QUANTITATIVE STOCK REPORT | November 01, 2019 | NYSE : IBP

Installed Building Products, Inc.

Recommendation [as of October 31, 2019]:

STRONG BUY

Risk Evaluation: MODERATE Price: 75.70 [Nov 01, 2019 close] Trading Currency: USD Country: United States

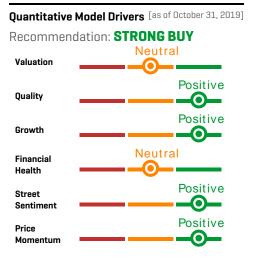
SPGMI's Quality Ranking: NR

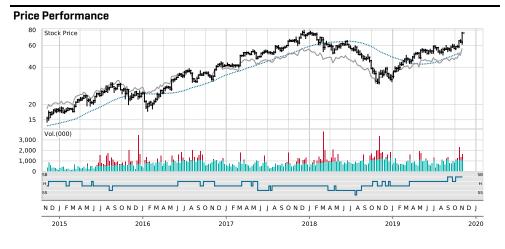
GICS Industry: Homebuilding

GICS Sector: Consumer Discretionary

Business Summary: Installed Building Products, Inc., together with its subsidiaries, engages in the installation of insulation, waterproofing, fire-stopping, fireproofing, garage doors, rain gutters, window blinds, shower doors, closet shelving and mirrors, and other products in the continental United States. It offers a range contd...

Sector Ranking: Marketweight





Risk Evaluation :	MODERATE
Asset/Market Size Risk	Moderate
Financial Leverage Risk	High
Price Volatility Risk	Moderate
Liquidity Risk	Moderate

Relative Strength vs	As Reported Earnings vs	Total Return[%CAGR]	YTD	1Yr	ЗYr	5Yr
Index 40-Week Mov. Avg.	Previous Year Up 🔻 Down 🕨 No Change	NYSE:IBP	162.7	115.3	31.8	39.2
Volume	Quantitative Ranking	Peer Average	97.1	65.5	23.6	1.6
hill Below Avg. hill Above Avg.	Qualitizative Nativing	S&P 500	28.3	13.1	15.2	10.8

Quantitative Rankings: SB = Strong Buy, H = Hold, SS = Strong Sell Past performance is not an indication of future performance and should not be relied upon as such Source: CFRA, S&P Global Market Intelligence (SPGMI)

Model Ranking Commentary

- NYSE: IBP's STRONG BUY recommendation is based on its score from CFRA's quantitative model for the United States. ٠
- Growth and Valuation model sub-categories are the two largest drivers of NYSE: IBP's STRONG BUY recommendation.
- Growth includes factors that measure EPS growth and stability and cash flow growth and stability.
- Valuation includes factors such as price to earnings, price to EBITDA, and price to cash flow.
- NYSE: IBP's overall score ranked in the 6th percentile of all stocks in the model universe [1 = best and 100 = worst].

Current

NYSE:IBP

S&P 500

Peer Average

Peer Average

S&P 500

5-Year Average NYSE:IBP

Key Statistics			
Market Cap (MIn of USD)			2,261
52-Wk Range (USD)		30.54 -	76.60
Value of USD 10K Invested 5 Yrs	s ago	;	52,171
Beta vs S&P 500		1.15	
Common Shares Outstanding(M		29.9	
Average Daily Volume (MIn)		0.237	
Insider Ownership(%)			7.42
Compound Annual Growth	Rates		
Revenue - %CAGR	1Yr	3Yr	5Yr
Company	15.2	22.2	24.8
Peer Average	18.6	19.0	18.1
S&P 500	5.2	6.9	3.8

Dividend Data			Currency: USD
		5Yr Low	5Yr Hi
Indicated Rate/ Share			
Yield [%]	Nil	-	
Payout Ratio [%]	NM	NM	NM

Payment Details

-No Dividend Data Available

5 year P/E Ratio Comparisons [forward 12-month Diluted EPS estimates]



Operating EPS - %CAGR Company 147.8 37.1 21.4 Peer Average -64.0 8.6 -6.5 S&P 500 0.9 14.4 4.5

This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the Source: CFRA, S&P Global Market Intelligence (SPGMI) particular needs of any specific person who may receive this report. Refer to important disclosures at the end of this report.

