

Recommendation [as of October 01, 2020]: SELL



Risk Evaluation: HIGH Price: 15.71 [Oct 02, 2020 close] Trading Currency: USD Country: United States

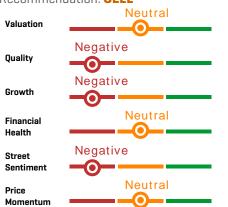
GICS Sector: Consumer Discretionary **GICS Industry:** Restaurants

Sector Ranking: marketweight

SPGMI's Quality Ranking: B

Business Summary: Dave & Buster's Entertainment, Inc. owns and operates entertainment and dining venues for adults and families in North America. Its venues offer a menu of entrees and appetizers, as well as a selection of non-alcoholic and alcoholic beverages; and an assortment of entertainment attractions centered on playing

## Quantitative Model Drivers [as of October 01, 2020] Recommendation: SELL



| Sto   | ock Price |                     |                        |       |     | and the same |             |             |  |        | Ph. 1244 |          |        |            |             |       |      |             |
|-------|-----------|---------------------|------------------------|-------|-----|--------------|-------------|-------------|--|--------|----------|----------|--------|------------|-------------|-------|------|-------------|
| leas. |           | Maria de            | Parting and Laboration |       |     |              | Territories | laga (1994) | ······································ | iden ! | · i      | Transfer | arturu |            | a Bear      | jung. |      |             |
| 794   | THE THE   | i telebaja (gipting | -m                     | _/_   | ~~  | ~            | 4           | -           | \ \ \                                  | مر     | W        | m        | M      | an-affer l | Hot . stale | T 4   |      |             |
|       | ~   ~     |                     |                        |       |     |              |             |             | <b>-</b> -V                            | ~      |          |          | /      | ~~         | m           | 1     | l .  | Δ           |
|       |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       | L. A | /III        |
|       |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       | WY.  | Mint.       |
|       |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       | rr   |             |
|       |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       |      |             |
| Vol   | l.(Mln)   |                     | +                      |       |     |              |             | +           |  |        |          |          |        |            | -           |       |      |             |
| 1     | .,,,,     |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       |      |             |
|       |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       |      |             |
|       |           |                     | latar a late           | ال ال |     |              | الصيمين     |             |  |        |          |          |        |            |             | ۱     |      | lidad litta |
| SB    |           |                     |                        | П     |     |              |             |             |  |        |          |          |        |            |             |       |      |             |
| SS    |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       |      | _           |
|       |           |                     |                        |       |     |              |             |             |  |        |          |          |        |            |             |       |      |             |
| 0.1   | NDJF      | MAMJ                | JAS                    | DNDJ  | FMA | MJJA         | SOND        | J F M       | A M J                                  | JAS    | OND,     | J F M    | A M J  | JAS        | OND         | J F M | AMJ  | JASO        |

| Risk Evaluation :       | HIGH     |
|-------------------------|----------|
| Asset/Market Size Risk  | Moderate |
| Financial Leverage Risk | High     |
| Price Volatility Risk   | High     |
| Liquidity Risk          | Low      |
|                         |          |



| Total Return[%CAGR] | YTD   | 1Yr   | 3Yr   | 5Yr   |
|---------------------|-------|-------|-------|-------|
| NasdaqGS:PLAY       | -70.8 | -60.2 | -32.1 | -17.3 |
| Peer Average        | -9.3  | -11.2 | 4.5   | 2.8   |
| S&P 500             | 8.2   | 19.3  | 12.3  | 13.9  |

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**

- $NasdaqGS: PLAY's \ SELL \ recommendation \ is \ based \ on \ its \ score \ from \ CFRA's \ quantitative \ model \ for \ the \ United \ States.$
- Growth and Valuation model sub-categories are the two largest drivers of NasdaqGS: PLAY's SELL 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.
- NasdaqGS: PLAY's overall score ranked in the 86th percentile of all stocks in the model universe [1 = best and 100 = worst].

