	$139,830
Avg Weekly Vol (30 wks)	31,324
30-week Range (USD)	65.22 - 80.49
Valuentum Sector	Health Care
5-week Return	3.4%
13-week Return	10.4%
30-week Return	18.4%
Dividend Yield %	1.6%
Dividends per Share	1.28
Forward Dividend Payout Ratio	39.5%
Est. Normal Diluted EPS	3.63
P/E on Est. Normal Diluted EPS	21.7
Est. Normal EBITDA	11,752
Forward EV/EBITDA	14.4
EV/Est. Normal EBITDA	13.2
Forward Revenue Growth (5-yr)	5.2%
Forward EPS Growth (5-yr)	23.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	4.7%
Return on Assets	2.0%
ROIC, with goodwill	14.4%
ROIC, without goodwill	23.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	19,566
Net Debt	15,480
Total Debt/EBITDA	2.8
Net Debt/EBITDA	2.2
EBITDA/Interest	8.4
Current Ratio	1.6
Quick Ratio	1.0

NMF = Not Meaningful

Investment Highlights

• The new Abbott isn't much different from the old Abbott (pre AbbVie spin-off), minus the blockbuster drug Humira and other members of its drug lineup. It remains aligned with favorable long-term healthcare trends in both developed and developing markets. The company is more than 125 years old. Roughly 65% of its sales are now generated outside the US.

• Abbott's diagnostics segment has some solid products in the pipeline that could kick-start growth, and it remains #1 in blood screening. More than 16% of the world's population will be 65 or older by 2050, offering meaningful opportunities across Abbott's portfolio.

• Abbott was busy on the M&A front in 2017 as it acquired point of care testing firm Alere for a total equity value of ~$5.3 billion and St. Jude Medical for $25 billion. The $5.5 billion point of care testing segment is one of the fastest growing segments in healthcare diagnostics, and the deal has made Abbott a leader in rapid testing. It expects $500 million in annual pre-tax synergies from the St. Jude deal.

• As the Dividend Aristocrat works to pay down debt from its recent acquisitions (net debt repayments were ~$8.5 billion in 2018), its dividend payout ratio is likely to remain near the lower end of its 40%-45% target. Organic sales growth is expected to be 6.5%-7.5% in 2019, and adjusted earnings per share guidance is a range of $3.15-$3.25 for the year.

• Abbott continues to expand its global presence, particularly in Latin America and Russia, and its global infrastructure presence. The acquisition of St. Jude has made it the world leader in point-of-care diagnostic testing with focuses on cardio-metabolic, infectious disease, and toxicology.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**76.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
AbbVie	9.3	1.3	90.7%
Eli Lilly	22.9	2.1	123.6%
Merck	20.3	2.5	113.6%
Pfizer	14.5	1.7	94.3%
Peer Median	17.4	1.9	103.9%
Abbott	**24.4**	**2.5**	**116.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	27,390	30,578	31,832
Revenue, YoY%	31.3%	11.6%	4.1%
Non-GAAP Operating Income	1,726	3,650	7,472
Non-GAAP EBIT %	6.3%	11.9%	23.5%
Non-GAAP Net Income	353	2,334	5,739
Non-GAAP NI Margin %	1.3%	7.6%	18.0%
Non-GAAP Diluted EPS	0.20	1.32	3.24
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP Free Cash Flow	4,435	4,906	7,645
Non-GAAP FCF Margin %	16.2%	16.0%	24.0%

In Millions of USD (except for per share items)

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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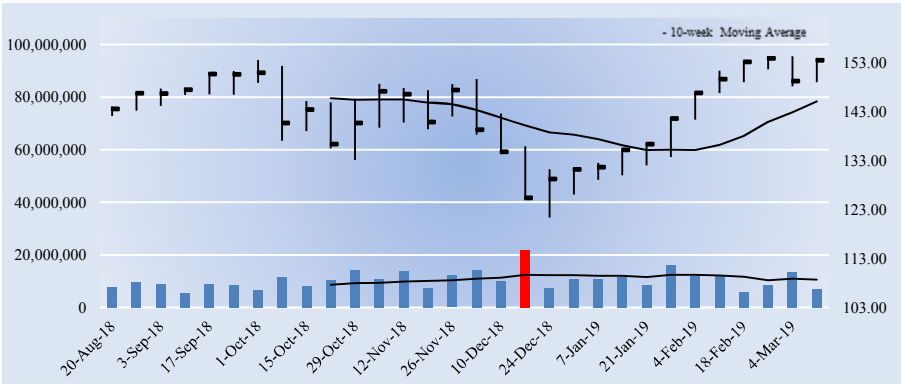
Automatic Data Processing ADP FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$149.00	$119.00 - $179.00	LARGE-CAP CORE	Information Technology	Staffing Services

Automatic Data Processing boasts a large, recurring revenue base resulting in strong, consistent cash flow generation.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**145.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$68,051
Avg Weekly Vol (30 wks)	10,499
30-week Range (USD)	121.4 - 154.55
Valuentum Sector	Information Technology
5-week Return	4.3%
13-week Return	14.0%
30-week Return	7.5%
Dividend Yield %	2.1%
Dividends per Share	3.16
Forward Dividend Payout Ratio	58.2%
Est. Normal Diluted EPS	6.49
P/E on Est. Normal Diluted EPS	23.7
Est. Normal EBITDA	4,214
Forward EV/EBITDA	11.0
EV/Est. Normal EBITDA	9.7
Forward Revenue Growth (5-yr)	5.3%
Forward EPS Growth (5-yr)	15.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	38.9%
Return on Assets	4.2%
ROIC, with goodwill	54.2%
ROIC, without goodwill	109.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	2,002
Net Debt	-27,305
Total Debt/EBITDA	0.7
Net Debt/EBITDA	NMF
EBITDA/Interest	28.8
Current Ratio	1.1
Quick Ratio	1.0

NMF = Not Meaningful

Investment Highlights

• Automatic Data Processing (ADP) is one of the world's largest providers of business outsourcing solutions. It offers a wide range of easy-to-use human resource, payroll, tax and benefits administration solutions from a single source. It has ~700,000 clients in 110+ countries, and ~80% of the Fortune 100 use at least one ADP service. The company was founded in 1949 and is based in New Jersey.

• The US human cloud capital management (HCM) market was ~$65 billion in ADP's fiscal 2017 and is expected to grow to ~$79 million by fiscal 2020, while the multi-national and international HCM market is expected to grow to ~$45 billion in fiscal 2020 from ~$40 billion in fiscal 2017.

• ADP believes its runway for growth is a long one, though its operating environment is evolving. The increasing complexity of regulatory compliance, trends toward the use of big data, and the globalization of businesses and the additional complexities that come along with cross-border operations are all expected to help drive demand. Reported revenue is expected to grow 5%-7% in fiscal 2018.

• ADP expects revenue to grow at a 7%-9% CAGR from fiscal 2017 to fiscal 2020 thanks in part to its focus on large and growing markets where it has a competitive advantage and ~200 basis points of adjusted EBIT margin expansion thanks to operating leverage, platform migrations, and service alignment and productivity initiatives.

• ADP boasts a large, recurring revenue base resulting in strong, consistent cash flow generation. The firm's business model has low capital requirements. It has minimal long-term obligations and has been paying dividends continuously since 1974.

Relative Valuation

	Forward P/E	PEG	Price / FV
Insperity	26.9	2.2	113.2%
Korn/Ferry	13.8	2.6	97.3%
Manpower	10.7	2.4	90.3%
Paychex	27.4	2.8	111.3%
Peer Median	20.4	2.5	104.3%
Automatic Data Processing	**28.3**	**2.8**	**103.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jun-17	Jun-18	Jun-19
Revenue	12,380	13,326	14,259
Revenue, YoY%	6.1%	7.6%	7.0%
Operating Income	2,327	2,512	3,229
Operating Margin %	18.8%	18.8%	22.6%
Net Income	1,733	1,621	2,361
Net Income Margin %	14.0%	12.2%	16.6%
Diluted EPS	3.85	3.66	5.43
Diluted EPS, YoY %	18.3%	-5.0%	48.6%
Free Cash Flow (CFO-capex)	1,656	2,044	2,480
Free Cash Flow Margin %	13.4%	15.3%	17.4%

In Millions of USD (except for per share items)

Structure of the Staffing Services Industry — NEUTRAL

The staffing services industry spans firms that provide business outsourcing services to those that offer talent management solutions. Providers of business outsourcing solutions compete with a variety of independent firms as well as captive in-house functions. Their businesses are characterized by long-term client relationships and recurring revenue. Talent management firms offer executive recruitment and consulting services and face emerging competition from professional networking website providers. Attracting consultants is particularly important for executive recruitment entities. We're neutral on the group.

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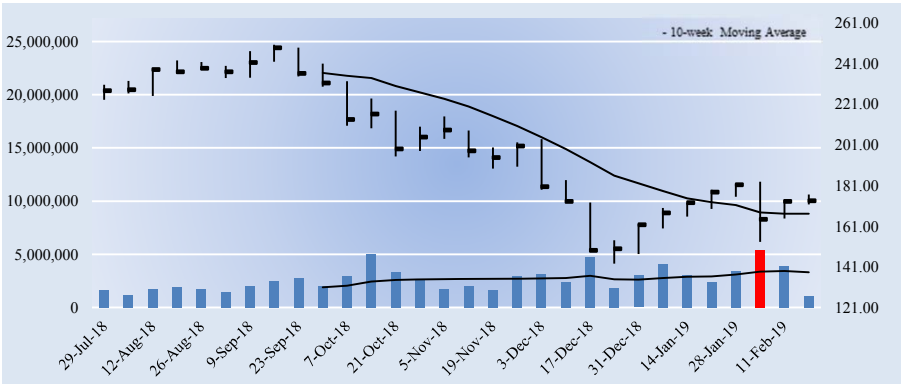
Alliance Data Systems ADS FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$229.00	$172.00 - $286.00	MID-CAP VALUE	Information Technology	Business Services

The shift to data-enabled, multi-channel digital marketing represents a huge and growing market for Alliance Data Systems.

Stock Chart (weekly)



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)	$9,694
Avg Weekly Vol (30 wks)	2,664
30-week Range (USD)	142.58 - 250.27
Valuentum Sector	Information Technology
5-week Return	0.8%
13-week Return	-11.9%
30-week Return	-23.9%
Dividend Yield %	1.5%
Dividends per Share	2.52
Forward Dividend Payout Ratio	14.4%
Est. Normal Diluted EPS	25.41
P/E on Est. Normal Diluted EPS	6.8
Est. Normal EBITDA	2,678
Forward EV/EBITDA	9.3
EV/Est. Normal EBITDA	7.6
Forward Revenue Growth (5-yr)	4.2%
Forward EPS Growth (5-yr)	17.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	33.5%
Return on Assets	2.6%
ROIC, with goodwill	16.9%
ROIC, without goodwill	22.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	14,887
Net Debt	10,697
Total Debt/EBITDA	6.9
Net Debt/EBITDA	5.0
EBITDA/Interest	3.8
Current Ratio	2.4
Quick Ratio	2.2

NMF = Not Meaningful

Investment Highlights

• Alliance Data Systems is a leading provider of transaction-based, data-driven marketing and loyalty solutions (including database marketing services, marketing strategy consulting, analytics and creative services). Consumer marketing data is the core of its business and offerings. The company was founded in 1996 and is headquartered in Plano, Texas.

• As it pertains to the long-term outlook, Alliance Data has both cyclical and non-cyclical businesses. Two of its three businesses expect continued growth through any economic downturn, and the firm was able to sustain growth through the 2008-2009 recession.

• Alliance Data has three businesses. LoyaltyOne operates the AIR MILES Reward Program in Canada. Epsilon specializes in marketing services including data and analytics, and its 'Card Services' division focuses on receivables financing and processing services. The firm's private label credit cards are active in the wallets of 1 of 10 employed adults in the US.

• The shift to data-enabled, multi-channel digital marketing represents a huge and growing market for Alliance Data. The firm was able to grow through the Great Recession thanks to steady performance from its non-card businesses and lower loss rate in its cards business compared to bank cards.

• Alliance Data is expecting top-line growth to slow in the near term but recover as we move forward in 2019. Bankruptcies from certain customers will impact this growth rate, but active client receivables growth is expected to remain solid, which should provide resiliency.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**167.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Accenture	21.9	2.5	114.1%
Amdocs	13.3	1.4	80.4%
IHS Markit	20.6	1.9	108.2%
VMware	27.1	2.8	122.0%
Peer Median	21.2	2.2	111.2%
Alliance Data Systems	**9.9**	**0.7**	**75.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-16	Dec-17	Dec-18
Revenue	7,138	7,719	7,791
Revenue, YoY%	10.8%	8.1%	0.9%
Operating Income	1,266	1,646	1,777
Operating Margin %	17.7%	21.3%	22.8%
Net Income	516	789	958
Net Income Margin %	7.2%	10.2%	12.3%
Diluted EPS	8.76	14.11	17.49
Diluted EPS, YoY %	-8.5%	61.1%	24.0%
Free Cash Flow (CFO-capex)	1,907	2,385	2,555
Free Cash Flow Margin %	26.7%	30.9%	32.8%

In Millions of USD (except for per share items)

Structure of the Business Services Industry — NEUTRAL

Firms in the business services space primarily focus on management consulting, technology/data-integration services/software and outsourcing solutions. Participants generate high returns on invested capital, but the business services marketplace is very competitive, and firms can often face pressure from off-shore service providers in lower-cost locations (India, Philippines and China). Such competition may inhibit firms' ability to obtain sufficient pricing for services, and economic conditions may hinder the capability of clients to pay for such services. Still, we're generally neutral on the group.

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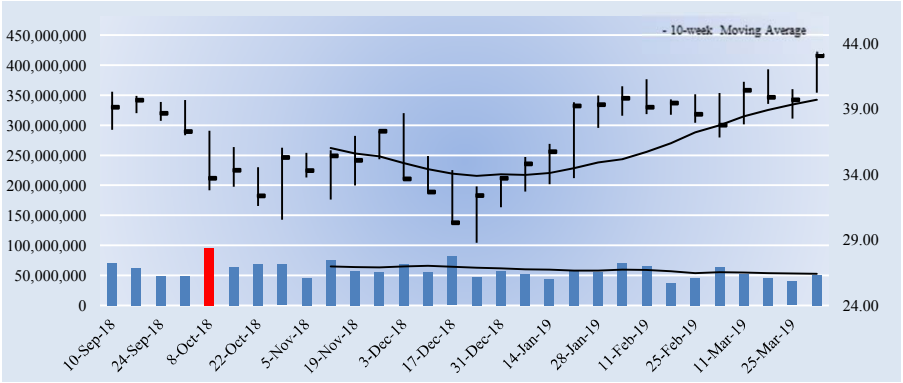
Applied Materials AMAT FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$48.00	$36.00 - $60.00	LARGE-CAP VALUE	Information Technology	Semi Equipment

Applied Materials expects wafer fab equipment spending to decline at a mid- to high-teens rate in 2019 over 2018 levels.

Stock Chart (weekly)



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)	$44,159
Avg Weekly Vol (30 wks)	58,674
30-week Range (USD)	28.79 - 43.39
Valuentum Sector	Information Technology
5-week Return	10.4%
13-week Return	27.3%
30-week Return	7.3%
Dividend Yield %	2.0%
Dividends per Share	0.84
Forward Dividend Payout Ratio	27.8%
Est. Normal Diluted EPS	3.81
P/E on Est. Normal Diluted EPS	11.3
Est. Normal EBITDA	4,824
Forward EV/EBITDA	11.2
EV/Est. Normal EBITDA	9.4
Forward Revenue Growth (5-yr)	1.2%
Forward EPS Growth (5-yr)	5.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	35.2%
Return on Assets	16.5%
ROIC, with goodwill	50.1%
ROIC, without goodwill	96.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	5,309
Net Debt	1,279
Total Debt/EBITDA	1.0
Net Debt/EBITDA	0.2
EBITDA/Interest	22.4
Current Ratio	2.6
Quick Ratio	1.6

NMF = Not Meaningful

Investment Highlights

• Applied may be the largest supplier of semi equipment, LCD fabrication equipment to the flat panel display industry and photovoltaic manufacturing systems to the solar industry, but substantial competition exists in all areas of its business. The firm was founded in 1967 and is headquartered in Santa Clara, California.

• In both semiconductor and display, major changes in device technology provide a catalyst for the firm's growth. With the coming of artificial intelligence, an explosion of data generation from machines is expected to drive demand for data storage and compute models and architectures.

• Applied Materials expects short term headwinds such as macroeconomic risks, global trade tensions, and a pullback in memory investments to eventually give way to demand and pricing stabilization in the back half of 2019. The company expects wafer fab equipment spending to decline at a mid- to high-teens rate in 2019 over 2018 levels. Weakness in emerging markets is impacting its display business.

• As with its peers, Applied Materials' growth will largely be driven by strength in mobile devices and the proliferation of connected devices in the 'Internet of Things.' It is optimistic about the long-term opportunity of the display market as the industry moves through technology transitions, but the businesses' top line will face pressure in the near term.

• The semiconductor industry has been increasingly driven by consumer demand for lower-cost electronic products with increased capability. The rapid pace of technological change can quickly diminish the value of Applied Materials' current technologies.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**40.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Cree	NMF	NMF	149.4%
KLA-Tencor	14.7	1.3	100.3%
Lam Research	13.9	NMF	118.3%
United Micro	NMF	1.7	62.3%
Peer Median	14.3	1.5	109.3%
Applied Materials	**14.3**	**1.6**	**89.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Oct-17	Oct-18	Oct-19
Revenue	14,537	17,253	14,510
Revenue, YoY%	34.3%	18.7%	-15.9%
Non-GAAP Operating Income	3,868	4,796	3,633
Non-GAAP EBIT %	26.6%	27.8%	25.0%
Non-GAAP Net Income	3,434	3,313	3,036
Non-GAAP NI Margin %	23.6%	19.2%	20.9%
Non-GAAP Diluted EPS	3.17	3.23	3.02
Non-GAAP Dil EPS, YoY %	105.4%	1.9%	-6.5%
Non-GAAP FCF (CFO-capex)	3,264	3,165	3,584
Non-GAAP FCF Margin %	22.5%	18.3%	24.7%

In Millions of USD (except for per share items)

Structure of the Semiconductor Equipment Industry — VERY POOR

The semiconductor equipment industry is highly competitive and characterized by rapid technological change. Success hinges on the ability to commercialize new technology in a timely manner, continuously enhance products to improve efficiency of customer fab operations, and manage costs and inventory effectively. Performance of constituents is heavily influenced by manufacturing capacity and fab utilization rates, which together create volatile demand cycles. The potential for unexpected shifts in demand for the group's products leaves us unexcited about the industry's structural characteristics.

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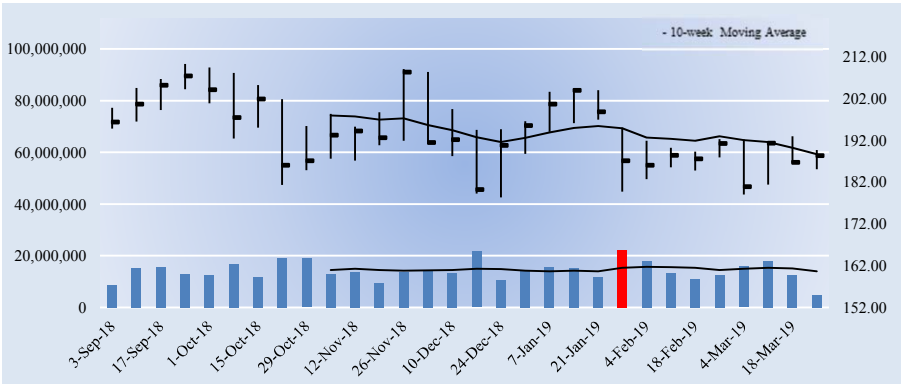
Amgen AMGN FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$202.00	$162.00 - $242.00	LARGE-CAP VALUE	Health Care	Pharmaceuticals - Big

Amgen is excited about its potential in the areas of atherosclerosis and heart failure, and we like its approach to innovative research.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**189.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$125,200
Avg Weekly Vol (30 wks)	14,245
30-week Range (USD)	178.29 - 210.19
Valuentum Sector	Health Care
5-week Return	-0.2%
13-week Return	-1.9%
30-week Return	-5.5%
Dividend Yield %	3.1%
Dividends per Share	5.80
Forward Dividend Payout Ratio	41.0%
Est. Normal Diluted EPS	15.39
P/E on Est. Normal Diluted EPS	12.2
Est. Normal EBITDA	13,111
Forward EV/EBITDA	9.8
EV/Est. Normal EBITDA	9.9
Forward Revenue Growth (5-yr)	0.1%
Forward EPS Growth (5-yr)	5.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Amgen is one of the world's largest biotechnology medicines firms. The company's pipeline continues to advance, and commercial execution of its portfolio remains strong. We expect it to continue to successfully execute on new product launches as well. The firm has been a pioneer since 1980 and is headquartered in Thousand Oaks, California.

• Amgen is anticipating data generated in 2019 to provide key insights to the future of its oncology pipeline, and it has a notable presence in cardiovascular disease. Repatha is the market leading PCSK9 inhibitory with more than 60% share of prescriptions in the US.

• Amgen is excited about its potential in the areas of atherosclerosis and heart failure, and it expects its efforts in biosimilars to come to fruition as commercialization began in 2018. We're not fans of the lower-margin nature of biosimilars, however, and this may not be as attractive of a growth market as management believes, though the push for lower cost treatment in the US may help its efforts.

• We like Amgen's approach to innovative research. The firm pursues a 'biology first' process allowing its scientists to first explore the complex molecular pathways of disease before determining what type of medicine is most likely to deliver optimal efficacy. Its near-term pipeline leaves a bit to be desired at the moment, however.

• Global expansion is key to future growth at Amgen. The firm continues to form partnerships and acquire rights to expand its presence in Japan, China, and key emerging markets. Sales of key product Enbrel are worth watching as it faces pressure in the increasingly crowded inflammatory disease space.

Relative Valuation

	Forward P/E	PEG	Price / FV
Abbott	24.4	2.5	116.2%
Eli Lilly	22.9	2.1	123.6%
Merck	20.3	2.5	113.6%
Pfizer	14.5	1.7	94.3%
Peer Median	21.6	2.3	114.9%
Amgen	**13.3**	**2.7**	**93.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	26.1%
Return on Assets	8.1%
ROIC, with goodwill	36.4%
ROIC, without goodwill	73.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	33,929
Net Debt	4,625
Total Debt/EBITDA	2.7
Net Debt/EBITDA	0.4
EBITDA/Interest	9.0
Current Ratio	2.8
Quick Ratio	2.4

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	22,849	23,747	22,821
Revenue, YoY%	-0.6%	3.9%	-3.9%
Non-GAAP Operating Income	10,348	10,577	11,279
Non-GAAP EBIT %	45.3%	44.5%	49.4%
Non-GAAP Net Income	1,979	8,394	8,977
Non-GAAP NI Margin %	8.7%	35.3%	39.3%
Non-GAAP Diluted EPS	2.69	12.62	14.14
Non-GAAP Dil EPS, YoY %	-73.7%	368.8%	12.0%
Non-GAAP Free Cash Flow	10,513	10,558	9,966
Non-GAAP FCF Margin %	46.0%	44.5%	43.7%

In Millions of USD (except for per share items)

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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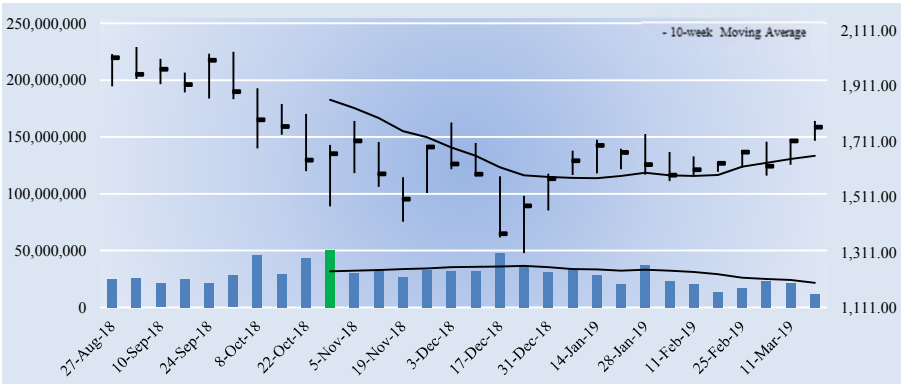
Amazon.com AMZN FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$2049.00	$1537.00 - $2561.00	MEGA-CAP BLEND	Consumer Discretionary	Internet & Catalog Retail

We're big fans of the high-margin, cash-rich nature of Amazon Web Services, and Amazon continues to focus on taking market share in its retail operations.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**AGGRESSIVE**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**1659.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$880,925
Avg Weekly Vol (30 wks)	29,105
30-week Range (USD)	1307 - 2050.5
Valuentum Sector	Consumer Discretionary
5-week Return	10.0%
13-week Return	30.9%
30-week Return	-8.0%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	55.63
P/E on Est. Normal Diluted EPS	31.7
Est. Normal EBITDA	61,296
Forward EV/EBITDA	24.6
EV/Est. Normal EBITDA	14.3
Forward Revenue Growth (5-yr)	18.0%
Forward EPS Growth (5-yr)	34.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	18.6%
Return on Assets	4.3%
ROIC, with goodwill	19.8%
ROIC, without goodwill	23.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	39,787
Net Debt	-1,463
Total Debt/EBITDA	1.4
Net Debt/EBITDA	NMF
EBITDA/Interest	19.8
Current Ratio	1.1
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Amazon seeks to be the center for four primary customer sets: consumers, sellers, enterprises, and content creators. The company also provides advertising services and co-branded credit card agreements in addition to its Amazon Web Services, a suite of on demand cloud-based services. It stands as the best example as to why the dot-com boom of the late 1990s wasn't a complete bust.

• Amazon Web Services is becoming an increasingly important part of Amazon's business. Revenue growth in the segment is outpacing overall company growth, and AWS accounted for ~59% of operating income in 2018 despite generating roughly 11% of revenue.

• In the past, Amazon has notoriously been less concerned with maximizing profits, but free cash flow has now become a welcome abundance. However, an investment in the stock remains risky due to a lack of clarity into long-term operating margins, to which our fair value estimate is very sensitive. A 1% change in our mid-cycle operating margin assumption results in a ~$178 change in Amazon's fair value estimate.

• The online retailer continues to focus on taking market share and damaging its brick-and-mortar competitors. Its $13.7 billion purchase of Whole Foods speaks directly to this as the firm continues to compete aggressively for market share. The company continues to work to disrupt a number of other verticals, including pharmacy and shipping.

• Amazon is truly a special entity. From millions of new Prime members, to creating its own content, to delivering packages via drones, to its rapidly expanding AWS business and beyond, Amazon is a wonder of an enterprise. The Internet giant is working to enter the digital ad market in a big way.

Relative Valuation

	Forward P/E	PEG	Price / FV
Alibaba	32.8	1.8	87.8%
Booking Holdings	17.4	1.6	82.1%
eBay	13.6	2.0	98.1%
Expedia Group	17.6	1.5	81.6%
Peer Median	17.5	1.7	85.0%
Amazon.com	**NMF**	**2.6**	**86.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	177,866	232,887	279,697
Revenue, YoY%	30.8%	30.9%	20.1%
Operating Income	4,320	12,717	17,330
Operating Margin %	2.4%	5.5%	6.2%
Net Income	3,033	10,073	13,909
Net Income Margin %	1.7%	4.3%	5.0%
Diluted EPS	6.15	20.15	27.54
Diluted EPS, YoY %	NMF	NMF	36.7%
Free Cash Flow (CFO-capex)	6,479	17,296	18,276
Free Cash Flow Margin %	3.6%	7.4%	6.5%

In Millions of USD (except for per share items)

Structure of the Internet & Catalog Retail Industry — GOOD

The Internet and catalog retail industry benefits as a whole from the secular trend toward consumer digital (online) consumption. The industry consists of a number of exclusive online retailers led by Amazon, which continues to disrupt the broader retail space, and businesses that offer Internet travel services such as Booking Holdings, while online auctions are dominated by eBay. The industry generates high returns on investment due to minimal capital costs, but the landscape will be vastly different in the decades ahead. Still, we like the group.

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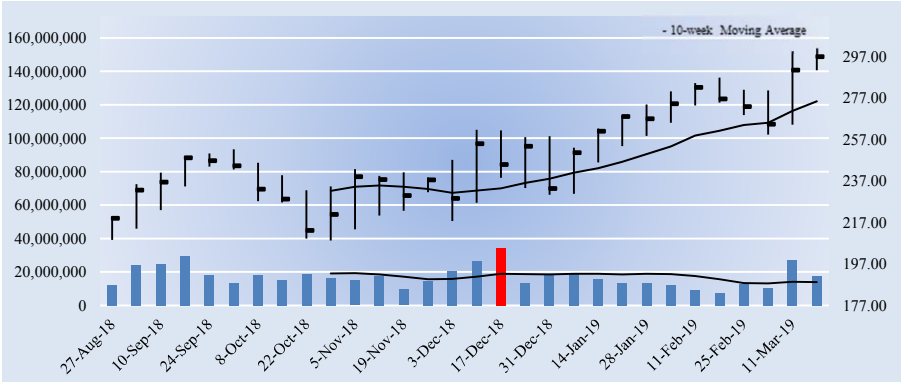
Broadcom AVGO FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$266.00	$213.00 - $319.00	LARGE-CAP CORE	Information Technology	Broad Line Semiconductors

Broadcom acquired CA Technologies for ~$18.9 billion in cash. CA brings a strong degree of recurring revenue and adds to its semiconductor and infrastructure software solutions portfolio.

Stock Chart (weekly)



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)	$127,921
Avg Weekly Vol (30 wks)	17,298
30-week Range (USD)	208.23 - 300.98
Valuentum Sector	Information Technology
5-week Return	5.6%
13-week Return	22.6%
30-week Return	41.2%
Dividend Yield %	3.6%
Dividends per Share	10.60
Forward Dividend Payout Ratio	46.0%
Est. Normal Diluted EPS	27.03
P/E on Est. Normal Diluted EPS	11.0
Est. Normal EBITDA	13,862
Forward EV/EBITDA	12.9
EV/Est. Normal EBITDA	11.6
Forward Revenue Growth (5-yr)	6.4%
Forward EPS Growth (5-yr)	0.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	16.0%
Return on Assets	7.3%
ROIC, with goodwill	19.8%
ROIC, without goodwill	47.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	37,641
Net Debt	32,548
Total Debt/EBITDA	4.0
Net Debt/EBITDA	3.4
EBITDA/Interest	15.0
Current Ratio	3.9
Quick Ratio	3.3

NMF = Not Meaningful

Investment Highlights

• Broadcom is a leading diversified communications semiconductor company with a broad portfolio of category-leading franchises. It serves markets in China, the US, Singapore, among others across the globe. The company is headquartered in Singapore and has a long history, with some of its divisions tracing their roots to the 1960s.

• As of fiscal 2018, 42% of Broadcom's revenue was generated in its 'Wired Infrastructure' segment. Key drivers for the segment include increasing use of cloud, social media, and video streaming, big data and corresponding analytics, and the adoption of connected home technology.

• Broadcom recently acquired Brocade in an all cash deal worth ~$5.5 billion. Brocade's fiber channel switches are expected to be used in gaining share in the data center products market as they speed up data transfer between servers and storage devices. Broadcom has withdrawn its hostile takeover bid for Qualcomm but continued its acquisitive streak with the purchase of CA Tech for ~$18.9 billion in cash.

• The CA Tech deal continues a focus on established mission critical businesses and expands its addressable market into the growing and fragmented infrastructure software market. The firm expects its non-GAAP operating margin to move towards 55% in 2020. Investors should note our financial leverage assumptions are based on pre-closing guidance.

• Broadcom's capital allocation plan includes the distribution of 50% of prior fiscal year's free cash flow as dividends, the flexibility to use the balance of free cash flow to fund a combination of share repurchases and future acquisitions, and the maintenance of an investment grade credit rating.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**275.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Advanced Micro Devices	75.8	6.8	129.0%
Intel	10.7	2.4	87.0%
STMicroelectronics	11.3	1.9	93.7%
Texas Instruments	18.3	2.6	117.2%
Peer Median	14.8	2.5	105.5%
Broadcom	**12.9**	**1.6**	**111.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Oct-17	Oct-18	Oct-19
Revenue	17,636	20,848	24,621
Revenue, YoY%	33.2%	18.2%	18.1%
Non-GAAP Operating Income	2,666	5,368	11,837
Non-GAAP EBIT %	15.1%	25.7%	48.1%
Non-GAAP Net Income	1,698	12,278	9,727
Non-GAAP NI Margin %	9.6%	58.9%	39.5%
Non-GAAP Diluted EPS	4.03	28.49	23.03
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP FCF (CFO-capex)	5,482	8,245	9,640
Non-GAAP FCF Margin %	31.1%	39.5%	39.2%

In Millions of USD (except for per share items)

Structure of the Broad Line Semiconductor Industry — POOR

The broad line semiconductor industry is characterized by intense competition, rapid technological change, and frequent product introductions. The number and variety of computing devices have expanded rapidly, creating a connected landscape between suppliers and competitors. New market segments have emerged rapidly (smartphones, tablets), and constituents must continuously innovate to maintain share as traditional PC demand faces pressure. Though some firms may gain advantages via the combination of their manufacturing/test facilities with their design teams, we think the structure of the group is poor.

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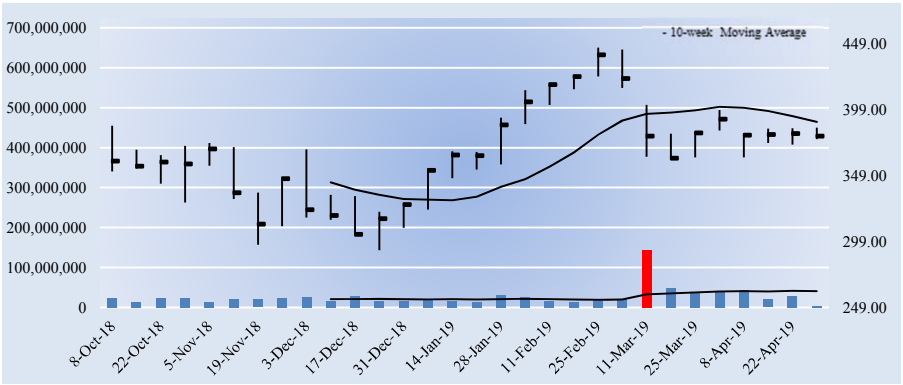
Boeing BA FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$332.00	$257.00 - $407.00	MEGA-CAP CORE	Industrials	A&D Prime

Boeing's backlog gives it excellent visibility and a growth trajectory better than most firms of similar size, but concerns related to two recent 737 MAX crashes have dampened sentiment and its near-term outlook.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**390.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$222,199
Avg Weekly Vol (30 wks)	27,254
30-week Range (USD)	292.470001 - 446.01001
Valuentum Sector	Industrials
5-week Return	-1.7%
13-week Return	-2.6%
30-week Return	-1.2%
Dividend Yield %	2.2%
Dividends per Share	8.22
Forward Dividend Payout Ratio	49.8%
Est. Normal Diluted EPS	25.64
P/E on Est. Normal Diluted EPS	14.8
Est. Normal EBITDA	19,729
Forward EV/EBITDA	16.5
EV/Est. Normal EBITDA	11.5
Forward Revenue Growth (5-yr)	7.6%
Forward EPS Growth (5-yr)	12.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Boeing is the largest manufacturer of commercial jetliners and military aircraft combined. Boeing also makes rotorcraft, electronic and defense systems, missiles, satellites, launch vehicles and advanced information and communication systems. The firm is a major service provider to NASA. It was founded in 1916 and is now based in Chicago, Illinois.

• The aerospace giant is benefiting from a benign operating environment. Global economic growth continues (albeit modestly), air passenger traffic is healthy, defense markets are firming with renewed threats, and commercial aviation remains a long-term growth market.

• Boeing's commercial aerospace backlog of unfulfilled deliveries ($490 billion total backlog as of the end of 2018) gives it excellent visibility and a growth trajectory better than most firms of similar size. 19% of its backlog is expected to be converted to revenue in 2019 (65% through 2022). It is working to build a $50 billion services division over the next decade, which should enhance its purchasing power.

• The company has found itself garnering materially negative headlines after two fatal 737 MAX crashes. It could face notable one-time costs in legal liabilities, and the aircraft has been grounded in most countries around the world. Monthly production rates have been cut, but Boeing's backlog supports its long-term growth trajectory.

• We think Boeing has learned from the recent global financial crisis, but cyclical end markets will always be a risk. The firm is also exposed to risks related to geopolitical trade policy uncertainty. However, it earns an 'A' rating from the credit agencies, and the firm's balance sheet remains relatively healthy.

Relative Valuation

	Forward P/E	PEG	Price / FV
General Dynamics	15.2	1.7	99.0%
Lockheed Martin	16.0	1.7	107.7%
Northrop Grumman	14.9	2.0	101.1%
Raytheon	15.0	1.3	96.9%
Peer Median	15.1	1.7	100.0%
Boeing	**23.0**	**1.2**	**114.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	1516.7%
Return on Assets	8.1%
ROIC, with goodwill	36.0%
ROIC, without goodwill	48.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	93,392	101,127	103,150
Revenue, YoY%	-1.2%	8.3%	2.0%
Operating Income	10,257	11,912	11,636
Operating Margin %	11.0%	11.8%	11.3%
Net Income	8,197	10,460	9,487
Net Income Margin %	8.8%	10.3%	9.2%
Diluted EPS	13.42	17.84	16.51
Diluted EPS, YoY %	76.3%	32.9%	-7.5%
Free Cash Flow (CFO-capex)	11,605	13,600	12,762
Free Cash Flow Margin %	12.4%	13.4%	12.4%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	13,847
Net Debt	5,283
Total Debt/EBITDA	1.0
Net Debt/EBITDA	0.4
EBITDA/Interest	29.5
Current Ratio	1.1
Quick Ratio	0.3

NMF = Not Meaningful

Structure of the Aerospace and Defense Industry — GOOD

The global commercial aerospace duopoly is being challenged by encroaching international competitors who are intent on increasing market share, but Boeing and Airbus continue to dominate the large commercial aircraft segment. Long-term demand for commercial aircraft is cyclical and depends on the health of the credit markets, airline customers, and lessors, but massive backlogs and a strong multi-decade demand outlook are reasons for confidence. The defense industry has strong competition in all market segments and remains dependent on government funding decisions and competing budget priorities.

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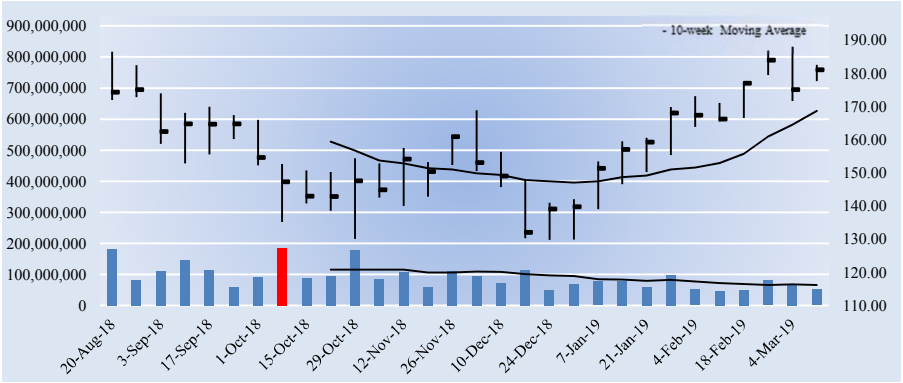
Alibaba BABA FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$206.00	$155.00 - $258.00	MEGA-CAP BLEND	Consumer Discretionary	Internet & Catalog Retail

Alibaba is widely known as being synonymous with e-commerce in China, and it is targeting $1 trillion in gross merchandising volume in fiscal 2020.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**AGGRESSIVE**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**1659.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$472,332
Avg Weekly Vol (30 wks)	92,039
30-week Range (USD)	129.77 - 188.08
Valuentum Sector	Consumer Discretionary
5-week Return	7.2%
13-week Return	23.5%
30-week Return	3.3%
Dividend Yield %	0.0%
Dividends per Share (in CNY)	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS (in CNY	59.47
P/E on Est. Normal Diluted EPS	20.3
Est. Normal EBITDA (in CNY)	242,664
Forward EV/EBITDA	20.5
EV/Est. Normal EBITDA	12.6
Forward Revenue Growth (5-yr)	28.4%
Forward EPS Growth (5-yr)	27.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Alibaba has been generating significant economic value (ROIC-less-WACC) during the past few years. The company benefits greatly from a network effect and will continue to benefit from favorable demographic trends in China. Altaba (formerly Yahoo!) and Softbank own a nice slice of the firm. The firm also explores next-generation technology applications in its 'Innovation Initiatives' segment.

• Alibaba is widely known as being synonymous with e-commerce in China. The firm owns Taobao.com, the country's largest online shopping destination, Tmall, China's largest third-party plaform for brands and retailers, and Juhuasuan, China's most popular group buying marketplace.

• One upside catalyst to Alibaba's shares rests on its monetization rate. Though the firm manages its business for growth in GMV and active buyers, the Street is laser-focused on this metric. Segments outside its core commerce business such as 'Cloud Computing' and 'Digital Media and Entertainment' could be sources of upside as well, though sustained profitability in those areas may still be a ways off.

• Alibaba has a robust marketplaces operation and is a mobile commerce leader. Total gross merchandising volume (GMV) on its China retail marketplaces is staggeringly large. The company is targeting GMV to reach $1 trillion in fiscal 2020 from $768 billion in fiscal 2018, but the potential for slowing economic growth in China could impact this goal.

• We think Alibaba's shares are worth roughly $206 each. Risks are abundant with operators in China (regulatory/legal/corporate governance), and the company's standing within the political structure of the country could be worth watching. It would take a massive event to truly derail the firm at this point.

Relative Valuation

	Forward P/E	PEG	Price / FV
Amazon.com	NMF	2.6	86.0%
Booking Holdings	17.4	1.6	82.1%
eBay	13.6	2.0	98.1%
Expedia Group	17.6	1.5	81.6%
Peer Median	17.4	1.8	84.1%
Alibaba	**32.8**	**1.8**	**87.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	23.0%
Return on Assets	14.1%
ROIC, with goodwill	27.7%
ROIC, without goodwill	33.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-17	Mar-18	Mar-19
Revenue (CNY)	158,273	250,266	388,163
Revenue, YoY%	56.5%	58.1%	55.1%
Non-GAAP Operating Income	48,055	69,808	124,708
Non-GAAP EBIT Margin %	30.4%	27.9%	32.1%
Non-GAAP Net Income	43,675	64,093	96,130
Non-GAAP NI Margin %	27.6%	25.6%	24.8%
Non-GAAP Diluted EPS (CNY)	16.97	24.52	36.83
Non-GAAP Dil EPS, YoY %	-39.1%	44.4%	50.2%
Non-GAAP Free Cash Flow	62,780	95,335	83,302
Non-GAAP FCF Margin %	39.7%	38.1%	21.5%

In Millions of CNY (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of CNY

Total Debt	125,553
Net Debt	-88,074
Total Debt/EBITDA	1.5
Net Debt/EBITDA	NMF
EBITDA/Interest	24.0
Current Ratio	1.9
Quick Ratio	1.6

NMF = Not Meaningful

Structure of the Internet & Catalog Retail Industry — GOOD

The Internet and catalog retail industry benefits as a whole from the secular trend toward consumer digital (online) consumption. The industry consists of a number of exclusive online retailers led by Amazon, which continues to disrupt the broader retail space, and businesses that offer Internet travel services such as Booking Holdings, while online auctions are dominated by eBay. The industry generates high returns on investment due to minimal capital costs, but the landscape will be vastly different in the decades ahead. Still, we like the group.

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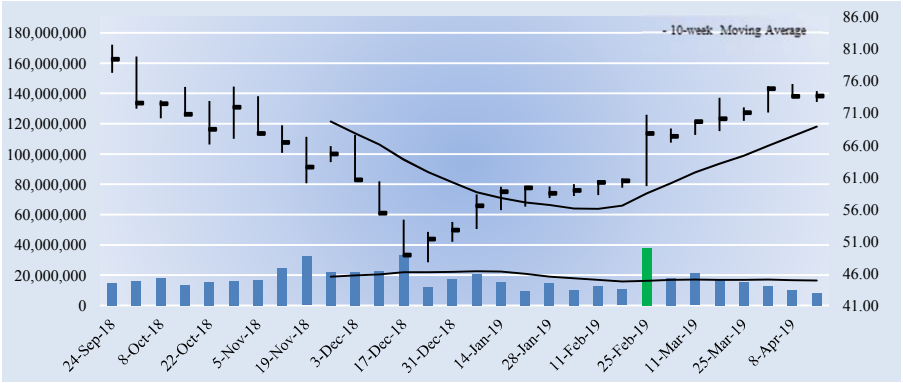
Best Buy BBY FAIRLY VALUED

Buying Index™ 5 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$76.00	$57.00 - $95.00	LARGE-CAP VALUE	Consumer Discretionary	Specialty Retailers

We've raised our fair value estimate for Best Buy after increasing near-term projections. Comps have impressed, online sales growth has been strong, and efficiencies have driven solid margin performance for the retailer of late.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**69.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$20,722
Avg Weekly Vol (30 wks)	17,837
30-week Range (USD)	47.72 - 81.66
Valuentum Sector	Consumer Discretionary
5-week Return	5.7%
13-week Return	26.4%
30-week Return	-9.1%
Dividend Yield %	2.7%
Dividends per Share	2.00
Forward Dividend Payout Ratio	35.0%
Est. Normal Diluted EPS	6.27
P/E on Est. Normal Diluted EPS	11.7
Est. Normal EBITDA	3,017
Forward EV/EBITDA	7.0
EV/Est. Normal EBITDA	6.7
Forward Revenue Growth (5-yr)	1.5%
Forward EPS Growth (5-yr)	5.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Best Buy is the global leader in consumer electronics as far as big box retailers go. The company must continue to reinvent itself to mitigate competitive pressures from the likes of online powerhouse Amazon. Best Buy has notable market share in areas such as home theater, notebooks and desktops. It was founded in 1966 and is headquartered in Minnesota.

• Best Buy's Best Buy 2020 strategy includes a target of $600 million in annualized cost reductions by the end of fiscal 2021. As of the end of fiscal 2019, the company had achieved $500 million towards that target as it continues to work to offset investments in and pressures on its business.

• Best Buy is facing a promotional environment like no other in its history. Competition is unforgiving, but the firm has been able to gain share in the majority of its categories in the US. Bottom-line performance of late has benefited from a disciplined promotional strategy, optimization of merchandise margins, and expense management. As long as the economy remains strong, positive comps are a real possibility.

• Best Buy recently acquired GreatCall, a leading provider of connected health and personal emergency response services for the aging population, for ~$800 million in cash. Management points to the need for tech-based solutions for everyday-life for a growing population of aging Americans as deal rationale, but its balance sheet health has taken a hit.

• Best Buy holds a net cash position on the balance sheet and generates strong levels of free cash flow. Its strong Dividend Cushion ratio is hard to ignore, as was the recent hike in the payout. Still, it's hard for us to get excited about any big box retailer, and management is not shy about buybacks.

Relative Valuation

	Forward P/E	PEG	Price / FV
Bed Bath & Beyond	8.8	NMF	78.5%
Home Depot	20.2	2.4	117.5%
Lowe's	18.6	1.5	118.5%
Office Depot	7.6	0.9	61.5%
Peer Median	13.7	1.5	98.0%
Best Buy	**12.9**	**2.6**	**96.9%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	31.0%
Return on Assets	9.2%
ROIC, with goodwill	65.7%
ROIC, without goodwill	82.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	42,151	42,879	43,522
Revenue, YoY%	7.0%	1.7%	1.5%
Operating Income	1,853	1,946	2,104
Operating Margin %	4.4%	4.5%	4.8%
Net Income	999	1,464	1,574
Net Income Margin %	2.4%	3.4%	3.6%
Diluted EPS	3.25	5.20	5.71
Diluted EPS, YoY %	-13.1%	59.9%	9.7%
Free Cash Flow (CFO-capex)	1,453	1,589	1,295
Free Cash Flow Margin %	3.4%	3.7%	3.0%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,388
Net Debt	-592
Total Debt/EBITDA	0.5
Net Debt/EBITDA	NMF
EBITDA/Interest	37.2
Current Ratio	1.2
Quick Ratio	0.4

NMF = Not Meaningful

Structure of the Specialty Retailers Industry — NEUTRAL

The specialty retail segment is fragmented, highly competitive, and economically-sensitive. The group covers a broad array of businesses and is dominated by retailers with large brick-and-mortar store footprints. Though some constituents may be insulated from e-commerce competition, others risk obsolescence as product distribution moves to digital means, and online retailers offer lower prices for identical goods and services. We're fairly neutral on the structure of the industry, though some constituents will inevitably face secular and permanent declines.

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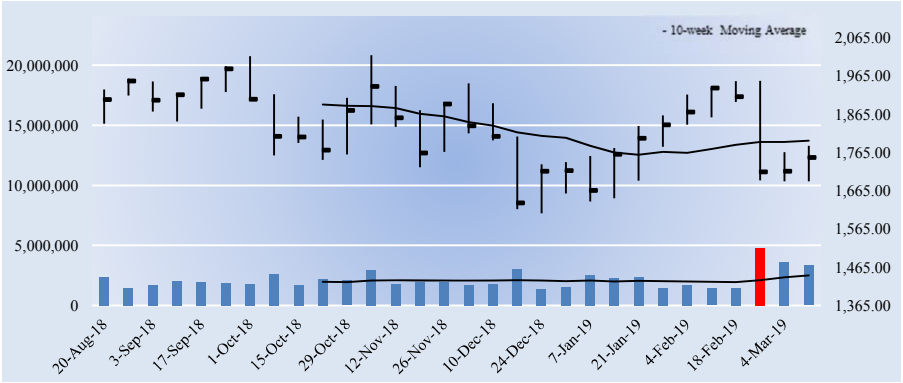
Booking Holdings BKNG FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$2133.00	$1706.00 - $2560.00	LARGE-CAP VALUE	Consumer Discretionary	Internet & Catalog Retail

As it rides the wave of secular growth in Internet penetration in travel, Booking Holdings will also benefit from expansion into new markets.

Stock Chart (weekly)



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)	$82,154
Avg Weekly Vol (30 wks)	2,165
30-week Range (USD)	1606.27 - 2019.48
Valuentum Sector	Consumer Discretionary
5-week Return	-6.5%
13-week Return	-2.5%
30-week Return	-5.0%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	125.82
P/E on Est. Normal Diluted EPS	13.9
Est. Normal EBITDA	7,536
Forward EV/EBITDA	13.2
EV/Est. Normal EBITDA	11.2
Forward Revenue Growth (5-yr)	8.4%
Forward EPS Growth (5-yr)	12.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	28.3%
Return on Assets	12.8%
ROIC, with goodwill	78.2%
ROIC, without goodwill	143.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	8,649
Net Debt	2,365
Total Debt/EBITDA	1.5
Net Debt/EBITDA	0.4
EBITDA/Interest	21.4
Current Ratio	2.4
Quick Ratio	2.2

NMF = Not Meaningful

Investment Highlights

• Booking Holdings is a leader in global online hotel reservations. The firm is composed of four primary brands--Booking.com, Booking Holdings.com, Agoda.com, Kayak and Rentalcars.com--and several ancillary brands. Booking growth continues to be excellent across its platforms. The company was founded in 1997 and is headquartered in Connecticut.

• Demand in Booking Holdings' business model is boosted by a virtuous cycle. Its partnerships allow it to offer an enhanced customer experience, driving increased conversion and traffic. Growing traffic levels give it the opportunity to test and improve customer and partner satisfaction.

• Booking Holdings has made a habit of issuing conservative quarterly guidance, which the market tends not to like. Investors should be prepared for material swings on quarterly reports due to such guidance, and the firm's equity may be better served by management not issuing such punitive quarterly guidance. Nevertheless, we continue to have confidence in the firm's fundamentals.

• Booking.com, the company's largest subsidiary and reason behind its name change, accounts for the majority of its gross bookings and operating income with more than 1.5 million listed properties and an average of 1 million bookings per day. Management has suggested that it is open to acquisitions to further expand its portfolio.

• As it rides the wave of secular growth in Internet penetration in travel, Booking Holdings will also benefit from expansion into new markets in North America, the Asia Pacific, and South America. Increasing competition and potentially slowing global economic activity should not be ignored, however.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Resistance, 10-wk MA	**1796.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Alibaba	32.8	1.8	87.8%
Amazon.com	NMF	2.6	86.0%
eBay	13.6	2.0	98.1%
Expedia Group	17.6	1.5	81.6%
Peer Median	17.6	1.9	86.9%
Booking Holdings	**17.4**	**1.6**	**82.1%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	12,431	14,527	15,558
Revenue, YoY%	15.7%	16.9%	7.1%
Operating Income	4,538	5,341	5,936
Operating Margin %	36.5%	36.8%	38.2%
Net Income	2,341	3,998	4,712
Net Income Margin %	18.8%	27.5%	30.3%
Diluted EPS	46.86	83.26	100.51
Diluted EPS, YoY %	9.9%	77.7%	20.7%
Free Cash Flow (CFO-capex)	4,375	4,896	4,709
Free Cash Flow Margin %	35.2%	33.7%	30.3%

In Millions of USD (except for per share items)

Structure of the Internet & Catalog Retail Industry — GOOD

The Internet and catalog retail industry benefits as a whole from the secular trend toward consumer digital (online) consumption. The industry consists of a number of exclusive online retailers led by Amazon, which continues to disrupt the broader retail space, and businesses that offer Internet travel services such as Booking Holdings, while online auctions are dominated by eBay. The industry generates high returns on investment due to minimal capital costs, but the landscape will be vastly different in the decades ahead. Still, we like the group.

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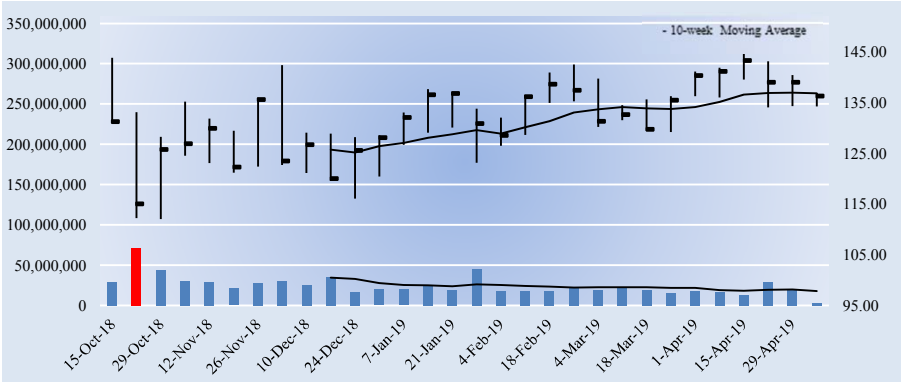
Caterpillar CAT FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$162.00	$130.00 - $194.00	LARGE-CAP VALUE	Industrials	Machinery - agriculture

After taking a fresh look at our valuation model, we have raised our fair value estimate of Caterpillar significantly.

Stock Chart (weekly)



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)	$81,721
Avg Weekly Vol (30 wks)	24,789
30-week Range (USD)	112.059998 - 144.770004
Valuentum Sector	Industrials
5-week Return	-2.6%
13-week Return	5.7%
30-week Return	-4.0%
Dividend Yield %	3.0%
Dividends per Share	4.12
Forward Dividend Payout Ratio	33.2%
Est. Normal Diluted EPS	12.84
P/E on Est. Normal Diluted EPS	10.6
Est. Normal EBITDA	13,459
Forward EV/EBITDA	6.4
EV/Est. Normal EBITDA	6.2
Forward Revenue Growth (5-yr)	2.4%
Forward EPS Growth (5-yr)	4.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	16.4%
Return on Assets	2.9%
ROIC, with goodwill	15.8%
ROIC, without goodwill	20.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	9,611
Net Debt	1,754
Total Debt/EBITDA	0.9
Net Debt/EBITDA	0.2
EBITDA/Interest	27.4
Current Ratio	1.4
Quick Ratio	0.9

NMF = Not Meaningful; Debt excludes debt associated with the finance sub.

Investment Highlights

• Caterpillar makes construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. The company also owns Caterpillar Financial Services (Cat Financial). The machinery giant's operations are tied to cyclical end markets, and results are not immune to geopolitical risks either. It is based in Deerfield, Illinois.

• Cat's dealer network is a significant competitive advantage. Its reach is phenomenal, with ~50 dealers in the US and 120+ outside the US (serving ~190 countries). Mining equipment sales remain tied to expectations of commodity prices, and the period 2013-2016 is exemplary of the pain this can cause.

• Drivers of demand at Cat of late include continued strength in the North American construction market, new equipment sales momentum in resource industries, and demand for rebuilds of well-serving equipment in the energy space. Higher material and freight costs have the potential to weigh on bottom-line results in the near term, but it expects to mitigate the impact of tariff-related costs.

• Caterpillar is quite effective at managing costs through the course of the economic cycle. Part of Caterpillar's strategy when faced with revenue declines is to manage the fall such that the decrease in operating profit is less than 30% of the decline in revenue. We also like the focus on driving strong inventory turns.

• Cat Financial's exposure to weak credits in the mining and energy arenas will always have us concerned. The hidden captive finance arms across the broader machinery group may put surprising pressure on performance in the event of a downturn.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**137.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
AGCO Corp	15.6	1.7	96.1%
CNH Industrial	11.6	1.2	85.9%
Deere	14.2	1.4	101.4%
Manitowoc	NMF	NMF	82.0%
Peer Median	14.2	NMF	91.0%
Caterpillar	**11.0**	**3.0**	**84.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	45,462	54,722	56,583
Revenue, YoY%	18.0%	20.4%	3.4%
Non-GAAP Operating Income	4,406	8,293	10,249
Non-GAAP EBIT %	9.7%	15.2%	18.1%
Non-GAAP Net Income	759	6,148	7,408
Non-GAAP NI Margin %	1.7%	11.2%	13.1%
Non-GAAP Diluted EPS	1.27	10.26	12.42
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP FCF (CFO-capex)	4,264	4,918	7,511
Non-GAAP FCF Margin %	9.4%	9.0%	13.3%

In Millions of USD (except for per share items)

Structure of the Agricultural Machinery Industry — NEUTRAL

The agricultural machinery industry is composed of firms that make farm and construction equipment. Demand for agricultural equipment is levered to farm incomes and commodity prices, while purchases of construction equipment are dependent on global economic health. Population growth and the increasing need for food/energy are the major long-term drivers for new orders across the industry. Still, firms are competitive, capital intensive, and possess significant operating leverage. A strong/dependable brand and an expansive distribution network are keys to success. We're neutral on the group.

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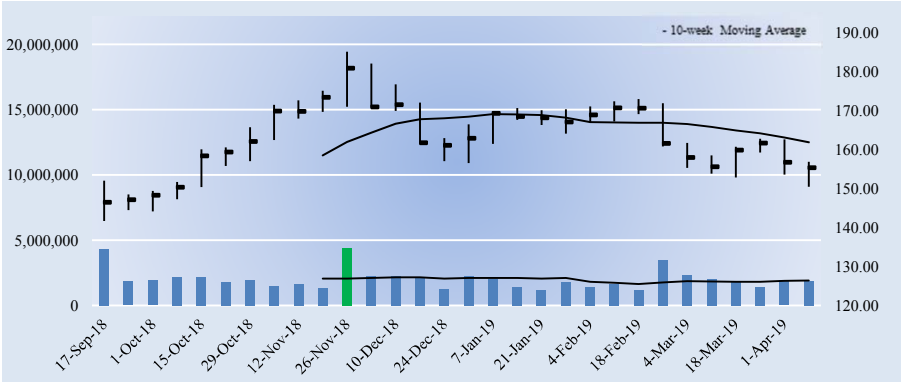
Cracker Barrel CBRL FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$159.00	$127.00 - $191.00	MID-CAP VALUE	Consumer Discretionary	Restaurants - Fast Cas & Full Svc

We think Cracker Barrel is a differentiated concept, but it is not immune to margin pressures including wage inflation and food commodity costs.

Stock Chart (weekly)



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)	$3,738
Avg Weekly Vol (30 wks)	2,024
30-week Range (USD)	141.63 - 185
Valuentum Sector	Consumer Discretionary
5-week Return	-1.8%
13-week Return	-8.4%
30-week Return	3.5%
Dividend Yield %	3.2%
Dividends per Share	5.00
Forward Dividend Payout Ratio	54.5%
Est. Normal Diluted EPS	10.44
P/E on Est. Normal Diluted EPS	14.9
Est. Normal EBITDA	418
Forward EV/EBITDA	10.7
EV/Est. Normal EBITDA	9.6
Forward Revenue Growth (5-yr)	2.4%
Forward EPS Growth (5-yr)	2.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	39.1%
Return on Assets	14.0%
ROIC, with goodwill	29.5%
ROIC, without goodwill	29.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	400
Net Debt	285
Total Debt/EBITDA	1.0
Net Debt/EBITDA	0.7
EBITDA/Interest	25.5
Current Ratio	0.8
Quick Ratio	0.4

NMF = Not Meaningful

Investment Highlights

• Cracker Barrel is principally engaged in the operation of the Cracker Barrel Old Country Store concept. Stores consist of a rustic, old country-store design offering a full-service restaurant menu featuring home-style country food. A typical store serves 1,000 guests a day and employs 100+ people. The company was founded in 1969 and is headquartered in Tennessee.

