PROSPECT CAPITAL CORP

Form 497

December 19, 2016

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement and the accompanying prospectus supplement and prospectus are not offers to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion

Preliminary Pricing Supplement dated

December 19, 2016

Prospect Capital Corporation

Prospect Capital InterNotes®

74348YUS8US74348YUS89\$

5.000% Notes due 2021 (the "Notes")

Filed under Rule 497, Registration Statement No. 333-213391

Preliminary Pricing Supplement No. 452 — Dated Monday, December 19, 2016

(To: Prospectus Dated November 3, 2016, and Prospectus Supplement Dated November 10, 2016)

CUSIP ISIN PrincipalSelling Gross Net CouponCouponCoupon Maturity 1st Coupon1st **Amount Price** Number Number Concession Proceeds Type Rate Frequency Date Date

Fixed 5.000% Semi-Annual 12/15/2021 6/15/2017 \$22

100.000% 1.250%

Redemption Information: Callable at 100.000% on 12/15/2017 and every coupon date thereafter.

Trade Date: Tuesday, December 27, 2016 @ 12:00 PM ET

Settle Date: Friday, December 30, 2016

Minimum Denomination/Increments: \$1,000.00/\$1,000.00 Initial trades settle flat and clear SDFS: DTC Book Entry only

The Notes will be issued pursuant to the Indenture, dated as of February 16, 2012, as amended and supplemented by that certain Four Hundred Fifty-Second Supplemental Indenture dated as of December 30, 2016.

The date from which interest shall accrue on the Notes is Friday, December 30, 2016. The "Interest Payment Dates" for the Notes shall be June 15 and December 15 of each year, commencing June 15, 2017; the interest payable on any Interest Payment Date, will be paid to the Person in whose name the Notes (or one or more predecessor Notes) is registered at the close of business on the Regular Record Date (as defined in the Indenture) for such interest, which shall be June 1 or December 1, as the case may be, next preceding such Interest Payment Date.

The Notes will be redeemable in whole or in part at any time or from time to time, at the option of Prospect Capital Corporation, on or after December 15, 2017 at a redemption price of \$1,000 per Note plus accrued and unpaid interest payments otherwise payable for the then-current semi-annual interest period accrued to, but excluding, the date fixed for redemption and upon not less than 30 days nor more that 60 days prior notice to the noteholder and the trustee, as described in the prospectus.

Prospect Capital Corporation is a financial services company that lends to and invests in middle market, privately-held companies. We are organized as an externally-managed, non-diversified closed-end management investment company that has elected to be treated as a business development company under the Investment Company Act of 1940. Prospect Capital Management L.P. manages our investments and Prospect Administration LLC provides the administrative services necessary for us to operate.

This preliminary pricing supplement relates only to the securities described in the accompanying prospectus supplement and prospectus, is only a summary of changes and should be read together with the accompanying prospectus supplement and prospectus, including among other things the section entitled "Risk Factors" beginning on page S-8 of such prospectus supplement and page 10 of such prospectus. This preliminary pricing supplement and the accompanying prospectus supplement and prospectus contain important information you should know before investing in our securities. Please read it before you invest and keep it for future reference. We file annual, quarterly and current reports, proxy statements and other information about us with the Securities and Exchange Commission, or the "SEC." This information is available free of charge by contacting us at 10 East 40Street, 42nd Floor, New York, NY 10016 or by telephone at (212) 448-0702. The SEC maintains a website at www.sec.gov where such information

is available without charge upon written or oral request. Our internet website address is www.prospectstreet.com. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and you should not consider information contained on our website to be part of this prospectus supplement or the accompanying prospectus.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this preliminary pricing supplement. Any representation to the contrary is a criminal offense. Obligations of Prospect Capital Corporation and any subsidiary of Prospect Capital Corporation are not guaranteed by the full faith and credit of the United States of America. Neither Prospect Capital Corporation nor any subsidiary of Prospect Capital Corporation is a government-sponsored enterprise or an instrumentality of the United States of America.

InterNotes® is a registered trademark of Incapital Holdings LLC.

Recent Developments:

On November 17, 2016, we received a partial repayment of \$9.2 million of our loans previously outstanding with National Property REIT Corp. ("NPRC"), and its wholly-owned subsidiaries and \$19.1 million as a return of capital on our equity investment in NPRC.