| Key Statistics                      |                |
|-------------------------------------|----------------|
| Market Cap (MIn of USD)             | 747.7          |
| 52-Wk Range (USD)                   | 4.605 - 48.800 |
| Value of USD 10K Invested 5 Yrs ago | 3,875          |
| Beta vs S&P 500                     | 1.74           |
| Common Shares Outstanding(MIn)      | 47.6           |
| Average Daily Volume (Mln)          | 6.801          |
| Insider Ownership(%)                | 1.65           |

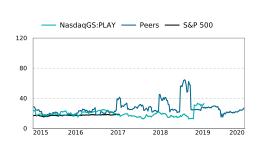
| Dividend Data            |     |         | Currency: USD |
|--------------------------|-----|---------|---------------|
|                          |     | 5Yr Low | 5Yr Hi        |
| Indicated Rate/<br>Share | 0   |         |               |
| Yield [%]                | Nil | 0       | 13.1          |
| Payout Ratio<br>[%]      | NM  | NM      | 22            |

| Payment Details |             |             |                 |  |  |  |  |  |  |  |  |
|-----------------|-------------|-------------|-----------------|--|--|--|--|--|--|--|--|
| Amount<br>[USD] | Ex Div Date | Record Date | Payment<br>Date |  |  |  |  |  |  |  |  |
| 0.16            | Jan 09      | Jan 10      | Feb 10, 2020    |  |  |  |  |  |  |  |  |
| 0.16            | Oct 10      | Oct 11      | Nov 11, 2019    |  |  |  |  |  |  |  |  |
| 0.15            | Jun 24      | Jun 25      | Jul 10, 2019    |  |  |  |  |  |  |  |  |
| 0.15            | Mar 25      | Mar 26      | Apr 10, 2019    |  |  |  |  |  |  |  |  |

#### Compound Annual Growth Rates

| Compound Annual Crow  | tii itatos |       |     |
|-----------------------|------------|-------|-----|
| Revenue - %CAGR       | 1Yr        | 3Yr   | 5Yr |
| Company               | -35.2      | -7.5  | 1.1 |
| Peer Average          | -5.7       | 2.2   | 3.8 |
| S&P 500               | -1.1       | 4.8   | 3.5 |
| Operating EPS - %CAGR |            |       |     |
| Company               | -170.2     | -43.3 | 0.9 |
| Peer Average          | 221.7      | -5.0  | 5.2 |
| S&P 500               | -26.0      | -1.6  | 0.7 |
|                       |            |       |     |

| 5 year P/E Ratio Comparisons [forward 12-month |      |  |  |  |  |  |  |
|--|------|--|--|--|--|--|--|
| Current  |      |  |  |  |  |  |  |
| NasdaqGS:PLAY                                  | 180  |  |  |  |  |  |  |
| Peer Average                                   | 24.9 |  |  |  |  |  |  |
| S&P 500  | 22.5 |  |  |  |  |  |  |
| 5-Year Average                                 |      |  |  |  |  |  |  |
| NasdaqGS:PLAY                                  | 19.6 |  |  |  |  |  |  |
| Peer Average                                   | 26.7 |  |  |  |  |  |  |
| S&P 500  | 18   |  |  |  |  |  |  |
|  |      |  |  |  |  |  |  |



Diluted EPS estimates]



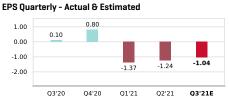
Recommendation [as of October 01, 2020]: SELL

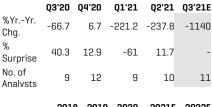


Risk Evaluation: HIGH Price: 15.71 (Oct 02, 2020 close) Trading Currency: USD Country: United States