Installed Building Products, Inc.

Recommendation [as of October 31, 2019]:

STRONG BUY

Risk Evaluation: MODERATE Price: 75.70 (Nov 01, 2019 close) Trading Currency: USD Country: United States

EPS Per Share and Revenues [Millions USD, except per share]

Fiscal year ends Dec 31



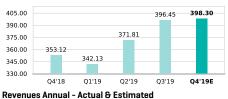
FRA

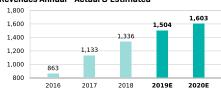


EPS Annual - Actual & Estimated



Revenues Quarterly - Actual & Estimated





%YrYr. Chg.	38.5	13.3	11.5	37.5	20.6	
% Surprise	15.9	-0.2	2.2	13.1	-	
No. of Analvsts	11	10	8	8	7	
	2016	2017	2018	2019E	2020E	
%YrYr. Chg.	2016 44.9	2017 5.9	2018 34.6	2019E 85.9	2020E 9.7	

Q4'18 Q1'19 Q2'19 Q3'19 Q4'19E

Key Profitability Ratios								
	2014	2015	2016	2017	2018	LTM		
% Operating Margin	4.9	6.9	7.9	6.9	7.2	7.9		
Peer Average	3.5	5.1	6.3	7.1	6.8	6.9		
% Net Margin	2.7	4.0	4.5	3.6	4.1	4.5		
Peer Average	1.5	3.7	3.2	5.3	3.6	3.6		
% Return on Capital	17.7	14.3	14.8	11.0	9.9	9.6		
Peer Average	4.3	6.1	7.5	7.3	6.9	5.9		
% Cash Flow to Sales	3.8	5.2	8.5	6.1	7.2	NA		
Peer Average	3.6	3.9	3.7	6.6	7.7	NA		

Q4'18 Q1'19 Q2'19 Q3'19 Q4'19E %Yr.-Yr. 17.8 13.4 11.8 13.6 12.8

Chg. No. of 8 8 3 11 11 Analysts

	2016	2017	2018	2019E	2020E
%YrYr. Chg.	30.2	31.3	18	12.6	6.5
No. of Analysts	6	8	11	4	7

Key Valuation Ratios

Source: S&P Global Market Intelligence

Note: EPS & Revenues in graphs above may represent analyst-adjusted actuals and estimates and therefore may not match numbers in the financial data presentation below.

Income Statement, Cash Flow and Balance Sheet Data (Millions USD, except per share) Fiscal Year E							Fiscal Year En	ding: Dec. 31 .
	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	238	301	432	518	663	863	1,133	1,336
Operating Income	-15.4	-9.5	14.5	25.6	46.1	68.3	78.2	96.5
Net Income	-7.2	-4.3	6.6	14.0	26.5	38.4	41.1	54.7
Operating Cash Flow	-12.8	4.6	4.2	19.6	34.5	73.3	68.8	96.6
Capital Expenditures	1.1	2.9	2.7	6.2	27.3	27.0	31.7	35.2
Earnings Per Share	3.87	-0.48	0.02	-0.20	0.85	1.23	1.30	1.75
Dividends Per Share	NA	NA	NA	NA	NA	NA	NA	NA
Dividend Payout Ratio	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Free Cash Flow Per Share	-0.71	0.08	0.07	0.45	0.23	1.47	1.17	1.97
Cash and Short Term Investments	2.53	3.90	4.07	10.76	6.82	14.48	92.56	100.50
Long Term Debt	17	18	28	25	113	134	331	432
Total Debt	21	30	50	54	144	167	360	463
Common Equity	-10	-7	-71	92	114	154	211	182

Note: Data may be restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends as of ex-dividend date.

