

Sanderson Farms, Inc.

Recommendation **HOLD** ★ ★ ★ ★ ★

Price
\$163.37 (as of Sep 21, 2017 4:00 PM ET)

12-Mo. Target Price
\$146.00

Report Currency
USD

Investment Style
Mid-Cap Value

Equity Analyst Joseph Agnese

GICS Sector Consumer Staples

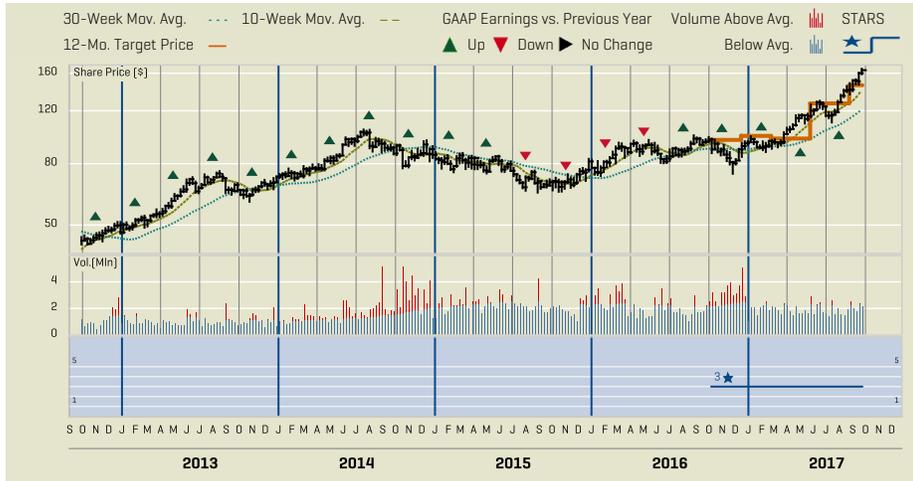
Summary This company is the third largest poultry processor in the United States.

Sub-Industry Packaged Foods & Meats

Key Stock Statistics (Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports)

52-Wk Range	\$160.50 - 74.07	Oper. EPS 2017E	12.75	Market Capitalization(B)	\$3.716	Beta	0.57
Trailing 12-Month EPS	12.46	Oper. EPS 2018E	10.41	Yield (%)	1.20	3-Yr Proj. EPS CAGR(%)	2
Trailing 12-Month P/E	13.01	P/E on Oper. EPS 2017E	12.71	Dividend Rate/Share	\$1.96	SPGMI's Quality Ranking	B
\$10K Invested 5 Yrs Ago	\$38,343	Common Shares Outstg.(M)	22.7	Institutional Ownership (%)	90		

Price Performance



Source: CFRA, S&P Global Market Intelligence

Past performance is not an indication of future performance and should not be relied upon as such.

Analysis prepared by Equity Analyst J. Agnese on Aug 24, 2017 01:52 PM, when the stock traded at \$140.41.

Highlights

- ▶ We expect net sales to increase 17% in FY 17 (Oct.) to \$3.289 billion, up from \$2.816 billion reported in FY 16. We see sales growth supported by continued strong consumer demand for protein products and the lifting of U.S. poultry export bans in international markets following an outbreak of avian influenza in the U.S. in mid-2015. A recent weakening in the U.S. dollar is expected to ease pressure on prices of chicken part exports in international markets, in our view. However, we see chicken pricing in the U.S. restricted by falling prices of competing protein products.
- ▶ We expect EBITDA margins to widen to 15.3% in FY 17, from 13.4% in FY 16, reflecting continued low feed costs and pricing support from strong demand from international markets. We also see margins supported by increased capacity utilization and a more favorable product mix following the opening of a new processing plant in St. Paul, North Carolina, in January 2017.
- ▶ We expect operating EPS to rise in FY 17 to \$12.75, up significantly from operating EPS of \$8.37 reported in FY 16, excluding one-time items from both periods.