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

Fiscal year ends Feb 02







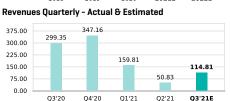


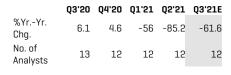


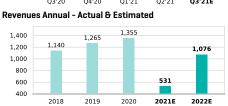
NA

NA

**Key Profitability 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.

| Key Valuation Ratios  |      |      |      |      |      |         |  |  |  |  |  |
|-----------------------|------|------|------|------|------|---------|--|--|--|--|--|
|                       | 2015 | 2016 | 2017 | 2018 | 2019 | Current |  |  |  |  |  |
| Fwrd P/E -<br>High    | 61.5 | 38.4 | 35.0 | 25.8 | 20.3 | 16.1    |  |  |  |  |  |
| Fwrd P/E -<br>Low     | 55.3 | 27.7 | 27.4 | 19.1 | 15.2 | 6.7     |  |  |  |  |  |
| Peer Average          | 46.1 | 44.1 | 49.1 | 47.5 | 43.0 | 77.0    |  |  |  |  |  |
| Avg<br>EV/EBITDA      | NM   | 4.0  | 9.7  | 8.1  | 7.3  | 6.0     |  |  |  |  |  |
| Peer Average          | 22.3 | 19.7 | 19.0 | 18.3 | 22.7 | NM      |  |  |  |  |  |
| Avg Price to<br>Sales | 0.1  | NM   | 0.1  | NM   | NM   | NM      |  |  |  |  |  |
| Peer Average          | NM   | NM   | NM   | NM   | NM   | NM      |  |  |  |  |  |
| Avg Price to<br>Book  | 6.0  | 5.2  | 5.5  | 4.7  | 4.6  | 1.9     |  |  |  |  |  |
| Peer Average          | 20.6 | NM   | 69.8 | 0.7  | 0.6  | 0.7     |  |  |  |  |  |

| Income Statement, Cash Flow and | Balance Sheet [ | <b>Data</b> (Millions USD | l, except per share) |      |       |      | Fiscal Year Er | nding: Feb. 2 . |
|---------------------------------|-----------------|---------------------------|----------------------|------|-------|------|----------------|-----------------|
|                                 | 2013            | 2014                      | 2015                 | 2016 | 2017  | 2018 | 2019           | 2020            |
| Revenue                         | NA              | NA                        | NA                   | 867  | 1,005 | NA   | NA             | NA              |
| Operating Income                | NA              | NA                        | NA                   | 110  | 151   | NA   | NA             | NA              |
| Net Income                      | NA              | NA                        | NA                   | 59.6 | 90.8  | NA   | NA             | NA              |
| Operating Cash Flow             | NA              | NA                        | NA                   | 187  | 231   | NA   | NA             | NA              |
| Capital Expenditures            | NA              | NA                        | NA                   | 163  | 181   | NA   | NA             | NA              |
| Earnings Per Share              | Nil             | Nil                       | Nil                  | 1.39 | 2.10  | Nil  | Nil            | Nil             |
| 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        | NA              | NA                        | NA                   | 0.56 | 1.17  | NA   | NA             | NA              |
| Cash and Short Term Investments | NA              | NA                        | NA                   | 25.5 | 20.1  | NA   | NA             | NA              |
| Long Term Debt                  | NA              | NA                        | NA                   | 330  | 257   | NA   | NA             | NA              |
| Total Debt                      | NA              | NA                        | NA                   | 337  | 264   | NA   | NA             | NA              |
| Common Equity                   | NA              | NA                        | NA                   | 346  | 439   | NA   | NA             | NA              |

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)



Recommendation [as of October 01, 2020]: SELL



Risk Evaluation: HIGH Price: 15.71 (Oct 02, 2020 close) Trading Currency: USD Country: United States

