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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 10-K**

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**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended **December 31, 2018**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: **814-00235**

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**Rand Capital Corporation**

(Exact name of registrant as specified in its charter)

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New York  
(State or Other Jurisdiction of  
Incorporation or organization)

16-0961359  
(IRS Employer  
Identification No.)

2200 Rand Building, Buffalo, NY  
(Address of Principal executive offices)

14203  
(Zip Code)

Registrant's telephone number, including area code: (716) 853-0802

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Name of Exchange on Which Registered</u>
Common Stock, \$0.10 par value	Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of the Act: None

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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 under the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicated by check mark if the registrant has elected not to use extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the registrant’s outstanding common stock held by non-affiliates of the registrant as of June 30, 2018 was approximately \$15,361,100 based upon the closing price as reported on the Nasdaq Capital Market on such date.

As of March 1, 2019, there were 6,321,988 shares of the registrant’s common stock outstanding.

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**Table of Contents**

**RAND CAPITAL CORPORATION  
TABLE OF CONTENTS FOR FORM 10-K**

**PART I**

Item 1.	<a href="#">Business</a>	1
Item 1A.	<a href="#">Risk Factors</a>	7
Item 1B.	<a href="#">Unresolved Staff Comments</a>	12
Item 2.	<a href="#">Properties</a>	12
Item 3.	<a href="#">Legal Proceedings</a>	13
Item 4.	<a href="#">Mine Safety Disclosures</a>	13

**PART II**

Item 5.	<a href="#">Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</a>	14
Item 6.	<a href="#">Selected Financial Data</a>	16
Item 7.	<a href="#">Management’s Discussion and Analysis of Financial Condition and Results of Operations</a>	17
Item 7A.	<a href="#">Quantitative and Qualitative Disclosures about Market Risk</a>	33
Item 8.	<a href="#">Financial Statements and Supplementary Data</a>	34
Item 9.	<a href="#">Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</a>	77
Item 9A.	<a href="#">Controls and Procedures</a>	77
Item 9B.	<a href="#">Other Information</a>	77

**PART III**

Item 10.	<a href="#">Directors, Executive Officers and Corporate Governance</a>	78
Item 11.	<a href="#">Executive Compensation</a>	83
Item 12.	<a href="#">Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</a>	93
Item 13.	<a href="#">Certain Relationships and Related Transactions, and Director Independence</a>	94
Item 14.	<a href="#">Principal Accountant Fees and Services</a>	95

**PART IV**

Item 15.	<a href="#">Exhibits and Financial Statement Schedules</a>	97
Item 16.	<a href="#">Form 10-K Summary</a>	99

**PART I**

**Item 1. Business**

**Overview of Our Business**

Rand Capital Corporation (“Rand”, “we”, “us” and “our”) was incorporated under the laws of New York in February 1969. Throughout our history, our principal business has been to make venture capital investments in early or expansion stage companies, often in upstate New York and regions in close proximity. In accordance with our strategic growth plan, we look for companies with strong leadership that are bringing to market new or unique products, technologies or services and have a high potential for growth. We invest in a mixture of debt and equity instruments. The debt securities typically have an equity component in the form of warrants or options to acquire stock or the right to convert the debt securities into stock. We established our small business investment company (“SBIC”) in 2002, Rand Capital SBIC, Inc. (“Rand SBIC”), whereby we utilized funds borrowed from the Small Business Administration (“SBA”) combined with our capital to invest in our portfolio companies.

**Recent Developments**

As previously announced, on January 24, 2019, Rand entered into a Stock Purchase Agreement (the “Stock Purchase Agreement”) by and among Rand, East Asset Management, LLC (“East”), and, solely for purposes of being bound by Sections 7.10 and 10.9(a) and (b) thereof, Rand Capital Management LLC (“RCM”). Pursuant to the terms of the Stock Purchase Agreement, at the closing of the transaction (the “Closing”), East will purchase 8,333,333.33 shares (the “Shares”) of Rand’s common stock, par value \$0.10 per share, at a purchase price of \$3.00 per Share for an aggregate purchase price of \$25,000,000 (the “Stock Purchase”), which consideration is to be paid to Rand partially in cash and partially through the contribution of existing loans and other securities (the “Contributed Assets”). As a condition to Closing, Rand will enter into a Shareholder Agreement with East (the “Shareholder Agreement”), which provides East with the right to designate two or three persons, depending upon the size of Rand’s board of directors (the “Board”), for nomination for election to the Board.

The Stock Purchase Agreement also contemplates that, at the Closing, Rand will enter into an investment advisory and management agreement (the “Advisory Agreement”) with RCM pursuant to which RCM will serve as Rand’s external investment adviser. Pursuant to the terms of the Advisory Agreement, Rand will pay RCM a base management fee and an incentive fee. At the Closing, Rand will also enter into an administration agreement (the “Administration Agreement”) with RCM pursuant to which RCM will serve as Rand’s administrator.

The transactions contemplated by the Stock Purchase Agreement including the entry into the Advisory Agreement with RCM (which we refer to as the “Transactions”) are subject to shareholder approval. Rand has agreed to hold a special meeting of shareholders for purposes of obtaining these approvals.

Additional information regarding the Stock Purchase Agreement and the Transactions is available in Rand’s Current Reports on Form 8-K filed with the Securities and Exchange Commission on January 25, 2019. Rand is in the process of preparing and intends to file in the near future a proxy statement with the Securities and Exchange Commission for purposes of seeking to obtain shareholder approval of the Transactions.

In the event the Transactions are completed, Rand intends to accelerate its shift to an investment strategy focused on higher yielding debt investments, to elect tax treatment as a regulated investment company (“RIC”), and in connection with such RIC election to pay a special dividend to shareholders, and to adopt a new dividend policy that may include regular cash dividends to shareholders.

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## Table of Contents

### ***Our Investment Objectives and Strategy***

Our principal investment objective is to achieve long-term capital appreciation on our equity investments while maintaining a current cash flow from our debenture and pass-through equity instruments to fund expenses. Therefore, we invest in a variety of financial instruments to provide a current return on a portion of the investment portfolio. The equity features contained in our investment portfolio are structured to realize capital appreciation over the long-term and typically do not generate current income in the form of dividends or interest.

Our investment strategy is to partner with other investors to invest in small companies that either have a new product, service or technology they are trying to commercialize or are working to accelerate their rate of growth. We define small companies as businesses that may not yet be generating revenue up to companies with \$20 million in revenue.

We have historically made an initial investment of \$500,000 to \$1,000,000 directly in a company through equity or in debt or loan instruments and frequently provide follow-on investments during our investment tenure. The loan and debt instruments we acquire generally have a maturity of not more than five years and usually are convertible or have detachable equity warrants. Interest is either paid currently or deferred. We fund new investments and operating expenses through existing cash balances, proceeds from investment exits, and interest and principal payments from our portfolio companies.

### ***Our Investment Process***

Our primary business is making debt and equity investments in small companies that meet some or all of the following criteria:

- 1) a qualified and experienced management team;
- 2) a new or unique product or service; and
- 3) high potential for growth in revenue and cash flow.

Our management team identifies investment opportunities through a network of investment referral relationships. Investment proposals may come to us from other sources, including unsolicited proposals from companies and referrals from accountants, bankers, lawyers and other members of the financial community. We believe that our reputation in the investment community and our experience provide a competitive advantage in originating quality investments.

In a typical private financing, our management team will review, analyze, and confirm, through due diligence, the business plan and operations of the potential portfolio company. Additionally, we familiarize ourselves with the portfolio company's industry and competition and may conduct reference checks with its customers and suppliers.

Following our initial investment, we may make follow-on investments in the portfolio company, if needed. Follow-on investments may be made to take advantage of warrants or other preferential rights granted to us to increase or maintain our position in a promising portfolio company, or provide additional funds to allow a portfolio company to fully implement its business plans, develop a new line of business or recover from unexpected business problems. Follow-on investments in a portfolio company are evaluated individually and may be subject to SBA restrictions.

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## [Table of Contents](#)

### *Disposition of Investments*

We may exit investments through the maturation of a debt security or when a liquidity event takes place, such as the sale, recapitalization, or initial public offering of a portfolio company. The method and timing of the disposition of our portfolio investments can be critical to the realization of maximum total return. We generally expect to dispose of our equity securities through private sales of securities to other investors or through the sale or merger of the portfolio company. We anticipate our debt investments will be repaid with interest and expect to realize further appreciation from the warrants or other equity type instruments received in connection with the investment.

### **Current Portfolio Companies**

For a description of our current portfolio company investments, see “Item 7. Management’s Discussion and Analysis of Financial Conditions and Results of Operations – Composition of the Investment Portfolio.”

### **Competition**

We compete for quality investments with other venture capital firms, individual investors, business development companies, and investment funds (including private equity funds and mezzanine funds), as well as traditional financial services companies such as commercial banks. We believe we are able to compete with these entities primarily on the basis of our referral network, our investing reputation and experience, our responsive, quick and efficient investment analysis and decision-making process, the investment terms we offer, and our willingness to make smaller investments.

For information concerning the competitive risks we face, see “Item 1A. Risk Factors.”

### **Employees**

As of December 31, 2018, we had four employees, unchanged from 2017.

### **Organization and History**

We completed our initial public offering in 1971 as an internally managed, closed-end, diversified, management investment company. We have elected to be treated as a business development company (“BDC”) under the Investment Company Act of 1940, as amended (the “1940 Act”). As a BDC we are required to comply with certain regulatory requirements as provided for in the 1940 Act and the rules and regulations promulgated thereunder. For instance, we generally have to invest at least 70% of our total assets in “qualifying assets” and provide managerial assistance to the portfolio companies in which we invest. See “Item 1. Business – Regulations, Business Development Company Regulations.”

We historically made the majority of our investments through Rand SBIC, an SBIC that has been licensed by the SBA since 2002. Rand SBIC’s predecessor was organized as a Delaware limited partnership and was converted into a New York corporation in 2008, at which time our operations as a licensed SBIC were continued. Although Rand SBIC had operated as if it were a BDC, it was registered as an investment company under the 1940 Act. In 2012, the Securities and Exchange Commission (“SEC”) granted an Order of Exemption for Rand with respect to the operations of Rand SBIC and Rand SBIC then filed an election to be regulated as a BDC under the 1940 Act. Rand SBIC’s board of directors is comprised of the directors of Rand, a majority of whom are not “interested persons” of Rand Capital or Rand SBIC.

During 2017 we established a second SBIC subsidiary, Rand Capital SBIC II, L.P. (“Rand SBIC II”), and began making investments through this SBIC subsidiary. During 2018, together with the SBA, we determined that the optimal structure was to revert back to investing in small businesses through our original SBIC, Rand SBIC, and the assets of Rand SBIC II were transferred to Rand SBIC.

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## Table of Contents

We operate as an internally managed investment company whereby our officers and employees conduct our business under the general supervision of our Board of Directors. We have not elected to qualify to be taxed as a regulated investment company (“RIC”) as defined under Subchapter M of the Internal Revenue Code.

In this Annual Report on Form 10-K, (“Annual Report”), unless the context otherwise requires, “we”, the “Corporation”, “us”, and “our” refer to Rand Corporation and Rand SBIC.

Our corporate office is located in Buffalo, NY and our website address is [www.randcapital.com](http://www.randcapital.com). We make available on our website, free of charge, our annual and periodic reports, proxy statements and other information as soon as reasonably practicable after such material is filed with the SEC. Our shares are traded on the Nasdaq Capital Market under the ticker symbol “RAND.”

### **Regulations**

The following discussion is a general summary of the material prohibitions and descriptions governing BDCs and SBA-licensed SBICs. It does not purport to be a complete description of all of the laws and regulations affecting BDCs and SBICs.

#### **Business Development Company Regulations**

We have elected to be regulated as a BDC under the 1940 Act. Although the 1940 Act exempts a BDC from registration under that Act, it contains significant limitations on the operations of BDCs. Among other things, the 1940 Act contains prohibitions and restrictions relating to transactions between a BDC and its affiliates, principal underwriters and affiliates of its affiliates or underwriters. The 1940 Act also prohibits a BDC from changing the nature of its business so as to cease to be, or to withdraw its election as, a BDC unless so authorized by a vote of the holders of a majority of its outstanding voting securities. BDCs are not required to maintain fundamental investment policies relating to diversification and concentration of investments within a single industry. More specifically, in order to qualify as a BDC, a company must:

- (1) be a domestic company;
- (2) have registered a class of its equity securities or have filed a registration statement with the SEC pursuant to Section 12 of the Securities Exchange Act of 1934 (the “Exchange Act”);
- (3) operate for the purpose of investing in the securities of certain types of companies, namely immature or emerging companies and businesses suffering or just recovering from financial distress. Generally, a BDC must be primarily engaged in the business of furnishing capital and providing managerial expertise to companies that do not have ready access to capital through conventional financial channels. Such companies are termed “eligible portfolio companies;”
- (4) extend significant managerial assistance to such portfolio companies; and
- (5) have a majority of “disinterested” directors (as defined in the 1940 Act).