• The firm is laser-focused on improving margins via re-engineering processes to reduce costs and creating a more efficient box for new stores. However, the company is targeting an operating margin of 9%-9.3% as food commodity and wage inflation continue to impact its profitability levels.

• We think Cracker Barrel is a differentiated concept. The company generates ~20% of revenue from its retail business, while ~40% of its customers are travelers. Its retail shop produces sales per square foot of ~$440 million and gross margins around 50%. The 'Cracker Barrel' experience begins with rockers on its front porch, which are also a top seller in its retail shop.

• Cracker Barrel continues to earn high marks for 'uniqueness' from consumers. The Cracker Barrel experience is full of nostalgia, homemade authenticity, affordable quality, southern country heritage, and is largely viewed as a relaxing, family friendly environment. Such a reputation is irreplaceable.

• Cracker Barrel is working to exploit growth opportunities outside of its core restaurant concept. Key examples include Holler & Dash, its fast casual concept, and its holiday Heat n' Serve catering offering that launched in fiscal 2017 and is aimed at growing its presence in Christmas and Easter.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**162.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Brinker	11.1	1.1	100.0%
Cheesecake Factory	18.0	1.6	89.9%
Chipotle	57.0	2.7	122.6%
Darden Restaurants	19.9	2.6	116.5%
Peer Median	19.0	2.1	108.2%
Cracker Barrel	**16.9**	**2.3**	**97.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jul-17	Jul-18	Jul-19
Revenue	2,926	3,030	3,055
Revenue, YoY%	0.5%	3.6%	0.8%
Operating Income	313	294	281
Operating Margin %	10.7%	9.7%	9.2%
Net Income	202	248	221
Net Income Margin %	6.9%	8.2%	7.2%
Diluted EPS	8.37	10.29	9.18
Diluted EPS, YoY %	6.5%	22.9%	-10.7%
Free Cash Flow (CFO-capex)	211	179	198
Free Cash Flow Margin %	7.2%	5.9%	6.5%

In Millions of USD (except for per share items)

Structure of the Restaurants Industry - Fast Casual & Full Service — NEUTRAL

The restaurant industry has benefited from a long-term trend toward eating out, but the space has become increasingly more competitive as new concepts are introduced and successful chains expand. Not only are there pricing pressures and trade-down threats, but rising costs for commodities and labor have pressured profits. Barriers to entry are low, and many constituents have a difficult time differentiating themselves. We tend to like larger chains that benefit from scale advantages and international expansion opportunities, though niche franchises can be appealing. We're neutral on the structure of the group.

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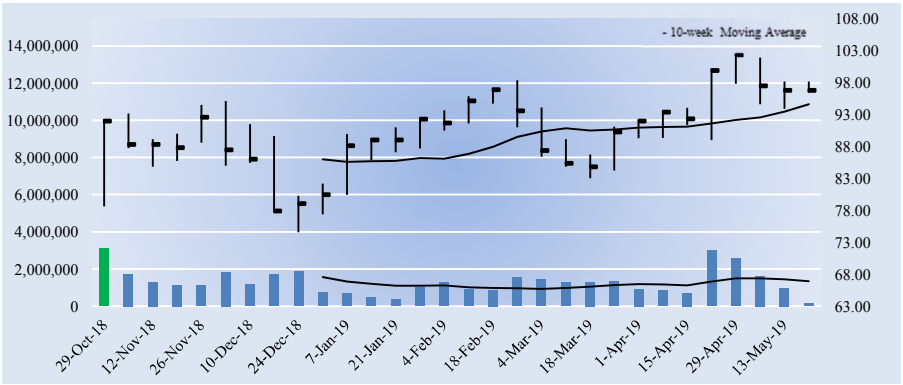
Churchill Downs CHDN FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$80.00	$60.00 - $100.00	MID-CAP CORE	Consumer Discretionary	Gaming & Hotels

Churchill Downs' growth-through-diversification strategy should allow it to overcome the challenges of its traditional racing operations.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**95.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$4,027
Avg Weekly Vol (30 wks)	1,300
30-week Range (USD)	74.576668 - 102.589996
Valuentum Sector	Consumer Discretionary
5-week Return	5.7%
13-week Return	-0.9%
30-week Return	15.0%
Dividend Yield %	0.6%
Dividends per Share	0.54
Forward Dividend Payout Ratio	12.8%
Est. Normal Diluted EPS	5.35
P/E on Est. Normal Diluted EPS	18.1
Est. Normal EBITDA	377
Forward EV/EBITDA	15.1
EV/Est. Normal EBITDA	12.6
Forward Revenue Growth (5-yr)	7.8%
Forward EPS Growth (5-yr)	7.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Churchill Downs is home of the Kentucky Derby, and the firm continues to evolve. It now owns five racetracks, six casinos, the country's leading online horseracing wagering business (TwinSpires.com), and a variety of other assets. The company was founded in 1928 and is headquartered in Louisville, Kentucky.

• Though the Kentucky Derby is stronger than ever in terms of attendance, wagering, strategic partnerships and overall prominence, the company's growth-through-diversification strategy should allow it to overcome the challenges of its traditional thoroughbred racing operations.

• Churchill Downs is undergoing a transformation in favor of casino and entertainment businesses. Though its future acquisition plans are fraught with overpayment and selection risk, the market loves the transformation, and management appears to be executing fantastically.

• Churchill Downs sold its mobile gaming subsidiary Big Fish Games just three years after it agreed to acquire the business. We expect the company to be among the largest beneficiaries of legalized sports gambling in the US thanks in part to the leveragability of its existing gambling infrastructure.

• Though organic measures aren't readily available, we've been very surprised by the company's ability to drive top-line expansion and earnings growth. We give management a lot of credit, and it is targeting a net leverage ratio of 3x-4x, though it is willing to go higher for the right strategic investment.

Relative Valuation

	Forward P/E	PEG	Price / FV
Hilton	23.8	1.7	116.2%
Las Vegas Sands	17.9	2.5	98.9%
Marriott Intl	21.2	2.4	123.5%
MGM Resorts	24.6	1.3	103.6%
Peer Median	22.5	2.0	109.9%
Churchill Downs	**22.9**	**2.2**	**121.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	22.6%
Return on Assets	6.3%
ROIC, with goodwill	9.4%
ROIC, without goodwill	20.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	883	1,009	1,321
Revenue, YoY%	-32.6%	14.3%	30.9%
Non-GAAP Operating Income	168	199	233
Non-GAAP EBIT %	19.1%	19.7%	17.7%
Non-GAAP Net Income	122	183	176
Non-GAAP NI Margin %	13.9%	18.1%	13.3%
Non-GAAP Diluted EPS	7.65	4.39	4.23
Non-GAAP Dil EPS, YoY %	18.7%	-42.6%	-3.6%
Non-GAAP FCF (CFO-capex)	102	48	208
Non-GAAP FCF Margin %	11.5%	4.8%	15.8%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	884
Net Debt	711
Total Debt/EBITDA	3.4
Net Debt/EBITDA	2.7
EBITDA/Interest	6.6
Current Ratio	0.9
Quick Ratio	0.8

NMF = Not Meaningful

Structure of the Gaming and Hotels Industry — NEUTRAL

The gaming industry is heavily regulated and particularly sensitive to discretionary spending. Significant future gaming revenue growth will come from the Asian markets, especially Macao. Possession of a gaming subconcession by the Chinese government is an advantage, though competition remains intense among existing Macao rivals. The hotels industry is highly competitive, with over 900 lodging management companies in the US alone. Demand for hotel rooms is very cyclical, and fluctuations in both occupancy rates and revenue per available room (RevPAR) should be expected. We're generally neutral on the structure of the group.

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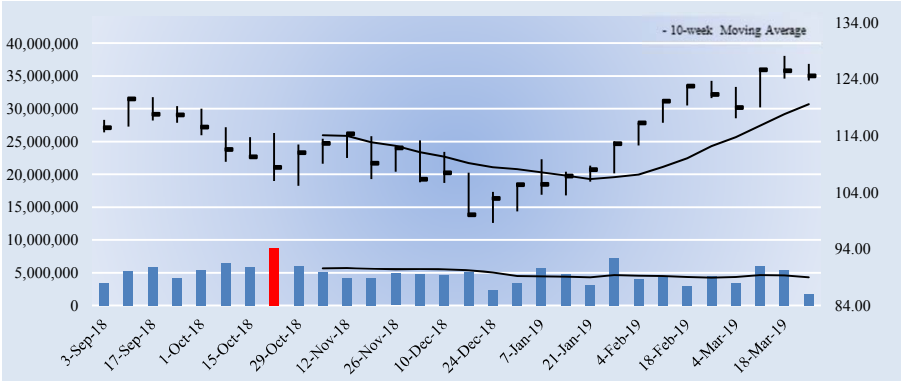
Check Point CHKP FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Highest Rated	$122.00	$92.00 - $153.00	LARGE-CAP CORE	Information Technology	Software - security

We've raised our fair value estimate after rolling the model forward and raising near-term expectations. The company's balance sheet health is impressive, but competition is heating up.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**120.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$19,858
Avg Weekly Vol (30 wks)	4,777
30-week Range (USD)	98.57 - 128.11
Valuentum Sector	Information Technology
5-week Return	1.3%
13-week Return	20.3%
30-week Return	8.1%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	7.01
P/E on Est. Normal Diluted EPS	17.8
Est. Normal EBITDA	1,178
Forward EV/EBITDA	14.8
EV/Est. Normal EBITDA	13.4
Forward Revenue Growth (5-yr)	4.7%
Forward EPS Growth (5-yr)	9.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Check Point is a leader in securing the Internet, providing customers with protection against all types of threats while reducing security complexity and lowering costs. The company first pioneered the industry with FireWall-1. It was founded in 1993 and is headquartered in San Carlos, California.

• The continuing evolution of threats and attacks on IT systems, heightened regulations on data privacy and compliance, and growth in the need for safe remote connectivity are major factors driving the need for enterprise security.

• Check Point is taking a more aggressive marketing approach, and its competition is not backing down. The company derives its sales primarily through indirect channels, and it depends on a small number of distributors. In 2017, approximately 54% of its sales came from its ten largest distributors, and top two distributors accounted for roughly 36% of its sales.

• Mobile devices are becoming the weak link in cyber security, and Check Point is committed to staying one step ahead of such developing threats. Much like other software and Internet-based industries, mobile offers a material source of growth. Mobile attacks now represent nearly 20% of global cyber attacks.

• We're fans of Check Point's balance sheet. As of the end of 2018, the company had a cash and short-term marketable securities balance of ~$1.8 billion and ~$2.3 billion in long-term marketable securities compared to no debt. This cash position will help the firm stay innovative and competitive.

Relative Valuation

	Forward P/E	PEG	Price / FV
Fireeye	NMF	NMF	97.1%
Fortinet	39.0	3.3	115.3%
Symantec	14.5	NMF	91.8%
VeriSign	34.7	5.0	146.0%
Peer Median	34.7	4.2	106.2%
Check Point	**20.4**	**2.7**	**102.1%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	21.9%
Return on Assets	14.6%
ROIC, with goodwill	71.7%
ROIC, without goodwill	235.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	0
Net Debt	-4,039
Total Debt/EBITDA	0.0
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	1.7
Quick Ratio	3.4

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	1,855	1,916	2,014
Revenue, YoY%	6.5%	3.3%	5.1%
Operating Income	924	914	1,045
Operating Margin %	49.8%	47.7%	51.9%
Net Income	803	821	955
Net Income Margin %	43.3%	42.9%	47.4%
Diluted EPS	4.82	5.15	6.11
Diluted EPS, YoY %	15.2%	6.9%	18.6%
Free Cash Flow (CFO-capex)	1,081	1,113	1,038
Free Cash Flow Margin %	58.3%	58.1%	51.5%

In Millions of USD (except for per share items)

Structure of the Software (security) Industry — NEUTRAL

Participants in the software security industry focus on protecting important information wherever it resides—whether in servers, computers, mobile devices, or in the cloud. The space is intensely competitive, and some companies may offer their technology for free, engage in aggressive marketing, or pursue competitive partnerships. Firms also face indirect competition from application/operating system providers that may embed security solutions/functions in their own products. Participants must continuously develop new and enhanced services to meet changing customer demands. We're neutral on the group.

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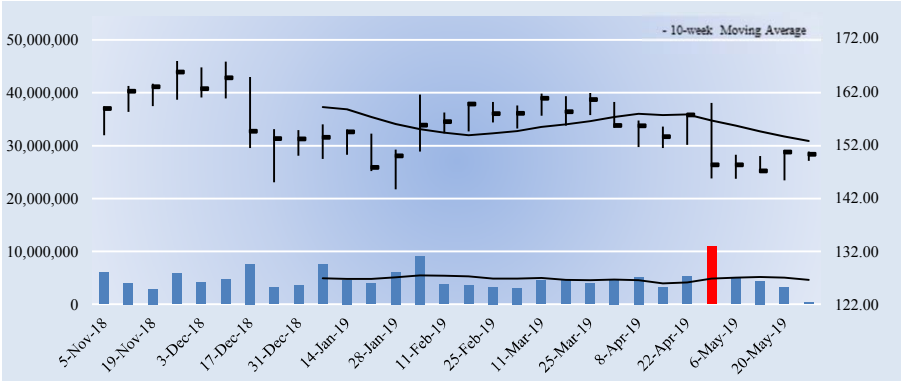
Clorox CLX FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$128.00	$102.00 - $154.00	LARGE-CAP CORE	Consumer Staples	Household Products

It's hard for us to get excited about a consumer staples stock trading north of 20 times earnings and holding a net debt position.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**153.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$19,756
Avg Weekly Vol (30 wks)	4,721
30-week Range (USD)	143.580002 - 167.699997
Valuentum Sector	Consumer Staples
5-week Return	-4.4%
13-week Return	-5.0%
30-week Return	-2.7%
Dividend Yield %	2.8%
Dividends per Share	4.24
Forward Dividend Payout Ratio	66.8%
Est. Normal Diluted EPS	7.45
P/E on Est. Normal Diluted EPS	20.2
Est. Normal EBITDA	1,536
Forward EV/EBITDA	16.6
EV/Est. Normal EBITDA	14.4
Forward Revenue Growth (5-yr)	3.8%
Forward EPS Growth (5-yr)	7.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Clorox markets some blockbuster brand names, including its namesake bleach/cleaning products, Pine-Sol cleaners, Fresh Step cat litter, Glad bags, Kingsford charcoal, and KC Masterpiece sauces. Over 80% of the company's revenue is generated by brands that hold the #1 or #2 market share positions in their categories. The company was founded in 1913 and is headquartered in Oakland, California.

• Clorox, like many other big brand companies, has realized the importance of a shift to e-commerce and digital marketing. It expects to invest 50%+ of its media in digital in fiscal 2019. E-commerce sales have grown at a 38% CAGR from fiscal 2015-2018 and is on track for 8% of 2019 total sales.

• The firm has some noteworthy long-term annual financial goals: organic sales growth of 3%-5%, EBIT margin improvement of 25-50 basis points, and free cash flow of 11%-13% of sales. Most of this ongoing improvement will have to come from US retail, which it targets to represent ~80% of revenue. Clorox has a robust innovation pipeline and targets 3%+ annual growth from innovation.

• Rising input costs (raw material and transportation) are pressuring Clorox's near-term margin outlook, but it is committed to maintaining the fundamental strength of its business via pricing, cost savings, margin accretive innovation and 'going lean' initiatives. Diluted EPS from continuing operations guidance is a range of $6.25-$6.35 for fiscal 2019.

• Clorox has raised its annual dividend each year since 1977. It also has a strong track record of savings and targets a 150 basis point annual EBIT margin benefit from cost savings. SG&A spend is targeted at less than 14% of sales, and gross debt-to-EBITDA is targeted at 2.0x-2.5x.

Relative Valuation

	Forward P/E	PEG	Price / FV
Colgate-Palmolive	24.1	2.5	118.6%
Johnson & Johnson	15.8	1.8	92.5%
Kimberly-Clark	18.5	1.7	120.8%
Procter & Gamble	23.4	2.2	125.1%
Peer Median	21.0	2.0	119.7%
Clorox	**23.7**	**3.3**	**117.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	203.2%
Return on Assets	15.8%
ROIC, with goodwill	31.5%
ROIC, without goodwill	53.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jun-17	Jun-18	Jun-19
Revenue	5,973	6,124	6,381
Revenue, YoY%	3.7%	2.5%	4.2%
Operating Income	1,127	1,136	1,162
Operating Margin %	18.9%	18.5%	18.2%
Net Income	703	823	835
Net Income Margin %	11.8%	13.4%	13.1%
Diluted EPS	5.34	6.25	6.34
Diluted EPS, YoY %	8.6%	17.1%	1.4%
Free Cash Flow (CFO-capex)	637	780	810
Free Cash Flow Margin %	10.7%	12.7%	12.7%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	2,483
Net Debt	2,352
Total Debt/EBITDA	1.9
Net Debt/EBITDA	1.8
EBITDA/Interest	15.3
Current Ratio	1.1
Quick Ratio	0.6

NMF = Not Meaningful

Structure of the Household Products Industry — GOOD

Firms in the household products industry sell some of the most recognized branded consumer packaged goods in the world and often hold a significant market share position in a variety of product categories. Though the industry is characterized by stiff competition from retailers' private-label brands, constituents tend to boast meaningful competitive advantages due to their brand strength/reputation and generate high returns on invested capital. Household products companies remain tied to the vicissitudes of consumer spending, but we tend to like the structure of the group.

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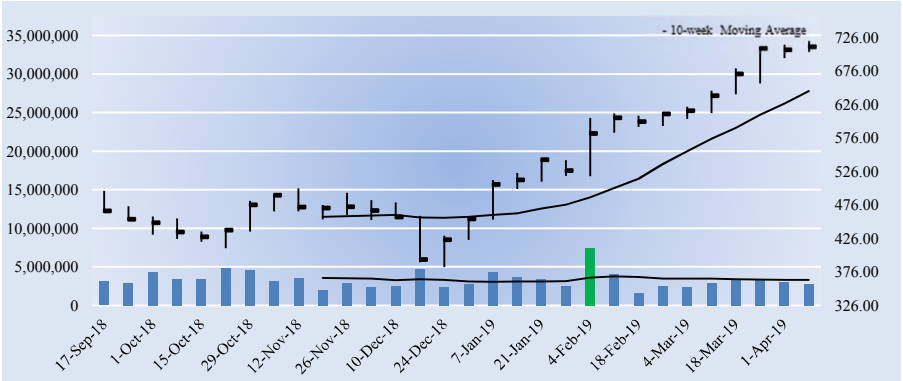
Chipotle CMG FAIRLY VALUED

Buying Index™ 5 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$581.00	$407.00 - $755.00	LARGE-CAP GROWTH	Consumer Discretionary	Restaurants - Fast Cas & Full Svc

We've raised our fair value estimate for Chipotle after raising near-term expectations and lowering our cost of capital assumption. Top-line growth is back on track in a big way, and the company is re-focused on innovation.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**NEUTRAL**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**646.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$19,921
Avg Weekly Vol (30 wks)	3,347
30-week Range (USD)	383.2 - 721.21
Valuentum Sector	Consumer Discretionary
5-week Return	15.7%
13-week Return	41.7%
30-week Return	44.9%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	23.22
P/E on Est. Normal Diluted EPS	30.7
Est. Normal EBITDA	1,090
Forward EV/EBITDA	28.2
EV/Est. Normal EBITDA	17.7
Forward Revenue Growth (5-yr)	9.1%
Forward EPS Growth (5-yr)	42.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Chipotle serves a focused menu of burritos, tacos, burrito bowls (a burrito without the tortilla) and salads, made using fresh ingredients. It prides itself on trying to find the highest-quality ingredients ('Food With Integrity') and providing an exceptional restaurant experience. The company was founded in 1993 and is based in Denver, Colorado.

• Chipotle continues to expand its restaurant count. As of the end of 2018, the firm's total restaurant count was 2,452, and it expects to add 140-155 new restaurants in 2019. The company is also working to accelerate its high-growth online, mobile, and catering businesses.

• Chipotle has been on a rollercoaster ride in the past few years--beginning with the food safety scandal that caused substantial drops in same-store sales beginning in late 2015--and the restaurant is facing strengthened competition from Yum! Brands' Taco Bell, which lost its CEO to Chipotle, and Qdoba. However, top-line growth is back on track in a big way, and the company is re-focused on innovation.

• Chipotle is a fantastic company and a great concept with tons of potential growth ahead of it. However, consumer confidence was shattered in the wake of food safety issues. We think Chipotle has righted the ship, and its return to meaningful store growth speaks to this. Innovations on the digital front will be ongoing and may be a key differentiator.

• Investors should be aware of the generosity in our assumptions. We expecting mid- to high-single digit revenue growth through 2023 and assume significant operating margin expansion over the period. Achieving these will require pristine execution but are not unrealistic for the reinvigorated company.

Relative Valuation

	Forward P/E	PEG	Price / FV
Brinker	11.1	1.1	100.0%
Cheesecake Factory	18.0	1.6	89.9%
Cracker Barrel	16.9	2.3	97.7%
Darden Restaurants	19.9	2.6	116.5%
Peer Median	17.5	1.9	98.8%
Chipotle	**57.0**	**2.7**	**122.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	8.9%
Return on Assets	5.9%
ROIC, with goodwill	23.0%
ROIC, without goodwill	23.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	4,476	4,865	5,303
Revenue, YoY%	14.7%	8.7%	9.0%
Operating Income	284	334	463
Operating Margin %	6.3%	6.9%	8.7%
Net Income	176	177	343
Net Income Margin %	3.9%	3.6%	6.5%
Diluted EPS	6.17	6.31	12.50
Diluted EPS, YoY %	NMF	NMF	98.0%
Free Cash Flow (CFO-capex)	250	335	366
Free Cash Flow Margin %	5.6%	6.9%	6.9%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	0
Net Debt	-677
Total Debt/EBITDA	0.0
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	1.8
Quick Ratio	1.6

NMF = Not Meaningful

Structure of the Restaurants Industry - Fast Casual & Full Service — NEUTRAL

The restaurant industry has benefited from a long-term trend toward eating out, but the space has become increasingly more competitive as new concepts are introduced and successful chains expand. Not only are there pricing pressures and trade-down threats, but rising costs for commodities and labor have pressured profits. Barriers to entry are low, and many constituents have a difficult time differentiating themselves. We tend to like larger chains that benefit from scale advantages and international expansion opportunities, though niche franchises can be appealing. We're neutral on the structure of the group.

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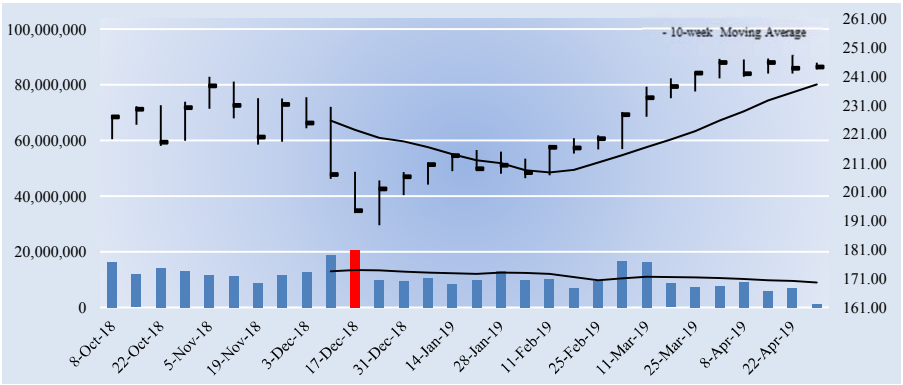
Costco COST FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$208.00	$166.00 - $250.00	LARGE-CAP CORE	Consumer Staples	Food Retailers

Costco has a number of strengths: strong member renewals, fantastic employees that enjoy the higher-than-average pay, great merchandise, and a treasure-hunt atmosphere that consumers love.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**238.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$107,931
Avg Weekly Vol (30 wks)	10,947
30-week Range (USD)	189.509995 - 248.699997
Valuentum Sector	Consumer Staples
5-week Return	0.5%
13-week Return	15.9%
30-week Return	11.4%
Dividend Yield %	0.9%
Dividends per Share	2.28
Forward Dividend Payout Ratio	28.4%
Est. Normal Diluted EPS	10.98
P/E on Est. Normal Diluted EPS	22.3
Est. Normal EBITDA	8,415
Forward EV/EBITDA	16.6
EV/Est. Normal EBITDA	12.7
Forward Revenue Growth (5-yr)	7.3%
Forward EPS Growth (5-yr)	16.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Costco operates an international chain of warehouses, mainly under the 'Costco Wholesale' name. Costco is open only to members and offers three types of membership: Business, Gold Star (individual) and the Executive membership. It has more than 94 million loyal cardholders. The company was founded in 1976 and is headquartered in Washington.

• Costco's reported same-store sales can be impacted by gasoline price volatility and foreign exchange rates, but underlying core performance has been solid. Total comparable store sales excluding gasoline price deflation and foreign exchange headwinds advanced 6.8% in fiscal 2018.

• Costco targets merchandise that produces high sales volumes and rapid inventory turnover. This turnover, when combined with efficiencies achieved by volume purchasing, efficient distribution and reduced handling of merchandise in no-frills, self-service warehouses, enables Costco to operate profitably at significantly lower gross margins than peers.

• Costco has a number of strengths: strong member renewals, fantastic employees that enjoy the higher-than-average pay, great merchandise, and a treasure-hunt atmosphere that consumers love. Its image speaks of quality, and the public often uses Costco as an example for excellent employee relations.

• Large scale food retailers have been put on notice with Amazon's 2017 acquisition of Whole Foods. We think Costco has staying power, and the firm continues to resonate with all of its stakeholders. The firm is actively pursuing the expansion of its delivery and online businesses.

Relative Valuation

	Forward P/E	PEG	Price / FV
Kroger	11.5	NMF	91.3%
Target	13.2	2.1	98.5%
Walgreens Boots Alliance	8.9	1.1	87.8%
Wal-Mart	21.2	1.6	101.6%
Peer Median	12.3	1.6	94.9%
Costco	**30.4**	**2.1**	**117.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	23.9%
Return on Assets	7.7%
ROIC, with goodwill	28.2%
ROIC, without goodwill	28.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	6,487
Net Debt	-772
Total Debt/EBITDA	1.1
Net Debt/EBITDA	NMF
EBITDA/Interest	37.2
Current Ratio	1.0
Quick Ratio	0.4

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Aug-17	Aug-18	Aug-19
Revenue	129,025	141,576	153,752
Revenue, YoY%	8.7%	9.7%	8.6%
Operating Income	4,111	4,480	4,880
Operating Margin %	3.2%	3.2%	3.2%
Net Income	2,679	3,134	3,552
Net Income Margin %	2.1%	2.2%	2.3%
Diluted EPS	6.08	7.09	8.04
Diluted EPS, YoY %	14.1%	16.7%	13.3%
Free Cash Flow (CFO-capex)	4,224	2,805	2,564
Free Cash Flow Margin %	3.3%	2.0%	1.7%

In Millions of USD (except for per share items)

Structure of the Food Retailers Industry — NEUTRAL

Firms in the mature food retailers industry generally have slim profit margins and face significant competition from brick-and-mortar locations (discount, department, drug, dollar, warehouse clubs and supermarkets) as well as Internet-based retailers (including Amazon). Though the industry is not terribly cyclical, economic conditions, disposable income, credit availability, fuel prices, and unemployment levels drive ticket size and traffic trends. Offering consumers a compelling value proposition is a must, even as higher-priced organic food offerings proliferate. We're generally neutral on the group.

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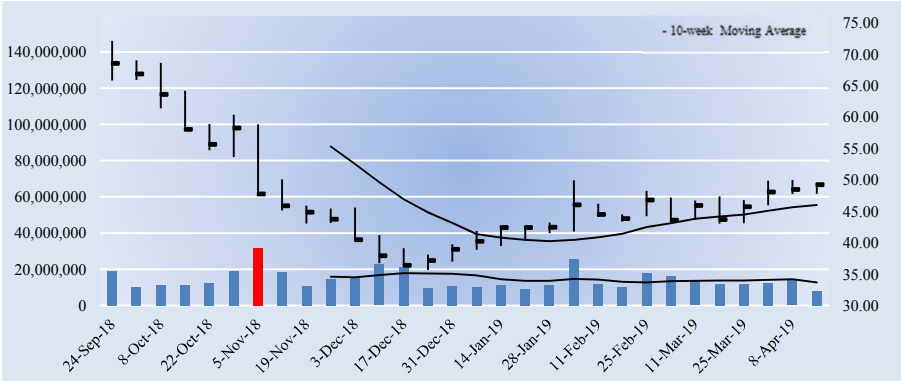
Capri Holdings CPRI FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$59.00	$44.00 - $74.00	MID-CAP VALUE	Consumer Discretionary	Luxury - Ultra & Aspirational

Capri Holdings expects notable adjusted operating margin expansion in the years ahead as its recently acquired businesses are integrated and scale.

Stock Chart (weekly)



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)	$7,481
Avg Weekly Vol (30 wks)	14,453
30-week Range (USD)	35.68 - 72.15
Valuentum Sector	Consumer Discretionary
5-week Return	6.8%
13-week Return	16.6%
30-week Return	-31.8%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	5.45
P/E on Est. Normal Diluted EPS	9.0
Est. Normal EBITDA	1,288
Forward EV/EBITDA	8.1
EV/Est. Normal EBITDA	7.6
Forward Revenue Growth (5-yr)	7.2%
Forward EPS Growth (5-yr)	10.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	34.3%
Return on Assets	24.1%
ROIC, with goodwill	56.1%
ROIC, without goodwill	60.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	2,534
Net Debt	2,270
Total Debt/EBITDA	2.3
Net Debt/EBITDA	2.1
EBITDA/Interest	49.0
Current Ratio	1.3
Quick Ratio	0.5

NMF = Not Meaningful

Investment Highlights

• Capri Holdings boasts three iconic global, founder-led brands in Michael Kors, Versace, and Jimmy Choo, all of which are leaders in style and trend. As of fiscal 2019, management estimates that Michael Kors accounts for 75% of total pro forma revenue, Versace accounts for nearly 15%, and Jimmy Choo for roughly 10%. The company is headquartered in London.

• Capri Holdings is targeting $8 billion in total revenue, up from $6 billion in pro forma revenue in fiscal 2019. It expects the majority of this growth to come from the Versace brand, while the Michael Kors brand is expected to deliver the lowest top-line growth rate.

• The old Michael Kors followed its Jimmy Choo purchase with the acquisition of Italian fashion label Versace for ~$2.12 billion. The deal is expected to facilitate revenue growth, has expand its portfolio of iconic founder-led brands, and has diversified it geographically. Fiscal 2019 pro forma revenue breaks down as follows: 56% Americas, 25% Europe, and 19% Asia.

• In fiscal 2020, Capri expects total revenue of ~$6.1 billion, with an adjusted operating margin of ~15.5%, and earnings per share of roughly $4.95. It expects stable, improving, and flat operating margins at Michael Kors, Jimmy Choo, and Versace, respectively. Management expects to reduce its debt load by more than $500 million in fiscal 2020.

• In fiscal 2021-2022, Capri expects revenue growth in the mid-single digit range and adjusted earnings per share growth in the double digits. Its adjusted operating margin targets for the two years come in at ~16% and ~17%, respectively, with Jimmy Choo and Versace driving the improvements.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**46.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Fossil	NMF	NMF	81.7%
Ralph Lauren	18.5	1.9	105.7%
Tapestry	12.8	1.3	79.4%
Tiffany	21.4	2.7	111.6%
Peer Median	18.5	1.9	93.7%
Capri Holdings	**9.8**	**1.3**	**83.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-17	Mar-18	Mar-19
Revenue	4,494	4,719	5,223
Revenue, YoY%	-4.6%	5.0%	10.7%
Operating Income	889	884	972
Operating Margin %	19.8%	18.7%	18.6%
Net Income	553	592	760
Net Income Margin %	12.3%	12.5%	14.5%
Diluted EPS	3.29	3.82	5.00
Diluted EPS, YoY %	-26.0%	16.1%	31.0%
Free Cash Flow (CFO-capex)	865	939	713
Free Cash Flow Margin %	19.2%	19.9%	13.6%

In Millions of USD (except for per share items)

Structure of the Luxury Goods Industry — GOOD

Luxury goods firms differentiate themselves based on brand name, perception, and quality in order to generate excess returns on invested capital through the economic cycle. Building a large, successful luxury brand is difficult, leaving those that possess them with intangible competitive advantages that are not easily overcome by new entrants. Growth in emerging middle classes and China will be the key demand drivers going forward, though the strongest brands will also grow successfully via market share gains. Though changes in consumer preferences should be watched closely, we like the structure of the group.

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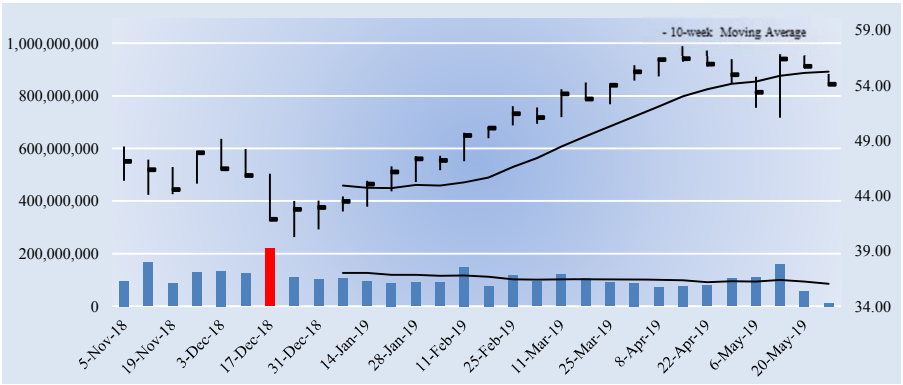
Cisco CSCO FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$56.00	$45.00 - $67.00	MEGA-CAP VALUE	Information Technology	Networking Equipment

Cisco's cash hoard gives it tremendous financial flexibility, and its business transition continues to exhibit positive momentum.

Stock Chart (weekly)



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)	$263,916
Avg Weekly Vol (30 wks)	104,774
30-week Range (USD)	40.25 - 57.529999
Valuentum Sector	Information Technology
5-week Return	-2.9%
13-week Return	4.7%
30-week Return	18.2%
Dividend Yield %	2.6%
Dividends per Share	1.40
Forward Dividend Payout Ratio	45.2%
Est. Normal Diluted EPS	3.60
P/E on Est. Normal Diluted EPS	15.0
Est. Normal EBITDA	22,315
Forward EV/EBITDA	12.1
EV/Est. Normal EBITDA	10.9
Forward Revenue Growth (5-yr)	3.6%
Forward EPS Growth (5-yr)	182.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	10.8%
Return on Assets	5.6%
ROIC, with goodwill	26.9%
ROIC, without goodwill	66.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	25,569
Net Debt	-20,979
Total Debt/EBITDA	1.7
Net Debt/EBITDA	NMF
EBITDA/Interest	15.8
Current Ratio	2.3
Quick Ratio	2.1

NMF = Not Meaningful

Investment Highlights

• Cisco sells Internet Protocol based networking and other products related to the communications and IT industry. The firm provides a broad line of products for transporting data, voice, and video. It is #1 or #2 across a wide variety of architectures, and we like the progress it is making in its transition to a software and subscription based business model. It was founded in 1984 and is headquartered in California.

• Cisco has been acquisitive as of late. Instead of targeting suppliers to improve its gross margin, the firm's M&A strategy will be focused on disruptive technology and software and cloud acquisitions that will positively impact gross margins.

• We like that Cisco is aggressively buying back stock as our opinion of its valuation has been largely positive of late. In fiscal 2018, it repurchased ~$17.5 billion of its shares. Despite robust returns of cash to shareholders, Cisco's business transition is gaining positive momentum. Recurring revenue accounts for ~32% of revenue, and subscriptions as a percentage of software revenue continues to climb.

• After its fiscal 2019 first quarter, Cisco noted that trade tensions had no impact on demand levels, and it has enacted price increases to combat tariff-related costs in a number of its core networking products. Management points to software subscriptions as a percentage of total software revenue as the most meaningful gauge of its transformation progress.

• Cisco had $46.5 billion in cash and cash equivalents at the end of fiscal 2018. Such a cash hoard gives it tremendous financial flexibility to pursue value-creating acquisitions and/or significantly grow the dividend. While we like shares, we're watching closely the impact buybacks have on its balance sheet.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**55.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Finisar	23.7	NMF	91.3%
Juniper Networks	14.7	2.3	84.8%
Knowles Corp	15.4	1.6	93.1%
Nokia	19.8	NMF	88.6%
Peer Median	17.6	2.0	89.9%
Cisco	**17.4**	**13.2**	**96.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jul-17	Jul-18	Jul-19
Revenue	48,005	49,330	51,698
Revenue, YoY%	-2.5%	2.8%	4.8%
Non-GAAP Operating Income	12,729	12,667	17,794
Non-GAAP EBIT %	26.5%	25.7%	34.4%
Non-GAAP Net Income	9,609	110	14,871
Non-GAAP NI Margin %	20.0%	0.2%	28.8%
Non-GAAP Diluted EPS	1.90	0.02	3.10
Non-GAAP Dil EPS, YoY %	-9.8%	NMF	NMF
Non-GAAP FCF (CFO-capex)	12,912	12,832	15,939
Non-GAAP FCF Margin %	26.9%	26.0%	30.8%

In Millions of USD (except for per share items)

Structure of the Networking Equipment Industry — POOR

Firms in the networking equipment industry provide products for transporting data, voice, and video within businesses and around the world. Participants must adapt to address virtualization/cloud-driven needs in the enterprise data center market; the convergence of video, collaboration, and networked mobility technologies; and the move toward programmable, virtual networks. The industry is characterized by low barriers to entry, rapid technological change and significant pricing competition. Gross margins can be volatile and should be watched closely. We don't like the structure of the group.

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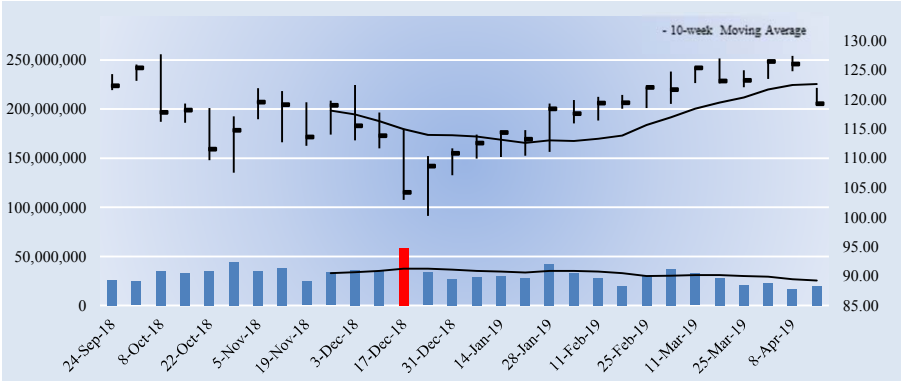
Chevron CVX FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Neutral	$116.00	$75.00 - $157.00	MEGA-CAP CORE	Energy	Major Oil & Gas

Chevron has agreed to acquire Anadarko for $33 billion in cash and stock. The deal is expected to enhance Chevron's presence in shale and tight, deepwater, and LNG production.

Stock Chart (weekly)



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)	$228,168
Avg Weekly Vol (30 wks)	31,254
30-week Range (USD)	100.22 - 127.6
Valuentum Sector	Energy
5-week Return	-4.8%
13-week Return	5.4%
30-week Return	-2.2%
Dividend Yield %	4.0%
Dividends per Share	4.76
Forward Dividend Payout Ratio	65.6%
Est. Normal Diluted EPS	8.59
P/E on Est. Normal Diluted EPS	13.9
Est. Normal EBITDA	42,298
Forward EV/EBITDA	6.8
EV/Est. Normal EBITDA	6.0
Forward Revenue Growth (5-yr)	4.3%
Forward EPS Growth (5-yr)	3.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	5.3%
Return on Assets	3.1%
ROIC, with goodwill	0.8%
ROIC, without goodwill	0.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	34,459
Net Debt	24,114
Total Debt/EBITDA	0.8
Net Debt/EBITDA	0.6
EBITDA/Interest	55.2
Current Ratio	1.3
Quick Ratio	0.9

NMF = Not Meaningful

Investment Highlights

• Chevron is engaged in integrated petroleum operations, chemicals operations, mining activities, power generation and energy services. The upstream and downstream activities of the company are widely dispersed geographically. The company was founded in 1879 and is headquartered in California.

• Deliberate actions to lower Chevron's cost structure to protect against a prolonged scenario of lower energy prices have become the norm. In addition to the benefit of its downstream operations in the face of crude oil volaitlity, the company expects its upstream cash margin to continue growing through 2020.

• Chevron expects free cash flow to improve materially in the near term thanks to higher upstream margins and volumes and a lower and more flexible capital spending program. Crude oil of $50 per barrel (or higher) is expected to lead to positive free cash flow growth, and its total capital and exploratory spending is expected to be $20 billion in 2019 with more a focus on high-return short-cycle projects.

• Chevron has agreed to acquire Anadarko for an equity value of $33 billion in cash and stock. The deal is expected to enhance Chevron's presence in shale and tight, deepwater, and LNG production, and $2 billion in annual run rate synergies are expected within a year of closing, which is expected in the second half of 2019.

• The Anadarko deal is structured as 75% stock and 25% cash, resulting in Chevron paying ~$8 billion in cash and assuming net debt of ~$15 billion. The deal is expected to be accretive to free cash flow one year after closing, assuming $60 Brent prices. We'll be watching dividend implications closely.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**POOR**
ValueRisk™	**HIGH**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Resistance, 10-wk MA	**123.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
BP	13.1	1.7	99.7%
ConocoPhillips	16.1	NMF	99.1%
Exxon Mobil	18.8	1.9	109.3%
Royal Dutch Shell	11.8	3.2	94.8%
Peer Median	14.6	1.9	99.4%
Chevron	**16.4**	**2.3**	**102.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	141,722	166,339	160,683
Revenue, YoY%	23.8%	17.4%	-3.4%
Operating Income	2,480	21,883	18,363
Operating Margin %	1.7%	13.2%	11.4%
Net Income	9,195	14,824	13,880
Net Income Margin %	6.5%	8.9%	8.6%
Diluted EPS	4.84	7.75	7.25
Diluted EPS, YoY %	NMF	NMF	NMF
Free Cash Flow (CFO-capex)	7,111	16,826	15,556
Free Cash Flow Margin %	5.0%	10.1%	9.7%

In Millions of USD (except for per share items)

Structure of the Oil & Gas (majors) Industry — NEUTRAL

The global oil and gas industry is dominated by state-owned firms, including member nations of OPEC, which have a large influence on pricing. Public constituents are not small, however, as firms in this group make up a large portion of the energy sector's market cap. Oil and gas prices are the key profit driver and largely reflect supply/demand dynamics, though it is not uncommon for speculative/geopolitical price premiums to occur. A firm's estimated reserve life and cost for exploration and development should be monitored closely. We're neutral on the structure of the majors, given their commoditized product.

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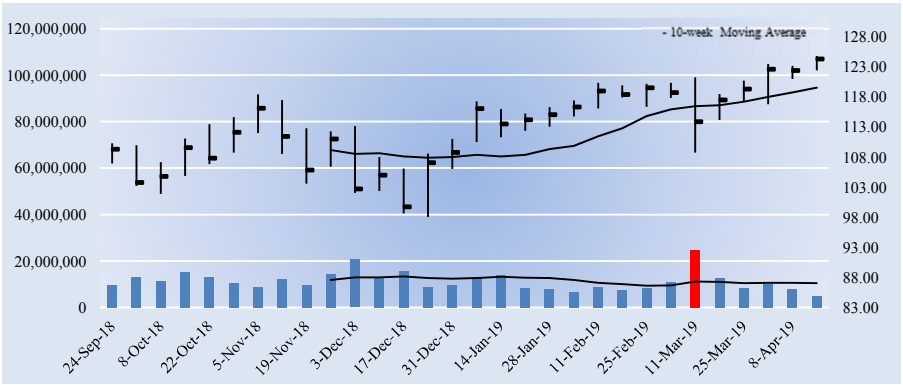
Dollar General DG FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$111.00	$89.00 - $133.00	LARGE-CAP CORE	Consumer Discretionary	Multiline Retail - discount

Dollar General's same-store sales growth streak is at nearly three full decades, and it continues to add meaningfully to its store count.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**120.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$33,077
Avg Weekly Vol (30 wks)	11,362
30-week Range (USD)	98.08 - 124.83
Valuentum Sector	Consumer Discretionary
5-week Return	7.5%
13-week Return	10.0%
30-week Return	15.1%
Dividend Yield %	1.0%
Dividends per Share	1.28
Forward Dividend Payout Ratio	19.7%
Est. Normal Diluted EPS	8.12
P/E on Est. Normal Diluted EPS	15.3
Est. Normal EBITDA	3,256
Forward EV/EBITDA	12.9
EV/Est. Normal EBITDA	11.0
Forward Revenue Growth (5-yr)	6.5%
Forward EPS Growth (5-yr)	10.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Dollar General is the largest discount retailer in the US by number of stores with over 15,400 neighborhood stores in 44 states. It provides products that are frequently used and replenished such as food, snacks, and health and beauty aids. The company helps shoppers: 'Save time, Save money, Every day.' It was founded in 1939 and is headquartered in Tennessee.

• Dollar General's stores have an average of approximately 7,400 square feet of selling space, and roughly 75% of its stores are located in towns with populations of 20,000 or less. It has had success in locating suitable store sites in the past, and this contributes to its ambitous store count growth plans.

• Dollar General has put up 29 consecutive years of same-store sales growth as of fiscal 2018. The firm continues to add new stores to its portfolio and plans to add as many as 975 in 2019 in addition to the remodeling of 1,000 stores and 100 relocations. The company's free cash flow generating capacity in the midst of such a robust expansion program is impressive and a testament to its consistency.

• As of late 2018, Dollar General sees the opportunity for an additional 12,000-13,000 locations across the US, some of which will be developed as small format stores with less than 6,000 square feet. Small format stores enable it to optimize merchandise mixes in each store and reduce occupancy costs. As of fiscal 2018, ~77.5% of net sales came from consumables.

• In fiscal 2019, management is anticipating net sales growth of ~7% and same-store sales growth of ~2.5%. Dollar General's operating income is expected to grow 4%-6% as a result of higher markdowns and lower margin products accounting for a higher proportion of consumables sales.

Relative Valuation

	Forward P/E	PEG	Price / FV
Big Lots	10.5	1.8	107.4%
Dollar Tree	20.1	NMF	120.0%
Fred's Inc	NMF	NMF	55.0%
PriceSmart	24.8	1.4	94.9%
Peer Median	20.1	1.6	101.1%
Dollar General	**19.2**	**1.9**	**112.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	25.1%
Return on Assets	12.0%
ROIC, with goodwill	17.5%
ROIC, without goodwill	32.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	2,865
Net Debt	2,629
Total Debt/EBITDA	1.1
Net Debt/EBITDA	1.0
EBITDA/Interest	25.7
Current Ratio	1.5
Quick Ratio	0.1

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	23,471	25,625	27,726
Revenue, YoY%	6.8%	9.2%	8.2%
Operating Income	2,008	2,116	2,268
Operating Margin %	8.6%	8.3%	8.2%
Net Income	1,539	1,589	1,691
Net Income Margin %	6.6%	6.2%	6.1%
Diluted EPS	5.63	5.97	6.48
Diluted EPS, YoY %	27.0%	6.1%	8.6%
Free Cash Flow (CFO-capex)	1,156	1,410	1,362
Free Cash Flow Margin %	4.9%	5.5%	4.9%

In Millions of USD (except for per share items)

Structure of the Multiline Retail (discount) Industry — GOOD

The retail discount store industry provides consumable basic needs to customers primarily in the low- and middle-income brackets. More than one third of the industry's customers live in households that earn less than $20,000 per year, making the group's results counter-cyclical--as more households generate lower income due to poor economic conditions, store growth and same-store-sales opportunities increase. Still, competition is fierce among constituents and with many other retailers, including grocery stores. But given the niche low-price strategy of participants and their counter-cyclical nature, we like the group.

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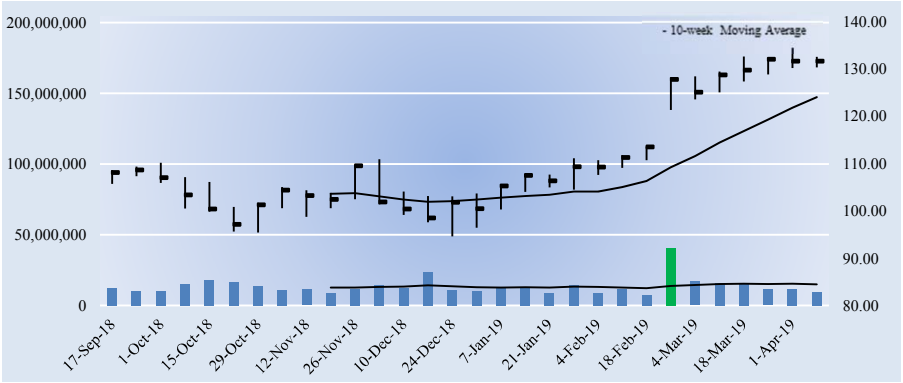
Danaher DHR FAIRLY VALUED

Buying Index™ 5 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$108.00	$81.00 - $135.00	LARGE-CAP CORE	Industrials	Conglomerates

We've raised our fair value estimate for Danaher after increasing near-term expectations. It has agreed to acquire GE's BioPharma unit for $21.4 billion.

Stock Chart (weekly)



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)	$93,484
Avg Weekly Vol (30 wks)	13,626
30-week Range (USD)	94.59 - 134.5
Valuentum Sector	Industrials
5-week Return	5.0%
13-week Return	26.1%
30-week Return	23.4%
Dividend Yield %	0.5%
Dividends per Share	0.68
Forward Dividend Payout Ratio	14.1%
Est. Normal Diluted EPS	5.90
P/E on Est. Normal Diluted EPS	22.3
Est. Normal EBITDA	6,853
Forward EV/EBITDA	17.7
EV/Est. Normal EBITDA	14.9
Forward Revenue Growth (5-yr)	5.1%
Forward EPS Growth (5-yr)	13.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	9.6%
Return on Assets	5.2%
ROIC, with goodwill	8.3%
ROIC, without goodwill	21.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	9,740
Net Debt	8,953
Total Debt/EBITDA	2.1
Net Debt/EBITDA	1.9
EBITDA/Interest	29.9
Current Ratio	1.5
Quick Ratio	0.9

NMF = Not Meaningful

Investment Highlights

• Danaher makes innovative products and provides services to professional, medical, industrial, and commercial customers. Its portfolio of premier brands, including Pall, Cepheid, and Beckman Coulter, is among the most highly recognized in each of the markets it serves. The company was founded in 1969 and is headquartered in Washington, D.C.

• Danaher recently announced plans to spin off its 'Dental' segment into an independent, publicly-traded company in the second half of 2019. As of the first half of 2018, the segment accounted for ~14.5% of Danaher's total revenue, and it expects a more refined focus to benefit its business moving forward.

• Danaher boasts a strong portfolio of brands and an extensive installed base that helps it drive recurring revenue. Roughly 70% of its revenue is generated direct from customers (as opposed to distributors) and recurring. Its portfolio is geographically diverse as North America accounts for ~40% of revenue, high growth markets for ~30%, and Western Europe for ~24%.

• Danaher's portfolio is exposed to secular growth drivers such as increasing environmental, healthcare, and food safety regulatory requirements, and China offers long-term expansion opportunities for the firm. We also applaud the firm's free cash flow conversion efforts as 2018 marked the 27th consecutive year in which free cash flow exceeded net income.

• Danaher has agreed to acquire GE's BioPharma unit, which is a leading provider of instruments, consumables, and software that support biologic production workflows, for $21.4 billion. $100+ million in annual cost savings are expected by year three after closing, expected in fourth quarter 2019.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**124.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
3M	20.5	2.3	124.2%
General Electric	15.6	NMF	81.8%
Honeywell	20.3	2.4	112.8%
United Technologies	17.4	1.6	113.7%
Peer Median	18.9	2.3	113.3%
Danaher	**27.2**	**2.6**	**121.9%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	18,330	19,893	20,709
Revenue, YoY%	8.6%	8.5%	4.1%
Non-GAAP Operating Income	3,021	3,404	4,441
Non-GAAP EBIT %	16.5%	17.1%	21.4%
Non-GAAP Net Income	2,470	2,651	3,456
Non-GAAP NI Margin %	13.5%	13.3%	16.7%
Non-GAAP Diluted EPS	3.50	3.73	4.84
Non-GAAP Dil EPS, YoY %	13.7%	6.7%	29.6%
Non-GAAP FCF (CFO-capex)	2,858	3,366	4,283
Non-GAAP FCF Margin %	15.6%	16.9%	20.7%

In Millions of USD (except for per share items)

Structure of the Conglomerates Industry — GOOD

The industrial conglomerate industry is characterized by firms that operate various business lines on a global scale. Demand for industrial products tends to be cyclical in nature, and most firms couple their manufacturing operations with generally more stable services businesses to mitigate fundamental volatility. Firms tend to have bargaining power over suppliers due to industry dominance and boast substantial resources to adapt to changing conditions or competitive threats. Most sell products under powerful and recognizable brand names and look to emerging markets for future growth. We like the group.

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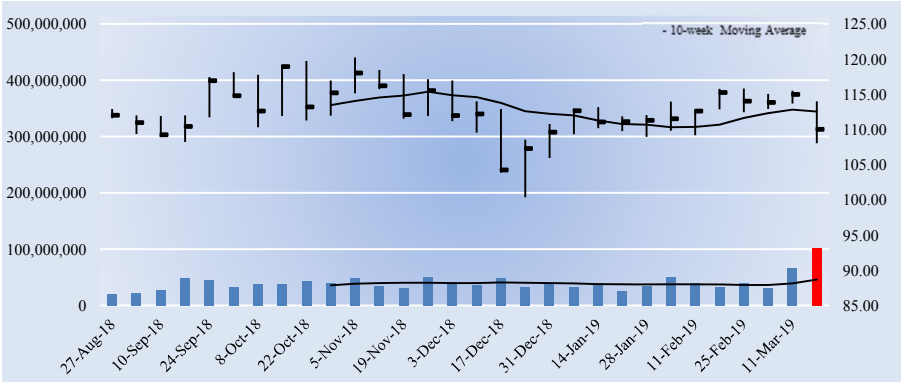
Disney DIS FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$114.00	$88.00 - $140.00	LARGE-CAP VALUE	Consumer Discretionary	Media - entertainment

Disney acquired 21st Century Fox for $71.3 billion in cash and stock in a deal that will transform the company and have meaningful implications for the entertainment industry as a whole.

Stock Chart (weekly)



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Company Vitals

Market Cap (USD)	$165,755
Avg Weekly Vol (30 wks)	40,358
30-week Range (USD)	100.35 - 120.2
Valuentum Sector	Consumer Discretionary
5-week Return	-2.6%
13-week Return	6.5%
30-week Return	-2.2%
Dividend Yield %	1.6%
Dividends per Share	1.76
Forward Dividend Payout Ratio	24.8%
Est. Normal Diluted EPS	8.30
P/E on Est. Normal Diluted EPS	13.3
Est. Normal EBITDA	20,331
Forward EV/EBITDA	9.9
EV/Est. Normal EBITDA	9.0
Forward Revenue Growth (5-yr)	4.4%
Forward EPS Growth (5-yr)	3.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	24.5%
Return on Assets	11.4%
ROIC, with goodwill	16.4%
ROIC, without goodwill	30.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	20,874
Net Debt	16,724
Total Debt/EBITDA	1.2
Net Debt/EBITDA	0.9
EBITDA/Interest	26.2
Current Ratio	0.9
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Disney is a diversified entertainment company with operations in five segments: Media Networks, Parks and Resorts, Studio Entertainment, Consumer Products, and Interactive. 'Media Networks' and 'Parks and Resorts' account for more than 70% of revenue. The firm boasts one of the most-recognized brand names. It was founded in 1923 and is headquartered in California.

• Disney has an innate ability to leverage creative success across its entire company. For example, its 'Consumer Products' division has created 11 major franchises that each generate more than $1 billion in annual global retail sales. The timing of movie releases can make such sales somewhat lumpy, however.

• Earnings at Disney continue to be resilient thanks to the strength of its brands and the value of its high-quality creative content. The firm's 'Media Networks' and 'Parks and Resorts' segments continue to lead the charge. ESPN continues to be a solid anchor to 'Cable Networks' revenue--a division included in 'Media Networks'--though the rising threat of 'cord-cutting' should not be ignored.

• Disney acquired 21st Century Fox for $71.3 billion in cash and stock at an overall 50/50 mix of cash and stock after 21st Century was spun off from Fox. Disney now owns Fox's film and TV studio, along with FX and National Geographic networks. $2 billion in cost synergies are expected by 2021, and $13.8 billion in 21st Century Fox's debt was assumed.

• Disney has taken majority control of BAMTech, a global leader in DTC streaming technology, and launched an ESPN-branded sports streaming service in 2018 and a Disney-branded service is coming in 2019. It owns 60% of Hulu after the 21st Century deal. This is a notable shift in Disney's content distribution.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**113.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Cinemark	17.4	1.7	115.2%
IMAX Corp	20.9	1.8	95.2%
Live Nation	NMF	NMF	134.4%
News Corp	NMF	NMF	90.0%
Peer Median	19.1	1.7	105.2%
Disney	**15.5**	**1.5**	**96.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	55,137	59,434	60,504
Revenue, YoY%	-0.9%	7.8%	1.8%
Operating Income	13,873	14,837	15,301
Operating Margin %	25.2%	25.0%	25.3%
Net Income	8,980	12,598	10,501
Net Income Margin %	16.3%	21.2%	17.4%
Diluted EPS	5.69	8.36	7.11
Diluted EPS, YoY %	-0.7%	46.9%	-14.9%
Free Cash Flow (CFO-capex)	8,720	9,830	9,459
Free Cash Flow Margin %	15.8%	16.5%	15.6%

In Millions of USD (except for per share items)

Structure of the Media (entertainment) Industry — NEUTRAL

The media (entertainment) industry spans firms with diversified worldwide entertainment operations to those that specialize primarily in motion picture production and technologies. Firms with media network businesses compete for viewers with other networks, while companies with studio entertainment businesses compete with all forms of entertainment. A significant number of companies produce theatrical/television films, and success depends on unpredictable public preferences. The strongest participants will consistently create filmed entertainment and/or cable programming that consumers want. We're neutral on the group.

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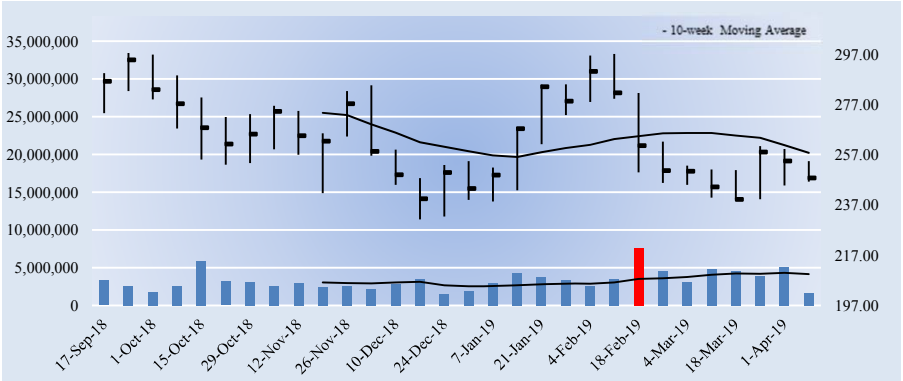
Domino's Pizza DPZ FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$236.00	$177.00 - $295.00	LARGE-CAP GROWTH	Consumer Discretionary	Restaurants - Fast Food & Coffee

Domino's Pizza's return on invested capital is simply a sight to see, but we're keeping an eye on its financial leverage. The company is targeting 25,000 stores worldwide and $25 billion in global retail sales by 2025.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**HIGH**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**258.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$10,739
Avg Weekly Vol (30 wks)	3,368
30-week Range (USD)	231.28 - 297.56
Valuentum Sector	Consumer Discretionary
5-week Return	-1.2%
13-week Return	-0.1%
30-week Return	-11.1%
Dividend Yield %	1.0%
Dividends per Share	2.60
Forward Dividend Payout Ratio	27.5%
Est. Normal Diluted EPS	13.60
P/E on Est. Normal Diluted EPS	18.2
Est. Normal EBITDA	923
Forward EV/EBITDA	19.6
EV/Est. Normal EBITDA	15.3
Forward Revenue Growth (5-yr)	9.7%
Forward EPS Growth (5-yr)	17.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Domino's Pizza is the number one pizza delivery company in the US, based on reported consumer spending. The firm also has a leading international presence and ranks as the second-largest pizza company in the world, based on number of units and sales. It has an enterprise of more than 15,000 units with ~60% outside of the US market.

• All investors should become familiar with the success of Domino's. Profits are driven primarily by franchise royalties, which account for more than 90% of international operating income. 2018 marked the 22nd consecutive year of positive international same-store sales growth.

• Domino's is an impressive company. Its US annual same-store sales growth has averaged +3.9% since 1997, with particular strength coming during the past few years (+12% in 2015, +10.5% in 2016, +7.7% in 2017, and +6.6% in 2018). The firm's average annual international same-store sales expansion has been even more impressive over this time horizon (+5.6% average).