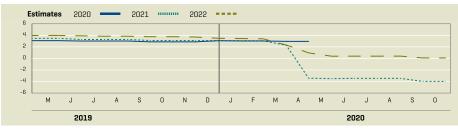
#### **Peer Group Comparison**

| Peer Group                                | Stock Symbol  | Stk.Mkt.Cap<br>(Min USD) | Beta | Recent<br>Stock<br>Price[USD] | 52 Week<br>Low/High[USD] | Dividend<br>Yield[%] | Fwrd P/E | P/B<br>Ratio | Ranking <sup>1</sup> | Return On<br>Revenue[%] | Return On<br>Equity[%] | LTD to<br>Cap[%] |
|---|---------------|--------------------------|------|-------------------------------|--------------------------|----------------------|----------|--------------|----------------------|-------------------------|------------------------|------------------|
| Dave & Buster's<br>Entertainment,<br>Inc. | NasdaqGS:PLAY | 747.72                   | 1.74 | 15.71                         | 4.87/47.37               | Nil                  | NM       | 3.0          | Sell                 | -8.9                    | -30.7                  | 86.1             |
| BJ's Restaurants,<br>Inc.                 | NasdaqGS:BJRI | 679.98                   | 2.09 | 30.52                         | 6.54/43.71               | Nil                  | NM       | 2.2          | * * * *              | -1.6                    | -4.7                   | 64.0             |
| Darden<br>Restaurants, Inc.               | NYSE:DRI      | 13,536.23                | 1.25 | 104.21                        | 34.16/122.45             | 1.2                  | 25.1     | 5.8          | * * * *              | -0.6                    | -2.1                   | 66.8             |
| Dine Brands<br>Global, Inc.               | NYSE:DIN      | 945.74                   | 1.87 | 57.6                          | 17.0/97.84               | Nil                  | 31.5     | NM           | Strong Sell          | -8.0                    | 20.2                   | 116.3            |
| Dunkin' Brands<br>Group, Inc.             | NasdaqGS:DNKN | 6,951.37                 | 0.87 | 84.49                         | 39.68/84.5               | 1.9                  | 31.6     | NM           | * * * *              | 16.8                    | -35.1                  | 118.2            |
| Jack in the Box<br>Inc.                   | NasdaqGS:JACK | 1,894.05                 | 1.6  | 83.52                         | 18.59/91.25              | 1.9                  | 20.1     | NM           | Hold                 | 7.5                     | -10.5                  | 142.9            |
| Red Robin<br>Gourmet Burgers,<br>Inc.     | NasdaqGS:RRGB | 203.74                   | 2.41 | 13.11                         | 5.18/37.13               | Nil                  | NM       | 1.3          | Strong Sell          | -22.6                   | -91.0                  | 74.0             |
| Shake Shack Inc.                          | NYSE:SHAK     | 2,553.09                 | 1.7  | 66.77                         | 32.51/93.28              | Nil                  | NM       | 6.1          | * * *                | -1.8                    | -2.6                   | 40.7             |
| Texas Roadhouse,<br>Inc.                  | NasdaqGS:TXRH | 4,457.12                 | 0.98 | 64.22                         | 30.41/71.52              | Nil                  | NM       | 5.1          | Hold                 | 2.7                     | 7.0                    | 44.1             |
| The Cheesecake<br>Factory<br>Incorporated | NasdaqGS:CAKE | 1,331.59                 | 1.52 | 29.29                         | 15.1/44.92               | Nil                  | NM       | 3.8          | * * *                | -5.8                    | -31.8                  | 70.5             |
| The Wendy's<br>Company                    | NasdaqGS:WEN  | 5,188.10                 | 1.05 | 23.18                         | 7.47/23.94               | .9                   | 42.4     | 10.7         | Sell                 | 8.3                     | 19.8                   | 84.0             |

<sup>1</sup> 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 |
|---------------|---------------|---------------|----------|-----------|----------|
| 2022          | 0.09          | 1.00          | -0.77    | 11        | NM       |
| 2021          | -3.98         | -3.64         | -4.50    | 11        | NM       |
| 2022 vs. 2021 | <b>▲</b> 102% | <b>▲</b> 127% | ▲83%     | 0%        | NA       |

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.



Recommendation [as of October 01, 2020]: SELL



Risk Evaluation: HIGH Price: 15.71 (Oct 02, 2020 close) Trading Currency: USD Country: United States

#### **Business Summary**

Dave & Buster's Entertainment, Inc. owns and operates entertainment and dining venues for adults and families in North America. Its venues offer a menu of entrees and appetizers, as well as a selection of non-alcoholic and alcoholic beverages; and an assortment of entertainment attractions centered on playing games and watching live sports, and other televised events. The company operates its venues under the Dave & Buster's name. As of February 2, 2020, it owned and operated 136 stores located in 39 states, Puerto Rico, and one Canadian Province. The company was founded in 1982 and is headquartered in Dallas, Texas.