#### ***Qualifying Assets***

Under the 1940 Act, a BDC may not acquire any asset other than assets of the type listed in Section 55(a) of the 1940 Act, which are referred to as qualifying assets, unless, at the time the acquisition is made, qualifying assets represent at least 70% of their total assets. The 1940 Act prohibits BDCs from investing in certain types of companies, such as brokerage firms, insurance companies, investment banking firms and investment companies.

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## Table of Contents

An eligible portfolio company is, generally, a private domestic operating company, or a public domestic operating company whose securities are not listed on a national securities exchange. In addition, any small business investment company that is licensed by the SBA and is a wholly owned subsidiary of a BDC is an eligible portfolio company.

Qualifying assets include:

- (1) securities of companies that were eligible portfolio companies at the time the BDC acquired their securities;
- (2) securities of bankrupt or insolvent companies that were eligible at the time of the BDC's initial acquisition of their securities but are no longer eligible, provided that the BDC has maintained a substantial portion of its initial investment in those companies;
- (3) securities received in exchange for or distributed on or with respect to any of the foregoing; and
- (4) cash items, government securities and high-quality short-term debt.

The 1940 Act also places restrictions on the nature of the transactions in which, and the persons from whom, securities can be purchased in order for the securities to be considered qualifying assets.

A BDC is permitted to invest in the securities of public companies and other investments that are not qualifying assets, but those kinds of investments may not exceed 30% of the BDC's total asset value at the time of the investment. At December 31, 2018, we were in compliance with this rule.

### ***Managerial Assistance to Portfolio Companies***

In order to count portfolio securities as qualifying assets for the purpose of the 70% test discussed above, a BDC must either control the issuer of the securities or must offer to make available significant managerial assistance; except that, where the BDC purchases the securities in conjunction with one or more other persons acting together, one of the other persons in the group may make available such managerial assistance. Making available significant managerial assistance means, among other things, any arrangement whereby the BDC, through its directors, officers or employees, offers to provide and, if accepted, does so provide, significant guidance and counsel concerning the management, operations or business objectives and policies of a portfolio company through monitoring of portfolio company operations, selective participation in board and management meetings, consulting with and advising a portfolio company's officers or other organizational or financial guidance.

### **Small Business Investment Company Regulations**

#### ***SBA Lending Restrictions***

SBICs are designed to stimulate the flow of private debt and/or equity capital to small businesses. The types and dollar amounts of the loans and other investments we may make are limited by the 1940 Act, the Small Business Act (the "SBA Act") and SBA regulations. Rand SBIC uses funds borrowed from the SBA that can be combined with our own capital to provide loans to, and make equity investments in, businesses that meet the following criteria:

(a) have a tangible net worth not in excess of \$19.5 million and average net income after U.S. federal income taxes for the preceding two completed fiscal years not in excess of \$6.5 million, or

(b) meet size standards set by the SBA that are measured by either annual receipts or number of employees, depending on the industry in which the businesses are primarily engaged.

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## Table of Contents

In addition, at the end of each fiscal year, an SBIC must have at least 20% (in total dollars) invested in “smaller enterprises.” The SBA defines “smaller enterprises” as businesses that:

- (a) do not have a net worth in excess of \$6 million and have average net income after U.S. federal income taxes for the preceding two years no greater than \$2 million, or
- (b) meet size standards set by the SBA that are measured by either annual receipts or number of employees, depending on the industry in which the concerns are primarily engaged.

We have complied with these requirements since the inception of Rand SBIC.

The SBA prohibits an SBIC from providing funds to small businesses with specific characteristics, such as businesses with the majority of their employees located outside the United States, or from investing in passive or non-operating businesses, real estate, project financing, farmland, or financial lenders. Without prior SBA approval, an SBIC may not invest an amount equal to more than approximately 30% of the SBIC’s regulatory capital in any one company and its affiliates.

The SBA places limitations on the financing terms of investments by SBICs in portfolio companies such as limiting the prepayment options, the financing fees that can be charged to a portfolio company, the allowable interest rate on loan and debt securities that an SBIC can charge a portfolio company, and the maximum term of such financing. An SBIC may exercise control over a small business for a period of up to seven years from the date on which the SBIC initially acquires its control position.

The SBA restricts the ability of an SBIC to lend money to any of its officers, directors and employees or to invest in associates. The SBA also prohibits, without prior SBA approval, a “change of control” of an SBIC or transfers that would result in any person, or a group of persons acting together, owning 10% or more of a class of capital stock of a licensed SBIC. A “change of control” is any event which would result in the transfer of the power, direct or indirect, to direct the management and policies of an SBIC, whether through ownership, contractual arrangements or otherwise.

Rand SBIC may invest directly in a portfolio company’s equity, but may not become a general partner of a non-incorporated entity or otherwise become jointly or severally liable for the general obligations of a non-incorporated entity. Rand SBIC may acquire options or warrants in portfolio companies, and the options or warrants may have redemption provisions, subject to certain restrictions. Pursuant to SBA regulations, the maximum cash which may be invested in any one portfolio company by Rand SBIC is currently \$4.8 million.

In addition the SBA regulations require an examination of a licensed SBIC by an SBA examiner to determine the SBIC’s compliance with the relevant SBA regulations. Our annual report, submitted to the SBA, must be audited by an independent public accounting firm.

### ***SBA Leverage***

The SBA raises capital to enable it to provide funds to SBICs by guaranteeing certificates or bonds that are pooled and sold to purchasers of the government guaranteed securities. The amount of funds that the SBA may lend to SBICs is determined by annual Congressional appropriations.

SBA debentures are issued with ten year maturities. Interest only is payable semi-annually until maturity. All of our outstanding SBA debentures may be prepaid without penalty. To reserve the approved SBA debenture leverage, we paid an upfront 1% commitment fee to the SBA as a partial prepayment of the SBA’s nonrefundable 3% leverage fee. These fees are expensed over the life of the corresponding SBA debenture

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## Table of Contents

instruments. The SBA, as a creditor, will have a superior claim to Rand SBIC's assets over our shareholders in the event we liquidate Rand SBIC or the SBA exercises its remedies under the SBA-guaranteed debentures issued by Rand SBIC upon an event of default.

At December 31, 2018, we had \$8,750,000 in outstanding SBA debenture instruments.

### **Item 1A. Risk Factors**

#### ***Risks related to our business and structure***

##### **Our financial results will depend on our skill to manage and deploy capital effectively**

Our ability to achieve long-term capital appreciation on our equity investments while maintaining a current cash flow from our debenture and pass-through equity instruments depends on our capability to effectively identify, invest and manage our capital.

Accomplishing this investment objective effectively will be based on our management team's handling of the investment process, starting with its ability to find investments that offer favorable terms and meet our investment objective. They will also have to monitor the portfolio company's performance and may be called upon to provide managerial assistance. These demands on their time may distract them or may slow the rate of investment.

Even if we are able to grow and build on our investment, any failure to manage our growth effectively could have a material adverse effect on our business, financial condition, results of operations and prospects. If we cannot successfully operate our business or implement our investment objective, it could negatively impact our stock price.

##### **We are subject to risks created by our regulated environment**

We are regulated by the SEC and the SBA. Changes in the laws or regulations that govern BDCs and SBICs could significantly affect our business. Regulations and laws may be changed periodically, and the interpretations of the relevant regulations and laws are also subject to change. Any change in the regulations and laws governing our business could have a material impact on our financial condition and our results of operations. Moreover, the laws and regulations that govern BDCs and SBICs may place conflicting demands on the manner in which we operate, and the resolution of those conflicts may restrict or otherwise adversely affect our operations.

##### **We are subject to risks created by borrowing funds from the SBA**

Our liabilities include debt instruments issued through the SBA which have fixed interest rates. Until and unless we are able to invest substantially all of the proceeds from debentures at annualized interest or other rates of return that substantially exceed annualized interest rates that Rand SBIC must pay the SBA, our operating results may be adversely affected which may, in turn, depress the market price of our common stock.

In addition, our outstanding \$8,750,000 in SBA debentures will reach maturity and become payable between 2022 and 2029. In order to repay our outstanding SBA debentures, we will need to identify sources of additional funding if the proceeds received upon the exits of our investments are insufficient to fund our operations and repay our SBA obligations. We cannot be assured that the proceeds to be received upon the exits from our investments will be sufficient to meet our funding needs or, if such proceeds are insufficient, that we will be able to obtain access to the necessary funding on terms that are acceptable to us.

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## [Table of Contents](#)

### **We are subject to risks created by the valuation of our portfolio investments**

At December 31, 2018, 100% of our investments are in private securities that are not publicly traded. There is typically no public market for securities of the small privately held companies in which we invest. Investments are valued in accordance with our established valuation policy and are stated at fair value as determined in good faith by management and approved by our Board of Directors. In the absence of a readily ascertainable market value, the estimated value of our investment portfolio may differ significantly, favorably or unfavorably, from the values that would be placed on the portfolio if a ready market for the securities existed. Any changes in estimated value are recorded in the consolidated statement of operations as “Net change in unrealized depreciation or appreciation on investments.”

### **We are dependent upon key management personnel for future success**

We are dependent on the skill, diligence, and the network of business contacts of our executive officers for the sourcing and selection, structuring, closing, monitoring and valuation of our investments. Our future success depends, to a significant extent, on the continued employment of these officers and their departure could materially adversely affect our ability to implement our business strategy. We do not maintain key man life insurance or employment agreements on the officers.

### **We operate in a competitive market for investment opportunities**

We operate in a competitive market for investment opportunities. We face competition in our investing activities from many entities including other SBICs, private venture capital funds, investment affiliates of large companies, wealthy individuals and other domestic or foreign investors. The competition is not limited to entities that operate in the same geographical area as we do. As a regulated BDC, we are required to disclose quarterly and annually the name and business description of our portfolio companies and the value of their portfolio securities. Most of our competitors are not subject to this disclosure requirement. This obligation to disclose this information could hinder our ability to invest in potential portfolio companies. Additionally, other regulations, current and future, may make us less attractive as a potential investor to a given portfolio company than a private venture capital fund.

### **We are subject to cyber security risks and incidents that may adversely affect the operations of our company or the companies in which we invest. A failure in our cyber security systems could impair our ability to conduct business and damage our business relationships, compromise or corrupt our confidential information and ultimately negatively impact business, financial condition and operating results.**

Our operations are dependent on secure information technology systems for data processing, storage and reporting. Increased cyber security vulnerabilities, threats and more sophisticated and targeted cyber-attacks pose a risk to the security of our information and the information of our portfolio companies. These cyber-attacks could affect our computer network, our website or our service providers (such as, but not limited to, accountants, lawyers, and transfer agents) and could result in operating disruptions or information misappropriation, which could have a material adverse effect on our business operations and the integrity and availability of our financial information. We have attempted to mitigate these cybersecurity risks by employing a number of processes, procedures and internal controls within our company but we remain potentially vulnerable to additional known and unknown threats.

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## [Table of Contents](#)

### **We may experience fluctuations in our quarterly results**

Our quarterly operating results may fluctuate significantly as a result of a number of factors. These factors include, among others, variations in and the timing of the recognition of realized and unrealized gains or losses, the degree to which portfolio companies encounter competition in their markets, their ability to raise additional capital, if needed, and general economic conditions. As a result of these factors, results for any quarter cannot be relied upon as being indicative of performance in future quarters or for a full year.

### ***Risks related to our investments***

#### **We have a limited number of companies in our portfolio of investments, and may be subjected to greater risk if any of these companies default**

Our portfolio investment values are concentrated in a small number of companies and as such, we may experience a significant loss in our net asset value if one or more of these companies performs poorly or goes out of business. The unrealized or realized depreciation in the value of the securities of any one of these companies would negatively impact our net asset value.

#### **The lack of liquidity in our investments may adversely affect our business**

We invest, and will continue to invest, in portfolio companies whose securities are not publicly traded and may be subject to restrictions on resale, and as a result will be less liquid than publicly traded securities. Most of our investments are or will be either equity securities or subordinated debt securities acquired directly from small, private companies. The illiquidity of most of our portfolio may adversely affect our ability to dispose of the securities at times when it may be advantageous for us to liquidate investments. In addition, we may not realize the full value of these private investments if we have to liquidate all or a part of our portfolio investment quickly, given the lack of available markets for their sale.

#### **Economic downturns or recessions may adversely affect our portfolio companies' financial performance and therefore harm our operating results**

The United States economy has periodically experienced periods of instability and recessions and the financial results of the small companies in which we invest could be more acutely affected negatively by this instability and suffer deterioration in operational or financial results. This deterioration may have a negative effect on our financial performance.

#### **Investing in private companies involves a high degree of risk**

We typically invest a substantial portion of our assets in small private companies. These private businesses may be thinly capitalized, unproven companies with risky technologies, products or services, may lack management depth, and may not have attained profitability. Because of the speculative nature and the lack of a public market for these investments, there is significantly greater risk of loss than is the case with securities traded on a public exchange. We expect that some of our investments will become worthless and that some will appear likely to become successful but will never realize their potential. We have been risk seeking rather than risk averse in our approach to our investments.

