



Common Stock Data as of 4/30/19¹

| | |
|--|------------------|
| Total Net Asset Value (est.) | \$349.8 million |
| Net Asset Value per share (est.) | \$14.33 – 14.43 |
| Closing Price per share | \$17.11 |
| Premium/Discount ² | 18.98% |
| Total Market Capitalization ³ | \$613.15 million |

NYSE Symbols

| | |
|--------------------------|------|
| Common Stock | ECC |
| Series A Preferred Stock | ECCA |
| Series B Preferred Stock | ECCB |
| Series 2027 Notes | ECCY |
| Series 2028 Notes | ECCX |

Net Performance vs. Selected Indices⁴

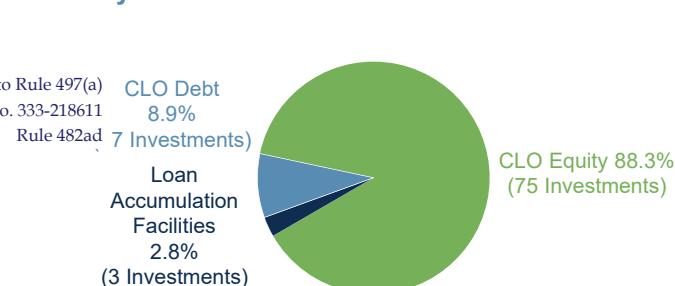
| | April 2019 | YTD | Annualized Total Return | | | Cumulative |
|-------------------------------|--------------|---------------|-------------------------|---------------|-----------------|-----------------|
| | | | 1 year | 3 year | Since Inception | Since Inception |
| ECC | 4.03% | 26.31% | 6.43% | 12.69% | 10.36% | 56.81% |
| CS Leveraged Loan Index | 1.59% | 5.42% | 4.46% | 5.76% | 4.27% | 21.03% |
| ML High Yield Master II Index | 1.40% | 8.90% | 6.71% | 7.77% | 5.19% | 25.97% |
| S&P 500 Index | 4.05% | 18.25% | 13.49% | 14.87% | 11.92% | 67.19% |

Performance, which is as of April 30, 2019, represents past performance. **Past performance is not indicative of, or a guarantee of, future performance.** Total return is based on ECC's closing stock price during the applicable period and assumes that any dividends or distributions are reinvested on the applicable payment dates. Future results may vary and may be higher or lower than the data shown.

Summary of Underlying Portfolio Characteristics⁵

| | |
|--|-----------|
| Number of Unique Underlying Obligor | 1,502 |
| Largest Exposure to an Individual Obligor | 0.94% |
| Average Individual Obligor Exposure | 0.0006% |
| Top 10 Obligor Exposure | 6.2% |
| Currency: USD Exposure | 99.9% |
| Aggregate Indirect Exposure to Senior Secured Loans ⁶ | 96.88% |
| Weighted Average Junior OC Cushion | 4.34% |
| Weighted Average Market Value of Collateral | 97.72% |
| Weighted Average Stated Spread | 3.55% |
| Weighted Average Rating ⁷ | B+/B |
| Weighted Average Maturity | 5.1 years |
| Weighted Average Remaining Reinvestment Period | 3.2 years |

Summary of the Portfolio of Investments as of 4/30/19¹



Top 10 Underlying Obligor^{5,9}

| Obligor | % Total |
|------------------------------|-------------|
| Altice | 0.9% |
| Asurion | 0.8% |
| American Airlines Inc | 0.8% |
| Dell Inc | 0.6% |
| TransDigm | 0.6% |
| Energy Future Holdings | 0.5% |
| CenturyLink | 0.5% |
| Numericable | 0.5% |
| Caesars Entertainment | 0.5% |
| Envision Healthcare Holdings | 0.5% |
| Total | 6.2% |

Top 10 Industries of Underlying Obligor^{5,8,9}

| Industry | % Total |
|--------------------------------|--------------|
| Technology | 10.4% |
| Health care | 8.5% |
| Publishing | 7.0% |
| Telecommunications | 5.3% |
| Financial intermediaries | 5.2% |
| Lodging & casinos | 4.9% |
| Commercial Services & Supplies | 4.3% |
| Utilities | 3.6% |
| Building & Development | 3.4% |
| Electronics/electrical | 3.3% |
| Total | 55.9% |

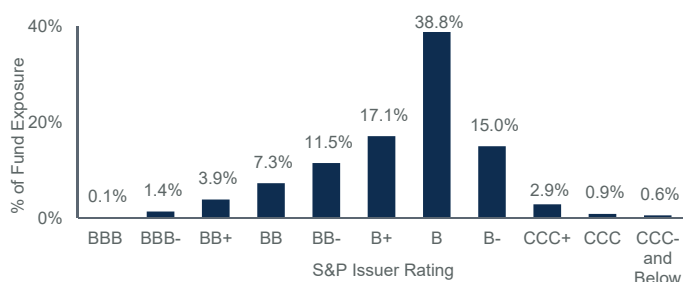
Diversification by Geography of Underlying Obligor⁵

| Country | % Total |
|----------------|---------------|
| United States | 93.4% |
| Canada | 1.9% |
| Luxembourg | 1.6% |
| Netherlands | 0.9% |
| United Kingdom | 0.9% |
| Germany | 0.4% |
| France | 0.4% |
| Australia | 0.3% |
| Switzerland | 0.1% |
| Other | 0.2% |
| Total | 100.0% |