• The firm's franchise model generates sustainable returns for franchisees ($137k-$140k in annual EBITDA in the US in 2018), revealing healthy internals. It is targeting a mid-range outlook of 6%-8% net unit growth, domestic same store sales growth of 3%-6%, international same store sales growth of 3%-6%, and global retail sales growth of 8%-12%.

• Domino's return on invested capital is simply a sight to see. If it is not the greatest value-generator in our coverage universe, it certainly is within the restaurant space. However, its debt load should not be ignored. Debt-to-EBITDA was near the upper bound of its 3x-6x target at the end of the third quarter of 2018.

Relative Valuation

	Forward P/E	PEG	Price / FV
McDonald's	23.2	2.8	131.1%
Starbucks	27.5	1.5	123.1%
Wendy's Co	28.7	NMF	128.5%
Yum! Brands	25.7	1.9	138.2%
Peer Median	26.6	1.9	129.8%
Domino's Pizza	**26.2**	**1.7**	**105.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	-12.1%
Return on Assets	35.2%
ROIC, with goodwill	185.0%
ROIC, without goodwill	200.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	2,788	3,433	3,766
Revenue, YoY%	12.8%	23.1%	9.7%
Operating Income	521	572	652
Operating Margin %	18.7%	16.6%	17.3%
Net Income	278	362	402
Net Income Margin %	10.0%	10.5%	10.7%
Diluted EPS	5.83	8.35	9.46
Diluted EPS, YoY %	35.6%	43.3%	13.3%
Free Cash Flow (CFO-capex)	249	274	356
Free Cash Flow Margin %	8.9%	8.0%	9.4%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	3,532
Net Debt	3,339
Total Debt/EBITDA	5.6
Net Debt/EBITDA	5.3
EBITDA/Interest	4.3
Current Ratio	1.5
Quick Ratio	1.0

NMF = Not Meaningful

Structure of the Restaurants Industry - Fast Food & Coffee — NEUTRAL

The restaurant industry has benefited from a long-term trend toward eating out, but the space has become increasingly more competitive as new concepts are introduced and successful chains expand. Not only are there pricing pressures and trade-down threats, but rising costs for commodities and labor have pressured profits. Barriers to entry are low, and many constituents have a difficult time differentiating themselves. We tend to like larger chains that benefit from scale advantages and international expansion opportunities, though niche franchises can be appealing. We're neutral on the structure of the group.

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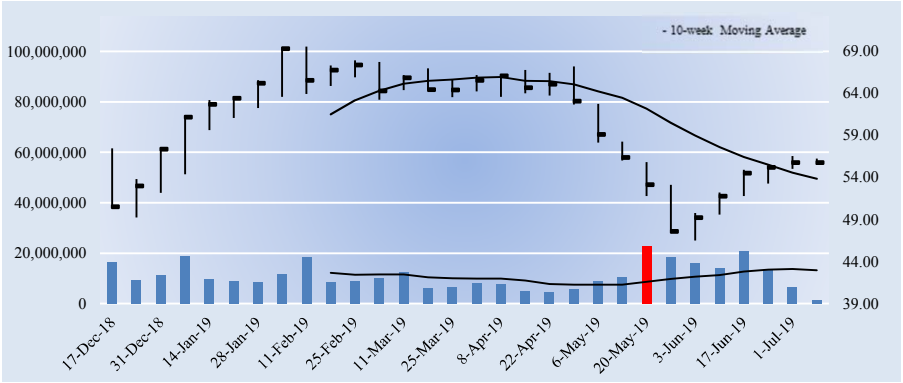
DXC Technology DXC UNDERVALUED 16.7%

Buying Index™ 3 **Value Rating** ✓

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$86.00	$65.00 - $108.00	LARGE-CAP VALUE	Information Technology	IT Services

Shares of DXC Technologies look very cheap. The company is a free cash flow powerhouse, too.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**UNDERVALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**DECLINING**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**54.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$16,140
Avg Weekly Vol (30 wks)	11,006
30-week Range (USD)	46.459999 - 69.449997
Valuentum Sector	Information Technology
5-week Return	12.4%
13-week Return	-16.5%
30-week Return	-1.3%
Dividend Yield %	1.5%
Dividends per Share	0.84
Forward Dividend Payout Ratio	10.7%
Est. Normal Diluted EPS	6.72
P/E on Est. Normal Diluted EPS	8.3
Est. Normal EBITDA	4,281
Forward EV/EBITDA	4.2
EV/Est. Normal EBITDA	4.8
Forward Revenue Growth (5-yr)	-0.2%
Forward EPS Growth (5-yr)	3.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• DXC Technology is the result of a merger of Computer Sciences and HP Enterprise's 'Enterprise Services' business unit. The merger was completed in March 2017, and it created the world's leading, independent, end-to-end IT services firm after both companies underwent transformational journeys.

• The IT services industry is undergoing a technology paradigm shift that has strategic implications for service providers. While outsourcing and globalization trends continue, the digital disruption currently being experienced is bringing unprecedented value opportunity for service providers.

• DXC Technology was created with digital disruption in mind. Its value platform is built upon scale and skills (nearly $25 billion in annual revenue and 25% of workforce skilled in next-gen concepts), agility and cost efficiency (via an integrated delivery model and automation initiatives), customer intimacy, and technology driven innovation ($4 billion in annual digital revenue).

• DXC merged its USPS business with Vencore and KeyPoint to create an independent, publicly traded firm. It also agreed to acquire Luxoft, a global scale digital innovator, for an equity value of ~$2 billion in cash. The deal should bring a differentiated customer value prop by adding Luxoft's digital engineering to DXC's IT modernization and integration expertise.

• Digital portfolio growth is expected to be a key driver for DXC's top line in coming years and is currently being targeted at 25%-30% through year 3. The firm is expecting to realize $1.5 billion in annual run-rate savings by the end of year 3, with $1 billion of those savings coming in year 1.

Relative Valuation

	Forward P/E	PEG	Price / FV
Cognizant Tech	16.3	2.2	93.0%
Infosys Ltd	19.7	1.9	107.4%
Jack Henry	38.9	1.7	134.9%
Wipro	18.1	NMF	109.5%
Peer Median	18.9	1.9	108.5%
DXC Technology	**7.1**	**3.6**	**64.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	9.3%
Return on Assets	3.7%
ROIC, with goodwill	15.3%
ROIC, without goodwill	26.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-18	Mar-19	Mar-20
Revenue	24,556	20,753	20,753
Revenue, YoY%	222.8%	-15.5%	0.0%
Operating Income	2,638	1,880	3,085
Operating Margin %	10.7%	9.1%	14.9%
Net Income	1,751	1,222	2,223
Net Income Margin %	7.1%	5.9%	10.7%
Diluted EPS	6.04	4.22	7.83
Diluted EPS, YoY %	NMF	NMF	85.6%
Free Cash Flow (CFO-capex)	3,019	1,486	3,589
Free Cash Flow Margin %	12.3%	7.2%	17.3%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	7,412
Net Debt	4,513
Total Debt/EBITDA	1.9
Net Debt/EBITDA	1.2
EBITDA/Interest	11.7
Current Ratio	1.0
Quick Ratio	0.6

NMF = Not Meaningful

Structure of the IT Services Industry — NEUTRAL

The IT services industry is composed of offshore entities that provide outsourced IT infrastructure at a low cost and contractors that provide a variety of services to US government agencies. Success is often dependent on the talent of a firm's technology professionals and the effective execution of service offerings. Most constituents generate significant cash flow and high returns on investment due to minimal capital requirements. Still, competition remains fierce, and recent government actions to stimulate rivalry and reduce the number of sole source awards has weighed on some participants. We're neutral on the group.

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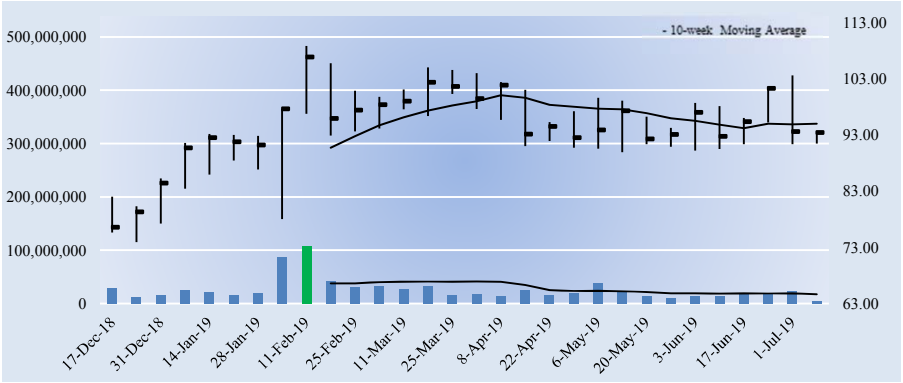
Electronic Arts EA FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Highest Rated	$95.00	$67.00 - $124.00	LARGE-CAP VALUE	Information Technology	Software - graphics

Electronic Arts' shares rocketed to nearly $150 in July 2018 and have since converged to our fair value estimate in the mid-$90s. The firm's equity will remain volatile.

Stock Chart (weekly)



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)	$28,593
Avg Weekly Vol (30 wks)	26,257
30-week Range (USD)	73.910004 - 108.800003
Valuentum Sector	Information Technology
5-week Return	-4.7%
13-week Return	-7.1%
30-week Return	16.6%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	5.45
P/E on Est. Normal Diluted EPS	17.1
Est. Normal EBITDA	2,187
Forward EV/EBITDA	12.7
EV/Est. Normal EBITDA	11.0
Forward Revenue Growth (5-yr)	5.2%
Forward EPS Growth (5-yr)	13.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	23.5%
Return on Assets	12.5%
ROIC, with goodwill	52.6%
ROIC, without goodwill	226.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	994
Net Debt	-4,451
Total Debt/EBITDA	0.9
Net Debt/EBITDA	NMF
EBITDA/Interest	25.7
Current Ratio	2.8
Quick Ratio	2.7

NMF = Not Meaningful

Investment Highlights

• Electronic Arts develops, markets, publishes and distributes game software content and services that can be played by consumers on a variety of video game machines and electronic devices such as PlayStations 3 and 4, Xbox 360, Xbox One, and Wii. Some of its titles include Battlefield, UFC, and EA Sports offerings for nearly every major American sport.

• EA's revenue from mobile has grown considerably in recent years and is a great opportunity for future growth. The segment's gains have more than offset negative PC trends. Digital net bookings for the twelve month period ending September 2018 grew 11% and made up 69% of total net bookings.

• Multiple industry trends are changing EA's operating environment. Online gameplay and the digital distribution of games are leading the digital transformation. Business models have emerged with focuses on extended product engagement, mobile opportunities, and predictable subscription-based revenue. The importance and dependability of franchises cannot be denied, however.

• New consoles tend to drive growth at EA, so investors should pay close attention to the strategies of Nintendo (Wii and Switch), Microsoft (Xbox One) and Sony (PS). Digital share (mobile/handhelds, extra content, full game downloads) of overall interactive entertainment industry spending has advanced to 70% of the total in recent years.

• The company's portfolio of brands includes wholly-owned brands such as Battlefield, Mass Effect, Need for Speed, The Sims, Bejeweled, and Plants v. Zombies. We like EA's considerable brand recognition and strength.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**95.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Activision	21.3	2.8	86.1%
Glu Mobile	19.9	NMF	87.8%
Take-Two	32.0	6.8	107.2%
Zynga	26.6	5.1	102.8%
Peer Median	23.9	5.1	95.3%
Electronic Arts	**20.3**	**2.2**	**98.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-18	Mar-19	Mar-20
Revenue	5,150	4,950	5,198
Revenue, YoY%	6.3%	-3.9%	5.0%
Non-GAAP Operating Income	1,434	1,010	1,743
Non-GAAP EBIT %	27.8%	20.4%	33.5%
Non-GAAP Net Income	1,043	1,019	1,392
Non-GAAP NI Margin %	20.3%	20.6%	26.8%
Non-GAAP Diluted EPS	3.34	3.33	4.60
Non-GAAP Dil EPS, YoY %	NMF	-0.4%	38.0%
Non-GAAP FCF (CFO-capex)	1,585	1,428	1,513
Non-GAAP FCF Margin %	30.8%	28.8%	29.1%

In Millions of USD (except for per share items)

Structure of the Software (graphics) Industry — POOR

The software (graphics) industry is composed of a variety of firms from online gaming entities to technology-based-language learning companies. Industry constituents compete for the leisure time, attention and discretionary spending of consumers. The social gaming space, in particular, is evolving rapidly, and new entrants will inevitably drive down outsize returns over time. Performance of many participants is "hit" driven. If companies don't deliver "hit" products to the market, operating results will suffer. Rapid technological change makes obsolescence a possibility. We don't like the group's structure.

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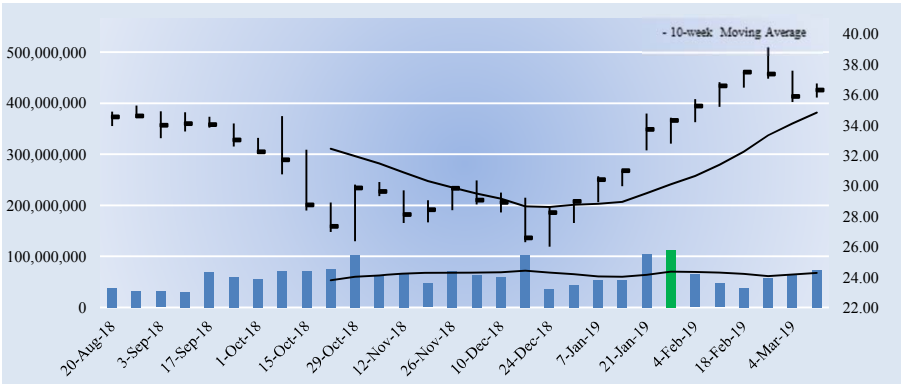
eBay EBAY FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$37.00	$28.00 - $46.00	LARGE-CAP VALUE	Consumer Discretionary	Internet & Catalog Retail

eBay recently announced a series of strategic initiatives, and competition is intensifying. GMV growth is expected to be subdued in the near term.

Stock Chart (weekly)



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)	$35,973
Avg Weekly Vol (30 wks)	62,122
30-week Range (USD)	26.01 - 39.14
Valuentum Sector	Consumer Discretionary
5-week Return	2.3%
13-week Return	26.1%
30-week Return	6.1%
Dividend Yield %	1.5%
Dividends per Share	0.56
Forward Dividend Payout Ratio	20.9%
Est. Normal Diluted EPS	3.19
P/E on Est. Normal Diluted EPS	11.4
Est. Normal EBITDA	4,480
Forward EV/EBITDA	10.1
EV/Est. Normal EBITDA	9.0
Forward Revenue Growth (5-yr)	3.1%
Forward EPS Growth (5-yr)	7.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	36.5%
Return on Assets	13.8%
ROIC, with goodwill	18.1%
ROIC, without goodwill	30.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	9,231
Net Debt	4,316
Total Debt/EBITDA	2.9
Net Debt/EBITDA	1.3
EBITDA/Interest	9.8
Current Ratio	1.6
Quick Ratio	1.3

NMF = Not Meaningful

Investment Highlights

• eBay is a global commerce and payments company that connects buyers and sellers worldwide. Activist investor Carl Icahn no longer holds shares in this security, and it has been separated from PayPal since July 2015. It also owns online ticket platform StubHub. The company was founded in 1995 and is headquartered in San Jose, California.

• eBay is still a powerhouse even after letting go of its prized PayPal. In 2018, the firm processed ~$95 billion in gross merchandise value (up ~5% in constant currency from 2017), and it exited the year with from nearly 180 million active buyers. Increased competition in e-commerce is impacting expectations.

• International operations continue to account for an increasing portion of overall GMV, but management has noted a deceleration in GMV in European markets more recently. eBay continues to focus on innovation in big data, personalization, and artificial intelligence, but it is scaling back on user experience plans and taking a more disciplined approach to marketing, which will constrain GMV in the short term.

• In 2019, eBay is expecting to grow GMV by ~1% and revenue by 1%-3% in constant currency. Operating margin is expected to come in at 28%-29% in 2019, roughly 1 percentage point higher than 2018 at the midpoint. Non-GAAP earnings per share guidance comes in a range of $2.62-$2.68 for the year, and free cash flow is expected to be $2.1-$2.3 billion.

• eBay announced a series of new initiatives in March 2019, including a strategic review of assets such as StubHub and eBay Classifieds Group, and it is working with activist investors Elliot Management and Starboard Value. It also initiated a quarterly dividend and is targeting a 1.5x net debt-to-EBITDA ratio.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**35.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Alibaba	32.8	1.8	87.8%
Amazon.com	NMF	2.6	86.0%
Booking Holdings	17.4	1.6	82.1%
Expedia Group	17.6	1.5	81.6%
Peer Median	17.6	1.7	84.1%
eBay	**13.6**	**2.0**	**98.1%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	- Actual -	Split Adjusted	Post - Proj
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	9,567	10,746	10,853
Revenue, YoY%	6.5%	12.3%	1.0%
Non-GAAP Operating Income	2,537	2,508	3,304
Non-GAAP EBIT Margin %	26.5%	23.3%	30.4%
Non-GAAP Net Income	-1,012	2,528	2,586
Non-GAAP NI Margin %	-10.6%	23.5%	23.8%
Non-GAAP Diluted EPS	-0.95	2.55	2.68
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Free Cash Flow (CFO-capex)	2,480	2,007	2,205
Free Cash Flow Margin %	25.9%	18.7%	20.3%

In Millions of USD (except for per share items)

Structure of the Internet & Catalog Retail Industry — GOOD

The Internet and catalog retail industry benefits as a whole from the secular trend toward consumer digital (online) consumption. The industry consists of a number of exclusive online retailers led by Amazon, which continues to disrupt the broader retail space, and businesses that offer Internet travel services such as Booking Holdings, while online auctions are dominated by eBay. The industry generates high returns on investment due to minimal capital costs, but the landscape will be vastly different in the decades ahead. Still, we like the group.

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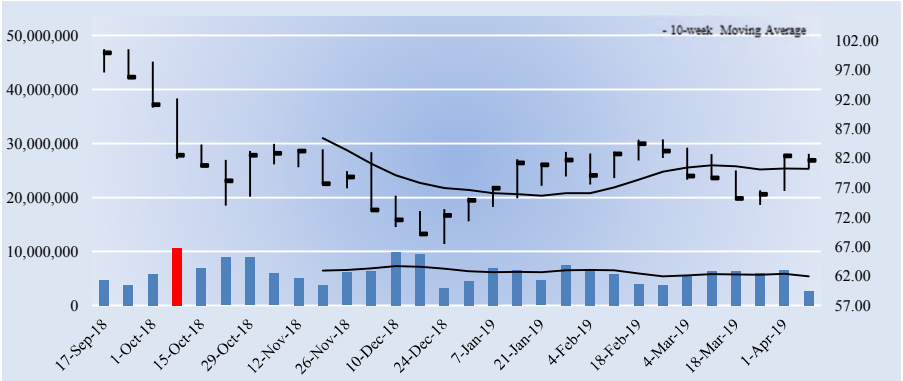
Eastman Chemical EMN FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$97.00	$78.00 - $116.00	LARGE-CAP VALUE	Materials	Chemicals - broad

Roughly two-thirds of Eastman Chemical's sales comes from product lines with leading market positions, from additives to advanced materials to fibers.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**GOOD**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**80.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$11,665
Avg Weekly Vol (30 wks)	6,131
30-week Range (USD)	67.4 - 100.51
Valuentum Sector	Materials
5-week Return	2.7%
13-week Return	7.0%
30-week Return	-16.1%
Dividend Yield %	3.0%
Dividends per Share	2.48
Forward Dividend Payout Ratio	28.2%
Est. Normal Diluted EPS	9.78
P/E on Est. Normal Diluted EPS	8.3
Est. Normal EBITDA	2,473
Forward EV/EBITDA	7.5
EV/Est. Normal EBITDA	7.1
Forward Revenue Growth (5-yr)	2.2%
Forward EPS Growth (5-yr)	6.3%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Eastman Chemical is a global specialty chemical company that produces a broad range of advanced materials, additives and functional products, specialty chemicals, and fibers. The company's strategic shift away from 'commodity' chemicals has brightened its future. It was founded in 1920 and is headquartered in Tennessee.

• Near-term growth drivers include its portfolio of specialty businesses creating their own growth markets, growth in high-margin innovative products, and productivity to offset inflation. Headwinds include higher raw material and energy costs, global economic uncertainty, and higher spending for growth.

• Eastman Chemical is targeting core revenue growth in line with end markets, but it expects specialty products sales to grow at least 2x as fast as underlying markets. It is also targeting a 23% and growing EBITDA margin driven by the aforementioned improving product mix, $1+ billion and growing annual free cash flow, and 10%-15% and growing ROIC.

• Two thirds of the company's sales comes from product lines with leading market positions, from additives (cellulosic polymers, insoluble sulfurs) to advanced materials (copolyester, PVB resin) to fibers (acetate tow, acetate yarn). Capital spending will continue to support organic growth projects throughout the company.

• Eastman Chemical stands to benefit from long-term global trends such as energy efficiency, a rising middle class in emerging economies, and increased health and wellness. The company is targeting an earnings per share CAGR of 8%-12% from 2018-2020.

Relative Valuation

	Forward P/E	PEG	Price / FV
DowDuPont	12.2	1.4	83.7%
Ecolab	30.6	2.5	153.4%
LyondellBasell	8.5	0.9	88.7%
PPG Industries	18.2	1.6	113.8%
Peer Median	15.2	1.5	101.2%
Eastman Chemical	**9.3**	**1.7**	**84.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	22.5%
Return on Assets	7.0%
ROIC, with goodwill	9.7%
ROIC, without goodwill	14.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	9,549	10,151	10,354
Revenue, YoY%	6.0%	6.3%	2.0%
Operating Income	1,540	1,523	1,722
Operating Margin %	16.1%	15.0%	16.6%
Net Income	1,384	1,080	1,231
Net Income Margin %	14.5%	10.6%	11.9%
Diluted EPS	9.47	7.56	8.79
Diluted EPS, YoY %	64.6%	-20.2%	16.3%
Free Cash Flow (CFO-capex)	1,008	1,015	1,250
Free Cash Flow Margin %	10.6%	10.0%	12.1%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	6,168
Net Debt	5,942
Total Debt/EBITDA	2.9
Net Debt/EBITDA	2.8
EBITDA/Interest	9.1
Current Ratio	1.8
Quick Ratio	0.9

NMF = Not Meaningful

Structure of the Chemicals Industry — POOR

The broad chemicals industry includes firms that make thousands of different chemical substances, ranging from basic raw materials to advanced specialty chemicals. Making chemicals is a cyclical and energy-intensive business, with volatile oil/gas prices influencing feedstock, operation, and transportation costs. Specialty providers can carve out niches, but commodity chemicals producers are largely undifferentiated, making it impossible to gain a sustainable competitive edge. The industry is very capital intensive, and large swings in prices and volume should be expected. We don't like the industry structure.

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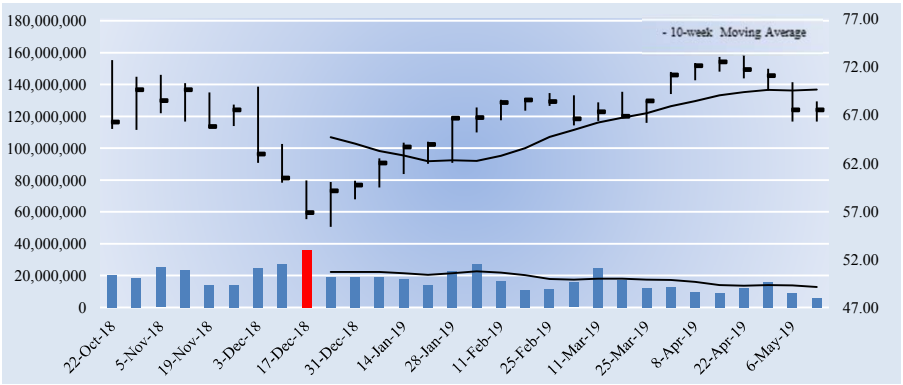
Emerson Electric EMR FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$63.00	$50.00 - $76.00	LARGE-CAP CORE	Industrials	Electrical Equipment

There are a number of moving parts in Emerson Electric's business, but its free cash flow generating capacity continues to impress.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**70.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$42,902
Avg Weekly Vol (30 wks)	17,630
30-week Range (USD)	55.389999 - 73.239998
Valuentum Sector	Industrials
5-week Return	-6.3%
13-week Return	-0.7%
30-week Return	-7.0%
Dividend Yield %	2.9%
Dividends per Share	1.96
Forward Dividend Payout Ratio	52.6%
Est. Normal Diluted EPS	4.55
P/E on Est. Normal Diluted EPS	14.8
Est. Normal EBITDA	4,802
Forward EV/EBITDA	11.3
EV/Est. Normal EBITDA	9.7
Forward Revenue Growth (5-yr)	5.3%
Forward EPS Growth (5-yr)	9.3%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Emerson offers a wide range of products and services in the industrial, commercial and consumer markets through its 'Automation Solutions' and 'Commercial & Residential Solutions' segments, the latter of which is made up of its 'Climate Technologies' and 'Tools & Home Products' businesses. The company was founded in 1890 and is headquartered in St. Louis, Missouri.

• Emerson expects global demand trends to continue improving, with strength in Asia and North America leading the way. Organic growth will be bolstered by bolt-on acquisitions, including its purchase agreement for GE's Intelligent Platforms business, which should boost its position in automation.

• There are a number of moving parts in Emerson's business. The firm recently sold its network power division for $4 billion and its motor and generator business for $1.2 billion, and it purchased Pentair's valves and controls business for $3.15 billion. It also acquired Textron's Tools & Test business for $810 million and smart pneumatics technology producer Aventics for €527 million.

• In fiscal 2019, Emerson expects underlying net sales growth of 4%-5.5%. GAAP EPS guidance is set in a range of $3.60-$3.70 (mid-single-digit growth over 2018), and operating cash flow and free cash flow are expected to be ~$3.2 billion and ~$2.5 billion, respectively.

• Emerson has a fantastic dividend growth profile and impressive track record. Management plans to reduce its dividend-to-free cash flow ratio to 40%-50% by fiscal 2020 from 56% in 2017. The firm's dividend yield and Dividend Cushion ratio offer an enticing combination.

Relative Valuation

	Forward P/E	PEG	Price / FV
Lennox	21.4	1.9	120.2%
Parker-Hannifin	14.7	1.7	88.0%
Pentair	16.2	1.8	99.7%
Roper Technologies	27.4	2.6	122.6%
Peer Median	18.8	1.9	110.0%
Emerson Electric	**18.1**	**2.1**	**107.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	22.1%
Return on Assets	8.9%
ROIC, with goodwill	19.5%
ROIC, without goodwill	36.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,760
Net Debt	3,667
Total Debt/EBITDA	1.2
Net Debt/EBITDA	0.9
EBITDA/Interest	24.9
Current Ratio	1.1
Quick Ratio	0.7

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	15,264	17,408	18,940
Revenue, YoY%	5.1%	14.0%	8.8%
Operating Income	2,786	3,202	3,291
Operating Margin %	18.3%	18.4%	17.4%
Net Income	1,643	2,203	2,344
Net Income Margin %	10.8%	12.7%	12.4%
Diluted EPS	2.55	3.47	3.73
Diluted EPS, YoY %	3.9%	35.8%	7.5%
Free Cash Flow (CFO-capex)	1,436	2,275	2,583
Free Cash Flow Margin %	9.4%	13.1%	13.6%

In Millions of USD (except for per share items)

Structure of the Electrical Equipment Industry — NEUTRAL

The fragmented electrical equipment industry includes firms that primarily provide flow control and electrical components. Order trends and backlog are largely driven by the overall health of the economy, while all constituents must deal with volatile raw material prices. Most operate high fixed-cost business models, where operating leverage should be monitored closely, and face intense global competition. Still, we like the group's exposure to recurring maintenance, repair, and overhaul (MRO) revenue and its large and growing emerging-market opportunities. We're generally neutral on the industry's structure.

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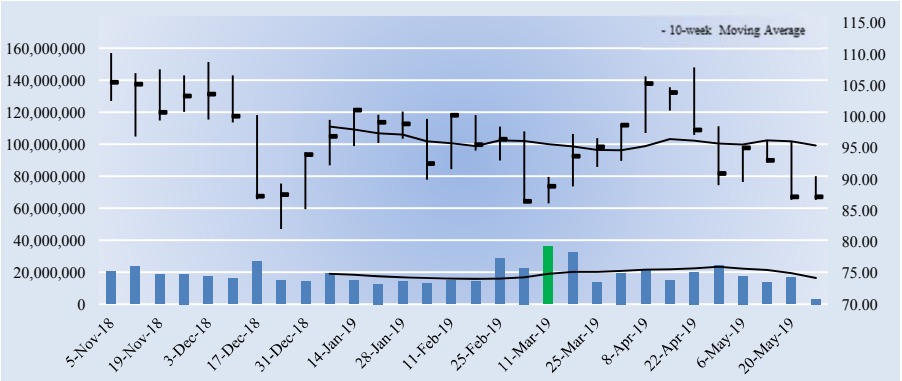
EOG Resources EOG UNDERVALUED 2.1%

Buying Index™ 3 **Value Rating** ✓

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Neutral	$118.00	$89.00 - $148.00	LARGE-CAP BLEND	Energy	Independent Oil & Gas

We like EOG Resources, but energy resource prices can be quite volatile.

Stock Chart (weekly)



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)	$50,553
Avg Weekly Vol (30 wks)	18,598
30-week Range (USD)	82.040001 - 110.199997
Valuentum Sector	Energy
5-week Return	-11.1%
13-week Return	-9.9%
30-week Return	-16.6%
Dividend Yield %	1.3%
Dividends per Share	1.15
Forward Dividend Payout Ratio	20.3%
Est. Normal Diluted EPS	7.44
P/E on Est. Normal Diluted EPS	11.7
Est. Normal EBITDA	9,896
Forward EV/EBITDA	7.0
EV/Est. Normal EBITDA	5.6
Forward Revenue Growth (5-yr)	9.7%
Forward EPS Growth (5-yr)	8.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	6.4%
Return on Assets	3.7%
ROIC, with goodwill	7.5%
ROIC, without goodwill	7.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	6,083
Net Debt	4,527
Total Debt/EBITDA	0.8
Net Debt/EBITDA	0.6
EBITDA/Interest	32.3
Current Ratio	1.4
Quick Ratio	1.0

NMF = Not Meaningful

Investment Highlights

• EOG operates primarily in the US, Canada, Trinidad, UK, China, and Argentina. The firm is the largest crude oil producer in the South Texas Eagle Ford Shale and North Dakota Bakken, which should drive significant reserve and production growth. EOG has a prudent focus on return on capital employed and targets the metric to grow at a double-digit rate over the long haul.

• Collapsing crude oil prices put EOG on the defensive. The company was able to reduce its all-in reserve replacement costs per BOE by 43% from 2013 to 2017 (to $8.71 from $15.23) and is expecting further reductions thanks in part to its focus on premium drilling.

• EOG boasts the highest production per employee in its peer group, giving it a labor efficiency advantage. A shift to focus on premium drilling should drive capital efficiency, and a recent increase in capital spending is expected to allow it to retain high performing service providers and provide service continuity as it targets well cost reductions.

• EOG expects to generate positive free cash flow at $50/bbl oil prices in the near term, and it is committed to operating within its internally generated cash flow, a focus we like. Management plans to develop its capital budget with assumptions of $40 oil and $2.50 natural gas prices to remain prudent, and it hopes to repay $3 billion in debt by 2021.

• EOG's total debt outstanding was ~$6.1 billion at the end of 2018. On a net debt basis, the company's leverage is slightly better. The firm is in better shape than some of its peers, but its net debt load shouldn't be ignored.

Investment Considerations

DCF Valuation	**UNDERVALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**POOR**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**95.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Apache	25.1	3.2	73.9%
Cabot	12.7	1.6	98.8%
Devon Energy	13.4	1.1	84.3%
Occidental Petroleum	13.6	NMF	95.5%
Peer Median	13.5	1.6	89.9%
EOG Resources	**15.4**	**1.2**	**73.9%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	7,908	11,946	12,448
Revenue, YoY%	43.9%	51.1%	4.2%
Operating Income	935	4,486	4,321
Operating Margin %	11.8%	37.6%	34.7%
Net Income	2,112	3,419	3,286
Net Income Margin %	26.7%	28.6%	26.4%
Diluted EPS	3.65	5.89	5.67
Diluted EPS, YoY %	-208.2%	NMF	NMF
Free Cash Flow (CFO-capex)	141	1,693	1,827
Free Cash Flow Margin %	1.8%	14.2%	14.7%

In Millions of USD (except for per share items)

Structure of the Independent Oil & Gas Industry — POOR

The oil and gas business is highly competitive in the exploration, acquisition, and production of reserves. Changes in deepwater drilling laws and other regulatory initiatives can add uncertainty to operations. The trajectory of global economic growth, the actions of OPEC, and political and environmental uncertainty are other key factors. A strong balance sheet to manage through the commodity price cycle is necessary for survival. With the group's profitability largely driven by the volatile prices of oil, natural-gas and NGLs, we're not that excited about the structure of this commodity-producing space.

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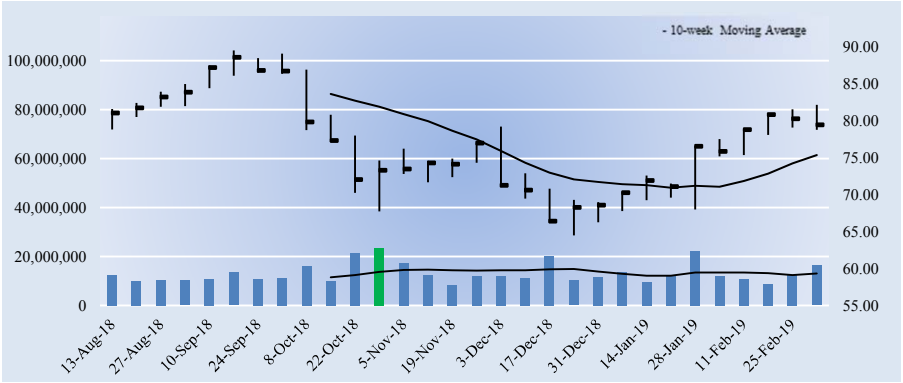
Eaton ETN FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$87.00	$70.00 - $104.00	LARGE-CAP VALUE	Industrials	Electrical Equipment - industrial

Eaton expects solid organic growth in the near term, and management is confident it will be able to offset the impact of tariff-related costs in 2019.

Stock Chart (weekly)



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)	$34,475
Avg Weekly Vol (30 wks)	13,118
30-week Range (USD)	64.46 - 89.46
Valuentum Sector	Industrials
5-week Return	3.5%
13-week Return	11.5%
30-week Return	-2.6%
Dividend Yield %	3.6%
Dividends per Share	2.84
Forward Dividend Payout Ratio	47.8%
Est. Normal Diluted EPS	6.81
P/E on Est. Normal Diluted EPS	11.6
Est. Normal EBITDA	4,271
Forward EV/EBITDA	10.5
EV/Est. Normal EBITDA	9.7
Forward Revenue Growth (5-yr)	2.8%
Forward EPS Growth (5-yr)	9.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	14.7%
Return on Assets	7.5%
ROIC, with goodwill	8.7%
ROIC, without goodwill	18.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	7,521
Net Debt	7,081
Total Debt/EBITDA	1.9
Net Debt/EBITDA	1.8
EBITDA/Interest	14.3
Current Ratio	1.5
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Eaton is a leader in diversified power management solutions that make electrical, hydraulic and mechanical power operate more efficiently. The firm serves the electrical, hydraulics, aerospace, truck and automotive end markets. Electrical accounts for ~60% of sales. It was founded in 1916 and is headquartered in Ireland. It plans to spin-off its Lighting business by the end of 2019.

• Eaton expects a majority of its businesses to experience solid growth in their respective end markets in 2019 with overall market growth of ~3%-4% expected. It is confident it wil be able to offset tariff-related costs, which are projected at ~$110 million in 2019, in the year.

• Multiple secular trends are driving Eaton's business over the long haul: population growth is pushing electricity demand higher; environmental concerns and increased regulation are requiring increased innovation, as is the case with the push for greater energy efficiency; and intelligent products and connectivity are driving new avenues for value creation.

• The firm continues to focus on improving segment operating margins via margin-accretive acquisitions, innovative new products, and through restructuring. Management estimates it has reduced earnings volatility through the economic cycle by 40%, and it is targeting a segment operating margin of 17%-18% in 2020, up from 15% in 2015-2017.

• Eaton's 2018-2020 goals include 3%-4% organic revenue growth, 1%-3% acquisition revenue growth, ~170 basis points of segment operating margin expansion, an EPS growth CAGR of 11%-12%, and free cash flow at 10%+ of sales. Share repurchases amount to 1%-2% of its market cap per year.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**75.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Ametek	19.2	3.0	121.0%
AO Smith Corp	18.6	2.5	97.8%
Littelfuse	20.0	2.0	107.8%
Rockwell Automation	19.2	1.9	114.8%
Peer Median	19.2	2.2	111.3%
Eaton	**13.4**	**1.7**	**91.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	20,404	21,609	22,387
Revenue, YoY%	3.3%	5.9%	3.6%
Operating Income	2,499	2,966	3,246
Operating Margin %	12.2%	13.7%	14.5%
Net Income	2,985	2,145	2,528
Net Income Margin %	14.6%	9.9%	11.3%
Diluted EPS	6.72	4.94	5.94
Diluted EPS, YoY %	59.5%	-26.5%	20.2%
Free Cash Flow (CFO-capex)	2,146	2,093	2,491
Free Cash Flow Margin %	10.5%	9.7%	11.1%

In Millions of USD (except for per share items)

Structure of the Industrial Electrical Equipment Industry — NEUTRAL

Demand for products in the industrial electrical equipment space is highly cyclical, and industry constituents are exposed to volatile raw-material costs, which at times can be difficult to pass along to customers. Product development and quality initiatives are sources of competitive strengths, but rivals often compete aggressively on price to gain share. The industrial electrical equipment market should grow at a GDP-like pace in the developed world and a multiple of that trajectory in emerging markets. We're neutral on the space.

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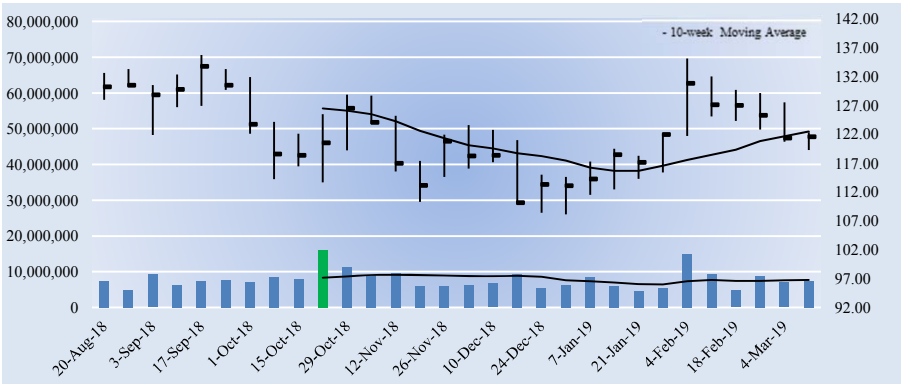
Expedia Group EXPE FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$149.00	$119.00 - $179.00	LARGE-CAP VALUE	Consumer Discretionary	Internet & Catalog Retail

We've raised our fair value estimate for Expedia Group after raising near-term expectations. Momentum in gross bookings has impressed of late, and its low international penetration rates imply a solid runway for potential growth.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**IMPROVING**
Near-term Technical Resistance, 10-wk MA	**122.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$18,585
Avg Weekly Vol (30 wks)	7,856
30-week Range (USD)	108.11 - 135.69
Valuentum Sector	Consumer Discretionary
5-week Return	-7.2%
13-week Return	3.3%
30-week Return	-7.1%
Dividend Yield %	1.1%
Dividends per Share	1.28
Forward Dividend Payout Ratio	18.5%
Est. Normal Diluted EPS	8.72
P/E on Est. Normal Diluted EPS	13.9
Est. Normal EBITDA	3,054
Forward EV/EBITDA	7.7
EV/Est. Normal EBITDA	6.4
Forward Revenue Growth (5-yr)	7.8%
Forward EPS Growth (5-yr)	30.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Expedia Group is one of the largest online travel companies, with an extensive portfolio of online travel brands. The firm covers virtually every aspect of researching, planning, and booking travel. It was founded in 1996. Liberty Interactive owns ~16% of the company; Barry Diller controls roughly 54% of total voting power.

• Expedia's technology platform would be nearly impossible for a new entrant to replicate, and the company boasts deep global supplier relationships and multiple, diverse sources of demand (leisure, corporate, travel agency). Overall travel demand levels are healthy.

• Expedia truly has a dynamic portfolio of travel brands, including Expedia.com, Hotels.com, Hotwire.com, Egencia, eLong, and others. As one of the world's largest online travel companies, its gross bookings still represent only ~6% of total worldwide travel spending. Growth prospects are bright, but consolidation among hotels could impact negotiations regarding take rates for online travel companies.

• Expedia is investing in mobile in an attempt to drive growth and engagement. Roughly one-third of all transactions are booked via mobile as of the full year 2018, and transactions in its mobile app grew by nearly 50% in 2018, suggesting its digital investments are paying off. Expedia app users are more than twice as likely to be repeat users than the average user.

• Expedia is not afraid to make a deal. In December 2015, the company completed its acquisition of HomeAway in a cash and stock deal valued at almost $4 billion. The firm also purchased rival Orbitz in a deal with an enterprise value of ~$1.6 billion.

Relative Valuation

	Forward P/E	PEG	Price / FV
Alibaba	32.8	1.8	87.8%
Amazon.com	NMF	2.6	86.0%
Booking Holdings	17.4	1.6	82.1%
eBay	13.6	2.0	98.1%
Peer Median	17.4	1.9	86.9%
Expedia Group	**17.6**	**1.5**	**81.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	7.9%
Return on Assets	2.0%
ROIC, with goodwill	7.3%
ROIC, without goodwill	23.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	10,060	11,223	12,334
Revenue, YoY%	14.7%	11.6%	9.9%
Non-GAAP Operating Income	667	783	1,451
Non-GAAP EBIT %	6.6%	7.0%	11.8%
Non-GAAP Net Income	378	406	1,047
Non-GAAP NI Margin %	3.8%	3.6%	8.5%
Non-GAAP Diluted EPS	2.42	2.66	6.92
Non-GAAP Dil EPS, YoY %	32.5%	9.9%	160.5%
Non-GAAP FCF (CFO-capex)	1,089	1,097	1,460
Non-GAAP FCF Margin %	10.8%	9.8%	11.8%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	3,717
Net Debt	987
Total Debt/EBITDA	2.1
Net Debt/EBITDA	0.6
EBITDA/Interest	9.4
Current Ratio	0.6
Quick Ratio	0.6

NMF = Not Meaningful

Structure of the Internet & Catalog Retail Industry — GOOD

The Internet and catalog retail industry benefits as a whole from the secular trend toward consumer digital (online) consumption. The industry consists of a number of exclusive online retailers led by Amazon, which continues to disrupt the broader retail space, and businesses that offer Internet travel services such as Booking Holdings, while online auctions are dominated by eBay. The industry generates high returns on investment due to minimal capital costs, but the landscape will be vastly different in the decades ahead. Still, we like the group.

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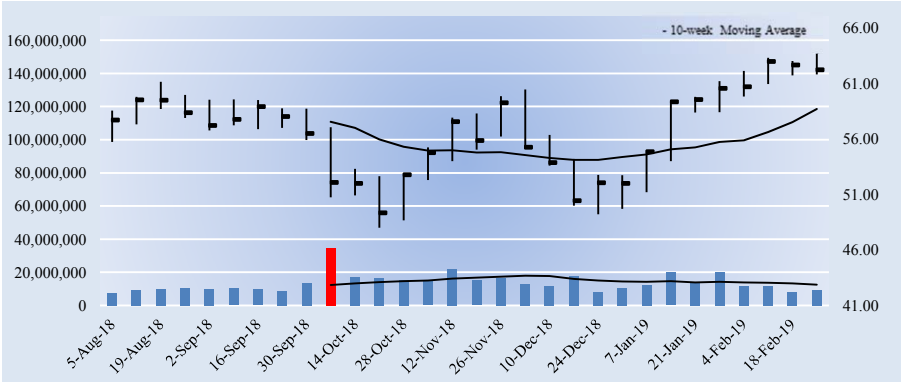
Fastenal FAST FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$52.00	$39.00 - $65.00	LARGE-CAP CORE	Industrials	Distributors

Given the prevalence of cost inflation and tariffs, Fastenal is working to evaluate and execute pricing strategies that will enhance long-term margin potential.

Stock Chart (weekly)



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)	$17,872
Avg Weekly Vol (30 wks)	13,650
30-week Range (USD)	48.01 - 63.72
Valuentum Sector	Industrials
5-week Return	5.8%
13-week Return	3.7%
30-week Return	11.2%
Dividend Yield %	2.8%
Dividends per Share	1.72
Forward Dividend Payout Ratio	60.0%
Est. Normal Diluted EPS	3.43
P/E on Est. Normal Diluted EPS	18.1
Est. Normal EBITDA	1,476
Forward EV/EBITDA	14.5
EV/Est. Normal EBITDA	12.3
Forward Revenue Growth (5-yr)	7.7%
Forward EPS Growth (5-yr)	9.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	29.9%
Return on Assets	21.4%
ROIC, with goodwill	29.5%
ROIC, without goodwill	29.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	500
Net Debt	333
Total Debt/EBITDA	0.4
Net Debt/EBITDA	0.3
EBITDA/Interest	89.9
Current Ratio	5.3
Quick Ratio	2.0

NMF = Not Meaningful

Investment Highlights

• Each of Fastenal's ~3,400 stores is a local, one-stop shop for a variety of OEM, MRO and construction supplies, and it also has more than 600 onsite locations. The firm's value proposition to customers centers on working within a decentralized environment to deliver local product to local people. The company was founded in 1967 and is headquartered in Minnesota.

• Fastenal's motto is 'Growth through Customer Service.' The firm believes it can grow market share by providing the greatest value to the customer. Fastenal's ability to grow is amplified if it can service the customer at the closest economic point of contact. Execution remains critical.

• Fastenal believes its local store network, along with its increasing 'keep-fill' initiatives close to customer locations, gives it an important structural advantage over other distributors who have embraced e-commerce. The company's strategic focus will continue to be on becoming the best same-day supplier of industrial and construction products worldwide.

• Fastenal's revenue breakdown by industry is: ~40% manufacturing, ~26% heavy equipment, ~13% construction, ~10% resellers, and ~11% other. It continues to look for growth from national accounts (roughly 50% of revenue) as well as its vending and e-business. The number of Onsite locations, which serve single customers, continues to grow.

• As it relates to operations, Fastenal is our favorite distributor, and its platform can't be easily replicated by peers. Recent results have shown the impact of rising employee, occupancy, and transportation related expenses, all of which could continue to impact margin performance in the near term.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**59.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Anixter	9.4	1.5	82.4%
MSC Industrial	14.3	1.9	97.5%
W.W. Grainger	16.6	1.6	104.3%
WESCO	10.1	1.6	81.6%
Peer Median	12.2	1.6	89.9%
Fastenal	**21.7**	**2.6**	**119.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	4,391	4,965	5,496
Revenue, YoY%	10.8%	13.1%	10.7%
Operating Income	881	999	1,105
Operating Margin %	20.1%	20.1%	20.1%
Net Income	579	752	819
Net Income Margin %	13.2%	15.1%	14.9%
Diluted EPS	2.01	2.62	2.87
Diluted EPS, YoY %	16.2%	30.4%	9.6%
Free Cash Flow (CFO-capex)	465	498	622
Free Cash Flow Margin %	10.6%	10.0%	11.3%

In Millions of USD (except for per share items)

Structure of the Industrial Distributors Industry — GOOD

Though consolidating, the industrial distributors industry remains fragmented and highly competitive. Delivering cost savings, convenience, and product availability are the major competitive factors. Some rivals use vans to sell products in markets away from their warehouses, while others rely on mail order, websites or telemarketing sales. Still, others operate stores and use centralized distribution centers to supply their networks. The industry is economically-sensitive and exposed to the threat of aggressive pricing strategies, but we generally like the group's massive distribution platforms that are difficult to replicate.

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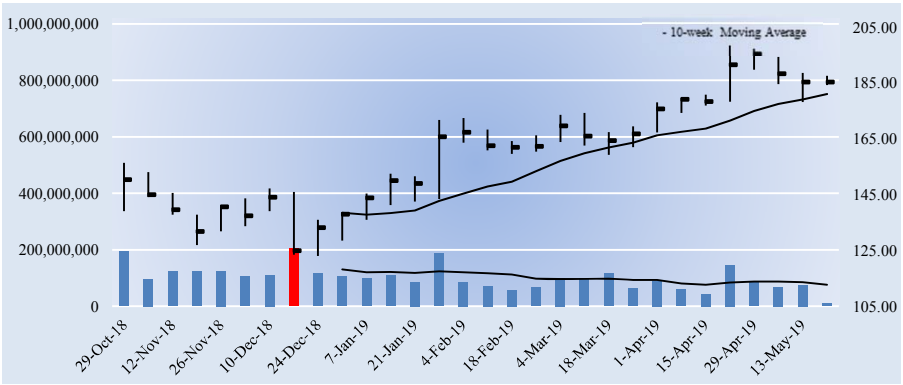
Facebook FB FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$227.00	$170.00 - $284.00	MEGA-CAP BLEND	Information Technology	Internet Software & Svcs

We think concerns over shares of Facebook are overblown. The company remains one of our favorite ideas.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**AGGRESSIVE**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**181.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$541,261
Avg Weekly Vol (30 wks)	100,538
30-week Range (USD)	123.019997 - 198.479996
Valuentum Sector	Information Technology
5-week Return	4.0%
13-week Return	13.6%
30-week Return	24.8%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	10.63
P/E on Est. Normal Diluted EPS	17.4
Est. Normal EBITDA	43,631
Forward EV/EBITDA	16.9
EV/Est. Normal EBITDA	11.5
Forward Revenue Growth (5-yr)	17.7%
Forward EPS Growth (5-yr)	12.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	23.8%
Return on Assets	21.2%
ROIC, with goodwill	58.1%
ROIC, without goodwill	123.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	0
Net Debt	-41,114
Total Debt/EBITDA	0.0
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	7.2
Quick Ratio	6.9

NMF = Not Meaningful

Investment Highlights

• Facebook's mission is to make the world more open and connected. People use Facebook to stay in touch with friends/family, to learn about the latest news, and to share and express what matters to them, and the company continues to expand its reach with businesses such as the popular social media platform Instagram. The company was founded in 2004 and is headquartered in California.

• It's unfair to lump Facebook in with other social media companies. Facebook is generating tens of billions in revenue and is throwing off gobs of excess free cash flow, but capital spending is on the rise. The company's balance sheet is pristine with more than $41 billion in cash and no debt at the end of 2018.

• Facebook's number of mobile users continues to grow, with mobile ad revenue accounting for 93% of total ad revenue in the fourth quarter of 2018, up from 83% in full-year 2016. Data privacy and security remain paramount. Its operating margin guidance for the years ahead disappointed due to increased levels of spending in areas such as product development and infrastructure, safety and security, and AR/VR.

• Facebook's free cash flow generation and balance sheet are strong sources of reassurance, but investors must be cognizant of the low barriers to entry in the social media space as well as the potentially fickle nature of its users. Recent social and political pressures have impacted public perception, and it is reportedly seeking a major cybersecurity acquisition.

• Facebook's monthly active users (MAUs) count is still growing at a solid rate. Overall MAUs sat at 2.32 billion at the end of 2018, while daily active users sat at 1.52 billion, both of which grew 9% from a year earlier. Concerns over user growth in the important Europe and US & Canada regions have cropped up.

Relative Valuation

	Forward P/E	PEG	Price / FV
Baidu	31.8	NMF	75.9%
Ultimate Software	60.8	8.1	99.8%
Alphabet	25.3	1.8	83.0%
Twitter	44.7	NMF	126.7%
Peer Median	38.2	5.0	91.4%
Facebook	**25.8**	**1.4**	**81.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	40,653	55,838	68,960
Revenue, YoY%	47.1%	37.4%	23.5%
Operating Income	20,203	24,913	24,274
Operating Margin %	49.7%	44.6%	35.2%
Net Income	15,920	22,111	21,013
Net Income Margin %	39.2%	39.6%	30.5%
Diluted EPS	5.39	7.57	7.19
Diluted EPS, YoY %	54.6%	40.6%	-5.0%
Free Cash Flow (CFO-capex)	17,483	15,359	9,260
Free Cash Flow Margin %	43.0%	27.5%	13.4%

In Millions of USD (except for per share items)

Structure of the Internet Software & Services Industry — NEUTRAL

The Internet software/services industry is composed of a variety of companies with rapidly-changing business models. Most focus on improving the ways people connect with information, either via Internet search or by social media platforms, and generate revenue primarily by delivering cost-effective online advertising. Constituents earn significant returns on invested capital due to their capital-light operations, though competition remains fierce. We expect most companies in this group to look substantially different 10 years from now than they do today. Overall, we're neutral on the structure.

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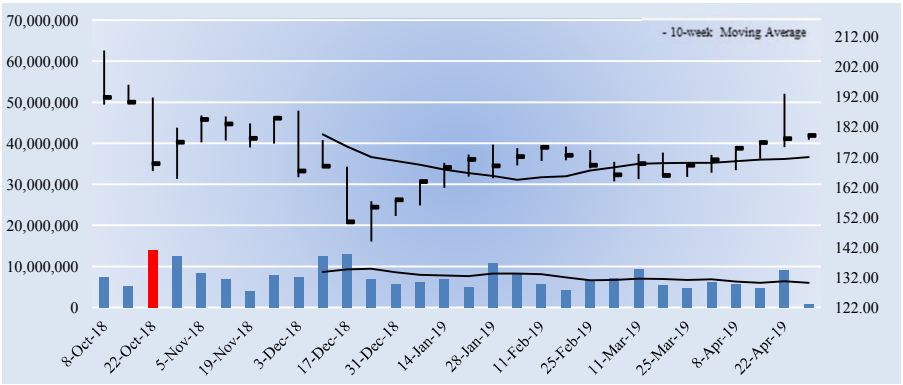
General Dynamics GD FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$181.00	$145.00 - $217.00	LARGE-CAP VALUE	Industrials	A&D Prime

General Dynamics has an impressive backlog, and its aerospace segment boasts strong operating leverage.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**172.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$53,584
Avg Weekly Vol (30 wks)	7,332
30-week Range (USD)	143.869995 - 207.470001
Valuentum Sector	Industrials
5-week Return	5.3%
13-week Return	5.8%
30-week Return	-13.0%
Dividend Yield %	2.3%
Dividends per Share	4.08
Forward Dividend Payout Ratio	34.5%
Est. Normal Diluted EPS	14.53
P/E on Est. Normal Diluted EPS	12.3
Est. Normal EBITDA	6,431
Forward EV/EBITDA	11.8
EV/Est. Normal EBITDA	10.2
Forward Revenue Growth (5-yr)	5.3%
Forward EPS Growth (5-yr)	9.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	27.7%
Return on Assets	8.8%
ROIC, with goodwill	17.3%
ROIC, without goodwill	54.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	13,081
Net Debt	12,071
Total Debt/EBITDA	2.5
Net Debt/EBITDA	2.3
EBITDA/Interest	14.0
Current Ratio	1.2
Quick Ratio	0.3

NMF = Not Meaningful

Investment Highlights

• General Dynamics is a leader in business aviation; combat vehicles/systems, armaments, and munitions; shipbuilding/marine systems; and information systems and technology. The firm's product line-up ranges from Gulfstream business jets to nuclear-powered submarines. It was founded in 1899 and is based in Virginia.

• As of the end of first quarter of 2019, the firm's total backlog of unfulfilled business orders was $69.2 billion, up 11.4% on a year-over-year basis. Contract activity has been solid across most business groups of late, with particular strength coming from its 'Marine Systems' segment.

• The modest growth across General Dynamics' business is expected to begin projecting higher. In its Aerospace segment, the return to full production and delivery of its G500 model in 2018 and the G600 model in 2019 will be a key growth driver. The company is forecasting sales to rise by an average of 5.6% annually through 2020 (without CSRA), which is roughly in line with our forecasts.

• Management remains focused on improving margins, generating cash, and improving returns on capital. Strong operating leverage in its aerospace segment, resilient performance in combat systems, and healthy navy construction work offer an optimistic outlook. It recently acquired CSRA, which is now part of its 'Information Technology' segment for ~$9.7 billion.

• General Dynamics continues to raise its dividend annually. Strong free cash flow generation and a focus on return on invested capital make continued increases a likelihood. However, recent deals have pushed its total debt load to elevated levels.

Relative Valuation

	Forward P/E	PEG	Price / FV
Boeing	23.0	1.2	114.2%
Lockheed Martin	16.0	1.7	107.7%
Northrop Grumman	14.9	2.0	101.1%
Raytheon	15.0	1.3	96.9%
Peer Median	15.5	1.5	104.4%
General Dynamics	**15.2**	**1.7**	**99.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	30,973	36,193	38,582
Revenue, YoY%	-1.2%	16.9%	6.6%
Operating Income	4,177	4,457	4,761
Operating Margin %	13.5%	12.3%	12.3%
Net Income	2,912	3,358	3,466
Net Income Margin %	9.4%	9.3%	9.0%
Diluted EPS	9.56	11.23	11.83
Diluted EPS, YoY %	-3.1%	17.5%	5.3%
Free Cash Flow (CFO-capex)	3,451	2,458	3,113
Free Cash Flow Margin %	11.1%	6.8%	8.1%

In Millions of USD (except for per share items)

Structure of the Aerospace and Defense Industry — GOOD

The global commercial aerospace duopoly is being challenged by encroaching international competitors who are intent on increasing market share, but Boeing and Airbus continue to dominate the large commercial aircraft segment. Long-term demand for commercial aircraft is cyclical and depends on the health of the credit markets, airline customers, and lessors, but massive backlogs and a strong multi-decade demand outlook are reasons for confidence. The defense industry has strong competition in all market segments and remains dependent on government funding decisions and competing budget priorities.

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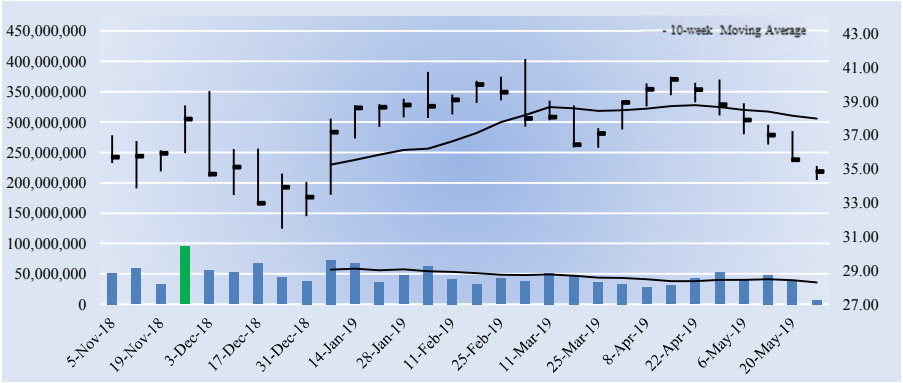
General Motors GM UNDERVALUED 6.2%

Buying Index™ 6 **Value Rating** ✓

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$49.00	$37.00 - $61.00	LARGE-CAP VALUE	Consumer Discretionary	Auto Manufacturers

General Motors' shares will continue to be on a wild ride as US-China trade news continues.

Stock Chart (weekly)



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)	$49,863
Avg Weekly Vol (30 wks)	46,426
30-week Range (USD)	31.459999 - 41.5
Valuentum Sector	Consumer Discretionary
5-week Return	-12.3%
13-week Return	-12.2%
30-week Return	-3.2%
Dividend Yield %	4.4%
Dividends per Share	1.52
Forward Dividend Payout Ratio	22.4%
Est. Normal Diluted EPS	6.67
P/E on Est. Normal Diluted EPS	5.2
Est. Normal EBITDA	22,649
Forward EV/EBITDA	5.6
EV/Est. Normal EBITDA	5.7
Forward Revenue Growth (5-yr)	0.3%
Forward EPS Growth (5-yr)	4.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	14.9%
Return on Assets	2.8%
ROIC, with goodwill	5.9%
ROIC, without goodwill	5.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	104,951
Net Debt	78,141
Total Debt/EBITDA	5.8
Net Debt/EBITDA	4.3
EBITDA/Interest	27.7
Current Ratio	0.9
Quick Ratio	0.7

NMF = Not Meaningful; Debt excludes debt associated with the finance sub.

Investment Highlights

• General Motors makes cars, crossovers, trucks and parts. The firm's brand names include Buick, Cadillac, Chevrolet, and GMC, among others. Founded in 1908 in Detroit, General Motors has become synonymous with American manufacturing. A 'new' and leaner GM emerged from bankruptcy in July 2009.

• GM's transformation plan is expected to help it develop into a leader in next-gen personal mobility. It is targeting annual run-rate cash savings of ~$6 billion by year-end 2020, and will prioritize electric and autonomous vehicle programs by doubling resources allocated to such programs over the next two years.

• GM has significantly improved its break-even point, which has helped drive margin improvements. It recently received a large investment from SoftBank in Cruise Automation, aimed at 'massive scale' next-gen production, which we view as a large positive. Management is targeting EPS-diluted-adjusted to be in a range of $6.50-$7.00, and it expects to achieve an adjusted ROIC of 20%+.