Even if our portfolio companies are able to develop commercially viable technologies, products or services, the market for those new technologies, products and services is likely to be highly competitive and rapidly changing. Commercial success is difficult to predict and the marketing efforts of the portfolio companies may not be successful.

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## [Table of Contents](#)

### **We generally do not control our portfolio companies**

We do not have an expectation to control the decision making in our portfolio companies, even though we may have a board seat or board observation rights. Because of this, we are subject to the risk that our portfolio companies will make business decisions with which we disagree or will incur risks or otherwise act in ways that do not maximize their value and serve our interests as minority debt and equity holders. Due to the lack of liquidity in our investments in these private companies, we may not be able to dispose of our investment in these portfolio companies as freely as we would like or at a valuation that is appropriate. As a result, a portfolio company may make decisions that would decrease the value of our portfolio holdings.

### **We typically are minority shareholders in our portfolio companies**

We typically invest as a minority shareholder in our portfolio companies. As a minority shareholder we are unable to require the company to seek or entertain liquidity events as a way to exit our investments. This may cause us to hold investments longer than planned or to seek a sale that may not reflect the full value of our investment.

### **We may not have the funds or ability to make follow-on investments in our portfolio companies**

We may not have the funds or ability to make additional investments in our portfolio companies. After our initial investment in a company, we may be asked to participate in another round of financing to the company. There is no assurance that we will make, or have sufficient funds to make, these follow-on investments. Any decision to not make an additional investment in a portfolio company may have a negative impact on the portfolio company in need of the capital, and have a negative impact on our ownership in the company.

### ***Risks related to our common stock***

#### **Investing in our shares may be inappropriate for an investor's risk tolerance**

Our venture capital investments, in accordance with our investment objective and principal strategies, result in a greater than average amount of risk and volatility and may result in loss of principal. Our investments in portfolio companies are highly speculative and aggressive and, therefore, an investment in our shares may not be suitable for investors for whom such risk is inappropriate. Neither our investments nor an investment in our shares constitutes a balanced investment program.

#### **Sales of substantial amounts of our common stock may have an adverse effect on the market price of our securities.**

Sales of substantial amounts of our common stock, or the availability of such securities for sale, could adversely affect the prevailing market prices for our common stock.

#### **Our shares often trade at a discount to our net asset value**

Shares of business development companies may trade at a market price that is less than the net asset value that is attributable to those shares and our shares have often traded at such a discount. This characteristic of closed-end investment companies is separate and distinct from the risk that our net asset value per share may decline. It is not possible to predict if, or when, our shares will trade at, above, or below net asset value.

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## [Table of Contents](#)

### ***Risks related to the transactions contemplated by the Stock Purchase Agreement***

#### **The failure to complete the Transactions may result in a decrease in the market value of our shares.**

After the Transactions were announced on January 24, 2019, the market price for our shares of common stock rose significantly. The Transactions are subject to a number of contingencies, including approval by our shareholders and the other closing conditions set forth in the Stock Purchase Agreement. As a result, there is a risk that the Transactions will not be completed. If the Transactions are not completed for any reason or are delayed for a significant period of time, the market price of our shares may decline, including to a price per share that is below the price per share on the date that the Transactions were announced.

#### **If the Transactions are not consummated, there may not be any other offers from potential acquirers or parties interested in a potential strategic transaction.**

If the Transactions are not consummated, we may seek another strategic transaction. Although we have had prior discussions with other parties regarding a strategic transaction, these parties may no longer have an interest in a strategic transaction with Rand, or be willing to offer acceptable terms in a transaction.

#### **If we do not complete the Transactions, we may continue to face challenges and uncertainties in our ability to achieve business success.**

Historically, Rand has focused on a total return strategy that involved seeking long-term capital appreciation on its equity investments, while maintaining a current cash flow from debt investments and pass-through equity instruments to fund expenses. Rand has observed that this total return strategy has become disfavored among investors resulting in an increasingly larger spread between the share price for the Common Stock and our Net Asset Value (NAV) per share. If the Transactions are not completed, we will not engage an external investment adviser to manage our investment strategy and will remain, for the time being, an internally managed BDC that is likely to continue the same legacy total return strategy. Therefore, if we are unable to complete the Transactions, we may continue to operate our business in a manner that is substantially similar to the manner in which it is currently operated, and would continue to face the same business challenges and uncertainties associated with our current business strategy.

#### **Under certain circumstances, a termination fee may be payable by Rand upon termination of the Stock Purchase Agreement.**

The Stock Purchase Agreement provides for the payment by Rand of a termination fee of up to \$750,000 if the Stock Purchase Agreement is terminated under certain circumstances. Given our financial condition and amount of cash and cash equivalents on hand, payment of the termination fee in an amount up to \$750,000 would likely have a material adverse effect on our financial condition and on our ability to make any significant new investments or follow-on investments in the near future.

#### **The Stock Purchase Agreement contains restrictions limiting our ability to pursue alternatives to the Transactions.**

The Stock Purchase Agreement contains provisions that limit our ability to actively solicit, discuss or negotiate competing third-party proposals for strategic transactions. These provisions, which are typical for transactions of this type, and include the termination fee payable under certain circumstances, might discourage a competing acquirer that might have an interest in acquiring all or a significant part of Rand from considering or proposing a transaction even if it were prepared to pay consideration with a higher price than that to be paid by East in the Stock Purchase Agreement or might result in a potential competing acquirer proposing to pay a lower price to acquire Rand than it might otherwise have proposed to pay without Rand's requirement to pay the termination fee in order to terminate the Stock Purchase Agreement to accept a superior proposal.

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## [Table of Contents](#)

### **The failure of satisfy the closing conditions under the Stock Purchase Agreement, including receipt of shareholder approvals, will result in the Transactions not being completed.**

The Transactions are subject to closing conditions, including certain approvals of shareholders and approval of the SBA, which, if not satisfied, will prevent the Transactions from being completed. The closing condition requiring shareholder approvals may not be waived under applicable law and must be satisfied for the Transactions to be completed. In addition to the required approvals from the shareholders, the Transactions are subject to a number of other conditions, some of which are beyond our direct control. We cannot predict when the conditions set forth in the Stock Purchase Agreement will be satisfied or if they will be satisfied at all.

### **The Company will be subject to operational uncertainties and contractual restrictions while the Transactions are pending.**

Uncertainty about the effect of the Transactions may have an adverse effect on Rand while the Transactions are pending. These uncertainties may impair Rand's ability to retain key personnel until the Transactions are consummated and could cause those that deal with Rand to seek to change their existing relationships with Rand. In addition, the Stock Purchase Agreement imposes limitations on Rand with respect to actions that it can take while the Transactions are pending, which may result in us not pursuing or being unable to pursue certain business opportunities that may arise prior to the completion of the Transactions.

### **If the Transactions do not close, the Company will not benefit from the expenses incurred in furtherance of the Transactions.**

If the Transactions are not completed, Rand will have incurred substantial expenses for which no ultimate benefit will have been received. Rand has incurred, and will continue to incur, out-of-pocket expenses in connection with the Transactions for investment banking, legal and accounting fees and other expenses, much of which will be incurred even if the Transactions are not completed.

### **If we complete the Transactions, we will face risks associated with the terms and structure of the Transactions.**

If the Transactions are completed, there are risks arising from the terms and structure of the Transactions, including the following:

- Despite our expressed intentions, we may not declare or pay a special dividend or regular cash dividends to shareholders.
- East will exercise significant influence in connection with its ownership of Common Stock.
- RCM has no prior experience managing or acting as an investor adviser for a BDC.
- We will be dependent upon RCM for our future success.
- There are potential conflicts of interest, including the management of other investment funds and accounts by the principals and certain members of the Investment Committee of RCM, which could impact our investment returns.
- Our ability to enter into transactions with affiliates of RCM will be restricted.

### **Item 1B. Unresolved Staff Comments**

Not applicable.

### **Item 2. Properties**

We currently lease office space in Buffalo, New York for our corporate headquarters. We believe that these leased facilities are adequate to support our current staff and expected future needs.

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[Table of Contents](#)

**Item 3. Legal Proceedings**

None.

**Item 4. Mine Safety Disclosures**

Not applicable.

**Part II**

**Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

Our common stock (“Common Stock”) is traded on the Nasdaq Capital Market (“Nasdaq”) under the symbol “RAND.”

We have historically not paid any cash dividends to shareholders. Unless the transactions contemplated by the Stock Purchase Agreement are completed, we have no present intention of paying cash dividends in the foreseeable future.

**Issuer Purchases of Equity Securities**

<u>Period</u>	<u>Total number of shares purchased (1)</u>	<u>Average price paid per share (2)</u>	<u>Total number of shares purchased as part of publicly announced plan (3)</u>	<u>Maximum number of shares that may yet be purchased under the share repurchase plan (3)</u>
10/1 – 10/31/2018	—	—	—	458,954
11/1 – 11/30/2018	—	—	—	458,954
12/1 – 12/31/2018	—	—	—	458,954

- (1) There were no shares repurchased during the fourth quarter of 2018.
- (2) The average price paid per share is calculated on a settlement basis and includes commission.
- (3) On October 25, 2018, the Board of Directors extended the repurchase authorization of up to 1,000,000 shares of the Common Stock on the open market at prices no greater than the then current net asset value through October 25, 2019.

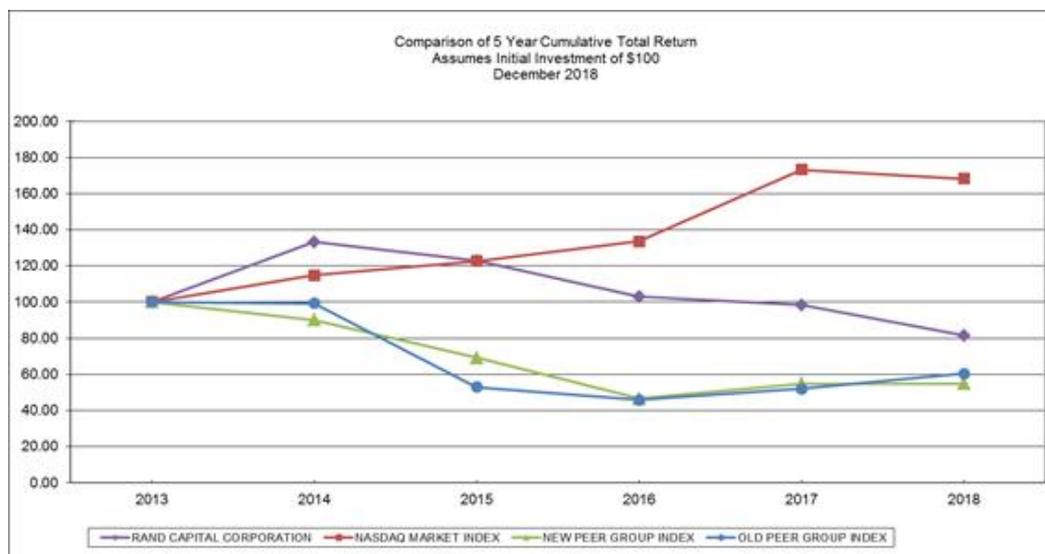
**Shareholders of Record**

On March 1, 2019, we had a total of approximately 908 shareholders, which included 77 record holders of our Common Stock, and an estimated 831 holders with shares beneficially owned in nominee name or under clearinghouse positions of brokerage firms or banks.

[Table of Contents](#)

**Corporation Performance Graph**

The following graph shows a five-year comparison of cumulative total shareholder returns for our Common Stock, the Nasdaq Market Index, and an old and new Peer Group, assuming a base index of \$100 at the end of 2013. The cumulative total return for each annual period within the five years presented is measured by dividing (1) the sum of (A) the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, and (B) the difference between share prices at the end and at the beginning of the measurement period by (2) the share price at the beginning of the measurement period.



Comparison of cumulative total return of one or more companies, peer groups, industry indexes and/or broad markets

Company/Index/Market	YEAR ENDED DECEMBER 31,					
	2013	2014	2015	2016	2017	2018
Rand Capital Corporation	\$100.00	\$133.22	\$122.80	\$102.93	\$ 98.37	\$ 81.46
NASDAQ Market Index	\$100.00	\$114.75	\$122.74	\$133.62	\$173.22	\$168.30
New Peer Group Index	\$100.00	\$ 90.09	\$ 69.29	\$ 46.63	\$ 54.92	\$ 54.75
Old Peer Group Index	\$100.00	99.36	\$ 52.83	\$ 45.78	\$ 51.88	\$ 60.37

The New Peer Group was comprised of the following companies:

- Equus Total Return, Inc. (NYSE: EQS)
- Firsthand Technology Value Fund, Inc. (NasdaqGS: SVVC)
- GSV Capital Corp. (NasdaqCM: GSVC)
- 180 Degree Capital Corp. (NasdaqGM: TURN)

The Old Peer Group was comprised of the following companies:

- Capital Southwest Corporation (NasdaqGS: CSWC)
- Firsthand Technology Value Fund, Inc. (NasdaqGS: SVVC)
- GSV Capital Corp. (NasdaqCM: GSVC)
- 180 Degree Capital Corp. (NasdaqGM: TURN)

We selected the New Peer Group because it is our belief that the four issuers in the group have investment objectives that are similar to ours, and among the publicly traded companies, they are relatively similar in size to us. Capital Southwest was removed from our peer group to reflect the change in their business strategy.

