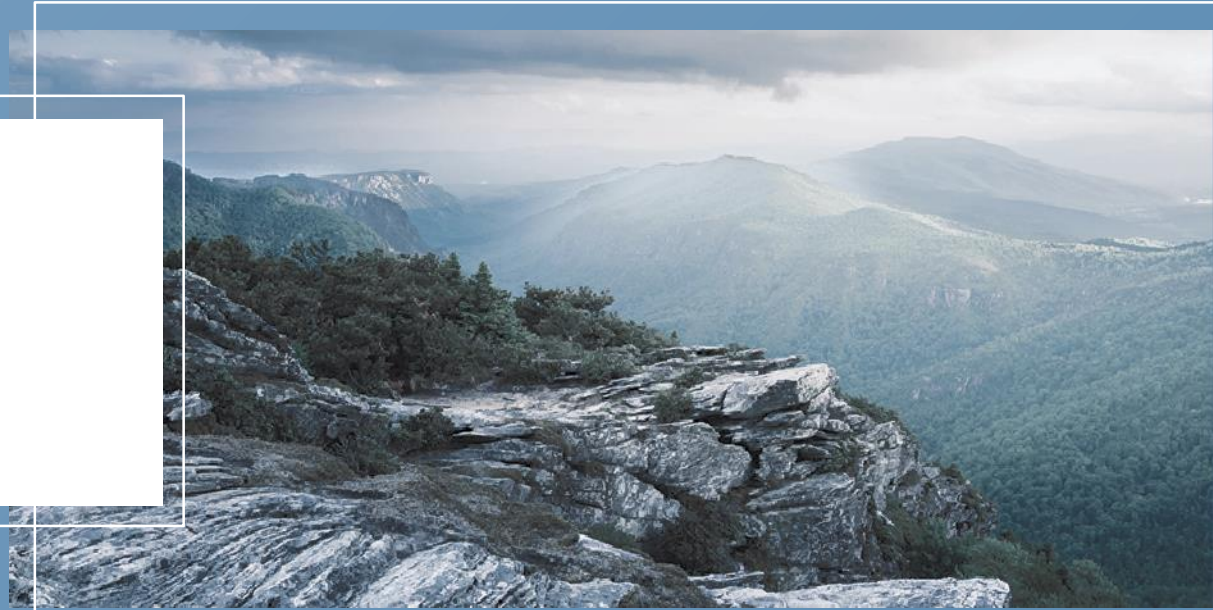


EAGLE POINT CREDIT COMPANY
PRESENTATION



APRIL 27, 2017

IMPORTANT INFORMATION



This report and the information and views included herein do not constitute investment advice, or a recommendation or an offer to enter into any transaction with Eagle Point Credit Company Inc. (the "Company") or any of its affiliates. This report is provided for informational purposes only, does not constitute an offer to sell securities of the Company or a solicitation of an offer to purchase any such securities. From time to time, the Company may have a registration statement relating to one or more of its securities on file with the Securities and Exchange Commission ("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 filed with the SEC is effective.

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Neither Eagle Point Credit Management LLC nor the Company provides legal, accounting or tax advice. Any statement regarding such matters is explanatory and may not be relied upon as definitive advice. Investors should consult with their legal, accounting and tax advisers regarding any potential investment. The information presented herein is as of the dates noted herein and is derived from financial and other information of the Company, and, in certain cases, from third party sources and reports (including reports of third party custodians, CLO collateral managers and trustees) that have not been independently verified by the Company. As noted herein, certain of this information is estimated and unaudited, and therefore subject to change. We do not represent that such information is accurate or complete, and it should not be relied upon as such. This report does not purport to be complete and no obligation to update or revise any information herein is being assumed.

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 principals of Eagle Point Credit Management LLC are Thomas P. Majewski, Daniel W. Ko and Daniel M. Spinner. The Company makes certain unaudited portfolio information available each month on its website in addition to making certain other unaudited financial information available on its 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.

FORWARD-LOOKING STATEMENTS

These materials may contain "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Statements other than statements of historical facts included in this press release may constitute forward-looking statements and are not guarantees of future performance or results and involve a number of risks and uncertainties. Actual results may differ materially from those in the forward-looking statements as a result of a number of factors, including those described in the prospectus and the Company's other filings with the SEC. The Company undertakes no duty to update any forward-looking statement made herein. All forward-looking statements speak only as of the date of this press release.