| Key Develop | ments                         |  |
|-------------|-------------------------------|--|
| Sep-10-2020 | Announcements of<br>Earnings  | Dave & Buster's Entertainment, Inc. Reports Consolidated Unaudited<br>Earnings Results for the Thirteen Weeks and Twenty Six Weeks Ended August<br>2, 2020 |
| Sep-10-2020 | Earnings Calls                | Dave & Buster's Entertainment, Inc., Q2 2021 Earnings Call, Sep 10, 2020   |
| Sep-10-2020 | Earnings Release Date         | Dave & Buster's Entertainment, Inc. to Report Q2, 2021 Results on Sep 10, 2020   |
| Jun-29-2020 | Index Constituent<br>Adds     | Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell Small Cap Comp Value Index   |
| Jun-29-2020 | Index Constituent<br>Adds     | Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell 2000 Value Index   |
| Jun-29-2020 | Index Constituent<br>Adds     | Dave & Buster's Entertainment, Inc.(NasdaqGS:PLAY) added to Russell 2500 Value Index   |
| Jun-29-2020 | Index Constituent<br>Drops    | Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] dropped from Russell 2000 Growth-Defensive Index  |
| Jun-29-2020 | Index Constituent<br>Drops    | Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] dropped from Russell 2000 Defensive Index   |
| Jun-29-2020 | Index Constituent<br>Adds     | Dave & Buster's Entertainment, Inc.[NasdaqGS:PLAY] added to Russell 3000 Value Index   |
| Jun-23-2020 | Annual General<br>Meeting     | Dave & Buster's Entertainment, Inc., Annual General Meeting, Jun 23, 2020  |
| Jun-19-2020 | End of Lock-Up Period         | Certain Common Stock of Dave & Buster's Entertainment, Inc. are subject to a Lock-Up Agreement Ending on 19-JUN-2020.                                      |
| Jun-11-2020 | Announcements of<br>Earnings  | Dave & Buster's Entertainment, Inc. Reports Earnings Results for the First<br>Quarter Ended May 3, 2020  |
| Jun-11-2020 | Earnings Calls                | Dave & Buster's Entertainment, Inc., Q1 2021 Earnings Call, Jun 11, 2020   |
| Jun-11-2020 | Earnings Release Date         | Dave & Buster's Entertainment, Inc. to Report Q1, 2021 Results on Jun 11, 2020   |
| May-04-2020 | Follow-on Equity<br>Offerings | Dave & Buster's Entertainment, Inc. has filed a Follow-on Equity Offering in the amount of \$100 million.  |
| May-04-2020 | Follow-on Equity<br>Offerings | Dave & Buster's Entertainment, Inc. has completed a Follow-on Equity Offering in the amount of \$100.00001 million.  |
|             |                               |  |

#### **Corporate Information**

#### Office

2481 MaNana Drive

Dallas

Texas

75220

United States

Dallas , Texas 75220 United States

Telephone

214 357 9588

\_\_\_\_\_

**Web Site** ir.daveandbusters.com

Key Officers

CEO & Director

B. A. Jenkins

Senior Vice President of Entertainment & Games Strategy

K. Bachus

Consultant

J. Jackman

COO & Senior VP

M. L. Manning

Senior VP & Chief Marketing Officer

B. C. Coleman

Senior VP & Chief Information Officer

J. Hurtado

VP of Accounting & Controller

M. J. Metzinger

General Counsel, Secretary & Senior VP of HR

R. W. Edmund

Senior Vice President of Supply Chain & Business

Development

J. B. DeProspero

Senior VP & CFO

S. J. Bowman

Senior Vice President of Real Estate & Development

J. B. Mulleady

#### **Board Members**

B. A. Jenkins, H. A. Dodds, J. C. Hockin, J. S. Halkyard, J. Storms, K. M. Sheehan, M. J. Griffith, P. H. Mueller, S. M. King

#### State of Incorporation

Delaware

#### **Employees**

15,908



#### 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 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 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+ 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  $\ensuremath{\mathsf{NM}}$ 

#### **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:

| Noiovant Bononnia Ro. |                         |                         |  |  |
|-----------------------|-------------------------|-------------------------|--|--|
| 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<br>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**

S&P GLOBAL is used under license. The owner of this trademarks is S&P Global Inc. Analyst Certification or its affiliate, which are not affiliated with CFRA Research or the author of this

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.