• Though there will be hiccups along the way, we don't think GM is finished expanding operating margins. Its intermediate-term goal is for EBIT-adjusted margins to be greater than 10% in North America. Near-term headwinds include commodity cost inflation, tariffs, SUV launch downtime, and China industry pressures.

• China will become the world's largest auto market, and GM has used its first-mover advantage to become a key player in the country. Slowing economic growth in China has materially impacted its auto market. GM's sale of its European operations was part of its strategy to focus on North America.

Investment Considerations

DCF Valuation	**UNDERVALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**POOR**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**OVERSOLD**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**38.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Ford	7.2	0.5	73.6%
Harley-Davidson	11.6	1.8	90.5%
Honda	7.0	NMF	78.7%
Toyota	19.1	1.2	99.6%
Peer Median	9.4	1.2	84.6%
General Motors	**5.1**	**1.3**	**71.1%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	145,588	147,049	146,167
Revenue, YoY%	-12.5%	1.0%	-0.6%
Operating Income	10,016	4,445	9,475
Operating Margin %	6.9%	3.0%	6.5%
Net Income	348	8,084	9,630
Net Income Margin %	0.2%	5.5%	6.6%
Diluted EPS	0.23	5.60	6.80
Diluted EPS, YoY %	-96.1%	NMF	NMF
Free Cash Flow (CFO-capex)	8,875	6,495	11,334
Free Cash Flow Margin %	6.1%	4.4%	7.8%

In Millions of USD (except for per share items)

Structure of the Auto Manufacturers Industry — VERY POOR

The auto manufacturers industry is characterized by high fixed costs, substantial operating leverage, and intense competition. Vehicle sales are impacted by general economic conditions, which are largely out of the control of participants, and by the cost of credit and fuel. Excess capacity, price discounting and other marketing initiatives can pressure the top line, while rising raw material and labor costs can squeeze the bottom line. Changing consumer preferences in type, model and fuel-efficiency can cause abrupt shifts in market share. The structural characteristics of the group are very poor.

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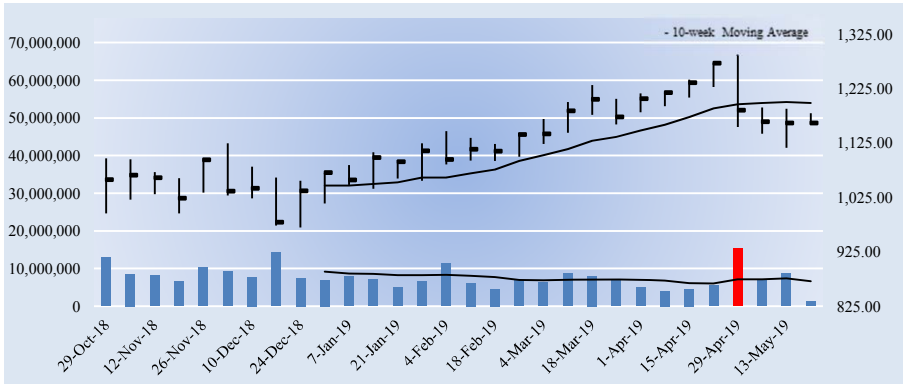
Alphabet GOOG FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$1401.00	$1051.00 - $1751.00	MEGA-CAP BLEND	Information Technology	Internet Software & Svcs

We believe shares of Alphabet are attractive, but investors should expect ongoing volatility. Our fair value estimate has been trimmed since the last update.



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**1199.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$817,428
Avg Weekly Vol (30 wks)	7,640
30-week Range (USD)	970.11 - 1289.27
Valuentum Sector	Information Technology
5-week Return	-6.0%
13-week Return	4.1%
30-week Return	7.4%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	65.25
P/E on Est. Normal Diluted EPS	17.8
Est. Normal EBITDA	65,717
Forward EV/EBITDA	15.1
EV/Est. Normal EBITDA	10.8
Forward Revenue Growth (5-yr)	14.1%
Forward EPS Growth (5-yr)	14.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	14.1%
Return on Assets	11.2%
ROIC, with goodwill	53.0%
ROIC, without goodwill	73.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,012
Net Debt	-105,128
Total Debt/EBITDA	0.1
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	3.9
Quick Ratio	3.8

NMF = Not Meaningful

Investment Highlights

• Known for its search dominance that it maintains, Alphabet is a tech company focused on a number of things: Android, ads, YouTube, Chrome, and research. We think the company will have some megahits in the years ahead. It reported an operating loss of ~$3.4 billion in 'Other Bets' in 2018, suggesting core levels of profitability are higher than reported.

• Alphabet offers investors a compelling combination of attractive valuation, growth potential, cash-flow generation and competitive profile. Very few firms are more attractive on a fundamental basis, in our view, and its impressive free cash flow conversion rates (consistently above 100%) speak to this.

• Alphabet is pleased with momentum in its mobile division, particularly within mobile advertising. The mobile Internet space will be key for the firm. Facebook is not backing down, and Amazon may be entering digital advertising in a big way. YouTube and programmatic advertising offer upside potential, but we're watching spending levels, which have spiked due in part to higher traffic acquisition costs.

• Alphabet has a strong future in search, and we continue to be in awe of the strength in this division. Its massive net cash position (~$105.1 billion at the end of 2018) gives the company a substantial cushion to fall back on as it invests in high-return opportunities and new concepts such as smart home features, Glass, Fiber, or other innovative ideas.

• Alphabet has three different stock classes with two different tickers. GOOGL is Class A stock, and GOOG represents the non-voting Class C stock that was created by a stock split in 2014 in order for Google founders to maintain majority control.

Relative Valuation

	Forward P/E	PEG	Price / FV
Baidu	31.8	NMF	75.9%
Ultimate Software	60.8	8.1	99.8%
Facebook	21.5	1.4	71.2%
Twitter	44.7	NMF	126.7%
Peer Median	38.2	4.8	87.9%
Alphabet	**25.3**	**1.8**	**83.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	110,855	136,819	160,489
Revenue, YoY%	22.8%	23.4%	17.3%
Operating Income	28,882	31,392	36,752
Operating Margin %	26.1%	22.9%	22.9%
Net Income	12,662	30,736	32,355
Net Income Margin %	11.4%	22.5%	20.2%
Diluted EPS	18.00	43.70	46.01
Diluted EPS, YoY %	-35.4%	142.8%	5.3%
Free Cash Flow (CFO-capex)	23,907	22,832	18,464
Free Cash Flow Margin %	21.6%	16.7%	11.5%

In Millions of USD (except for per share items)

Structure of the Internet Software & Services Industry — NEUTRAL

The Internet software/services industry is composed of a variety of companies with rapidly-changing business models. Most focus on improving the ways people connect with information, either via Internet search or by social media platforms, and generate revenue primarily by delivering cost-effective online advertising. Constituents earn significant returns on invested capital due to their capital-light operations, though competition remains fierce. We expect most companies in this group to look substantially different 10 years from now than they do today. Overall, we're neutral on the structure.

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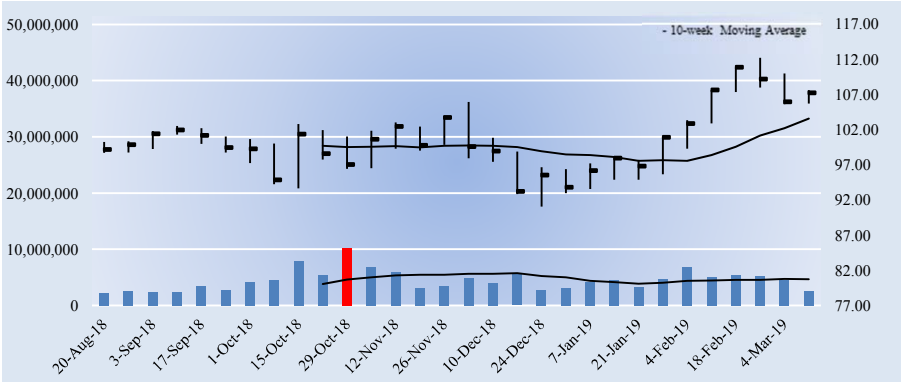
Genuine Parts GPC FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$92.00	$74.00 - $110.00	LARGE-CAP CORE	Consumer Discretionary	Specialty Retail - auto

Genuine Parts continues to be encouraged by trends in automotive aftermarket fundamentals. The company's track record of consistency is impressive.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**104.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$15,780
Avg Weekly Vol (30 wks)	4,482
30-week Range (USD)	91.04 - 112.18
Valuentum Sector	Consumer Discretionary
5-week Return	3.9%
13-week Return	8.5%
30-week Return	8.3%
Dividend Yield %	2.8%
Dividends per Share	3.05
Forward Dividend Payout Ratio	50.8%
Est. Normal Diluted EPS	7.32
P/E on Est. Normal Diluted EPS	14.6
Est. Normal EBITDA	1,752
Forward EV/EBITDA	12.3
EV/Est. Normal EBITDA	10.6
Forward Revenue Growth (5-yr)	3.1%
Forward EPS Growth (5-yr)	10.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Genuine Parts distributes auto parts and accessory items. It operates under a widely-recognized brand (NAPA), but the auto parts distribution business is highly competitive, and we don't expect weakening competition in any of its four business segments. Its 'Automotive Group' accounts for more than 50% of sales, and three-quarters of sales are generated in the US. The company is based in Georgia.

• Management continues to be encouraged by trends in automotive aftermarket fundamentals. The prime years for aftermarket repair start in year 6, and vehicles that are 6+ years of age make up more than 70% of the fleet. Genuine Parts holds ~7.5% of the global automotive aftermarket.

• Genuine Parts recently acquired Alliance Automotive Group (AAG) for ~$2 billion in cash. As the second largest European parts distribution platform, AAG focuses on light vehicle and commercial vehicle replacement parts and gives the firm access to the European markets with meaningful scale. Annual synergies of ~$25 million are expected to be achieved within three years.

• Genuine Parts' long-term annual objectives include annual sales growth of 6%-8%, steadily expand operating margin, and grow earnings per share by 7%-10%. 2019 sales growth is expected to come in at 3%-4% on an as-reported basis, and adjusted earnings per share guidance is a range of $5.81-$5.96, up from $5.68 in 2018.

• The firm has paid a cash dividend every year since going public in 1948. 2018 marks its 62nd consecutive year that it has increased annual dividends paid to shareholders. It has also managed to grow sales in 86 of its 91 year history and profit in 75 of its 91 year history.

Relative Valuation

	Forward P/E	PEG	Price / FV
AutoNation	8.1	1.4	73.4%
AutoZone	15.3	1.9	126.6%
CarMax	12.8	0.9	110.7%
O'Reilly Automotive	20.5	2.2	128.4%
Peer Median	14.0	1.6	118.6%
Genuine Parts	**17.8**	**1.9**	**116.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	21.3%
Return on Assets	6.8%
ROIC, with goodwill	15.4%
ROIC, without goodwill	21.0%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	16,309	18,735	19,260
Revenue, YoY%	6.3%	14.9%	2.8%
Operating Income	1,020	1,110	1,268
Operating Margin %	6.3%	5.9%	6.6%
Net Income	617	810	875
Net Income Margin %	3.8%	4.3%	4.5%
Diluted EPS	4.18	5.50	6.01
Diluted EPS, YoY %	-9.0%	31.8%	9.2%
Free Cash Flow (CFO-capex)	659	912	838
Free Cash Flow Margin %	4.0%	4.9%	4.4%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	3,143
Net Debt	2,810
Total Debt/EBITDA	2.3
Net Debt/EBITDA	2.1
EBITDA/Interest	13.3
Current Ratio	1.3
Quick Ratio	0.5

NMF = Not Meaningful

Structure of the Retail Auto Parts Industry — GOOD

The retail auto parts industry is characterized by stiff competition in many areas, including brand recognition, customer service, and price. The industry is impacted by both the age and number of vehicles in service, especially those that are no longer under manufacturer's warranties (typically seven years old and older). Demand for retail auto parts can best be described as counter-cyclical: as consumers' cash flows decrease, drivers tend to keep their vehicles longer, leading to more retail auto parts sales. Though competition among constituents is intense, we like the industry's defensive characteristics.

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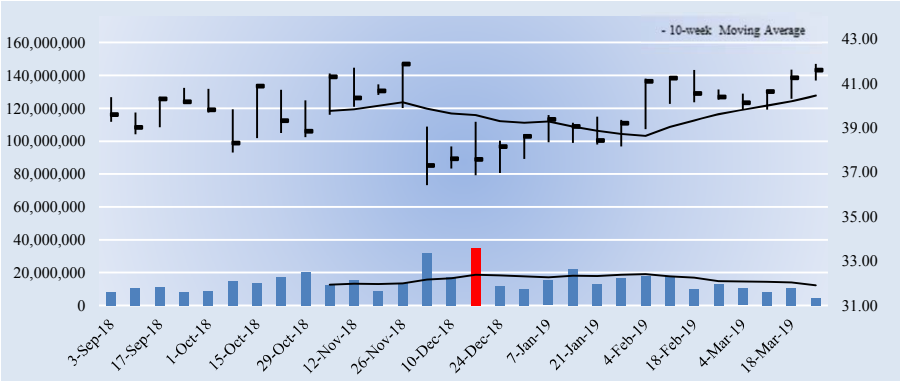
GlaxoSmithKline GSK FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$45.00	$36.00 - $54.00	LARGE-CAP VALUE	Health Care	Pharmaceuticals - Big

There are a number of moving parts at GlaxoSmithKline, and management is optimistic about its potential in oncology.

Stock Chart (weekly)



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)	$103,397
Avg Weekly Vol (30 wks)	14,314
30-week Range (USD)	36.41 - 41.91
Valuentum Sector	Health Care
5-week Return	2.4%
13-week Return	8.8%
30-week Return	3.1%
Dividend Yield %	5.7%
Dividends per Share (in GBP)	2.39
Forward Dividend Payout Ratio	296.3%
Est. Normal Diluted EPS (in GBP	0.92
P/E on Est. Normal Diluted EPS	34.1
Est. Normal EBITDA (in GBP)	8,892
Forward EV/EBITDA	12.4
EV/Est. Normal EBITDA	11.2
Forward Revenue Growth (5-yr)	2.3%
Forward EPS Growth (5-yr)	7.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	211.1%
Return on Assets	4.2%
ROIC, with goodwill	24.1%
ROIC, without goodwill	29.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of GBP

Total Debt	26,064
Net Debt	22,106
Total Debt/EBITDA	3.0
Net Debt/EBITDA	2.6
EBITDA/Interest	10.8
Current Ratio	0.8
Quick Ratio	0.5

NMF = Not Meaningful

Investment Highlights

• GSK is a UK-based global healthcare company. The firm has a significant global commercial presence in 150+ markets, a network of 80+ manufacturing sites in 35+ countries and large R&D centers in the UK, USA, Spain, Belgium and China. Pharmaceuticals account for ~60% of sales. The company was founded in 1935.

• From 2016-2020 GSK is expecting a low-to-mid single digit compound annual growth rate in sales, as well as mid-to-high single digit constant exchange rate compound annual growth rate in core earnings per share. A restructuring of its recently augmented Consumer Healthcare should help long-term earnings.

• Thanks in part to GSK's progress in oncology, the firm has the potential to file up to 20 new molecular entities (NMEs) and product line extensions (PLEs) by 2020. The company currently has more than 40 NMEs with significant data readouts coming in 2018-2020. It recently acquired Tesaro for ~$5.1 billion, and it is creating a JV with Pfizer in consumer health in which it will own a majority stake.

• Roughly one-third of GSK's overall business is outside the US and Europe, though sales in the US remain resilient. The company continues to deliver on restructuring benefits as it capitalizes on its drug pipeline, and management expects annual cost savings of £1 billion by 2020. It is also targeting free cash flow coverage of dividends of 1.25x-1.5x by 2020.

• GSK has been working closely with Novartis, but it recently acquired Novartis' stake in their Consumer Healthcare business collaboration for ~$13 billion. GSK is targeting an operating margin in the mid-20s for the segment by 2022, and the deal could help it achieve improved credit ratings.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**40.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Abbott	24.4	2.5	116.2%
Eli Lilly	22.9	2.1	123.6%
Merck	20.3	2.5	113.6%
Pfizer	14.5	1.7	94.3%
Peer Median	21.6	2.3	114.9%
GlaxoSmithKline	**NMF**	**6.0**	**92.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	30,186	30,821	31,838
Revenue, YoY%	8.2%	2.1%	3.3%
Non-GAAP Operating Income	5,696	6,772	6,158
Non-GAAP EBIT %	18.9%	22.0%	19.3%
Non-GAAP Net Income	1,532	3,623	4,009
Non-GAAP NI Margin %	5.1%	11.8%	12.6%
Non-GAAP Diluted EPS	0.31	0.73	0.81
Non-GAAP Dil EPS, YoY %	66.9%	135.1%	10.7%
Non-GAAP FCF (CFO-capex)	4,716	6,635	6,716
Non-GAAP FCF Margin %	15.6%	21.5%	21.1%

In Millions of GBP (except for per share items)

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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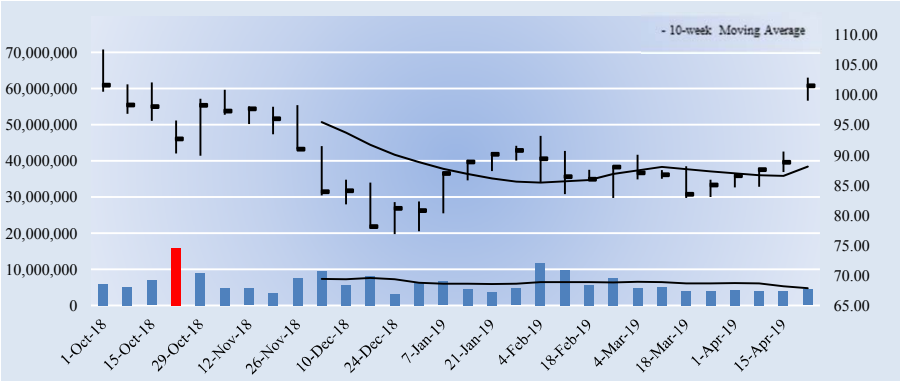
Hasbro HAS FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$98.00	$78.00 - $118.00	LARGE-CAP CORE	Consumer Discretionary	Leisure

Hasbro expects to move beyond some recent top-line challenges in 2019, and its 'Franchise Brands' segment should benefit from a strong upcoming movie line up.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**IMPROVING**
Near-term Technical Support, 10-week MA	**88.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$12,883
Avg Weekly Vol (30 wks)	6,183
30-week Range (USD)	76.84 - 107.57
Valuentum Sector	Consumer Discretionary
5-week Return	21.9%
13-week Return	13.9%
30-week Return	-4.3%
Dividend Yield %	2.7%
Dividends per Share	2.72
Forward Dividend Payout Ratio	62.6%
Est. Normal Diluted EPS	5.60
P/E on Est. Normal Diluted EPS	18.1
Est. Normal EBITDA	1,169
Forward EV/EBITDA	13.9
EV/Est. Normal EBITDA	11.5
Forward Revenue Growth (5-yr)	4.3%
Forward EPS Growth (5-yr)	31.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Hasbro's products include toys/games, television programming, motion pictures and digital gaming. The firm owns well-known brands such as Transformers, Nerf, Playskool, My Little Pony, G.I. Joe, Magic: The Gathering, and Monopoly. The company was founded in 1923 and is headquartered in Rhode Island.

• Though concerns over the demise of physical toys may not be completely unfounded in this digital age, Hasbro is less a toy company than it is a licensing firm. Its high-margin 'Entertainment and Licensing' segment has performed well of late, but the firm is not immune to fluctuations in toy demand.

• Hasbro's merchandizing relationship with Disney Consumer Products for the Disney Princess and Frozen properties is a huge win, and we expect it to benefit from the relationship for years to come. A changing landscape in Europe and the US and the liquidation of Toys 'R' Us impacted 2018 results. 'Franchise Brands' performance has since rebounded nicely, but demand here can be hit-based to a degree.

• Hasbro's medium-term objectives include low- to mid-single digit growth in developed economies via brand innovation and market share gains, double-digit growth in emerging markets, operating profit margin sustainment with slight growth in the near term, and annual operating cash flow in a range of $600-$700 million. Its debt-to-EBITDA target is 2x-2.5x.

• Hasbro has been paying dividends since 1977, and it has raised the payout at a 13% CAGR over the past 10 years. Share repurchases will be ongoing, and rumors continue to swirl regarding a potential takeover of Mattel, which rejected Hasbro's latest offer.

Relative Valuation

	Forward P/E	PEG	Price / FV
Carnival Corp	11.7	1.1	95.8%
Intl Game Technology	10.1	NMF	78.2%
Mattel	NMF	NMF	88.1%
Royal Caribbean	12.0	1.1	109.0%
Peer Median	11.7	1.1	92.0%
Hasbro	**23.4**	**1.8**	**103.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	21.3%
Return on Assets	7.6%
ROIC, with goodwill	34.7%
ROIC, without goodwill	48.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	5,210	4,580	4,896
Revenue, YoY%	3.8%	-12.1%	6.9%
Operating Income	810	331	741
Operating Margin %	15.6%	7.2%	15.1%
Net Income	397	220	551
Net Income Margin %	7.6%	4.8%	11.3%
Diluted EPS	3.12	1.74	4.34
Diluted EPS, YoY %	-28.1%	-44.4%	150.0%
Free Cash Flow (CFO-capex)	589	506	626
Free Cash Flow Margin %	11.3%	11.0%	12.8%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,705
Net Debt	522
Total Debt/EBITDA	3.1
Net Debt/EBITDA	1.0
EBITDA/Interest	6.0
Current Ratio	2.4
Quick Ratio	1.9

NMF = Not Meaningful

Structure of the Leisure Industry — NEUTRAL

The leisure industry is composed of firms that span the cruise line business to those that make toys and children's products. The cruise business has grown significantly in recent years, but still remains relatively small compared to the overall vacation industry (including land-based destinations). Competition among toy companies is intensifying due to recent trends toward shorter toy life cycles, the increasing use of technology in toys, and the proliferation of electronic consumer products and video games. All industry participants compete for consumer discretionary income. We're neutral on the structure of the group.

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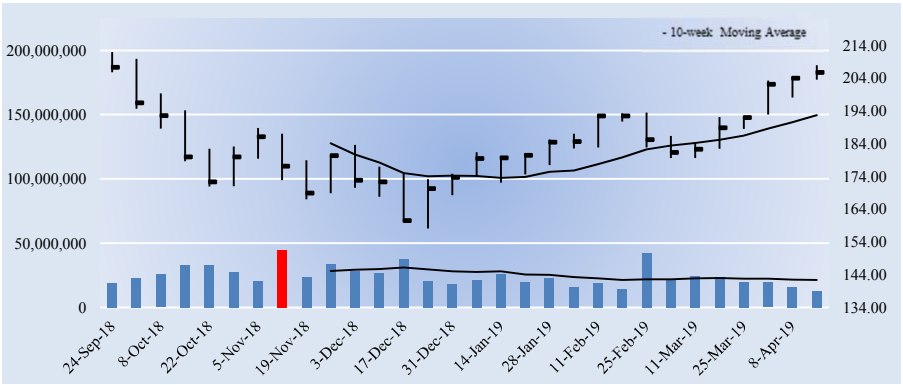
Home Depot HD FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$175.00	$140.00 - $210.00	MEGA-CAP CORE	Consumer Discretionary	Specialty Retailers

Home Depot's financial performance depends in part on the stability of the housing, residential construction and home improvement markets, which have been resilient of late.

Stock Chart (weekly)



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)	$235,069
Avg Weekly Vol (30 wks)	24,499
30-week Range (USD)	158.09 - 211.84
Valuentum Sector	Consumer Discretionary
5-week Return	12.7%
13-week Return	15.9%
30-week Return	-2.8%
Dividend Yield %	2.6%
Dividends per Share	5.44
Forward Dividend Payout Ratio	53.3%
Est. Normal Diluted EPS	12.43
P/E on Est. Normal Diluted EPS	16.5
Est. Normal EBITDA	20,880
Forward EV/EBITDA	14.5
EV/Est. Normal EBITDA	12.6
Forward Revenue Growth (5-yr)	4.7%
Forward EPS Growth (5-yr)	8.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	-1599.4%
Return on Assets	21.2%
ROIC, with goodwill	43.1%
ROIC, without goodwill	46.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	29,202
Net Debt	27,424
Total Debt/EBITDA	1.7
Net Debt/EBITDA	1.6
EBITDA/Interest	16.8
Current Ratio	1.1
Quick Ratio	0.2

NMF = Not Meaningful

Investment Highlights

• Home Depot is the world's largest home improvement specialty retailer. Its stores sell an assortment of building materials, home improvement and lawn/garden products. Its stores average ~104,000 square feet of enclosed space, with ~24,000 additional square feet of outside garden area. The company was founded in 1978 and is based in Atlanta, Georgia.

• Home Depot's financial performance depends in part on the stability of the housing, residential construction and home improvement markets, which have been resilient of late. However, these markets can and do experience wild swings over the course of a full economic cycle.

• Home Depot has an interesting growth strategy. Canada and Mexico are core pieces in this strategy, where it is the #1 home improvement retailer. As of the end of fiscal 2018 (ended January 2019) ~13% of the firm's total stores were in Canada or Mexico. The strategy also involves saying no to international expansion into new geographies and large acquisitions to 'buy' sales.

• Home Depot serves three primary customer groups: Do-It-Yourself customers, Do-It-For-Me customers, and professional customers (tradesmen). Home Depot plans to focus more on its professional customers, where average tickets are substantially larger. Providing recurring MRO needs is among its core initiatives in this area.

• Home Depot's impressive financial performance of late, specifically its strong free cash flow generation, has allowed it to raise its dividend in a big way. Management is targeting revenue of $115-$120 billion, an operating margin of 14.4%-15.0%, and ROIC of 40%+ in fiscal 2020.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**193.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Bed Bath & Beyond	8.8	NMF	78.5%
Best Buy	12.9	2.6	96.9%
Lowe's	18.6	1.5	118.5%
Office Depot	7.6	0.9	61.5%
Peer Median	10.8	1.5	87.7%
Home Depot	**20.2**	**2.4**	**117.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	100,904	108,203	112,639
Revenue, YoY%	6.7%	7.2%	4.1%
Operating Income	14,681	15,777	16,193
Operating Margin %	14.5%	14.6%	14.4%
Net Income	8,630	11,121	11,427
Net Income Margin %	8.6%	10.3%	10.1%
Diluted EPS	7.29	9.73	10.20
Diluted EPS, YoY %	13.0%	33.5%	4.8%
Free Cash Flow (CFO-capex)	10,134	10,596	11,388
Free Cash Flow Margin %	10.0%	9.8%	10.1%

In Millions of USD (except for per share items)

Structure of the Specialty Retailers Industry — NEUTRAL

The specialty retail segment is fragmented, highly competitive, and economically-sensitive. The group covers a broad array of businesses and is dominated by retailers with large brick-and-mortar store footprints. Though some constituents may be insulated from e-commerce competition, others risk obsolescence as product distribution moves to digital means, and online retailers offer lower prices for identical goods and services. We're fairly neutral on the structure of the industry, though some constituents will inevitably face secular and permanent declines.

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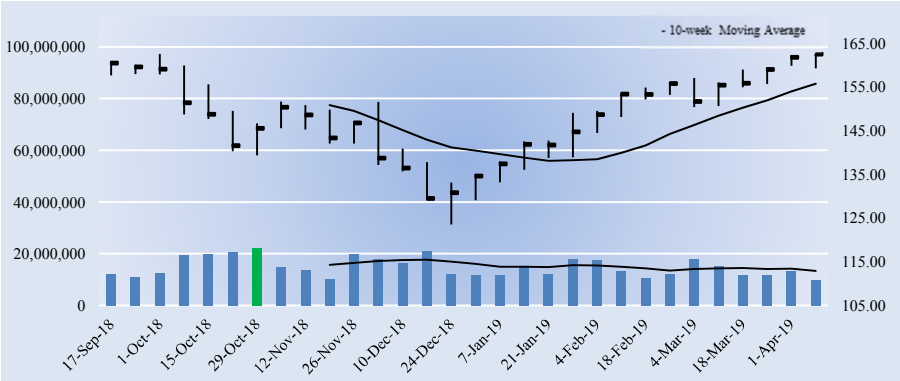
Honeywell HON FAIRLY VALUED

Buying Index™ 5 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$144.00	$115.00 - $173.00	LARGE-CAP CORE	Industrials	Conglomerates

Honeywell is now focused on six key end markets and has solid expectations for its near-term financial performance.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**156.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$122,340
Avg Weekly Vol (30 wks)	14,919
30-week Range (USD)	123.48 - 162.63
Valuentum Sector	Industrials
5-week Return	7.6%
13-week Return	19.2%
30-week Return	2.7%
Dividend Yield %	2.0%
Dividends per Share	3.28
Forward Dividend Payout Ratio	41.1%
Est. Normal Diluted EPS	9.42
P/E on Est. Normal Diluted EPS	17.2
Est. Normal EBITDA	10,381
Forward EV/EBITDA	14.3
EV/Est. Normal EBITDA	12.3
Forward Revenue Growth (5-yr)	1.4%
Forward EPS Growth (5-yr)	3.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Honeywell is a conglomerate operating in the following areas: aerospace, automation and controls solutions, performance materials and technologies, and transportation systems. Its aerospace products are used on virtually every aircraft, and its warehouse automation business is gaining steam. The company was founded in 1920 and is based in New Jersey.

• For an industrial giant, Honeywell generates nice margins. Its 'Performance Materials and Technology' segment boasts its highest profit margins in the low- to mid-20% range, followed by its 'Aerospace' segment in the low 20% range. It is working to optimize fixed costs in its manufacturing and logistics facilities.

• Honeywell expects continued macro strength across is major end markets in 2019 including commercial aviation, defense, and process automation, which will be drive by flight hours growth, robust defense budgets, and warehouse building. It expects the impact of tariffs enacted thus far to be manageable and is targeting a $340 million reduction in corporate and other stranded costs by the end of the year.

• Honeywell's long-term financial targets include 3%-5% annual organic sales growth, 30-50 basis points of margin expansion per year, EPS growth greater than peers, a cash conversion rate greater than 100%, and the maintenance of investment grade credit ratings. Management is also targeting dividend growth in-line with earnings growth.

• Honeywell has spun-off its Homes and ADI Global Distribution business ($4.5 billion annual revenue), which is now Resideo (REZI), and will spin-off its Transportation Systems business ($3 billion revenue). Honeywell is now focused on six key end markets and has high hopes for near-term performance.

Relative Valuation

	Forward P/E	PEG	Price / FV
3M	20.5	2.3	124.2%
Danaher	27.2	2.6	121.9%
General Electric	15.6	NMF	81.8%
United Technologies	17.4	1.6	113.7%
Peer Median	18.9	2.3	117.8%
Honeywell	**20.3**	**2.4**	**112.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	24.5%
Return on Assets	8.0%
ROIC, with goodwill	19.4%
ROIC, without goodwill	48.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	16,214
Net Debt	5,304
Total Debt/EBITDA	2.1
Net Debt/EBITDA	0.7
EBITDA/Interest	21.3
Current Ratio	1.3
Quick Ratio	1.0

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	40,534	41,802	37,287
Revenue, YoY%	3.1%	3.1%	-10.8%
Operating Income	7,151	6,705	7,893
Operating Margin %	17.6%	16.0%	21.2%
Net Income	1,655	6,765	6,016
Net Income Margin %	4.1%	16.2%	16.1%
Diluted EPS	2.14	8.98	7.99
Diluted EPS, YoY %	-65.4%	319.1%	-11.1%
Free Cash Flow (CFO-capex)	4,935	5,606	5,728
Free Cash Flow Margin %	12.2%	13.4%	15.4%

In Millions of USD (except for per share items)

Structure of the Conglomerates Industry — GOOD

The industrial conglomerate industry is characterized by firms that operate various business lines on a global scale. Demand for industrial products tends to be cyclical in nature, and most firms couple their manufacturing operations with generally more stable services businesses to mitigate fundamental volatility. Firms tend to have bargaining power over suppliers due to industry dominance and boast substantial resources to adapt to changing conditions or competitive threats. Most sell products under powerful and recognizable brand names and look to emerging markets for future growth. We like the group.

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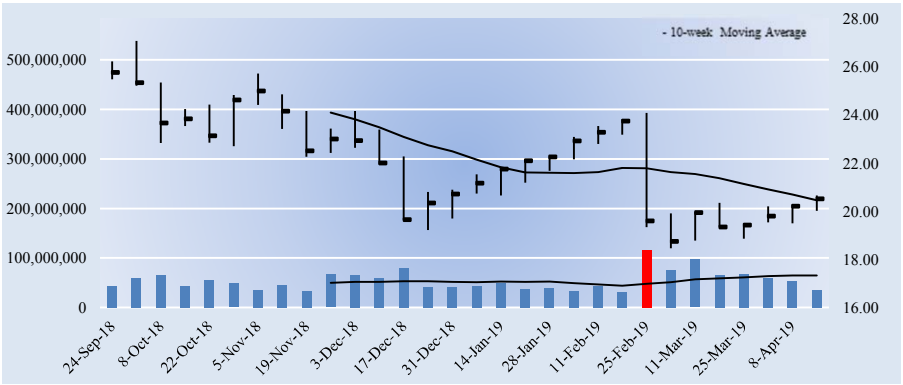
Hewlett-Packard HPQ FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$29.00	$20.00 - $38.00	LARGE-CAP VALUE	Information Technology	Computer Hardware

Hewlett-Packard remains tied to the struggling PC market, and the potential slowing of economic growth in China and the growing popularity and power of smartphones continue to work against the market.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**20.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$33,530
Avg Weekly Vol (30 wks)	54,505
30-week Range (USD)	18.46 - 27.08
Valuentum Sector	Information Technology
5-week Return	3.1%
13-week Return	-5.1%
30-week Return	-20.2%
Dividend Yield %	3.1%
Dividends per Share	0.64
Forward Dividend Payout Ratio	29.3%
Est. Normal Diluted EPS	2.37
P/E on Est. Normal Diluted EPS	8.7
Est. Normal EBITDA	5,189
Forward EV/EBITDA	6.9
EV/Est. Normal EBITDA	6.6
Forward Revenue Growth (5-yr)	1.2%
Forward EPS Growth (5-yr)	-4.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	-103.4%
Return on Assets	9.3%
ROIC, with goodwill	30.3%
ROIC, without goodwill	67.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	5,987
Net Debt	821
Total Debt/EBITDA	1.2
Net Debt/EBITDA	0.2
EBITDA/Interest	15.6
Current Ratio	0.9
Quick Ratio	0.4

NMF = Not Meaningful

Investment Highlights

• Hewlett-Packard's recent split has resulted in two independent companies, HP and HP Enterprise. HP provides products, technologies, software, solutions, and services to individual consumers and small- and medium-sized businesses, as well as to the government, health, and education sectors. HP Enterprise provides technology solutions to business and public sector enterprises.

• HP remains tied to the struggling PC market as nearly 40% of net revenue comes from notebooks and another 20% from desktops. However, its 'Printing' segment makes up roughly two-thirds of non-GAAP operating profit despite accounting for only ~35% of net revenue as it carries a ~16% operating margin.

• The global PC market remains under pressure, but some observers see it stabilizing on the back of improved all-in-one PC demand. The potential slowing of economic growth in China and the growing popularity and power of smartphones are underlying factors that continue to work against the market. The firm's market share sits at 22.5% as of the end of fiscal 2018.

• Though the company derives roughly one-third of net revenue from the US, it has a nicely balanced portfolio geographically speaking. The Americas account for ~41% of net revenue, followed by the EMEA region at 36% and the Asia-Pacific and Japan region at 23% as of the first quarter of fiscal 2019, the latter of which has been an area of strength of late.

• HP is working to take part in the disruptive 3D printing industry with its HP Metal Jet, which is designed for mass production. Its expects to build up to broad availability of the Metal Jet in 2021, and its Multi Jet Fusion is the most used industrial 3D printer in the world.

Relative Valuation

	Forward P/E	PEG	Price / FV
Apple	18.1	2.2	93.5%
BlackBerry	NMF	2.1	92.1%
Cray	NMF	NMF	118.5%
IBM	10.0	1.4	94.2%
Peer Median	14.0	2.1	93.8%
Hewlett-Packard	**9.4**	**NMF**	**70.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Oct-17	Oct-18	Oct-19
Revenue	52,056	58,472	58,881
Revenue, YoY%	7.9%	12.3%	0.7%
Operating Income	4,012	4,326	4,471
Operating Margin %	7.7%	7.4%	7.6%
Net Income	2,526	5,327	3,493
Net Income Margin %	4.9%	9.1%	5.9%
Diluted EPS	1.48	3.26	2.18
Diluted EPS, YoY %	-3.0%	119.7%	-33.1%
Free Cash Flow (CFO-capex)	3,275	3,982	3,181
Free Cash Flow Margin %	6.3%	6.8%	5.4%

In Millions of USD (except for per share items)

Structure of the Computer Hardware Industry — NEUTRAL

The computer hardware space, which spans the personal computer to the iPhone and iPad, is highly competitive. The industry 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 performance. Obsolescence may be an eventuality for some, and services revenue has become critical for others. We're neutral on the space.

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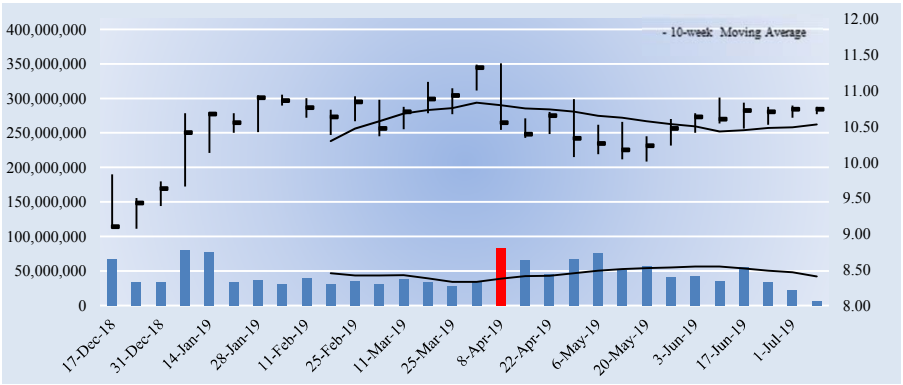
Infosys Ltd INFY FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$10.00	$8.00 - $13.00	LARGE-CAP CORE	Information Technology	IT Services

Infosys is targeting revenue growth in the range of 7.5%-9.5% in constant currency and operating margin guidance in the range of 21%-23%.

Stock Chart (weekly)



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)	$46,751
Avg Weekly Vol (30 wks)	45,241
30-week Range (USD)	9.07 - 11.38
Valuentum Sector	Information Technology
5-week Return	-0.2%
13-week Return	1.2%
30-week Return	9.4%
Dividend Yield %	2.3%
Dividends per Share	0.25
Forward Dividend Payout Ratio	45.8%
Est. Normal Diluted EPS	0.69
P/E on Est. Normal Diluted EPS	15.6
Est. Normal EBITDA	3,992
Forward EV/EBITDA	13.2
EV/Est. Normal EBITDA	10.8
Forward Revenue Growth (5-yr)	7.2%
Forward EPS Growth (5-yr)	11.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	23.0%
Return on Assets	18.7%
ROIC, with goodwill	27.8%
ROIC, without goodwill	32.0%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	0
Net Debt	-3,787
Total Debt/EBITDA	0.0
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	2.8
Quick Ratio	2.2

NMF = Not Meaningful

Investment Highlights

• Infosys is a global leader in consulting, technology and outsourcing solutions. The company is headquartered in India, which is widely recognized as the premier destination for offshore technology services. Offshore outsourcing is global mega trend. The firm was founded in 1981 and is headquartered in India.

• Continued automation increases at Infosys will increase productivity and lower cost of ownership to clients, while advancing agility through client value based models will increase the firm's service differentiation compared to peers. We're fans of its cash-rich balance sheet.

• Infosys expects its business to continue evolving from a cost-based, human-only model to one in which human efforts are amplified by software platforms and artificial intelligence. Such an evolution frees up resources for innovation in areas that are strategic to client specific businesses. Investing in such innovation is not necessarily beholden to geopolitical factors.

• Infosys is executing its strategy of software enabled services and accelerating growth in its new services portfolio, and it continues to focus on operational efficiencies in delivering stable margins. The company's client base is growing and has advanced to ~1,200 from ~800 in fiscal 2013.

• Infosys has dubbed its transformation as a 'Renew-New' strategy in which it aims to renew its core business and reimagine core service lines and improve productivity while innovating into new businesses. Total digital revenue accounts for ~30% of its business.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Support, 10-week MA	**11.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Cognizant Tech	16.3	2.2	93.0%
DXC Technology	7.1	3.6	64.8%
Jack Henry	38.9	1.7	134.9%
Wipro	18.1	NMF	109.5%
Peer Median	17.2	2.2	101.3%
Infosys Ltd	**19.7**	**1.9**	**107.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-18	Mar-19	Mar-20
Revenue	10,939	11,799	12,790
Revenue, YoY%	7.2%	7.9%	8.4%
Operating Income	2,670	2,731	2,938
Operating Margin %	24.4%	23.1%	23.0%
Net Income	2,497	2,200	2,350
Net Income Margin %	22.8%	18.6%	18.4%
Diluted EPS	0.55	0.51	0.55
Diluted EPS, YoY %	15.2%	-8.6%	7.9%
Free Cash Flow (CFO-capex)	1,947	1,913	1,218
Free Cash Flow Margin %	17.8%	16.2%	9.5%

In Millions of USD (except for per share items)

Structure of the IT Services Industry — NEUTRAL

The IT services industry is composed of offshore entities that provide outsourced IT infrastructure at a low cost and contractors that provide a variety of services to US government agencies. Success is often dependent on the talent of a firm's technology professionals and the effective execution of service offerings. Most constituents generate significant cash flow and high returns on investment due to minimal capital requirements. Still, competition remains fierce, and recent government actions to stimulate rivalry and reduce the number of sole source awards has weighed on some participants. We're neutral on the group.

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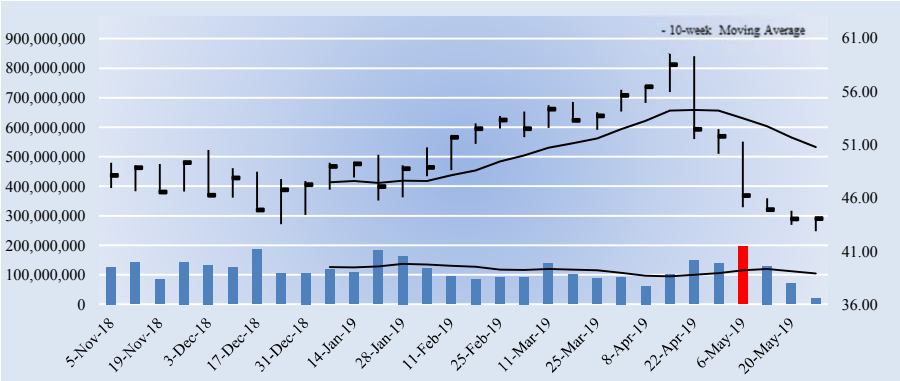
Intel INTC FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$53.00	$42.00 - $64.00	MEGA-CAP VALUE	Information Technology	Broad Line Semiconductors

Intel's three-year outlook wasn't as exciting as we would have hoped, but the company is still one of the strongest ideas in big tech.

Stock Chart (weekly)



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)	$207,009
Avg Weekly Vol (30 wks)	116,049
30-week Range (USD)	42.860001 - 59.59
Valuentum Sector	Information Technology
5-week Return	-15.6%
13-week Return	-18.1%
30-week Return	-7.0%
Dividend Yield %	2.9%
Dividends per Share	1.26
Forward Dividend Payout Ratio	29.1%
Est. Normal Diluted EPS	4.82
P/E on Est. Normal Diluted EPS	9.1
Est. Normal EBITDA	33,583
Forward EV/EBITDA	7.1
EV/Est. Normal EBITDA	6.6
Forward Revenue Growth (5-yr)	2.3%
Forward EPS Growth (5-yr)	3.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	19.9%
Return on Assets	11.5%
ROIC, with goodwill	24.7%
ROIC, without goodwill	33.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	26,359
Net Debt	14,709
Total Debt/EBITDA	0.8
Net Debt/EBITDA	0.5
EBITDA/Interest	69.1
Current Ratio	1.7
Quick Ratio	1.1

NMF = Not Meaningful

Investment Highlights

• Intel designs and manufactures advanced integrated digital technology platforms, which are used in PCs, servers, tablets, smartphones, automobiles, automated factory systems, and medical devices. The company bought Altera in a near-$17 billion deal that has enabled it to compete in new classes of products in its high-growth Data Center and Internet of Things segments, but competition is fierce.

• Intel continues to shift its portfolio from PC-centric to data-centric, and its revenue mix was 52/48 PC/data in 2018 compared to 72/28 in 2012. Management expects to deliver ~$4.35 in non-GAAP earnings per share in 2019.

• Intel believes it has a virtuous cycle of growth as we move into 'the next Industrial Revolution,' or the Internet of Things. Intel's products speed up the connectivity of devices to data centers and the cloud while enabling larger amounts of storage at a lower cost. As more devices are equipped with such technology, demand for the same technology should increase on the data center end, and vice versa.

• Intel's purchase of Mobileye positions it as a leader in the provision of end-to-end solutions in the automated driving market, expanding the reach of its virtuous cycle of growth. Annual cost synergies of $195 million are being targeted by 2019, but its balance sheet has been weakened. We love what the deal brings in terms of broadening Intel's TAM.

• Intel's delayed launch of its 10-nm chips came at an inopportune time as rivals such as AMD are gaining steam, and it expects the launch to take place in time for the 2019 holiday season. We continue to like the long-term opportunity at Intel, and its robust free cash flow generation drives its dividend strength.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**51.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Advanced Micro Devices	75.8	6.8	129.0%
Broadcom	12.9	1.6	111.6%
STMicroelectronics	11.3	1.9	93.7%
Texas Instruments	18.3	2.6	117.2%
Peer Median	15.6	2.3	114.4%
Intel	**10.2**	**1.9**	**83.1%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	62,761	70,848	68,652
Revenue, YoY%	5.7%	12.9%	-3.1%
Non-GAAP Operating Income	18,320	23,244	22,504
Non-GAAP EBIT %	29.2%	32.8%	32.8%
Non-GAAP Net Income	9,601	21,053	19,962
Non-GAAP NI Margin %	15.3%	29.7%	29.1%
Non-GAAP Diluted EPS	1.99	4.48	4.33
Non-GAAP Dil EPS, YoY %	-6.2%	125.5%	-3.2%
Non-GAAP Free Cash Flow	10,332	14,251	13,175
Non-GAAP FCF Margin %	16.5%	20.1%	19.2%

In Millions of USD (except for per share items)

Structure of the Broad Line Semiconductor Industry — POOR

The broad line semiconductor industry is characterized by intense competition, rapid technological change, and frequent product introductions. The number and variety of computing devices have expanded rapidly, creating a connected landscape between suppliers and competitors. New market segments have emerged rapidly (smartphones, tablets), and constituents must continuously innovate to maintain share as traditional PC demand faces pressure. Though some firms may gain advantages via the combination of their manufacturing/test facilities with their design teams, we think the structure of the group is poor.

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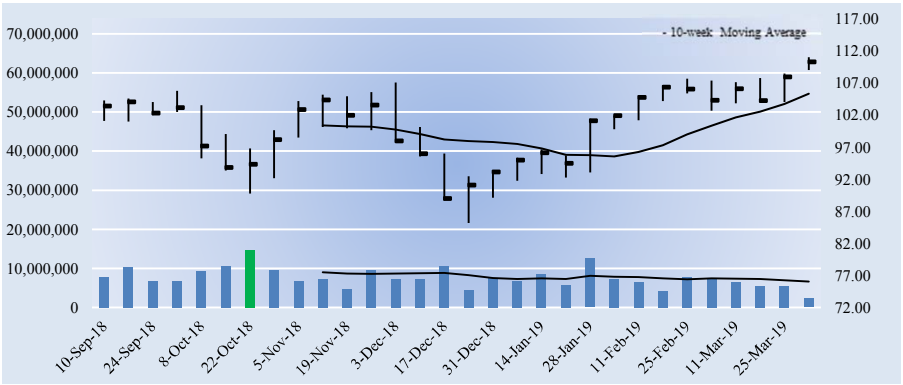
Ingersoll-Rand IR FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$97.00	$78.00 - $116.00	LARGE-CAP CORE	Industrials	Machinery & Tools

Ingersoll-Rand will continue to aggressively pursue procurement, pricing, and productivity actions to mitigate tariff and inflation impacts on margins.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**105.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$27,576
Avg Weekly Vol (30 wks)	7,636
30-week Range (USD)	85.15 - 111
Valuentum Sector	Industrials
5-week Return	3.3%
13-week Return	18.4%
30-week Return	9.1%
Dividend Yield %	1.9%
Dividends per Share	2.12
Forward Dividend Payout Ratio	33.3%
Est. Normal Diluted EPS	7.37
P/E on Est. Normal Diluted EPS	15.0
Est. Normal EBITDA	2,833
Forward EV/EBITDA	11.8
EV/Est. Normal EBITDA	10.9
Forward Revenue Growth (5-yr)	3.5%
Forward EPS Growth (5-yr)	8.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	20.8%
Return on Assets	7.9%
ROIC, with goodwill	11.1%
ROIC, without goodwill	21.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,091
Net Debt	3,188
Total Debt/EBITDA	1.8
Net Debt/EBITDA	1.4
EBITDA/Interest	10.3
Current Ratio	1.3
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Ingersoll-Rand's diverse portfolio of industrial products have well-recognized brand names, including Ingersoll-Rand, American Standard, and Trane. Following the spinoff of Allegion, the company restructured from four reporting business segments to two—Climate and Industrial. The firm was founded in 1872 and is headquartered in Ireland.

• Ingersoll-Rand estimates that 75% of infrastructure globally that will exist in 2050 has yet to be built, offering it a significant sustainable growth opportunity. India offers above average growth opportunity, where 85% of buildings that will exist in 2050 have yet to be built.

• Ingersoll-Rand is well-positioned to capitalize on the needs driven by the global urban population, which is expected to expand to 6.4 billion by 2050 or a 70%-85% increase from recent levels. The firm has an excellent position to leverage its large installed equipment base to expand higher-margin services revenue.

• Ingersoll-Rand expects total reported revenue growth of 4%-5% in 2019 with growth in both segments. It will be utilizing its business operating system to actively manage pricing and productivity and continue to aggressively pursue procurement, pricing, and productivity action to mitigate tariff and inflation impacts on margins in 2019.

• Management expects 30-80 basis points of adjusted operating margin expansion in 2019, with both segments contributing positively. Adjusted earnings per share guidance comes in a range of $6.15-$6.35 for the year, and it expects free cash flow to be greater than 100% of net income.

Relative Valuation

	Forward P/E	PEG	Price / FV
Dover	16.2	1.8	106.6%
Flowserve	21.1	1.8	115.7%
Graco	24.3	3.6	127.0%
Illinois Tool Works	18.5	2.8	119.0%
Peer Median	19.8	2.3	117.4%
Ingersoll-Rand	**17.3**	**2.3**	**113.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	14,198	15,668	16,405
Revenue, YoY%	5.1%	10.4%	4.7%
Operating Income	1,665	1,917	2,226
Operating Margin %	11.7%	12.2%	13.6%
Net Income	1,328	1,359	1,560
Net Income Margin %	9.4%	8.7%	9.5%
Diluted EPS	5.15	5.43	6.36
Diluted EPS, YoY %	-6.7%	5.6%	17.1%
Free Cash Flow (CFO-capex)	1,302	1,042	1,629
Free Cash Flow Margin %	9.2%	6.7%	9.9%

In Millions of USD (except for per share items)

Structure of the Machinery & Tools Industry — GOOD

The machinery and tools industry is fragmented and highly competitive. Most constituents offer a wide range of products in a myriad of markets. Firms are heavily exposed to fluctuating raw material prices (steel, resins, chemicals) and the vicissitudes of the global economic cycle, including customer capital/maintenance budgets. Several companies are recognized worldwide for their strong brand names and reputation for quality, innovation and value, and we view such attributes as material competitive advantages. Though pricing competition is not absent, we like the structural characteristics of the group.

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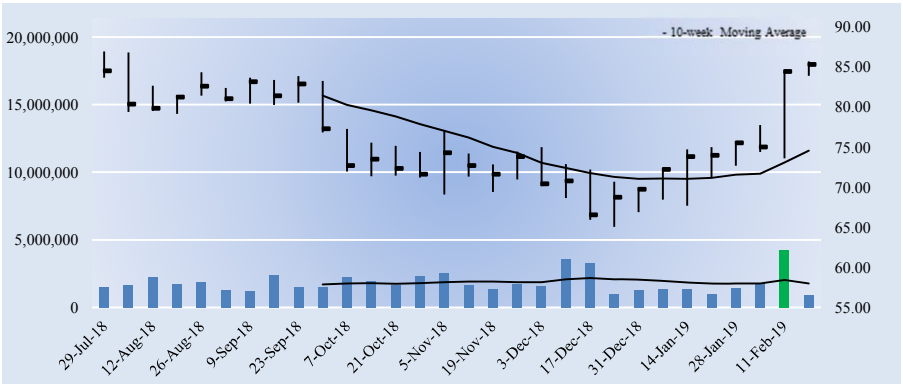
j2 Global JCOM FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$100.00	$75.00 - $125.00	MID-CAP VALUE	Information Technology	Business Services

j2 Global's 'Digital Media' segment continues to account for a growing percentage of total revenue, and the trend is expected to continue in the near term.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**75.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$4,154
Avg Weekly Vol (30 wks)	1,850
30-week Range (USD)	65.07 - 86.9
Valuentum Sector	Information Technology
5-week Return	16.1%
13-week Return	17.3%
30-week Return	-1.1%
Dividend Yield %	2.1%
Dividends per Share	1.78
Forward Dividend Payout Ratio	68.8%
Est. Normal Diluted EPS	5.83
P/E on Est. Normal Diluted EPS	14.6
Est. Normal EBITDA	561
Forward EV/EBITDA	13.5
EV/Est. Normal EBITDA	8.6
Forward Revenue Growth (5-yr)	6.2%
Forward EPS Growth (5-yr)	16.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• j2 Global is a leading provider of Internet services through its two business segments 'Business Cloud Services' and 'Digital Media.' Its 'Business Cloud Services' segment provides cloud services to businesses of all sizes and licenses its intellectual property, while its 'Digital Media' segment specializes in the technology and gaming markets. The firm was founded in 1995 and is headquartered in Los Angeles.

• Over 80% of j2 Global's 'Cloud Services' segment revenue (more than 40% of total revenue) is generated via fixed subscriptions; variable cost subscriptions and other license reveneus account for the balance in the segment. We like the visibility this revenue stream provides.

• j2 Global's 'Digital Media' segment continues to account for a growing percentage of total revenue, and this measure was just over 50% in 2018 compared to ~48% in 2017. The trend should continue in 2019 as the segment is expecting revenue growth in excess of 10% compared to ~5% revenue growth guidance for its 'Cloud Services' segment. Adjusted earnings per share guidance comes in at $6.65-$6.95.

• j2 Global is exposed to the economic cycle via its customers, and any downturn could lead to a material reduction in usage rates, customer acquisitions, and retention. Acquisitions are core to its growth strategy, opening it up to identification, integration, and execution risk. Large deals are not typical, but its balance sheet health should be monitored.

• In addition to its visible revenue stream, j2 Global's 'Cloud Services' segment has a scalable subscription-based business model, and its focus on small businesses helps its diversity (customer base of over 3.2 million). Acquisitions should continue complimenting organic growth.

Relative Valuation

	Forward P/E	PEG	Price / FV
Accenture	21.9	2.5	114.1%
Amdocs	13.3	1.4	80.4%
IHS Markit	20.6	1.9	108.2%
VMware	27.1	2.8	122.0%
Peer Median	21.2	2.2	111.2%
j2 Global	**33.0**	**1.2**	**85.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	15.6%
Return on Assets	7.2%
ROIC, with goodwill	20.9%
ROIC, without goodwill	58.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-16	Dec-17	Dec-18
Revenue	874	1,118	1,207
Revenue, YoY%	21.3%	27.9%	8.0%
Non-GAAP Operating Income	243	246	228
Non-GAAP EBIT %	27.7%	22.0%	18.9%
Non-GAAP Net Income	152	139	126
Non-GAAP NI Margin %	17.4%	12.5%	10.4%
Non-GAAP Diluted EPS	3.18	2.86	2.59
Non-GAAP Dil EPS, YoY %	14.4%	-9.9%	-9.7%
Non-GAAP FCF (CFO-capex)	253	222	344
Non-GAAP FCF Margin %	28.9%	19.8%	28.5%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,002
Net Debt	651
Total Debt/EBITDA	2.4
Net Debt/EBITDA	1.6
EBITDA/Interest	6.2
Current Ratio	2.3
Quick Ratio	2.2

NMF = Not Meaningful

Structure of the Business Services Industry — NEUTRAL

Firms in the business services space primarily focus on management consulting, technology/data-integration services/software and outsourcing solutions. Participants generate high returns on invested capital, but the business services marketplace is very competitive, and firms can often face pressure from off-shore service providers in lower-cost locations (India, Philippines and China). Such competition may inhibit firms' ability to obtain sufficient pricing for services, and economic conditions may hinder the capability of clients to pay for such services. Still, we're generally neutral on the group.

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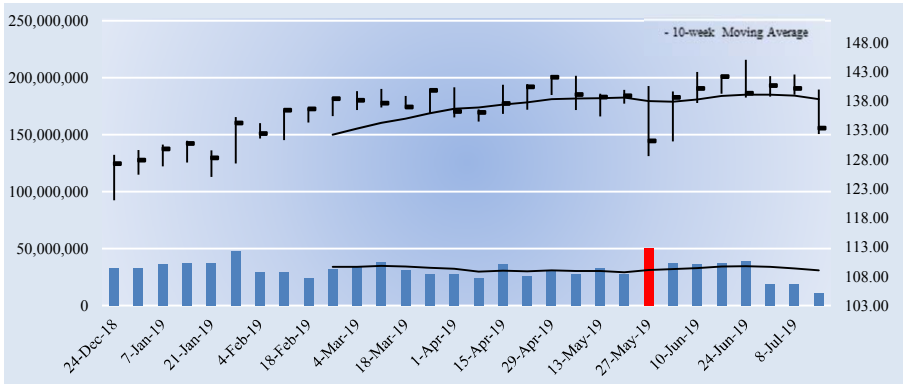
Johnson & Johnson JNJ FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$151.00	$121.00 - $181.00	MEGA-CAP VALUE	Consumer Staples	Household Products

Johnson & Johnson is the subject of a criminal probe into what it knew about the risks of its talcum powder products. We think this will be an overhang on the stock for some time.

Stock Chart (weekly)



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)	$363,708
Avg Weekly Vol (30 wks)	31,830
30-week Range (USD)	121 - 144.979996
Valuentum Sector	Consumer Staples
5-week Return	-4.8%
13-week Return	-2.7%
30-week Return	4.7%
Dividend Yield %	2.9%
Dividends per Share	3.80
Forward Dividend Payout Ratio	43.7%
Est. Normal Diluted EPS	9.74
P/E on Est. Normal Diluted EPS	13.7
Est. Normal EBITDA	37,845
Forward EV/EBITDA	10.7
EV/Est. Normal EBITDA	9.9
Forward Revenue Growth (5-yr)	2.9%
Forward EPS Growth (5-yr)	13.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	17.0%
Return on Assets	7.6%
ROIC, with goodwill	24.0%
ROIC, without goodwill	34.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	30,480
Net Debt	10,793
Total Debt/EBITDA	1.1
Net Debt/EBITDA	0.4
EBITDA/Interest	28.0
Current Ratio	1.5
Quick Ratio	1.1

NMF = Not Meaningful

Investment Highlights

• J&J has built one of the most comprehensive health care businesses, generating approximately 70% of revenue from top positions in its respective markets. The firm is focused on innovation while broadening its geographic presence. Consumer product sales are roughly 17% of its operations. The company was founded in 1885 and is headquartered in New Brunswick, New Jersey.

• J&J has 26 platforms/products that boast $1+ billion in annual sales as of the end of 2018. It plows ~10% of annual sales into R&D, a focus we like, but litigation risk continues to cast a shadow over shares. Management has been productive in reducing net debt of late.

• J&J's pharma portfolio is impressive. REMICADE has ~90% share of the US market for IV immunology products by volume, but the therapy's US exclusivity expired in 2018. STELARA (exclusivity through 2023 in US) and SIMPONI (exclusivity through 2024 in US) are also key profit drivers. Biosimilars competition is accelerating, but J&J's Oncology division is growing at a tremendous pace.

• Top-line growth at Johnson & Johnson will be driven by its impressive pharma portfolio pipeline, which will be supported by its steady consumer product business. The firm has at least 10 new molecular entities it believes have $1+ billion in individual annual sales potential that it expects to launch or file for approval from 2017-2021.