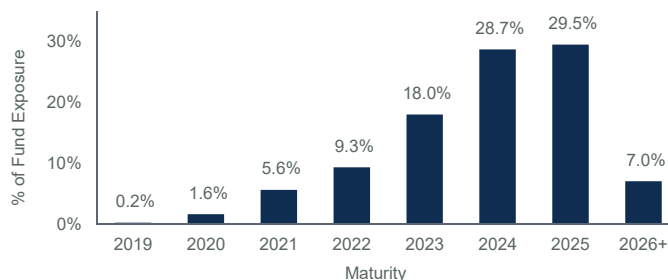
Diversification by Credit Type of Underlying Obligor⁵

| Credit Type | % Total |
|-----------------------|---------------|
| First Lien | 96.9% |
| Second Lien | 2.0% |
| Unsecured Loan | 1.1% |
| Senior Unsecured Bond | 0.1% |
| Total | 100.0% |

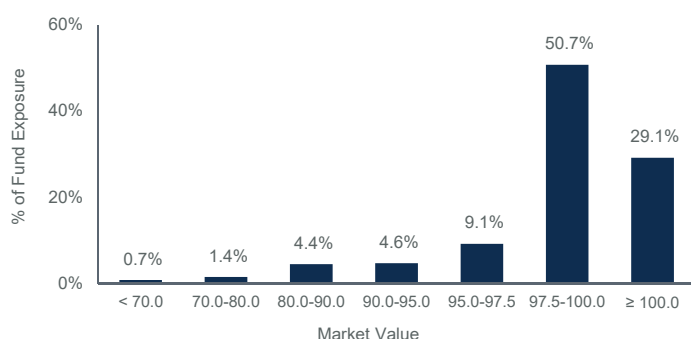
Rating Distribution of Underlying Obligors^{5,7}



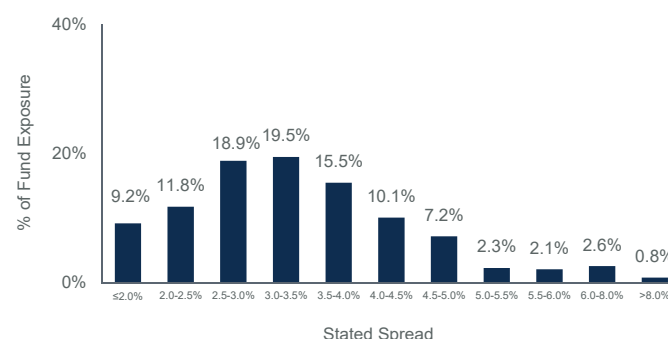
Maturity Distribution of Underlying Obligors⁵



Price Distribution of Underlying Obligors⁵



Stated Spread Distribution of Underlying Obligors⁵



Notes

Note: Amounts shown in this report are rounded and therefore totals may not foot.