STARS Stock Reports are prepared by the equity research analysts of CFRA 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.

#### **About CFRA Equity Research's Distributors:**

This Research Report is published and originally distributed by Accounting Research & Analytics, LLC d/b/a CFRA ("CFRA US"), with the following exceptions: In the UK/EU/EEA, it is published and originally distributed by CFRA UK Limited, ("CFRA UK"), which is regulated by the Financial Conduct Authority (No. 775151), and in Malaysia by CFRA MY Sdn Bhd (Company No. 683377-A) (formerly known as Standard & Poor's Malaysia Sdn Bhd] ("CFRA Malaysia"), which is regulated by Securities Commission Malaysia, (No. CMSL/A0181/2007) under license from CFRA US. These parties and their subsidiaries maintain no responsibility for reports redistributed by third parties such as brokers or financial advisors.



#### **General Disclosure** Notice to all jurisdictions:

Where Research Reports are made available in a language other than English and in the case of inconsistencies between the English and translated versions of a Research Report, the English version will control and supersede any ambiguities associated with information on a subject company may be available any part or section of a Research Report that has been issued in a foreign language. Neither CFRA nor its affiliates guarantee the accuracy of the translation.

The content of this report and the opinions expressed herein are those of CFRA based upon publicly-available information that CFRA believes to be reliable and the opinions are subject to change without notice. This analysis has not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. While CFRA exercised due care in compiling this analysis, CFRA AND ALL RELATED ENTITIES SPECIFICALLY DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, to the full extent permitted by law, regarding the accuracy, completeness, or usefulness of this information and assumes no liability with respect to the consequences of relying on this information for investment or other purposes. No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of CFRA. The Content shall not be used for any unlawful or unauthorized purposes. CFRA and any third-party providers, as well as their directors, officers, shareholders, employees or agents do not quarantee the accuracy, completeness, timeliness or availability of the Content.

#### Past performance is not necessarily indicative of future results.

This document may contain forward-looking statements or forecasts; such forecasts are not a reliable indicator of future performance.

This report is not intended to, and does not, constitute an offer or solicitation to buy and sell securities or engage in any investment activity. This report is for informational purposes only. Recommendations in this report are not made with respect to any particular investor or type of investor. Securities, financial instruments or strategies mentioned herein may not be suitable for all investors and this material is not intended for any specific investor and does not take into account an investor's particular investment objectives, financial situations or needs. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional

CFRA may license certain intellectual property or provide services to, or otherwise have a business relationship with, certain issuers of securities that are the subject of CFRA research reports, including exchange-traded investments whose investment objective is to substantially replicate the returns of a proprietary index of CFRA. In cases where CFRA is paid fees that are tied to the amount of assets invested in a Securities Evaluations, Inc. ("SE"), a wholly owned

fund or the volume of trading activity in a fund, investment in the fund may result in CFRA receiving compensation in addition to the subscription fees or other compensation for services rendered by CFRA, however, no part of CFRA's compensation for services is tied to any recommendation or rating. Additional unon request.

CFRA's financial data provider is S&P Global Market Intelligence. THIS DOCUMENT CONTAINS COPYRIGHTED AND TRADE SECRET MATERIAL DISTRIBUTED UNDER LICENSE FROM S&P GLOBAL MARKET INTELLIGENCE. FOR RECIPIENT'S INTERNAL USE ONLY.

The Global Industry Classification Standard (GICS®) was developed by and/or is the exclusive property of MSCI, Inc. and S&P Global Market Intelligence. GICS is a service mark of MSCI and S&P Global Market Intelligence and has been licensed for use by CFRA.