• J&J's has raised its dividend for 56 years consecutive years as of 2018. Its annual payout has advanced from just $0.43/share in 1997 to its current robust payout. J&J is a holding in both simulated newsletter portfolios, and we expect future dividend growth to be driven by robust free cash flow generation.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Resistance, 10-wk MA	**138.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Clorox	23.7	3.3	117.3%
Colgate-Palmolive	24.1	2.5	118.6%
Kimberly-Clark	18.5	1.7	120.8%
Procter & Gamble	23.4	2.2	125.1%
Peer Median	23.5	2.4	119.7%
Johnson & Johnson	**15.3**	**1.7**	**88.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	76,450	81,581	81,255
Revenue, YoY%	6.3%	6.7%	-0.4%
Non-GAAP Operating Income	19,122	21,175	27,999
Non-GAAP EBIT %	25.0%	26.0%	34.5%
Non-GAAP Net Income	1,300	15,297	23,464
Non-GAAP NI Margin %	1.7%	18.8%	28.9%
Non-GAAP Diluted EPS	0.47	5.61	8.69
Non-GAAP Dil EPS, YoY %	-92.0%	1083.9%	NMF
Non-GAAP FCF (CFO-capex)	17,777	18,531	23,419
Non-GAAP FCF Margin %	23.3%	22.7%	28.8%

In Millions of USD (except for per share items)

Structure of the Household Products Industry — GOOD

Firms in the household products industry sell some of the most recognized branded consumer packaged goods in the world and often hold a significant market share position in a variety of product categories. Though the industry is characterized by stiff competition from retailers' private-label brands, constituents tend to boast meaningful competitive advantages due to their brand strength/reputation and generate high returns on invested capital. Household products companies remain tied to the vicissitudes of consumer spending, but we tend to like the structure of the group.

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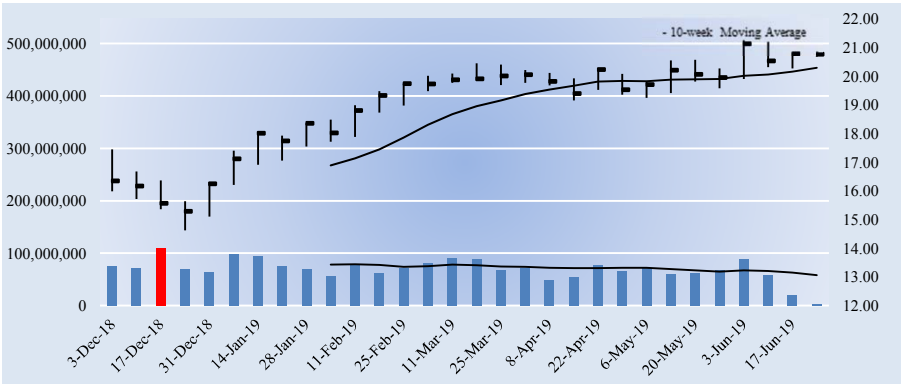
Kinder Morgan KMI FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Neutral	$23.00	$15.00 - $31.00	LARGE-CAP VALUE	Energy	Oil & Gas Pipelines

Kinder Morgan's shares are trading roughly in line with our fair value estimate.

Stock Chart (weekly)



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)	$46,015
Avg Weekly Vol (30 wks)	69,309
30-week Range (USD)	14.62 - 21.25
Valuentum Sector	Energy
5-week Return	3.3%
13-week Return	3.5%
30-week Return	20.6%
Dividend Yield %	4.8%
Dividends per Share	1.00
Forward Dividend Payout Ratio	120.5%
Est. Normal Diluted EPS	0.98
P/E on Est. Normal Diluted EPS	21.2
Est. Normal EBITDA	7,711
Forward EV/EBITDA	9.9
EV/Est. Normal EBITDA	9.1
Forward Revenue Growth (5-yr)	3.4%
Forward EPS Growth (5-yr)	11.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	2.8%
Return on Assets	1.2%
ROIC, with goodwill	4.8%
ROIC, without goodwill	5.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	32,538
Net Debt	24,472
Total Debt/EBITDA	5.2
Net Debt/EBITDA	3.9
EBITDA/Interest	3.3
Current Ratio	0.8
Quick Ratio	0.6

NMF = Not Meaningful; Debt excludes debt associated with the finance sub.

Investment Highlights

• Kinder Morgan is one of the largest midstream energy companies in North America, with ~80,000 miles of pipelines and 152 terminals. It re-consolidated its holdings in Kinder Morgan Energy Partners (KMP), El Paso Pipeline Partners (EPB) and Kinder Morgan Management (KMR). Kinder Morgan's operations are conducted through the following business segments: Natural Gas Pipelines (56% of EBDA), CO2, Products Pipelines, Terminals, and Kinder Morgan Canada. Management estimates that ~96% of cash flows are derived from take-or-pay and other fee-based contracts or are hedged.

• Kinder Morgan's business strategy is to 1) focus on stable, fee-based energy transportation/storage assets, 2) increase utilization of its assets while controlling costs, 3) leverage scale from incremental acquisitions and expansions of assets that fit within its strategy, and 4) maximize the benefits of its financial structure. The company is doing a good job executing upon its strategy, but its capital structure has worked against dividend growth plans, creating a not-so-virtuous cycle for stakeholders. The firm targets a net debt-to-adjusted EBITDA ratio of 4.5 times over the long haul, and the measure was 4.6x at the end of the third quarter of 2018.

• Kinder Morgan boasts an investment-grade credit rating, but only because it slashed its dividend payout, much to the dismay of income investors. Though it continues to work to improve its balance sheet health, management is looking for significant growth in the payout through 2020. A $2 billion share repurchase program began in December 2017..

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**POOR**
ValueRisk™	**HIGH**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**20.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Enbridge	23.2	0.7	88.4%
Enterprise Product Partners	14.7	2.1	90.6%
NuStar	-17.9	NMF	93.7%
Plains All American	12.9	1.5	92.5%
Peer Median	13.8	1.5	91.6%
Kinder Morgan	**25.0**	**NMF**	**90.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	13,705	14,144	14,865
Revenue, YoY%	5.0%	3.2%	5.1%
Operating Income	3,557	3,961	4,723
Operating Margin %	26.0%	28.0%	31.8%
Net Income	183	1,609	1,839
Net Income Margin %	1.3%	11.4%	12.4%
Diluted EPS	0.01	0.67	0.83
Diluted EPS, YoY %	-95.1%	NMF	NMF
Free Cash Flow (CFO-capex)	1,413	2,139	3,095
Free Cash Flow Margin %	10.3%	15.1%	20.8%

In Millions of USD (except for per share items)

Structure of the Oil & Gas Pipeline Industry — NEUTRAL

Firms in the oil and gas pipeline industry own or operate thousands of miles of pipelines and terminals—assets that are nearly impossible/uneconomical to replicate. Most companies act as a toll road and receive a fee for transporting natural gas, crude oil and other refined products (and generally avoid commodity price risk). Though there is much to like, most constituents operate as master limited partnerships and pay out hefty distributions that can stretch their balance sheets. Additional unit issuance (dilution) has become common, and capital-market dependence is a key risk. We're neutral on the group.

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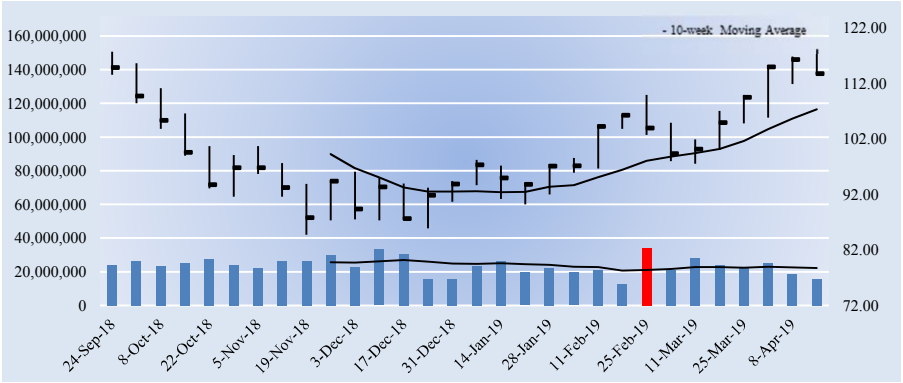
Lowe's LOW FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$96.00	$74.00 - $118.00	LARGE-CAP CORE	Consumer Discretionary	Specialty Retailers

We've raised our fair value estimate for Lowe's after lowering our cost of capital assumption. The company expects to continue reaping the benefits of a fundamentally solid operating environment.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**107.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$92,357
Avg Weekly Vol (30 wks)	23,652
30-week Range (USD)	84.75 - 118.23
Valuentum Sector	Consumer Discretionary
5-week Return	13.8%
13-week Return	21.8%
30-week Return	-2.1%
Dividend Yield %	1.7%
Dividends per Share	1.92
Forward Dividend Payout Ratio	31.4%
Est. Normal Diluted EPS	7.75
P/E on Est. Normal Diluted EPS	14.7
Est. Normal EBITDA	9,994
Forward EV/EBITDA	12.6
EV/Est. Normal EBITDA	10.8
Forward Revenue Growth (5-yr)	2.9%
Forward EPS Growth (5-yr)	26.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Lowe's is the world's second largest home improvement retailer. It operates over 1,800 stores in the US, roughly 300 in Canada, and ~10 in Mexico. The company strives to be customers' first choice for home improvement, and it serves approximately 16 million customers a week. Its Canadian stores include RONA. It was founded in 1946 and is headquartered in North Carolina.

• Lowe's is a fantastic company, and one that continues to benefit from the housing recovery. We're expecting the home improvement retail group to continue outperforming the broader retail space, which continues to struggle, thanks in part to the lack of a meaningful online threat at this point in time.

• Lowe's expects to continue reaping the benefits of a fundamentally solid operating environment in the near term. It expects US home improvement to benefit from income growth, lower federal tax rates, gains in household formations, and continued home price appreciation. An aging housing stock is also adding to its positive outlook as consumers stay in homes longer and invest in their homes.

• Lowe's plans to continue to grow sales through improving its customer experience as it continues to develop omni-channel capabilities. It has additional opportunity in improving its product and service offering for the Pro customer. Pros are relatively underrepresented in Lowe's customer base, but Pro comps have outperformed company averages of late.

• Aside from return on invested capital, one of the key metrics we look at in the retail space is 'sales per selling square foot.' For Lowe's, this metric has steadily advanced since 2009. Lowe's is customer-focused with an emphasis on simplicity as it helps consumers tackle large projects.

Relative Valuation

	Forward P/E	PEG	Price / FV
Bed Bath & Beyond	8.8	NMF	78.5%
Best Buy	12.9	2.6	96.9%
Home Depot	20.2	2.4	117.5%
Office Depot	7.6	0.9	61.5%
Peer Median	10.8	2.4	87.7%
Lowe's	**18.6**	**1.5**	**118.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	49.5%
Return on Assets	8.6%
ROIC, with goodwill	23.7%
ROIC, without goodwill	24.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	68,619	71,309	72,521
Revenue, YoY%	5.5%	3.9%	1.7%
Operating Income	6,586	4,018	7,033
Operating Margin %	9.6%	5.6%	9.7%
Net Income	3,447	2,314	4,871
Net Income Margin %	5.0%	3.2%	6.7%
Diluted EPS	4.10	2.85	6.12
Diluted EPS, YoY %	16.9%	-30.6%	114.8%
Free Cash Flow (CFO-capex)	3,942	5,019	4,917
Free Cash Flow Margin %	5.7%	7.0%	6.8%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	16,223
Net Debt	15,494
Total Debt/EBITDA	3.0
Net Debt/EBITDA	2.8
EBITDA/Interest	8.8
Current Ratio	1.0
Quick Ratio	0.1

NMF = Not Meaningful

Structure of the Specialty Retailers Industry — NEUTRAL

The specialty retail segment is fragmented, highly competitive, and economically-sensitive. The group covers a broad array of businesses and is dominated by retailers with large brick-and-mortar store footprints. Though some constituents may be insulated from e-commerce competition, others risk obsolescence as product distribution moves to digital means, and online retailers offer lower prices for identical goods and services. We're fairly neutral on the structure of the industry, though some constituents will inevitably face secular and permanent declines.

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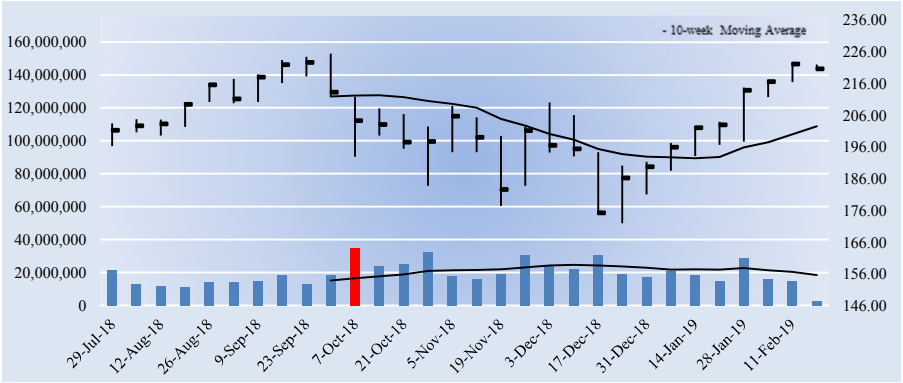
Mastercard MA FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$220.00	$176.00 - $264.00	MEGA-CAP GROWTH	Information Technology	Financial Tech Services

MasterCard benefits from one of the strongest competitive advantages out there – the network effect.

Stock Chart (weekly)



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)	$230,958
Avg Weekly Vol (30 wks)	19,416
30-week Range (USD)	171.89 - 225.35
Valuentum Sector	Information Technology
5-week Return	10.4%
13-week Return	18.9%
30-week Return	8.7%
Dividend Yield %	0.6%
Dividends per Share	1.32
Forward Dividend Payout Ratio	17.3%
Est. Normal Diluted EPS	10.38
P/E on Est. Normal Diluted EPS	21.3
Est. Normal EBITDA	13,444
Forward EV/EBITDA	22.0
EV/Est. Normal EBITDA	17.0
Forward Revenue Growth (5-yr)	11.9%
Forward EPS Growth (5-yr)	18.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	82.6%
Return on Assets	22.7%
ROIC, with goodwill	101.1%
ROIC, without goodwill	153.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	6,334
Net Debt	-2,597
Total Debt/EBITDA	0.7
Net Debt/EBITDA	NMF
EBITDA/Interest	47.7
Current Ratio	1.4
Quick Ratio	1.2

NMF = Not Meaningful

Investment Highlights

• MasterCard is a payments industry leader. Every day, the firm's network makes payments happen. It doesn't issue cards, set interest rates or establish annual fees. MasterCard generates revenue by charging fees to issuers and acquirers for providing transaction processing and other payment-related services based on the gross dollar volume of activity.

• Though uncertainty persists in the global economy, the fundamentals of MasterCard's business and its approach remains unchanged. The firm has strong performance objectives for 2019-2021: a low-teens net revenue CAGR, annual operating margin of at least 50%, and a high-teens earnings per share CAGR.

• The payments industry is a rapidly evolving one. The larger secular trend moving society towards electronic payments remains very much intact, and technological advances and demand for adjacent services will continue to drive growth opportunities. However, risks for the industry include cybersecurity and privacy concerns, increased regulatory presence and nationalism, and new competitive entrants.

• MasterCard benefits from one of the strongest competitive advantages out there – the network effect. As more consumers use credit/debit cards, more merchants accept them, thereby creating a virtuous cycle. Concerns around rising interest rates and a potential easing of liquidity impacting growth appear to be waning, and consumer spending remains robust.

• When it comes to the credit-card processing space, we generally prefer Visa and MasterCard, which do not take on credit risk like Discover or American Express. This shields it from credit quality concerns. MasterCard's free cash flow generation is a sight to behold.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**203.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Bottomline Tech	NMF	3.6	106.1%
Fiserv	29.8	NMF	129.7%
Visa	26.9	2.1	94.4%
Western Union	9.5	NMF	81.1%
Peer Median	26.9	2.8	100.3%
Mastercard	**28.9**	**2.1**	**100.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	12,497	14,950	16,908
Revenue, YoY%	16.0%	19.6%	13.1%
Operating Income	6,637	8,410	9,844
Operating Margin %	53.1%	56.3%	58.2%
Net Income	3,915	5,859	7,824
Net Income Margin %	31.3%	39.2%	46.3%
Diluted EPS	3.65	5.60	7.63
Diluted EPS, YoY %	-0.9%	53.2%	36.3%
Free Cash Flow (CFO-capex)	5,132	5,719	8,259
Free Cash Flow Margin %	41.1%	38.3%	48.8%

In Millions of USD (except for per share items)

Structure of the Financial Tech Services Industry — EXCELLENT

The financial tech services industry is primarily composed of firms that generate revenue by charging fees to customers for providing transaction processing and other payment-related services. Constituents operate in a rapidly-evolving legal/regulatory environment, particularly with respect to interchange fees, data protection, and information security. Several participants benefit from a significant competitive advantage – the network effect. As more consumers use credit/debit cards, more merchants accept them, thereby creating a virtuous cycle. The industry is one of the most attractive in our coverage.

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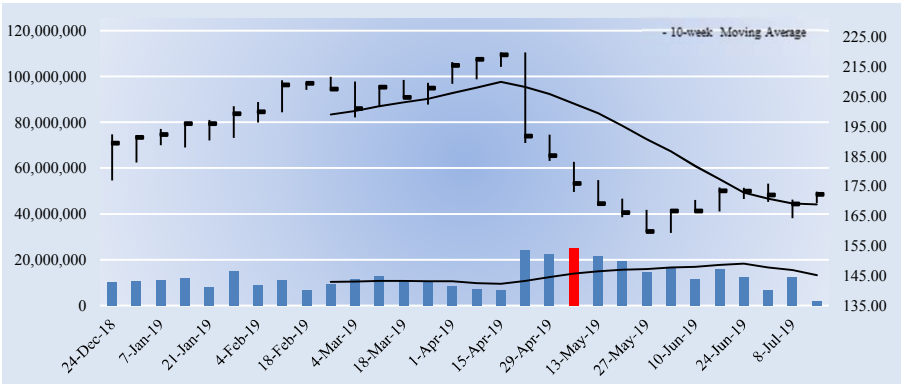
3M MMM FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$162.00	$122.00 - $203.00	LARGE-CAP CORE	Industrials	Conglomerates

We said 3M was significantly overpriced in January 2018, and its shares have come tumbling down. We've cut our fair value estimate again.

Stock Chart (weekly)



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)	$103,697
Avg Weekly Vol (30 wks)	12,541
30-week Range (USD)	159.320007 - 219.75
Valuentum Sector	Industrials
5-week Return	3.1%
13-week Return	-20.7%
30-week Return	-5.3%
Dividend Yield %	3.3%
Dividends per Share	5.76
Forward Dividend Payout Ratio	60.7%
Est. Normal Diluted EPS	11.41
P/E on Est. Normal Diluted EPS	15.1
Est. Normal EBITDA	10,232
Forward EV/EBITDA	13.0
EV/Est. Normal EBITDA	11.3
Forward Revenue Growth (5-yr)	3.0%
Forward EPS Growth (5-yr)	8.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	46.9%
Return on Assets	14.5%
ROIC, with goodwill	21.8%
ROIC, without goodwill	35.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	14,697
Net Debt	11,464
Total Debt/EBITDA	1.8
Net Debt/EBITDA	1.4
EBITDA/Interest	23.3
Current Ratio	1.9
Quick Ratio	1.1

NMF = Not Meaningful

Investment Highlights

• 3M is fundamentally a science-based company and holds over 100,000 patents. The company makes imaginative products, and it is a leader in many markets--from health care and highway safety to office products and abrasives and adhesives. 3M is perhaps among the most innovative firms in our coverage universe. Believe it or not, 3M started as a small mining venture in 1902.

• 3M has been scooping up assets to help it take advantage of the rapidly growing, regulatory driven market of workplace safety. Its top priorities for growth include connected safety, automotive electrification, advanced wound care, and data centers, among others.

• 3M has ambitious goals for the period 2019-2023. The conglomerate expects annual organic local-currency sales growth of 3-5%, annual earnings per share expansion of 8-11%, 20% return on invested capital, and 100% free cash flow conversion of net income. Its 'Healthcare' business is expected to lead top-line growth at 4%-6% per year, followed by 'Safety & Industrial' at 3%-5%.

• 3M has well laid-out capital allocation plan. In 2019-2023 it plans to allocate ~30% of capital to growth investments with R&D spending at ~6% of sales and capex at 5%-5.5% of sales. ~30% will be allocated to the dividend with the remaining ~40% going towards M&A and buybacks.

• 3M has accelerated its dividend growth in recent periods, and it has raised the annual payout in 61 consecutive years as of 2019. Management expects to grow the dividend in line with earnings over time. It also plans to maintain a minimum share repurchase threshold.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Support, 10-week MA	**169.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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	27.2	2.6	121.9%
General Electric	15.6	NMF	81.8%
Honeywell	20.3	2.4	112.8%
United Technologies	17.4	1.6	113.7%
Peer Median	18.9	2.4	113.3%
3M	**18.1**	**2.3**	**106.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	31,657	32,765	32,798
Revenue, YoY%	5.1%	3.5%	0.1%
Operating Income	7,820	6,660	7,370
Operating Margin %	24.7%	20.3%	22.5%
Net Income	4,858	5,349	5,658
Net Income Margin %	15.3%	16.3%	17.3%
Diluted EPS	7.93	8.89	9.49
Diluted EPS, YoY %	-2.9%	12.1%	6.8%
Free Cash Flow (CFO-capex)	4,867	4,862	5,518
Free Cash Flow Margin %	15.4%	14.8%	16.8%

In Millions of USD (except for per share items)

Structure of the Conglomerates Industry — GOOD

The industrial conglomerate industry is characterized by firms that operate various business lines on a global scale. Demand for industrial products tends to be cyclical in nature, and most firms couple their manufacturing operations with generally more stable services businesses to mitigate fundamental volatility. Firms tend to have bargaining power over suppliers due to industry dominance and boast substantial resources to adapt to changing conditions or competitive threats. Most sell products under powerful and recognizable brand names and look to emerging markets for future growth. We like the group.

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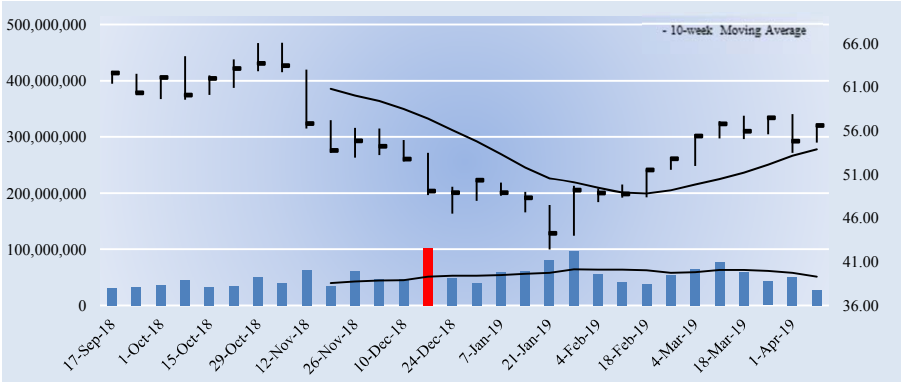
Altria Group MO FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$59.00	$47.00 - $71.00	LARGE-CAP VALUE	Consumer Staples	Tobacco

Altria has agreed to spend $14.6 billion in investments in long-term growth potential via material stakes in Cronos Group and JUUL Labs. Regulatory risk is prevalent in both of these businesses as well.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**54.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$106,785
Avg Weekly Vol (30 wks)	51,975
30-week Range (USD)	42.4 - 66.04
Valuentum Sector	Consumer Staples
5-week Return	2.2%
13-week Return	15.5%
30-week Return	-8.9%
Dividend Yield %	5.7%
Dividends per Share	3.20
Forward Dividend Payout Ratio	76.3%
Est. Normal Diluted EPS	4.57
P/E on Est. Normal Diluted EPS	12.4
Est. Normal EBITDA	11,465
Forward EV/EBITDA	12.1
EV/Est. Normal EBITDA	11.4
Forward Revenue Growth (5-yr)	1.4%
Forward EPS Growth (5-yr)	5.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Altria makes and sells cigarettes and smokeless products in the US. It owns the Marlboro brand, which holds ~43% retail cigarette share, and the Copenhagen and Skoal brands, which together own more than 50% retail smokeless share. The company was founded in 1919 and is headquartered in Richmond, Virginia.

• Altria has an approximate 10.2% equity interest in the new AB InBev, and it received ~$5.3 billion in pre-tax cash from the combination of AB InBev and SABMiller that has created a global beer giant. Altria supported the deal, and we think it will be a long-term positive.

• Altria acquired a 45% stake in Cronos Group, a leading cannabinoid company based in Toronto, for ~$1.8 billion with a warrant to add up to 10% to its ownership. It followed that deal with a $12.8 billion investment, for a 35% stake, in dominant US e-cigarette maker JUUL Labs. The two investments significantly enhance the company's long-term growth potential outside of the declining cigarette market.

• We're fans of Altria's long-term goals: grow adjusted diluted EPS at an average annual rate of 7%-9% and maintain a dividend payout ratio of approximately 80% of adjusted diluted EPS. Material pricing gains have helped offset cigarette volume declines in the US, but Altria appears to be switching its focus to next generation smoking products.

• Recent initiatives from the FDA in cracking down on nicotine levels and menthol in tobacco products should be monitored, and the FDA is also working to regulate and reduce teen use of e-cigarettes. Altria expects near-term EPS growth to come up short of long-term goals due to acquisition-related costs.

Relative Valuation

	Forward P/E	PEG	Price / FV
British American	9.8	1.4	101.6%
Philip Morris	16.7	3.0	114.4%
Schweitzer-Mauduit	10.9	3.0	104.0%
Vector Group	16.1	1.8	64.9%
Peer Median	13.5	2.4	102.8%
Altria Group	**13.5**	**2.7**	**95.9%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	100.3%
Return on Assets	24.5%
ROIC, with goodwill	13.9%
ROIC, without goodwill	19.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	19,494	19,627	19,823
Revenue, YoY%	0.8%	0.7%	1.0%
Operating Income	9,589	9,498	10,581
Operating Margin %	49.2%	48.4%	53.4%
Net Income	10,222	6,963	7,814
Net Income Margin %	52.4%	35.5%	39.4%
Diluted EPS	5.32	3.69	4.19
Diluted EPS, YoY %	-27.1%	-30.7%	13.7%
Free Cash Flow (CFO-capex)	4,723	8,153	8,350
Free Cash Flow Margin %	24.2%	41.5%	42.1%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	25,746
Net Debt	24,413
Total Debt/EBITDA	2.6
Net Debt/EBITDA	2.5
EBITDA/Interest	14.6
Current Ratio	0.2
Quick Ratio	0.1

NMF = Not Meaningful

Structure of the Tobacco Industry — GOOD

The oligopolistic tobacco industry is attractive in a number of ways. Firms sell an "addictive" product (cigarettes and/or smokeless tobacco), have significant pricing power, generate high margins, and strong returns on invested capital. Still, declining trends in smoking in the US, threats of tobacco-related litigation, new tobacco regulation (labeling) that discourages tobacco use, and excise tax price shocks that may impact demand will always be concerns. In any case, we tend to like the structural characteristics of the tobacco industry and the shareholder-friendly policies of constituents.

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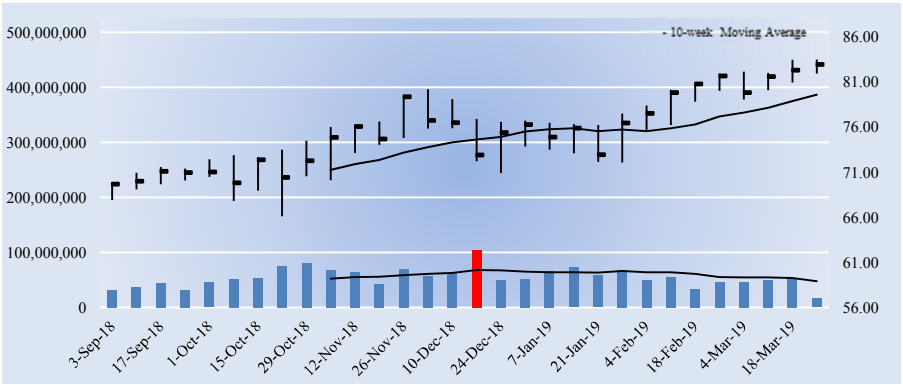
Merck MRK FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$73.00	$58.00 - $88.00	MEGA-CAP CORE	Health Care	Pharmaceuticals - Big

Merck's Keytruda is a key driver of sales growth, and the company continues to advance its late-stage pipeline.

Stock Chart (weekly)



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)	$222,143
Avg Weekly Vol (30 wks)	54,663
30-week Range (USD)	66.1 - 83.47
Valuentum Sector	Health Care
5-week Return	2.5%
13-week Return	9.4%
30-week Return	21.3%
Dividend Yield %	2.7%
Dividends per Share	2.20
Forward Dividend Payout Ratio	53.8%
Est. Normal Diluted EPS	4.51
P/E on Est. Normal Diluted EPS	18.4
Est. Normal EBITDA	19,290
Forward EV/EBITDA	13.2
EV/Est. Normal EBITDA	12.4
Forward Revenue Growth (5-yr)	4.5%
Forward EPS Growth (5-yr)	14.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	12.0%
Return on Assets	4.6%
ROIC, with goodwill	29.7%
ROIC, without goodwill	48.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	25,114
Net Debt	16,250
Total Debt/EBITDA	1.9
Net Debt/EBITDA	1.2
EBITDA/Interest	17.4
Current Ratio	1.2
Quick Ratio	0.7

NMF = Not Meaningful

Investment Highlights

• Merck is a global health care company that delivers innovative health solutions through its prescription medicines, vaccines, and biologic therapies. Januvia/Janumet for type 2 diabetes and Keytruda for advanced Melanoma are its two largest revenue drivers within its pharma business. The company was founded in 1891 and is headquartered in New Jersey.

• Merck's Keytruda is the #1 treatment for advanced Melanoma in the US. The drug will be key for the in a return to top-line expansion after a period of suppressed growth due to the loss of exclusivity of multiple drugs. 2018 Keytruda sales were more than 5 times that of 2016 at ~$7.2 billion.

• Merck's recent results reveal in many ways the company has turned the corner with respect to the "patent cliff" and the expiration of exclusivity on its blockbuster Singulair and Nasonex. Keytruda's performance after four years on the market is unprecedented in terms of product sales growth post launch. The firm plans to increase capital spending to expand its manufacturing capacity in coming years.

• Merck continues to advance its late-stage pipeline, and we think it has promising potential therapies in cancer, antibiotic resistance, cardiometabolic disease, and Alzheimer's disease. The firm is facing challenges in diabetes but expects growth opportunities to be present in international markets, which should help stabilize the business segment.

• Merck expects to be active on the M&A front in the near term as a number of its peers have scooped up attractively priced biopharma entities. Management has not shut the door on the potential for a major purchase, but it is focused on identifying impactful treatments over size.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**80.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Abbott	24.4	2.5	116.2%
AbbVie	9.3	1.3	90.7%
Eli Lilly	22.9	2.1	123.6%
Pfizer	14.5	1.7	94.3%
Peer Median	18.7	1.9	105.2%
Merck	**20.3**	**2.5**	**113.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	40,122	42,294	44,662
Revenue, YoY%	0.8%	5.4%	5.6%
Non-GAAP Operating Income	7,309	8,931	13,465
Non-GAAP EBIT %	18.2%	21.1%	30.1%
Non-GAAP Net Income	2,394	6,220	10,849
Non-GAAP NI Margin %	6.0%	14.7%	24.3%
Non-GAAP Diluted EPS	0.87	2.32	4.09
Non-GAAP Dil EPS, YoY %	-38.1%	166.5%	76.2%
Non-GAAP Free Cash Flow	4,559	8,307	13,876
Non-GAAP FCF Margin %	11.4%	19.6%	31.1%

In Millions of USD (except for per share items)

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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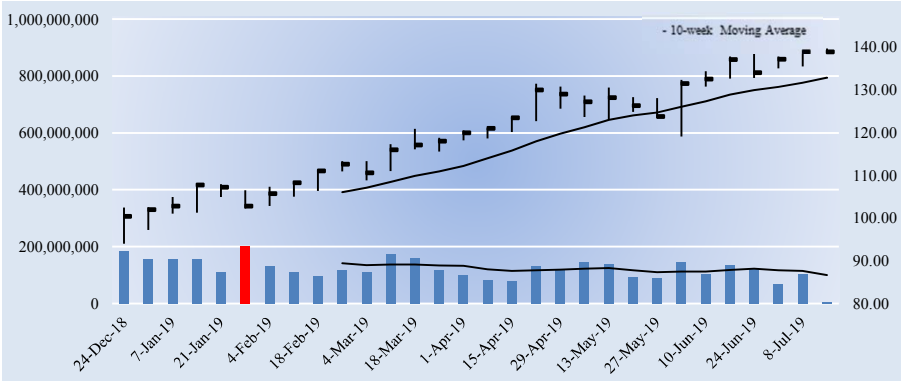
Microsoft MSFT FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$128.00	$102.00 - $154.00	MEGA-CAP GROWTH	Information Technology	Software

After taking a fresh look at our valuation for Microsoft, we have raised our fair value estimate.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**HIGH**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**133.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$1,081,418
Avg Weekly Vol (30 wks)	121,807
30-week Range (USD)	93.959999 - 139.539993
Valuentum Sector	Information Technology
5-week Return	4.6%
13-week Return	13.2%
30-week Return	42.0%
Dividend Yield %	1.3%
Dividends per Share	1.84
Forward Dividend Payout Ratio	39.7%
Est. Normal Diluted EPS	5.68
P/E on Est. Normal Diluted EPS	24.4
Est. Normal EBITDA	66,985
Forward EV/EBITDA	18.5
EV/Est. Normal EBITDA	15.3
Forward Revenue Growth (5-yr)	9.5%
Forward EPS Growth (5-yr)	25.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Microsoft's products include operating systems, cloud services, server applications, desktop and server management tools, software development tools, video games, and online advertising. It also designs, manufactures and sells hardware, including PCs, tablets, gaming consoles, and other smart accessories that integrate with its cloud offerings.

• Microsoft can't scoop up its own shares fast enough through its massive buyback program. The firm floats debt with the best credit quality (Aaa), and we can't think of another firm with a better financial profile. Financial discipline and strong execution remain hallmarks of its business.

• Microsoft is not a tech dinosaur, and momentum behind new devices and platforms, Windows 10, Office 365 and Azure continues to build. Its cloud-based product suite, Office 365 and Azure, continues to build among consumers and enterprises at impressive rates. This momentum allowed the firm to achieve its goal of $20 billion in commercial cloud annual recurring revenue well ahead of schedule.

• Microsoft acquired LinkedIn for over $26 billion in cash, and management believes the deal will expand its addressable market, while helping drive engagement across Office 365. The firm's impressive financial profile gives us confidence in it moving forward, and its tremendous free cash flow generating capacity has not wavered.

• Microsoft's Windows business has been the bread-and-butter of the company for such a long time, but investor focus has shifted to the company's other segments as its business model moves towards the cloud. Microsoft is helping drive the transition to cloud-based software products.

Relative Valuation

	Forward P/E	PEG	Price / FV
Adobe Systems	33.4	2.1	104.6%
F5 Networks	14.9	1.7	92.3%
Oracle	14.3	1.5	83.5%
Salesforce.com	57.5	9.4	124.8%
Peer Median	24.1	1.9	98.4%
Microsoft	**29.9**	**2.5**	**108.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	24.3%
Return on Assets	8.5%
ROIC, with goodwill	45.3%
ROIC, without goodwill	71.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jun-17	Jun-18	Jun-19
Revenue	89,950	110,360	124,928
Revenue, YoY%	5.4%	22.7%	13.2%
Non-GAAP Operating Income	22,632	35,058	43,834
Non-GAAP EBIT %	25.2%	31.8%	35.1%
Non-GAAP Net Income	21,204	16,571	35,952
Non-GAAP NI Margin %	23.6%	15.0%	28.8%
Non-GAAP Diluted EPS	2.71	2.13	4.64
Non-GAAP Dil EPS, YoY %	29.1%	-21.5%	118.0%
Non-GAAP FCF (CFO-capex)	31,378	32,252	42,212
Non-GAAP FCF Margin %	34.9%	29.2%	33.8%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	76,240
Net Debt	-57,528
Total Debt/EBITDA	1.7
Net Debt/EBITDA	NMF
EBITDA/Interest	16.6
Current Ratio	2.9
Quick Ratio	2.7

NMF = Not Meaningful

Structure of the Software Industry — VERY GOOD

Firms that serve the mature software markets—or those consisting of basic business applications—have powerful distribution channels, large installed bases, and fortress balance sheets. These entrenched competitors benefit from significant customer switching costs, which make it nearly impossible for new entrants to gain a foothold. Participants generally benefit from high-margin license revenue and generate significant returns on investment. Still, the shift to cloud computing has created both opportunities and challenges, and the enterprise software landscape continues to evolve. We like the group.

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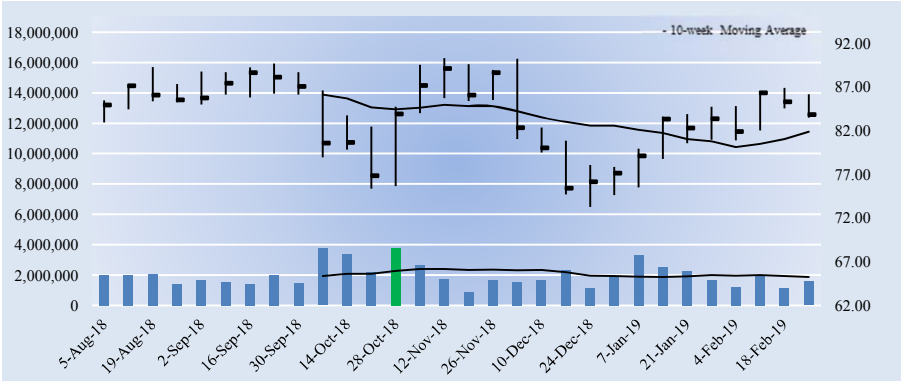
MSC Industrial MSM FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$86.00	$69.00 - $103.00	MID-CAP VALUE	Industrials	Distributors

We generally like MSC Industrial's business strategy that focuses on being an integrated, low-cost solution to its customers' MRO requirements.

Stock Chart (weekly)



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)	$4,754
Avg Weekly Vol (30 wks)	1,999
30-week Range (USD)	73.28 - 90.25
Valuentum Sector	Industrials
5-week Return	2.8%
13-week Return	-6.9%
30-week Return	0.7%
Dividend Yield %	3.0%
Dividends per Share	2.52
Forward Dividend Payout Ratio	43.0%
Est. Normal Diluted EPS	7.12
P/E on Est. Normal Diluted EPS	11.8
Est. Normal EBITDA	595
Forward EV/EBITDA	10.2
EV/Est. Normal EBITDA	8.8
Forward Revenue Growth (5-yr)	5.6%
Forward EPS Growth (5-yr)	7.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	21.4%
Return on Assets	12.4%
ROIC, with goodwill	17.3%
ROIC, without goodwill	26.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	535
Net Debt	489
Total Debt/EBITDA	1.1
Net Debt/EBITDA	1.0
EBITDA/Interest	33.4
Current Ratio	2.3
Quick Ratio	1.2

NMF = Not Meaningful

Investment Highlights

• MSC Industrial is one of the largest direct marketers of a broad range of industrial products to industrial customers in the United States, satisfying their maintenance, repair and operations (MRO) supply requirements. It has roughly a dozen customer fulfillment centers. The company was founded in 1941 and is headquartered in New York.

• MSC continues to invest in its e-commerce capabilities and add new products to its portfolio. The firm now has more than 1.6 million product SKUs available through its database. Management is focused on share gains, and growth rates have improved or held steady across customer types in recent quarters.

• We generally like MSC Industrial's business strategy that focuses on being an integrated, low-cost solution to its customers' MRO requirements. The firm is shifting its focus from reduction in product costs to improving its entire cost structure. The company boasts high marks for customer satisfaction, which it has tagged as a leading indicator of customer retention and growth.

• The MRO industry continues to consolidate and remains very large and fragmented. There are 145,000 distributors in North America chasing roughly $160 billion in spending. MSC is observing a firm manufacturing environment, positive customer outlook, and an improving pricing environment, all of which are helping drive top-line performance.

• MSC Industrial has identified a correlation between its customers' activity and the Metalworking Business Index (MBI) as nearly 70% of its revenue is generated in the manufacturing sector (including more than half from heavy manufacturing).

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**82.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Anixter	9.4	1.5	82.4%
Fastenal	21.7	2.6	119.7%
W.W. Grainger	16.6	1.6	104.3%
WESCO	10.1	1.6	81.6%
Peer Median	13.4	1.6	93.4%
MSC Industrial	**14.3**	**1.9**	**97.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Aug-17	Aug-18	Aug-19
Revenue	2,888	3,204	3,473
Revenue, YoY%	0.8%	10.9%	8.4%
Operating Income	379	421	448
Operating Margin %	13.1%	13.1%	12.9%
Net Income	231	329	326
Net Income Margin %	8.0%	10.3%	9.4%
Diluted EPS	4.06	5.81	5.86
Diluted EPS, YoY %	7.3%	42.9%	0.9%
Free Cash Flow (CFO-capex)	201	295	282
Free Cash Flow Margin %	6.9%	9.2%	8.1%

In Millions of USD (except for per share items)

Structure of the Industrial Distributors Industry — GOOD

Though consolidating, the industrial distributors industry remains fragmented and highly competitive. Delivering cost savings, convenience, and product availability are the major competitive factors. Some rivals use vans to sell products in markets away from their warehouses, while others rely on mail order, websites or telemarketing sales. Still, others operate stores and use centralized distribution centers to supply their networks. The industry is economically-sensitive and exposed to the threat of aggressive pricing strategies, but we generally like the group's massive distribution platforms that are difficult to replicate.

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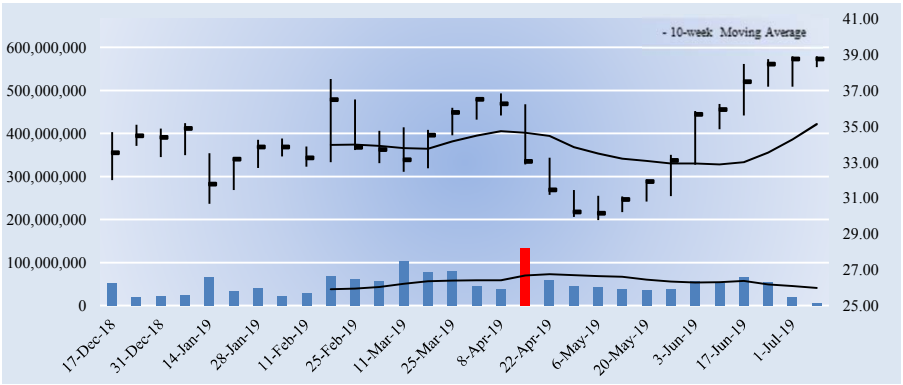
Newmont Mining NEM FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Neutral	$38.00	$25.00 - $51.00	LARGE-CAP GROWTH	Materials	Mining - diversified

Newmont Mining has agreed to acquire Goldcorp in an all-stock deal valued at ~$10 billion.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**GOOD**
ValueRisk™	**HIGH**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**HIGH**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**35.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$20,737
Avg Weekly Vol (30 wks)	50,016
30-week Range (USD)	29.77 - 38.91
Valuentum Sector	Materials
5-week Return	10.3%
13-week Return	7.7%
30-week Return	15.6%
Dividend Yield %	1.4%
Dividends per Share	0.56
Forward Dividend Payout Ratio	40.8%
Est. Normal Diluted EPS	1.83
P/E on Est. Normal Diluted EPS	21.2
Est. Normal EBITDA	3,601
Forward EV/EBITDA	7.5
EV/Est. Normal EBITDA	6.0
Forward Revenue Growth (5-yr)	13.5%
Forward EPS Growth (5-yr)	28.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Newmont Mining is primarily a gold producer, with significant assets or operations in the US, Australia, Peru, Indonesia, Ghana, New Zealand and Mexico. Newmont's proven and probable gold reserves are just under 70 million attributable ounces as of the end of 2017. The company was founded in 1918 and is headquartered in Colorado.

• Newmont has a strong asset portfolio and stable production base, and it continues to focus on cost improvement. The firm's has reduced its net debt by ~$4.4 billion since 2013, and its net debt-to-EBITDA was a solid 0.3x at the end of 2017. Liquidity of more than $6 billion gives it a nice cushion.

• Newmont has agreed to acquire Goldcorp in an all-stock deal valued at ~$10 billion. Goldcorp shareholders will receive 0.328 Newmont shares for each Goldcorp share owned, and the to-be-combined entity is expected to have the largest gold reserves per share in the industry.

• Newmont is working to grow value for shareholders via enhancing mine life and margins. For example, the firm has added three new lower cost mines since 2013, while completing $2.8 billion in non-core asset sales. Management is targeting all-in sustaining costs to a range of $870-$970 for the period 2019-2022.

• Investing in a gold miner is largely a speculative bet on the direction of gold prices. The yellow metal exhibits many 'greater fool' tendencies in that it relies mostly on speculative demand for its price to move higher. The post-deal company is expected to have unparalleled leverage to gold prices given its scale.

Relative Valuation

	Forward P/E	PEG	Price / FV
BHP Billiton	13.7	2.2	125.6%
Cleveland-Cliffs	3.3	NMF	125.4%
Freeport McMoRan	6.9	NMF	76.8%
Rio Tinto	11.8	NMF	103.9%
Peer Median	9.3	NMF	114.7%
Newmont Mining	**28.2**	**NMF**	**102.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	-4.3%
Return on Assets	-2.0%
ROIC, with goodwill	13.4%
ROIC, without goodwill	13.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	7,348	7,253	9,748
Revenue, YoY%	9.5%	-1.3%	34.4%
Operating Income	1,333	945	1,236
Operating Margin %	18.1%	13.0%	12.7%
Net Income	-41	319	739
Net Income Margin %	-0.6%	4.4%	7.6%
Diluted EPS	-0.15	0.64	1.37
Diluted EPS, YoY %	NMF	NMF	NMF
Free Cash Flow (CFO-capex)	1,469	795	1,249
Free Cash Flow Margin %	20.0%	11.0%	12.8%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,261
Net Debt	816
Total Debt/EBITDA	2.0
Net Debt/EBITDA	0.4
EBITDA/Interest	10.4
Current Ratio	3.0
Quick Ratio	2.1

NMF = Not Meaningful

Structure of the Gold Mining Industry — POOR

Gold miners are tied to the world price of gold, which depends on a number of demand drivers: industrial and jewelry; gold as an investment; central bank activity; inflation expectations; and speculative trading. If realized prices on the yellow metal fall and remain at low levels, mining profitability would be significantly impaired. Industry constituents must constantly seek to replace reserves depleted by production via new exploration, which remains a speculative activity. Unexpected project cost overruns remain another key risk. In general, we're not huge fans of the volatile fundamentals of the gold mining sector.

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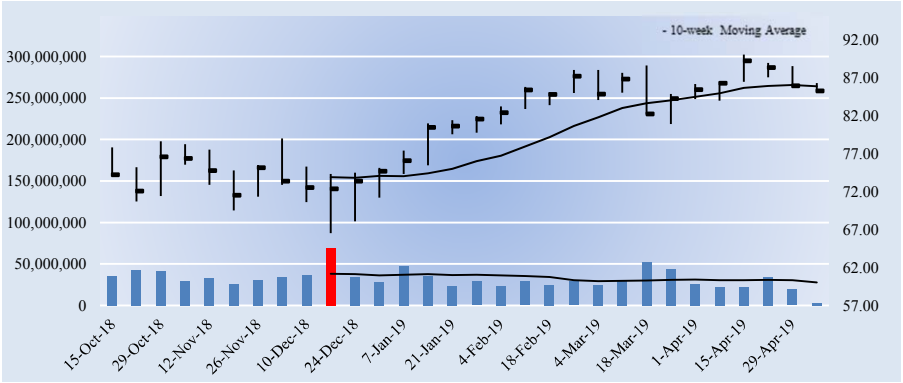
Nike NKE FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$73.00	$58.00 - $88.00	LARGE-CAP CORE	Consumer Discretionary	Luxury - Established Brands

Nike's push to grow its direct-to-consumer business is helping accelerate digital sales, and the pricing power afforded by its brand strength is material.

Stock Chart (weekly)



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)	$141,430
Avg Weekly Vol (30 wks)	32,027
30-week Range (USD)	66.529999 - 90
Valuentum Sector	Consumer Discretionary
5-week Return	0.3%
13-week Return	2.8%
30-week Return	12.5%
Dividend Yield %	1.0%
Dividends per Share	0.88
Forward Dividend Payout Ratio	34.3%
Est. Normal Diluted EPS	3.66
P/E on Est. Normal Diluted EPS	23.3
Est. Normal EBITDA	7,884
Forward EV/EBITDA	24.2
EV/Est. Normal EBITDA	17.8
Forward Revenue Growth (5-yr)	7.2%
Forward EPS Growth (5-yr)	33.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	27.3%
Return on Assets	15.0%
ROIC, with goodwill	38.0%
ROIC, without goodwill	38.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	3,810
Net Debt	-1,435
Total Debt/EBITDA	0.7
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	2.5
Quick Ratio	1.4

NMF = Not Meaningful

Investment Highlights

• Nike focuses its 'Nike Brand' product offerings in the following categories: Running, Basketball, Football (Soccer), Men's Training, Women's Training, Nike Sportswear (sports-inspired lifestyle products), Action Sports, Gold, and the Jordan Brand. The breadth and depth of its product portfolio have translated into consistently strong results. Its long-term deal with Lebron James could spell upside.

• Nike is targeting revenue of $50 billion by fiscal year 2020. The company's internal long-term financial model indicates high single-digit to low double-digit revenue growth, mid-teens earnings per share growth and expanding returns on capital. Fiscal 2019 revenue growth is expected in the high-single-digit range.

• Nike might not have the 'freshness' of a 'Lululemon' or 'Under Armour,' but we think Nike has the best business model and the most valuable brand among the three. Fiscal 2019 will be its first full year of the Nike Consumer Direct Offense, and it has helped digital become its fastest growing channel in every geography of late. Digital is improving revenue growth and has a favorable impact on gross margins.

• Nike expects its international operations (now accounts for more than 55% of total revenue) to provide 75% of incremental growth over the next five years. The company is expected to be well-insulated from the threat of tariffs thanks to its broad manufacturing footprint and significant pricing power afforded by its brand strength.

• Though we do not expect any material damages to the Nike or Jordan brands in the foreseeable future, Adidas has done well in taking market share in US athletic footwear. The gains have not come fully at the expense of Nike, but the strengthening competitor is worth keeping an eye on.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**86.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Estee Lauder	32.7	2.1	124.3%
Lululemon	37.6	2.7	117.1%
PVH Corp	12.2	1.6	101.3%
Signet	7.3	NMF	78.8%
Peer Median	22.5	2.1	109.2%
Nike	**33.2**	**2.2**	**116.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	May-17	May-18	May-19
Revenue	34,350	36,397	39,090
Revenue, YoY%	6.1%	6.0%	7.4%
Operating Income	4,749	4,445	4,957
Operating Margin %	13.8%	12.2%	12.7%
Net Income	4,240	1,933	4,213
Net Income Margin %	12.3%	5.3%	10.8%
Diluted EPS	2.51	1.17	2.57
Diluted EPS, YoY %	16.1%	-53.5%	120.2%
Free Cash Flow (CFO-capex)	2,741	3,927	4,365
Free Cash Flow Margin %	8.0%	10.8%	11.2%

In Millions of USD (except for per share items)

Structure of the Luxury Goods Industry — GOOD

Luxury goods firms differentiate themselves based on brand name, perception, and quality in order to generate excess returns on invested capital through the economic cycle. Building a large, successful luxury brand is difficult, leaving those that possess them with intangible competitive advantages that are not easily overcome by new entrants. Growth in emerging middle classes and China will be the key demand drivers going forward, though the strongest brands will also grow successfully via market share gains. Though changes in consumer preferences should be watched closely, we like the structure of the group.

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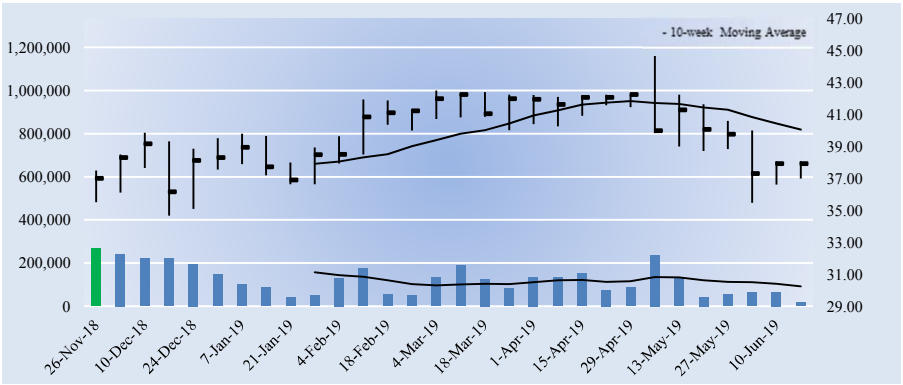
Natural Resource Partners NRP FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Neutral	$49.00	$32.00 - $66.00	SMALL-CAP VALUE	Energy	Industrial Minerals

Though it has a large net debt position, Natural Resource Partners generates a significant amount of free cash flow.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**HIGH**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**DECLINING**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**40.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$758
Avg Weekly Vol (30 wks)	123
30-week Range (USD)	34.68 - 44.709999
Valuentum Sector	Energy
5-week Return	-8.0%
13-week Return	-7.5%
30-week Return	6.2%
Dividend Yield %	4.7%
Dividends per Share	1.80
Forward Dividend Payout Ratio	35.4%
Est. Normal Diluted EPS	5.03
P/E on Est. Normal Diluted EPS	7.5
Est. Normal EBITDA	190
Forward EV/EBITDA	6.9
EV/Est. Normal EBITDA	7.0
Forward Revenue Growth (5-yr)	-2.3%
Forward EPS Growth (5-yr)	-5.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Natural Resource Partners is a master limited partnership principally engaged in the business of owning and managing mineral reserve properties. The MLP owns interests in coal and industrial minerals and oil and gas across the US. Its assets generate royalty and other income for the partnership.

• Natural Resources Partners' revenue has doubled since 2005, and sales from sources other than coal have expanded to more than 30% from ~6% in 2005. The MLP has increasing exposure to the Illinois Basin. Continued diversification into aggregates/soda ash should be expected.

• President Trump's rhetoric surrounding the coal and traditional energy spaces have done wonders for expectations, and a reduced regulatory environment could be the basis of a revival of the industry. The long-term viability of coal as an energy resource remains to be seen, however, and concerns have cropped up that Trump's full agenda may never truly come to fruition.

• That NRP is one of the largest owners of coal reserves in the US has not been a positive in recent years. NRP has been forced to slash its distribution twice. It recently agreed to sell its construction aggregates business segment to an affiliate of Sun Capital Partners for $205 million.

• NRP is only in the initial stages of implementing a long-term strategic plan to reduce debt and enhance liquidity. As of the first quarter of 2019, its leverage ratio was down to 2.6x from a peak of 5.3x. Management will have a lot to do to regain trust from the investment community.

Relative Valuation

	Forward P/E	PEG	Price / FV
Alliance Resource Partners	4.4	NMF	70.6%
Cameco Corp	NMF	NMF	103.2%
CNX Resources	9.9	NMF	79.1%
Hi-Crush	-93.1	1.5	47.0%
Peer Median	4.4	1.5	74.9%
Natural Resource Partners	**7.4**	**NMF**	**77.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	45.7%
Return on Assets	7.1%
ROIC, with goodwill	18.9%
ROIC, without goodwill	18.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	334	203	180
Revenue, YoY%	0.9%	-39.2%	-11.1%
Operating Income	172	192	172
Operating Margin %	51.5%	94.6%	95.2%
Net Income	89	121	102
Net Income Margin %	26.6%	59.6%	56.4%
Diluted EPS	4.05	6.05	5.09
Diluted EPS, YoY %	NMF	NMF	NMF
Free Cash Flow (CFO-capex)	119	189	117
Free Cash Flow Margin %	35.8%	93.1%	64.7%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	673
Net Debt	571
Total Debt/EBITDA	3.1
Net Debt/EBITDA	2.7
EBITDA/Interest	3.1
Current Ratio	1.6
Quick Ratio	0.9

NMF = Not Meaningful

Structure of the Industrial Minerals Industry — VERY POOR

The volatile industrial minerals space contains firms that primarily focus on coal mining. The profitability of constituents largely depends on coal prices, which are tied to factors beyond their control--such as the price of alternatives (natural gas), the demand for electricity/steel, and the strength of the global economy. Customers typically have bargaining power under customary long-term supply agreements and can terminate contracts under certain scenarios (e.g. a spike in transportation costs). Regulations and organized labor add further uncertainty to operations. We don't like the structure of the group.

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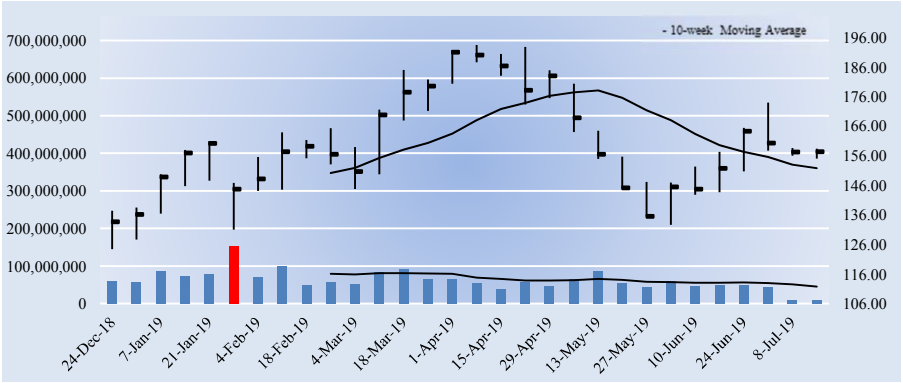
Nvidia NVDA FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$184.00	$136.00 - $232.00	LARGE-CAP BLEND	Information Technology	Integrated Circuits

Nvidia expects to be a significant player in autonomous driving, and we're big fans of its balance sheet health, which provides a nice cushion in rapidly developing markets.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Support, 10-week MA	**152.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$98,319
Avg Weekly Vol (30 wks)	62,118
30-week Range (USD)	124.459999 - 193.470001
Valuentum Sector	Information Technology
5-week Return	8.8%
13-week Return	-15.1%
30-week Return	24.4%
Dividend Yield %	0.4%
Dividends per Share	0.64
Forward Dividend Payout Ratio	11.9%
Est. Normal Diluted EPS	8.00
P/E on Est. Normal Diluted EPS	19.7
Est. Normal EBITDA	5,934
Forward EV/EBITDA	23.3
EV/Est. Normal EBITDA	15.7
Forward Revenue Growth (5-yr)	10.2%
Forward EPS Growth (5-yr)	8.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Nvidia is a computer graphics company. Its business is based on two technologies: the GPU and the Tegra processor. GPUs are the engine of visual computing. Tegra processors incorporate multi-core GPUs and CPUs together with audio and video capabilities. The company was founded in 1993 and is headquartered in Santa Clara, California.

• We're big fans of Nvidia's balance sheet health. Cash, cash equivalents and marketable securities were just over $7.4 billion as of the end of fiscal 2019. Though it does have ~$2 billion in total debt, a strong balance sheet supports dividend potential and provides a cushion in a rapidly developing market.

• Though it does not expect its long-term fundamentals to be materially impacted, Nvidia is anticipating near-term headwinds due in part to excess inventory in gaming related to the sharp decline in cryptocurrency mining. Gaming card prices declined materially and have stabilized, and data center revenue has disappointed more recently as customers adopt more cautious policies amid geopolitical uncertainty.

• Nvidia expects to be a significant player in autonomous driving. As of the end of fiscal 2019, 370+ companies were operating on its Drive AGX open computing platform, and the list includes many of the top names in next-gen car and truck manufacturing. Nvidia tabs autonomous vehicles as a $60 billion opportunity by 2035.

• Gaming had been a strong point for Nvidia as, and rapid demand growth in deep learning was pushing GPU revenue higher. Softening macroeconomic conditions, particularly in China, however, have impacted demand for gaming GPUs, and sales of its new Turing architecture have disappointed.

Relative Valuation

	Forward P/E	PEG	Price / FV
Analog Devices	21.5	4.7	119.3%
Microchip Technology	14.6	3.2	108.8%
Skyworks	12.7	2.0	87.6%
Taiwan Semiconductor	20.0	1.9	104.4%
Peer Median	17.3	2.6	106.6%
Nvidia	**29.3**	**1.4**	**85.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	42.6%
Return on Assets	27.3%
ROIC, with goodwill	119.2%
ROIC, without goodwill	160.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	9,714	11,716	10,966
Revenue, YoY%	40.6%	20.6%	-6.4%
Operating Income	3,210	3,804	3,731
Operating Margin %	33.0%	32.5%	34.0%
Net Income	3,047	4,141	3,352
Net Income Margin %	31.4%	35.3%	30.6%
Diluted EPS	4.82	6.63	5.36
Diluted EPS, YoY %	87.8%	37.4%	-19.1%
Free Cash Flow (CFO-capex)	2,909	3,143	3,625
Free Cash Flow Margin %	29.9%	26.8%	33.1%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,988
Net Debt	-5,434
Total Debt/EBITDA	0.5
Net Debt/EBITDA	NMF
EBITDA/Interest	70.1
Current Ratio	7.9
Quick Ratio	6.7

NMF = Not Meaningful

Structure of the Integrated Circuits Industry — VERY POOR

Firms in the integrated circuits industry make components that form the electronic building blocks used in electronic systems and equipment. The industry is notoriously cyclical and subject to significant economic upturns and downturns, as well as rapid technological changes. Firms must innovate to survive, and products stocked in inventory can sometimes become obsolete before they are even shipped. Severe pricing competition and lengthy manufacturing cycles only add uncertainty to the mix. We're not fans of the structure of the integrated circuits space.

