Jones Lang LaSalle Incorporated

Recommendation [as of June 30, 2016]: HOLD

GICS Sector: Financials
GICS Industry: Real Estate Services
Business Summary: Jones Lang LaSalle Incorporated, a financial and professional services company, provides commercial real estate and investment management services worldwide.

S&P Capital IQ Sector Ranking: MarketWeight
S&P Capital IQ Quality Ranking: B

Valuation

Quality

Growth

Street Sentiment

Price Momentum

GICS Sector: Financials

S&P Capital IQ Risk Evaluation: MODERATE

Asset/Market Size Risk: Low

Financial Leverage Risk: Moderate

Price Volatility Risk: High

Liquidity Risk: Low

Price Performance

Relative Strength vs Index

As Reported Earnings vs Previous Year

Stock Price

Volatility

Volume

S&P Capital IQ Quantitative Ranking

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.

Key Statistics

Market Cap [Min of USD] 4,327

52-Wk Range [USD] 94.96 - 179.97

Value of USD 10K Invested 5 Yrs ago 10,311

Beta vs S&P 500 0.11

Common Shares Outstanding (Min) 45.1

Average Daily Volume [Min] 0.492

Insider Ownership [%] 0.71

Dividend Data

Currency: USD

5Yr Low 5Yr Hi

Indicated Rate/Share 0.62

Yield [%] 0.6 0.3 0.6

Payout Ratio [%] 6.0 5.3 9.2

Payment Details

Amount [USD] Ex Div Date Record Date Payment Date

0.310 May 11 May 13 Jun 15, 2016

0.290 Nov 10 Nov 13 Dec 15, 2015

0.270 May 13 May 15 Jun 15, 2015

0.250 Nov 12 Nov 14 Dec 15, 2014

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

Current

NYSE: JLL 9.6

Peer Average 14.0

S&P 500 17.3

5-Year Average

NYSE: JLL 14.9

Peer Average 16.9

S&P 500 15.1

This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. Refer to important disclosures at the end of this report.
Jones Lang LaSalle Incorporated

Recommendation (as of June 30, 2016): HOLD

Trading Currency: USD  
Country: United States

**Key Profitability Ratios**

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>LTM</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Operating Margin</td>
<td>8.6</td>
<td>8.5</td>
<td>8.7</td>
<td>9.4</td>
<td>9.5</td>
</tr>
<tr>
<td>Peer Average</td>
<td>7.5</td>
<td>10.9</td>
<td>8.8</td>
<td>10.7</td>
<td>12.6</td>
</tr>
<tr>
<td>% Net Margin</td>
<td>4.6</td>
<td>5.3</td>
<td>6.1</td>
<td>7.1</td>
<td>7.5</td>
</tr>
<tr>
<td>Peer Average</td>
<td>2.3</td>
<td>5.6</td>
<td>7.2</td>
<td>8.7</td>
<td>9.7</td>
</tr>
<tr>
<td>% Return on Capital</td>
<td>9.4</td>
<td>8.6</td>
<td>9.2</td>
<td>11.6</td>
<td>11.1</td>
</tr>
<tr>
<td>Peer Average</td>
<td>0.7</td>
<td>5.8</td>
<td>9.0</td>
<td>10.5</td>
<td>11.4</td>
</tr>
<tr>
<td>% Cash Flow to Sales</td>
<td>5.9</td>
<td>8.3</td>
<td>9.2</td>
<td>6.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Peer Average</td>
<td>5.4</td>
<td>8.4</td>
<td>12.2</td>
<td>8.9</td>
<td>13.8</td>
</tr>
</tbody>
</table>

**Key Valuation Ratios**

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fwrd P/E - High</td>
<td>22.2</td>
<td>15.8</td>
<td>18.2</td>
<td>18.2</td>
<td>19.3</td>
</tr>
<tr>
<td>Fwrd P/E - Low</td>
<td>9.7</td>
<td>11.3</td>
<td>12.8</td>
<td>15.2</td>
<td>14.8</td>
</tr>
<tr>
<td>Peer Average</td>
<td>18.6</td>
<td>11.2</td>
<td>16.5</td>
<td>19.3</td>
<td>20.6</td>
</tr>
<tr>
<td>Avg EV/EBITDA</td>
<td>11.6</td>
<td>9.4</td>
<td>11.0</td>
<td>11.9</td>
<td>11.3</td>
</tr>
<tr>
<td>Peer Average</td>
<td>10.6</td>
<td>11.0</td>
<td>11.7</td>
<td>14.2</td>
<td>12.7</td>
</tr>
<tr>
<td>Avg Price to Sales</td>
<td>1.2</td>
<td>0.9</td>
<td>1.0</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Peer Average</td>
<td>1.2</td>
<td>0.8</td>
<td>0.9</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Avg Price to Book</td>
<td>2.2</td>
<td>1.9</td>
<td>2.1</td>
<td>2.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Peer Average</td>
<td>2.7</td>
<td>3.7</td>
<td>4.8</td>
<td>4.1</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Earnings Per Share and Revenues**


**Earnings Per Share - Actual & Estimated**

<table>
<thead>
<tr>
<th>Q2'15</th>
<th>Q3'15</th>
<th>Q4'15</th>
<th>Q1'16</th>
<th>Q2'16E</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Yr. -</td>
<td>Yr Chg.</td>
<td>19.6</td>
<td>9.1</td>
<td>5.3</td>
</tr>
<tr>
<td>% EPS Surprise</td>
<td>8.4</td>
<td>25.6</td>
<td>-5.1</td>
<td>0.9</td>
</tr>
<tr>
<td>No. of Analysts</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**Revenue Quarterly - Actual & Estimated**