NA = Not Available. NM = Not Meaningful.

Source: S&P Global Market Intelligence (SPGMI)

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CFRA

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STRONG BUY



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Peer Group Comparison

Peer Group	Stock Symbol	Stk.Mkt.Cap (MIn USD)	Beta	Recent Stock Price[USD]	52 Week Low/High[USD]	Dividend Yield[%]	Fwrd P/E	P/B Ratio	Ranking ¹	Return On Revenue[%]	Return On Equity[%]	LTD to Cap[%]
Installed Building Products, Inc.	NYSE:IBP	2,260.59	1.15	75.7	31.57/75.7	Nil	23.3	10.0	Strong Buy	4.5	29.6	68.1
Beacon Roofing Supply, Inc.	NasdaqGS:BECN	2,227.09	1.38	32.51	26.8/39.33	Nil	13.6	1.2	Hold	0.1	-1.0	56.4
TopBuild Corp.	NYSE:BLD	3,743.42	0.79	110.27	42.3/110.27	Nil	20.3	3.2	Buy	7.1	16.3	38.0
¹ Quantitative Rank	Quantitative Rankings : Strong Buy , Buy , Hold , Sell , Strong Sell ; Qualitative Rankings(STARS) : 5 = Strong Buy , 4 = Buy , 3 = Hold , 2 = Sell , 1 = Strong Sell											

within the same industry and/or that engage in the same line of business. The subject company and some of the companies in the Peer Group may be ranked by two different ranking systems. For the purpose

Qualitative Rainkings, or only buy, buy, for one of the second second second buy, a - buy, a - hold, e

Rankings are not predictive of future performance. For full definitions of Rankings, see the glossary section of this report. Note: Peer Group selection is performed using CFRA's proprietary peer ranking system. Peers are selected based on factors such as similarity of analyst coverage, industry, size, and region. The subject company is ranked against a universe of companies (the "Universe") which has been compiled by CFRA and consists of a list of companies with similar characteristics, but may not include all the companies

of the overall ranking/recommendation, the subject company is ranked against all the companies in the Universe and not necessarily against the companies listed in the Peer Group.

Wall Street Consensus Estimates



Source: S&P Global Market Intelligence (SPGMI)

Forecasts are not reliable indicator of future performance.

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance. QUANTITATIVE STOCK REPORT | November 01, 2019 | NYSE : IBP

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Business Summary

FRA

Installed Building Products, Inc., together with its subsidiaries, engages in the installation of insulation, waterproofing, fire-stopping, fireproofing, garage doors, rain gutters, window blinds, shower doors, closet shelving and mirrors, and other products in the continental United States. It offers a range of insulation materials, such as fiberglass and cellulose, and spray foam insulation materials. The company is also involved in the installation of insulation and sealant materials in various areas of a structure, which includes basement and crawl space, building envelope, attic, and acoustical. It serves homebuilders, multi-family and commercial construction firms, individual homeowners, and repair and remodeling contractors. The company was formerly known as CCIB Holdco, Inc. Installed Building Products, Inc. was founded in 1977 and is headquartered in Columbus, Ohio.

