

ACM Research, Inc.

 Recommendation [as of November 09, 2023]: **BUY**
Risk Evaluation: MODERATE **Price:** 16.31 (Nov 09, 2023 close) **Trading Currency:** USD **Country:** United States

GICS Sector: Information Technology

Sector Ranking: overweight

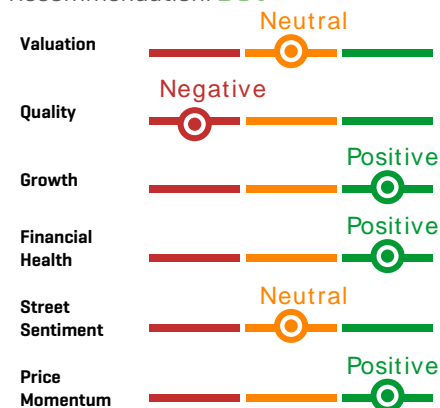
SPGM's Quality Ranking: NR

GICS Industry: Semiconductor Materials & Equipment

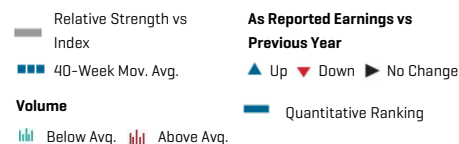
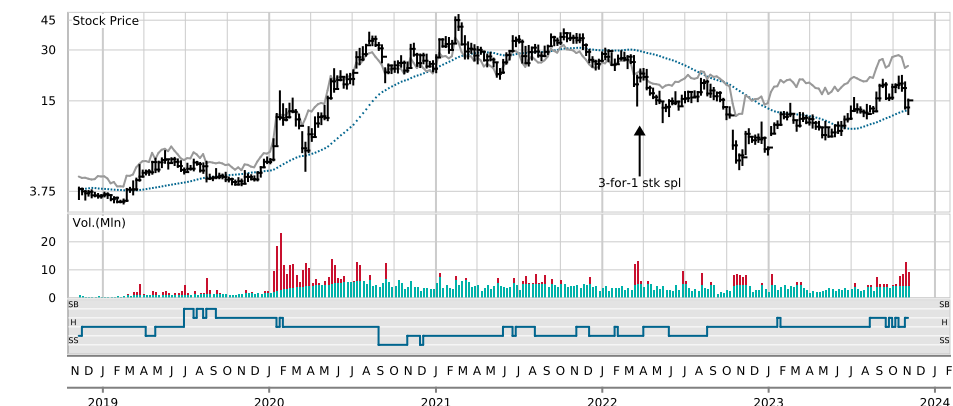
Business Summary: ACM Research, Inc., together with its subsidiaries, develops, manufactures, and sells single-wafer wet cleaning equipment for enhancing the manufacturing process and yield for integrated chips worldwide. It offers space alternated phase shift technology for flat and patterned wafer surfaces, which employs contd...

Quantitative Model [as of November 09, 2023]

Drivers

 Recommendation: **BUY**

Risk Evaluation : **MODERATE**

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

Price Performance


Total Return[%CAGR]	YTD	1Yr	3Yr	5Yr
NasdaqGM:ACMR	138.9	80.6	-16.3	33.1
Peer Average	52.8	34.9	23.2	22.9
S&P 500	18.5	18.8	9.0	11.4

 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

- NasdaqGM: ACMR's BUY recommendation is based on its score from CFRA's quantitative model for the United States.
- Growth and Valuation model sub-categories are the two largest drivers of NasdaqGM: ACMR's 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.
- NasdaqGM: ACMR's overall score ranked in the 30th percentile of all stocks in the model universe [1 = best and 100 = worst].