<table>
<thead>
<tr>
<th>Q2'15</th>
<th>Q3'15</th>
<th>Q4'15</th>
<th>Q1'16</th>
<th>Q2'16E</th>
</tr>
</thead>
<tbody>
<tr>
<td>%Yr. -</td>
<td>Yr Chg.</td>
<td>7.5</td>
<td>9.9</td>
<td>7.9</td>
</tr>
</tbody>
</table>

**Revenues Annual - Actual & Estimated**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>2,481</td>
<td>2,926</td>
<td>3,585</td>
<td>3,933</td>
<td>4,462</td>
<td>5,430</td>
</tr>
<tr>
<td>Operating Income</td>
<td>164</td>
<td>267</td>
<td>307</td>
<td>335</td>
<td>387</td>
<td>508</td>
</tr>
<tr>
<td>Net Income</td>
<td>-4</td>
<td>154</td>
<td>164</td>
<td>208</td>
<td>270</td>
<td>386</td>
</tr>
<tr>
<td>Operating Cash Flow</td>
<td>251</td>
<td>384</td>
<td>211</td>
<td>326</td>
<td>295</td>
<td>499</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>44.2</td>
<td>47.6</td>
<td>91.5</td>
<td>94.8</td>
<td>110.7</td>
<td>156.9</td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>-0.11</td>
<td>3.48</td>
<td>3.70</td>
<td>4.63</td>
<td>5.98</td>
<td>8.52</td>
</tr>
<tr>
<td>Dividends Per Share</td>
<td>0.20</td>
<td>0.20</td>
<td>0.30</td>
<td>0.40</td>
<td>0.44</td>
<td>0.48</td>
</tr>
<tr>
<td>Dividend Payout Ratio</td>
<td>NM</td>
<td>6%</td>
<td>8%</td>
<td>9%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>Free Cash Flow Per Share</td>
<td>5.35</td>
<td>7.64</td>
<td>2.70</td>
<td>5.16</td>
<td>4.09</td>
<td>7.55</td>
</tr>
<tr>
<td>Cash and Short Term Investments</td>
<td>69</td>
<td>252</td>
<td>184</td>
<td>152</td>
<td>153</td>
<td>250</td>
</tr>
<tr>
<td>Long Term Debt</td>
<td>175</td>
<td>198</td>
<td>463</td>
<td>444</td>
<td>430</td>
<td>275</td>
</tr>
<tr>
<td>Total Debt</td>
<td>198</td>
<td>226</td>
<td>528</td>
<td>620</td>
<td>455</td>
<td>378</td>
</tr>
<tr>
<td>Common Equity</td>
<td>1,379</td>
<td>1,569</td>
<td>1,691</td>
<td>1,951</td>
<td>2,180</td>
<td>2,387</td>
</tr>
</tbody>
</table>

Source: S&P Capital IQ

* LTM Last 12 months ended Mar 31, 2016. For balance sheet items, data is as of Mar 31, 2016.

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.
### Peer Group Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones Lang LaSalle Incorporated</td>
<td>NYSE:JLL</td>
<td>4,327</td>
<td>95.30/179.97</td>
<td>0.11</td>
<td>0.6</td>
<td>9.6</td>
<td>1.6</td>
<td>Hold</td>
<td>7.0</td>
<td>16.7</td>
<td>25.3</td>
</tr>
<tr>
<td>Area Quest Inc</td>
<td>TSE:B912</td>
<td>22.36</td>
<td>0.994/1.549</td>
<td>NA</td>
<td>2.0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>10.6</td>
<td>18.7</td>
<td>22.1</td>
</tr>
<tr>
<td>Belvoir Lettings Plc</td>
<td>AIM:BLV</td>
<td>57.84</td>
<td>1.718/1.773</td>
<td>NA</td>
<td>5.2</td>
<td>14.2</td>
<td>2.5</td>
<td>Hold</td>
<td>24.7</td>
<td>16.0</td>
<td>3.2</td>
</tr>
<tr>
<td>CBRE Group, Inc.</td>
<td>NYSE:CSE</td>
<td>8,698</td>
<td>25.93/38.76</td>
<td>-0.09</td>
<td>Nil</td>
<td>11.3</td>
<td>3.1</td>
<td>Hold</td>
<td>4.7</td>
<td>21.1</td>
<td>40.5</td>
</tr>
<tr>
<td>Colliers International Group Inc.</td>
<td>TSX:CIG</td>
<td>1,279</td>
<td>33.87/51.74</td>
<td>0.14</td>
<td>0.2</td>
<td>NA</td>
<td>NA</td>
<td>Hold</td>
<td>2.5</td>
<td>4.0</td>
<td>53.5</td>
</tr>
<tr>
<td>IFM Investments Limited</td>
<td>DTCP:CTCLY</td>
<td>0.323</td>
<td>0.0218/0.01900</td>
<td>NA</td>
<td>Nil</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>-6.5</td>
<td>-15.2</td>
<td>NA</td>
</tr>
<tr>
<td>Kennedy-Wilson Holdings, Inc.</td>
<td>NYSE:KW</td>
<td>2,110</td>
<td>18.56/26.44</td>
<td>-0.17</td>
<td>3.0</td>
<td>NA</td>
<td>1.9</td>
<td>Hold</td>
<td>12.7</td>
<td>5.9</td>
<td>61.8</td>
</tr>
<tr>
<td>LSL Property Services Plc</td>
<td>LSE:LSL</td>
<td>346.4</td>
<td>3.287/5.314</td>
<td>NA</td>
<td>5.1</td>
<td>7.4</td>
<td>2.1</td>
<td>Buy</td>
<td>10.1</td>
<td>32.0</td>
<td>29.9</td>
</tr>
<tr>
<td>Marcus &amp; Millichap, Inc.</td>
<td>NYSE:MML</td>
<td>950.5</td>
<td>25.30/53.92</td>
<td>NA</td>
<td>Nil</td>
<td>14.0</td>
<td>4.6</td>
<td>Buy</td>
<td>9.5</td>
<td>40.0</td>
<td>4.5</td>
</tr>
<tr>
<td>RE/MAX Holdings, Inc.</td>
<td>NYSE:REMAX</td>
<td>701.3</td>
<td>39.74/43.22</td>
<td>NA</td>
<td>1.5</td>
<td>23.7</td>
<td>1.5</td>
<td>Buy</td>
<td>30.0</td>
<td>5.4</td>
<td>74.9</td>
</tr>
<tr>
<td>Realogy Holdings Corp.</td>
<td>NYSE:RLGY</td>
<td>4,274</td>
<td>29.27/49.75</td>
<td>NA</td>
<td>Nil</td>
<td>15.2</td>
<td>1.8</td>
<td>Hold</td>
<td>3.1</td>
<td>7.7</td>
<td>51.3</td>
</tr>
</tbody>
</table>