On November 30, 2016, we made a \$10.0 million follow-on second lien senior secured debt investment in CURO Group Holdings Corp. (f/k/a Speedy Cash Holdings Corp.).

During the period from November 29, 2016 through December 7, 2016, we collectively made a \$34.0 million second lien secured investment to fund a recapitalization of Digital Room LLC, an online printing and design company.

On December 8, 2016, we made a \$15.4 million second lien secured investment in National Home Healthcare Corp., a provider of home health and hospice care services, to support an acquisition.

On December 9, 2016, we made a \$42.0 million follow-on first lien senior secured debt investment in Atlantis Health Care Group (Puerto Rico), Inc. to support a recapitalization.

On December 9, 2016, we made a follow-on \$16.0 million first lien senior secured debt and \$2.8 million equity investment in Echelon Aviation LLC to support an asset acquisition.

On December 9, 2016, we made an investment of \$30.0 million to purchase 69.0% of the subordinated notes in CIFC 2016-I, Ltd. in a co-investment transaction with Priority Income Fund, Inc., a closed-end fund managed by an affiliate of Prospect Capital Management L.P.

On December 19, 2016, Empire Today, LLC repaid the \$50.4 million loan receivable to us.

During the period from November 25, 2016 through December 15, 2016, we issued \$7.5 million in aggregate principal amount of our Prospect Capital InterNotes® for net proceeds of \$7.4 million.

During the period from November 23, 2016 through December 19, 2016, we made three follow-on investments in NPRC totaling \$42.5 million to support the online consumer lending initiative. We invested \$8.4 million of equity through NPH Property Holdings, LLC ("NPH") and \$34.1 million of debt directly to NPRC and its wholly-owned subsidiaries. We also provided \$9.7 million of debt and \$3.4 million of equity financing to NPRC, which was utilized for the acquisition of JSIP Union Place, LLC, a 300 unit multi-family property located in Franklin, Massachusetts. In addition, we provided \$2.9 million of equity investment which was used to fund capital expenditures for existing properties.

Filed pursuant to Rule 497 File No. 333-213391

PROSPECTUS SUPPLEMENT

(To Prospectus dated November 3, 2016)

Prospect Capital Corporation

Prospect Capital InterNotes®

We may offer to sell our Prospect Capital InterNotes[®] from time to time. The specific terms of the notes will be set prior to the time of sale and described in a pricing supplement. You should read this prospectus supplement, the accompanying prospectus and the applicable pricing supplement carefully before you invest. We may offer other debt securities from time to time other than the notes under our Registration Statement or in private placements. We may offer the notes to or through agents for resale. The applicable pricing supplement will specify the purchase price, agent discounts and net proceeds of any particular offering of notes. The agents are not required to sell any specific amount of notes but will use their reasonable best efforts to sell the notes. We also may offer the notes directly. We have not set a date for termination of our offering.

The agents have advised us that from time to time they may purchase and sell notes in the secondary market, but they are not obligated to make a market in the notes and may suspend or completely stop that activity at any time. Unless otherwise specified in the applicable pricing supplement, we do not intend to list the notes on any stock exchange. Investing in the notes involves certain risks, including those described in the "Risk Factors" section beginning on page S-8 of this prospectus supplement and page 10 of the accompanying prospectus.

This prospectus supplement and the accompanying prospectus contain important information you should know before investing in our securities. Please read it before you invest and keep it for future reference. We file annual, quarterly and current reports, proxy statements and other information about us with the Securities and Exchange Commission, or the "SEC." This information is available free of charge by contacting us at 10 East 40Street, 42nd Floor, New York, NY 10016 or by telephone at (212) 448-0702. The SEC maintains a website at www.sec.gov where such information is available without charge upon written or oral request. Our internet website address is www.prospectstreet.com. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and you should not consider information contained on our website to be part of this prospectus supplement or the accompanying prospectus.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense. Obligations of Prospect Capital Corporation and any subsidiary of Prospect Capital Corporation are not guaranteed by the full faith and credit of the United States of America. Neither Prospect Capital Corporation nor any subsidiary of Prospect Capital Corporation is a government-sponsored enterprise or an instrumentality of the United States of America.

We may sell the notes to or through one or more agents or dealers, including the agents listed below.