Investment Rationale/Risk

- ▶ We believe the company is well positioned to benefit as a vertically integrated, low-cost processor of poultry. We see near-term margin benefits as an expected large U.S. corn and soybean crop in 2017 should support continued historically low feed costs into 2018. We see consumer protein demand in the U.S. remaining strong and expect international demand to improve following the discovery of avian influenza in Europe and the lifting of US poultry import bans that were put in place following a U.S. outbreak of avian influenza in 2015.
- ▶ Risks to our recommendation and target price include higher than expected grain costs, lower than expected chicken prices, lower consumer demand than we expected, lower production levels than expected, supply of raw materials or changes to export markets.
- ▶ We derive our 12-month target price of \$146 by applying a P/E of 14.0X, about in line with SAFM close peer average (14.4X), to our FY 18 EPS estimate. We believe a valuation in line with peers is warranted on benefits we see from historically low grain costs, strong consumer domestic demand for protein products, and the opening of international export markets.

Analyst's Risk Assessment

LOW	MEDIUM	HIGH
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The company's focus on the poultry market, with a lack of diversity across protein categories (beef, pork), makes it vulnerable to shifts between protein categories, changes in grain (feed) costs, fluctuating export demand, and impacts from potential disease outbreaks.

Revenue/Earnings Data

Revenue (Million U.S. \$)	1Q	2Q	3Q	4Q	Year
2018	--	--	--	--	--
2017	688	802	932	--	--
2016	605	692	728	791	2,816
2015	667	717	740	680	2,803
2014	585	661	768	761	2,775
2013	596	621	739	727	2,683

Earnings Per Share (U.S. \$)

Earnings Per Share (U.S. \$)	1Q	2Q	3Q	4Q	Year
2018	E 1.50	E 2.63	E 3.03	E 3.25	E 10.41
2017	1.02	2.94	5.09	E 3.70	E 12.75
2016	0.47	2.11	2.42	3.30	8.37
2015	2.87	3.13	2.27	1.21	9.52
2014	1.25	2.21	3.30	3.93	10.80
2013	-0.31	1.06	2.95	1.92	5.68

Fiscal year ended Oct 31. Next earnings report expected: Mid Dec. EPS Estimates based on CFRA's Operating Earnings; historical GAAP earnings are as reported in Company reports.

Dividend Data

Amount (\$)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
1.00 Spl.	Sep 22	Sep 30	Oct 04	Oct 18 '16
0.24	Sep 22	Sep 30	Oct 04	Oct 18 '16
0.24	Jan 19	Jan 27	Jan 31	Feb 14 '17
0.24	Apr 27	May 05	May 09	May 23 '17
0.24	Jul 20	Jul 28	Aug 01	Aug 15 '17
0.32	Sep 21	Oct 02	Oct 03	Oct 17 '17

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Forecasts are not reliable indicator of future performance.

Sanderson Farms, Inc.

Business Summary October 06, 2016

Sanderson Farms, Inc. engages in the production, processing, marketing, and distribution of fresh and frozen chicken products. The company engages, through its wholly-owned subsidiary, in the preparation, processing, marketing and distribution of processed and prepared chicken items.

The company sells ice pack, chill pack, bulk pack and frozen chicken, in whole, cut-up and boneless form, primarily under the Sanderson Farms brand name to retailers, distributors, and casual dining operators principally in the southeastern, southwestern, northeastern and western United States, and to customers who resell frozen chicken into export markets.

During its fiscal year ended October 31, 2015, the company processed approximately 476 million chickens, or approximately 3.4 billion dressed pounds. The company's chicken operations encompass 9 hatcheries, 8 feed mills and 10 processing plants, including the facilities at its new Palestine, Texas complex.

The company's prepared chicken product line includes approximately 70 institutional and consumer packaged partially cooked or marinated chicken items that it sells nationally and regionally, primarily to distributors and food service establishments.

The company has the ability to produce a range of processed chicken products and prepared chicken items. The company adds value to its ice packed, whole chickens by removing the giblets, weighing, packaging and labeling the product to specific customer requirements and cutting and deboning the product based on customer specifications. The company adds additional value to the processed chicken by deep chilling and packaging whole chickens in bags or combinations of fresh chicken parts, including boneless product, in various sized, individual trays under its brand name, which then may be weighed and pre-priced, based on each customer's needs.