1 Quantitative Rankings: Strong Buy, Buy, Hold, Sell, Strong Sell; Qualitative Rankings [STARS]: ***** = Strong Buy, **** = Buy, *** = Hold, ** = Sell, * = Strong Sell

S&P Capital IQ Rankings are not predictive of future performance. For full definitions of S&P Capital IQ Rankings, see the glossary section of this report.

Note: Peer Group selection is performed using S&P Capital IQ’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 “S&P Capital IQ Universe”) which has been compiled by S&P Capital IQ 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 S&P Capital IQ overall ranking/recommendation, the subject company is ranked against all the companies in the S&P Capital IQ Universe and not necessarily against the companies listed in the Peer Group.

### Sub-Industry Outlook: Real Estate Services

We have a positive fundamental outlook on the real estate services sub-industry. We think that sales and leasing of commercial real estate are poised to continue to expand as the economy continues its recovery. We look for the rebound to be somewhat restrained, compared to previous recoveries as well as during the boom years. Nonetheless, we think credit conditions have become more accommodating for buyers of commercial real estate and will lead to some upside in pricing. In general, we see properties in strong, high barrier to entry markets able to command attractive prices, with those in secondary and tertiary markets lagging the sector recovery. We expect commercial real estate brokers to generally report better 2016 results, although we think that turmoil in European capital markets may have led to a pause in the pace of commercial real estate transactions since mid-2012. Recent operating results reflect leasing activity that is still expanding in U.S. markets while the level of real estate sales transactions is rebounding, in our view. We believe that tight credit conditions for commercial real estate brought on by the fallout from the residential real estate sector will continue to ease for larger, well-capitalized buyers. Going forward, we expect an uneven, but positive, flow of investment capital into most commercial real estate markets. In addition, we expect commercial real estate sales and leasing activity to expand in the U.S. and Asian markets. Investment management results could also benefit from rising asset prices. We believe that outsourcing of real estate management by companies looking to reduce costs will continue to complement the other businesses, helping to offset volatility in the other areas; we think outsourcing will continue to be a significant growth driver even once the economy has recovered. This is a historically strong-growing industry. Revenues at the top four publicly-traded U.S. Real Estate Management firms increased by a total of 18% in 2015, and 24% in 2014, helped by acquisitions. On an organic basis, the S&P Capital IQ consensus view of analysts expects 12% revenue growth in 2016, and 7% growth in 2017. Acquisitions will likely contribute to revenues in both years. Profits rose 7% in 2015, hurt by one company. The consensus forecast for 2016 is for profit growth of 17%. Due to concerns about the strength of the global economy, the S&P Real Estate Services Index fell 30.3% year to date through February 29, as compared to the 5.4% decrease of the S&P 1500 Index. However, in 2015, the S&P Real Estate Services Index rose 3.3%, beating the 1.0% decrease of the S&P 1500 Index.

\[\text{Erik Oja} \]
**Jones Lang LaSalle Incorporated**

**Recommendation [as of June 30, 2016]: HOLD**

**S&P Capital IQ Risk Evaluation: MODERATE  Price: 95.90 [Jul 01, 2016 close]**

**Trading Currency: USD  Country: United States**

### Business Summary

Jones Lang LaSalle Incorporated, a financial and professional services company, provides commercial real estate and investment management services worldwide. It offers a range of real estate services, including agency leasing, project and development management/construction, capital markets, property management, corporate finance, real estate investment banking/merchant banking, energy and sustainability services, research, facility management outsourcing, strategic consulting and advisory services, investment management, tenant representation, lease administration, transaction management, logistics and supply-chain management, valuations, mortgage origination and servicing, and value recovery and receivership services. The company also provides investment management services to institutional and retail investors, including high-net-worth individuals. It offers its services to real estate owners, occupiers, investors, and developers for various property types, including cultural, educational, government, healthcare, laboratory, hotel, hospitality, and sports facilities; industrial, warehouse, office, residential, and retail properties; critical environments, data, and transportation centers; infrastructure projects; military housing; and shopping malls. The company was formerly known as LaSalle Partners Incorporated and changed its name to Jones Lang LaSalle Incorporated in March 1999. Jones Lang LaSalle Incorporated was founded in 1997 and is headquartered in Chicago, Illinois.