Key Developments

Dec-03-2019	Company Conference Presentations	Installed Building Products, Inc. Presents at Credit Suisse 7th Annual Industrials Conference, Dec-03-2019
Nov-14-2019	Company Conference Presentations	Installed Building Products, Inc. Presents at Stephens Nashville Investment Conference, Nov-14-2019 06:30 AM
Nov-01-2019	Earnings Calls	Installed Building Products, Inc., Q3 2019 Earnings Call, Nov 01, 2019
Nov-01-2019	Earnings Release Date	Installed Building Products, Inc. to Report Q3, 2019 Results on Nov 01, 2019
Sep-23-2019	M&A Transaction Closings	Installed Building Products, Inc. (NYSE:IBP) acquired Northeast Spray Insulation, Inc. and Minnesota Spray-Foam Insulation.
Sep-19-2019	Company Conference Presentations	Installed Building Products, Inc. Presents at Zelman Housing Summit, Sep-19-2019
Sep-16-2019	Fixed Income Offerings	Installed Building Products, Inc. has completed a Fixed-Income Offering in the amount of \$300 million.
Sep-11-2019	Fixed Income Offerings	Installed Building Products, Inc. has announced a Fixed-Income Offering.
Aug-19-2019	M&A Transaction Closings	Installed Building Products, Inc. (NYSE:IBP) acquired Therm-Con, LLC and Foamtech, Inc.
Aug-08-2019	Earnings Calls	Installed Building Products, Inc., Q2 2019 Earnings Call, Aug 08, 2019
Aug-08-2019	Earnings Release Date	Installed Building Products, Inc. to Report Q2, 2019 Results on Aug 08, 2019
Aug-08-2019	Announcements of Earnings	Installed Building Products, Inc. Reports Earnings Results for the Second Quarter Ended June 30, 2019
Jun-24-2019	M&A Transaction Closings	Installed Building Products, Inc. (NYSE:IBP) acquired Expert Insulation, Inc. for \$17.9 million.
Jun-05-2019	Company Conference Presentations	Installed Building Products, Inc. Presents at Deutsch Bank 10th Annual Global Industrials & Materials Summit, Jun-05-2019
May-30-2019	Annual General Meeting	Installed Building Products, Inc., Annual General Meeting, May 30, 2019
May-02-2019	Earnings Calls	Installed Building Products, Inc., Q1 2019 Earnings Call, May 02, 2019

Corporate Information

Investor Contact J. R. Niswonger (614-221-3399) Office

495 South High Street Suite 50 Columbus Ohio 43215 United States Columbus , Ohio 43215 United States

Telephone 614-221-3399

Web Site www.installedbuildingproducts.com

Key Officers **Chief Operating Officer** J. P. Elliott President of External Affairs W. J. Hire **Regional President** R. S. Jenkins **Regional President** M. J. Momper **Regional President** W. W. Pearce **Regional President** R. S. Williamson **Regional President** B. A. Wheeler President of the Alpha Companies H. T. Schmueckle President of Commercial Development & Director V. Verma CFO, Executive VP & Director M. T. Miller Senior Vice President of Purchasing & Supply Chain W. W. Jenkins Chairman, CEO & President J. W. Edwards General Counsel & Secretary S. A. McBride Senior Vice President of Finance & Investor Relations J. R. Niswonger Chief Accounting Officer & Treasurer T. R. Fry

Board Members

J. E. Jackson, J. W. Edwards, L. A. Hilsheimer, M. H. Thomas, M. L. Carter, M. T. Miller, R. H. Schottenstein, V. Verma

State of Incorporation

Delaware

Employees 7,700



Glossary

Quantitative Model Overall Recommendation and drivers of the recommendation

CFRAs global quantitative stock reports provide a 5-tier recommendation assigning a Strong Buy, Buy, Hold, Sell, or Strong Sell recommendation based on a series of quantitative inputs from four separate regional models:

- United States
- Canada
- Developed Europe
- Developed Asia excluding Japan

Each of these regional models is based on between 25 and 40 different investment factors (financial ratios), selected from S&P Global Market Intelligence's Alpha Factor Library.

To provide its recommendation, CFRA ranks a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed.

Within these categories, factors are chosen based on their historical predictive strength (alpha) within the region and their correlation with other factors. Each regional model contains two separate sub-models; one that uses factors specific to financial companies and one that focuses on non-financial companies. Due to the large number of banks in the U.S., the U.S. model also has a third sub-model specifically for banks.