Incapital LLC Citigroup RBC Capital Markets
Prospectus Supplement dated November 10, 2016.

®InterNotes is a registered trademark of Incapital Holdings LLC

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus may contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, or the "Exchange Act," which involve substantial risks and uncertainties. Forward-looking statements predict or describe our future operations, business plans, business and investment strategies and portfolio management and the performance of our investments and our investment management business. These forward-looking statements are not historical facts, but rather are based on current expectations, estimates and projections about our industry, our beliefs, and our assumptions. Words such as "intends," "intended," "goal," "estimate," "expects," "expects," "expected," "projected," "proje "seeks," "anticipates," "anticipated," "should," "could," "may," "will," "designed to," "foreseeable future," "believe," "believe," "scheduled" and variations of these words and similar expressions are intended to identify forward-looking statements. Our actual results or outcomes may differ materially from those anticipated. Readers are cautioned not to place undue reliance on these forward looking statements, which speak only as of the date the statement was made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. These statements are not guarantees of future performance and are subject to risks, uncertainties, and other factors, some of which are beyond our control and difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements, including without limitation:

our future operating results,

our business prospects and the prospects of our portfolio companies,

the impact of investments that we expect to make,

our contractual arrangements and relationships with third parties,

the dependence of our future success on the general economy and its impact on the industries in which we invest, the ability of our portfolio companies to achieve their objectives,

difficulty in obtaining financing or raising capital, especially in the current credit and equity environment, the level and volatility of prevailing interest rates and credit spreads, magnified by the current turmoil in the credit markets,

adverse developments in the availability of desirable loan and investment opportunities whether they are due to competition, regulation or otherwise,

a compression of the yield on our investments and the cost of our liabilities, as well as the level of leverage available

our regulatory structure and tax treatment, including our ability to operate as a business development company and a regulated investment company,

the adequacy of our cash resources and working capital,

the timing of cash flows, if any, from the operations of our portfolio companies,

the ability of our investment adviser to locate suitable investments for us and to monitor and administer our investments,

authoritative generally accepted accounting principles or policy changes from such standard-setting bodies as the Financial Accounting Standards Board, the SEC, Internal Revenue Service, the NASDAQ Global Select Market, and other authorities that we are subject to, as well as their counterparts in any foreign jurisdictions where we might do business, and

the risks, uncertainties and other factors we identify in "Risk Factors" and elsewhere in this prospectus supplement and the accompanying prospectus and in our filings with the SEC.

Although we believe that the assumptions on which these forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate, and as a result, the forward-looking statements based on those assumptions also could be inaccurate. Important assumptions include our ability to originate new loans and investments, ability to obtain certain margins and levels of profitability and the availability of additional capital. In light of these and other uncertainties, the inclusion of a projection or forward-looking statement in this prospectus supplement and the accompanying prospectus, respectively, should not be regarded as a representation by us that our plans and objectives will be achieved. These risks and uncertainties include those described or identified in "Risk Factors" and elsewhere in this prospectus supplement and the accompanying prospectus, respectively. You should not

place undue reliance on these forward-looking statements, which apply

i

only as of the date of this prospectus supplement or the accompanying prospectus, as applicable. These forward-looking statements do not meet the safe harbor for forward-looking statements pursuant to Section 27A of the Securities Act of 1933, as amended, or the "Securities Act."

You should rely only on the information contained in this prospectus supplement, including any pricing supplement included hereto, and the accompanying prospectus. We have not, and the agent(s) or dealer(s) has not, authorized any other person to provide you with information that is different from that contained in this prospectus supplement, including any pricing supplement included hereto, or the accompanying prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the agents are not, making an offer of these securities in any jurisdiction where the offer is not permitted. You should assume that the information appearing in this prospectus supplement, including any pricing supplement included hereto, and the accompanying prospectus is accurate only as of their respective dates and we assume no obligation to update any such information. Our business, financial condition and results of operations may have changed since those dates. Although we undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise, you are advised to consult any additional disclosures that we may make directly to you or through reports that we have filed with the SEC, including annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K.