### Key Developments

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-27-2016</td>
<td><strong>MBA Transaction Announcements</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated (NYSE:JLL) entered into an agreement to acquire Global Corporate Occupiers Benchmarking Business from MSCI Inc. (NYSE:MSCI).</td>
</tr>
<tr>
<td>Jun-22-2016</td>
<td><strong>Company Conference Presentations</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated Presents at Africa Hotel Investment Forum, Jun-21-2016 through Jun-22-2016</td>
</tr>
<tr>
<td>Jun-07-2016</td>
<td><strong>MBA Transaction Announcements</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated (NYSE:JLL) entered into an agreement to acquire Travis Commercial Real Estate Services, Ltd.</td>
</tr>
<tr>
<td>Jun-06-2016</td>
<td><strong>Company Conference Presentations</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated Presents at REITWeek Investor Forum, Jun-07-2016</td>
</tr>
<tr>
<td>Jun-06-2016</td>
<td><strong>MBA Transaction Announcements</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated (NYSE:JLL) entered into an agreement to acquire BRG.</td>
</tr>
<tr>
<td>Jun-05-2016</td>
<td><strong>MBA Transaction Announcements</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated (NYSE:JLL) signed a definitive agreement to acquire Integral UK Ltd. from Integral UK Group Limited for $330 million.</td>
</tr>
<tr>
<td>Jun-02-2016</td>
<td><strong>MBA Transaction Closings</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated (NYSE:JLL) acquired Merritt B Harris, Inc.</td>
</tr>
<tr>
<td>May-27-2016</td>
<td><strong>Annual General Meeting</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated, Annual General Meeting, May 27, 2016</td>
</tr>
<tr>
<td>May-27-2016</td>
<td><strong>MBA Rumors and Discussions</strong></td>
</tr>
<tr>
<td></td>
<td>Liberty Center Reportedly Up For Sale</td>
</tr>
<tr>
<td>May-25-2016</td>
<td><strong>Seeking to Sell/Divest</strong></td>
</tr>
<tr>
<td></td>
<td>Redcape Seeks Sale Of Fairfield Waters Site</td>
</tr>
<tr>
<td>May-18-2016</td>
<td><strong>MBA Rumors and Discussions</strong></td>
</tr>
<tr>
<td></td>
<td>Charter Hall’s Eastern Building At Perth, Up For Sale</td>
</tr>
<tr>
<td>May-17-2016</td>
<td><strong>MBA Transaction Closings</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated (NYSE:JLL) acquired Cassidy Turley Harry K. Moore.</td>
</tr>
<tr>
<td>May-04-2016</td>
<td><strong>MBA Rumors and Discussions</strong></td>
</tr>
<tr>
<td></td>
<td>Melbourne Hotels Up For Sale</td>
</tr>
<tr>
<td>May-03-2016</td>
<td><strong>Company Conference Presentations</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Presents at Middle East Investment Summit 2016, May-02-2016 through May-03-2016</td>
</tr>
<tr>
<td>Apr-28-2016</td>
<td><strong>Private Placements</strong></td>
</tr>
<tr>
<td></td>
<td>ImCheck24 GmbH announced that it has received funding from Innovationsstarter Hamburg GmbH, Jones Lang LaSalle Incorporated, and another investor.</td>
</tr>
<tr>
<td>Apr-28-2016</td>
<td><strong>Seeking to Sell/Divest</strong></td>
</tr>
<tr>
<td></td>
<td>Walgreens Boots’ Former Building Up For Sale</td>
</tr>
<tr>
<td>Apr-27-2016</td>
<td><strong>Earnings Calls</strong></td>
</tr>
<tr>
<td></td>
<td>Jones Lang LaSalle Incorporated, Q1 2016 Earnings Call, Apr 27, 2016</td>
</tr>
</tbody>
</table>
Glossary

S&P Capital IQ Quantitative Model Overall Recommendation and drivers of the recommendation

S&P Capital IQ’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 Capital IQ’s Alpha Factor Library. To provide its recommendation Standard & Poor’s Investment Advisory Services, LLC, a business unit of S&P Capital IQ, 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%
  - Sells: next 20%
  - **Strong Sells:** bottom 10%

**S&P Capital IQ Risk Evaluation**

S&P Capital IQ 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 S&P Capital IQ evaluates the following risk categories:

- 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 same S&P Capital IQ’s universe on each of the four risk categories mentioned above, with 1 being low risk and 100 being high risk. The overall S&P Capital IQ 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 S&P Capital IQ’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.

**S&P Capital IQ Sector Ranking**

S&P Capital IQ’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.

**S&P Qualitative Ranking (STARS)**

- **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-STARS (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 Capital IQ 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 Capital IQ’s earnings and dividend rankings for common stocks, which are designed to capsize 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

A Quality Ranking will not be made available and will be displayed as "NA" if there is insufficient data available to generate the Ranking.