The company conducts its chicken operations through Sanderson Farms, Inc. [Production Division] and Sanderson Farms, Inc. [Processing Division], both of which are wholly-owned subsidiaries of Sanderson Farms, Inc. The production subsidiary, Sanderson Farms, Inc. [Production Division], which has facilities in Laurel, Collins, Hazlehurst and McComb, Mississippi; Bryan, Waco, Palestine, Freestone County, and Robertson County, Texas; and Adel, Georgia and Kinston, North Carolina, engages in the production of chickens to the broiler stage. Sanderson Farms, Inc. [Processing Division], which has facilities in Laurel, Collins, Hazlehurst and McComb, Mississippi; Hammond, Louisiana; Bryan, Palestine, and Waco, Texas; and Moultrie, Georgia and Kinston, North Carolina, engages in the processing, sale and distribution of chickens.

The company conducts its prepared chicken business through its wholly-owned subsidiary, Sanderson Farms, Inc. [Foods Division], which has a facility in Flowood, Mississippi. The Foods Division engages in the processing, marketing and distribution of approximately 70 prepared chicken items, which it sells nationally and regionally, principally to distributors and national food service accounts. As of October 31, 2015, the company had the capacity to process 5.625 million head per week in its big bird deboning plants.

Corporate Information

Investor Contact

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Telephone

601-649-4030

Website

www.sandersonfarms.com

Officers

Chrmn & CEO

J.F. Sanderson, Jr.

Pres & COO

L. Butts

CFD, Treas & Investor Contact

D.M. Cockrell

Chief Acctg Officer, Secy & Cntrl

T.F. Rigney

Chief Admin Officer

B. Romano

Board Members

J.H. Baker, III

F. Banks, Jr.

J. Bierbusse

L. Butts

D.M. Cockrell

T.D. Cooley

B.W. Hogan

R.C. Khayat

P.K. Livingston

S.T. Mestayer

D. Mooney

G.J. Pittman

J.F. Sanderson, Jr.

Domicile

Mississippi

Auditor

Ernst & Young LLP

Founded

1947

Employees

13,232

Stockholders

3,487

Sanderson Farms, Inc.

Sub-Industry Outlook

Our fundamental outlook for the S&P Packaged Foods & Meats sub-industry is positive. We view the U.S. and Western European food markets as relatively mature, but see opportunities for faster longer-term growth from places such as China and Latin America. However, emerging international markets can also bring additional risks from factors such as currency fluctuation and regulation.

We expect improved prospects and the realization of a large crop harvest in 2016 and 2017 to support favorable ingredient costs for most food manufacturers in 2017 and in 2018. However, for a number of food products, we view ingredient costs as a relatively small part of the overall retail price paid by consumers.

While food industry volume growth has picked up over the past few years, we attribute the increase to greater consumer demand in a deflationary pricing environment. A prolonged deflationary food cost environment has resulted in increased promotional competition as companies compete for greater volumes to help offset lower selling prices. However, we see rising crop prices and easier comparisons in 2017 helping support an increase in inflation in the second half of 2017 and in 2018. As a result, we see margin pressure easing as promotional spending decreases.

We think changing consumer preferences toward perishable foods found on the perimeter of food stores (away from shelf stable processed foods at the center of the store) hurt sales growth in recent years. However, we expect progress toward both the re-positioning and shifting of product portfolios through mergers and acquisitions and product innovation to lead to

improved exposure toward faster growing categories in 2017 and beyond.

We think various food companies are seeking to bolster profits with cost reduction programs, and improved efficiency or productivity.

Over time, we expect growing consumer and regulatory scrutiny of prospective health concerns and benefits from various foods, beverages and ingredients.

Longer term, we think the packaged food industry will focus on consumer lifestyles, tastes, health considerations, and demographics, including both opportunities in developing international markets and the interests and needs of an aging U.S. population. Rising standards of living in developing international markets should provide U.S. packaged food companies with opportunities for growth, in our view.