This prospectus supplement, including any pricing supplement included hereto, supersedes the accompanying prospectus to the extent it contains information that is different from or in addition to the information in that prospectus.

ii

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT	
Prospectus Summary	<u>S-1</u>
Selected Condensed Financial Data	<u>S-6</u>
Risk Factors	<u>S-8</u>
<u>Description of Notes</u>	<u>S-12</u>
Management's Discussion and Analysis of Financial	<u>S-21</u>
Condition and Results of Operations	<u>3-21</u>
Quantitative and Qualitative Disclosures About	<u>S-52</u>
Market Risk	<u>3-32</u>
Registration and Settlement	<u>S-53</u>
Supplement to Material U.S. Federal Income Tax	<u>S-56</u>
<u>Considerations</u>	<u>3-30</u>
Certain Considerations Applicable to ERISA.	C 61
Governmental and Other Plan Investors	<u>S-61</u>
<u>Use of Proceeds</u>	<u>S-62</u>
Senior Securities	<u>S-63</u>
Ratio of Earnings to Fixed Charges	<u>S-66</u>
<u>Plan of Distribution</u>	<u>S-67</u>
Dividend Reinvestment and Direct Stock Purchase	c 60
<u>Plan</u>	<u>S-69</u>
<u>Legal Matters</u>	<u>S-72</u>
Independent Accounting Firms	<u>S-72</u>
Available Information	<u>S-72</u>
Index to Financial Statements	<u>F-1</u>
PROSPECTUS	
About This Prospectus	<u>1</u>
Prospectus Summary	<u>2</u>
Selected Condensed Financial Data	9
Risk Factors	<u>10</u>
Management's Discussion and Analysis of Financial	<u>42</u>
Condition and Results of Operations	
Quantitative and Qualitative Disclosures about Marke	<u>t</u> 77
<u>Risk</u>	<u>//</u>
Report of Management on Internal Control Over	70
Financial Reporting	<u>78</u>
<u>Use of Proceeds</u>	<u>78</u>
Forward-Looking Statements	<u>79</u>
<u>Distributions</u>	<u>80</u>
Senior Securities	<u>82</u>
Price Range of Common Stock	<u>84</u>
Business	<u>85</u>
Certain Relationships and Transactions	<u>109</u>
Control Persons and Principal Stockholders	<u>109</u>
Portfolio Companies	<u>110</u>
Determination of Net Asset Value	119
Sales of Common Stock Below Net Asset Value	120
Dividend Reinvestment and Direct Stock Purchase	125
Plan	<u>125</u>

Material U.S. Federal Income Tax Considerations	<u>128</u>
Description of Our Capital Stock	<u>134</u>
Description of Our Preferred Stock	<u>140</u>
<u>Description of Our Debt Securities</u>	<u>141</u>
<u>Description of Our Subscription Rights</u>	<u>151</u>

iii

Description of Our Warrants	<u>152</u>
Description of Our Units	<u>153</u>
Regulation	<u>154</u>
Custodian, Transfer and Dividend Paying Agent and Registrar	<u>159</u>
Brokerage Allocation and Other Practices	<u>160</u>
<u>Plan of Distribution</u>	<u>161</u>
<u>Legal Matters</u>	<u>163</u>
Independent Accounting Firms	<u>163</u>
Available Information	<u>163</u>
Index to Financial Statements	<u>F-1</u>

iv

PROSPECTUS SUMMARY

This section summarizes the legal and financial terms of the notes that are described in more detail in "Description of Notes" beginning on page S-16. Final terms of any particular notes will be determined at the time of sale and will be contained in the pricing supplement, which will be included with this prospectus supplement, relating to those notes. The terms in that pricing supplement may vary from and supersede the terms contained in this summary and in "Description of Notes." In addition, you should read the more detailed information appearing elsewhere in this prospectus supplement, the accompanying prospectus and in that pricing supplement.

The terms "we," "us," "our" and "Company" refer to Prospect Capital Corporation; "Prospect Capital Management," "Investm Adviser" and "PCM" refer to Prospect Capital Management L.P., formerly Prospect Capital Management LLC; and "Prospect Administration" and the "Administrator" refer to Prospect Administration LLC.