The performance graph information provided above will not be deemed to be “soliciting material” or “filed” with the SEC or subject to Regulations 14A or 14C, or to the liabilities of section 18 of the Securities Exchange Act, unless in the future we specifically request that the information be treated as soliciting material or specifically incorporate it by reference into any filing under the Securities Act or the Exchange Act.

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[Table of Contents](#)**Item 6. Selected Financial Data**

The following table provides selected consolidated financial data for the periods indicated. You should read the selected financial data set forth below in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and with the consolidated financial statements and related notes appearing within Item 8 of this Annual Report.

	<b>Balance Sheet Data as of December 31:</b>				
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Total assets	\$ 40,521,724	\$ 40,133,913	\$ 42,418,530	\$ 44,562,060	\$ 45,525,987
Total liabilities	\$ 8,997,537	\$ 8,215,228	\$ 9,789,167	\$ 10,708,400	\$ 13,172,546
Net assets	\$ 31,524,187	\$ 31,918,685	\$ 32,629,363	\$ 33,853,660	\$ 32,353,441
Net asset value per outstanding share	\$ 4.99	\$ 5.05	\$ 5.16	\$ 5.35	\$ 5.11
Shares of common stock outstanding	6,321,988	6,321,988	6,321,988	6,328,538	6,328,538

	<b>Operating Data for the Years Ended December 31:</b>				
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Investment income	\$ 2,106,954	\$ 1,454,782	\$ 1,031,858	\$ 2,824,337	\$ 2,584,475
Total expenses	\$ 2,193,672	\$ 2,010,977	\$ 3,401,037	\$ 1,817,279	\$ 2,499,297
Net investment (loss) gain, net of tax	(\$ 68,406)	(\$ 19,298)	(\$ 1,553,268)	\$ 842,902	\$ 21,835
Net realized (loss) gain on sales and dispositions of investments, net of tax	(\$ 994,295)	\$ 88,684	\$ 8,864,653	(\$ 27,973)	\$ 4,767,484
Net increase (decrease) in unrealized depreciation or appreciation on investments, net of tax	\$ 668,203	(\$ 780,064)	(\$ 8,514,068)	\$ 685,290	(\$ 247,838)
Net (decrease) increase in net assets from operations	(\$ 394,498)	(\$ 710,678)	(\$ 1,202,683)	\$ 1,500,219	\$ 4,541,481

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## [Table of Contents](#)

### **Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations**

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the consolidated financial statements and related notes included within Item 8 of this Annual Report.

#### **FORWARD LOOKING STATEMENTS**

Statements included in this Management’s Discussion and Analysis of Financial Condition and Results of Operations and elsewhere in this Report that do not relate to present or historical conditions are “forward-looking statements” within the meaning of that term in Section 27A of the Securities Act of 1933, as amended, and in Section 21E of the Securities Exchange Act of 1934, as amended. Additional oral or written forward-looking statements may be made by us from time to time, and forward-looking statements may be included in documents that are filed with the SEC. Forward-looking statements involve risks and uncertainties that could cause our results or outcomes to differ materially from those expressed in the forward-looking statements. Forward-looking statements may include, without limitation, statements relating to our plans, strategies, objectives, expectations and intentions and are intended to be made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Words such as “believes,” “forecasts,” “intends,” “possible,” “expects,” “estimates,” “anticipates,” or “plans” and similar expressions are intended to identify forward-looking statements. Among the important factors on which such statements are based are assumptions concerning the state of the United States economy and the local markets in which our portfolio companies operate, the state of the securities markets in which the securities of our portfolio companies could be traded, liquidity within the United States financial markets, and inflation. Forward-looking statements are also subject to the risks and uncertainties described under the caption “Risk Factors” contained in Part I, Item 1A. of this Annual Report.

There may be other factors not identified that affect the accuracy of our forward-looking statements. Further, any forward-looking statement speaks only as of the date when it is made and, except as required by law, we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which it is made or to reflect the occurrence of anticipated or unanticipated events or circumstances. New factors emerge from time to time that may cause our business not to develop as we expect, and we cannot predict all of them.

#### **Overview**

Currently, we are an internally managed investment company that lends to and invests in small companies often concurrently with other investors. We have elected to be treated as a business development company (“BDC”) under the Investment Company Act of 1940, as amended (the “1940 Act”). As a BDC, we are required to comply with certain regulatory requirements. We have historically made the majority of our investments through our wholly-owned subsidiary, Rand Capital SBIC, Inc. (“Rand SBIC”), which operates as a small business investment company (“SBIC”) and has been licensed by the U.S. Small Business Administration (“SBA”) since 2002. Rand SBIC was approved for an additional \$6.0 million in new SBA leverage commitments during 2018.

Our principal investment objective has historically been to achieve long-term capital appreciation on our equity investments while maintaining a current cash flow from our debenture and pass-through equity instruments to fund our operating expenses. Therefore, we invest in a variety of financial instruments to provide a current return on a portion of the investment portfolio. The equity features contained in our investment portfolio are structured to realize capital appreciation over the long-term and typically do not generate current income in the form of dividends or interest.

We have historically made initial investments of \$500,000 to \$1,000,000 directly in companies through equity or in debt or loan instruments and frequently provided follow-on investments during our investment tenure. The debt instruments generally have a maturity of not more than five years and usually have detachable equity warrants. Interest may be paid currently or deferred, based on the investment structure negotiated.

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## Table of Contents

We may exit investments through the maturation of a debt security or when a liquidity event takes place, such as the sale, recapitalization, or initial public offering of a portfolio company. The method and timing of the disposition of our portfolio investments can be critical to the realization of maximum total return. We generally expect to dispose of our equity securities through private sales of securities to other investors or through an outright sale of the portfolio company or a merger. We anticipate our debt investments will be repaid with interest and hope to realize further appreciation from the warrants or other equity type instruments we receive in connection with the investment. We fund new investments and operating expenses through existing cash balances, investment returns, and interest and principal payments from our portfolio companies

In January 2019, we entered into a stock purchase agreement to sell approximately 8.3 million shares of our common stock to East Asset Management, LLC (“East”) for \$25 million in cash and portfolio assets. The portfolio assets will be income-producing instruments that were originated in the last 48 months. Additionally, a new entity, Rand Capital Management, LLC (“RCM”), will be established as an external management company and will be retained by Rand Capital to be its investment advisor. RCM will have the same management team that is currently at Rand. The sale and issuance of common stock pursuant to the stock purchase agreement as well as the externalization of the management structure are subject to shareholder and other regulatory approvals.

Following the closing of the above-described transactions ( the “Transactions”) and contingent upon meeting certain tax-related conditions, we intend to elect to become a regulated investment company (“RIC”) for U.S. federal tax purposes. This will enable the pass through of capital gains and investment income to shareholders without payment of corporate-level U.S. federal income tax by Rand.

### **2018 Portfolio and Investment Activity**

We believe the change in net asset value over time is the leading valuation metric of our performance. Exits from our portfolio holdings are the key driver of growth in net asset value over time.

- Net asset value of our portfolio decreased to \$4.99 per share, or \$31.5 million, at December 31, 2018, down (\$0.06) per share, or (1.2%), compared with net asset value of \$5.05 per share, or \$31.9 million, at the end of the prior year.
- At year end, the estimated value of our portfolio, which included investments in securities from 30 active companies, was \$34.7 million. This value included \$3.6 million in net pre-tax unrealized depreciation.
  - Approximately 59% of the portfolio was equity investments with the remainder being debt and loan investments.
- The portfolio generated approximately \$2.1 million in interest, fee, dividend and other income in 2018.
- During 2018, we made \$2.5 million of new investments in 8 companies, of which one was a new portfolio company.

### **Outlook**

At the end of 2018, we had \$4.0 million in cash available for future investments and expenses, a decrease from \$6.3 million at the end of 2017. The decrease was primarily due to \$2.5 million of investments originated during 2018 as well as funding ongoing operating expenses.

We received SBA approval during 2018 for an additional \$6.0 million in leverage and we drew down \$750,000 of that leverage as of December 31, 2018 and an additional \$2,250,000 in January 2019.

We believe the combination of cash on hand, proceeds from portfolio exits, SBA leverage, and prospective investment income provide sufficient capital for us to continue to add new investments to our

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## Table of Contents

portfolio while reinvesting in existing portfolio companies that demonstrate continued growth potential. Additionally, upon the anticipated closing of the Transactions described above, we will have additional investments in our portfolio and additional cash to invest. The following short and long-term trends provide us confidence in our ability to grow Rand:

- We expect that well run businesses will require capital to grow and should be able to compete effectively given the strong macroeconomic environment and eager reception of new technologies and service concepts.
- We continue to manage risk by investing with other investors, when possible.
- We are involved with the governance and management of a majority of our portfolio companies, which enables us to support their operating and marketing efforts and facilitate their growth.
- As our portfolio expands, we are able to better leverage our infrastructure.
- We have sufficient cash to invest in new opportunities and to repurchase shares. At year end, we had authorization to repurchase an additional 458,954 shares of our Common Stock. However, our prioritized use of cash continues to be growing our portfolio.
- We believe the anticipated receipt of cash and portfolio assets from East, as well as the establishment of RCM as an external management company, will broaden our potential pipeline of investment opportunities in order to build our portfolio and grow further. Strategically, we expect to advance our efforts to increase our income producing investments that can support a regular cash dividend for shareholders and complement our equity investments that drive capital appreciation.

### **Critical Accounting Policies**

We prepare our consolidated financial statements in accordance with United States generally accepted accounting principles, or GAAP, which require the use of estimates and assumptions that affect the reported amounts of assets and liabilities. For a summary of all significant accounting policies, including critical accounting policies, see Note 1 to the consolidated financial statements in Item 8 of this Annual Report.

The increasing complexity of the business environment and applicable authoritative accounting guidance require us to monitor our accounting policies and procedures. We have two critical accounting policies that require the use of significant judgment. The following summary of critical accounting policies is intended to enhance a reader's ability to assess our financial condition and results of operations and the potential volatility due to changes in estimates.

#### *Valuation of Investments*

Investments are valued at fair value as determined in good faith by management and approved by our Board of Directors. We invest in loan, debt, and equity instruments and there is no single standard for determining fair value of these investments. As a result, determining fair value requires that judgment be applied to the specific facts and circumstances of each portfolio company while employing a consistent valuation process. We analyze and value each investment quarterly, and record unrealized depreciation for an investment that we believe has become impaired, including where collection of a loan or realization of the recorded value of an equity security is doubtful. Conversely, we will record unrealized appreciation if we believe that an underlying portfolio company has appreciated in value and, therefore, its equity security has also appreciated in value. These estimated fair values may differ from the values that would have been used had a ready market for the investments existed and these differences could be material if our assumptions and judgments differ from results of actual liquidation events.

Our investments are carried at fair value in accordance with Accounting Standards Codification (ASC) 820, "Fair Value Measurements and Disclosures", which defines fair value, establishes a framework for measuring fair value in accordance with GAAP, and expands disclosures about fair value measurements.

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## Table of Contents

Loan investments are defined as traditional loan financings with no equity features. Debt investments are defined as debt financings that include one or more equity features such as conversion rights, stock purchase warrants, and/or stock purchase options. A financing may also be categorized as a debt financing if it is accompanied by the direct purchase of an equity interest in the portfolio company.

We utilize several approaches to determine the fair value of an investment. The main approaches are:

- Loan and debt securities are valued at cost when it is representative of the fair value of the investment or sufficient assets or liquidation proceeds are expected to exist from a sale of a portfolio company at its estimated fair value. However, they may be valued at an amount other than cost given the carrying interest rate versus the related inherent portfolio risk of the investment. A loan or debt instrument may be reduced in value if it is judged to be of poor quality, collection is in doubt or insufficient liquidation proceeds exist.
- Equity securities may be valued using the “asset approach”, “market approach” or “income approach.” The asset approach involves estimating the liquidation value of the portfolio company’s assets. This approach values the equity at the value remaining after the portfolio company pays of its debt and loan balances and its outstanding liabilities. The market approach uses observable prices and other relevant information generated by similar market transactions. It may include the use of market multiples derived from a set of comparables to assist in pricing the investment. Additionally, we adjust valuations if a subsequent significant equity financing has occurred that includes a meaningful portion of the financing by a sophisticated, unrelated new investor. The income approach employs a cash flow and discounting methodology to value an investment.

ASC 820 classifies the inputs used to measure fair value into the following hierarchy:

Level 1: Quoted prices in active markets for identical assets or liabilities, used in our valuation at the measurement date.

Level 2: Quoted prices for similar assets or liabilities in active markets, or quoted prices for identical or similar assets or liabilities in markets that are not active, or other observable inputs other than quoted prices.

Level 3: Unobservable and significant inputs to determining the fair value.

Financial assets are categorized based upon the level of judgment associated with the inputs used to measure their fair value.

Any changes in estimated fair value are recorded in the statement of operations as “Net change in unrealized depreciation on investments.”