INTRODUCTION TO EAGLE POINT CREDIT COMPANY



ECC Highlights

About ECC

- Eagle Point Credit Company Inc. (“ECC”) is an externally-managed company which seeks to generate high current income
- ECC seeks to provide indirect exposure to floating rate US senior secured loans by primarily investing in equity and junior debt CLO securities

The Adviser

- ECC’s adviser is Eagle Point Credit Management LLC (“Eagle Point”), a specialist investment manager with approximately \$1.5 billion of assets under management (as of December 31, 2016)⁽¹⁾
- Each member of Eagle Point’s senior investment team is a CLO industry specialist who has been directly involved in the CLO market for the majority of his career
- Alignment: Eagle Point and its management and affiliates have approximately \$174.7 million invested in ECC, ECCA and ECCZ⁽²⁾

Differentiated Investment Strategy and Process

- ECC pursues a differentiated private equity style investment approach focused on proactively sourcing investment opportunities in CLO equity
- ECC typically seeks to take significant stakes in its CLO equity investments and to influence the key terms and conditions of such investments

Track Record

- Since its IPO, ECC has, on average, traded at a premium to book value during a time in which the Wells Fargo BDC Index has, on average, traded at a discount to book value (October 7, 2014 through April 24, 2017)⁽³⁾
- Common stock currently pays monthly distribution

Past performance is not indicative of, or a guarantee of, future performance.

(1) Inclusive of undrawn capital commitments.

(2) Amount includes holdings of Eagle Point, its senior personnel and the Trident V Funds managed by Stone Point Capital LLC, an affiliate of Eagle Point, as of March 31, 2017 (based on market values as of April 25, 2017).

(3) Management’s unaudited estimate of the net asset value (NAV) per share of common stock as of March 31, 2017 is \$17.13. This estimate is shown for informational purposes only and is subject to revision when the Company determines its quarterly net asset value. Additional information regarding the Company’s NAV is available as described under the heading “About the Company” on page 1. The Wells Fargo BDC Index is intended to measure the performance of all Business Development Companies (BDCs) that are listed on the New York Stock Exchange or NASDAQ and satisfy market capitalization and other eligibility requirements. Although ECC is not a BDC, BDCs generally invest in high yielding credit investments, as does ECC. In addition, similar to ECC, BDCs generally elect to be classified as a regulated investment company under the U.S. Internal Revenue Code of 1986, as amended, which generally requires an investment company to distribute its taxable income to shareholders. You cannot invest directly in an index. Source: Bloomberg.

INTRODUCTION TO ECC

Securities Outstanding



- Eagle Point, its management and affiliates have \$174.7 million invested in ECC, ECCA and ECCZ⁽³⁾

| NYSE Ticker: ECC | | NYSE Ticker: ECCA | | NYSE Ticker: ECCB | | NYSE Ticker: ECCZ | |
|---|----------|---|-------------------|---|--------------------|--|--------------------|
| Common Stock | | Series A Term Preferred Stock Due 2022 \$25 liquidation preference | | Series B Term Preferred Stock Due 2026 \$25 liquidation preference | | Unsecured Notes Due 2020 \$25 par denominations | |
| Market Cap: ⁽¹⁾ | \$350.4M | Market Cap: ⁽¹⁾ | \$47.3M | Market Cap: ⁽¹⁾ | \$47.9M | Market Cap: ⁽¹⁾ | \$61.8M |
| Price per share: ⁽¹⁾ | \$19.64 | Price per share: ⁽¹⁾ | \$26.00 | Price per share: ⁽¹⁾ | \$26.02 | Price per share: ⁽¹⁾ | \$25.73 |
| Current Distribution: ⁽²⁾ | \$0.20 | Coupon: | 7.75% | Coupon: | 7.75% | Coupon: | 7.00% |
| Distribution Rate: ⁽²⁾ | 12.22% | Yield to Maturity ⁽¹⁾ : | 6.84% | Yield to Maturity ⁽¹⁾ : | 7.17% | Yield to Maturity ⁽¹⁾ : | 6.29% |
| Payment: ⁽²⁾ | Monthly | Payment: | Monthly | Payment: | Monthly | Payment: | Quarterly |
| Maturity Date: | N/A | Maturity Date: | 6/30/22 (NC 3) | Maturity Date: | 10/30/26 (NC 5) | Maturity Date: | 12/31/20 (NC 2) |
| Market Value Held by Insiders: ⁽³⁾ | \$174.1M | Market Value Held by Insiders: ⁽³⁾ | \$503K | Market Value Held by Insiders: ⁽³⁾ | \$0 | Market Value Held by Insiders: ⁽³⁾ | \$58K |

(1) As of April 25, 2017. As of this date, ECCA, ECCB and ECCZ have \$45.45M, \$46M and \$60M of principal amount outstanding, respectively.