The Company

Prospect Capital Corporation is a financial services company that primarily lends to and invests in middle market privately-held companies. We are a closed-end investment company incorporated in Maryland. We have elected to be regulated as a business development company ("BDC") under the Investment Company Act of 1940 (the "1940 Act"). As a BDC, we have elected to be treated as a regulated investment company ("RIC") under Subchapter M of the Internal Revenue Code of 1986 (the "Code"). We were organized on April 13, 2004 and were funded in an initial public offering completed on July 27, 2004. We are one of the largest BDCs with approximately \$6.3 billion of total assets as of September 30, 2016.

We are externally managed by our investment adviser, Prospect Capital Management. Prospect Administration provides administrative services and facilities necessary for us to operate.

On May 15, 2007, we formed a wholly-owned subsidiary Prospect Capital Funding LLC ("PCF"), a Delaware limited liability company and a bankruptcy remote special purpose entity, which holds certain of our portfolio loan investments that are used as collateral for the revolving credit facility at PCF. Our wholly-owned subsidiary Prospect Small Business Lending, LLC ("PSBL") was formed on January 27, 2014 and purchases small business whole loans on a recurring basis from online small business loan originators, including On Deck Capital, Inc. ("OnDeck"). On September 30, 2014, we formed a wholly-owned subsidiary Prospect Yield Corporation, LLC ("PYC") and effective October 23, 2014, PYC holds our investments in collateralized loan obligations ("CLOs"). Each of these subsidiaries have been consolidated since operations commenced.

We currently have nine origination strategies in which we make investments: (1) lending in private equity sponsored transactions, (2) lending directly to companies not owned by private equity firms, (3) control investments in corporate operating companies, (4) control investments in financial companies, (5) investments in structured credit, (6) real estate investments, (7) investments in syndicated debt, (8) aircraft leasing and (9) online lending. We continue to evaluate other origination strategies in the ordinary course of business with no specific top-down allocation to any single origination strategy.

Lending in Private Equity Sponsored Transactions – We make loans to companies which are controlled by leading private equity firms. This debt can take the form of first lien, second lien, unitranche or unsecured loans. In making these investments, we look for a diversified customer base, recurring demand for the product or service, barriers to entry, strong historical cash flow and experienced management teams. These loans typically have significant equity subordinate to our loan position. Historically, this strategy has comprised approximately 50%-60% of our business, but more recently it is less than 50% of our business.

Lending Directly to Companies – We provide debt financing to companies owned by non-private equity firms, the company founder, a management team or a family. Here, in addition to the strengths we look for in a sponsored transaction, we also look for the alignment with the management team with significant invested capital. This strategy often has less competition than the private equity sponsor strategy because such company financing needs are not easily addressed by banks and often require more diligence preparation. Direct lending can result in higher returns and lower leverage than sponsor transactions and may include warrants or equity to us. Historically, this strategy has comprised approximately 5%-15% of our business, but more recently it is less than 5% of our business. Control Investments in Corporate Operating Companies – This strategy involves acquiring controlling stakes in

control Investments in Corporate Operating Companies – This strategy involves acquiring controlling stakes in non-financial operating companies. Our investments in these companies are generally structured as a combination of yield-producing debt and equity. We provide enhanced certainty of closure to our counterparties, give the seller

personal liquidity and generally look for management to continue on in their current roles. This strategy has comprised approximately 10%-15% of our business.

Control Investments in Financial Companies – This strategy involves acquiring controlling stakes in financial companies, including consumer direct lending, sub-prime auto lending and other strategies. Our investments in these companies are generally structured as a combination of yield-producing debt and equity. These investments are often structured in a tax-efficient RIC-compliant partnership, enhancing returns. This strategy has comprised approximately 5%-15% of our business.

S-1

Investments in Structured Credit – We make investments in CLOs, generally taking a significant position in the subordinated interests (equity) of the CLOs. The CLOs include a diversified portfolio of broadly syndicated loans and do not have direct exposure to real estate, mortgages, debt or consumer based debt. The CLOs in which we invest are managed by top-tier collateral managers that have been thoroughly diligenced prior to investment. This strategy has comprised approximately 10%-20% of our business.

Real Estate Investments – We make investments in real estate through our wholly-owned tax-efficient real estate investment trust ("REIT") National Property REIT Corp. ("NPRC"), the surviving entity of the May 23, 2016 merger with American Property REIT Corp. and United Property REIT Corp. Our real estate investments are in various classes of fully developed and occupied real estate properties that generate current yields. We seek to identify properties that have historically high occupancy and steady cash flow generation. NPRC co-invests with established and experienced property managers that manage such properties after acquisition. This investment strategy has comprised approximately 5%-10% of our business.