Key Statistics

Market Cap [Mln of USD]	988.5
52-Wk Range [USD]	6.910 - 21.070
Value of USD 10K Invested 5 Yrs ago	41,714
Beta vs S&P 500	1.08
Common Shares Outstanding[Mln]	60.6
Average Daily Volume [Mln]	1.294
Insider Ownership[%]	12.84

Compound Annual Growth Rates

Revenue - %CAGR	1Yr	3Yr	5Yr
Company	49.3	56.0	54.3
Peer Average	-1.4	19.0	13.7
S&P 500	6.7	9.6	6.7

Operating EPS - %CAGR

	1Yr	3Yr	5Yr
Company	104.4	60.9	70.3
Peer Average	-11.3	54.2	21.7
S&P 500	-4.9	22.0	7.8

Dividend Data

Currency: USD

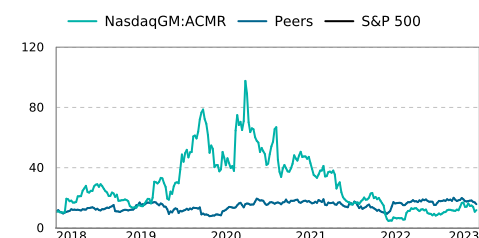
	5Yr Low	5Yr Hi
Indicated Rate/Share		
Yield [%]	Nil	
Payout Ratio [%]	NM	NM

Payment Details

-No Dividend Data Available

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

	Current
NasdaqGM:ACMR	12.8
Peer Average	23.7
S&P 500	19.5
	5-Year Average
NasdaqGM:ACMR	29.4
Peer Average	23.4
S&P 500	19.6





ACM Research, Inc.

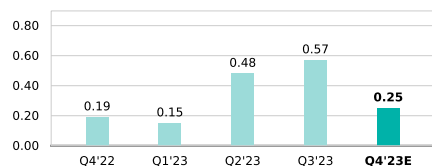
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EPS Per Share and Revenues [Millions USD, except per share]

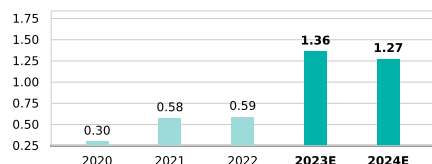
Fiscal year ends Dec 31

EPS Quarterly - Actual & Estimated



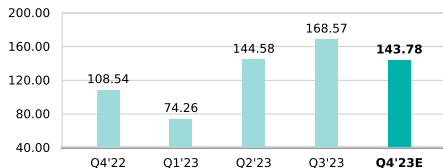
	Q4'22	Q1'23	Q2'23	Q3'23	Q4'23E
%Yr.-Yr. Chg.	-29.6	1600	118.2	35.7	31.6
% Surprise	25	246.2	214.8	67.6	-
No. of Analysts	5	3	4	4	2

EPS Annual - Actual & Estimated



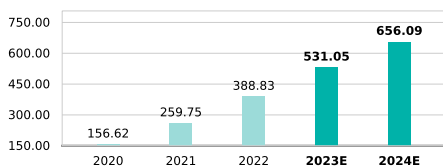
	2020	2021	2022	2023E	2024E
%Yr.-Yr. Chg.	-9.1	92	2.8	130.2	-6.4
No. of Analysts	8	6	5	4	4

Revenues Quarterly - Actual & Estimated



	Q4'22	Q1'23	Q2'23	Q3'23	Q4'23E
%Yr.-Yr. Chg.	14.1	76	38.5	26.1	32.5
No. of Analysts	7	5	7	6	6

Revenues Annual - Actual & Estimated



	2020	2021	2022	2023E	2024E
%Yr.-Yr. Chg.	45.7	65.8	49.7	36.6	23.5
No. of Analysts	7	9	8	7	7

Key Profitability Ratios

	2018	2019	2020	2021	2022	LTM
% Operating Margin	8.7	16.5	13.7	14.9	15.2	18.0
Peer Average	13.9	8.6	12.8	20.7	21.9	17.8
% Net Margin	8.8	18.1	13.8	16.5	13.0	17.7
Peer Average	3.7	5.0	11.5	19.9	21.7	17.2
% Return on Capital	7.6	9.4	6.2	4.4	4.2	6.1
Peer Average	9.3	5.0	6.9	13.5	14.5	10.2
% Cash Flow to Sales	9.3	8.7	-8.6	-15.4	-16.0	NA
Peer Average	12.8	11.6	19.3	21.8	18.4	NA

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 Ending: Dec. 31 .