Under the valuation policy, we value unrestricted publicly traded companies, categorized as Level 1 investments, at the average closing bid price for the last three trading days of the reporting period. There were no Level 1 or Level 2 investments as of December 31, 2018.

In the valuation process, we value restricted securities, categorized as Level 3 investments, using information from these portfolio companies, which may include:

- Audited and unaudited statements of operations, balance sheets and operating budgets;
- Current and projected financial, operational and technological developments of the portfolio company;
- Current and projected ability of the portfolio company to service its debt obligations;

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## Table of Contents

- The current capital structure of the business and the seniority of the various classes of equity if a deemed liquidation event were to occur;
- Pending debt or capital restructuring of the portfolio company;
- Current information regarding any offers to purchase the investment, or recent fundraising transactions;
- Current ability of the portfolio company to raise additional financing if needed;
- Changes in the economic environment which may have a material impact on the operating results of the portfolio company;
- Internal circumstances and events that may have an impact (both positive and negative) on the operating performance of the portfolio company;
- Qualitative assessment of key management;
- Contractual rights, obligations or restrictions associated with the investment; and
- Other factors deemed relevant by our management to assess valuation.

The valuation may be reduced if a portfolio company's performance and potential have deteriorated significantly. If the factors that led to a reduction in valuation are overcome, the valuation may be readjusted.

## Equity Securities

Equity Securities may include preferred stock, common stock, warrants and limited liability company membership interests.

The significant unobservable inputs used in the fair value measurement of our equity investments are earnings before interest, taxes and depreciation and amortization (EBITDA) and revenue multiples, where applicable, the financial and operational performance of the business, and the senior equity preferences that may exist in a deemed liquidation event. Standard industry multiples may be used when available; however, our portfolio companies are typically small and in early stages of development and these industry standards may be adjusted to more closely match the specific financial and operational performance of the portfolio company. Due to the nature of certain investments, fair value measurements may be based on other criteria, which may include third party appraisals. Significant changes to the unobservable inputs, such as variances in financial performance from expectations, may result in a significantly higher or lower fair value measurement. Significant changes in any of these unobservable inputs may result in a significantly higher or lower fair value estimate.

Another key factor used in valuing equity investments is a significant recent arms-length equity transaction with a sophisticated non-strategic unrelated new investor entered into by the portfolio company. The terms of these equity transactions may not be identical to the equity transactions between the portfolio company and us, and the impact of the difference in transaction terms on the market value of the portfolio company may be difficult or impossible to quantify.

When appropriate the Black-Scholes pricing model is used to estimate the fair value of warrants for accounting purposes. This model requires the use of highly subjective inputs including expected volatility and expected life, in addition to variables for the valuation of minority equity positions in small private and early stage companies. Significant changes in any of these unobservable inputs may result in a significantly higher or lower fair value estimate.

For recent investments, we generally rely on the cost basis, which is deemed to represent fair value, unless other fair market value inputs are identified causing us to depart from this basis.

## Loans and Debt Securities

The significant unobservable inputs used in the fair value measurement of our loan and debt securities are the financial and operational performance of the portfolio company, similar debt with similar terms with other portfolio

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## Table of Contents

companies, current market rates for underlying risks associated with the particular company, as well as the market acceptance of the portfolio company's products or services and its future performance. These inputs will likely provide an indicator as to the probability of principal recovery of the investment. Our debt investments are often junior secured or unsecured debt securities. Fair value may also be determined based on other criteria where appropriate. Significant changes to the unobservable inputs may result in a change in fair value.

For recent investments, we generally rely on the cost basis, which is deemed to represent the fair value, unless other fair market value inputs are identified causing us to depart from this basis.

### *Revenue Recognition*

Interest income generally is recognized on the accrual basis except where the investment is in default or otherwise presumed to be in doubt. In such cases, interest income is recognized at the time of receipt. A reserve for possible losses on interest receivable is maintained when appropriate.

Our SBIC's interest accrual is also regulated by the SBA's "Accounting Standards and Financial Reporting Requirements for Small Business Investment Companies." Under these rules, interest income cannot be recognized if collection is doubtful, and a 100% reserve must be established. The collection of interest is presumed to be in doubt when there is substantial doubt about a portfolio company's ability to continue as a going concern or the loan is in default more than 120 days. Management also uses other qualitative and quantitative measures to determine the value of a portfolio investment and the collectability of any accrued interest.

We hold debt securities in our investment portfolio that contain payment-in-kind ("PIK") interest provisions. PIK interest, computed at the contractual rate specified in each debt agreement, is periodically added to the principal balance of the debt and is recorded as interest income. Thus, the actual collection of this interest may be deferred until the time of debt principal repayment.

We may receive distributions from portfolio companies that are limited liability companies or corporations. These distributions are classified as dividend income on the consolidated statement of operations. Dividend income is recognized on an accrual basis when it can be reasonably estimated.

We hold preferred equity securities that may contain cumulative dividend provisions. Cumulative dividends are recorded as dividend income when they are declared and deemed a contractual obligation. Any dividends in arrears are added to the balance of the preferred equity investment. The actual collection of these dividends in arrears may be deferred until such time as the preferred security is redeemed.

## [Table of Contents](#)

### Financial Condition

	<u>12/31/18</u>	<u>12/31/17</u>	<u>Increase (Decrease)</u>	<u>% Increase (Decrease)</u>
<b>Overview:</b>				
Total assets	\$40,521,724	\$40,133,913	\$ 387,811	1.0%
Total liabilities	<u>8,997,537</u>	<u>8,215,228</u>	<u>782,309</u>	9.5%
Net assets	<u>\$31,524,187</u>	<u>\$31,918,685</u>	<u>(\$394,498)</u>	(1.2%)

Net asset value was \$4.99 per share at December 31, 2018 versus \$5.05 per share at December 31, 2017.

The outstanding SBA debentures at December 31, 2018 and 2017 are \$8,750,000 and \$8,000,000, respectively. The debentures mature from 2022 through 2029.

Cash approximated 13% of net assets at December 31, 2018 compared to 20% at December 31, 2017.

### Composition of the Investment Portfolio

Our financial condition is dependent on the success of our portfolio holdings, which are investments in small companies. The following summarizes our investment portfolio at the year ends indicated.

	<u>12/31/18</u>	<u>12/31/17</u>	<u>Change</u>	<u>% Change</u>
Investments, at cost	\$38,292,143	\$36,689,319	\$1,602,824	4.4%
Unrealized depreciation, net	<u>(3,625,339)</u>	<u>(4,405,257)</u>	<u>779,918</u>	(17.7%)
Investments, at fair value	<u>\$34,666,804</u>	<u>\$32,284,062</u>	<u>\$2,382,742</u>	7.4%
Number of Active Portfolio Companies	30	30		

Our total investments at fair value, as estimated by management and approved by the Board of Directors, approximated 110% of net assets at December 31, 2018 and 101% of net assets at December 31, 2017.

The change in investments, at cost, during the year ended December 31, 2018, is comprised of the following:

	<u>Cost Increase (Decrease)</u>
<b>New investments:</b>	
KnowledgeVision Systems, Inc. (Knowledgevision)	\$ 775,000
Tech 2000, Inc. (Tech 2000)	600,000
BeetNPath, LLC (Beetnpath)	262,627
Genicon Inc. (Genicon)	250,000
SciAps, Inc. (Sciaps)	250,000
Centivo Corporation (Centivo)	200,000
Tilson Technology Management, Inc. (Tilson)	100,000
Empire Genomics, LLC (Empire Genomics)	<u>50,000</u>
Total of new investments	2,487,627
<b>Other changes to investments:</b>	
Empire Genomics capitalized fee income and interest conversion	298,287
Genicon interest conversion and OID amortization	231,807
OnCore Golf Technology, Inc. (Oncore) interest conversion	77,712
Microcision LLC (Microcision) interest conversion	19,213
Tech 2000 interest conversion	10,777
GoNoodle, Inc. (GoNoodle) interest conversion	10,333
Centivo interest conversion	<u>1,342</u>
Total of other changes to investments	649,471

[Table of Contents](#)

<b>Investments repaid, sold or liquidated:</b>	
Intrinsiq Material, Inc. (Intrinsiq) realized loss	(1,125,673)
First Wave Technologies, Inc. (First Wave) realized loss	(338,469)
Knoa Software Inc. (Knoa) repayment	(48,466)
Empire Genomics repayment	(21,667)
Total of investments repaid, sold or liquidated	(1,534,274)
<b>Net change in investments, at cost</b>	<b>\$ 1,602,824</b>

Our top five portfolio companies represented 39% of total assets at December 31, 2018:

<u>Company</u>	<u>Industry</u>	<u>Fair Value at December 31, 2018</u>	<u>% of Total Assets at December 31, 2018</u>
Genicon, Inc.	Health Care – Testing Device	\$ 4,423,086	11%
eHealth Global Technologies, Inc.	Health Care	\$ 3,500,000	9%
ACV Auctions, Inc.	Software	\$ 2,776,907	7%
Tilson Technology Management, Inc.	Professional Services	\$ 2,600,000	6%
Microcision, LLC	Manufacturing	\$ 2,543,353	6%

Our top five portfolio companies represented 37% of total assets at December 31, 2017:

<u>Company</u>	<u>Industry</u>	<u>Fair Value at December 31, 2017</u>	<u>% of Total Assets at December 31, 2017</u>
Genicon, Inc.	Health Care – Testing Device	\$ 4,023,779	10%
eHealth Global Technologies, Inc.	Health Care	\$ 3,500,000	9%
Rheonix, Inc.	Health Care – Testing Device	\$ 2,938,731	7%
Tilson Technology Management, Inc.	Professional Services	\$ 2,500,000	6%
Outmatch Holdings, LLC	Software	\$ 2,145,496	5%

Below is the geographic breakdown of our investments at fair value as of December 31, 2018 and 2017:

<u>Geographic Region</u>	<u>% of Net Asset Value at December 31, 2018</u>	<u>% of Net Asset Value at December 31, 2017</u>
USA – East	94%	86%
USA - South	16%	15%
Total investments as a % of net asset value	110%	101%

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**Table of Contents**

As of December 31, 2018 and 2017, the investment portfolio consisted of the following types of investments:

	<u>Cost</u>	<u>Percentage of Total Portfolio</u>	<u>Fair Value</u>	<u>Percentage of Total Portfolio</u>
<b><u>December 31, 2018:</u></b>				
Subordinated Debt and Promissory Notes	\$14,017,541	36%	\$13,296,948	38%
Convertible Debt	1,866,615	5	1,036,808	3
Equity and Membership Interests	22,155,337	58	20,260,523	59
Equity Warrants	252,650	1	72,525	0
Total	<u>\$38,292,143</u>	<u>100%</u>	<u>\$34,666,804</u>	<u>100%</u>
<b><u>December 31, 2017:</u></b>				
Subordinated Debt and Promissory Notes	\$12,924,321	35%	\$11,796,289	37%
Convertible Debt	1,849,955	5	1,849,955	6
Equity and Membership Interests	21,640,393	59	18,482,793	57
Equity Warrants	274,650	1	155,025	0
Total	<u>\$36,689,319</u>	<u>100%</u>	<u>\$32,284,062</u>	<u>100%</u>

## [Table of Contents](#)

### Results of Operations

#### Investment Income

Our principal investment objective is to achieve long-term capital appreciation on our equity investments while maintaining a current cash flow from our debenture and pass-through equity instruments to fund expenses. Therefore, we invest in a variety of financial instruments to provide a current return on a portion of the investment portfolio.

*Comparison of the years ended December 31, 2018 and 2017*

	December 31, 2018	December 31, 2017	Increase	% Increase
Interest from portfolio companies	\$ 1,498,740	\$ 1,155,316	\$343,424	30%
Interest from other investments	37,614	30,761	6,853	22%
Dividend and other investment income	384,382	243,614	140,768	58%
Fee income	186,218	25,091	161,127	642%
Total investment income	<u>\$ 2,106,954</u>	<u>\$ 1,454,782</u>	<u>\$652,172</u>	45%

Investment income increased 45%, or \$652,172, from \$1,454,782 for the year ended December 31, 2017 to \$2,106,954 for the year ended December 31, 2018. The total investment income that is received on a current basis for the year ended December 31, 2018 is received from 9 portfolio companies. This contrasts with the 11 portfolio companies generating current income for the year ended December 31, 2017.

Interest from portfolio companies – Interest from portfolio companies was approximately 30% higher during the year ended December 31, 2018 versus the same period in 2017 due to the fact that we have originated more income-producing debt investments in the last year. The new debt instruments were originated from KnowledgeVision Systems, Inc. (Knowledgevision), Tech 2000, Inc. (Tech 2000), Genicon Inc. (Genicon) and several other portfolio companies. In addition, during 2018 the Empire Genomics loans were modified and resulted in a recording of interest that had previously not been accrued of approximately \$91,000. This amount was capitalized into the loan balance as part of the debt modification and is non-recurring.

The following investments are on non-accrual status: G-TEC Natural Gas Systems (G-Tec) and a portion of the Mercantile Adjustment Bureau, LLC (Mercantile) outstanding loan balances.