Investments in Syndicated Debt – On an opportunistic basis, we make investments in loans and high yield bonds that have been sold to a syndicate of buyers. Here we look for investments with attractive risk-adjusted returns after we have completed a fundamental credit analysis. These investments are purchased with a long term, buy-and-hold outlook and we look to provide significant structuring input by providing anchoring orders. This strategy has comprised approximately 5%-10% of our business.

Aircraft Leasing – We invest in debt as well as equity in aircraft assets subject to commercial leases to credit-worthy airlines across the globe. These investments present attractive return opportunities due to cash flow consistency from long-lived assets coupled with hard asset collateral. We seek to deliver risk-adjusted returns with strong downside protection by analyzing relative value characteristics across the spectrum of aircraft types of all vintages. Our target portfolio includes both in-production and out-of-production jet and turboprop aircraft and engines, operated by airlines across the globe. This strategy comprised approximately 1% of our business.

Online Lending – We make investments in loans originated by certain consumer loan and small and medium sized business ("SME") loan facilitators. We purchase each loan in its entirety (i.e., a "whole loan"). The borrowers are consumers and SMEs. The loans are typically serviced by the facilitators of the loans. This investment strategy has comprised approximately 4%-8% of our business.

We invest primarily in first and second lien secured loans and unsecured debt, which in some cases includes an equity component. First and second lien secured loans generally are senior debt instruments that rank ahead of unsecured debt of a given portfolio company. These loans also have the benefit of security interests on the assets of the portfolio company, which may rank ahead of or be junior to other security interests. Our investments in CLOs are subordinated to senior loans and are generally unsecured. We invest in debt and equity positions of CLOs which are a form of securitization in which the cash flows of a portfolio of loans are pooled and passed on to different classes of owners in various tranches. Our CLO investments are derived from portfolios of corporate debt securities which are generally risk rated from BB to B.

We hold many of our control investments in a two-tier structure consisting of a holding company and one or more related operating companies for tax purposes. These holding companies serve various business purposes including concentration of management teams, optimization of third party borrowing costs, improvement of supplier, customer, and insurance terms, and enhancement of co-investments by the management teams. In these cases, our investment, which is generally equity in the holding company, the holding company's equity investment in the operating company and any debt from us directly to the operating company structure represents our total exposure for the investment. As of September 30, 2016, as shown in our Consolidated Schedule of Investments, the cost basis and fair value of our investments in controlled companies were each \$1.9 billion. This structure gives rise to several of the risks described in our public documents and highlighted elsewhere in this prospectus supplement. We consolidate all wholly-owned and substantially wholly-owned holding companies formed by us for the purpose of holding our controlled investments in operating companies. There is no significant effect of consolidating these holding companies as they hold minimal assets other than their investments in the controlled operating companies. Investment company accounting prohibits the consolidation of any operating companies.

As of September 30, 2016, we had investments in 123 portfolio companies. The aggregate fair value as of September 30, 2016 of investments in these portfolio companies held on that date is approximately \$6.1 billion. Our portfolio

across all our performing interest-bearing investments had an annualized current yield of 12.8% as of September 30, 2016.

Recent Developments

Investment Transactions

On October 4, 2016, we made a \$40.0 million second lien senior secured investment to support the recapitalization of Coinstar, LLC, an automated network of self-service coin counting machines.

On October 5, 2016, Focus Brands, Inc. repaid the \$18.0 million loan receivable to us.

S-2

On October 7, 2016, we made an \$11.5 million second lien senior secured debt investment in Dunn Paper Holdings, Inc, a leading specialty packaging supplier, in support of an acquisition of the company.

On October 14, 2016, Trinity Services Group, Inc. repaid the \$134.6 million loan receivable to us.

On October 14, 2016, Security Alarm Financing Enterprise, L.P. repaid the \$25.0 million loan receivable to us.

On October 14, 2016, Harbortouch repaid the \$27.7 million loan receivable to us.

On October 14, 2016, we provided \$22.5 million of second lien senior secured debt to support the refinancing of Vivid Seats LLC, a secondary marketplace for entertainment tickets.