**S&P Capital IQ Consensus Estimates**

S&P 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 an 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

Abbreviations Used in S&P Capital IQ 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

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:

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>US</td>
<td>S&amp;P 500 Index</td>
</tr>
<tr>
<td>Canada</td>
<td>Canada</td>
<td>S&amp;P/TSX Composite Index</td>
</tr>
<tr>
<td>Europe</td>
<td>All</td>
<td>S&amp;P Europe 350 Index</td>
</tr>
<tr>
<td>Asia ex Japan</td>
<td>Australia</td>
<td>S&amp;P/ASX 200 Index</td>
</tr>
<tr>
<td>Asia ex Japan</td>
<td>All except</td>
<td>S&amp;P Global 1200</td>
</tr>
</tbody>
</table>

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

S&P Capital IQ ranks stocks in accordance with the following ranking methodologies:

**STARS Stock Reports:**
S&P Capital IQ’s qualitative STARS recommendations are determined and assigned by S&P Capital IQ 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:**
S&P Capital IQ’s 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 “S&P Capital IQ’s Research Reports” or “Research Reports”] reflect different criteria, assumptions and analytical methods and may have differing recommendations. S&P Capital IQ believes that the methodologies and data used to generate the different types of Research Reports are reasonable and appropriate. Generally, S&P Capital IQ does not generate research 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. S&P Capital IQ reserves the right to alter, replace or vary models, methodologies or assumptions from time to time and without notice to clients.

**STARS Stock Reports:**
STARS Stock Reports are prepared by the equity research analysts of Standard & Poor’s Investment Advisory Services LLC (“SPIAS”), McGraw-Hill Financial Research Europe Limited (“MHFRE”), and Standard & Poor’s Malaysia Sdn Bhd (“S&P Malaysia”), each a division of S&P Capital IQ. 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. Analysts generally update stock reports at least four times each year.

**Quantitative Stock Reports:**
The rankings for Quantitative reports have a fixed distribution based on relative weightings as described in the Glossary section of the report.

**Analyst Certification**
STARS Stock Reports are prepared by the equity research analysts of Standard & Poor’s Investment Advisory Services LLC (“SPIAS”), McGraw-Hill Financial Research Europe Limited (“MHFRE”), and Standard & Poor’s Malaysia Sdn Bhd (“S&P Malaysia”), each a division of S&P Capital IQ. 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. Analysts generally update stock reports at least four times each year. No part of analyst compensation and SPIAS’, MHFRE’s or S&P Malaysia’s compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in a STARS Stock Report.

**About S&P Capital IQ’s Distributors:**
S&P Capital IQ’s Research Reports have been prepared by Global Markets Intelligence (“GM”), a business unit of S&P Capital IQ. In the United States, Research Reports are prepared and issued by SPIAS. In the European Economic Area (“EEA”) States, Research Reports are distributed by MHFRE, which is authorized and regulated by the Financial Conduct Authority in the United Kingdom. Under and subject to the Markets in Financial Instruments Directive (“MiFID”), MHFRE is entitled to exercise a passport right to provide cross border investment advice into EEA States. MHFRE exercises its MiFID right to passport investment advice including the Research Reports into EEA States. In Hong Kong, Research Reports are issued by Standard & Poor’s Information Services (Australia) Pty Ltd (“SPIIS”), which is regulated by the Hong Kong Securities Futures Commission; in Singapore, by McGraw-Hill Financial Singapore Pte. Limited (“MHFSPL”), which is regulated by the Monetary Authority of Singapore; Research Reports are distributed in Malaysia, by S&P Malaysia, which is regulated by the Securities Commission of Malaysia; in Australia, by Standard & Poor’s Information Services (Australia) Pty Ltd (“SPIIS”), which is regulated by the Australian Securities & Investments Commission; and in Japan, by McGraw-Hill Financial Japan KK (“MHF Japan”), which is registered by Kanto Financial Bureau. SPIAS, MHFRE, SPIAS HK, MHFSPL, S&P Malaysia, SPIIS and MHF Japan, each a wholly owned subsidiary of McGraw Hill Financial, Inc. operate under the GM brand.

S&P Capital IQ and its affiliates provide a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

For details on the S&P Capital IQ research objectivity and conflict-of-interest policies, please visit: [https://www.spcapitaliq.com/disclaimers/s-p-capital-iq-research-reports](https://www.spcapitaliq.com/disclaimers/s-p-capital-iq-research-reports)

For a list of companies mentioned in a Research Report for which McGraw Hill Financial, Inc. and/or one of its affiliates own 1% or more of common equity securities and for a list of companies mentioned in a Research Report that own more than 5% of the common equity securities of McGraw Hill Financial, Inc. and/or one of its affiliates, please visit: [www.spcapitaliq.com/issuer-stock-ownership](http://www.spcapitaliq.com/issuer-stock-ownership)

S&P Capital IQ and/or one of its affiliates has performed services for and received compensation from this company during the past twelve months.
General Disclosure

Notice to all jurisdictions:

Where S&P Capital IQ’s 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 any part or section of a research report that has been issued in a foreign language.

Neither S&P Capital IQ nor its affiliates guarantee the accuracy of the translation.

Assumptions, opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. This document may contain forward looking statements or forecasts, such statement or forecasts are not a reliable indicator of future performance.

Past performance is not necessarily indicative of future results.

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 Standard & Poor’s Financial Services LLC or its affiliates [collectively, S&P]. The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents [collectively S&P Parties] do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P 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. S&P 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 S&P 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.