Interest from other investments - The increase in interest from other investments was primarily due to higher average cash balances during the year ended December 31, 2018 versus the year ended December 31, 2017.

Dividend and other investment income - Dividend income is comprised of cash distributions from limited liability companies (LLCs) and corporations in which we have invested. Our investment agreements with certain LLCs require those LLCs to distribute funds to us for payment of income taxes on our allocable share of the LLC's profits. These portfolio companies may also elect to make additional discretionary distributions. Dividend income will fluctuate based upon the profitability of these LLCs and corporations and the timing of the distributions or the impact of new investments or divestitures. The dividend distributions for the respective periods were:

	December 31, 2018	December 31, 2017
Carolina Skiff LLC (Carolina Skiff)	\$ 251,913	\$ 178,532
Advantage 24/7 LLC (Advantage 24/7)	60,000	—
Tilson Technology Management, Inc. (Tilson)	39,002	21,579
New Monarch Machine Tool, LLC (Monarch)	27,409	27,409
Empire Genomics, LLC (Empire Genomics)	6,058	10,070
SOMS Technologies, LLC (SOMS)	—	6,024
Total dividend and other investment income	<u>\$ 384,382</u>	<u>\$ 243,614</u>

## Table of Contents

Fee income – Fee income typically consists of the revenue associated with the amortization of financing fees charged to the portfolio companies upon successful closing of SBIC financings and income from portfolio company board attendance fees. The financing fees are amortized ratably over the life of the instrument associated with the fees. The unamortized fees are carried on the balance sheet under the line item “Deferred revenue.”

The income associated with the amortization of financing fees was \$41,872 and \$24,091 for the years ended December 31, 2018 and 2017, respectively. The financing fee income based on the existing portfolio is expected to be approximately \$46,000 in 2019, \$21,000 in 2020 and \$6,000 in 2021.

Fees paid for board service at the portfolio companies were \$2,000 and \$1,000 for the years ended December 31, 2018 and 2017, respectively.

In addition, we recorded a one-time debt modification fee of approximately \$142,000 from Empire Genomics which was capitalized into the Empire Genomics loan balances as part of the debt modification.

### *Comparison of the years ended December 31, 2017 and 2016*

	<u>December 31,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>	<u>Increase</u> <u>(Decrease)</u>	<u>% Increase</u> <u>(Decrease)</u>
Interest from portfolio companies	\$ 1,155,316	\$ 767,153	\$388,163	51%
Interest from other investments	30,761	45,139	(14,378)	(32%)
Dividend and other investment income	243,614	192,932	50,682	26%
Fee income	25,091	26,634	(1,543)	(6%)
<b>Total investment income</b>	<b>\$ 1,454,782</b>	<b>\$ 1,031,858</b>	<b>\$422,924</b>	<b>41%</b>

Investment income increased 41%, or \$422,924, from \$1,031,858 for the year ended December 31, 2016 to \$1,454,782 for the year ended December 31, 2017.

Interest from portfolio companies – Interest from portfolio companies was 51% higher during the year ended December 31, 2017 versus the same period in 2016 due to the fact that more income-producing debt investments were originated in the last year. These new debt instruments were originated from Genicon Inc. (Genicon), eHealth Global Technologies, Inc. (eHealth), Empire Genomics, LLC (Empire Genomics) and several other portfolio companies.

The following investments were on non-accrual status at December 31, 2017: G-TEC Natural Gas Systems (G-Tec), First Wave Products Group, LLC (First Wave) and a portion of the Mercantile Adjustment Bureau, LLC (Mercantile) outstanding loan balance.

Interest from other investments – The decrease in interest from other investments was primarily due to lower average cash balances during the year ended December 31, 2017 versus the year ended December 31, 2016.

## Table of Contents

Dividend and other investment income – The dividend distributions for the respective periods were:

	December 31, 2017	December 31, 2016
Carolina Skiff LLC (Carolina Skiff)	\$ 178,532	\$ 131,785
New Monarch Machine Tool, LLC (Monarch)	27,409	27,409
Tilson Technology Management, Inc. (Tilson)	21,579	16,250
Empire Genomics, LLC (Empire Genomics)	10,070	4,024
SOMS Technologies, LLC (SOMS)	6,024	13,464
Total dividend and other investment income	<u>\$ 243,614</u>	<u>\$ 192,932</u>

Fee income - The income associated with the amortization of financing fees was \$24,091 and \$22,634 for the years ended December 31, 2017 and 2016, respectively. The financing fee income based on the existing portfolio is expected to be approximately \$21,000 in 2018, \$15,000 in 2019 and \$2,000 in 2020.

Fees paid for board service at the portfolio companies were \$1,000 and \$4,000 for the years ended December 31, 2017 and 2016, respectively.

## Expenses

*Comparison of the years ended December 31, 2018 and 2017*

	December 31, 2018	December 31, 2017	Increase	% Increase
Total expenses	\$ 2,193,672	\$ 2,010,977	\$182,695	9%

Expenses predominately consist of interest expense on outstanding SBA borrowings, compensation expense, and general and administrative expenses, including stockholder and office operating expenses and professional fees.

The increase in expenses during the year ended December 31, 2018 versus the same period in 2017 was primarily caused by a 14%, or approximately \$50,000, increase in professional fees. Professional fees are higher during 2018 primarily as a result of expenses incurred in the consideration of strategic alternatives. These expenses included external legal, tax consulting and other advisory expenses to support analysis of our strategic alternatives, which involved assessing options relative to the complex regulatory environment in which we operate.

In addition bonus and profit sharing expense went from \$12,000 during the year ended December 31, 2017 to \$125,000 during the year ended December 31, 2018, an \$113,000 increase.

*Comparison of the years ended December 31, 2017 and 2016*

	December 31, 2017	December 31, 2016	Decrease	% Decrease
Total expenses	\$ 2,010,977	\$ 3,401,037	(\$1,390,060)	(41%)

The decrease in expenses during the year ended December 31, 2017 versus the same period in 2016 was primarily caused by a decrease of \$1,373,052 in bonus and profit sharing expense related to the Gemcor II, LLC (Gemcor) exit in early 2016. Gemcor sold its assets in March 2016 and based on our ownership percentage, we received gross cash proceeds of approximately \$13.8 million, excluding an escrow receivable, and realized a gain, before income taxes, of approximately \$13.2 million from the sale. As a result of this sale, we recognized \$1,385,052 under our Profit Sharing Plan during the year ended December 31, 2016. There were no amounts earned pursuant to the Profit Sharing Plan for the year ended December 31, 2017.

## Net Realized Gains and Losses on Investments

	December 31, 2018	December 31, 2017	December 31, 2016
Net realized (loss) gain on sales and dispositions, before income tax (benefit) expense	(\$1,464,142)	\$ 138,240	\$14,138,203

## Table of Contents

During the year ended December 31, 2018, we recognized a realized loss of \$1,125,673 on our investment in Intrinsic Material, Inc. (Intrinsic) when the company was sold and we did not receive any proceeds. In addition we restructured our notes in First Wave Technologies, Inc. (First Wave) and converted the notes into equity. As part of that restructuring we recognized a realized loss of \$338,469 on the junior note and the warrants.

During the year ended December 31, 2017, one of our portfolio companies, Athenex Inc. (Athenex) completed an initial public offering and its common stock became publicly traded on the Nasdaq Global Select Market under the symbol "ATNX". We sold our shares in Athenex and recognized a net realized gain, before income taxes, of \$638,240 on the sale of the 46,296 Athenex shares.

In addition, during 2017, we recognized a realized loss of \$500,000 on our investment in City Dining Cards (Loupe) when the company ceased operations.

During 2016 our portfolio company, Gemcor II, LLC, sold its assets, and we received gross cash proceeds of approximately \$14.1 million, excluding amounts held in escrow, and recognized a realized gain, before income taxes, of \$14,620,063. The escrow holdback at December 31, 2016 was \$1,100,000. The escrow was released, in full, during 2017.

In addition, we recognized a realized gain of \$168,140 during the year ended December 31, 2016 from the earn out provision in connection with the 2014 sale of QuaDPharma, LLC to Athenex Inc. We recognized a realized loss of \$650,000 on our investment in Satisfy, Inc. (Satisfy) during the year ended December 31, 2016 when the company ceased operations.

### **Net Change in Unrealized Depreciation on Investments**

The change in unrealized depreciation, before income taxes, for the year ended December 31, 2018 was comprised of the following:

	<b>Year ended December 31, 2018</b>
Empire Genomics, LLC (Empire Genomics)	(\$ 901,360)
Rheonix, Inc. (Rheonix)	(735,999)
SOMS Technologies, LLC (SOMS)	(528,348)
BeetNPath, LLC (Beetnpath)	(388,723)
KnowledgeVision Systems, Inc. (Knowledgevision)	(300,000)
Mercantile Adjustment Bureau, LLC (Mercantile)	(249,040)
G-Tec Natural Gas Systems (Gtec)	(100,000)
Genicon, Inc. (Genicon)	(82,500)
OnCore Golf Technology, Inc. (Oncore)	(77,712)
First Wave Products Group (First Wave)	121,469
GiveGab, Inc. (Givegab)	191,907
Microcision LLC (Microcision)	610,000
Intrinsic Material, Inc. (Intrinsic) reclassified to a realized loss	725,673
ACV Auctions, Inc. (ACV)	2,494,551
<b>Total change in net unrealized depreciation of investments before income taxes during the year ended December 31, 2018</b>	<b>\$ 779,918</b>

## Table of Contents

The valuations of our investments in Beetnpath, Empire Genomics, Gtec, Mercantile, Oncore, Rheonix, and SOMS were decreased after we reviewed each of the portfolio company's operations, commercial progress against their business plan, and past and projected financial condition and determined that a valuation adjustment was necessary.

Our valuation of First Wave was changed to reflect a conversion from debt instruments to equity holdings. As part of this restructure we recognized a realized loss on the junior note and the warrants.

Givegab's value was increased to the cost basis of the investment after a financial analysis of the portfolio company indicating continued improved performance.

Our valuation of Knowledgevision and Genicon were decreased during the year ended December 31, 2018 to revalue our holdings based upon liquidation preferences of our securities and on a recent round of financing.

In accordance with our valuation policy, we increased the value of our holdings in ACV and Microcision. ACV was increased based on a significant equity financing during 2018 with sophisticated new non-strategic outside investors at a higher valuation than their prior financing round valuation. Microcision was increased based on a financial analysis of the company indicating positive cash flow from operations for the past two years.

The Intrinsic investment was written off after the company was sold during 2018 and we did not receive any proceeds.

The change in unrealized depreciation, before income taxes, for the year ended December 31, 2017 was comprised of the following:

	<b>Year ended December 31, 2017</b>
SciAps, Inc. (Sciaps)	(\$ 554,710)
Teleservices Solutions Holdings, LLC (Teleservices)	(395,398)
Intrinsic Materials, Inc. (Intrinsic)	(380,000)
Athenex, Inc. (Athenex) reclass to a realized gain	(273,379)
Mercantile Adjustment Bureau, LLC (Mercantile)	(250,000)
BeetNPath, LLC (Beetnpath)	29,723
ACV Auctions, Inc. (ACV)	119,356
Carolina Skiff LLC (Carolina Skiff)	650,000
Knoa Software, Inc. (Knoa)	779,700
<b>Total change in net unrealized depreciation on investments before income taxes during the year ended December 31, 2017</b>	<b>(\$ 274,708)</b>

The valuations of our investments in Intrinsic, Mercantile and Teleservices were decreased after we reviewed each portfolio company and its current and projected financial condition and determined that a valuation adjustment was necessary.

In accordance with our valuation policy, we adjusted the value of our investments in ACV, Beetnpath and Sciaps based on a significant equity financing by a new non-strategic outside entity, and consideration of the related affect on the liquidation preferences of our existing investment instrument in each of the companies. In addition, our investments in Carolina Skiff and Knoa were increased based on a financial analysis of each portfolio company indicating improved performance.

## Table of Contents

The change in net unrealized depreciation, before income taxes, for the year ended December 31, 2016 was comprised of the following:

	<b>Year ended December 31, 2016</b>
Gemcor II, LLC (Gemcor) reclassified to a realized gain	(\$12,775,000)
Teleservices Solutions Holdings, LLC (Teleservices)	(990,680)
Knoa Software, Inc. (Knoa)	(422,800)
OnCore Golf Technology, Inc. (Oncore)	(187,500)
Athenex, Inc. (Athenex)	69,444
Intrinsiq Materials, Inc. (Intrinsiq)	254,329
Carolina Skiff LLC (Carolina Skiff)	500,000
<b>Total change in net unrealized depreciation of investments before income taxes during the year ended December 31, 2016</b>	<b>(\$13,552,207)</b>

During the first quarter of 2016 Gemcor II, LLC sold its assets and we received gross cash proceeds of approximately \$14.1 million. The realized gain from the sale, before income taxes, was \$14,620,063 and included \$1,100,000 that was held in escrow at December 31, 2016.