	2015	2016	2017	2018	2019	2020	2021	2022
Revenue	31	27	37	75	108	157	260	389
Operating Income	4.9	3.5	0.7	6.5	17.8	21.5	38.7	59.0
Net Income	5.4	1.0	-0.3	6.6	18.9	18.8	37.8	39.3
Operating Cash Flow	2.70	-3.70	-8.10	6.91	9.40	-13.55	-40.09	-62.19
Capital Expenditures	1.37	0.80	0.65	1.83	0.97	45.42	9.15	91.09
Earnings Per Share	0.32	0.06	-0.02	0.12	0.33	0.30	0.58	0.59
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	0.14	-0.40	-0.43	0.09	0.14	-1.09	-0.76	-2.37
Cash and Short Term Investments	4.4	10.1	17.7	27.1	58.3	100.0	592.0	338.7
Long Term Debt	NA	NA	NA	NA	NA	18.0	23.0	18.7
Total Debt	9.7	5.3	5.1	9.4	17.6	50.0	39.1	79.5
Common Equity	-8	-2	40	52	97	141	676	675

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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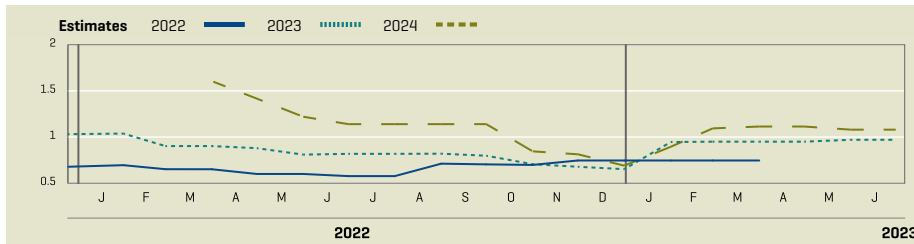
Peer Group Comparison

Peer Group	Stock Symbol	Stk.Mkt.Cap [Mln 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[%]
ACM Research, Inc.	NasdaqGM:ACMR	988.51	1.08	16.31	7.08/20.07	Nil	12.0	1.3	Buy	17.7	10.4	4.6
Advanced Micro-Fabrication Equipment Inc. China	SHSE:688012	14,275.95	NA	23.09	13.44/26.5	.1	10.2	0.8	NA	26.8	9.6	1.5
Applied Materials, Inc.	NasdaqGS:AMAT	120,653.28	1.59	143.17	94.23/153.99	.9	18.1	7.9	★★★★	24.3	47.4	27.4
Axcelis Technologies, Inc.	NasdaqGS:ACLS	4,080.66	1.79	124.61	74.39/200.48	Nil	17.1	5.1	Strong Buy	21.4	32.8	8.0
Cohu, Inc.	NasdaqGS:COHU	1,437.98	1.57	30.27	30.14/43.65	Nil	18.8	1.5	Buy	7.5	5.7	4.9
FormFactor, Inc.	NasdaqGS:FORM	2,788.30	1.2	34.32	21.45/37.16	Nil	48.0	3.2	Hold	-1.1	-0.9	4.4
Kulicke and Soffa Industries, Inc.	NasdaqGS:KLIC	2,429.48	1.42	43.02	40.98/59.98	1.8	24.8	2.1	Hold	11.9	8.3	3.4
Lam Research Corporation	NasdaqGS:LRCX	85,699.07	1.52	650.26	402.8/721.26	1.2	23.2	10.7	★★★★	25.1	51.4	38.2
Nova Ltd.	NasdaqGS:NVMI	2,913.45	1.25	106.6	79.23/129.0	Nil	23.4	4.4	Hold	25.1	21.4	4.1
Onto Innovation Inc.	NYSE:ONTO	6,038.53	1.29	123.07	66.0/143.04	Nil	33.6	3.6	Hold	19.3	10.9	0.8
Veeco Instruments Inc.	NasdaqGS:VECO	1,489.68	1.28	26.81	17.81/30.66	Nil	16.8	2.3	Hold	11.9	14.2	32.1

¹ Quantitative Rankings : Strong Buy , Buy , Hold , Sell , Strong Sell ; Qualitative Rankings(STARS) : 5 = Strong Buy , 4 = Buy , 3 = Hold , 2 = Sell , 1 = Strong Sell
 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 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 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



Fiscal Years	Avg Est.	High Est	Low Est.	# of Est.	Est. P/E
2024	1.27	1.68	0.99	4	12.8
2023	1.36	1.51	1.26	4	12.0
2024 vs. 2023	▼ -7%	▲ 11%	▼ -21%	0%	▲ 7%

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.