While S&P Capital IQ has obtained information from sources it believes to be reliable, S&P Capital IQ does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with such analytical process. Research Reports are not intended to be investment advice and do not constitute any form of invitation or inducement by S&P Capital IQ to engage in investment activity. This material is not intended as an offer or solicitation for the purchase or sale of any security or other financial instrument. 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. Any opinions expressed herein are given in good faith, are subject to change without notice, and are only current as of the stated date of their issue. Prices, values, or income from any securities or investments mentioned in this report may fluctuate, and an investor may, upon selling an investment, lose a portion of, or all of the principal amount invested. Where an investment is described as being likely to yield income, please note that the amount of income that the investor will receive from such an investment may fluctuate. Where an investment or security is denominated in a different currency to the investor’s chosen currency, changes in rates of exchange may have an adverse effect on the value, price or income of or from that investment to the investor. The information contained in Research Reports does not constitute advice on the tax consequences of making any particular investment decision. Before acting on any recommendation in this material, you should consider whether it is suitable for your particular circumstances and, if necessary, seek professional advice.

Additional information on a subject company may be available upon request.

Notice to all Non U.S. Residents:

S&P Capital IQ’s Research Reports may be distributed in certain localities, countries and/or jurisdictions (“Territories”) by independent third parties or independent intermediaries and/or distributors (the “Intermediaries” or “Distributors”). Intermediaries are not acting as agents or representatives of S&P Capital IQ. In Territories where an Intermediary distributes S&P Capital IQ’s Research Reports, the Intermediary, and not S&P Capital IQ, is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory authorities, including laws in connection with the distribution of third-party Research Reports, licensing requirements, supervisory and record keeping obligations that the Intermediary may have under the applicable laws and regulations of the territories where it distributes the Research Reports.

Each Research Report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject S&P Capital IQ or its affiliates to any registration or licensing requirements in such jurisdiction.

Each Research Report is not directed to, or intended for distribution to or use by, any person or entity who is not in a class qualified to receive Research Reports (e.g., a qualified person and/or investor), as defined by the local laws or regulations in the country or jurisdiction where the person is domiciled, a citizen or resident of, or the entity is legally registered or domiciled.

S&P Capital IQ’s Research Reports are not intended for distribution in or directed to entities, residents or investors in: Burma, Cuba, Crimea, Czech Republic, Iran, Kuwait, Lebanon, North Korea, Portugal, Romania, Sudan, Slovakia, Syria, Thailand, Turkey.

For residents of Australia: Research Reports are distributed in Australia by SPIS. Any express or implied opinion contained in a Research Report is limited to “General Advice” and based solely on consideration of the investment merits of the financial product(s) alone. The information in a Research Report has not been prepared for use by residents of Australia and has been prepared without taking account of any particular investor’s financial or investment objectives, financial situation or needs. Before acting on any advice, any investor using the advice should consider its appropriateness having regard to their own or their clients’ objectives, financial situation and needs. Investors should obtain a Product Disclosure Statement relating to the product and consider the statement before making any decision or recommendation about whether to acquire the product. Each opinion must be weighed solely as one factor in any investment decision made by or on behalf of any adviser and any such adviser must accordingly make their own assessment taking into account an individual’s particular circumstances.

SPIS holds an Australian Financial Services License Number 258896. Please refer to the SPIS Financial Services Guide for more information at www.spcapitaliq.com/FinancialServicesGuide

More information about the written criteria and methodologies for the generation of Research Reports and historical information for Research Reports for the past 12 months are available by contacting S&P Capital IQ Client Services Department at 61-1300-792-553 or via e-mail at clientsupport@standardandpoors.com or clientsupport@sandp.com.

For residents of Bahamas: - The Intermediary, and not S&P Capital IQ, is solely responsible for complying with licensing requirements under the Securities Industry Act of 1993 and the Securities Industry Regulations of 2000 of The Bahamas, when distributing Research Reports to members of the public in The Bahamas. The Intermediary is also solely responsible for providing any required disclosures under applicable securities laws and regulations to its Bahamian clients, including but not limited to disclosing whether the Intermediary: (i) has a reasonable basis for specific investment recommendations, and the recommended security’s price or price range at the time of the recommendation to the client; (ii) makes a market in the recommended security; (iii) its directors, officers or principal shareholders have a current or contingent financial interest in the recommended security, unless the interest is nominal; (iv) participated in a public offering of the recommended security in the last two (2) years; and (v) has disclosed any conflict of interest between it and the issuer of the recommended security.
For residents of Bermuda: The Bermuda Monetary Authority or the Registrar of Companies in Bermuda has not approved the Research Reports and any representation, explicit or implicit, is prohibited.

For residents of Brazil: Research reports are distributed by S&P Capital IQ and in compliance with Instruction 483 enacted by Comissão de Valores Mobiliários (the Brazilian Securities Commission) dated as of July 6, 2010, the analyst (where applicable) who prepares a Research Report or a report extract affirms: (i) that all the views expressed herein and/or in a Research Report accurately reflect his or her personal views about the securities and issuers; (ii) that all recommendations issued by him or her were independently produced, including from the opinion of the entity in which he or she is an employee. S&P Capital IQ is of the opinion its Research Reports have been prepared in accordance with section 17, II of Instruction 483. The distributor of the Research Report is responsible for disclosing any circumstances that may impact the independence of S&P Capital IQ’s Research Reports, in accordance with section 17, II of Instruction 483.

For residents of British Virgin Islands: All products and services offered by S&P Capital IQ and its affiliates are provided or performed, outside of the British Virgin Islands. The intended recipients of the Research Reports are (i) persons who are not members of the public for the purposes of the Securities and Investment Business Act, 2010 (“SIBA”); (ii) persons who are professional services providers to the British Virgin Islands business companies for the purposes of SIBA; and (iii) any other person who is given the Research Reports by a person licensed as an investment advisor in the British Virgin Islands. If you are in any doubt as to whether you are the intended recipient of this document, please consult your licensed investment advisor.