#### Other Disclaimers and Notices

Certain information in this report is provided by S&P Global, Inc. and/or its affiliates and subsidiaries (collectively "S&P Global"). Such information is subject to the following disclaimers and notices: "Copyright @ 2017, S&P Global Market Intelligence (and its affiliates as applicable). All rights reserved. Nothing contained herein is investment advice and a reference to a particular investment or security, a credit rating or any observation concerning a security or investment provided by S&P Global is not a recommendation to buy, sell or hold such investment or security or make any other investment decisions. This may contain information obtained from third parties, including ratings from credit ratings agencies. Reproduction and distribution of S&P Global's information and third party content in any form is prohibited except with the prior written permission of S&P Global or the related third party, as applicable. Neither S&P Global nor its third party providers quarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such information or content. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE AND ALL S&P INFORMATION IS PROVIDED ON AN AS-IS BASIS. S&P GLOBAL AND ITS THIRD PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR ANY DIRECT. INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR INFORMATION OR CONTENT, INCLUDING RATINGS. Credit perform an audit and undertakes no duty of due ratings are statements of opinions and are not statements of fact or recommendations to purchase. hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice."

Certain information in this report may be provided by

subsidiary of Intercontinental Exchange. SE is a registered investment adviser with the United States Securities and Exchange Commission (SEC). SE's advisory services include evaluated pricing and model valuation of fixed income securities, derivative valuations and Odd-Lot Pricing that consists of bidand ask-side evaluated prices for U.S. Municipal and U.S. Corporate Securities (together called valuation services). Such information is subject to the following disclaimers and notices: "No content (including credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse

engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of SE. The Content shall not be used for any unlawful or unauthorized purposes. SE and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively SE Parties) do not quarantee the accuracy, completeness, timeliness or availability of the Content. SE Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. SE PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall SE Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. Credit-related and other analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. SE assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill. judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. SE's opinions and analyses do not address the suitability of any security. SE does not act as a fiduciary or an investment advisor. While SE has obtained information from sources it believes to be reliable, SE does not diligence or independent verification of any information it receives. Valuations services are opinions and not statements of fact or recommendations to purchase, hold or sell any security or instrument, or to make any investment decisions. The information provided as part of valuations services should not be intended as an offer, promotion or solicitation for the purchase or sale of any security or other financial instrument nor should it he considered investment advice. Valuations services



do not address the suitability of any security or instrument, and securities, financial instruments or strategies mentioned by SE may not be suitable for all investors. SE does not provide legal, accounting or tax advice, and clients and potential clients of valuation services should consult with an attorney and/or a tax or accounting professional regarding any specific legal, tax or accounting provision[s] applicable to their particular situations and in the countries and jurisdictions where they do business. SE has redistribution relationships that reflect evaluated pricing, derivative valuation and/or equity pricing services of other unaffiliated firms with which SE has contracted to distribute to its client base. Pricing and data provided by these third-party firms are the responsibilities of those firms, and not SE, and are produced under those firms' methodologies, policies and procedures. Valuations services provided by SE and products containing valuations services may not be available in all countries or jurisdictions. Copyright @ 2018 by Intercontinental Exchange Inc. All rights reserved."

Any portions of the fund information contained in this report supplied by Lipper, A Thomson Reuters Company, are subject to the following: "Copyright 2018 © Thomson Reuters. All rights reserved. Lipper shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon."

For residents of the European Union/European Economic Area: Research reports are originally distributed by CFRA UK Limited (company number 08456139 registered in England & Wales with its registered office address at 131 Edgware Road, London, W2 2AP, United Kingdom). CFRA UK Limited is regulated by the UK Financial Conduct Authority [No. 77515].

For residents Malaysia: Research reports are originally produced and distributed by CFRA MY Sdn Bhd (Company No. 683377-A) [formerly known as Standard & Poor's Malaysia Sdn Bhd] ("CFRA Malaysia"), a wholly-owned subsidiary of CFRA US. CFRA Malaysia is regulated by Securities Commission Malaysia (License No. CMSL/A0181/2007).

For residents of all other countries: Research reports are originally distributed Accounting Research & Analytics, LLC d/b/a CFRA.

Copyright @ 2018 CFRA. All rights reserved. CFRA and STARS are registered trademarks of CFRA.