Our investment in Teleservices was revalued after we reviewed their operations and their current and past financial performance. This review indicated that a further deterioration of their business had occurred. The portfolio company remains in operation and is developing new business strategies.

The valuation of our investment in Knoa was decreased during 2016 to value our equity at liquidation value. The valuation of our investment in Oncore was decreased after we reviewed the portfolio company and its financial condition and determined that a valuation adjustment was necessary.

In accordance with our valuation policy, we increased the value of our investment in Athenex based on a significant equity financing by a new non-strategic outside entity. This new financing used a higher valuation for Athenex than had been used for its prior financing rounds.

Intrinsiq's value was increased based on the completion of an equity refinancing in the third quarter of 2016. Carolina Skiff's value was increased based on a financial analysis of the portfolio company indicating continued improved performance.

All of these value adjustments resulted from a review by management using the guidance set forth by ASC 820 and our established valuation policy.

### **Net Decrease in Net Assets from Operations**

We account for our operations under GAAP for investment companies. The principal measure of our financial performance is "Net decrease in net assets from operations" on our consolidated statements of operations. During the year ended December 31, 2018, the net decrease in net assets from operations was (\$394,498) as compared with net decreases of (\$710,678) in 2017 and (\$1,202,683) in 2016.

### **Liquidity and Capital Resources**

Historically, our principle objective has been to achieve capital appreciation. Therefore, a significant portion of the investment portfolio is structured to maximize the potential for capital appreciation and may provide little or no current yield in the form of dividends or interest payments. As discussed above, on the closing of the Transactions contemplated by the Stock Purchase Agreement with East, we expect to receive interest bearing investments and subsequently to position the portfolio to earn a current yield.

## Table of Contents

As of December 31, 2018, our total liquidity consisted of \$4,033,792 in cash and cash equivalents. In addition we had an outstanding SBA leverage commitment of \$5,250,000 at December 31, 2018.

Net cash used by operating activities has averaged approximately \$820,000 over the last three years. The cash used for investments in portfolio companies has averaged approximately \$4,600,000 over the last three years. Our cash flow may fluctuate based on the timing of the receipt of dividend income, realized exits and the associated income taxes paid. We will generally use cash to fund our operating expenses and to invest in companies as we build our portfolio. We anticipate that we will continue to exit investments. However, the timing of liquidation events within the portfolio is difficult to project. Starting in 2022 (See Note 5. in the Notes to the Consolidated Financial Statements), our outstanding SBA debt begins to reach maturity and this will require us to identify sources of future funding if liquidation of investments is not sufficient to fund operations and repay the SBA debt obligation.

The following table summarizes the SBA leverage at the year ends indicated:

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Outstanding SBA leverage	\$ 8,750,000	\$ 8,000,000
Outstanding SBA commitment	\$ 5,250,000	\$ 0

The following table summarizes the cash estimated to be received over the next five years from existing portfolio companies based on contractual obligations as of December 31, 2018. These payments represent scheduled principal and interest payments that are due under the terms of the investment securities we own in each portfolio company and are subject to change based on factors such as conversions and restructurings. It does not include any equity investments, which may provide additional proceeds upon exit of the investment.

	<u>Cash Receipts due by year</u>				
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023 and beyond</u>
Scheduled cash receipts from portfolio companies	\$1,507,000	\$12,709,000	\$2,026,000	\$1,100,000	\$2,500,000
Number of companies contributing to the scheduled cash receipts	10	10	4	2	1

We believe that the cash on hand at December 31, 2018, the outstanding SBA leverage commitment and the scheduled interest payments on our portfolio investments will be sufficient to meet our cash needs throughout 2019. We continue to pursue potential exits from portfolio companies to increase the amount of liquidity available for new investments, operating activities and future SBA debenture obligations.

### **Contractual Obligations**

The following table shows our specified contractual obligations at December 31, 2018. We do not have any capital lease obligations or other long-term liabilities reflected on our consolidated statement of financial position.

	<u>Payments due by period</u>				
	<u>Total</u>	<u>Less than 1 year</u>	<u>1-3 years</u>	<u>4-5 years</u>	<u>More than 5 yrs</u>
SBA debentures	\$ 8,750,000	\$ 0	\$3,000,000	\$4,000,000	\$1,750,000
SBA interest expense	\$ 1,706,000	\$304,000	\$ 943,000	\$ 301,000	\$ 158,000
Operating lease obligations (Rent of office space)	\$ 39,180	\$ 19,440	\$ 19,740	\$ 0	\$ 0
<b>Total</b>	<u>\$10,495,180</u>	<u>\$323,440</u>	<u>\$3,962,740</u>	<u>\$4,301,000</u>	<u>\$1,908,000</u>

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## [Table of Contents](#)

### **Item 7A. Quantitative and Qualitative Disclosures about Market Risk**

Our investment activities contain elements of risk. The portion of our investment portfolio consisting of debt and equity securities in private companies is subject to valuation risk. Because there is typically no public market for the debt and equity securities in which we invest, the valuations of the debt and equity interests in the portfolio are stated at “fair value” as determined in good faith by our management and approved by our Board of Directors. This is in accordance with our investment valuation policy. (The discussion of valuation policy contained in “Note 1- Summary of Significant Accounting Policies - Investments” in the consolidated financial statements contained in Item 8 of this report is incorporated herein by reference.) In the absence of readily ascertainable market values, the estimated value of the portfolio may differ significantly from the values that would be placed on the portfolio if a ready market for the investments existed. Any changes in valuation are recorded on the consolidated statement of operations as “Net change in unrealized depreciation on investments.”

At times, a portion of our portfolio may include marketable securities traded in the over-the-counter market or on stock exchange. In addition, there may be a portion of the portfolio for which no regular trading market exists. In order to realize the full value of a security, the market must trade in an orderly fashion or a willing purchaser must be available when a sale is to be made. Should an economic or other event occur that would not allow markets to trade in an orderly fashion, we may not be able to realize the fair value of our marketable investments or other investments in a timely manner.

As of December 31, 2018, we did not have any off-balance sheet arrangements or hedging or similar derivative financial instrument investments.

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**Table of Contents**

**Item 8. Financial Statements and Supplementary Data**

The following consolidated financial statements and consolidated supplemental schedule of the Corporation and report of Independent Registered Public Accounting Firm thereon are set forth below:

<a href="#"><u>Consolidated Statements of Financial Position as of December 31, 2018 and 2017</u></a>	35
<a href="#"><u>Consolidated Statements of Operations for the three years in the period ended December 31, 2018</u></a>	36
<a href="#"><u>Consolidated Statements of Changes in Net Assets for the three years in the period ended December 31, 2018</u></a>	37
<a href="#"><u>Consolidated Statements of Cash Flows for the three years in the period ended December 31, 2018</u></a>	38
<a href="#"><u>Consolidated Schedule of Portfolio Investments as of December 31, 2018</u></a>	39
<a href="#"><u>Consolidated Schedule of Portfolio Investments as of December 31, 2017</u></a>	47
<a href="#"><u>Financial Highlights Schedule for the five years in the period ended December 31, 2018</u></a>	55
<a href="#"><u>Notes to the Consolidated Financial Statements</u></a>	56
<a href="#"><u>Supplemental Schedule of Consolidated Changes in Investments at Cost and Realized Loss for the year ended December 31, 2018</u></a>	74
<a href="#"><u>Report of Independent Registered Public Accounting Firm</u></a>	75

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF FINANCIAL POSITION**

December 31,

	2018	2017
<b>ASSETS</b>		
Investments at fair value:		
Control investments (cost of \$ 99,500)	\$ 99,500	\$ 99,500
Affiliate investments (cost of \$20,708,659 and \$20,871,129, respectively)	17,026,091	17,016,795
Non-Control/Non-Affiliate investments (cost of \$17,483,984 and \$15,718,690, respectively)	17,541,213	15,167,767
Total investments, at fair value (cost of \$38,292,143 and \$36,689,319, respectively)	34,666,804	32,284,062
Cash and cash equivalents	4,033,792	6,262,039
Interest receivable (net of allowance: \$161,000)	145,532	231,048
Deferred tax asset	525,198	551,863
Prepaid income taxes	1,138,708	762,047
Other assets	11,690	42,854
<b>Total assets</b>	<b>\$40,521,724</b>	<b>\$40,133,913</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY (NET ASSETS)</b>		
<b>Liabilities:</b>		
Debentures guaranteed by the SBA (net of debt issuance costs)	\$ 8,554,443	\$ 7,855,173
Profit sharing and bonus payable	125,000	144,000
Accounts payable and accrued expenses	245,758	178,348
Deferred revenue	72,336	37,707
Total liabilities	8,997,537	8,215,228
Commitments and contingencies (See Note 9)		
<b>Stockholders' equity (net assets):</b>		
Common stock, \$0.10 par; shares authorized 10,000,000; shares issued 6,863,034; shares outstanding of 6,321,988 at 2018 and 2017	686,304	686,304
Capital in excess of par value	10,581,789	10,581,789
Accumulated net investment loss	(1,665,552)	(1,597,146)
Undistributed net realized gain on investments	26,221,443	27,215,738
Net unrealized depreciation on investments	(2,830,692)	(3,498,895)
Treasury stock, at cost: 541,046 shares	(1,469,105)	(1,469,105)
Total stockholders' equity (net assets) (per share 2018: \$4.99, 2017: \$5.05)	31,524,187	31,918,685
<b>Total liabilities and stockholders' equity (net assets)</b>	<b>\$40,521,724</b>	<b>\$40,133,913</b>

See accompanying notes

[Table of Contents](#)

## RAND CAPITAL CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS  
For The Years Ended December 31, 2018, 2017 and 2016

	2018	2017	2016
<b>Investment income:</b>			
Interest from portfolio companies:			
Control investments	\$ —	\$ —	\$ 11,828
Affiliate investments	741,432	563,708	403,850
Non-Control/Non-Affiliate investments	757,308	591,608	351,475
Total interest from portfolio companies	1,498,740	1,155,316	767,153
Interest from other investments:			
Non-Control/Non-Affiliate investments	37,614	30,761	45,139
Total interest from other investments	37,614	30,761	45,139
Dividend and other investment income:			
Control investments	60,000	—	—
Affiliate investments	318,324	233,544	188,908
Non-Control/Non-Affiliate investments	6,058	10,070	4,024
Total dividend and other investment income	384,382	243,614	192,932
Fee income:			
Control investments	—	—	2,000
Affiliate investments	15,667	8,416	5,862
Non-Control/Non-Affiliate investments	170,551	16,675	18,772
Total fee income	186,218	25,091	26,634
<b>Total investment income</b>	<b>2,106,954</b>	<b>1,454,782</b>	<b>1,031,858</b>
<b>Expenses:</b>			
Salaries	679,499	661,650	621,749
Profit sharing and bonuses	125,000	12,000	1,385,052
Employee benefits	194,818	160,779	174,796
Directors' fees	128,750	142,499	184,750
Professional fees	407,159	356,936	339,823
Shareholders and office operating	230,050	249,085	227,631
Insurance	34,187	31,876	32,134
Corporate development	62,117	65,202	64,412
Other operating	21,092	20,675	21,414
	1,882,672	1,700,702	3,051,761
Interest on SBA obligations	311,000	310,275	310,276
Bad debt expense	—	—	39,000
Total expenses	2,193,672	2,010,977	3,401,037
<b>Investment loss before income taxes</b>	<b>(86,718)</b>	<b>(556,195)</b>	<b>(2,369,179)</b>
Income tax benefit	(18,312)	(536,897)	(815,911)
<b>Net investment loss</b>	<b>(68,406)</b>	<b>(19,298)</b>	<b>(1,553,268)</b>
<b>Net realized (loss) gain on sales and dispositions of investments:</b>			
Control investments	—	—	14,620,063
Affiliate investments	(1,464,142)	—	(650,000)
Non-Control/Non-Affiliate investments	—	138,240	168,140
Net realized (loss) gain on sales and dispositions, before income taxes	(1,464,142)	138,240	14,138,203
Income tax (benefit) expense	(469,847)	49,556	5,273,550
Net realized (loss) gain on sales and dispositions of investments	(994,295)	88,684	8,864,653
<b>Net change in unrealized depreciation on investments:</b>			
Control investments	—	—	(12,775,000)
Affiliate investments	608,207	129,315	(846,651)
Non-Control/Non-Affiliate investments	171,711	(404,023)	69,444
Change in unrealized depreciation before income taxes	779,918	(274,708)	(13,552,207)
Deferred income tax expense (benefit)	111,715	505,356	(5,038,139)
Net change in unrealized depreciation or appreciation on investments	668,203	(780,064)	(8,514,068)
<b>Net realized and unrealized (loss) gain on investments</b>	<b>(326,092)</b>	<b>(691,380)</b>	<b>350,585</b>
<b>Net decrease in net assets from operations</b>	<b>(\$ 394,498)</b>	<b>(\$ 710,678)</b>	<b>(\$ 1,202,683)</b>
<b>Weighted average shares outstanding</b>	<b>6,321,988</b>	<b>6,321,988</b>	<b>6,325,792</b>
<b>Basic and diluted net decrease in net assets from operations per share</b>	<b>(0.06)</b>	<b>(0.11)</b>	<b>(0.19)</b>

See accompanying notes



[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS**  
**For The Years Ended December 31, 2018, 2017 and 2016**

	2018	2017	2016
<b>Net assets at beginning of year</b>	<b>\$ 31,918,685</b>	<b>\$ 32,629,363</b>	<b>\$ 33,853,660</b>
Net investment loss	(68,406)	(19,298)	(1,553,268)
Net realized (loss) gain on sales and dispositions of investments	(994,295)	88,684	8,864,653
Net increase (decrease) in unrealized depreciation or appreciation on investments	668,203	(780,064)	(8,514,068)
Net decrease in net assets from operations	(394,498)	(710,678)	(1,202,683)
Purchase of treasury stock	—	—	(21,614)
Total decrease in net assets	(394,498)	(710,678)	(1,224,297)
<b>Net assets at end of year</b>	<b>\$ 31,524,187</b>	<b>\$ 31,918,685</b>	<b>\$ 32,629,363</b>
<b>Accumulated net investment loss</b>	<b>(\$ 1,665,552)</b>	<b>(\$ 1,597,146)</b>	<b>(\$ 1,577,848)</b>

See accompanying notes.