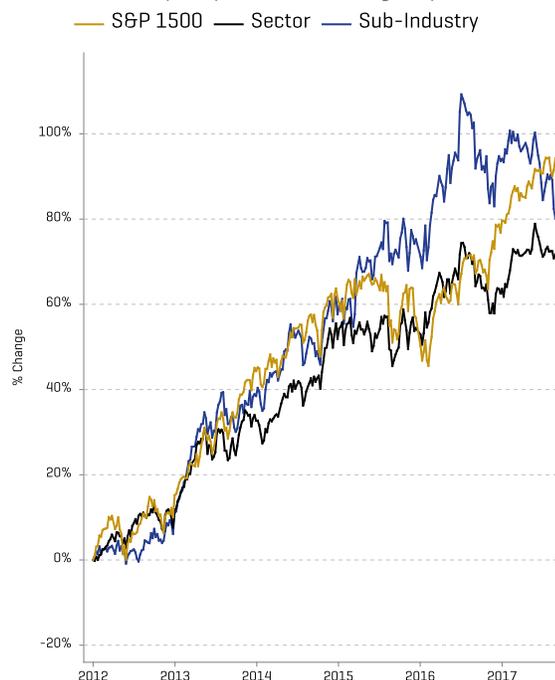
In 2016, through June 9th, the S&P Packaged Foods & Meats Index increased 2.0%, compared to a 8.2% rise in the S&P 1500 Index. In 2016, the S&P Packaged Foods & Meat Index was up 8.2%, compared to a 10.6% rise for the S&P 1500 Index.

--Joseph Agnese

Industry Performance

GICS Sector: Consumer Staples Sub-Industry: Packaged Foods & Meats

Based on S&P 1500 Indexes
Five-Year market price performance through Sep 24, 2017



NOTE: All Sector & Sub-Industry information is based on the Global Industry Classification Standard (GICS).

Past performance is not an indication of future performance and should not be relied upon as such.

Source: S&P Global Market Intelligence

Sub-Industry: Packaged Foods & Meats Peer Group*: Packaged Foods & Meats

Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price (\$)	Stk. Mkt. Cap. (M \$)	30-Day Price Chg. (%)	1-Year Price Chg. (%)	P/E Ratio	Yield (%)	Return on Equity (%)	LTD to Cap (%)
Sanderson Farms, Inc.	SAFM	NasdaqGS	USD	163.37	3,716	14.2	72.5	13	1.2	17.0	NA
ARYZTA AG	ARZT.Y	OTCPK	USD	14.98	2,751	-9.4	-25.3	NM	1.9	3.6	35.4
Flowers Foods, Inc.	FLO	NYSE	USD	18.16	3,802	0.0	18.1	24	3.7	13.4	42.2
Industrias Bachoco, S.A.B. de C.V.	IBA	NYSE	USD	66.31	3,322	4.4	32.3	15	1.3	13.3	2.7
Lancaster Colony Corporation	LANC	NasdaqGS	USD	117.73	3,232	-0.1	-10.7	28	1.9	21.2	NA
Maple Leaf Foods Inc.	MLFN.F	OTCPK	USD	27.54	3,543	-1.1	21.1	28	1.3	8.8	0.4
Snyder's-Lance, Inc.	LNCE	NasdaqGS	USD	36.65	3,542	-2.8	8.0	100	1.7	2.8	39.3
Tate & Lyle plc	TATY.Y	OTCPK	USD	34.16	3,976	-3.2	-8.6	12	4.2	21.6	29.2
The Hain Celestial Group, Inc.	HAIN	NasdaqGS	USD	39.90	4,138	-4.1	14.4	61	Nil	4.0	NA
Treehouse Foods, Inc.	THS	NYSE	USD	66.02	3,776	-6.1	-23.9	NM	Nil	-10.5	51.5
Yamazaki Baking Co., Ltd.	YMZB.Y	OTCPK	USD	181.81	4,004	-5.1	-27.6	23	0.9	6.5	6.7

*For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.

NA-Not Available NM-Not Meaningful.

Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes 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.