(2) Based on (i) a declaration on February 24, 2014 of four separate distributions of \$0.20 per share of common stock and (ii) announced intention to begin paying distributions on common stock on a monthly basis, rather than quarterly, and based on ECC's closing market price on April 25, 2017. To date, certain distributions have consisted of a return of capital as noted in the Company's Section 19 notices available on its website (www.eaglepointcreditcompany.com), and future distributions may similarly consist of a return of capital. **Not a guarantee of future distributions or yield.**

(3) Amount includes holdings of Eagle Point, its senior personnel and the Trident V Funds managed by Stone Point Capital LLC as of March 31, 2017 (based on market values as of April 25, 2017).

CLO EQUITY OVERVIEW

Senior Secured Loans are the Raw Materials of CLOs



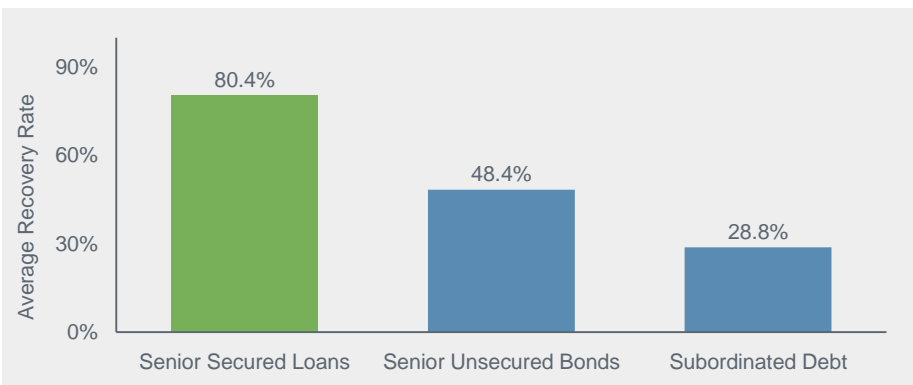
- Senior secured loans represent direct credit exposure
 - Senior: Senior position in a company’s capital structure
 - Secured: First lien security interest in a company’s assets
 - Floating Rate: Reduces interest rate risk associated with fixed rate bonds
 - Low LTV: Senior secured loans often have a loan-to-value ratio of approximately 40% - 60%

Representative Obligor Capital Structure

| Assets | Liabilities and Equity | % of Capital Structure |
|---|--|------------------------|
| <ul style="list-style-type: none"> ▪ Cash ▪ Receivables ▪ Inventory ▪ Property ▪ Plant ▪ Equipment ▪ Brands/Logos ▪ Intangibles ▪ Subsidiaries | Senior Secured Loans First priority pledge of assets | 40-60% |
| | Subordinated Bonds Generally unsecured | 10-20% |
| | Equity Dividends restricted while Senior Secured Loan is outstanding | 30-50% |

Reflects general market terms as of the date hereof; actual terms of any loan will vary.

Moody's Average Recovery Rate (1988–2011)



Source: Moody's Investor Service – Lessons from 1,000 Corporate Defaults.

SUMMARY FINANCIAL AND PORTFOLIO STATISTICS

Obligor and Industry Exposures



- As of March 31, 2017 ECC has exposure to 1,172 unique underlying borrowers across a range of industries

Obligor and Industry Exposure

Top 10 Underlying Obligors⁽¹⁾

| Obligor | % Total |
|--------------------------|-------------|
| Dell | 1.0% |
| Asurion | 0.9% |
| American Airlines | 0.7% |
| First Data | 0.7% |
| Bass Pro Group | 0.6% |
| TransDigm | 0.6% |
| Valeant Pharmaceuticals | 0.6% |
| Community Health Systems | 0.6% |
| WME/IMG Worldwide | 0.6% |
| Albertsons | 0.6% |
| Total | 6.9% |

Top 10 Industries of Underlying Obligors^{(1),(2)}

| Industry | % Total |
|----------------------------------|--------------|
| Health care | 9.0% |
| Business equipment & services | 7.6% |
| Electronics/electrical | 7.3% |
| Telecommunications | 4.9% |
| Leisure goods/activities/movies | 4.7% |
| Financial intermediaries | 4.3% |
| Retailers (except food and drug) | 4.0% |
| Chemicals & plastics | 3.8% |
| Utilities | 3.7% |
| Unclassified | 3.6% |
| Total | 52.8% |

- (1) 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 March 31, 2017 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 March 2017 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, March 2017 trustee reports and similar reports, other than market price, it does not reflect actual underlying portfolio characteristics as of March 31, 2017 and this data may not be representative of current or future holdings.
- (2) Industry categories are based on the S&P industry categorization of each obligor as set forth in CLO trustee reports relating to investments held by the Company or, if such information is not available in CLO trustee reports, the categories are based on equivalent categorizations as reported by a third party data provider. In addition, certain underlying borrowers 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 or in a particular industry may in current or future periods be reflected as multiple borrowers or in a different industry, as applicable.