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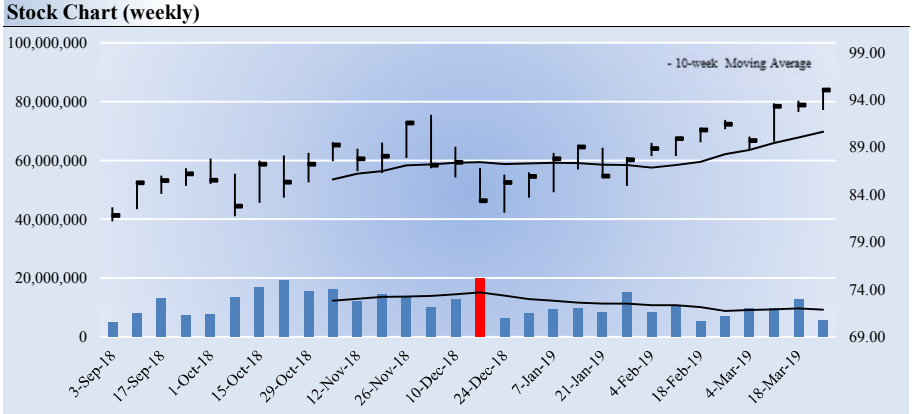
Novartis NVS FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$80.00	$64.00 - $96.00	MEGA-CAP CORE	Health Care	Pharmaceuticals - Big

Novartis is spinning-off Alcon, its eye care business, into a standalone entity in the second quarter of 2019.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**GOOD**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**91.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$222,727
Avg Weekly Vol (30 wks)	11,008
30-week Range (USD)	81.17 - 95.13
Valuentum Sector	Health Care
5-week Return	4.5%
13-week Return	11.0%
30-week Return	15.5%
Dividend Yield %	3.0%
Dividends per Share	2.83
Forward Dividend Payout Ratio	51.4%
Est. Normal Diluted EPS	6.47
P/E on Est. Normal Diluted EPS	14.7
Est. Normal EBITDA	15,974
Forward EV/EBITDA	18.3
EV/Est. Normal EBITDA	15.0
Forward Revenue Growth (5-yr)	3.7%
Forward EPS Growth (5-yr)	6.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Novartis provides innovative healthcare solutions. It offers a diversified portfolio to meet the needs of patients and societies via innovative medicines, eye care, cost-saving generic pharmaceuticals, preventive vaccines, and over-the-counter products. The firm was founded in 1895 and is headquartered in Basel, Switzerland.

• We continue to be impressed with the depth of Novartis' clinical pipeline, which should aid in the company's acceleration from the revenue cliff experienced as a result of the patent loss of top-selling product Gleevec. Cosentyx has been a core driver of top-line performance of late.

• Novartis is engaged in a transformation and will focus on businesses with innovation power and global scale--pharma and generics. It bought AveXis, owner of a gene replacement therapy for spinal muscular atrophy, for $8.7 billion in May 2018. The firm divested its animal health operations to Eli Lilly and sold its stake in its Consumer Health JV with GlaxoSmithKline for ~$13 billion.

• The transformation should result in significantly improved profitability on modestly lower sales. We like the strengthening of Novartis' oncology business, as GSK's oncology products have immediately complemented its portfolio. The transformation appears to be on track, and total oncology sales grew 9%% in constant currency in 2018.

• After an overhaul of Alcon, its eye care division, management announced plans to spin-off the business into a standalone company, which should enable the business to focus on its own growth initiatives. The spin-off is expected to be completed by the end of 2019.

Relative Valuation

	Forward P/E	PEG	Price / FV
Abbott	24.4	2.5	116.2%
Eli Lilly	22.9	2.1	123.6%
Merck	20.3	2.5	113.6%
Pfizer	14.5	1.7	94.3%
Peer Median	21.6	2.3	114.9%
Novartis	**17.3**	**2.7**	**118.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	11.9%
Return on Assets	6.7%
ROIC, with goodwill	8.5%
ROIC, without goodwill	13.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	50,135	53,166	54,814
Revenue, YoY%	1.4%	6.0%	3.1%
Non-GAAP Operating Income	6,660	9,214	9,686
Non-GAAP EBIT %	13.3%	17.3%	17.7%
Non-GAAP Net Income	7,703	12,611	12,893
Non-GAAP NI Margin %	15.4%	23.7%	23.5%
Non-GAAP Diluted EPS	3.28	5.38	5.50
Non-GAAP Dil EPS, YoY %	17.4%	63.8%	2.3%
Non-GAAP Free Cash Flow	9,515	10,917	15,276
Non-GAAP FCF Margin %	19.0%	20.5%	27.9%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	32,148
Net Debt	16,184
Total Debt/EBITDA	2.6
Net Debt/EBITDA	1.3
EBITDA/Interest	13.0
Current Ratio	1.2
Quick Ratio	0.8

NMF = Not Meaningful

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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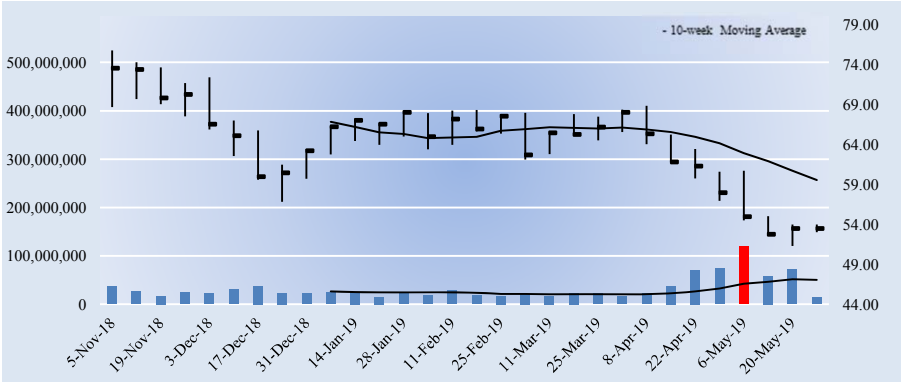
Occidental Petroleum OXY FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Neutral	$56.00	$39.00 - $73.00	LARGE-CAP VALUE	Energy	Independent Oil & Gas

We've updated our fair value estimate for Occidental Petroleum. We're concerned about the leverage that would ensue with its proposed tie-up with Anadarko.

Stock Chart (weekly)



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)	$40,798
Avg Weekly Vol (30 wks)	32,603
30-week Range (USD)	51.290001 - 75.790001
Valuentum Sector	Energy
5-week Return	-11.0%
13-week Return	-21.1%
30-week Return	-22.4%
Dividend Yield %	5.8%
Dividends per Share	3.12
Forward Dividend Payout Ratio	79.6%
Est. Normal Diluted EPS	4.26
P/E on Est. Normal Diluted EPS	12.6
Est. Normal EBITDA	8,400
Forward EV/EBITDA	6.1
EV/Est. Normal EBITDA	5.7
Forward Revenue Growth (5-yr)	0.8%
Forward EPS Growth (5-yr)	-1.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	7.2%
Return on Assets	3.5%
ROIC, with goodwill	4.9%
ROIC, without goodwill	4.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	10,317
Net Debt	7,284
Total Debt/EBITDA	1.1
Net Debt/EBITDA	0.8
EBITDA/Interest	24.8
Current Ratio	1.3
Quick Ratio	1.1

NMF = Not Meaningful

Investment Highlights

• Occidental Petroleum is an international oil and gas exploration and production company, and the firm's OxyChem subsidiary is a major North American chemical manufacturer. The company is targeting growing its oil and gas production by 5%-8% per year on average over the long haul. It has spun off its California oil and gas operations.

• Occidentail has raised its payout for 16 straight years through 2018, a streak that is even more impressive when considering the energy resource pricing environment of recent years. New debt from its proposed tie up with Anadarko should not be taken lightly, however.

• Occidental remains sensitive to energy resource prices. Management is targeting cash flow from operations of $9-$9.5 billion in 2022 with annual capital spending in the range of $5-$5.3 billion in a $60/bbl oil price environment. Production growth in 2019 is expected to exceed its long-term target. The proposed tie-up with Anadarko could complicate matters.

• Occidental has unmatched acreage and infrastructure in the Permian Basin, giving it the largest operated position in the basin. Technological advances and improving margins will help drive lower-cost production growth in the region, and the company is already a proven leader in maximizing recovery rates. Bottleneck concerns are worth watching.

• Occidental competes with numerous other domestic and foreign private and government entities, and its results are heavily exposed to swings in oil, NGL, and natural-gas prices. For example, even a mere $1 change in the price of oil per barrel could impact cash flow greatly.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**POOR**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**60.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Apache	25.1	3.2	73.9%
Cabot	12.7	1.6	98.8%
Devon Energy	13.4	1.1	84.3%
EOG Resources	15.4	1.2	73.9%
Peer Median	14.4	1.4	79.1%
Occidental Petroleum	**13.6**	**NMF**	**95.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	12,508	17,824	16,665
Revenue, YoY%	24.0%	42.5%	-6.5%
Operating Income	1,316	5,666	4,245
Operating Margin %	10.5%	31.8%	25.5%
Net Income	1,311	4,131	2,990
Net Income Margin %	10.5%	23.2%	17.9%
Diluted EPS	1.71	5.41	3.92
Diluted EPS, YoY %	NMF	NMF	NMF
Free Cash Flow (CFO-capex)	1,519	2,749	1,690
Free Cash Flow Margin %	12.1%	15.4%	10.1%

In Millions of USD (except for per share items)

Structure of the Independent Oil & Gas Industry — POOR

The oil and gas business is highly competitive in the exploration, acquisition, and production of reserves. Changes in deepwater drilling laws and other regulatory initiatives can add uncertainty to operations. The trajectory of global economic growth, the actions of OPEC, and political and environmental uncertainty are other key factors. A strong balance sheet to manage through the commodity price cycle is necessary for survival. With the group's profitability largely driven by the volatile prices of oil, natural-gas and NGLs, we're not that excited about the structure of this commodity-producing space.

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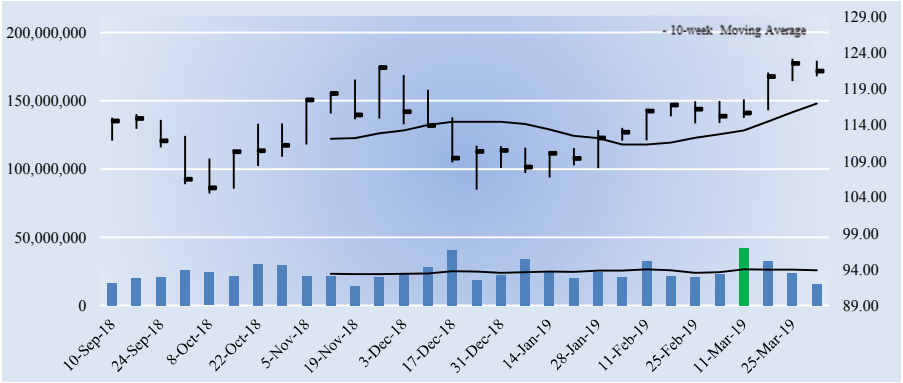
PepsiCo PEP FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$110.00	$88.00 - $132.00	LARGE-CAP CORE	Consumer Staples	Beverages - nonalcoholic

PepsiCo is expecting recently enacted pricing actions to improve margin performance after commodity inflation and transportation costs have eaten into its profitability.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**117.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$173,095
Avg Weekly Vol (30 wks)	24,548
30-week Range (USD)	104.53 - 123.19
Valuentum Sector	Consumer Staples
5-week Return	4.2%
13-week Return	10.4%
30-week Return	7.6%
Dividend Yield %	3.1%
Dividends per Share	3.71
Forward Dividend Payout Ratio	66.7%
Est. Normal Diluted EPS	6.91
P/E on Est. Normal Diluted EPS	17.6
Est. Normal EBITDA	16,043
Forward EV/EBITDA	14.2
EV/Est. Normal EBITDA	12.1
Forward Revenue Growth (5-yr)	3.7%
Forward EPS Growth (5-yr)	-0.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Pepsi is a global food/beverage company with a plethora of respected brands. Its portfolio includes the namesake Pepsi, Mountain Dew, Gatorade, Lay's, Doritos, Cheetos, Tostitos, Ruffles, Quaker oatmeal, and Aunt Jemima, among others. The US accounts for about half of revenue. The company was founded in 1898 and is headquartered in New York.

• Pepsi's long-term goals include 4%-6% annual organic revenue growth, 20-30 basis points of core operating margin expansion per year, high-single-digit core EPS growth in constant currency, and a rising core net ROIC. These goals imply materially improved performance relative to recent years.

• We're huge fans of Pepsi's brand portfolio, but competition remains fierce. Coca-Cola is its primary beverage competitor, while food and beverage rivals include Nestlé, Danone, Kellogg, General Mills, and Mondelēz. Pepsi has a scale advantage in North America, however, and has twenty-two global brands that each bring in $1 billion in sales annually. Social pressures against sugary drinks should not be ignored.

• Pepsi must continue to innovate to remain competitive, especially given the increase in societal pressures and health consciousness. The company recently acquired SodaStream for $3.2 billion, which gives it a significant presence in the at home marketplace with an environmentally friendly approach to personalizing beverages.

• We do not expect Pepsi's dividend to continue to grow as it has in the past, which is in part a function of the pace of its dividend growth in the past, but its debt load and weak near-term free cash flow outlook are worth watching. 2018 marked the 46th consecutive year of annual dividend increases.

Relative Valuation

	Forward P/E	PEG	Price / FV
Coca-Cola	21.9	2.1	119.2%
Keurig Dr Pepper	22.5	1.7	118.5%
Monster Beverage	25.9	2.3	105.7%
National Beverage	17.9	2.2	92.9%
Peer Median	22.2	2.2	112.1%
PepsiCo	**21.8**	**NMF**	**110.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	66.2%
Return on Assets	10.4%
ROIC, with goodwill	20.5%
ROIC, without goodwill	31.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	63,525	64,661	66,278
Revenue, YoY%	1.2%	1.8%	2.5%
Operating Income	10,509	10,110	11,218
Operating Margin %	16.5%	15.6%	16.9%
Net Income	4,857	12,515	7,855
Net Income Margin %	7.6%	19.4%	11.9%
Diluted EPS	3.38	8.78	5.57
Diluted EPS, YoY %	-22.5%	160.0%	-36.6%
Free Cash Flow (CFO-capex)	7,025	6,133	5,009
Free Cash Flow Margin %	11.1%	9.5%	7.6%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	32,321
Net Debt	21,331
Total Debt/EBITDA	2.6
Net Debt/EBITDA	1.7
EBITDA/Interest	8.2
Current Ratio	1.0
Quick Ratio	0.8

NMF = Not Meaningful

Structure of the Nonalcoholic Beverages Industry — GOOD

The nonalcoholic beverage segment of the commercial beverage industry is highly competitive, consisting of numerous companies that make various sparkling beverages, water products, juices, fruit drinks, energy and other performance-enhancing drinks. Pricing, advertising, product innovation, the availability of in-store private-label beverages, and health concerns about sugar-sweetened beverages are key drivers that impact demand. Leading brands with high levels of consumer acceptance and an expansive distribution network are sources of competitive strengths. We like the structure of the group.

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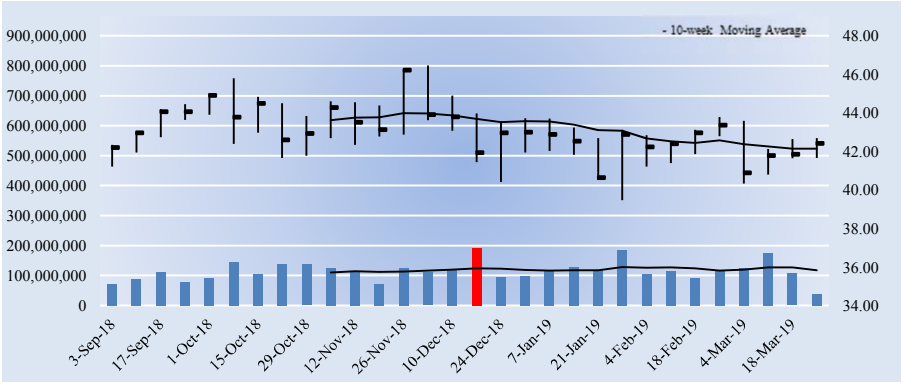
Pfizer PFE FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$45.00	$36.00 - $54.00	MEGA-CAP VALUE	Health Care	Pharmaceuticals - Big

Pfizer's focus on oncology and its leading position in emerging markets are expected to be growth drivers. The company has a long track record of approvals.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**42.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$253,544
Avg Weekly Vol (30 wks)	114,704
30-week Range (USD)	39.47 - 46.47
Valuentum Sector	Health Care
5-week Return	-1.4%
13-week Return	-1.8%
30-week Return	2.3%
Dividend Yield %	3.4%
Dividends per Share	1.44
Forward Dividend Payout Ratio	49.2%
Est. Normal Diluted EPS	3.21
P/E on Est. Normal Diluted EPS	13.2
Est. Normal EBITDA	24,614
Forward EV/EBITDA	11.9
EV/Est. Normal EBITDA	11.2
Forward Revenue Growth (5-yr)	1.7%
Forward EPS Growth (5-yr)	13.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Pfizer is a research-based, global biopharmaceutical company. The company has a leading portfolio of products and medicines that support wellness and prevention, as well as treatment and cures for diseases across a broad range of therapeutic areas. The firm was founded in 1849 and is headquartered in New York, New York.

• Pfizer continues to deliver novel and differentiated future potential products, and oncology has become an area of focus. The firm's oncology growth is expected to be fueled by IBRANCE and XTANDI, and it anticipates reaching 28 approved oncology indications by 2020 from 17 in 2017.

• Pfizer has a strong track record of approvals, which has played a key role in the evolution of its business. The firm is now #1 in non-viral anti-infective treatments, #1 in total biosimilar sales, the leading company in global off-patent sterile injectables, and has a leading position in emerging markets, which can be expected to drive growth in the near term.

• Though it is a small fraction of its overall business, Pfizer's biosimilar operations have grown at a robust rate in recent quarters, and 'Innovative Health' has been a source of strength as well. Management anticipates three potential blockbuster approvals in 2019 with a high degree of optimism surrounding tafamidis, a cardiomyopathy treatment.

• Pfizer has agreed to combine its Consumer Healthcare business with GSK's consumer health business in a JV that will be majority owned by GSK. The unit includes products such as Advil and Centrum. Pfizer acquired Ancacor Phrama for $5.2 billion in a deal that targeted its eczema gel product.

Relative Valuation

	Forward P/E	PEG	Price / FV
Abbott	24.4	2.5	116.2%
AbbVie	9.3	1.3	90.7%
Eli Lilly	22.9	2.1	123.6%
Merck	20.3	2.5	113.6%
Peer Median	21.6	2.3	114.9%
Pfizer	**14.5**	**1.7**	**94.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	20.3%
Return on Assets	7.8%
ROIC, with goodwill	12.7%
ROIC, without goodwill	23.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	41,740
Net Debt	22,907
Total Debt/EBITDA	2.5
Net Debt/EBITDA	1.4
EBITDA/Interest	12.7
Current Ratio	1.6
Quick Ratio	0.8

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	52,546	53,647	53,325
Revenue, YoY%	-0.5%	2.1%	-0.6%
Operating Income	14,107	15,045	21,551
Operating Margin %	26.8%	28.0%	40.4%
Net Income	21,307	11,143	17,242
Net Income Margin %	40.5%	20.8%	32.3%
Diluted EPS	3.52	1.86	2.93
Diluted EPS, YoY %	200.9%	-47.0%	57.1%
Free Cash Flow (CFO-capex)	14,253	13,631	18,419
Free Cash Flow Margin %	27.1%	25.4%	34.5%

In Millions of USD (except for per share items)

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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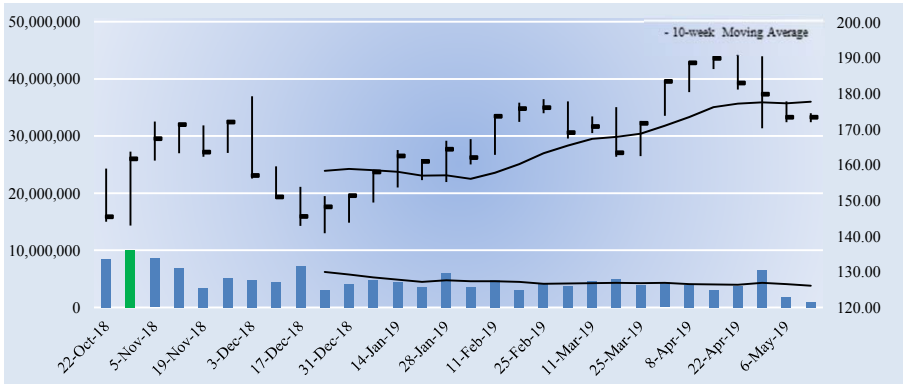
Parker-Hannifin PH FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$197.00	$158.00 - $236.00	LARGE-CAP VALUE	Industrials	Electrical Equipment

Parker-Hannifin's free cash flow conversion is consistently fantastic, and it has some ambitious financial targets for the years ahead.

Stock Chart (weekly)



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)	$23,480
Avg Weekly Vol (30 wks)	4,746
30-week Range (USD)	140.820007 - 190.970001
Valuentum Sector	Industrials
5-week Return	-7.8%
13-week Return	0.5%
30-week Return	9.4%
Dividend Yield %	2.0%
Dividends per Share	3.52
Forward Dividend Payout Ratio	29.9%
Est. Normal Diluted EPS	13.07
P/E on Est. Normal Diluted EPS	13.3
Est. Normal EBITDA	2,906
Forward EV/EBITDA	10.3
EV/Est. Normal EBITDA	9.5
Forward Revenue Growth (5-yr)	2.2%
Forward EPS Growth (5-yr)	12.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	18.6%
Return on Assets	6.9%
ROIC, with goodwill	15.9%
ROIC, without goodwill	29.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,957
Net Debt	4,102
Total Debt/EBITDA	2.1
Net Debt/EBITDA	1.7
EBITDA/Interest	11.0
Current Ratio	1.6
Quick Ratio	1.0

NMF = Not Meaningful

Investment Highlights

• Parker-Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems. There remains ample opportunity for growth in this $120+ billion global market. The firm has increased its annual dividends paid to shareholders for more than 60 consecutive fiscal years. It was founded in 1918 and is headquartered in Cleveland, Ohio.

• When it comes to industrial entities, Parker-Hannifin is among the strongest. It boasts top quartile performance in free-cash-flow generation and return on invested capital. Investors should keep a close eye on Parker-Hannifin's operating margins as well, which have expanded nicely as of late.

• Parker-Hannifin acquired Clarcor for ~$4.3 billion, combining Clarcor's solid US presence with Parker-Hannifin's international strength. Annual run-rate cost synergies of $160 million and revenue synergies of $100 million are expected by fiscal 2020. However, after the US DoJ filed an antitrust lawsuit, the firm has agreed to divest its Facet filtration business, which includes Clarcor's aviation fuel filtration assets.

• Parker-Hannifin now expects ~55% of its revenue to be generated via its aftermarket business thanks to its purchase of Clarcor, the integration of which has exceeded expectations thus far. Its free cash flow conversion (free cash flow divided by net income) is consistently fantastic and has been more than 100% of net income each year since fiscal 2006.

• Parker-Hannifin has set the following targets for fiscal 2023: organic sales growth of 150 basis points above the broader industrial markets growth, an operating income margin of 19%, an EPS CAGR of 10%+, and free cash flow conversion at or above 100% of net income.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**178.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Emerson Electric	18.1	2.1	107.2%
Lennox	21.4	1.9	120.2%
Pentair	16.2	1.8	99.7%
Roper Technologies	27.4	2.6	122.6%
Peer Median	19.7	2.0	113.7%
Parker-Hannifin	**14.7**	**1.7**	**88.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jun-17	Jun-18	Jun-19
Revenue	12,029	14,302	14,360
Revenue, YoY%	5.9%	18.9%	0.4%
Operating Income	1,386	1,882	2,208
Operating Margin %	11.5%	13.2%	15.4%
Net Income	983	1,061	1,595
Net Income Margin %	8.2%	7.4%	11.1%
Diluted EPS	7.25	7.83	11.78
Diluted EPS, YoY %	23.1%	8.0%	50.3%
Free Cash Flow (CFO-capex)	1,098	1,353	1,853
Free Cash Flow Margin %	9.1%	9.5%	12.9%

In Millions of USD (except for per share items)

Structure of the Electrical Equipment Industry — NEUTRAL

The fragmented electrical equipment industry includes firms that primarily provide flow control and electrical components. Order trends and backlog are largely driven by the overall health of the economy, while all constituents must deal with volatile raw material prices. Most operate high fixed-cost business models, where operating leverage should be monitored closely, and face intense global competition. Still, we like the group's exposure to recurring maintenance, repair, and overhaul (MRO) revenue and its large and growing emerging-market opportunities. We're generally neutral on the industry's structure.

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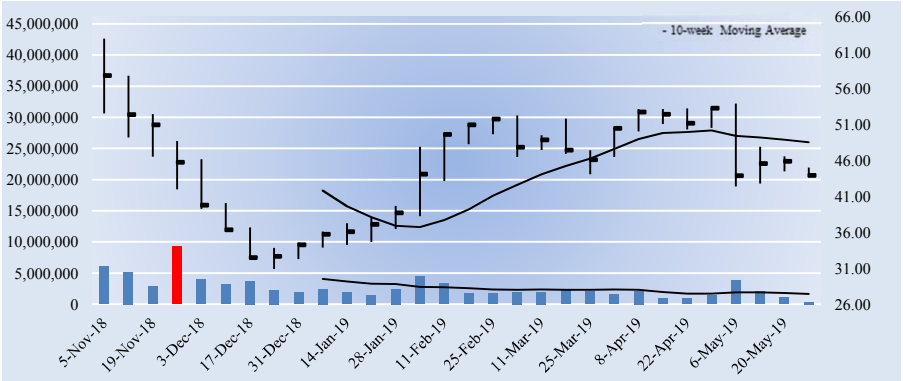
Plantronics Inc PLT FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$58.00	$43.00 - $73.00	SMALL-CAP VALUE	Information Technology	Communications Equipment

Plantronics is reportedly exploring strategic options, including a potential sale. Shares look cheap on a non-GAAP basis, but caution is in order.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Resistance, 10-wk MA	**49.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$1,669
Avg Weekly Vol (30 wks)	2,672
30-week Range (USD)	30.9 - 62.970001
Valuentum Sector	Information Technology
5-week Return	-14.2%
13-week Return	-15.5%
30-week Return	-28.6%
Dividend Yield %	1.4%
Dividends per Share	0.60
Forward Dividend Payout Ratio	21.6%
Est. Normal Diluted EPS	2.36
P/E on Est. Normal Diluted EPS	18.6
Est. Normal EBITDA	434
Forward EV/EBITDA	6.9
EV/Est. Normal EBITDA	7.1
Forward Revenue Growth (5-yr)	6.2%
Forward EPS Growth (5-yr)	-183.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Plantronics is a world leader in personal audio communications for professionals and consumers. Its services span solutions for unified communication to Bluetooth headsets. The company also makes specialty products under the Clarity brand. It was founded in 1961 and is headquartered in Santa Cruz, California.

• Plantronics believes it has a long runway of growth ahead of it in its Unified Communications (UC) segment, though growth in this area has been slower than initially anticipated. Innovation in software, services, and analytics will be important moving forward.

• Plantronics acquired Polycom, leader in voice and video collaboration, for $2 billion in cash and stock. The deal broadens its portfolio and expands its market opportunity thanks to an augmented services business. Annual run rate synergies of $75 million are expected within 12 months of closing. It is now exploring strategic alternatives, including a potential sale.

• The firm's business is sensitive to economic cycles, but the demand for headsets has generally grown over time for both business and consumer applications. Motorola, Samsung, LG and Bose can be considered competitors. Currency moves may pose headwinds.

• Management is targeting fiscal 2020 non-GAAP revenue growth in the range of 21%-24% and adjusted EBITDA in the range of $410-$460 million. Non-GAAP earnings per share guidance for fiscal 2020 is not provided.

Relative Valuation

	Forward P/E	PEG	Price / FV
EchoStar	50.1	NMF	87.8%
Harris Corp	22.9	2.6	120.9%
QUALCOMM	17.4	NMF	80.3%
ViaSat	NMF	NMF	117.1%
Peer Median	22.9	2.6	102.4%
Plantronics Inc	**NMF**	**NMF**	**75.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	5.7%
Return on Assets	2.8%
ROIC, with goodwill	33.4%
ROIC, without goodwill	39.0%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-18	Mar-19	Mar-20
Revenue	857	1,675	2,062
Revenue, YoY%	-2.8%	95.5%	23.1%
Operating Income	123	-76	245
Operating Margin %	14.4%	-4.5%	11.9%
Net Income	68	-136	107
Net Income Margin %	8.0%	-8.1%	5.2%
Diluted EPS	1.96	-3.58	2.78
Diluted EPS, YoY %	-21.9%	-282.8%	-177.6%
Free Cash Flow (CFO-capex)	90	89	227
Free Cash Flow Margin %	10.5%	5.3%	11.0%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,641
Net Debt	1,425
Total Debt/EBITDA	13.1
Net Debt/EBITDA	11.4
EBITDA/Interest	1.1
Current Ratio	1.5
Quick Ratio	1.0

NMF = Not Meaningful

Structure of the Communications Equipment Industry — VERY POOR

The communications equipment industry continues to undergo rapid change, as network traffic expands, new service offerings are introduced, and end user demand shifts. Competition among communication network solution vendors remains intense, as securing new opportunities often requires agreeing to less favorable commercial terms and pricing. Rivalry among constituents will only increase in coming years, as Chinese equipment vendors gain entry into the US market and incumbent competitors strive to retain share. We don't think such conditions are favorable to generating long-term economic profit.

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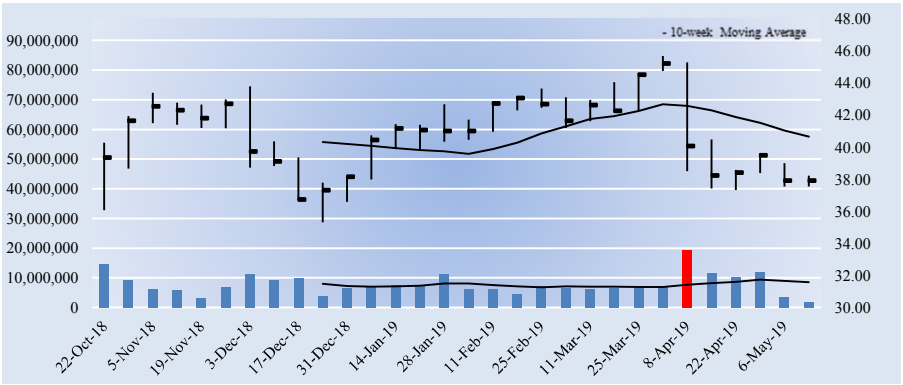
Pentair PNR FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$38.00	$30.00 - $46.00	MID-CAP VALUE	Industrials	Electrical Equipment

Following the spin-off of its Electrical business, Pentair is now a pure play water company, and we like that a higher percentage of its business is now tied to the replacement/aftermarket space.

Stock Chart (weekly)



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Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**IMPROVING**
Near-term Technical Resistance, 10-wk MA	**41.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$6,708
Avg Weekly Vol (30 wks)	7,871
30-week Range (USD)	35.299999 - 45.700001
Valuentum Sector	Industrials
5-week Return	-5.2%
13-week Return	-10.8%
30-week Return	-1.7%
Dividend Yield %	1.9%
Dividends per Share	0.72
Forward Dividend Payout Ratio	30.9%
Est. Normal Diluted EPS	2.75
P/E on Est. Normal Diluted EPS	13.8
Est. Normal EBITDA	703
Forward EV/EBITDA	12.2
EV/Est. Normal EBITDA	10.6
Forward Revenue Growth (5-yr)	3.6%
Forward EPS Growth (5-yr)	11.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Following the spin-off of its Electrical business, Pentair is now a pure play water company focused on smart, sustainable water and fluid processing applications. It provides solutions for residential (~60% of revenue), commercial (20%), and industrial and agriculture (20%) applications. The company has 130 locations in 34 countries around the world. It was founded in 1966 and is based in the UK.

• An enhanced strategic focus, simplified corporate structure, and improved clarity into business performance are key selling points of the spin-off, and geographic expansion remains a growth opportunity. The Electrical business has been named nVent Electric and trades under the ticker 'NVT.'

• Pentair's long-term financial goals include 2%-4% annual core sales growth, 6%-8% segment income growth, and 8%-10% adjusted earnings per share growth as it takes advantage of operating margin and share buyback opportunities. The company also expects to deliver free cash flow equal to adjusted net income, which could lead to $2+ billion in cumulative free cash flow through 2022.

• Pentair is working to transform its business into one that is more predictable via simplification and standardization initiatives, which are expected to help drive net income margins along with pricing initiatives in coming years. Following the spin-off, management estimates that ~70% of Pentair's revenue comes from replacement/aftermarket.

• Pentair targets free cash flow to be ~100% of adjusted net income, which will help in its capital allocation plan that includes a focus on tuck-in and bolt-on M&A activity as it embraces the shift toward 'smart' technologies. The company has grown its dividend for 40+ years, as adjusted for the spin-off.

Relative Valuation

	Forward P/E	PEG	Price / FV
Emerson Electric	18.1	2.1	107.2%
Lennox	21.4	1.9	120.2%
Parker-Hannifin	14.7	1.7	88.0%
Roper Technologies	27.4	2.6	122.6%
Peer Median	19.7	2.0	113.7%
Pentair	**16.2**	**1.8**	**99.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	10.2%
Return on Assets	4.6%
ROIC, with goodwill	9.0%
ROIC, without goodwill	22.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	4,937	2,965	3,039
Revenue, YoY%	1.0%	-39.9%	2.5%
Non-GAAP Operating Income	681	437	520
Non-GAAP EBIT %	13.8%	14.7%	17.1%
Non-GAAP Net Income	480	322	413
Non-GAAP NI Margin %	9.7%	10.9%	13.6%
Non-GAAP Diluted EPS	2.61	1.82	2.33
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP Free Cash Flow	549	391	438
Non-GAAP FCF Margin %	11.1%	13.2%	14.4%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	788
Net Debt	714
Total Debt/EBITDA	1.5
Net Debt/EBITDA	1.4
EBITDA/Interest	15.8
Current Ratio	1.3
Quick Ratio	0.7

NMF = Not Meaningful

Structure of the Electrical Equipment Industry — NEUTRAL

The fragmented electrical equipment industry includes firms that primarily provide flow control and electrical components. Order trends and backlog are largely driven by the overall health of the economy, while all constituents must deal with volatile raw material prices. Most operate high fixed-cost business models, where operating leverage should be monitored closely, and face intense global competition. Still, we like the group's exposure to recurring maintenance, repair, and overhaul (MRO) revenue and its large and growing emerging-market opportunities. We're generally neutral on the industry's structure.

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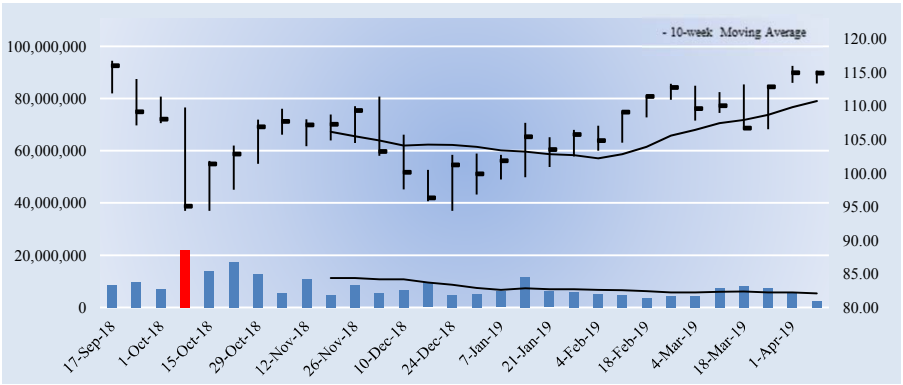
PPG Industries PPG FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$101.00	$81.00 - $121.00	LARGE-CAP CORE	Materials	Chemicals - broad

PPG Industries is facing cost pressures in raw materials, freight, energy, and labor, which it is combatting with price increases, and moderating growth in Asia, Europe, and the automotive OEM space should be monitored.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**111.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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.

Company Vitals

Market Cap (USD)	$28,196
Avg Weekly Vol (30 wks)	7,899
30-week Range (USD)	94.37 - 116.73
Valuentum Sector	Materials
5-week Return	4.4%
13-week Return	13.4%
30-week Return	2.3%
Dividend Yield %	1.7%
Dividends per Share	1.92
Forward Dividend Payout Ratio	30.5%
Est. Normal Diluted EPS	8.01
P/E on Est. Normal Diluted EPS	14.3
Est. Normal EBITDA	3,069
Forward EV/EBITDA	12.3
EV/Est. Normal EBITDA	10.5
Forward Revenue Growth (5-yr)	3.0%
Forward EPS Growth (5-yr)	13.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• PPG Industries is a leading supplier of paints, coatings, specialty materials, flat glass and fiber glass. United States and Canada account for ~45% of the company's business. PPG Industries continues to post excellent financial results, and management is fiscally prudent (albeit acquisitive). The firm was founded in 1883.

• Since 2004, the firm has undergone a significant shift in operational focus. Coatings accounted for ~56% of its business in 2004. Today, coatings account for the entirety of its portfolio. Acquisitions are worth watching, and the company points to Asia as a key global growth opportunity.

• PPG Industries is acquisitive, but we like its organic growth potential via emerging market expansion, increased sales content per airplane, and auto production. In the near term, PPG expects moderating growth rates in Asia, modest and varied growth across Europe, and very modest growth in auto EOM coatings. Raw material inflation will impact margins, but it continues to optimize its cost structure.

• PPG isn't too capital-intensive (capex averages ~2.5% of sales), has pricing power, and its top-market share position in the ~$140 billion consolidating coatings industry is hard not to like and may be vital for it to fight off the impact of recent cost inflation. On a fundamental basis, the firm is one of our favorite ideas within the chemicals industry.

• PPG is a Dividend Aristocrat, having raised its dividend in each of the past 45+ years. We like its dividend growth potential, but its annual yield isn't large. Dividends accounted for ~19% of its cash usage in 2009-2018. Capital deployed in that period was ~45% business growth and 55% shareholder returns.

Relative Valuation

	Forward P/E	PEG	Price / FV
DowDuPont	12.2	1.4	83.7%
Eastman Chemical	9.3	1.7	84.2%
Ecolab	30.6	2.5	153.4%
LyondellBasell	8.5	0.9	88.7%
Peer Median	10.8	1.5	86.4%
PPG Industries	**18.2**	**1.6**	**113.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	21.7%
Return on Assets	6.8%
ROIC, with goodwill	16.8%
ROIC, without goodwill	26.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	14,750	15,374	15,666
Revenue, YoY%	0.0%	4.2%	1.9%
Operating Income	2,063	1,862	2,112
Operating Margin %	14.0%	12.1%	13.5%
Net Income	1,371	1,323	1,516
Net Income Margin %	9.3%	8.6%	9.7%
Diluted EPS	5.32	5.39	6.30
Diluted EPS, YoY %	152.1%	1.4%	16.9%
Free Cash Flow (CFO-capex)	1,208	1,056	1,598
Free Cash Flow Margin %	8.2%	6.9%	10.2%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	5,016
Net Debt	4,053
Total Debt/EBITDA	2.1
Net Debt/EBITDA	1.7
EBITDA/Interest	20.0
Current Ratio	1.4
Quick Ratio	0.9

NMF = Not Meaningful

Structure of the Chemicals Industry — POOR

The broad chemicals industry includes firms that make thousands of different chemical substances, ranging from basic raw materials to advanced specialty chemicals. Making chemicals is a cyclical and energy-intensive business, with volatile oil/gas prices influencing feedstock, operation, and transportation costs. Specialty providers can carve out niches, but commodity chemicals producers are largely undifferentiated, making it impossible to gain a sustainable competitive edge. The industry is very capital intensive, and large swings in prices and volume should be expected. We don't like the industry structure.

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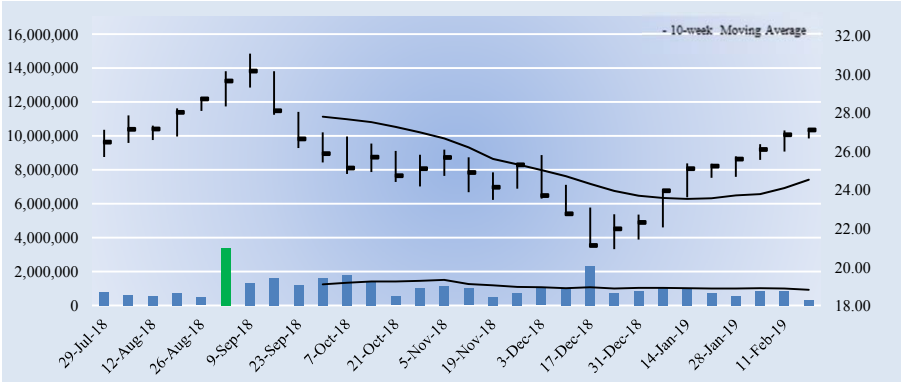
Perficient PRFT FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$27.00	$22.00 - $32.00	SMALL-CAP CORE	Information Technology	Business Services

Market forces behind Perficient's business include the ongoing digital transformation, the proliferation of cloud computing, the evolution of the healthcare industry, and a changing financial services regulatory environment.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**25.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$924
Avg Weekly Vol (30 wks)	1,061
30-week Range (USD)	20.92 - 31.09
Valuentum Sector	Information Technology
5-week Return	8.5%
13-week Return	11.6%
30-week Return	1.8%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	1.70
P/E on Est. Normal Diluted EPS	15.9
Est. Normal EBITDA	97
Forward EV/EBITDA	10.8
EV/Est. Normal EBITDA	10.0
Forward Revenue Growth (5-yr)	3.4%
Forward EPS Growth (5-yr)	27.3%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Perficient is an IT consulting firm. The company designs, builds, and delivers business-driven technology solutions using third-party software products. Solutions include business integration, CRM, and custom applications, among others. It was founded in 1997 and is based in St. Louis, Missouri.

• Perficient has a number of things going for it over the long haul. The two biggest are a huge addressable market at $200 billion and a ~95% repeat business rate. The firm continues to increase its average bill rate, and we think investors should expect further upside with this metric.

• Market forces behind Perficient's business include the ongoing digital transformation, the proliferation of cloud computing, the evolution of the healthcare industry, and a changing financial services regulatory environment. Its strategic growth drivers include geographic expansion, increased offshore presence, strategic account development, and M&A activity.

• The world's leading enterprises are increasingly turning to Perficient to help them design, develop and implement innovative digital experience business optimization and industry solutions. Client retention has been strong of late, and roughly 90% of revenues in 2017 came from accounts that were clients in either of the previous two years.

• Perficient seems to have the upper hand with respect to competitors. The company seems to win more than 60% of the time and against firms such as Accenture, Infosys, Cognizant, and Sapient. Nevertheless, win rates are worth keeping an eye on.

Relative Valuation

	Forward P/E	PEG	Price / FV
Accenture	21.9	2.5	114.1%
Amdocs	13.3	1.4	80.4%
IHS Markit	20.6	1.9	108.2%
VMware	27.1	2.8	122.0%
Peer Median	21.2	2.2	111.2%
Perficient	**17.5**	**1.8**	**100.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	6.0%
Return on Assets	4.5%
ROIC, with goodwill	13.6%
ROIC, without goodwill	43.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-16	Dec-17	Dec-18
Revenue	487	485	495
Revenue, YoY%	2.8%	-0.4%	2.0%
Non-GAAP Operating Income	32	34	70
Non-GAAP EBIT %	6.5%	6.9%	14.2%
Non-GAAP Net Income	20	19	53
Non-GAAP NI Margin %	4.2%	3.8%	10.6%
Non-GAAP Diluted EPS	0.58	0.55	1.55
Non-GAAP Dil EPS, YoY %	-12.8%	-6.7%	183.3%
Non-GAAP FCF (CFO-capex)	57	50	66
Non-GAAP FCF Margin %	11.6%	10.4%	13.3%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	55
Net Debt	49
Total Debt/EBITDA	1.0
Net Debt/EBITDA	0.9
EBITDA/Interest	29.0
Current Ratio	2.1
Quick Ratio	1.9

NMF = Not Meaningful

Structure of the Business Services Industry — NEUTRAL

Firms in the business services space primarily focus on management consulting, technology/data-integration services/software and outsourcing solutions. Participants generate high returns on invested capital, but the business services marketplace is very competitive, and firms can often face pressure from off-shore service providers in lower-cost locations (India, Philippines and China). Such competition may inhibit firms' ability to obtain sufficient pricing for services, and economic conditions may hinder the capability of clients to pay for such services. Still, we're generally neutral on the group.

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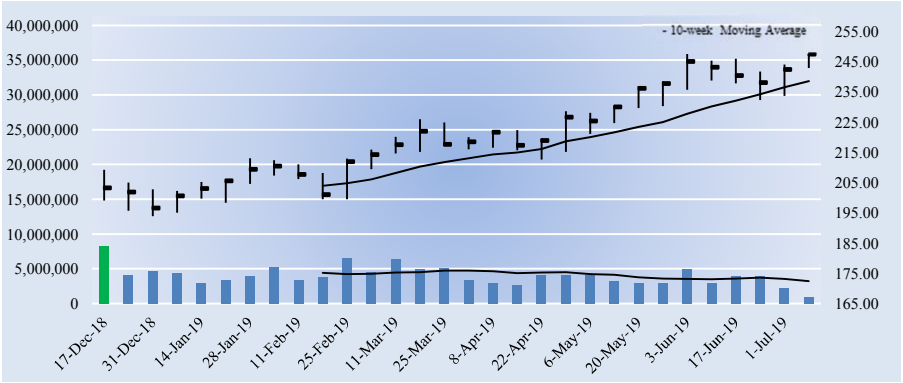
Public Storage PSA FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$202.00	$152.00 - $253.00	LARGE-CAP CORE	Industrials	Rental and Leasing

Public Storage is one of the few REITs with substantial free cash flow generation. While shares aren't cheap, we like its fundamentals and view it as a strong idea for income.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**DETERIORATING**
Near-term Technical Support, 10-week MA	**239.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$43,118
Avg Weekly Vol (30 wks)	4,043
30-week Range (USD)	193.889999 - 247.919998
Valuentum Sector	Industrials
5-week Return	0.9%
13-week Return	11.5%
30-week Return	21.7%
Dividend Yield %	3.2%
Dividends per Share	8.00
Forward Dividend Payout Ratio	72.7%
Est. Normal Diluted EPS	8.93
P/E on Est. Normal Diluted EPS	27.7
Est. Normal EBITDA	2,155
Forward EV/EBITDA	24.7
EV/Est. Normal EBITDA	22.4
Forward Revenue Growth (5-yr)	4.0%
Forward EPS Growth (5-yr)	3.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	30.3%
Return on Assets	14.8%
ROIC, with goodwill	15.1%
ROIC, without goodwill	15.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,412
Net Debt	1,051
Total Debt/EBITDA	0.7
Net Debt/EBITDA	0.6
EBITDA/Interest	57.5
Current Ratio	NA
Quick Ratio	NA

NMF = Not Meaningful

Investment Highlights

• Public Storage is the world's largest owner and operator of self-storage facilities, serving over one million customers. The firm has direct and indirect equity interests in more than 2,350 self-storage facilities in 28 states across the US, making it the largest owner and operator of self-storage facilities in the country. The company was founded in 1971 and is based in California.

• Though competition is significant, the self-storage industry remains fragmented in the US. This market fragmentation enhances the advantage of Public Storage's economies of scale and brand name recognition. Its business can be impacted by the health of regional economies at times.

• Public Storage's fundamentals remain solid across the board, but it has experienced a bit of change in terms of the trajectory of its top-line growth. Supply growth is anticipated to provide a headwind to pricing power in the near term, but the firm still plans to continue as planned with its development pipeline. Mid-single digit revenue growth is still expected.

• Though management emphasizes the dynamic nature of its approach to pricing and promotions as a result of its fragmented industry, it expects that it may be a couple years until excess supply is out of the market and past pricing power returns. The general health of the US economy has management confident in its business's resiliency in the near term, however.

• As a REIT, Public Storage is tied to changes in interest rates. The company's dividend yield currently sits north of most Treasury-based instruments. If this should change, the company's shares could face pressure, though the future trajectory of interest rates is a material uncertainty at this point.

Relative Valuation

	Forward P/E	PEG	Price / FV
AMERCO	17.3	1.7	107.8%
Avis Budget	8.7	0.8	102.6%
Ryder System	8.9	0.7	91.4%
United Rentals	6.9	0.8	74.7%
Peer Median	8.8	0.8	97.0%
Public Storage	**22.5**	**4.7**	**122.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	2,669	2,754	2,839
Revenue, YoY%	4.2%	3.2%	3.1%
Adjusted Operating Income	1,423	1,412	1,450
Adj. Operating Margin %	53.3%	51.3%	51.1%
Funds from Operations	1,690	1,821	1,936
FFO Margin %	63.3%	66.1%	68.2%
Diluted FFO per share	9.70	10.46	11.01
Diluted FFO, YoY %	0.0%	7.8%	5.2%
Free Cash Flow (CFO-capex)	1,638	1,723	1,711
Free Cash Flow Margin %	61.4%	62.6%	60.3%

In Millions of USD (except for per share items)

Structure of the Rental and Leasing Industry — POOR

The highly fragmented and competitive US rental/leasing industry include entities that rent construction/industrial equipment, firms that lease household durable goods products, and companies that offer car/truck rental services. Equipment rental firms are tied to the cyclical construction/industrial end markets, car rental revenue is levered to on-airport (air travel) demand, while lessors of household durables are tied to housing and consumer confidence trends. Some firms may gain advantages via large/diverse rental fleets and significant purchasing power, but we don't like the structure of the group.

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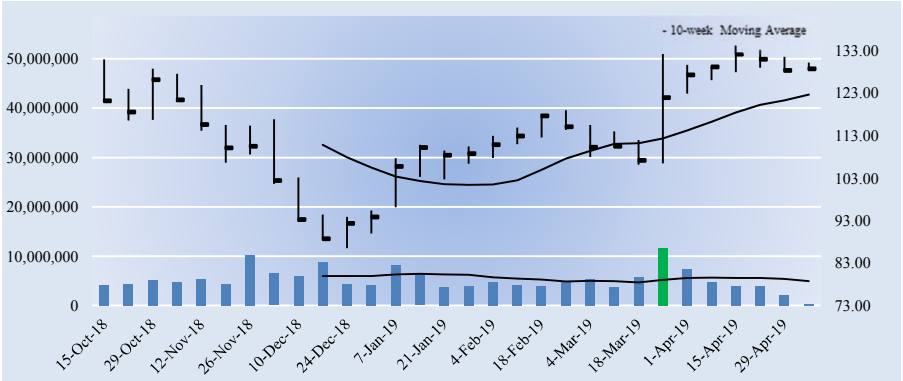
PVH Corp PVH FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$127.00	$102.00 - $152.00	MID-CAP CORE	Consumer Discretionary	Luxury - Established Brands

PVH Corp leverages a diversified portfolio of brands--including Calvin Klein, Tommy Hilfiger, Van Heusen, IZOD, ARROW, and Speedo.

Stock Chart (weekly)



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)	$9,911
Avg Weekly Vol (30 wks)	5,241
30-week Range (USD)	86.459999 - 134.240005
Valuentum Sector	Consumer Discretionary
5-week Return	1.5%
13-week Return	15.6%
30-week Return	2.6%
Dividend Yield %	0.1%
Dividends per Share	0.15
Forward Dividend Payout Ratio	1.4%
Est. Normal Diluted EPS	12.46
P/E on Est. Normal Diluted EPS	10.3
Est. Normal EBITDA	1,523
Forward EV/EBITDA	8.9
EV/Est. Normal EBITDA	8.1
Forward Revenue Growth (5-yr)	3.5%
Forward EPS Growth (5-yr)	8.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	11.7%
Return on Assets	5.3%
ROIC, with goodwill	6.2%
ROIC, without goodwill	8.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	2,832
Net Debt	2,380
Total Debt/EBITDA	2.3
Net Debt/EBITDA	2.0
EBITDA/Interest	10.0
Current Ratio	1.7
Quick Ratio	0.6

NMF = Not Meaningful

Investment Highlights

• PVH Corp is one of the world's largest apparel companies. The firm leverages a diversified portfolio of brands--including Calvin Klein, Tommy Hilfiger, Van Heusen, IZOD, ARROW, and Speedo--and markets them globally. The company was founded in 1881 and is based in New York.

• Tommy Hilfiger and Calvin Klein account for about 75% of the firm's revenue and about 85% of its earnings before interest and taxes. The continued success of these two brands remains vital to PVH's long-term health. PVH acquired The Warnaco Group in February 2013.

• Europe, China, and Japan have been key sources of strength for PVH in recent quarters, while its North America operations have improved nicely, thanks in part to strong growth in its digital channel. Investors can expect increased marketing spend in the near term as management invests to drive brand relevance and consumer reach.

• PVH recently acquired True&Co, an e-commerce retailer, for an undisclosed sum. While the deal may not be a blockbuster needle mover in terms of immediate growth potential, we like what the decision to acquire a data and analytics driven entity could bring further down the road. Integration and execution risk are certainly present, however.

• Tracing its roots back to the late 19th century, PVH has come a long way. It has wholesale, retail, e-commerce and licensing channels, and the firm's Asia and Latin American operations account for 20%+ of operating income.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**POOR**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**123.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Estee Lauder	32.7	2.1	124.3%
Lululemon	37.6	2.7	117.1%
Nike	33.2	2.2	116.8%
Signet	7.3	NMF	78.8%
Peer Median	33.0	2.2	116.9%
PVH Corp	**12.2**	**1.6**	**101.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	8,915	9,657	10,034
Revenue, YoY%	8.7%	8.3%	3.9%
Operating Income	646	876	1,039
Operating Margin %	7.2%	9.1%	10.4%
Net Income	538	747	791
Net Income Margin %	6.0%	7.7%	7.9%
Diluted EPS	6.84	9.70	10.53
Diluted EPS, YoY %	0.8%	41.7%	8.6%
Free Cash Flow (CFO-capex)	342	473	646
Free Cash Flow Margin %	3.8%	4.9%	6.4%

In Millions of USD (except for per share items)

Structure of the Luxury Goods Industry — GOOD

Luxury goods firms differentiate themselves based on brand name, perception, and quality in order to generate excess returns on invested capital through the economic cycle. Building a large, successful luxury brand is difficult, leaving those that possess them with intangible competitive advantages that are not easily overcome by new entrants. Growth in emerging middle classes and China will be the key demand drivers going forward, though the strongest brands will also grow successfully via market share gains. Though changes in consumer preferences should be watched closely, we like the structure of the group.

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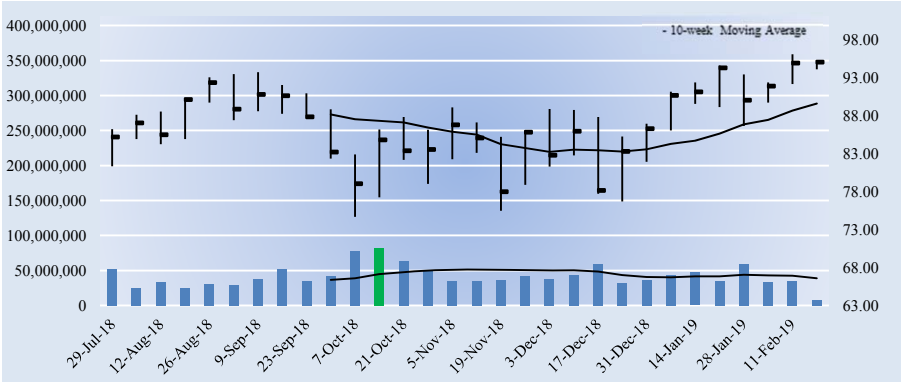
PayPal PYPL FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$116.00	$93.00 - $139.00	LARGE-CAP BLEND	Information Technology	Financial Tech Services

The network effect of PayPal's scale is increasing as digital commerce continues to proliferate, but competition is consistently growing stronger.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**AGGRESSIVE**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**90.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$114,309
Avg Weekly Vol (30 wks)	41,978
30-week Range (USD)	74.66 - 96.04
Valuentum Sector	Information Technology
5-week Return	5.2%
13-week Return	20.3%
30-week Return	11.1%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	4.24
P/E on Est. Normal Diluted EPS	22.4
Est. Normal EBITDA	7,220
Forward EV/EBITDA	20.9
EV/Est. Normal EBITDA	14.8
Forward Revenue Growth (5-yr)	15.2%
Forward EPS Growth (5-yr)	27.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• PayPal operates as a technology platform company that enables digital and mobile payments on behalf of consumers and merchants worldwide. The company's platform allows customers to pay and get paid, transfer and withdraw funds to their bank accounts, and hold balances in their PayPal accounts in various currencies. PayPal was spun off from eBay in July 2015.

• PayPal will continue to innovate and update its products and platform, which will be necessary to remain effectively competitive. Venmo, its peer-to-peer platform, offers additional growth potential, and management is optimistic regarding its ability to further monetize the platform.

• PayPal's business is subject to extensive government regulation and oversight, as well as complex, overlapping and frequently changing rules, regulations and legal interpretations. Additionally, any factors that increase the costs of cross-border trade or restrict, delay, or make cross-border trade more difficult would lower its revenues and profits and could harm our business, providing additional geopolitical risk.

• PayPal continues to set itself up for long-term success. The firm has announced partnerships with Visa, MasterCard, and Discover that enhance customer service features, particularly in the area of digital payments. In 2019, the company expects revenue growth of 16%-17% in constant currency, and non-GAAP EPS growth is targeted at 17%-20%.

• Competition is growing for PayPal, including the likes of Square, Stripe, and digital initiatives from credit card companies. Amazon is reportedly offering discounts to retailers using Amazon Pay. Shares have been volatile on news around its agreement with eBay, which was ultimately extended through 2023.

Relative Valuation

	Forward P/E	PEG	Price / FV
Bottomline Tech	NMF	3.6	106.1%
Fiserv	29.8	NMF	129.7%
Mastercard	28.9	2.1	100.3%
Visa	26.9	2.1	94.4%
Peer Median	28.9	2.1	103.2%
PayPal	**32.6**	**2.1**	**81.9%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	11.5%
Return on Assets	4.8%
ROIC, with goodwill	29.8%
ROIC, without goodwill	49.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,998
Net Debt	-7,111
Total Debt/EBITDA	0.6
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	1.3
Quick Ratio	1.1

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	13,094	15,451	17,985
Revenue, YoY%	20.8%	18.0%	16.4%
Non-GAAP Operating Income	2,259	2,503	4,252
Non-GAAP EBIT %	17.3%	16.2%	23.6%
Non-GAAP Net Income	1,795	2,057	3,487
Non-GAAP NI Margin %	13.7%	13.3%	19.4%
Non-GAAP Diluted EPS	1.47	1.71	2.92
Non-GAAP Dil EPS, YoY %	27.8%	16.3%	70.7%
Non-GAAP FCF (CFO-capex)	1,864	4,660	3,906
Non-GAAP FCF Margin %	14.2%	30.2%	21.7%

In Millions of USD (except for per share items)

Structure of the Financial Tech Services Industry — EXCELLENT

The financial tech services industry is primarily composed of firms that generate revenue by charging fees to customers for providing transaction processing and other payment-related services. Constituents operate in a rapidly-evolving legal/regulatory environment, particularly with respect to interchange fees, data protection, and information security. Several participants benefit from a significant competitive advantage – the network effect. As more consumers use credit/debit cards, more merchants accept them, thereby creating a virtuous cycle. The industry is one of the most attractive in our coverage.

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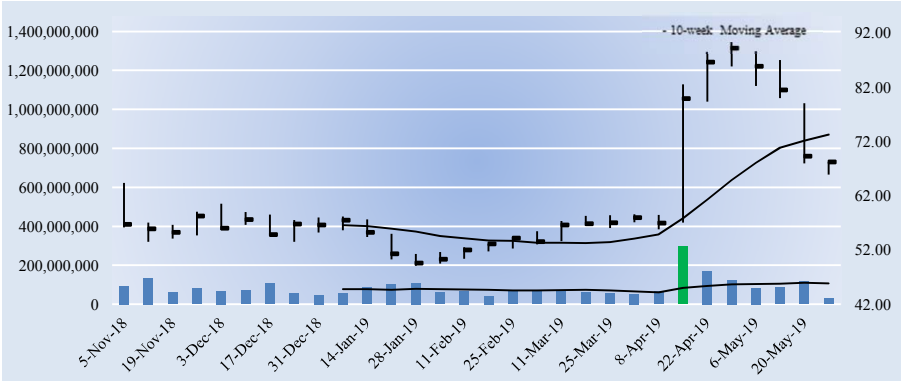
QUALCOMM QCOM FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$85.00	$68.00 - $102.00	LARGE-CAP VALUE	Information Technology	Communications Equipment

We've raised our fair value estimate for QUALCOMM after Apple agreed to drop all litigation worldwide in a settlement that includes Apple making a payment to QUALCOMM and a multiyear supply agreement.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Resistance, 10-wk MA	**73.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$99,857
Avg Weekly Vol (30 wks)	86,208
30-week Range (USD)	49.099998 - 90.339996
Valuentum Sector	Information Technology
5-week Return	-21.0%
13-week Return	25.1%
30-week Return	8.2%
Dividend Yield %	3.6%
Dividends per Share	2.48
Forward Dividend Payout Ratio	63.1%
Est. Normal Diluted EPS	5.79
P/E on Est. Normal Diluted EPS	11.8
Est. Normal EBITDA	10,638
Forward EV/EBITDA	13.7
EV/Est. Normal EBITDA	9.8
Forward Revenue Growth (5-yr)	5.8%
Forward EPS Growth (5-yr)	-215.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• QUALCOMM has revolutionized the mobile phone industry. Through its own R&D and through partnerships with other firms, the company develops breakthrough technology and then licenses it. The firm has one of the strongest Economic Castles in our coverage. It was founded in 1985 and is headquartered in San Diego, California.