Analyst Research Notes and other Company News**August 24, 2017**

11:58 am ET... CFRA KEEPS HOLD RECOMMENDATION ON SHARES OF SANDERSON FARMS INC. [SAFM 140.96***]: We raise our 12-month target by \$19 to \$146, a P/E of 14X, in line with SAFM's peers, our FY 18 [Oct.] EPS estimate of \$10.41, up from \$8.30. We lift our FY 17 EPS estimate by \$3.65 to \$12.75. Jul-Q EPS of \$5.09 vs. \$2.42 is \$2.39 above our estimate as higher chicken pricing is being supported by favorable supply and demand for fresh chicken sold to grocery stores. We expect weak U.S. foodservice demand to be partially offset by local restaurant demand. We see exports supporting dark meat results. We see margin benefits from higher pricing partially offset by higher feed costs. /J. Agnese

feed costs. We see protein demand remaining strong as most international US poultry import bans have been lifted after the 2015 discovery of avian influenza in the U.S. /J. Agnese

July 20, 2017

Sanderson Farms, Inc. announced that Suzanne T. Mestayer was elected to the Company's Board of Directors, effective July 20, 2017. She will fill a Class B director vacancy with a term expiring at the next annual meeting of shareholders in 2018.

May 25, 2017

02:03 pm ET... CFRA KEEPS HOLD OPINION ON SHARES OF SANDERSON FARMS, INC. [SAFM 120.25***]: We lift our 12-month target by \$30 to \$127, a P/E of 14X, in line with SAFM's peer average, our FY 17 [Oct.] EPS estimate of \$9.10, up from \$8.42. Apr-Q EPS of \$2.94 vs. \$2.11 is \$0.79 above our estimate. We expect results to continue to benefit in Jul-Q from favorable grain costs, strong domestic demand for chicken and favorable export markets. We see chicken pricing remaining strong as the presence of avian influenza in Europe leads to increased global demand for U.S. chicken. We expect production volumes to accelerate as newly opened processing facilities build capacity. /J. Agnese

February 23, 2017

03:29 pm ET... S&P CAPITAL IQ KEEPS HOLD OPINION ON SHARES OF SANDERSON FARMS, INC. [SAFM 95.15***]: We lower our 12-month target by \$2 to \$97, a P/E of 11.5X, in the upper end of SAFM's three-year range, our FY 17 [Oct.] EPS estimate of \$8.42, down from \$9.00. We see valuation supported by improved demand following the lifting of most dark meat export bans. But, we see FY 17 EPS growth pressured by rising feed costs and continued weak boneless breast food service demand. SAFM reports Jan-Q EPS of \$1.02, vs. \$0.47, \$0.48 below our estimate reflecting higher than expected feed costs. We expect SAFM to reach full capacity at its new St. Pauls, NC processing facility during Apr-Q. /J. Agnese

December 15, 2016

02:23 pm ET... S&P CAPITAL IQ KEEPS HOLD OPINION ON SHARES OF SANDERSON FARMS, INC. [SAFM 89.22***]: We lift our 12-month target by \$3 to \$99, a P/E of 11X, in the high end of SAFM's 3-year range, our FY 17 [Oct.] EPS estimate of \$9.00, up from \$8.00. We set 2018 EPS at \$8.30. We see valuation benefiting from increased export demand and continued low feed costs. Oct-Q EPS of \$3.36 vs. \$1.22 is \$0.07 above our estimate. Net sales growth of 16% was significantly higher than we expected as most avian influenza related bans on U.S. poultry have now been lifted, resulting in higher poultry exports. But, we see FY 17 export demand restricted by recent strengthening of the U.S. dollar. /J. Agnese

October 18, 2016

On October 13, 2016, Charles W. Ritter, Jr. notified the Chairman of the Board of Directors and Chief Executive Officer of Sanderson Farms, Inc. that he will retire from the Board of Directors and thus will not stand for re-election at the company's 2017 Annual Meeting of Stockholders. Mr. Ritter will continue to serve on the Board of Directors until the 2017 Annual Meeting, when his current term will expire.