For residents of Canada: Canadian investors should be aware that any specific securities discussed in a Research Report can only be purchased in Canada through a Canadian registered dealer and, if such securities are not available in the secondary market, they can only be purchased by eligible private placement purchasers on a basis that is exempt from the prospectus requirements of Canadian securities law and will be subject to resale restrictions. Information in Research Reports may not be suitable or appropriate for Canadian investors.

For residents of Chile: S&P Capital IQ shall not be acting as an Intermediary of any securities referred to in a Research Report. S&P Capital IQ (and its affiliates) is not registered with, and such securities may not be registered in the Securities Registry maintained by the Superintendencia de Valores y Seguros de Chile [Chilean Securities and Insurance Superintendence or “SVS”] pursuant to the Chilean Securities Market Law 18045. Accordingly, investment research presented in a Research Report is not intended to constitute a public or private offer of securities in Chile within the meaning of Article 4 of the Chilean Securities Market Law 18045, as amended and restated, and supplemental rules enacted thereunder.

For residents of Colombia: This information and/or information contained in Research Reports is not intended or should not be construed as constituting information delivery to the Colombian Securities Market under Colombian Law.


For residents of Dubai (DIFC): The information contained in Research Reports distributed by S&P Capital IQ is intended for investors who are “professional clients”, as defined in Rule 2.3.2(2) of the Conduct of Business Module (COB) of the DFSA Rulebook.

For residents of the European Economic Area (EEA): Research Reports have been approved for distribution in the EEA listed here: Austria; Belgium; Bulgaria; Cyprus; Czech Republic [see further disclosure above]; Denmark; Estonia; Finland; France [see further disclosure below]; Germany; Gibraltar; Greece; Hungary [see further disclosure below]; Iceland; Ireland; Italy; Latvia; Liechtenstein; Lithuania; Luxembourg; Malta [see further disclosure below]; Netherlands; Norway; Poland; Portugal; Romania; Slovakia [see further disclosure below]; Slovenia; Spain [see further disclosure below]; Sweden and United Kingdom, as investment research by MHFRE, which is authorized and regulated by the Financial Conduct Authority in the UK. S&P Capital IQ’s Stock Reports are to be read in conjunction with “Your Guide to S&P Capital IQ’s Stock Reports” which can be found at: www.spcapitaliq.com/stockreportguide.

For residents of Hong Kong: Information in the Research Reports shall not be construed to imply any relationship, advisory or otherwise, between S&P and the recipient user of the research report unless expressly agreed by S&P Capital IQ. S&P Capital IQ is not acting nor should it be deemed to be acting, as a “fiduciary” or an “investment manager” or “investment advisor” to any recipient of this information unless expressly agreed by S&P Capital IQ. The Distributor of the Research Reports will be solely responsible for describing its role to its clients with respect to the distribution of S&P Capital IQ’s Research Reports.

For residents of Ireland: All products and services offered by S&P Capital IQ and its affiliates are provided or performed, outside of Ireland. The intended recipients of the Research Reports are (i) persons who are not members of the public for the purposes of the Securities and Investment Business Act; (ii) persons who are professional services providers to the Irish business companies for the purposes of SIBA; and (iii) any other person who is given the Research Reports by a person licensed as an investment advisor in Ireland. If you are in any doubt as to whether you are the intended recipient of this document, please consult your licensed investment advisor.

For residents of Israel: The Intermediary, and not S&P Capital IQ, is solely responsible for complying with the rules related to data protection requirements as set out in Act IV of 1998 on the Protection of Privacy and Freedom of Information; and with Act XVIII of 1997 on Consumer Protection and with Act CXXXVII of 2007 on Data Protection Services.

For residents of Portugal: Researchers of S&P Capital IQ do not intend to utilize the Research Report service in order to limit or carry out any business activities with S&P Capital IQ. Research Reports provided by S&P Capital IQ serve to assist the Intermediary in determining the advice it provides to its clients, but are not intended as advice to the Intermediary and to any of the Intermediary’s clients or the Intermediary will be solely responsible for the provision of investment advice to the client.

For residents of Indonesia: Research Reports do not constitute an offering document and it should not be construed as an offer of securities in Indonesia, and any such securities will only be offered or sold through a financial institution.

For residents of Guernsey, Isle of Man and Jersey: The Research Reports provide by S&P Capital IQ serve to assist the Intermediary in determining the advice it provides to its clients, but are not intended as advice to any of the Intermediary’s clients, and the Intermediary, and not S&P Capital IQ, will be solely responsible for the provision of investment advice to the client.
For residents of Israel: Research reports are intended only for distribution to “Qualified Investors”, as defined in the Schedule to Israel’s Regulation of Investment Advice, Investment Marketing and Portfolio Management Law of 1995. All other persons who are not Qualified Investors under Israeli law should seek additional investment advice from their financial advisers. The relevant analyst declares that the views expressed in a particular Research Report faithfully reflect the analyst’s personal views regarding the securities under review and the issuer of the securities.

For residents of Japan: Research Reports are intended only for distribution to “Asset Management Firms”.

For residents of Kazakhstan: The distribution to specific persons in Kazakhstan is the sole responsibility of the Distributor and the Distributor, and not S&P Capital IQ, is responsible for complying with all local regulations, including but not limited to advertising requirements related to public solicitation.