- The Company determines its net asset value on a quarterly basis. The net asset value and net asset value per share shown herein (A) are unaudited and estimated by management, (B) are shown for informational purposes only, and (C) are as of the date noted above. Estimates with respect to a calendar quarter end are subject to revision when the Company determines its quarterly net asset value. The net asset value of the Company is calculated as the sum of the value of the Company's portfolio, any cash or cash equivalents held by the Company and the Company's other assets less the Company's liabilities. Net asset value per share is determined by dividing the net asset value of the Company by the number of shares of the Company's common stock outstanding as of the date shown above. The summary of portfolio investments shown is based on the estimated fair value of the underlying positions.
- Premium/discount is calculated to the midpoint of management's unaudited and estimated range of the net asset value per share. Premium/discount for periods after April 30, 2019 will vary based on stock price performance and Company performance.
- Combined market capitalization of ECC, ECCA, ECCB, ECCX and ECCY as of April 30, 2019 closing price. Market capitalization for periods after April 30, 2019 will vary based on stock price performance.
- The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. The indices shown herein have not been selected to represent a benchmark for a strategy's performance, but are instead disclosed to allow for comparison of the Company's returns to that of known, recognized and/or similar indices. The Credit Suisse Leverage Loan Index tracks the investable universe of the US-denominated leverage loan market. The ML US High Yield Index tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. The S&P 500 tracks the performance of US equity markets and is based on the market capitalization of 500 large companies having common stock listed on the NYSE or NASDAQ.
- The information presented herein is on a look-through basis to the collateralized loan obligation, or "CLO", equity and related investments (i.e., loan accumulation facilities) held by the Company as of April 30, 2019 (except as otherwise noted) and reflects the aggregate underlying exposure of the Company based on the portfolios of those investments. The data is estimated and unaudited and is derived from CLO trustee reports received by the Company relating to April 2019 and from custody statements and/or other information received from CLO collateral managers and other third party sources. Information relating to the market price of underlying collateral is as of month end; however, with respect to other information shown, depending on when such information was received, the data may reflect a lag in the information reported. As such, while this information was obtained from third party data sources, April 2019 trustee reports and similar reports, other than market price, it does not reflect actual underlying portfolio characteristics as of April 30, 2019 and this data may not be representative of current or future holdings. The Weighted Average Remaining Reinvestment Period information is based on the fair value of CLO equity investments held by the Company at the end of the reporting period.
- We obtain exposure in underlying senior secured loans indirectly through our investments in CLOs.
- Credit ratings shown are based on those assigned by Standard & Poor's Rating Group, or "S&P," or, for comparison and informational purposes, if S&P does not assign a rating to a particular obligor, the weighted average rating shown reflects the S&P equivalent rating of a rating agency that rated the obligor provided that such other rating is available with respect to a CLO equity or related investment held by us. In the event multiple ratings are available, the lowest S&P rating, or if there is no S&P rating, the lowest equivalent rating, is used. The ratings of specific borrowings by an obligor may differ from the rating assigned to the obligor and may differ among rating agencies. For certain obligors, no rating is available in the reports received by the Company. Such obligors are not shown in the graphs and, accordingly, the sum of the percentages in the graphs may not equal 100%. Ratings below BBB- are below investment grade. Further information regarding S&P's rating methodology and definitions may be found on its website (www.standardandpoors.com). This data includes underlying portfolio characteristics of the Company's CLO equity and loan accumulation facility portfolio.
- Industry categories are based on the S&P industry categorization of each obligor as reported in CLO trustee reports to the extent so reported. Certain CLO trustee reports do not report the industry category of all of the underlying obligors and where such information is not reported, it is not included in the summary look-through industry information shown. As such, the Fund's exposure to a particular industry may be higher than that shown if industry categories were available for all underlying obligors. In addition, certain underlying obligors may be re-classified from time to time based on developments in their respective businesses and/or market practices. Accordingly, certain underlying borrowers that are currently, or were previously, summarized as a single borrower in a particular industry may in current or future periods be reflected as multiple borrowers or in a different industry, as applicable.
- The look-through data shown is adjusted to skip incomplete obligors information provided on the trustee report; if it was shown, it would represent 0.9%. In addition, certain CLO trustee reports do not provide the industry classification for certain underlying obligors. These obligors are not summarized in the look-through industry data shown; if they were reflected, they would represent 5.8%.



Important Information

Investors should consider Eagle Point Credit Company Inc.'s (the "Company") investment objectives, risks, charges and expenses carefully before investing in securities of the Company. The Company's prospectus contains this and other important information about the fund. Investors should read the Company's prospectus and Securities and Exchange Commission ("SEC") filings (which are publicly available on the EDGAR Database on the SEC website at <http://www.sec.gov>) carefully and consider their investment goals, time horizons and risk tolerance before investing in the Company. There is no guarantee that any of the goals, targets or objectives described in this report will be achieved. An investment in the Company is not appropriate for all investors. The investment program of the Company is speculative, entails substantial risk and includes investment techniques not employed by traditional mutual funds. An investment in the Company is not intended to be a complete investment program. Shares of closed-end investment companies, such as the Company, frequently trade at a discount from their net asset value, which may increase investors' risk of loss. **Past performance is not indicative of, or a guarantee of, future performance.** The performance and certain other portfolio information quoted herein represents information as of dates noted herein. Nothing herein shall be relied upon as a representation as to the future performance or portfolio holdings of the Company. Investment return and principal value of an investment will fluctuate, and shares, when sold, may be worth more or less than their original cost. The Company's performance is subject to change since the end of the period noted in this report and may be lower or higher than the performance data shown herein.

From time to time, the Company may have a registration statement relating to one or more of its securities on file with the SEC. Any registration statement that has not yet been declared effective by the SEC, and any prospectus relating thereto, is not complete and may be changed. Any securities that are the subject of such a registration statement may not be sold until the registration statement is filed with the SEC is effective.

The information and its contents are the property of the Company. Any unauthorized dissemination, copying or use of this presentation is strictly prohibited and may be in violation of law.

ABOUT EAGLE POINT CREDIT COMPANY

The Company is a publicly-traded, non-diversified, closed-end management investment company. The Company's investment objectives are to generate high current income and capital appreciation primarily through investment in equity and junior debt tranches of CLOs. The Company is externally managed and advised by Eagle Point Credit Management LLC. The Company makes a monthly estimate of NAV and certain additional financial information available to investors via our website (www.eaglepointcreditcompany.com). This information includes (1) an estimated range of the Company's NII and realized capital gains or losses per share of common stock for each calendar quarter end, generally made available within the first fifteen days after the applicable calendar month end, (2) an estimated range of the Company's NAV per share of common stock for the prior month end and certain additional portfolio-level information, generally made available within the first fifteen days after the applicable calendar month end, and (3) during the latter part of each month, an updated estimate of NAV, if applicable, and, with respect to each calendar quarter end, an updated estimate of the Company's NII and realized capital gains or losses for the applicable quarter, if available.