• Broadcom has officially withdrawn its hostile bid for QUALCOMM after President Trump issued an order to block the deal on grounds that the merger could impair US national security. Since then reports have surfaced that its former chairman and CEO is seeking funding to take QUALCOMM private.

• Sentiment surrounding QUALCOMM has turned following Apple's agreement to drop all pending litigation and the formation of a multiyear licensing and chipset supply agreement. The company's strength in 5G has it well-positioned for growth moving forward and likely played a role in the settlement, which management expects to add $2 per share to earnings as shipments ramp.

• You know a firm's IP is one-of-a-kind when it continues to face antitrust lawsuits. However, serious concerns arose after the FTC filed charges against QUALCOMM for anticompetitive behavior. The FTC claims the firm disrupted the supply of baseband processors to obtain elevated royalties and other favorable terms.

• QUALCOMM has terminated its ~$47 billion deal for NXP Semiconductors after a period of heightened uncertainty related to geopolitical factors and regulatory pressures. The company owes NXP Semi a $2 billion termination fee but is eager to put the uncertainty overhang behind it.

Relative Valuation

	Forward P/E	PEG	Price / FV
CIENA	NMF	NMF	93.0%
EchoStar	50.1	NMF	87.8%
Harris Corp	22.9	2.6	120.9%
ViaSat	NMF	NMF	117.1%
Peer Median	36.5	2.6	105.0%
QUALCOMM	**17.4**	**NMF**	**80.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	-1.6%
Return on Assets	1.8%
ROIC, with goodwill	34.4%
ROIC, without goodwill	54.0%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	22,291	22,732	20,595
Revenue, YoY%	-5.4%	2.0%	-9.4%
Operating Income	4,356	3,877	6,122
Operating Margin %	19.5%	17.1%	29.7%
Net Income	2,466	-4,864	5,662
Net Income Margin %	11.1%	-21.4%	27.5%
Diluted EPS	1.66	-3.32	3.93
Diluted EPS, YoY %	-56.5%	-300.9%	-218.2%
Free Cash Flow (CFO-capex)	4,311	3,111	6,695
Free Cash Flow Margin %	19.3%	13.7%	32.5%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	16,370
Net Debt	4,247
Total Debt/EBITDA	3.0
Net Debt/EBITDA	0.8
EBITDA/Interest	7.1
Current Ratio	1.5
Quick Ratio	1.3

NMF = Not Meaningful

Structure of the Communications Equipment Industry — VERY POOR

The communications equipment industry continues to undergo rapid change, as network traffic expands, new service offerings are introduced, and end user demand shifts. Competition among communication network solution vendors remains intense, as securing new opportunities often requires agreeing to less favorable commercial terms and pricing. Rivalry among constituents will only increase in coming years, as Chinese equipment vendors gain entry into the US market and incumbent competitors strive to retain share. We don't think such conditions are favorable to generating long-term economic profit.

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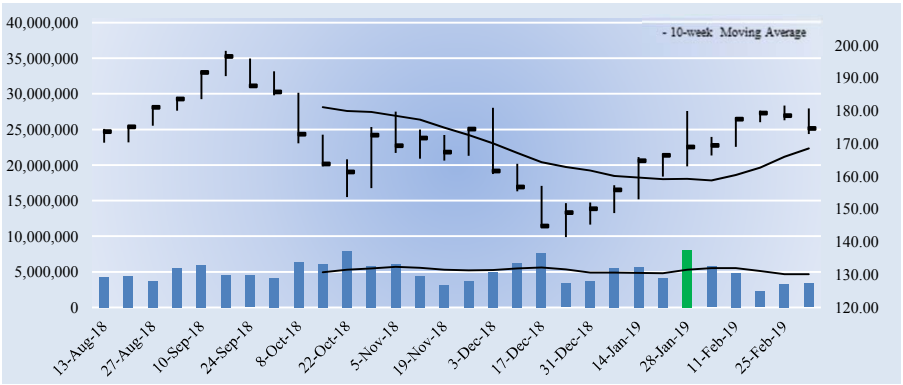
Rockwell Automation ROK FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$152.00	$122.00 - $182.00	LARGE-CAP CORE	Industrials	Electrical Equipment - industrial

Rockwell Automation remains focused on innovation and believes its singular focus on automation gives it a leg up.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**169.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$22,148
Avg Weekly Vol (30 wks)	4,985
30-week Range (USD)	141.46 - 198.23
Valuentum Sector	Industrials
5-week Return	3.7%
13-week Return	8.0%
30-week Return	0.8%
Dividend Yield %	2.2%
Dividends per Share	3.88
Forward Dividend Payout Ratio	42.6%
Est. Normal Diluted EPS	10.30
P/E on Est. Normal Diluted EPS	16.9
Est. Normal EBITDA	1,856
Forward EV/EBITDA	13.9
EV/Est. Normal EBITDA	12.4
Forward Revenue Growth (5-yr)	4.2%
Forward EPS Growth (5-yr)	21.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Rockwell Automation is the world's largest company dedicated to industrial automation. It operates in two segments, Architecture & Software (~46% of total sales) and Control Products & Solutions (~54% of total sales). The company operates in more than 80 countries, but the US accounts for ~55% of total sales. It was founded in 1903 and is headquartered in Milwaukee, Wisconsin.

• We agree with Rockwell that automation is a great market. The firm benefits from a number of tailwinds: an aging installed base, the need for productivity, the growing middle class in emerging markets, lower cost of computing and connectivity, and IT-OT convergence.

• Rockwell remains focused on innovation and believes its singular focus on automation gives it a leg up. The firm notes ongoing uncertainty related to geopolitical uncertainty and trade tensions but continues to forecast industrial production growth. Organic revenue growth is expected at 3.7%-6.7% in fiscal 2019, and it expects to offset tariff-related costs with supply chain changes and pricing.

• Rockwell Automation has some noteworthy long-term goals. The firm is targeting above-market revenue growth and earnings per share growth greater than revenue growth. It expects to generate 20%+ annual return on invested capital and convert more than 100% of adjusted net income to free cash flow each year.

• Management expects to deliver above-market revenue growth by gaining share in its core platforms, growing at a double digit rate in information solutions and connected services, and delivering at least one percentage point of annual revenue growth via acquisitions.

Relative Valuation

	Forward P/E	PEG	Price / FV
Ametek	19.2	3.0	121.0%
AO Smith Corp	18.6	2.5	97.8%
Eaton	13.4	1.7	91.2%
Littelfuse	20.0	2.0	107.8%
Peer Median	18.9	2.2	102.8%
Rockwell Automation	**19.2**	**1.9**	**114.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	6,311	6,666	6,999
Revenue, YoY%	7.3%	5.6%	5.0%
Operating Income	1,033	1,273	1,485
Operating Margin %	16.4%	19.1%	21.2%
Net Income	826	536	1,156
Net Income Margin %	13.1%	8.0%	16.5%
Diluted EPS	6.36	4.22	9.11
Diluted EPS, YoY %	14.2%	-33.6%	115.9%
Free Cash Flow (CFO-capex)	893	1,175	1,160
Free Cash Flow Margin %	14.1%	17.6%	16.6%

In Millions of USD (except for per share items)

Returns Summary

	3-year Historical Average
Return on Equity	31.6%
Return on Assets	10.1%
ROIC, with goodwill	35.6%
ROIC, without goodwill	59.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,776
Net Debt	867
Total Debt/EBITDA	1.2
Net Debt/EBITDA	0.6
EBITDA/Interest	19.7
Current Ratio	1.3
Quick Ratio	0.9

NMF = Not Meaningful

Structure of the Industrial Electrical Equipment Industry — NEUTRAL

Demand for products in the industrial electrical equipment space is highly cyclical, and industry constituents are exposed to volatile raw-material costs, which at times can be difficult to pass along to customers. Product development and quality initiatives are sources of competitive strengths, but rivals often compete aggressively on price to gain share. The industrial electrical equipment market should grow at a GDP-like pace in the developed world and a multiple of that trajectory in emerging markets. We're neutral on the space.

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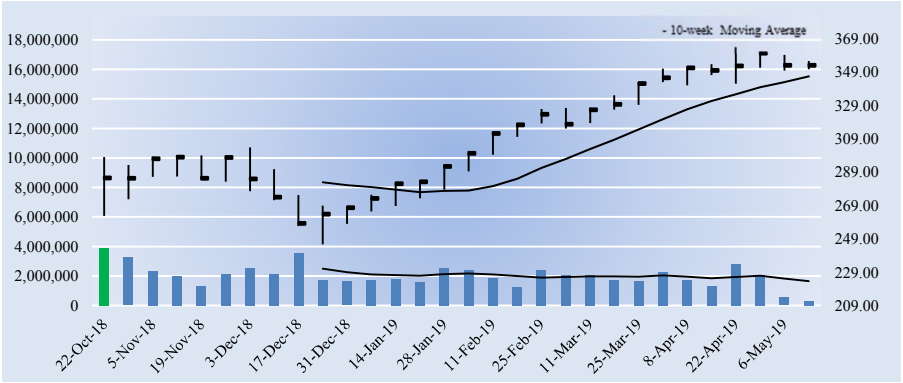
Roper Technologies ROP FAIRLY VALUED

Buying Index™ 5 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$288.00	$202.00 - $374.00	LARGE-CAP CORE	Industrials	Electrical Equipment

We love the company, but shares of Roper are not cheap.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**346.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$36,540
Avg Weekly Vol (30 wks)	2,024
30-week Range (USD)	245.589996 - 363.850006
Valuentum Sector	Industrials
5-week Return	0.1%
13-week Return	13.6%
30-week Return	26.8%
Dividend Yield %	0.5%
Dividends per Share	1.85
Forward Dividend Payout Ratio	14.4%
Est. Normal Diluted EPS	15.12
P/E on Est. Normal Diluted EPS	23.3
Est. Normal EBITDA	2,413
Forward EV/EBITDA	19.3
EV/Est. Normal EBITDA	17.0
Forward Revenue Growth (5-yr)	4.0%
Forward EPS Growth (5-yr)	14.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Roper makes radio frequency products and services, industrial technology products, energy systems and medical/scientific imaging products. We're huge fans of its free cash flow conversion, which has been better than net income for 20 consecutive years. This signals high-quality earnings. The company was founded in 1981 and is based in Sarasota, Florida.

• Roper's businesses that serve upstream oil and gas customers ebb and flow with the energy resource pricing, but its Medical and RF Technology segments help to offset the energy-related cyclicality. Roper generates 50%+ of revenue from recurring sources.

• We like Roper's focus on 'cash return on investment' (CRI). This metric approximates our return on invested capital metric; on the basis of Roper's ValueCreation™ measure, it is executing well. CRI is a metric used throughout the firm's business. CRI focuses on enterprise cash flow growth and disciplined asset investment.

• Roper's cash rich business allowed it to deploy ~$9 billion in acquisitions from 2011-2017 as it has transformed into a highly-profitable diversified technology firm. It plans to spend billions more in M&A over the next four years with a focus on high cash flow generating entities.

• Roper is a tremendous generator of free cash flow, and growing margins have helped free cash flow exceed net income for twenty consecutive years.

Relative Valuation

	Forward P/E	PEG	Price / FV
Emerson Electric	18.1	2.1	107.2%
Lennox	21.4	1.9	120.2%
Parker-Hannifin	14.7	1.7	88.0%
Pentair	16.2	1.8	99.7%
Peer Median	17.2	1.9	103.5%
Roper Technologies	**27.4**	**2.6**	**122.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	13.4%
Return on Assets	6.2%
ROIC, with goodwill	11.3%
ROIC, without goodwill	38.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	4,607	5,191	5,378
Revenue, YoY%	21.6%	12.7%	3.6%
Non-GAAP Operating Income	1,210	1,396	1,766
Non-GAAP EBIT %	26.3%	26.9%	32.8%
Non-GAAP Net Income	972	944	1,333
Non-GAAP NI Margin %	21.1%	18.2%	24.8%
Non-GAAP Diluted EPS	9.39	9.12	12.88
Non-GAAP Dil EPS, YoY %	46.0%	-2.9%	41.2%
Non-GAAP FCF (CFO-capex)	1,174	1,371	1,735
Non-GAAP FCF Margin %	25.5%	26.4%	32.3%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,942
Net Debt	4,578
Total Debt/EBITDA	2.8
Net Debt/EBITDA	2.6
EBITDA/Interest	8.9
Current Ratio	1.1
Quick Ratio	0.7

NMF = Not Meaningful

Structure of the Electrical Equipment Industry — NEUTRAL

The fragmented electrical equipment industry includes firms that primarily provide flow control and electrical components. Order trends and backlog are largely driven by the overall health of the economy, while all constituents must deal with volatile raw material prices. Most operate high fixed-cost business models, where operating leverage should be monitored closely, and face intense global competition. Still, we like the group's exposure to recurring maintenance, repair, and overhaul (MRO) revenue and its large and growing emerging-market opportunities. We're generally neutral on the industry's structure.

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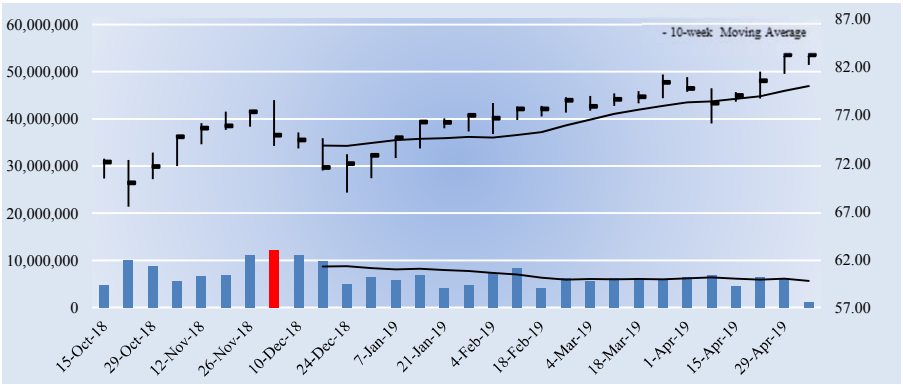
Republic Services RSG FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$74.00	$59.00 - $89.00	LARGE-CAP CORE	Industrials	Environmental Services

Republic Services' revenue is roughly evenly split between open market and restricted pricing markets, and it operates in a monopoly in ~30% of its wastesheds.

Stock Chart (weekly)



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)	$27,343
Avg Weekly Vol (30 wks)	6,748
30-week Range (USD)	67.480003 - 83.260002
Valuentum Sector	Industrials
5-week Return	4.5%
13-week Return	8.4%
30-week Return	18.3%
Dividend Yield %	1.8%
Dividends per Share	1.50
Forward Dividend Payout Ratio	45.8%
Est. Normal Diluted EPS	4.35
P/E on Est. Normal Diluted EPS	19.2
Est. Normal EBITDA	3,362
Forward EV/EBITDA	12.3
EV/Est. Normal EBITDA	10.6
Forward Revenue Growth (5-yr)	4.1%
Forward EPS Growth (5-yr)	12.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	12.4%
Return on Assets	4.7%
ROIC, with goodwill	8.5%
ROIC, without goodwill	21.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	8,338
Net Debt	8,267
Total Debt/EBITDA	2.9
Net Debt/EBITDA	2.9
EBITDA/Interest	7.4
Current Ratio	0.6
Quick Ratio	0.4

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 ~340 collection operations in ~40 states and Puerto Rico. It owns and operates ~195 active solid waste landfills. The company was founded in 1996 and is based in Phoenix, Arizona. 60%+ of revenue comes from franchise or small & mid-size markets.

• 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. Its Apex landfill in Nevada may be the crown jewel in the waste industry.

• Republic Services' strategy of 'Profitable Growth through Differentiation' is based on five pillars: market position, operating model, people and talent agenda, customer zeal, and digital platform. As of early 2019, ~75% of its residential routes have been converted to automated single-driver trucks, reflective of its focus on an efficient operating model.

• Republic's revenue is roughly split 50/50 between open market and restricted pricing markets. In open markets it secures price increases directly with customers and can hold greater pricing power, but contractual pricing markets drive additional operating leverage.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**80.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Casella Waste	44.1	4.1	110.1%
Stericycle	14.6	NMF	92.9%
Waste Connections	32.9	3.1	134.7%
Waste Management	24.4	1.8	118.2%
Peer Median	28.6	3.1	114.1%
Republic Services	**25.4**	**2.1**	**112.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	10,042	10,041	10,453
Revenue, YoY%	7.0%	0.0%	4.1%
Operating Income	1,652	1,717	1,731
Operating Margin %	16.5%	17.1%	16.6%
Net Income	1,278	1,037	1,059
Net Income Margin %	12.7%	10.3%	10.1%
Diluted EPS	3.77	3.16	3.27
Diluted EPS, YoY %	112.0%	-16.3%	3.6%
Free Cash Flow (CFO-capex)	931	1,171	1,267
Free Cash Flow Margin %	9.3%	11.7%	12.1%

In Millions of USD (except for per share items)

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.

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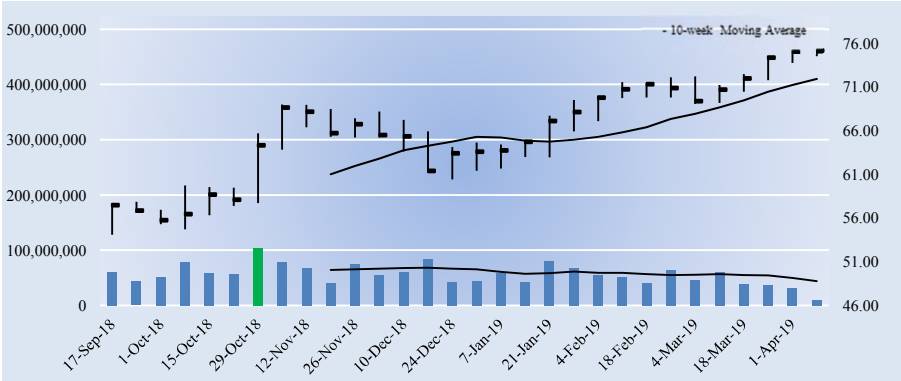
Starbucks SBUX FAIRLY VALUED

Buying Index™ 5 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$61.00	$46.00 - $76.00	LARGE-CAP CORE	Consumer Discretionary	Restaurants - Fast Food & Coffee

Starbucks's brand strength and leadership in digital innovation appear poised to keep it in favor with consumers of all ages and aid in its pricing power.

Stock Chart (weekly)



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)	$104,762
Avg Weekly Vol (30 wks)	56,425
30-week Range (USD)	54.1 - 75.3
Valuentum Sector	Consumer Discretionary
5-week Return	8.3%
13-week Return	18.6%
30-week Return	37.3%
Dividend Yield %	1.9%
Dividends per Share	1.44
Forward Dividend Payout Ratio	52.8%
Est. Normal Diluted EPS	3.71
P/E on Est. Normal Diluted EPS	20.3
Est. Normal EBITDA	7,539
Forward EV/EBITDA	18.2
EV/Est. Normal EBITDA	14.0
Forward Revenue Growth (5-yr)	6.8%
Forward EPS Growth (5-yr)	8.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	78.5%
Return on Assets	21.5%
ROIC, with goodwill	47.9%
ROIC, without goodwill	67.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	9,440
Net Debt	502
Total Debt/EBITDA	1.9
Net Debt/EBITDA	0.1
EBITDA/Interest	29.7
Current Ratio	2.2
Quick Ratio	1.7

NMF = Not Meaningful

Investment Highlights

• Starbucks purchases and roasts high-quality coffees that it sells, along with handcrafted coffee, tea and other beverages and a variety of fresh food items, through its company-operated stores. Global comparable sales growth has averaged in the mid-to-high single digits per annum during the past few years. The company continues to innovate with ordering and other forms of customer-centric technology.

• Starbucks' China division is growing at a tremendous overall pace, as the firm is opening a store in China almost every day. Management expects its China business will eventually be larger than its US business. Performance in the region has been solid.

• Starbucks is investing in its digital capabilities, which we think may provide it with a unique advantage with younger consumers when coupled with its brand strength. As of the fourth quarter of fiscal 2018, drive-thru, out-the-window, and Mobile Order and Pay combined for more than 50% of orders at US company-owned locations, more than 10% higher than two years prior.

• Starbucks has one of the strongest and most-recognized brands in the world, which we think is largely responsible for it being able to charge lofty prices, despite significant competition in its markets. Annual price increases across the menu appear to have become commonplace. We also like ongoing beverage innovation and recent step-change in food quality.

• Investors should be cognizant that input (coffee) costs can be volatile. A variety of factors can influence the price of coffee, such as the strength of South American currencies relative to the dollar and weather patterns. Wage/labor cost pressures should be monitored as well.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**72.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Dunkin' Brands	24.5	2.2	119.1%
McDonald's	23.2	2.8	131.1%
Wendy's Co	28.7	NMF	128.5%
Yum! Brands	25.7	1.9	138.2%
Peer Median	25.1	2.2	129.8%
Starbucks	**27.5**	**1.5**	**123.1%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	22,387	24,720	26,277
Revenue, YoY%	5.0%	10.4%	6.3%
Operating Income	3,897	3,807	4,443
Operating Margin %	17.4%	15.4%	16.9%
Net Income	2,885	4,518	3,765
Net Income Margin %	12.9%	18.3%	14.3%
Diluted EPS	1.97	3.24	2.73
Diluted EPS, YoY %	4.1%	64.1%	-15.8%
Free Cash Flow (CFO-capex)	2,655	9,962	3,170
Free Cash Flow Margin %	11.9%	40.3%	12.1%

In Millions of USD (except for per share items)

Structure of the Restaurants Industry - Fast Food & Coffee — NEUTRAL

The restaurant industry has benefited from a long-term trend toward eating out, but the space has become increasingly more competitive as new concepts are introduced and successful chains expand. Not only are there pricing pressures and trade-down threats, but rising costs for commodities and labor have pressured profits. Barriers to entry are low, and many constituents have a difficult time differentiating themselves. We tend to like larger chains that benefit from scale advantages and international expansion opportunities, though niche franchises can be appealing. We're neutral on the structure of the group.

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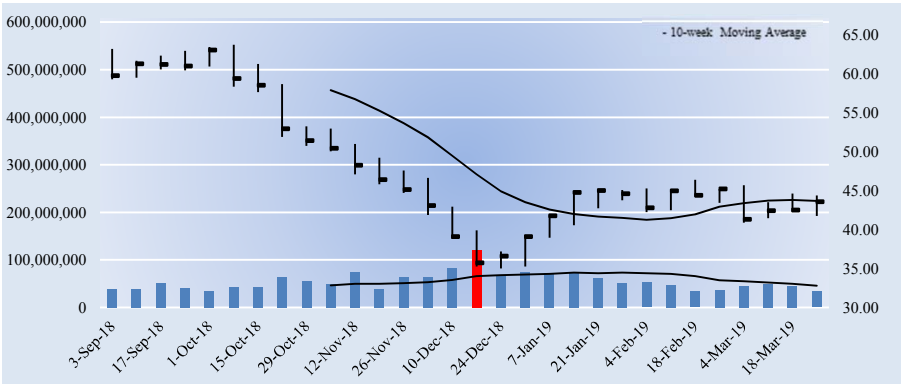
Schlumberger SLB FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$52.00	$42.00 - $62.00	LARGE-CAP VALUE	Energy	Energy Equipment - Large

Uncertainty surrounding capital spending budgets of Schlumberger's North American onshore customers muddies its near-term demand outlook, but international activity levels are expected to help buoy performance.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Resistance, 10-wk MA	**44.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$60,693
Avg Weekly Vol (30 wks)	55,075
30-week Range (USD)	34.99 - 63.65
Valuentum Sector	Energy
5-week Return	-1.7%
13-week Return	18.8%
30-week Return	-30.9%
Dividend Yield %	4.6%
Dividends per Share	2.00
Forward Dividend Payout Ratio	124.5%
Est. Normal Diluted EPS	2.44
P/E on Est. Normal Diluted EPS	17.9
Est. Normal EBITDA	9,047
Forward EV/EBITDA	10.8
EV/Est. Normal EBITDA	8.2
Forward Revenue Growth (5-yr)	6.3%
Forward EPS Growth (5-yr)	14.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Schlumberger is the world's leading supplier of technology, integrated project management and information solutions to the international oil and gas exploration and production industry. By market cap, the firm is bigger than the sum of its three main competitors (HAL, BHGE, WFT) by a wide margin. The company was founded in 1926 and is based in Houston, Texas.

• Schlumberger is maintaining a constructive view of oil markets as supply and demand continue to tighten and expects a gradual recovery in prices in 2019. Third party sources estimate world liquids demand in 2019 to be 101.7 million barrels/day, compared to 98.1 million in 2017 and 96.4 million in 2016.

• Schlumberger has been hurt by greater than expected softness in US hydraulic frac activity and pricing in recent quarters, and some are questioning the viability of the Permian basin to continue to provide its previously expected production growth as unit well productivity has eroded more than anticipated. North American customers are taking a cautious approach to capital spending in 2019.

• Schlumberger believes it is positioned to remain at the foreground of multiple industry-wide trends, including the need for higher global E&P spending, new business models that promote collaboration, and technology platforms that combine software, hardware, and data. Opportunity is present, but the crude oil markets must cooperate.

• Technology remains at Schlumberger's core. The firm's research has shifted to a focus on increasing the rate of innovation, shortening time to market, and improving product performance. It is forming a JV with Rockwell Automation to create the industry's first fully integrated digital automation solutions provider.

Relative Valuation

	Forward P/E	PEG	Price / FV
Baker Hughes	26.9	1.6	75.4%
Halliburton	21.3	1.0	86.2%
National Oilwell Varco	NMF	NMF	80.7%
TechnipFMC	17.1	NMF	84.0%
Peer Median	21.3	NMF	82.4%
Schlumberger	**27.1**	**2.0**	**83.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	-0.7%
Return on Assets	-0.4%
ROIC, with goodwill	11.0%
ROIC, without goodwill	21.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	16,051
Net Debt	13,274
Total Debt/EBITDA	2.4
Net Debt/EBITDA	2.0
EBITDA/Interest	11.7
Current Ratio	1.2
Quick Ratio	0.8

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	30,440	32,815	33,307
Revenue, YoY%	8.7%	7.8%	1.5%
Operating Income	2,678	3,191	3,256
Operating Margin %	8.8%	9.7%	9.8%
Net Income	-1,505	2,138	2,282
Net Income Margin %	-4.9%	6.5%	6.9%
Diluted EPS	-1.08	1.53	1.61
Diluted EPS, YoY %	NMF	NMF	NMF
Free Cash Flow (CFO-capex)	1,671	2,472	4,299
Free Cash Flow Margin %	5.5%	7.5%	12.9%

In Millions of USD (except for per share items)

Structure of the Energy Equipment Industry — NEUTRAL

The energy equipment industry is heavily tied to the exploration and production (upstream) expenditures of oil and gas producers across the globe. Many industry constituents participate in a number of different market segments to offer a complete range of products/services to customers. The fortunes of the group are levered to energy prices (crude/natural gas), as higher prices make drilling projects more attractive and increase the demand for oilfield equipment and services. However, falling prices have an opposite effect, creating long boom and bust cycles. We're neutral on the structure of the group.

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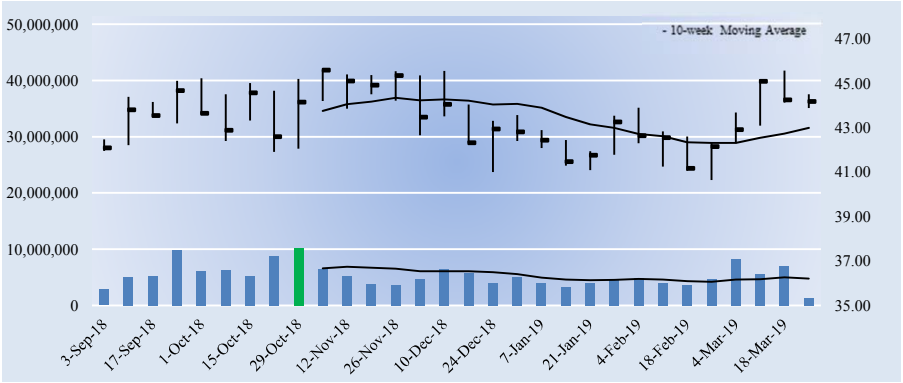
Sanofi SNY FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$42.00	$33.5.00 - $50.5.00	LARGE-CAP CORE	Health Care	Pharmaceuticals - Big

Sanofi has a solid position across much of its portfolio, but it is expecting to face a number of challenges moving forward.

Stock Chart (weekly)



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)	$110,935
Avg Weekly Vol (30 wks)	5,343
30-week Range (USD)	40.65 - 45.62
Valuentum Sector	Health Care
5-week Return	6.8%
13-week Return	2.9%
30-week Return	4.5%
Dividend Yield %	4.2%
Dividends per Share per ADR (in	1.86
Forward Dividend Payout Ratio	63.8%
Est. Normal Diluted EPS (in EUR	3.83
P/E on Est. Normal Diluted EPS	20.4
Est. Normal EBITDA (in EUR)	6,796
Forward EV/EBITDA	21.3
EV/Est. Normal EBITDA	17.1
Forward Revenue Growth (5-yr)	2.3%
Forward EPS Growth (5-yr)	7.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	6.9%
Return on Assets	3.9%
ROIC, with goodwill	8.6%
ROIC, without goodwill	19.2%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of EUR

Total Debt	24,640
Net Debt	17,715
Total Debt/EBITDA	3.7
Net Debt/EBITDA	2.6
EBITDA/Interest	15.5
Current Ratio	1.4
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Sanofi is a global healthcare leader. The firm has seven growth platforms: diabetes solutions, vaccines, innovative drugs, consumer healthcare, emerging markets, animal health and the new Genzyme. Sanofi is looking to the orphan drug market to make an impact. There are drugs available for only ~300 out of >7,000 orphan diseases. The orphan-only drug market is growing at a high-single-digit pace.

• Sanofi has released a '2020 Roadmap' for long-term growth. Sales are expected to advance at a CAGR between 3%-4% on a constant currency basis, six major launches are expected generate aggregate sales of €12-€14 billion, and targeted cost saving will drive constant currency EPS growth above that of sales.

• Sanofi has a solid position across much of its portfolio. It generates about two thirds of revenue from the United States and emerging markets, about evenly split. Both regions are growing nicely. Sanofi invests billions in R&D each year and has a large number of late-stage projects; it expects to grow annual R&D spending to €6 billion by 2020. Rare disease and multiple sclerosis are key opportunities.

• Sanofi is expecting to face a number of challenges moving forward. Affordability is a key concern around the globe, price pressure from payers in developed markets is expected, biosimilar threats and the risk of interchangeability are increasing, economic growth in emerging markets is slowing, and more focused competitors are emerging in its leadership positions.

• Sanofi recently acquired Bioverativ, a biotech with a leading presence in hemophilia, for $11.6 billion. Management expects the deal to achieve an ROIC greater than Sanofi's cost of capital within three years, and it should be able to preserve its A1/AA/AA credit rating.

Investment Considerations

DCF Valuation	FAIRLY VALUED
Relative Valuation	NEUTRAL
ValueCreation™	EXCELLENT
ValueRisk™	LOW
ValueTrend™	POSITIVE
Cash Flow Generation	STRONG
Financial Leverage	HIGH
Growth	MODEST
Technical Evaluation	BULLISH
Relative Strength	WEAK
Money Flow Index (MFI)	NEUTRAL
Upside/Downside Volume (U/D)	BEARISH
Near-term Technical Support, 10-week MA	43.00

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Abbott	24.4	2.5	116.2%
Eli Lilly	22.9	2.1	123.6%
Merck	20.3	2.5	113.6%
Pfizer	14.5	1.7	94.3%
Peer Median	21.6	2.3	114.9%
Sanofi	**26.8**	**1.6**	**105.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	36,204	35,677	35,463
Revenue, YoY%	4.3%	-1.5%	-0.6%
Non-GAAP Operating Income	7,197	5,601	4,303
Non-GAAP EBIT %	19.9%	15.7%	12.1%
Non-GAAP Net Income	3,791	4,319	3,621
Non-GAAP NI Margin %	10.5%	12.1%	10.2%
Non-GAAP Diluted EPS	2.99	3.44	2.91
Non-GAAP Dil EPS, YoY %	-11.8%	15.0%	-15.3%
Non-GAAP Free Cash Flow	5,423	3,570	6,045
Non-GAAP FCF Margin %	15.0%	10.0%	17.0%

In Millions of EUR (except for per share items)

Structure of the Big Pharma Industry — GOOD

The big pharma industry is primarily composed of makers of branded drugs. Intellectual property protection is vital to the successful commercialization of medicines and offers makers of branded drugs a unique competitive advantage via patents, which can extend for decades. When branded drugs lose market exclusivity, however, makers of generic pharmaceuticals can generate intense price competition, causing drastic revenue losses on unprotected therapies. Long-term success for branded pharma companies depends on a strong and diverse drug pipeline, which can be augmented by M&A activity. We generally like the group and expect continued industry consolidation.

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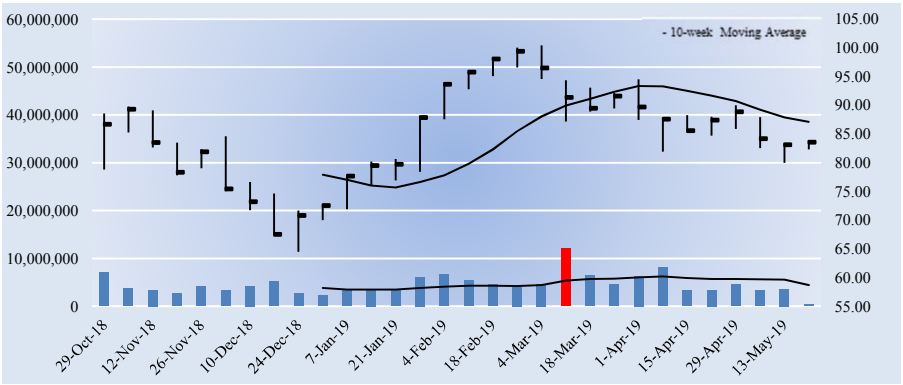
Spirit AeroSystems SPR FAIRLY VALUED

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$94.00	$75.00 - $113.00	MID-CAP VALUE	Industrials	A&D Suppliers

Spirit AeroSystems' ties with Boeing provide it a degree of long-term visibility, but recent issues related to the 737 MAX have created some near-term uncertainty.

Stock Chart (weekly)



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)	$9,113
Avg Weekly Vol (30 wks)	4,535
30-week Range (USD)	64.480003 - 100.339996
Valuentum Sector	Industrials
5-week Return	-2.0%
13-week Return	-15.4%
30-week Return	0.4%
Dividend Yield %	0.6%
Dividends per Share	0.48
Forward Dividend Payout Ratio	6.7%
Est. Normal Diluted EPS	8.48
P/E on Est. Normal Diluted EPS	9.9
Est. Normal EBITDA	1,439
Forward EV/EBITDA	7.9
EV/Est. Normal EBITDA	7.1
Forward Revenue Growth (5-yr)	4.5%
Forward EPS Growth (5-yr)	10.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	27.6%
Return on Assets	8.8%
ROIC, with goodwill	20.5%
ROIC, without goodwill	20.5%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,895
Net Debt	1,122
Total Debt/EBITDA	1.8
Net Debt/EBITDA	1.0
EBITDA/Interest	13.5
Current Ratio	1.8
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Spirit AeroSystems is one of the largest independent non-OEM (original equipment manufacturer) aircraft parts designers and manufacturers of commercial aerostructures in the world. It is the largest independent supplier of aerostructures to Boeing. The company was founded in 1927 and is headquartered in Wichita, Kansas.

• The commercial aerospace industry is one of the strongest industries on the market with significant visibility thanks in part to the burgeoning backlogs at the airframe makers. Air traffic is expected to grow at a ~5% CAGR for the next 20 years, providing a long runway for growth.

• The company makes aerostructures for every Boeing commercial aircraft currently in production, including the majority of the airframe content for the Boeing 737, the most popular major commercial aircraft in history. However, Boeing recently slashed its monthly 737 MAX production schedule after two high-profile crashes. Spirit plans to continue its prior production rate and will store excess inventory.

• Spirit is a leading global supplier of tier 1 aerostructures with ~30% market share as of 2018. The company has a balanced portfolio that breaks down as 52% fuselage, 26% propulsion, and 22% wing. The company's backlog has expanded to ~$48.4 billion at the end of 2018 from $19 billion in 2006. It pulled its bid for Asco after facing regulatory pressure.

• We like Spirit's industry leading capability from design using base materials to a fully installed operational flight deck to reliable delivery and support. We don't think the ties between Boeing and Spirit will ever be severed.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**87.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Astronics	22.2	1.8	81.2%
Hexcel Corp	20.0	1.8	102.2%
Teledyne	25.3	2.5	117.6%
Textron	13.2	NMF	90.0%
Peer Median	21.1	1.8	96.1%
Spirit AeroSystems	**11.7**	**1.4**	**88.9%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	6,983	7,222	8,016
Revenue, YoY%	2.8%	3.4%	11.0%
Operating Income	589	833	1,013
Operating Margin %	8.4%	11.5%	12.6%
Net Income	355	617	761
Net Income Margin %	5.1%	8.5%	9.5%
Diluted EPS	3.01	5.66	7.12
Diluted EPS, YoY %	NMF	NMF	25.9%
Free Cash Flow (CFO-capex)	300	499	622
Free Cash Flow Margin %	4.3%	6.9%	7.8%

In Millions of USD (except for per share items)

Structure of the A&D Supplier Industry — GOOD

The aerospace supply chain will benefit from the multi-year backlogs at the airframe makers, Boeing and Airbus. Though the current upswing looks robust, commercial aerospace has historically been cyclical and remains influenced by airline profits, passenger traffic, credit-market health, and geopolitical conditions. Participants generally operate under contracts with significant long-term price concessions, so cost-containment remains critical. The strongest suppliers are those that have long-standing customer relationships, technical expertise, and state-of-the-art manufacturing facilities. We like the group.

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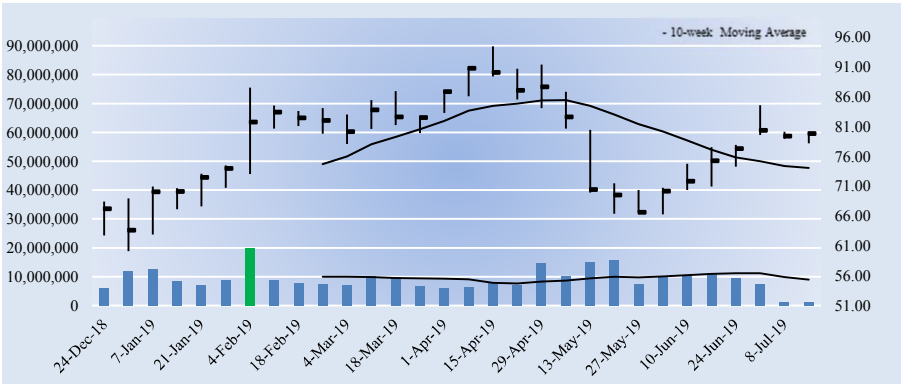
Skyworks SWKS FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$91.00	$66.00 - $116.00	LARGE-CAP VALUE	Information Technology	Integrated Circuits

Skyworks' long-term target operating model is attractive, but it is working to offset demand weakness in premium smartphones and general softness in China.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**DECLINING**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**74.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$14,612
Avg Weekly Vol (30 wks)	9,184
30-week Range (USD)	60.119999 - 94.389999
Valuentum Sector	Information Technology
5-week Return	11.3%
13-week Return	-10.9%
30-week Return	25.0%
Dividend Yield %	1.9%
Dividends per Share	1.52
Forward Dividend Payout Ratio	24.2%
Est. Normal Diluted EPS	6.88
P/E on Est. Normal Diluted EPS	11.6
Est. Normal EBITDA	1,624
Forward EV/EBITDA	8.8
EV/Est. Normal EBITDA	8.4
Forward Revenue Growth (5-yr)	-0.2%
Forward EPS Growth (5-yr)	7.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Skyworks is an innovator of high performance analog semiconductors. The firm supports automotive, broadband, energy management, GPS, industrial, medical, military, wireless networking, and smartphone/tablet applications. Its products run the gamut from amplifiers to voltage regulators. The company was founded in 1962 and is headquartered in Massachusetts.

• Skyworks has a notable degree of customer concentration risk. Apple accounted for 47% and Samsung accounted for 12% of the company's total fiscal 2018 revenue. Such concentration can impact near-term guidance. Smartphone weakness and overall softness in China are weighing on expectations.

• Skyworks' long-term operating model includes target revenue growth above that of its addressable market, a 53% gross margin target, a 40% operating model target, and a 30% free cash flow margin target. Our projections are roughly in line with these targets, and management plans to return 60%-75% of free cash flow to shareholders. It believes it is well positioned across all key growth vectors.

• Skyworks is capitalizing on the strength of mobile and the Internet of Things. Mobile devices are rapidly evolving to address the massive demand for data and speed, and the firm is well-positioned to help resolve such a complex issue. The number of machine-to-machine connections is expected to grow to 12.2 billion in 2020 from 4.9 billion in 2015.

• Power management is a significant growth avenue for Skyworks, and the global trend to connect 'everything' is playing into its hands. The total number of connected devices, for example, could reach an impressive 75+ billion by 2020 as the proliferation of connectivity continues across end markets.

Relative Valuation

	Forward P/E	PEG	Price / FV
Analog Devices	21.5	4.7	119.3%
Microchip Technology	14.6	3.2	108.8%
Nvidia	29.3	1.4	85.5%
Taiwan Semiconductor	20.0	1.9	104.4%
Peer Median	20.8	2.5	106.6%
Skyworks	**12.7**	**2.0**	**87.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	26.3%
Return on Assets	23.3%
ROIC, with goodwill	44.2%
ROIC, without goodwill	68.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	3,651	3,868	3,400
Revenue, YoY%	11.0%	5.9%	-12.1%
Operating Income	1,254	1,320	1,281
Operating Margin %	34.4%	34.1%	37.7%
Net Income	1,010	918	1,127
Net Income Margin %	27.7%	23.7%	33.2%
Diluted EPS	5.41	5.01	6.28
Diluted EPS, YoY %	4.4%	-7.4%	25.3%
Free Cash Flow (CFO-capex)	1,140	831	1,180
Free Cash Flow Margin %	31.2%	21.5%	34.7%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	0
Net Debt	-1,027
Total Debt/EBITDA	0.0
Net Debt/EBITDA	NMF
EBITDA/Interest	Excellent
Current Ratio	5.8
Quick Ratio	4.3

NMF = Not Meaningful

Structure of the Integrated Circuits Industry — VERY POOR

Firms in the integrated circuits industry make components that form the electronic building blocks used in electronic systems and equipment. The industry is notoriously cyclical and subject to significant economic upturns and downturns, as well as rapid technological changes. Firms must innovate to survive, and products stocked in inventory can sometimes become obsolete before they are even shipped. Severe pricing competition and lengthy manufacturing cycles only add uncertainty to the mix. We're not fans of the structure of the integrated circuits space.

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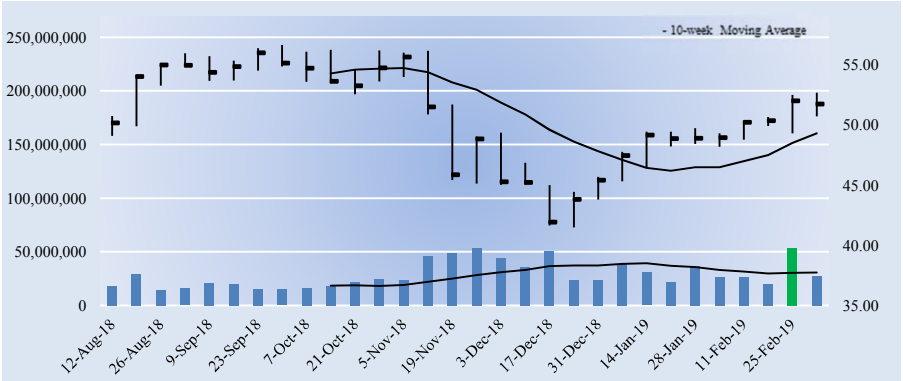
TJX Cos TJX FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$49.00	$37.00 - $61.00	LARGE-CAP CORE	Consumer Discretionary	Retail - Under 30, Off-Price, Sport Apparel

Customer traffic continues to be the primary driver behind strong comps performance at TJX Cos. Margin performance has been impacted by higher freight costs and other expenses related to its supply chain.

Stock Chart (weekly)



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)	$65,166
Avg Weekly Vol (30 wks)	28,720
30-week Range (USD)	41.49 - 56.64
Valuentum Sector	Consumer Discretionary
5-week Return	5.9%
13-week Return	13.5%
30-week Return	2.2%
Dividend Yield %	1.5%
Dividends per Share	0.78
Forward Dividend Payout Ratio	29.6%
Est. Normal Diluted EPS	3.27
P/E on Est. Normal Diluted EPS	15.8
Est. Normal EBITDA	6,193
Forward EV/EBITDA	12.2
EV/Est. Normal EBITDA	10.4
Forward Revenue Growth (5-yr)	5.6%
Forward EPS Growth (5-yr)	10.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	55.4%
Return on Assets	19.9%
ROIC, with goodwill	65.9%
ROIC, without goodwill	68.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	2,234
Net Debt	-797
Total Debt/EBITDA	0.4
Net Debt/EBITDA	NMF
EBITDA/Interest	568.4
Current Ratio	1.5
Quick Ratio	0.6

NMF = Not Meaningful

Investment Highlights

• TJX Cos is a leading off-price apparel and home fashions retailer in the US and worldwide. The firm believes its business model is one of the most flexible in the world and that it has one of the broadest demographic reaches in retail. It aims to offer brand name and designer merchandise at 20%-60% discounts to full-price retailers. TJX Cos was founded in 1956 and is based in Massachusetts.

• Over its nearly 40-year history, TJX Cos' annual same-store sales have declined only one time, and it has delivered strong earnings expansion and some of the highest financial returns in the retail sector. We love its ValueCreation rating and Economic Castle.

• Driving traffic and same-store sales growth will be the biggest growth driver for established TJX Cos. The firm believes it has huge opportunity to gain even more market share by attracting younger customers and leveraging its global marketing strategy through an integrated approach that includes growing its e-commerce presence.

• Customer traffic continues to be the primary driver behind strong comps performance at TJX Cos as average tickets have been impacted by the heavily-promotional retail environment. The company's margin performance has been impacted by higher freight costs and other expenses related to its supply chain.

• TJX believes it is gaining share in the challenging retail operating environment, and it continues to invest to support its growth plans. Management believes its global store count has potential to hit 5,600 over the long haul from 4,306 at the end of fiscal 2018.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**49.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Abercrombie & Fitch	23.8	3.6	112.0%
American Eagle	14.4	1.8	106.2%
Gap	10.7	2.6	81.0%
Ross Stores	20.2	3.1	115.5%
Peer Median	17.3	2.8	109.1%
TJX Cos	**19.6**	**2.0**	**105.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	35,865	38,973	41,311
Revenue, YoY%	8.1%	8.7%	6.0%
Operating Income	3,987	4,218	4,405
Operating Margin %	11.1%	10.8%	10.7%
Net Income	2,608	3,060	3,253
Net Income Margin %	7.3%	7.9%	7.9%
Diluted EPS	2.02	2.43	2.64
Diluted EPS, YoY %	16.7%	20.4%	8.5%
Free Cash Flow (CFO-capex)	1,968	2,964	2,990
Free Cash Flow Margin %	5.5%	7.6%	7.2%

In Millions of USD (except for per share items)

Structure of the Specialty Apparel (Under 30, Off-Price) Industry — NEUTRAL

The specialty apparel industry is highly competitive. Firms compete with various individual and chain specialty stores, as well as casual apparel sections of department stores and discount retailers. Identifying and responding to fashion trends remains key, and business fluctuates with changes in the economy and customer preferences. Fashion missteps can result in lower sales, excess inventories, and higher markdowns, which can severely impact profits. Improving productivity, managing new store growth and developing new brand concepts are critical for long-term success. We're neutral on the group.

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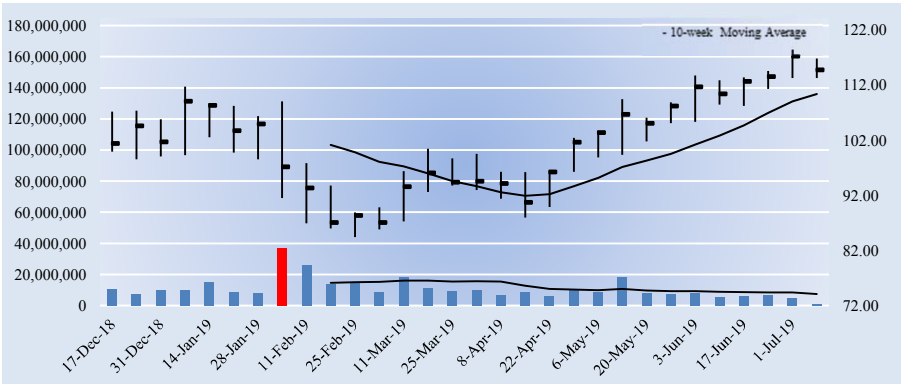
Take-Two TTWO FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$107.00	$75.00 - $139.00	LARGE-CAP CORE	Information Technology	Software - graphics

Take-Two is targeting GAAP revenue and GAAP net income in the range of $2.7-$2.8 billion and $389-$418 million for fiscal 2020, respectively.

Stock Chart (weekly)



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)	$13,328
Avg Weekly Vol (30 wks)	10,849
30-week Range (USD)	84.410004 - 118.489998
Valuentum Sector	Information Technology
5-week Return	2.3%
13-week Return	21.3%
30-week Return	12.0%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	3.77
P/E on Est. Normal Diluted EPS	30.4
Est. Normal EBITDA	801
Forward EV/EBITDA	15.4
EV/Est. Normal EBITDA	14.7
Forward Revenue Growth (5-yr)	2.4%
Forward EPS Growth (5-yr)	5.8%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	13.8%
Return on Assets	5.2%
ROIC, with goodwill	27.1%
ROIC, without goodwill	35.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	0
Net Debt	-1,571
Total Debt/EBITDA	0.0
Net Debt/EBITDA	NMF
EBITDA/Interest	58.4
Current Ratio	1.4
Quick Ratio	1.0

NMF = Not Meaningful

Investment Highlights

• Take-Two is a leading developer, publisher and marketer of interactive entertainment for consumers around the globe. The firm develops and publishes products through its two wholly-owned labels Rockstar Games and 2K. The company was founded in 1993 and is headquartered in New York, New York.

• The firm is home to one of the industry's most iconic and critically-acclaimed brands, Grand Theft Auto, and the online version of the game is a key driver of recurring consumer spending. Red Dead Redemption 2's launch in fall 2018 was the 'second-highest grossing entertainment launch of all time.'

• Take-Two's results can be impacted by its product release schedule. Its Grand Theft Auto products account for ~40% of net revenue as of fiscal 2018, and its release schedule for new products can vary materially. Its business also has a degree of customer concentration risk as its top five customers accounted for more than 70% of fiscal 2018 net revenue. Investors should note our large fair value range.

• Take-Two's margins continue to benefit from the transition of video gaming to a fully digital experience. Digital-delivered net revenue accounted for ~63% of net revenue in fiscal 2018, which will benefit margins and free cash flow generation. If margin expansion is sustained upside to our fair value estimate may exist.

• Take-Two continues to grow its digital-delivered revenue at a strong pace (23% growth in fiscal 2018). Making this revenue stream even more attractive is that a large portion of it is recurrent (good for 42% of total revenue), and it is driven by its usual heavy-hitters, such as Grand Theft Auto.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**110.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Activision	21.3	2.8	86.1%
Electronic Arts	20.3	2.2	98.4%
Glu Mobile	19.9	NMF	87.8%
Zynga	26.6	5.1	102.8%
Peer Median	20.8	2.8	93.1%
Take-Two	**32.0**	**6.8**	**107.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-18	Mar-19	Mar-20
Revenue	1,793	2,668	2,721
Revenue, YoY%	0.7%	48.8%	2.0%
Non-GAAP Operating Income	150	202	498
Non-GAAP EBIT %	8.4%	7.6%	18.3%
Non-GAAP Net Income	173	334	416
Non-GAAP NI Margin %	9.6%	12.5%	15.3%
Non-GAAP Diluted EPS	1.53	2.90	3.59
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP FCF (CFO-capex)	305	777	527
Non-GAAP FCF Margin %	17.0%	29.1%	19.4%

In Millions of USD (except for per share items)

Structure of the Software (graphics) Industry — POOR

The software (graphics) industry is composed of a variety of firms from online gaming entities to technology-based-language learning companies. Industry constituents compete for the leisure time, attention and discretionary spending of consumers. The social gaming space, in particular, is evolving rapidly, and new entrants will inevitably drive down outsize returns over time. Performance of many participants is "hit" driven. If companies don't deliver "hit" products to the market, operating results will suffer. Rapid technological change makes obsolescence a possibility. We don't like the group's structure.

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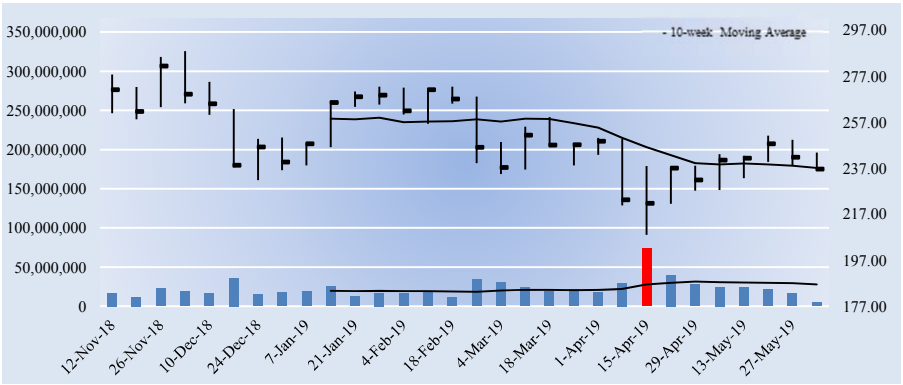
UnitedHealth Group UNH FAIRLY VALUED

Buying Index™ 3 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$228.00	$171.00 - $285.00	MEGA-CAP CORE	Health Care	Health Care Services

We've tweaked our model for UnitedHealth Group.

Stock Chart (weekly)



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)	$232,538
Avg Weekly Vol (30 wks)	22,705
30-week Range (USD)	208.070007 - 287.940002
Valuentum Sector	Health Care
5-week Return	3.7%
13-week Return	-1.1%
30-week Return	-14.3%
Dividend Yield %	1.5%
Dividends per Share	3.60
Forward Dividend Payout Ratio	24.2%
Est. Normal Diluted EPS	17.61
P/E on Est. Normal Diluted EPS	13.4
Est. Normal EBITDA	27,187
Forward EV/EBITDA	10.9
EV/Est. Normal EBITDA	9.4
Forward Revenue Growth (5-yr)	6.1%
Forward EPS Growth (5-yr)	9.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	23.2%
Return on Assets	7.6%
ROIC, with goodwill	16.2%
ROIC, without goodwill	59.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	36,554
Net Debt	22,230
Total Debt/EBITDA	1.8
Net Debt/EBITDA	1.1
EBITDA/Interest	14.1
Current Ratio	0.7
Quick Ratio	0.6

NMF = Not Meaningful

Investment Highlights

• UnitedHealth Group is a diversified healthcare and well-being company, and the firm provides health care benefits to a wide range of customers in an array of markets. Its two business platforms operate through four segments: UnitedHealthcare, OptumHealth, OptumInsight, and OptumRx. The company was founded in 1974 and is headquartered in Minnesota.

• The firm's UnitedHealthcare segment can be broken down into three operating divisions: Employer & Individual, Medicare & Retirement, and Community & State. UnitedHealth is the largest health insurance provider in the US.

• Though UnitedHealth Group is a behemoth, it is not without its fair share of competition, which in its case comes from a variety of sources. Managed health care companies, insurance companies, HMOs, TPAs, PBMs, and business services outsourcing companies all provide similar services to any one of its businesses. The firm's significant scale is an advantage.

• Looking ahead to 2019, UnitedHealth Group expects non-GAAP earnings per share to be in a range of $14.50-$14.75. Cash flow from operations is targeted at $17.3-$17.8 billion for the year. The company is accelerating investment levels to deliver compelling innovations in the next few years.

• The company's Optum businesses, which focus on improving the healthcare system itself, have been performing extremely well of late. The firm has been sued by the US DoJ over alleged Medicare overcharges, a development that may be worth watching.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**VERY BEARISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Resistance, 10-wk MA	**237.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
DaVita	10.7	1.4	80.9%
Encompass Health	15.6	2.1	104.6%
HCA Healthcare	13.0	0.9	96.1%
Universal Health	12.1	1.5	103.8%
Peer Median	12.5	1.4	100.0%
UnitedHealth Group	**15.9**	**2.0**	**103.8%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	201,159	226,247	244,347
Revenue, YoY%	8.8%	12.5%	8.0%
Operating Income	15,209	17,344	20,716
Operating Margin %	7.6%	7.7%	8.5%
Net Income	10,558	11,986	14,605
Net Income Margin %	5.2%	5.3%	6.0%
Diluted EPS	10.72	12.19	14.86
Diluted EPS, YoY %	47.9%	13.8%	21.8%
Free Cash Flow (CFO-capex)	11,573	13,650	15,443
Free Cash Flow Margin %	5.8%	6.0%	6.3%

In Millions of USD (except for per share items)

Structure of the Healthcare Services Industry — NEUTRAL

The healthcare services industry consists of firms that operate traditional hospitals, inpatient rehabilitation hospitals, and other specialized healthcare facilities. Demand for the group's services continues to increase as the US population ages and life expectancies rise. Inpatient rehabilitation care is growing at a 2-3% annual rate, while the expansion of patients with end stage renal disease continues at a slightly faster pace. Improvement in clinical practices and pharmacology and reimbursement policies of third-party payors have also impacted hospital utilization/occupancy. We're neutral on the group.

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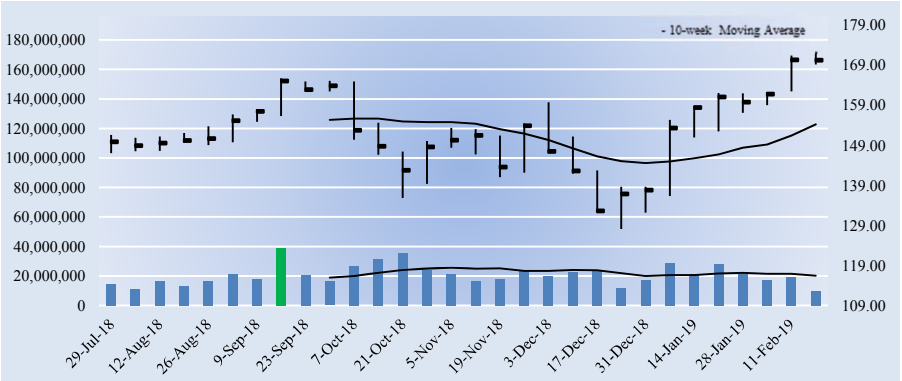
Union Pacific UNP FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$144.00	$115.00 - $173.00	LARGE-CAP CORE	Industrials	Railroads

Union Pacific is targeting an operating ratio below 61% in 2019 and below 60% in 2020 as part of its ultimate quest for an operating ratio of 55%.

Stock Chart (weekly)



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)	$128,359
Avg Weekly Vol (30 wks)	20,981
30-week Range (USD)	128.08 - 172.44
Valuentum Sector	Industrials
5-week Return	8.4%
13-week Return	18.1%
30-week Return	15.0%
Dividend Yield %	2.1%
Dividends per Share	3.52
Forward Dividend Payout Ratio	38.4%
Est. Normal Diluted EPS	11.31
P/E on Est. Normal Diluted EPS	15.0
Est. Normal EBITDA	13,848
Forward EV/EBITDA	12.4
EV/Est. Normal EBITDA	10.8
Forward Revenue Growth (5-yr)	4.1%
Forward EPS Growth (5-yr)	11.1%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	31.7%
Return on Assets	12.2%
ROIC, with goodwill	11.7%
ROIC, without goodwill	11.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	22,391
Net Debt	21,058
Total Debt/EBITDA	2.1
Net Debt/EBITDA	2.0
EBITDA/Interest	12.3
Current Ratio	0.9
Quick Ratio	0.7

NMF = Not Meaningful

Investment Highlights

• One of America's most recognized companies, Union Pacific links 23 states in the western two-thirds of the country by rail, providing a critical link in the global supply chain. The railroad's diversified business mix includes agricultural products, automotive, chemicals, coal, industrial products and intermodal.