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Business Summary

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Key Developments

Nov-15-2023	Company Conference Presentations	ACM Research, Inc. Presents at 12th Annual New York Technology Conference, Nov-15-2023
Nov-07-2023	Earnings Release Date	ACM Research, Inc. to Report Q3, 2023 Results on Nov 07, 2023
Nov-07-2023	Earnings Calls	ACM Research, Inc., Q3 2023 Earnings Call, Nov 07, 2023
Nov-07-2023	Announcements of Earnings	ACM Research, Inc. Reports Earnings Results for the Third Quarter and Nine Months Ended September 30, 2023
Nov-07-2023	Corporate Guidance - Lowered	ACM Research, Inc. Updates Revenue Guidance for Fiscal Year 2023
Sep-26-2023	Auditor Changes	ACM Research, Inc. Appoints Ernst & Young Hua Ming LLP as Auditor
Sep-13-2023	Company Conference Presentations	ACM Research, Inc. Presents at The Benchmark 10th Annual Tech/Media/Telecom One-on-One Conference, Sep-13-2023
Aug-29-2023	Company Conference Presentations	ACM Research, Inc. Presents at Jefferies Semiconductor, IT Hardware, Communications Software and Infrastructure Summit, Aug-29-2023
Aug-22-2023	Company Conference Presentations	ACM Research, Inc. Presents at 4th Annual Needham Virtual Semiconductor and Semicap Conference, Aug-22-2023
Aug-04-2023	Earnings Release Date	ACM Research, Inc. to Report Q2, 2023 Results on Aug 04, 2023
Aug-04-2023	Earnings Calls	ACM Research, Inc., Q2 2023 Earnings Call, Aug 04, 2023
Aug-04-2023	Announcements of Earnings	ACM Research, Inc. Reports Earnings Results for the Second Quarter and Six Months Ended June 30, 2023
Jul-27-2023	Auditor Changes	ACM Research, Inc. Announces Resignation of Armanino LLP as Independent Auditor
Jul-12-2023	Company Conference Presentations	ACM Research, Inc. Presents at 15th Annual CEO Investor Summit 2023, Jul-12-2023
Jul-11-2023	Company Conference Presentations	ACM Research, Inc. Presents at 17th Annual Kiterocket Lounge SEMICON West, Jul-11-2023
Jun-23-2023	Index Constituent Drops	ACM Research, Inc.[NasdaqGM:ACMR] dropped from Russell 2000 Defensive Index
Jun-23-2023	Index Constituent Drops	ACM Research, Inc.[NasdaqGM:ACMR] dropped from Russell 2000 Value-Defensive Index
Jun-23-2023	Index Constituent Drops	ACM Research, Inc.[NasdaqGM:ACMR] dropped from Russell 2000 Growth-Defensive Index

Corporate Information

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Telephone
 510 445 3700

Web Site
 www.acmrcsh.com

Key Officers
 Founder, Chairman, CEO & President
 H. Wang
 CFO, Executive VP, Secretary & Treasurer
 M. A. McKechnie
 Vice President of Sales - North America
 J. Straus

Board Members
 C. Hu, D. Liu, H. Dun, H. Wang, L. Tan, S. Chiao, S. Raghavan, X. Xing, Z. Xu

State of Incorporation
 Delaware

Employees
 1,209

Glossary

Quantitative Model Overall Recommendation and drivers of the recommendation

CFRA's 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 absolute 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 encapsulate 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+ Highest	B Below Average
A High	B- Lower
A- Above Average	C Lowest
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 versus 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).



Disclosures

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.

Quantitative 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:

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