Each company within a region is grouped with a universe of stocks and receives a score on each of the five (or six in the U.S.) model categories. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. Rankings are then assigned investment labels, as follows:

Strong Buy: top 10% by model score Buy: next 20% Hold: next 40% Sell: next 20% Strong Sell: bottom 10%

Risk Evaluation

Risk Evaluation is a relative ranking, which represents an assessment of the risk of investing in a company's stock relative to the risk of investing in other companies' stocks in the same universe. To perform this assessment the following risk categories are evaluated:

Asset/Market Size Risk Financial Leverage Risk Price Volatility Risk Liquidity Risk

Each company's stock is percentile ranked from 1 to 100 against the other companies within the universe on each of the four risk categories mentioned above, with 1 being low risk and 100 being

high risk. The overall risk evaluation represents the combined scores on these Risk categories, calculated as an equal-weighted average of percentile ranks of the 4 risk categories. The highest 40% of companies in each universe receive a high risk ranking, the next 35% receive a moderate risk ranking and, the lowest 25% receive a low risk ranking.

All investments carry some sort of risk and a low risk ranking represents a relative ranking of CFRA's assessment of the risk of investing in a company's stock versus the risk of investing in other companies that are part of that company's universe. Therefore, a low risk ranking should not be interpreted as an absolute risk evaluation, but as a relative measurement of the risk of investing in a company's stock.

Sector Ranking

CFRA's Investment Policy Committee (IPC) consists of a team of five seasoned investment professionals. It meets weekly to discuss market trends and projections, maintain an S&P 500 12-month forward price target, and make asset allocation/sector recommendations. The IPC establishes over, market, and underweight recommendations on the 10 sectors within the S&P 500. Overweight and underweight recommendations imply that the group expects these sectors to outperform or underperform the S&P 500 during the coming six-to-12 month period, respectively. A "marketweight" recommendation indicates that the sector is expected to be a market performer during this same timeframe. The IPC analyses economic projections, fundamental forecasts, technical considerations, and historical precedent when making such recommendations. Changes in recommendations can be made more frequently than every six-12 months as market conditions evolve. Sector rankings will only be made available for sectors in the S&P 500. If a ranking is not available, the value will be N/A.

Qualitative STARS Ranking system and definition: * * * * * 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a wide margin over the coming 12 months, with shares rising in price on an absolute basis.

* * * * 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months, with shares rising in price on an absolute basis.

* * * 3-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months, with shares generally rising in price on an <u>absolute</u> basis.

* * 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months, and the share price not anticipated to show a gain.

▲ 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a wide margin over the coming 12 months, with shares falling in price on an absolute basis.

S&P Global Market Intelligence's Quality Ranking

(also known as S&P Global Market Intelligence's Earnings & Dividend Rankings)- Growth and stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsulize the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

A High B-Lower A- Above Average C Lowest B+ Average D In Reorganization NR Not Ranked	A+	Highest	В	Below Average
B+ Average D In Reorganization	А	High	B-	Lower
5 5	A-	Above Average	С	Lowest
NR Not Ranked	B+	Average	D	In Reorganization
	NR	Not Ranked		

S&P Capital IQ Consensus Estimates

S&P Capital IQ Consensus Estimates represent the aggregation of individual estimates provided by analysts that are covering a public company. A consensus number can be provided as either the mean or the median. The size of the company and the amount of analyst coverage will determine the size of the group from which the Consensus is derived. All of the available analysts' estimates may not necessarily be included in the Consensus. The Consensus will only include analysts' estimates that are based on the same methodology. Consensus Mean: The mathematical average of the detailed estimates after the appropriate exclusions have been applied. Consensus Median: This represents the midpoint of the range of estimates that are ranked from highest to lowest after the appropriate exclusions have been applied. If the number of estimates is even, then the average of the middle two figures is the median.

Global Industry Classification Standard (GICS)

An industry classification standard, developed by Standard and Poor's in collaboration with Morgan Stanley Capital International (MSCI). Under the GICS structure, companies are classified in one of 154 sub-industries, which are grouped into 68 industries, 24 industry groups, and 10 economic sectors (consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, telecom services, and utilities). This four-tier structure accommodates companies across the world and facilitates sector analysis and investing.



Glossary

Peer Group

A subset of a universe that groups companies by specific criteria, such as industry/across industry, lines of business, geography [local, regional, national, and international], size of business [e. g. in terms of revenue], performance criteria, etc.