• Pricing strength has been a lever for Union Pacific, and the company continues to align its resources to current demand levels and expects price growth above inflation in the near term. Total volume growth is expected to be in the low-single-digit range in 2019.

• We expect the firm's operating ratio to be among the best in the railroad group by the end of this decade, and we like its exposure to growth in Mexico and export expansion on the West Coast. The company is targeting an operating ratio below 61% in 2019 and below 60% in 2020 (was 62.6% in 2017) as part of its ultimate quest for an operating ratio of 55%, which would make it tops among peers.

• As with its peers, the firm is levered to coal, though we note its mix is more of the Powder River Basin variety, which should continue to take share from Central Appalachian coal in the domestic market. Global coal oversupply isn't helping matters. The firm also boasts a solid Dividend Cushion ratio and a decent annual yield.

• Our forecasts for Union Pacific include relatively strong top-line performance in the out-years coupled with strong operating earnings performance. If the company comes up short with respect to its efficiency initiatives, there is downside risk to our valuation.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**GOOD**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**154.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Canadian National	17.9	0.6	113.2%
CSX Corp	17.1	2.7	114.5%
Kansas City Southern	16.4	1.7	101.6%
Norfolk Southern	17.3	2.0	122.0%
Peer Median	17.2	1.8	113.8%
Union Pacific	**18.6**	**1.9**	**118.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	21,240	22,832	23,722
Revenue, YoY%	6.5%	7.5%	3.9%
Operating Income	8,061	8,517	9,760
Operating Margin %	38.0%	37.3%	41.1%
Net Income	10,712	5,966	6,779
Net Income Margin %	50.4%	26.1%	28.6%
Diluted EPS	13.36	7.91	9.17
Diluted EPS, YoY %	163.7%	-40.8%	15.9%
Free Cash Flow (CFO-capex)	3,992	5,249	5,816
Free Cash Flow Margin %	18.8%	23.0%	24.5%

In Millions of USD (except for per share items)

Structure of the Railroads Industry — GOOD

The railroad industry operates at a significant competitive advantage relative to motor transportation in that it can charge lower rates for long-haul bulk shipments (coal, grain, rock). Still, participants face competition from other railroads that operate parallel routes, from motor carriers that provide similar services, and from barges in routes close to inland and Gulf Coast waterways. Operating a railroad is a capital-intensive proposition, and participants face cost pressures from both union labor and fuel. Pricing and volume trends in commodity categories can be quite volatile from year to year. We like the group.

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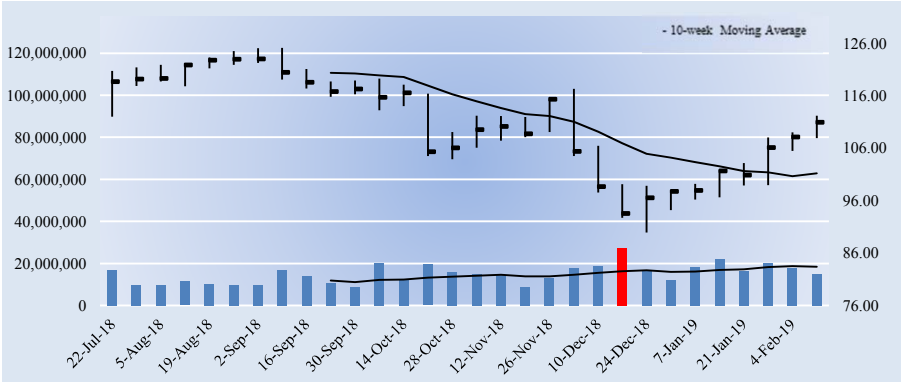
United Parcel Service UPS FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$105.00	$84.00 - $126.00	LARGE-CAP CORE	Industrials	Air Freight & Logistics

United Parcel Service expects low-teens growth in operating profit in the near term, but softer export and GDP growth is expected across major economies.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**101.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$95,266
Avg Weekly Vol (30 wks)	14,957
30-week Range (USD)	89.89 - 125.09
Valuentum Sector	Industrials
5-week Return	13.9%
13-week Return	0.7%
30-week Return	-1.4%
Dividend Yield %	3.5%
Dividends per Share	3.84
Forward Dividend Payout Ratio	69.6%
Est. Normal Diluted EPS	8.60
P/E on Est. Normal Diluted EPS	12.9
Est. Normal EBITDA	12,464
Forward EV/EBITDA	12.6
EV/Est. Normal EBITDA	9.3
Forward Revenue Growth (5-yr)	5.4%
Forward EPS Growth (5-yr)	14.6%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• United Parcel Services 'shrinks the globe.' The firm is the world's largest package delivery company, a leader in the US less-than-truckload industry and the premier provider of global supply chain management solutions. The health of the business is tied in part to the health of the global economy. Its history dates back to 1907, and it is headquartered in Atlanta, Georgia.

• We're huge fans of UPS' worldwide integrated network, respected brand and consistent free cash flow generation. It has superior scale and efficiencies. Emerging markets and e-commerce represent its largest growth opportunities. The impact of new peak time charges may be worth watching.

• UPS will accelerate investments in next-generation smart logistics network capabilities, with the end goal of online B2B and B2C market growth in mind. Management expects the next several years to represent the most sweeping transformation of its network in its history. Investors should note the long-term potential threat that Amazon Air poses to future growth at UPS as notable overlap exists.

• UPS boasts an industry-leading adjusted operating margin in small packages. In the mid-teens, it is well above the average of DHL and FedEx, both of which come at ~11% or less. The company recently raised its US service rates in an attempt to battle the lower margins associated with increased residential deliveries, a result of the rise in e-commerce.

• UPS also boasts an industry-leading ROIC. The firm is targeting ROIC to be in a range of 23%-28% through 2019 as it continues to pursue M&A to expand its network and capabilities and return excess cash to shareholders. Total operating profit is expected to grow at a low-teens rate in 2019.

Relative Valuation

	Forward P/E	PEG	Price / FV
CH Robinson	19.3	1.9	115.8%
Expeditors Intl	21.1	1.7	106.7%
FedEx	11.1	1.2	86.6%
JB Hunt	25.6	0.7	104.2%
Peer Median	20.2	1.5	105.5%
United Parcel Service	**20.1**	**1.0**	**105.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	382.6%
Return on Assets	11.1%
ROIC, with goodwill	16.2%
ROIC, without goodwill	18.7%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	24,289
Net Debt	20,220
Total Debt/EBITDA	2.5
Net Debt/EBITDA	2.1
EBITDA/Interest	21.7
Current Ratio	1.2
Quick Ratio	1.0

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-16	Dec-17	Dec-18
Revenue	60,906	65,872	71,861
Revenue, YoY%	4.4%	8.2%	9.1%
Operating Income	5,467	7,529	6,647
Operating Margin %	9.0%	11.4%	9.2%
Net Income	3,431	4,910	4,738
Net Income Margin %	5.6%	7.5%	6.6%
Diluted EPS	3.87	5.61	5.51
Diluted EPS, YoY %	-27.7%	45.1%	-1.7%
Free Cash Flow (CFO-capex)	3,508	-3,748	6,428
Free Cash Flow Margin %	5.8%	-5.7%	8.9%

In Millions of USD (except for per share items)

Structure of the Air Freight & Logistics Industry — GOOD

The highly competitive air freight and logistics industry is heavily tied to cyclical domestic economic expansion (primarily from retail good shipments). The international freight market remains a critical growth engine for air cargo providers, while all constituents deal with the cost of rising fuel (diesel) prices and potentially price-sensitive demand during periods of economic weakness. Firms with freight-forwarding, asset-light operations and/or large difficult-to-replicate shipping networks can carve out sustainable competitive advantages while generating high returns on investment. We generally like the group.

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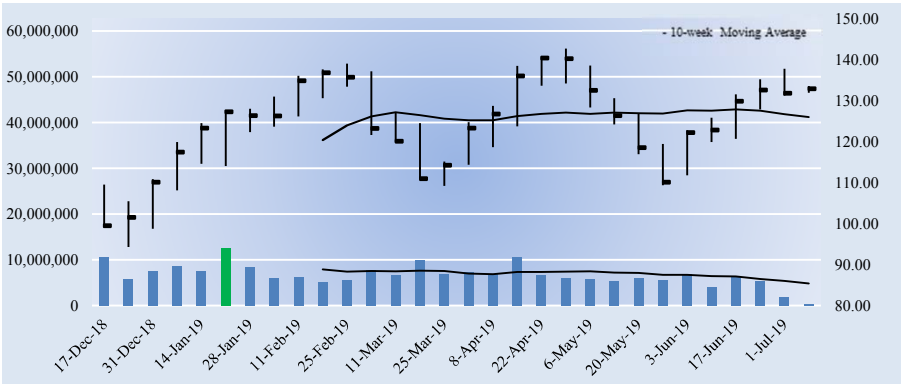
United Rentals URI FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$178.00	$116.00 - $240.00	LARGE-CAP VALUE	Industrials	Rental and Leasing

We've raised our fair value estimate for United Rentals. The company expects to be significantly free cash flow positive in 2019.

Stock Chart (weekly)



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)	$11,032
Avg Weekly Vol (30 wks)	6,716
30-week Range (USD)	94.279999 - 142.690002
Valuentum Sector	Industrials
5-week Return	7.7%
13-week Return	4.6%
30-week Return	26.5%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	21.94
P/E on Est. Normal Diluted EPS	6.1
Est. Normal EBITDA	4,826
Forward EV/EBITDA	5.0
EV/Est. Normal EBITDA	4.7
Forward Revenue Growth (5-yr)	6.1%
Forward EPS Growth (5-yr)	12.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	42.2%
Return on Assets	7.1%
ROIC, with goodwill	9.1%
ROIC, without goodwill	12.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	11,747
Net Debt	11,704
Total Debt/EBITDA	3.2
Net Debt/EBITDA	3.2
EBITDA/Interest	7.7
Current Ratio	0.8
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• United Rentals is the largest equipment rental company in the world and has the ability to serve customers that require substantial quantities and/or varieties of equipment. Though performance is tied to cyclical end markets, the firm is benefiting from a secular shift from customer ownership to the rental of construction equipment.

• The company has #1 share in the market it serves, boasting 12% control, a level that is more than twice that of peers HERC and Sunbelt. United Rentals has a diversified mix of industrial (50%), non-residential construction (46%), and residential (4%) exposure.

• United Rentals claims that scale creates distinctive competitive advantages and higher quality services for customers, and its margins speak to such strength. Specialty rental, which includes trench safety, power and HVAC, pump solutions, and tool solutions is an example of the high-margin growth areas United Rental is targeting. An increasingly smart world should provide growing demand for such products.

• United acquired BakerCorp for ~$715 million in cash in July 2018. $19 million in cost synergies are expected. BakerCorp brings a portfolio of solutions for fluid storage, transfer and treatment and an entry into select European markets. The firm is targeting net leverage of 2x-3x over the long haul.

• United acquired BlueLine, a top-10 equipment rental firm in North America, for ~$2.1 billion in cash. BlueLine brings a diversified customer base with a good mix of commercial construction and industrial accounts. $45 million in cost synergies are expected.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**GOOD**
ValueRisk™	**HIGH**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**126.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
AMERCO	17.3	1.7	107.8%
Avis Budget	8.7	0.8	102.6%
Public Storage	22.5	4.7	122.6%
Ryder System	8.9	0.7	91.4%
Peer Median	13.1	1.2	105.2%
United Rentals	**6.9**	**0.8**	**74.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	6,641	8,047	9,359
Revenue, YoY%	15.3%	21.2%	16.3%
Operating Income	1,607	2,018	2,562
Operating Margin %	24.2%	25.1%	27.4%
Net Income	1,346	1,096	1,561
Net Income Margin %	20.3%	13.6%	16.7%
Diluted EPS	15.73	13.20	19.29
Diluted EPS, YoY %	144.0%	-16.1%	46.1%
Free Cash Flow (CFO-capex)	341	562	1,320
Free Cash Flow Margin %	5.1%	7.0%	14.1%

In Millions of USD (except for per share items)

Structure of the Rental and Leasing Industry — POOR

The highly fragmented and competitive US rental/leasing industry include entities that rent construction/industrial equipment, firms that lease household durable goods products, and companies that offer car/truck rental services. Equipment rental firms are tied to the cyclical construction/industrial end markets, car rental revenue is levered to on-airport (air travel) demand, while lessors of household durables are tied to housing and consumer confidence trends. Some firms may gain advantages via large/diverse rental fleets and significant purchasing power, but we don't like the structure of the group.

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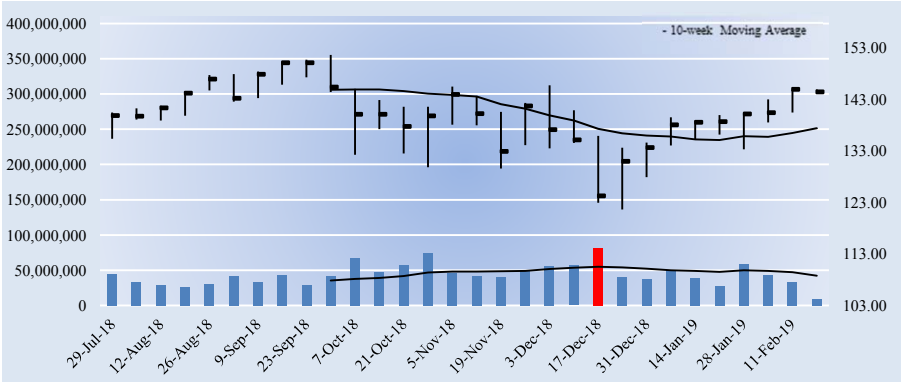
Visa V FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$153.00	$122.00 - $184.00	MEGA-CAP BLEND	Information Technology	Financial Tech Services

Visa's fundamentals are rock-solid, in our view, and it continues to have an attractive runway for growth. The company takes on no credit risk.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**137.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$336,401
Avg Weekly Vol (30 wks)	43,603
30-week Range (USD)	121.6 - 151.56
Valuentum Sector	Information Technology
5-week Return	4.7%
13-week Return	7.3%
30-week Return	3.1%
Dividend Yield %	0.7%
Dividends per Share	1.00
Forward Dividend Payout Ratio	18.6%
Est. Normal Diluted EPS	7.17
P/E on Est. Normal Diluted EPS	20.1
Est. Normal EBITDA	21,299
Forward EV/EBITDA	20.6
EV/Est. Normal EBITDA	16.2
Forward Revenue Growth (5-yr)	11.0%
Forward EPS Growth (5-yr)	15.5%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Visa is the largest retail electronic payments network based on payments volume, total volume and number of transactions. The company benefits from one of the strongest competitive advantages out there – the network effect. As more consumers use credit/debit cards, more merchants accept them, thereby creating a virtuous cycle.

• Visa is not a bank and does not issue credit cards. The firm takes on no credit risk--unlike American Express and Discover Financial--but remains an integral part of the trend toward a cashless society. Sales are primarily generated from payments volume on Visa-branded cards.

• Visa acquired Visa Europe in a deal valued at $23+ billion, which unified the brand globally, and added $15+ billion debt to finance the deal, flipping its balance sheet to a net debt position. It owes another €1.1 billion in June 2019 per the deal terms. We're not worried about the debt given Visa's tremendous cash flow generation capacity. Concerns have cropped up more recently regarding cross-border volume growth.

• Visa, along with other US payment card companies, is reportedly preparing to request licenses to operating in China in the near future. However, it could take up to two years for the requests to clear Chinese regulators. The space, which is expected to grow to 9 billion cards in circulation by 2020, is currently dominated by state-backed China UnionPay.

• Visa is included in the Best Ideas portfolio, and we think the company is one of the best operators in one of the strongest industries, the Financial Tech Services industry. The company's fundamentals are rock-solid, in our view, and it continues to have an attractive runway for growth.

Relative Valuation

	Forward P/E	PEG	Price / FV
Bottomline Tech	NMF	3.6	106.1%
Fiserv	29.8	NMF	129.7%
Mastercard	28.9	2.1	100.3%
Western Union	9.5	NMF	81.1%
Peer Median	28.9	2.8	103.2%
Visa	**26.9**	**2.1**	**94.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	27.5%
Return on Assets	12.2%
ROIC, with goodwill	36.7%
ROIC, without goodwill	59.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	16,630
Net Debt	3,430
Total Debt/EBITDA	1.2
Net Debt/EBITDA	0.2
EBITDA/Interest	23.2
Current Ratio	1.6
Quick Ratio	1.4

NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Sep-17	Sep-18	Sep-19
Revenue	18,358	20,609	22,979
Revenue, YoY%	21.7%	12.3%	11.5%
Non-GAAP Operating Income	12,163	13,561	16,046
Non-GAAP EBIT %	66.3%	65.8%	69.8%
Net Income	6,699	10,301	12,270
Net Income Margin %	36.5%	50.0%	53.4%
Diluted EPS	2.80	4.42	5.36
Diluted EPS, YoY %	12.7%	58.1%	21.3%
Free Cash Flow (CFO-capex)	8,501	11,995	13,259
Free Cash Flow Margin %	46.3%	58.2%	57.7%

In Millions of USD (except for per share items)

Structure of the Financial Tech Services Industry — EXCELLENT

The financial tech services industry is primarily composed of firms that generate revenue by charging fees to customers for providing transaction processing and other payment-related services. Constituents operate in a rapidly-evolving legal/regulatory environment, particularly with respect to interchange fees, data protection, and information security. Several participants benefit from a significant competitive advantage – the network effect. As more consumers use credit/debit cards, more merchants accept them, thereby creating a virtuous cycle. The industry is one of the most attractive in our coverage.

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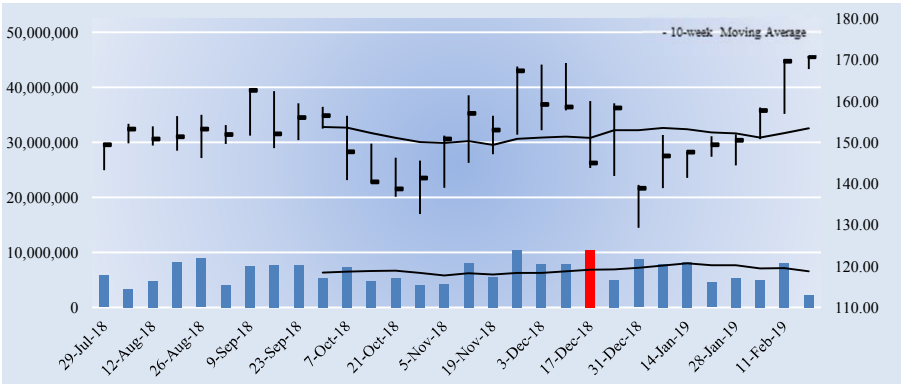
VMware VMW OVERVALUED 1.6%

Buying Index™ 4 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$140.00	$112.00 - $168.00	LARGE-CAP CORE	Information Technology	Business Services

VMware has a diversified set of foundational, market creating, and market disrupting products, and it invests ~55% of its R&D spending into market creating/disrupting products.

Stock Chart (weekly)



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)	$70,587
Avg Weekly Vol (30 wks)	6,494
30-week Range (USD)	129.33 - 171.12
Valuentum Sector	Information Technology
5-week Return	15.9%
13-week Return	10.1%
30-week Return	15.1%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	7.50
P/E on Est. Normal Diluted EPS	22.8
Est. Normal EBITDA	3,934
Forward EV/EBITDA	18.7
EV/Est. Normal EBITDA	16.1
Forward Revenue Growth (5-yr)	8.9%
Forward EPS Growth (5-yr)	44.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	11.6%
Return on Assets	5.6%
ROIC, with goodwill	25.1%
ROIC, without goodwill	56.3%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,234
Net Debt	-7,419
Total Debt/EBITDA	2.0
Net Debt/EBITDA	NMF
EBITDA/Interest	28.6
Current Ratio	2.7
Quick Ratio	2.7

NMF = Not Meaningful

Investment Highlights

• VMware makes virtualization and cloud infrastructure solutions that enable businesses to thrive in the 'Cloud Era'. Customers rely on VMware to help them transform the way they build, deliver and consume IT resources. The company was incorporated in 1998 and is headquartered in Palo Alto, California.

• VMware has a diversified set of foundational, market creating, and market disrupting products. The firm invests ~55% of its R&D spending into market creating/disrupting products, which it believes will transform into fundamental products and grow its revenue substantially over time.

• VMware's revenue is diversified among license, maintenance, PSO and 'subscription and consumption' lines. The firm's partnerships with IBM and Amazon Web Services have the potential to expand its presence among enterprises. Its hybrid cloud and SaaS business continues to make up a growing portion of its business with 8% of total revenue at last check.

• VMware expects recent strength in its business to continue in fiscal 2020. It is projecting roughly 12% revenue growth in the year, including accelerating growth in its hybrid cloud subscription and SaaS revenue. It expects its non-GAAP operating margin to be ~33% in the year as it invests in helping client migrate to its SaaS business and cloud platform.

• Shares of VMware have been impacted by reports surrounding a potential reverse merger with Dell. Dell went public in December 2018 and bought out the stake VMware held in it via tracking stock. This was returned to shareholders via a massive special dividend.

Investment Considerations

DCF Valuation	**OVERVALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**153.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueRisk™ \ ValueCreation™	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
Accenture	21.9	2.5	114.1%
Amdocs	13.3	1.4	80.4%
IHS Markit	20.6	1.9	108.2%
Verint	16.1	NMF	86.2%
Peer Median	18.4	1.9	97.2%
VMware	**27.1**	**2.8**	**122.0%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-16	Jan-18	Jan-19
Revenue	7,093	7,922	8,881
Revenue, YoY%	7.9%	11.7%	12.1%
Operating Income	1,491	1,779	3,020
Operating Margin %	21.0%	22.5%	34.0%
Net Income	1,186	570	2,575
Net Income Margin %	16.7%	7.2%	29.0%
Diluted EPS	2.80	1.38	6.29
Diluted EPS, YoY %	19.7%	-50.7%	356.3%
Free Cash Flow (CFO-capex)	2,228	2,948	3,297
Free Cash Flow Margin %	31.4%	37.2%	37.1%

In Millions of USD (except for per share items)

Structure of the Business Services Industry — NEUTRAL

Firms in the business services space primarily focus on management consulting, technology/data-integration services/software and outsourcing solutions. Participants generate high returns on invested capital, but the business services marketplace is very competitive, and firms can often face pressure from off-shore service providers in lower-cost locations (India, Philippines and China). Such competition may inhibit firms' ability to obtain sufficient pricing for services, and economic conditions may hinder the capability of clients to pay for such services. Still, we're generally neutral on the group.

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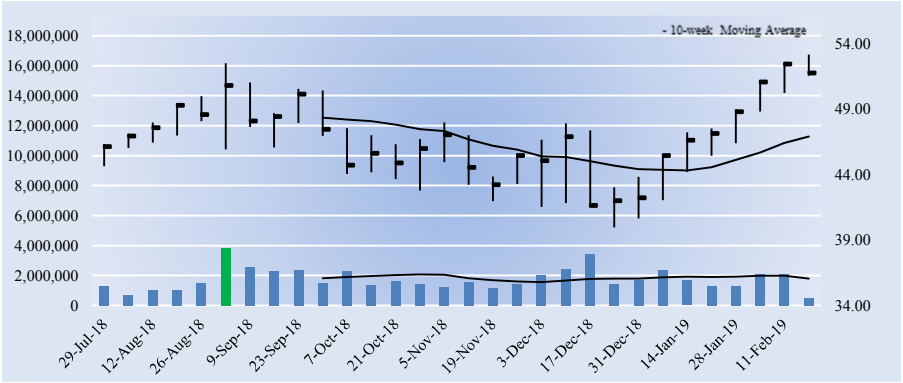
Verint VRNT FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$60.00	$48.00 - $72.00	MID-CAP VALUE	Information Technology	Business Services

Verint targets double digit earnings per share growth each year, driven by expectations for high-single digit revenue growth and ongoing margin expansion.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**STRONG**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**47.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$3,273
Avg Weekly Vol (30 wks)	1,754
30-week Range (USD)	39.96 - 53.11
Valuentum Sector	Information Technology
5-week Return	11.9%
13-week Return	18.7%
30-week Return	13.4%
Dividend Yield %	0.0%
Dividends per Share	0.00
Forward Dividend Payout Ratio	0.0%
Est. Normal Diluted EPS	3.73
P/E on Est. Normal Diluted EPS	13.8
Est. Normal EBITDA	377
Forward EV/EBITDA	10.8
EV/Est. Normal EBITDA	9.7
Forward Revenue Growth (5-yr)	5.8%
Forward EPS Growth (5-yr)	-308.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Verint is a global leader in 'Actionable Intelligence' solutions and value-added services. The firm's solutions enable organizations to extract and analyze information from customer interactions and operational data to make more effective decisions. The company was founded in 1994 and is headquartered in New York.

• Demand for Verint's solutions is being driven by organizations' need for intelligence to create an engaged workforce and smarter customer engagements. Its advanced actionable intelligence platform continues to grow, and its 'Cyber Intelligence' segment has a high level of repeat business.

• Verint has a culture of innovation. The firm has invested more than $1 billion in R&D during the past 10 years and has 850+ patents and applications. The company seeks to address three important challenges: Customer Engagement Optimization; Security Intelligence; and Fraud Risk and Compliance. Its addressable market has grown to ~$8 billion from $3 billion in 2012.

• The company's revenue trends have been very impressive in recent years. Non-GAAP revenue has advanced to more than $1.1 billion from just over $200 million in 2005. The company targets double digit earnings per share growth each year, driven by expectations for high-single digit revenue growth and ongoing margin expansion.

• Verint's large installed base provides stability and recurring revenue. The firm has opportunities for growth as its addressable market continues to expand. Profitability should increase as costs are scaled. Services and support revenue accounts for ~65% of total revenue.

Relative Valuation

	Forward P/E	PEG	Price / FV
Accenture	21.9	2.5	114.1%
Amdocs	13.3	1.4	80.4%
IHS Markit	20.6	1.9	108.2%
VMware	27.1	2.8	122.0%
Peer Median	21.2	2.2	111.2%
Verint	**16.1**	**NMF**	**86.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	-0.2%
Return on Assets	-0.1%
ROIC, with goodwill	12.9%
ROIC, without goodwill	65.4%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-17	Jan-18	Jan-19
Revenue	1,062	1,135	1,240
Revenue, YoY%	-6.0%	6.9%	9.2%
Non-GAAP Operating Income	17	49	265
Non-GAAP EBIT %	1.6%	4.3%	21.4%
Non-GAAP Net Income	-29	-7	203
Non-GAAP NI Margin %	-2.8%	-0.6%	16.4%
Non-GAAP Diluted EPS	-0.47	-0.10	3.20
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP FCF (CFO-capex)	142	137	228
Non-GAAP FCF Margin %	13.4%	12.1%	18.4%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	773
Net Debt	395
Total Debt/EBITDA	4.7
Net Debt/EBITDA	2.4
EBITDA/Interest	4.6
Current Ratio	1.5
Quick Ratio	1.3

NMF = Not Meaningful

Structure of the Business Services Industry — NEUTRAL

Firms in the business services space primarily focus on management consulting, technology/data-integration services/software and outsourcing solutions. Participants generate high returns on invested capital, but the business services marketplace is very competitive, and firms can often face pressure from off-shore service providers in lower-cost locations (India, Philippines and China). Such competition may inhibit firms' ability to obtain sufficient pricing for services, and economic conditions may hinder the capability of clients to pay for such services. Still, we're generally neutral on the group.

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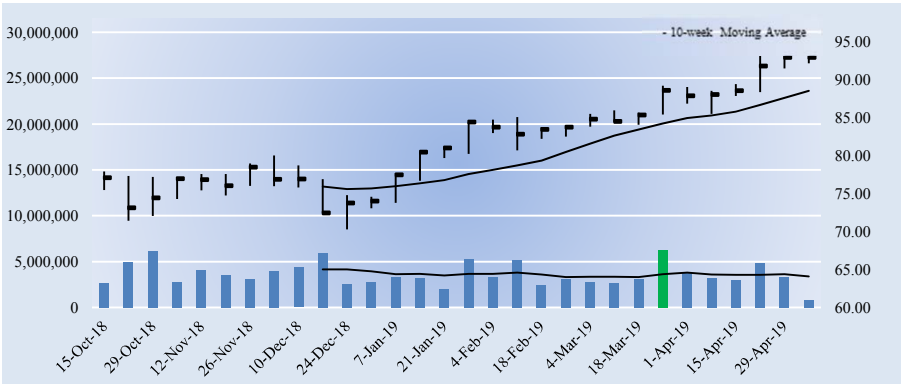
Waste Connections WCN OVERVALUED 10.7%

Buying Index™ 2 **Value Rating** ✕

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$69.00	$55.00 - $83.00	LARGE-CAP CORE	Industrials	Environmental Services

We think Waste Connections' share price has run too far too fast.

Stock Chart (weekly)



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)	$24,534
Avg Weekly Vol (30 wks)	3,626
30-week Range (USD)	70.279999 - 93.099998
Valuentum Sector	Industrials
5-week Return	6.2%
13-week Return	10.9%
30-week Return	22.4%
Dividend Yield %	0.7%
Dividends per Share	0.64
Forward Dividend Payout Ratio	22.6%
Est. Normal Diluted EPS	3.45
P/E on Est. Normal Diluted EPS	26.9
Est. Normal EBITDA	2,147
Forward EV/EBITDA	15.4
EV/Est. Normal EBITDA	13.2
Forward Revenue Growth (5-yr)	6.7%
Forward EPS Growth (5-yr)	14.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	8.3%
Return on Assets	4.1%
ROIC, with goodwill	8.0%
ROIC, without goodwill	13.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	4,173
Net Debt	3,854
Total Debt/EBITDA	2.7
Net Debt/EBITDA	2.5
EBITDA/Interest	11.6
Current Ratio	1.3
Quick Ratio	1.1

NMF = Not Meaningful

Investment Highlights

- Waste Connections is the third-largest publicly traded solid waste company in the US and focuses on secondary and exclusive markets. We like its strategy as it facilitates vertically-integrated operations that have less competition and better pricing dynamics. The company was founded in 1997 and is now headquartered in Canada. It recently under went a 3-for-2 stock split.
- Waste Connections' current footprint breaks down into 85% US and 15% Canada, and management is quick to note its proven access to low cost growth capital via its investment grade credit rating. It is working to lower customer churn rates via comparably better pricing and volume growth.
- Waste Connections has generated free cash flow margins in the mid-teens while making appropriate investments in recent years. Its EBITDA to free cash flow conversion rate has hovered around 50%, a level management expects to continue achieving on a consistent basis. Capital spending is expected to remain at approximately 10.5% of revenue in the near term.
- In 2019, Waste Connections expects price-led organic revenue growth of 4%-6% as pricing growth is targeted at ~4.5% but recycled commodity values may exhibit little upside and lower crude oil prices could impact E&P waste activity. Revenue growth of 8%-10% and EBITDA margin expansion of 30-50 basis points are expected.
- The waste industry has become more rational in recent years, and price-led growth within the space should drive continued margin expansion and increased free cash flow at Waste Connections. Management is targeting a double-digit annual increase in adjusted free cash flow per share.

Investment Considerations

DCF Valuation	**OVERVALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**GOOD**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**HIGH**
Growth	**MODEST**
Technical Evaluation	**NEUTRAL**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**OVERBOUGHT**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**89.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Casella Waste	44.1	4.1	110.1%
Republic Services	25.4	2.1	112.5%
Stericycle	14.6	NMF	92.9%
Waste Management	24.4	1.8	118.2%
Peer Median	24.9	2.1	111.3%
Waste Connections	**32.9**	**3.1**	**134.7%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	4,630	4,923	5,376
Revenue, YoY%	37.2%	6.3%	9.2%
Non-GAAP Operating Income	784	852	1,095
Non-GAAP EBIT %	16.9%	17.3%	20.4%
Non-GAAP Net Income	577	547	747
Non-GAAP NI Margin %	12.5%	11.1%	13.9%
Non-GAAP Diluted EPS	2.18	2.07	2.83
Non-GAAP Dil EPS, YoY %	NMF	NMF	NMF
Non-GAAP FCF (CFO-capex)	708	865	1,062
Non-GAAP FCF Margin %	15.3%	17.6%	19.8%

In Millions of USD (except for per share items)

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.

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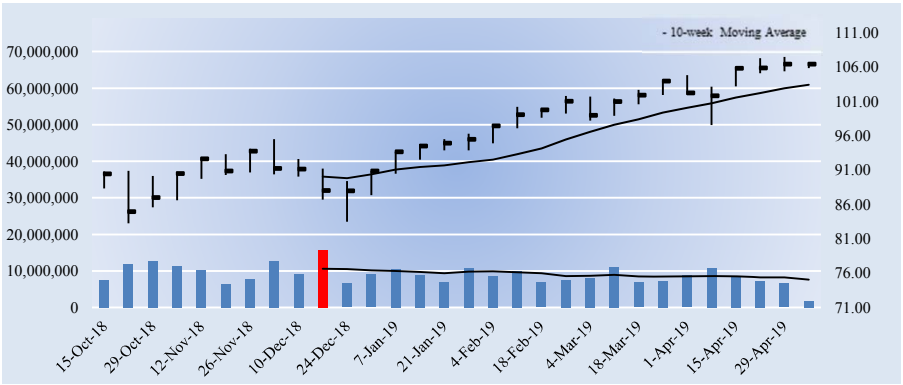
Waste Management WM FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$90.00	$70.00 - $110.00	LARGE-CAP CORE	Industrials	Environmental Services

Waste Management's asset base is quite diverse, and its best-in-class credit ratings speak to the stability of its business.

Stock Chart (weekly)



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)	$45,986
Avg Weekly Vol (30 wks)	8,923
30-week Range (USD)	83.220001 - 107.449997
Valuentum Sector	Industrials
5-week Return	4.1%
13-week Return	8.9%
30-week Return	20.4%
Dividend Yield %	1.9%
Dividends per Share	2.05
Forward Dividend Payout Ratio	47.0%
Est. Normal Diluted EPS	5.62
P/E on Est. Normal Diluted EPS	18.9
Est. Normal EBITDA	5,004
Forward EV/EBITDA	13.1
EV/Est. Normal EBITDA	11.2
Forward Revenue Growth (5-yr)	4.3%
Forward EPS Growth (5-yr)	10.0%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	29.3%
Return on Assets	7.8%
ROIC, with goodwill	13.1%
ROIC, without goodwill	20.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	10,026
Net Debt	9,965
Total Debt/EBITDA	2.4
Net Debt/EBITDA	2.4
EBITDA/Interest	11.3
Current Ratio	0.9
Quick Ratio	0.8

NMF = Not Meaningful

Investment Highlights

• Waste Management is the largest environmental solutions provider in North America, serving roughly 20 million customers in the US and Canada. The company has the largest network of recycling facilities (176), transfer stations (314) and landfills (247 solid waste landfills) in the industry. It was founded in 1987 and is headquartered in Houston, Texas.

• Waste Management generates the waste industry's best ROIC thanks to the high-quality nature of its earnings and disciplined investment practices. Its pricing and productivity initiatives in recycling and pricing-led growth in its collection and disposal business have helped expand margins of late.

• The firm's asset base is quite diverse. Its landfill operations boast significant barriers to entry due to regulatory requirements and stiff NIMBY opposition. The collection side of its residential business is generally recession-resistant, though volatile commodity prices can cause swings in recycling revenue. Recycled commodity prices have faced pressure of late.

• Its commercial and industrial pick-up operations are somewhat cyclical, however, which come in at ~40% and ~30%, respectively, of collection revenue, which in total is more than half of total revenue. Three-year service agreements in these areas help mitigate some cyclicality, and its best-in-class credit ratings speak to the ultimate stability of its business (A-/Baa1/BBB+).

• Waste Management's adjusted Dividend Cushion ratio is solid, and the firm remains shareholder friendly. Its ~10% increase in the payout in 2019 marked its 16th consecutive year of growth. It has reduced its net debt-to-EBITDA to 2.3x at the end of 2018 from 2.7x at the end of 2015.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**103.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Casella Waste	44.1	4.1	110.1%
Republic Services	25.4	2.1	112.5%
Stericycle	14.6	NMF	92.9%
Waste Connections	32.9	3.1	134.7%
Peer Median	29.2	3.1	111.3%
Waste Management	**24.4**	**1.8**	**118.2%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	14,485	14,914	15,660
Revenue, YoY%	6.4%	3.0%	5.0%
Operating Income	2,620	2,735	2,719
Operating Margin %	18.1%	18.3%	17.4%
Net Income	1,949	1,925	1,867
Net Income Margin %	13.5%	12.9%	11.9%
Diluted EPS	4.41	4.45	4.36
Diluted EPS, YoY %	66.6%	1.0%	-2.0%
Free Cash Flow (CFO-capex)	1,671	1,876	1,988
Free Cash Flow Margin %	11.5%	12.6%	12.7%

In Millions of USD (except for per share items)

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.

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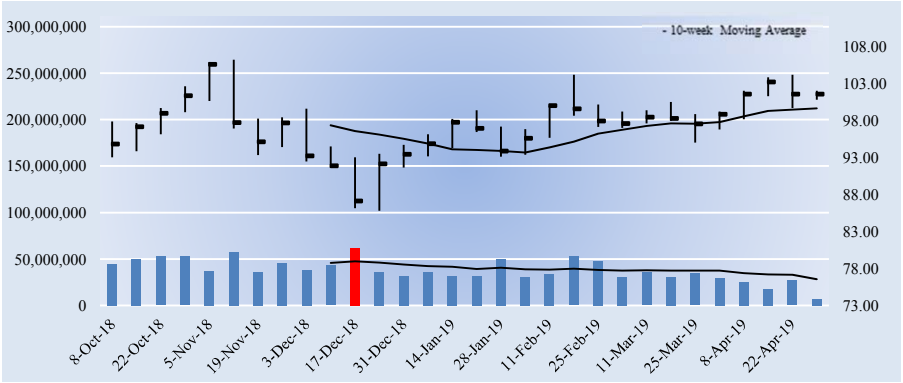
Wal-Mart WMT FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$100.00	$80.00 - $120.00	MEGA-CAP CORE	Consumer Staples	Food Retailers

Wal-Mart's current quest for innovation may be greater than at any other time in its history, but the same can be said for the competitive environment in which it is operating.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**MEDIUM**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Support, 10-week MA	**100.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$299,094
Avg Weekly Vol (30 wks)	37,863
30-week Range (USD)	85.779999 - 106.209999
Valuentum Sector	Consumer Staples
5-week Return	3.7%
13-week Return	8.2%
30-week Return	8.9%
Dividend Yield %	2.1%
Dividends per Share	2.12
Forward Dividend Payout Ratio	44.2%
Est. Normal Diluted EPS	6.09
P/E on Est. Normal Diluted EPS	16.7
Est. Normal EBITDA	38,329
Forward EV/EBITDA	10.6
EV/Est. Normal EBITDA	9.1
Forward Revenue Growth (5-yr)	3.1%
Forward EPS Growth (5-yr)	28.2%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Wal-Mart operates retail stores. Its Wal-Mart US segment includes the company's mass merchant concept in the US. Its Wal-Mart International segment consists of the company's operations outside of the US. The Sam's Club segment includes warehouse membership clubs and samsclub.com. Social pressures will keep the retail giant in the news, and sometimes not in the best of light.

• Wal-Mart is not going away anytime soon. Though it faces pressure from both Amazon and discount dollar stores, consumers continue to flock to its locations. Its everyday-low-prices strategy revolutionized the industry, and e-commerce initiatives look to be paying off as digital sales rocket higher.

• Gross margin pressures such as higher transportation costs, price investments, and mix effects from its growing e-commerce business are likely to persist in the near term, and competition with Amazon will likely only intensify and pressure margins further. The company is shifting its focus from store count growth to remodeling as it works to keep its massive store base relevant and competitive.

• With $115+ billion in sales, Wal-Mart's international business alone would be among the largest retailers in the world. A recent agreement with JD.com could provide the firm with the boost it needs in the Chinese online marketplace, and it recently took a 77% stake in Flipkart, an innovative e-commerce firm in India, for ~$16 billion.

• Wal-Mart expects comparable sales in the US to grow roughly 2.5%-3% in fiscal 2020, while its US e-commerce sales growth is targeted at ~35%. It expects to have 3,100 and 1,600 grocery pickup and delivery locations, respectively, by the end of the fiscal year, up from 2,100 and 800 a year earlier.

Relative Valuation

	Forward P/E	PEG	Price / FV
Costco	30.4	2.1	117.4%
Kroger	11.5	NMF	91.3%
Target	13.2	2.1	98.5%
Walgreens Boots Alliance	8.9	1.1	87.8%
Peer Median	12.3	2.1	94.9%
Wal-Mart	**21.2**	**1.6**	**101.6%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	13.7%
Return on Assets	5.3%
ROIC, with goodwill	16.7%
ROIC, without goodwill	20.1%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	500,343	514,405	528,294
Revenue, YoY%	3.0%	2.8%	2.7%
Operating Income	20,437	21,957	21,987
Operating Margin %	4.1%	4.3%	4.2%
Net Income	9,862	6,670	13,987
Net Income Margin %	2.0%	1.3%	2.6%
Diluted EPS	3.28	2.26	4.80
Diluted EPS, YoY %	-25.3%	-30.9%	111.8%
Free Cash Flow (CFO-capex)	18,286	17,409	15,957
Free Cash Flow Margin %	3.7%	3.4%	3.0%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	58,033
Net Debt	50,311
Total Debt/EBITDA	1.8
Net Debt/EBITDA	1.5
EBITDA/Interest	13.9
Current Ratio	0.8
Quick Ratio	0.2

NMF = Not Meaningful

Structure of the Food Retailers Industry — NEUTRAL

Firms in the mature food retailers industry generally have slim profit margins and face significant competition from brick-and-mortar locations (discount, department, drug, dollar, warehouse clubs and supermarkets) as well as Internet-based retailers (including Amazon). Though the industry is not terribly cyclical, economic conditions, disposable income, credit availability, fuel prices, and unemployment levels drive ticket size and traffic trends. Offering consumers a compelling value proposition is a must, even as higher-priced organic food offerings proliferate. We're generally neutral on the group.

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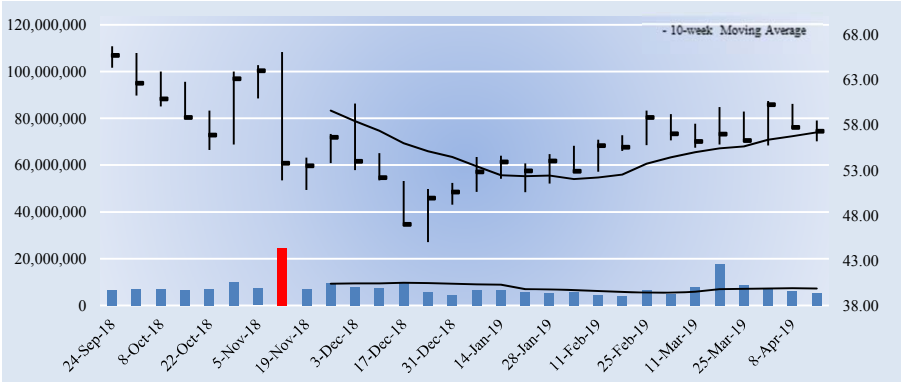
Williams-Sonoma WSM FAIRLY VALUED

Buying Index™ 7 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$60.00	$48.00 - $72.00	MID-CAP VALUE	Consumer Discretionary	Specialty Retailers

A key factor in Williams-Sonoma's multi-channel success is its exclusive product and lifestyle merchandizing.

Stock Chart (weekly)



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)	$4,719
Avg Weekly Vol (30 wks)	7,704
30-week Range (USD)	45.01 - 66.72
Valuentum Sector	Consumer Discretionary
5-week Return	2.5%
13-week Return	7.0%
30-week Return	-13.2%
Dividend Yield %	3.4%
Dividends per Share	1.92
Forward Dividend Payout Ratio	41.8%
Est. Normal Diluted EPS	5.15
P/E on Est. Normal Diluted EPS	11.1
Est. Normal EBITDA	730
Forward EV/EBITDA	6.8
EV/Est. Normal EBITDA	6.4
Forward Revenue Growth (5-yr)	1.9%
Forward EPS Growth (5-yr)	7.4%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	24.8%
Return on Assets	11.4%
ROIC, with goodwill	31.5%
ROIC, without goodwill	31.8%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	300
Net Debt	-39
Total Debt/EBITDA	0.5
Net Debt/EBITDA	NMF
EBITDA/Interest	93.2
Current Ratio	1.6
Quick Ratio	0.4

NMF = Not Meaningful

Investment Highlights

• Williams-Sonoma is a multi-channel specialty retailer of high quality products for the home. Its brands include Williams-Sonoma, Pottery Barn, Pottery Barn Kids, West Elm, PBteen, Rejuvenation, and Mark and Graham. The company was founded in 1956 and is headquartered in San Francisco, California.

• A key factor in Williams-Sonoma's multi-channel success is its exclusive product and lifestyle merchandizing. As of 2018, 95% of the products the firm sells are directly sourced, offering a unique point of view on taste and style in addition to industry leading margins.

• One of the areas at Williams-Sonoma that we're huge fans of is its e-commerce operations. The company now generates more than half of its sales from that channel, a key competitive advantage. Multi-channel customers spend 5 times more than single-channel customers. As of late 2018, its e-commerce revenue has grown at a 25% CAGR since 2000, and it carries a ~20% operating margin.

• Williams-Sonoma is a solid free cash flow generator, and it holds a small net cash position of $39 million on the balance sheet as of the end of fiscal 2018. Roughly 85% of sales in the home furningshing industry as still done in physical stores, but it is working to increase brand awareness and expand reach via digital ads.

• The company retains a strong portfolio of brands and highly-profitable operations. We view its global supply chain as a competitive advantage and believe the firm has multiple opportunities to grow through brand extensions. Its vertical integration allows it to generate industry-leading gross margins.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**ATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**LOW**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**57.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
Best Buy	12.9	2.6	96.9%
Home Depot	20.2	2.4	117.5%
Lowe's	18.6	1.5	118.5%
Office Depot	7.6	0.9	61.5%
Peer Median	15.7	1.9	107.2%
Williams-Sonoma	**12.5**	**1.9**	**95.5%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Jan-18	Jan-19	Jan-20
Revenue	5,292	5,672	5,734
Revenue, YoY%	4.1%	7.2%	1.1%
Operating Income	454	436	495
Operating Margin %	8.6%	7.7%	8.6%
Net Income	260	334	371
Net Income Margin %	4.9%	5.9%	6.5%
Diluted EPS	3.02	4.05	4.60
Diluted EPS, YoY %	-11.7%	34.4%	13.4%
Free Cash Flow (CFO-capex)	310	396	345
Free Cash Flow Margin %	5.9%	7.0%	6.0%

In Millions of USD (except for per share items)

Structure of the Specialty Retailers Industry — NEUTRAL

The specialty retail segment is fragmented, highly competitive, and economically-sensitive. The group covers a broad array of businesses and is dominated by retailers with large brick-and-mortar store footprints. Though some constituents may be insulated from e-commerce competition, others risk obsolescence as product distribution moves to digital means, and online retailers offer lower prices for identical goods and services. We're fairly neutral on the structure of the industry, though some constituents will inevitably face secular and permanent declines.

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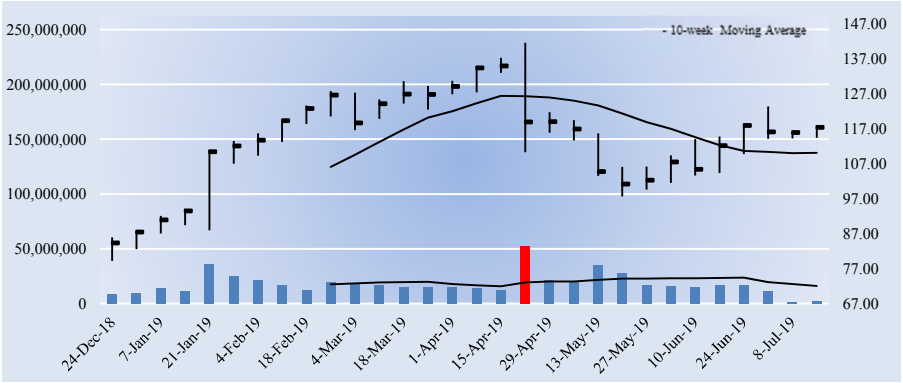
Xilinx XLNX FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Very Attractive	$118.00	$89.00 - $148.00	LARGE-CAP BLEND	Information Technology	Integrated Circuits

Xilinx serves fast-growing end markets and has benefited from early production in 5G and pre-5G deployments.

Stock Chart (weekly)



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

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**UNATTRACTIVE**
ValueCreation™	**EXCELLENT**
ValueRisk™	**MEDIUM**
ValueTrend™	**NEGATIVE**
Cash Flow Generation	**STRONG**
Financial Leverage	**LOW**
Growth	**HIGH**
Technical Evaluation	**BULLISH**
Relative Strength	**WEAK**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BEARISH**
Near-term Technical Support, 10-week MA	**110.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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.

Company Vitals

Market Cap (USD)	$30,039
Avg Weekly Vol (30 wks)	17,862
30-week Range (USD)	79.220001 - 141.600006
Valuentum Sector	Information Technology
5-week Return	11.3%
13-week Return	-13.1%
30-week Return	44.9%
Dividend Yield %	1.3%
Dividends per Share	1.48
Forward Dividend Payout Ratio	37.2%
Est. Normal Diluted EPS	5.01
P/E on Est. Normal Diluted EPS	23.4
Est. Normal EBITDA	1,591
Forward EV/EBITDA	21.4
EV/Est. Normal EBITDA	17.7
Forward Revenue Growth (5-yr)	10.2%
Forward EPS Growth (5-yr)	11.9%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Investment Highlights

• Xilinx makes FPGAs, SoCs and 3D ICs. These devices are coupled with a next-generation design environment and IP to serve a broad range of customer needs, from programmable logic to programmable systems integration. The company was founded in 1984 and is headquartered in California.

• As with rival Altera, which was recently acquired by Intel, Xilinx's strategy centers on the displacement of ASICs and ASSPs in the development of next-generation electronic systems. The company strives to drive down cost and power consumption at each manufacturing process node.

• Investors in technology pay close attention to a firm's gross margin to get a read for product pricing pressures. We like Xilinx's focus on growing earnings and its cash-rich balance sheet. The firm's shares have benefited from reports that it may be a takeover candidate, and robust estimates of potential markets including autonomous vehicles and artificial intelligence for chipmakers have been welcome news.

• The company is experiencing solid momentum in the 28nm market. Xilinx's quarterly revenue run-rate is growing, and demand for its 16nm and 28nm products is expanding thanks to end markets such as data center, automotive, test and measurement, wireless communications (early 5G and pre-5G deployments), and even space.

• The company is heavily dependent on distributor Avnet for the majority of sales revenue and order fulfillment. Resale of product through Avnet accounts for 40%+ of worldwide revenue and for roughly 40% of total net accounts receivable as of the first three quarters of fiscal 2019.

Relative Valuation

	Forward P/E	PEG	Price / FV
Analog Devices	21.5	4.7	119.3%
Microchip Technology	14.6	3.2	108.8%
Nvidia	29.3	1.4	85.5%
Taiwan Semiconductor	20.0	1.9	104.4%
Peer Median	20.8	2.5	106.6%
Xilinx	**29.5**	**2.8**	**99.4%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Returns Summary

	3-year Historical Average
Return on Equity	26.6%
Return on Assets	13.6%
ROIC, with goodwill	94.4%
ROIC, without goodwill	121.6%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Mar-18	Mar-19	Mar-20
Revenue	2,539	3,059	3,512
Revenue, YoY%	8.1%	20.5%	14.8%
Operating Income	778	957	1,199
Operating Margin %	30.7%	31.3%	34.1%
Net Income	512	889	1,009
Net Income Margin %	20.2%	29.1%	28.7%
Diluted EPS	1.99	3.47	3.98
Diluted EPS, YoY %	-14.2%	74.8%	14.6%
Free Cash Flow (CFO-capex)	770	1,002	1,171
Free Cash Flow Margin %	30.3%	32.8%	33.3%

In Millions of USD (except for per share items)

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	1,235
Net Debt	-1,940
Total Debt/EBITDA	1.2
Net Debt/EBITDA	NMF
EBITDA/Interest	20.0
Current Ratio	8.2
Quick Ratio	7.4

NMF = Not Meaningful

Structure of the Integrated Circuits Industry — VERY POOR

Firms in the integrated circuits industry make components that form the electronic building blocks used in electronic systems and equipment. The industry is notoriously cyclical and subject to significant economic upturns and downturns, as well as rapid technological changes. Firms must innovate to survive, and products stocked in inventory can sometimes become obsolete before they are even shipped. Severe pricing competition and lengthy manufacturing cycles only add uncertainty to the mix. We're not fans of the structure of the integrated circuits space.

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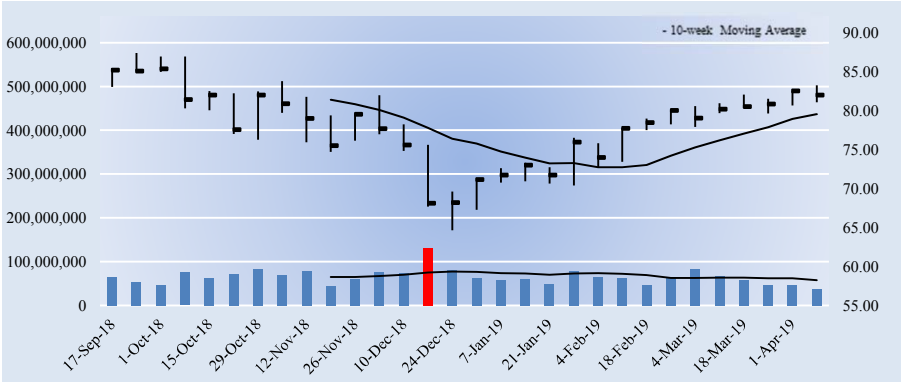
Exxon Mobil XOM FAIRLY VALUED

Buying Index™ 6 **Value Rating**

Economic Castle	Estimated Fair Value	Fair Value Range	Investment Style	Sector	Industry
Attractive	$75.00	$60.00 - $90.00	MEGA-CAP CORE	Energy	Major Oil & Gas

Exxon Mobil is competitively positioned across the value chain, which helps mitigate sector risk and adds flexibility to capture new opportunities.

Stock Chart (weekly)



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)	$349,927
Avg Weekly Vol (30 wks)	65,450
30-week Range (USD)	64.65 - 87.36
Valuentum Sector	Energy
5-week Return	2.5%
13-week Return	15.1%
30-week Return	-1.3%
Dividend Yield %	4.0%
Dividends per Share	3.28
Forward Dividend Payout Ratio	75.3%
Est. Normal Diluted EPS	5.54
P/E on Est. Normal Diluted EPS	14.8
Est. Normal EBITDA	54,037
Forward EV/EBITDA	8.5
EV/Est. Normal EBITDA	7.1
Forward Revenue Growth (5-yr)	3.0%
Forward EPS Growth (5-yr)	4.7%

NMF = Not Meaningful; Est. = Estimated; FY = Fiscal Year

Returns Summary

	3-year Historical Average
Return on Equity	9.1%
Return on Assets	4.8%
ROIC, with goodwill	4.9%
ROIC, without goodwill	4.9%

ROIC = Return on Invested Capital; NMF = Not Meaningful

Leverage, Coverage, and Liquidity

In Millions of USD

Total Debt	37,796
Net Debt	34,754
Total Debt/EBITDA	0.7
Net Debt/EBITDA	0.7
EBITDA/Interest	65.9
Current Ratio	0.8
Quick Ratio	0.5

NMF = Not Meaningful

Investment Highlights

• Exxon Mobil is involved in the exploration and production of crude oil/natural gas, and the manufacture of petroleum products as well as the transportation and sale of crude oil, natural gas and petroleum products. It also makes commodity petrochemicals. Exxon had more than 24 BOEB of total proved reserves at the end of 2018.

• Though Exxon recently lost its pristine AAA credit rating, its financial health is still solid. The executive team is strengthening its upstream portfolio (Permian Basin in focus) and upgrading its downstream production. It estimates proprietary technology will help downstream margins expand by 20%.

• Exxon Mobil's ROCE performance is consistently better than that of its peers on average from 2008-2017, and its upstream earnings-per-barrel recently surpassed that of Chevron for best in its peer group. The company expects expects earnings could more than double by 2025 assuming 2017 oil prices hold, and it is looking to boost production by 25% to 5 million bbl/day.

• Exxon is competitively positioned across the value chain, which helps mitigate sector risk and adds flexibility to capture new opportunities. Its integrated operations add synergy and optionality potential while maximizing value in dynamic markets. The firm estimates that cash flow from operations could nearly double by 2025 assuming 2017 prices hold.

• Exxon Mobil's dividend is better than that of peers, in our opinion, and we expect growth in it for years to come. The energy giant remains best in class, in our view, and free cash flow coverage of dividends in 2017 and 2018 is a great sign. 2018 marked its 36th consecutive year of annual dividend increases.

Investment Considerations

DCF Valuation	**FAIRLY VALUED**
Relative Valuation	**NEUTRAL**
ValueCreation™	**POOR**
ValueRisk™	**LOW**
ValueTrend™	**POSITIVE**
Cash Flow Generation	**MEDIUM**
Financial Leverage	**LOW**
Growth	**MODEST**
Technical Evaluation	**BULLISH**
Relative Strength	**NEUTRAL**
Money Flow Index (MFI)	**NEUTRAL**
Upside/Downside Volume (U/D)	**BULLISH**
Near-term Technical Support, 10-week MA	**79.00**

DCF = Discounted Cash Flow; MFI, U/D = Please see glossary. MA = Moving Average

Business Quality

ValueCreation™

ValueRisk™	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
BP	13.1	1.7	99.7%
Chevron	16.4	2.3	102.8%
ConocoPhillips	16.1	NMF	99.1%
Royal Dutch Shell	11.8	3.2	94.8%
Peer Median	14.6	2.3	99.4%
Exxon Mobil	**18.8**	**1.9**	**109.3%**

Price / FV = Current Stock Price divided by Estimated Fair Value

Financial Summary

	----- Actual -----		Projected
Fiscal Year End:	Dec-17	Dec-18	Dec-19
Revenue	244,363	290,212	290,502
Revenue, YoY%	8.1%	18.8%	0.1%
Operating Income	19,275	31,719	26,470
Operating Margin %	7.9%	10.9%	9.1%
Net Income	19,710	20,840	18,697
Net Income Margin %	8.1%	7.2%	6.4%
Diluted EPS	4.63	4.88	4.35
Diluted EPS, YoY %	146.7%	5.4%	-10.8%
Free Cash Flow (CFO-capex)	14,664	16,440	8,046
Free Cash Flow Margin %	6.0%	5.7%	2.8%

In Millions of USD (except for per share items)

Structure of the Oil & Gas (majors) Industry — NEUTRAL

The global oil and gas industry is dominated by state-owned firms, including member nations of OPEC, which have a large influence on pricing. Public constituents are not small, however, as firms in this group make up a large portion of the energy sector's market cap. Oil and gas prices are the key profit driver and largely reflect supply/demand dynamics, though it is not uncommon for speculative/geopolitical price premiums to occur. A firm's estimated reserve life and cost for exploration and development should be monitored closely. We're neutral on the structure of the majors, given their commoditized product.

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Glossary of Valuentum Terms

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.

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.

Company Description. The description section provides a brief company profile and in the top right corner indicates the investment style that Valuentum assigns to the stock. 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.

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.

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Dividend Growth Potential. We blend our analysis of a firm's Dividend Safety with its historical Track Record, while also considering historical dividend growth trends. We believe such a combination captures a firm's capacity (cash flow) and willingness (track record) to raise its dividend in the future. Scale: EXCELLENT, GOOD, POOR, VERY POOR.

Dividend Safety. We measure the safety of a firm's dividend by adding its net cash to our forecast of its future cash flows and divide that sum by our forecast of its future dividend payments. This process results in a ratio called the Valuentum Dividend Cushion™. Scale: Above 2.75 = EXCELLENT; Between 1.25 and 2.75 = GOOD; Between 0.5 and 1.25 = POOR; Below 0.5 = VERY POOR.

Dividend Strength. Our assessment of the firm's dividend strength is expressed in a matrix. If the safety of a firm's dividend is EXCELLENT and its growth prospects are also EXCELLENT, it scores high on our matrix (top right). If the firm's dividend safety and the potential future growth are VERY POOR, it scores lower on our scale (bottom left).

Dividend Track Record. We assess each firm's dividend track record based on whether the fundamentals of the firm have ever forced it to cut its dividend. If the firm has ever cut its dividend (within the last 10 years), we view its track record as RISKY. If the firm has maintained and/or raised its dividend each year (over the past 10 years), we view its track record as HEALTHY.

Estimated Fair Value. This measure is an output of our DCF valuation model and represents 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 would 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 ValueRisk rating).

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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.

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).

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.

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.

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.

Risk of Capital Loss. We think capital preservation is key for the dividend investor. As such, we evalute the risk of capital loss by assessing the intrinsic value of each firm based on our discounted cash-flow process. If a firm is significantly OVERVALUED, we think the risk of capital loss is HIGH. If a firm is FAIRLY VALUED, we think the risk of capital loss is MEDIUM, and if a firm is UNDERVALUED, we think the risk of capital loss is LOW.

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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.

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.

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.

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.

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.

Valuentum Dividend Cushion™. This is a proprietary Valuentum measure that drives our assessment of the firm's Dividend Safety rating. The forward-

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looking measure assesses dividend coverage via the cash characteristics of the business.

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.

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