On October 14, 2016, we received a partial repayment of \$60.8 million for the NPRC and its wholly-owned subsidiaries' loan previously outstanding and \$2.2 million as a return of capital on the equity investment in NPRC.

On October 20, 2016, we made a \$50.0 million second lien senior secured debt investment in Rocket Software, Inc. to support an acquisition and dividend recapitalization.

On October 31, 2016, System One Holdings, LLC repaid the \$104.6 million loan receivable to us.

On November 1, 2016, we made a \$13.0 million second lien secured investment to support an acquisition of K&N Parent, Inc., a leader in aftermarket automotive performance filtration products.

Debt and Equity

On November 3, 2016, our Registration Statement on Form N-2 was declared effective by the SEC. Under this Shelf Registration Statement, we can issue up to \$5.0 billion of additional debt and equity securities in the public market.

During the period from October 1, 2016 through November 10, 2016 we issued \$16.2 million aggregate principal amount of Prospect Capital InterNotes® for net proceeds of \$16.0 million.

Dividends

On November 8, 2016, we announced the declaration of monthly dividends in the following amounts and with the following dates:

\$0.08333 per share for November 2016 to holders of record on November 30, 2016 with a payment date of December 22, 2016;

\$0.08333 per share for December 2016 to holders of record on December 30, 2016 with a payment date of January 19, 2017; and

\$0.08333 per share for January 2017 to holders of record on January 31, 2017 with a payment date of February 16, 2017.

S-3

The Offering

Issuer Prospect Capital Corporation

Purchasing

Agent

Incapital LLC

Agents

Citigroup Global Markets Inc. and RBC Capital Markets, LLC. From time to time, we may sell the notes to or through additional agents.

Title of Notes

Prospect Capital InterNotes®

Amount

We may issue notes from time to time in various offerings up to \$1.5 billion, the aggregate principal amount authorized by our board of directors for notes. As of November 10, 2016, \$1.1 billion aggregate principal amount of notes has been issued. We have, from time to time, repurchased certain notes and, therefore, as of November 10, 2016, \$954.6 million aggregate principal amount of notes were outstanding. There are no limitations on our ability to issue additional indebtedness in the form of Prospect Capital InterNotes® or otherwise other than under the 1940 Act and the asset coverage requirement under our credit facility.

Denominations

The notes will be issued and sold in denominations of \$1,000 and multiples of \$1,000 (unless otherwise stated in the pricing supplement).

Status

The notes will be our direct unsecured senior obligations and will rank equally in right of payment with all of our other unsecured senior indebtedness from time to time outstanding.

Maturities

Each note will mature 12 months or more from its date of original issuance.

Interest

Notes may be issued with a fixed or floating interest rate; a floating interest rate note will be based on the London Interbank Offered Rate ("LIBOR").

Interest on each fixed or floating interest rate note will be payable either monthly, quarterly, semi-annually or annually on each interest payment date and on the stated maturity date. Interest also will be paid on the date of redemption or repayment if a note is redeemed or repaid prior to its stated maturity in accordance with its terms.

Interest on the notes will be computed on the basis of a 360-day year of twelve 30-day months, often referred to as the 30/360 (ISDA) day count convention.

Principal

The principal amount of each note will be payable on its stated maturity date at the corporate trust office of the paying agent or at any other place we may designate.

Redemption and Repayment

Unless otherwise stated in the applicable pricing supplement, a note will not be redeemable at our option or be repayable at the option of the holder prior to its stated maturity date. The notes will not be subject to any sinking fund.

Survivor's Option

Specific notes may contain a provision permitting the optional repayment of those notes prior to stated maturity, if requested by the authorized representative of the beneficial owner of those notes, following the death of the beneficial owner of the notes, so long as the notes were owned by the beneficial owner or his or her estate at least six months prior to the request. This feature is referred to as a "Survivor's Option." Your notes will not be repaid in this manner unless the pricing supplement for your notes provides for the Survivor's Option. If the pricing supplement for your notes provides for the Survivor's Option, your right to exercise the Survivor's Option will be subject to limits set by us on (1) the permitted dollar amount of total exercises by all holders of notes in any calendar year, and

(2) the permitted dollar amount of an individual exercise by a holder of a note in any calendar year. Additional details on the Survivor's Option are described in the section entitled "Description of Notes—Survivor's Option."