Universe

A set of companies that shares a common feature such as the same market capitalization, industry or index.

Beta

Beta is a measurement of the sensitivity of a company's stock price to the overall fluctuation of a given benchmark index. The beta values used in this report are levered, unadjusted and derived from a least squares regression analysis using stock and benchmark index returns based on a monthly frequency. Beta is calculated using 60 monthly returns [each as of month end] but if the company's trading history is too short to provide such a sample, fewer than 60 but not fewer than 24 monthly returns are used to run the regression. Beta in this report uses five different benchmark indices to better estimate a stock's volatility against a respective market: the S&P 500 for all US stocks, the S&P/TSX index for all Canadian stocks, the S&P Europe 350 for all European stocks, the S&P/ASX 200 index for all Australian stocks, and the S&P Global 1200 for all other international stocks.

Free Cash Flow (FCF)

Operating Cash Flow minus Capital Expenditures over the past 12 months

Funds from Operations (FFO)

Funds from Operations (FFO) represents a REIT's net income, excluding gains or losses from sales of property, plus real estate depreciation.

Not Meaningful (NM)

Value is available but it is not meaningful. Examples are certain negative ratios such as P/E, as well as certain ratios that are over +/- 100%

Not Available (NA)

Value is not available for this data item

Return on Capital

EBIT / [Total Equity + Total Debt + Deferred Tax Liability Non Current + Deferred Tax Liability Current] Notes: [1] If the denominator is less than or equal to zero then the ratio will be shown as NM [2] If the return is less than [300%] then the value will be shown as NM

Return on Equity

Earnings From Continuing Operations / [(Total Equity(t) + Total Equity (t-1)] / 2] Notes: (1) If both periods of data (t and t-1) are not available then the ratio will be shown as NM (2) If the denominator is less than or equal to zero then the ratio will be shown as NM

Relative Strength vs Index

Relative Strength vs Index measures the stock performance of the company verse all other stocks in the benchmark index each week. Weekly readings are accumulated to form the cumulative Relative Strength line.

Relevant benchmarks:

Region	Country	Index				
US	US	S&P 500 Index				
Canada	Canada	S&P/TSX Composite Index				
Europe	All	S&P Europe 350 Index				
Asia ex Japan	Australia	S&P/ASX 200 Index				
Asia ex Japan	All except Australia	S&P Global 1200				

Abbreviations used in CFRA Equity Research Reports

CAGR	Compound Annual Growth Rate
EBIT	Earnings Before Interest and Taxes
EBITDA	Earnings Before Interest Taxes Depreciation and Amortization
EPS	Earnings Per Share
EV	Enterprise Value
FCF	Free Cash Flow
FFO	Funds from Operations
LTD	Long Term Debt
NM	Not Meaningful (see definition above)
P/E	Price/Earnings

Dividends on American Depository Receipts (ADRs) and American Depository Shares (ADSs) are net of taxes (paid in the country of origin).



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Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

Qualitative STARS recommendations are determined and assigned by equity analysts. For reports containing STARS recommendations refer to the Glossary section of the report for detailed methodology and the definition of STARS rankings.

Ouantitative Stock Reports:

Quantitative recommendations are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative recommendations refer to the Glossary section of the report for detailed methodology and the definition of Quantitative rankings.

STARS Stock Reports and Quantitative Stock Reports:

The methodologies used in STARS Stock Reports and Quantitative Stock Reports [collectively, the "Research Reports"] reflect different criteria, assumptions and analytical methods and may have differing recommendations. The methodologies and data used to generate the different types of Research Reports are believed by the author and distributor reasonable and appropriate. Generally, CFRA does not generate reports with different ranking methodologies for the same issuer. However, in the event that different methodologies or data are used on the analysis of an issuer, the methodologies may lead to different views or recommendations on the issuer, which may at times result in contradicting assessments of an issuer. CFRA reserves the right to alter, replace or vary models, methodologies or assumptions from time to time and without notice to clients.

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