For residents of Malta: The Distributor of Research Reports in Malta, is solely responsible for ensuring that the investment research produced by S&P Capital IQ and proposed to be disseminated in or from within Malta is reviewed for compliance with the investment services rules issued by the Malta Financial Services Authority in terms of the Investment Services Act, Cap 370 of the laws of Malta.

For residents of Mexico: S&P Capital IQ is not regulated or supervised by the Mexican National Banking and Securities Commission (“CNBV”). S&P Capital IQ has a licensed rating agency affiliate in Mexico [Standard & Poor’s, S.A. De C.V.], of which S&P maintains firewalls and seeks to avoid conflicts of interest, pursuant to approved policies. Research Reports on securities that are not registered with the National Securities Registry maintained by the Mexican National Securities Registry are intended only for distribution to qualified, institutional investors or to any other investors to whom distribution the S&P Research is permissible under Mexican law.

For residents of Monaco: The Intermediary, and not S&P Capital IQ, will be solely responsible for providing copies of S&P Capital IQ Research Reports to the appropriate Monegasque regulator prior to distributing to its clients.

For residents of Morocco: Research Reports are intended for distribution only to professional investors.

For residents of Peru: S&P Capital IQ’s Research Reports shall not, under any circumstances, be considered an invitation to take deposits or funds from the public, under any mechanism, or to carry on any activities that may be prohibited by Peruvian law. The Intermediary also agrees that the use of S&P Capital IQ’s Research Reports shall not be used by Intermediary to solicit an investment in the securities that are the subject of the Research Report in any way that may be prohibited by Peruvian law.

For residents of Qatar: The Distributor, and not S&P Capital IQ, is responsible for complying with all relevant licensing requirements as set forth by the Qatar Financial Markets Authority or the Qatar Central Bank, and with all relevant rules and regulations set out in the Qatar Financial Markets Authority’s rule book, including third party branded investment research distribution of securities that are admitted for trading on a Qatari securities exchange (Admitted Securities).

For residents of Russia: Research Reports on financial instruments are intended for “qualified investors”, as defined in the Securities market law of the Russian Federation dated 22 April 1996, as amended, only.

For residents of The Kingdom of Saudi Arabia: S&P Capital IQ and its affiliates do not distribute Research Reports in the Kingdom of Saudi Arabia. Residents of Saudi Arabia should be aware that the Distributor of S&P Capital IQ’s Research Reports may not be permitted to distribute investment research either: (i) from a permanent place of business in or otherwise within the territory of the Kingdom of Saudi Arabia; or (ii) to an investor in the Kingdom of Saudi Arabia unless that investor is a Capital Market Authority authorized investor or the Saudi Arabian Monetary Agency.

When a Distributor disseminates S&P Capital IQ’s Research Reports in the Kingdom of Saudi Arabia, the Distributor, and not S&P Capital IQ, is solely responsible for approving the contents of Research Reports and complying with licensing requirements and authorizations of the Saudi Arabian Capital Market Authority’s [“CMA”], including CMA’s Authorized Persons Regulations concerning securities advertisements.

S&P does not conduct a securities business in the Kingdom of Saudi Arabia and the distributor, and not S&P Capital IQ, assumes all responsibilities and liabilities for distributing Research Reports in the Kingdom of Saudi Arabia. Research Reports are not intended to be investment advice and do not constitute any form of invitation or inducement by S&P Capital IQ to engage in an investment activity in the Kingdom of Saudi Arabia. S&P Capital IQ does not communicate directly with a distributor’s customers and a distributor’s customers should not contact S&P Capital IQ directly regarding any information or data provided in Research Reports.


For residents of Spain: Certain of S&P Capital IQ’s equity Research Reports may be considered to be marketing communications for purposes of Spanish law.

For residents of the United Arab Emirates (UAE): S&P Capital IQ and its affiliates neither undertake banking, financial, or investment consultations business in or into the UAE within the meaning of the Central Bank Board of Directors’ Resolution No. 169/89/94 regarding the regulations for investment companies nor provides financial analysis or consultation services in or into the UAE within the meaning of UAE SECURITIES AND COMMODITIES AUTHORITY DECISION NO. 48/R OF 2008 concerning financial consultation and financial analysis.

Investment research distributed by S&P Capital IQ and its affiliates is not intended to amount to an offer of securities within the meaning of DIFC Law No. 12 OF 2004 (the DIFC Markets Law) or the equivalent laws, rules and regulations made by the Central Bank of the UAE and their Emirates Securities and Commodities Authority. Neither the Dubai Financial Services Authority, the UAE Securities nor Commodities Authority of the Central Bank of the UAE has reviewed or verified any of the information provided in a Research Report or through any service provided by S&P Capital IQ or its affiliates, or has any responsibility for it.
If a recipient of Research Report does not understand any of the contents of the Research Report, the recipient should contact a financial advisor. Users of extracts of investment Research Reports should be aware that if they are distributed in the UAE by an intermediary, the intermediary is solely responsible for the distribution and contents of the investment research in the UAE.

For residents of Uruguay: S&P Capital IQ or its affiliates are not, individually a risk assessment entity registered with the Central Bank of Uruguay, and S&P Capital IQ’s Research Reports do not constitute a risk assessment. Investment research presented in a Research Report is not intended to constitute a public or private offer of securities in Uruguay. S&P Capital IQ’s Research Reports are not intended for worldwide distribution, as such, and are not published to Uruguayan clients in Spanish.

For residents of Venezuela: Research Reports can only be distributed in Venezuela by an investment advisor, duly licensed under Venezuelan law. The Distributor of the Research Reports, and not S&P Capital IQ, is solely responsible for complying with licensing requirements.