October 06, 2016

02:20 pm ET... S&P GLOBAL INITIATES COVERAGE ON SANDERSON FARMS SHARES WITH A HOLD OPINION [SAFM 93***]: We set our FY 16 [Oct.] and FY 17 EPS estimates at \$7.39 and \$8.00. Our 12-month target price is \$96, a P/E of 12X our FY 17 EPS estimate, in the upper end of SAFM's 3-year trading range. We see SAFM, the 3rd largest U.S. poultry processor, benefiting over the next 12-months from low grain costs and strong demand for protein products. We expect a large U.S. corn and soybean crop in 2016 to support continued low

Note: Research notes reflect S&P Global Market Intelligence's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect S&P Global Market Intelligence's current view on the company.

Sanderson Farms, Inc.

Wall Street Consensus Estimates



Wall Street Consensus Opinion

HOLD

Wall Street Consensus vs. Performance

For fiscal year 2017, analysts estimate that SAFM will earn USD \$12.78. For the 3rd quarter of fiscal year 2017, SAFM announced earnings per share of USD \$5.09, representing 39.8% of the total revenue estimate. For fiscal year 2018, analysts estimate that SAFM's earnings per share will decline by 11% to USD \$11.39.

Fiscal Years	Avg Est.	High Est	Low Est.	# of Est.	Est. P/E
2018	11.39	13.69	7.72	10	14.3
2017	12.78	13.34	12.18	9	12.8
2018 vs. 2017	▼ -11%	▲ 3%	▼ -37%	▲ 11%	▲ 12%
Q4'18	3.45	4.33	2.15	7	47.4
Q4'17	3.81	4.23	3.21	9	42.9
Q4'18 vs. Q4'17	▼ -9%	▲ 2%	▼ -33%	▼ -22%	▲ 10%

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.

Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.

Sanderson Farms, Inc.

Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs (American Depositary Receipts), and ADSs (American Depositary Shares) based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS (Stock Appreciation Ranking System), equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark (e.g., a regional index [S&P Asia 50 Index, S&P Europe 350® Index or S&P 500® Index]), based on a 12-month time horizon. STARS was designed to meet the needs of investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

(also known as **S&P Capital IQ 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		

EPS Estimates

CFRA's earnings per share (EPS) estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus (average) EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics, including Fair Value.

CFRA Equity Research

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Abbreviations Used in Equity Research Reports

CAGR	- Compound Annual Growth Rate
CAPEX	- Capital Expenditures
CY	- Calendar Year
DCF	- Discounted Cash Flow
DDM	- Dividend Discount Model
EBIT	- Earnings Before Interest and Taxes
EBITDA	- Earnings Before Interest, Taxes, Depreciation & Amortization
EPS	- Earnings Per Share
EV	- Enterprise Value
FCF	- Free Cash Flow
FFO	- Funds From Operations

FY	- Fiscal Year
P/E	- Price/Earnings
P/NAV	- Price to Net Asset Value PEG Ratio - P/E-to-Growth Ratio PV - Present Value
R&D	- Research & Development ROCE - Return on Capital Employed ROE - Return on Equity
ROI	- Return on Investment
ROIC	- Return on Invested Capital
ROA	- Return on Assets
SG&A	- Selling, General & Administrative Expenses
SOTP	- Sum-of-The-Parts
WACC	- Weighted Average Cost of Capital

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

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★★ 5-STARS (Strong Buy):

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

Relevant benchmarks:

In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the S&P Europe 350 Index and the S&P Asia 50 Index, respectively.

Disclosures

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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.

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:

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.

STARS Stock Reports:

Global STARS Distribution as of June 30, 2017

Ranking	North America	Europe	Asia	Global
Buy	37.4%	25.9%	36.6%	35.4%
Hold	55.1%	56.1%	39.4%	53.5%
Sell	7.5%	18.0%	24.0%	11.1%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

STARS Stock Reports are prepared by the equity research analysts of CFRA and its affiliates and subsidiaries. Quantitative Stock Reports are prepared by CFRA. All of the views expressed in STARS Stock Reports accurately reflect the research analyst's personal views regarding any and all of the subject securities or issuers; all of the views expressed in the Quantitative Stock Reports accurately reflect the output of CFRA's algorithms and programs. Analysts generally update STARS Stock Reports at least four times each year. Quantitative Stock Reports are generally updated weekly. No part of analyst, CFRA, CFRA affiliate, or CFRA subsidiary compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed in any Stock Report.

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