[Table of Contents](#)

## RAND CAPITAL CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENTS OF CASH FLOWS

For The Years Ended December 31, 2018, 2017 and 2016

	2018	2017	2016
<b>Cash flows from operating activities:</b>			
Net decrease in net assets from operations	(\$ 394,498)	(\$ 710,678)	(\$ 1,202,683)
Adjustments to reconcile net decrease in net assets to net cash (used in) provided by operating activities:			
Investments originated	(2,487,627)	(5,400,000)	(5,883,012)
Proceeds from sale of portfolio investments	—	781,525	15,413,203
Proceeds from loan repayments	70,131	—	416,972
Net realized loss (gain) on portfolio investments	1,464,142	(138,240)	(14,138,203)
Change in unrealized depreciation on investments	(779,918)	274,708	13,552,207
Deferred tax expense (benefit)	26,665	613,301	(3,526,350)
Depreciation and amortization	29,686	31,433	33,390
Original issue discount accretion	(39,653)	(32,129)	(9,996)
Change in interest receivable allowance	—	—	39,000
Non-cash conversion of debenture interest	(609,817)	(269,445)	(19,252)
Changes in operating assets and liabilities:			
Decrease (increase) in interest receivable	85,516	93,189	(148,013)
Decrease in other assets	28,936	1,101,621	450,752
(Increase) decrease in prepaid income taxes	(376,661)	(762,047)	65,228
(Decrease) increase in income taxes payable	—	(320,008)	320,008
(Decrease) increase in profit sharing and bonus payable	(19,000)	(1,126,052)	988,052
Increase (decrease) in accounts payable and accrued liabilities	67,410	(146,189)	85,626
Increase (decrease) in deferred revenue	34,629	(9,090)	20,867
Total adjustments	(2,505,561)	(5,307,423)	7,660,479
<b>Net cash (used in) provided by operating activities</b>	<b>(2,900,059)</b>	<b>(6,018,101)</b>	<b>6,457,796</b>
<b>Cash flows from investing activities:</b>			
Capital expenditures	—	—	(837)
<b>Net cash used in investing activities</b>	<b>—</b>	<b>—</b>	<b>(837)</b>
<b>Cash flows from financing activities:</b>			
Proceeds from SBA debentures	750,000	—	—
Origination costs to SBA	(78,188)	—	—
Purchase of treasury shares	—	—	(21,614)
<b>Net cash provided by (used in) financing activities</b>	<b>671,812</b>	<b>—</b>	<b>(21,614)</b>
Net (decrease) increase in cash	(2,228,247)	(6,018,101)	6,435,345
Cash:			
Beginning of year	6,262,039	12,280,140	5,844,795
End of year	\$ 4,033,792	\$ 6,262,039	\$ 12,280,140

See accompanying notes

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018**

<u>Company, Geographic Location, Business Description, (Industry) and Website</u>	<u>(a) Type of Investment</u>	<u>(b) Date Acquired</u>	<u>(c) Equity</u>	<u>Cost</u>	<u>(d)(f) Fair Value</u>	<u>Percent of Net Assets</u>
<b>Non-Control/Non-Affiliate Investments – 55.7% of net assets: (j)</b>						
<b>ACV Auctions, Inc. (e)(g)</b> Buffalo, NY. Live mobile wholesale auctions for new and used car dealers. (Software) www.acvauctions.com	1,181,160 Series A Preferred.	8/12/16	<1%	\$ 163,000	\$2,776,907	8.8%
<b>Centivo Corporation (e)(g)</b> New York, NY. Tech-enabled health solutions company that helps self-insured employers and their employees save money and have a better experience. (Health Care) www.centivo.com	190,967 Series A-1 Preferred. 337,808 Series A-2 Preferred.	7/5/17	<1%	200,000 101,342	200,000 101,342	1.0%
<b>Total Centivo</b>				<u>301,342</u>	<u>301,342</u>	
<b>eHealth Global Technologies, Inc. (g)</b> Henrietta, NY. eHealth Connect® improves health care delivery through intelligently aggregated clinical record and images for patient referrals. (Health Care) www.ehealthtechnologies.com	\$3,500,000 Term Note at 13% due December 31, 2020.	6/28/16	0%	3,500,000	3,500,000	11.1%
<b>Empire Genomics, LLC (g)(m)</b> Buffalo, NY. Molecular diagnostics company that offers a comprehensive menu of assay services for diagnosing and guiding patient therapeutic treatments. (Health Care) www.empiregenomics.com	\$1,209,014 Senior Secured Convertible Term Notes at 10% (8% PIK through September 30, 2019) due December 31, 2020. \$444,915 Promissory Note at 9% (4% PIK) due December 31, 2020.	6/13/14	0%	1,233,195 444,915	474,181 302,569	2.4%
<b>Total Empire</b>				<u>1,678,110</u>	<u>776,750</u>	
<b>GiveGab, Inc. (e)(g)</b> Ithaca, NY. Online fundraising, day of giving supporter engagement software for non-profit organizations. (Software) www.givegab.com	5,084,329 Series Seed Preferred.	3/13/13	4%	616,221	616,221	2.0%
<b>GoNoodle, Inc. (g)(m)</b> Nashville, TN. Student engagement education software providing core aligned physical activity breaks. (Software) www.gonoodle.com	\$1,000,000 Secured Note at 12% due January 31, 2020, (1% PIK). Warrant for 47,324 Series C Preferred.	2/6/15	<1%	1,039,663 25	1,039,663 25	3.3%
<b>Total GoNoodle</b>				<u>1,039,688</u>	<u>1,039,688</u>	
<b>Mercantile Adjustment Bureau, LLC (g)</b> Williamsville, NY. Full service accounts receivable management and collections company. (Contact Center)	\$1,199,039 Subordinated Secured Note at 13% (3% for the calendar year 2018) due January 31, 2019. (e) \$150,000 Subordinated Debenture at 8% due June 30, 2018.	10/22/12	4%	1,199,040 150,000	700,000 —	2.2%

www.mercantilesolutions.com	Warrant for 3.29% Membership Interests. Option for 1.5% Membership Interests. (i) Interest receivable \$50,254.			97,625	—	
<b>Total Mercantile</b>				<u>1,446,665</u>	<u>700,000</u>	
<b>Outmatch Holdings, LLC (e)(g) (Chequed Holdings, LLC)</b>	2,798,883 Class P1 Units. 109,788 Class C1 Units.	11/18/10	4%	2,140,007	2,140,007	6.8%
Dallas, TX. Web based predictive employee selection and reference checking. (Software) www.outmatch.com				5,489	5,489	
<b>Total Outmatch</b>				<u>2,145,496</u>	<u>2,145,496</u>	
<b>PostProcess Technologies LLC (e)(g)</b>	\$300,000 Convertible Promissory Note at 5% due July 28, 2020.	7/25/16	0%	300,000	300,000	1.0%
Buffalo, NY. Provides innovative solutions for the post-processing of additive manufactured 3D parts. (Manufacturing) www.postprocess.com						

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018 (Continued)**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>Rheonix, Inc. (e)</b> Ithaca, NY. Developer of fully automated microfluidic based molecular assay and diagnostic testing devices. (Health Care) www.rheonix.com	9,676 Common. (g) 1,839,422 Series A Preferred. (g) 50,593 Common. (g) 589,420 Series B Preferred.	10/29/09	4%	— 2,099,999 — 702,732	— 1,500,000 — 702,732	7.0%
<b>Total Rheonix</b>				<u>2,802,731</u>	<u>2,202,732</u>	
<b>SocialFlow, Inc. (e)(g)</b> New York, NY. Provides instant analysis of social networks using a proprietary, predictive analytic algorithm to optimize advertising and publishing. (Software) www.socialflow.com	1,049,538 Series B Preferred. 1,204,819 Series B-1 Preferred. 717,772 Series C Preferred.	4/5/13	4%	500,000 750,000 500,000	731,431 839,648 500,221	6.6%
<b>Total Social Flow</b>				<u>1,750,000</u>	<u>2,071,300</u>	
<b>Somerset Gas Transmission Company, LLC (e)</b> Columbus, OH. Natural gas transportation. (Oil and Gas) www.somersetgas.com	26.5337 Units.	7/10/02	3%	719,097	500,000	1.6%
<b>Tech 2000, Inc. (g)(m)</b> Herndon, VA. Develops and delivers IT training. (Software) www.t2000inc.com	\$600,000 Term Note at 14% (PIK through December 31, 2018) due November 15, 2021.	11/16/18	0%	610,777	610,777	1.9%
<b>Other Non-Control/Non-Affiliate Investments:</b>						
<b>DataView, LLC (e)</b> (Software)	Membership Interest.	10/1/98	5%	310,357	—	0.0%
<b>UStec/Wi3 (e)</b> (Manufacturing)	Common stock.	12/17/98	<1%	<u>100,500</u>	<u>—</u>	0.0%
<b>Subtotal Non-Control/Non-Affiliate Investments</b>				<u>\$17,483,984</u>	<u>\$17,541,213</u>	
<b>Affiliate Investments – 54.0% of net assets (k)</b>						
<b>BeetNPath, LLC (Grainful) (e)(g)</b> Ithaca, NY. Frozen entrées made from 100% whole grain steel cut oats under Grainful brand name. (Consumer Product) www.grainful.com	1,119,024 Series A-2 Preferred Membership Units. 1,032,918 Series B Preferred Membership Units. \$262,626.64 Convertible Secured Notes at 8% due December 21, 2019.	10/20/14	9%	\$ 359,000 261,277 262,627	\$ — 261,277 262,627	1.7%
<b>Total BeetNPath</b>				<u>882,904</u>	<u>523,904</u>	
<b>Carolina Skiff LLC (g)</b> Waycross, GA. Manufacturer of ocean fishing and pleasure boats. (Manufacturing) www.carolinaskiff.com	6.0825% Class A Common Membership Interest.	1/30/04	7%	15,000	1,750,000	5.6%
<b>ClearView Social, Inc. (e)(g)</b> Buffalo, NY. Social media publishing tool for law, CPA and professional firms. (Software) www.clearviewsocial.com	312,500 Series Seed Plus Preferred.	1/4/16	6%	200,000	200,000	0.6%
<b>First Wave Technologies, Inc. (e)(g)</b> Batavia, NY. Sells First Crush automated pill crusher that crushes and grinds pills for nursing homes and medical institutions. (Health Care) www.firstwaveproducts.com	670,443.2 Class A Common.	4/19/12	5%	661,563	33,000	0.1%



[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018 (Continued)**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>Genicon, Inc. (g) (m)</b> Winter Park, FL. Designs, produces and distributes patented surgical instrumentation. (Health Care) www.geniconendo.com	1,586,902 Series B Preferred.	4/10/15	6%	1,000,000	1,000,000	14.0%
	\$3,250,000 Promissory Notes at 10% due May 1, 2020, (8% PIK).			3,385,586	3,385,586	
	Warrants for 500,000 Common.			120,000	37,500	
	<b>Total Genicon</b>			<u>4,505,586</u>	<u>4,423,086</u>	
<b>Knoa Software, Inc. (e)(g)</b> New York, NY. End user experience management and performance (EMP) solutions utilizing enterprise applications. (Software) www.knoa.com	973,533 Series A-1 Convertible Preferred.	11/20/12	7%	750,000	750,000	3.9%
	1,876,922 Series B Preferred.			479,155	479,155	
	<b>Total Knoa</b>			<u>1,229,155</u>	<u>1,229,155</u>	
<b>KnowledgeVision Systems, Inc. (g)</b> Lincoln, MA. Online presentation and training software. (Software) www.knowledgevision.com	200,000 Series A-1 Preferred.	11/13/13	7%	250,000	—	3.2%
	214,285 Series A-2 Preferred.			300,000	—	
	129,033 Series A-3 Preferred.			165,001	165,001	
	Warrant for 46,743 Series A-3. \$75,000 Subordinated Promissory Notes at 8% payable on demand of majority of holders after August 31, 2019.(e) \$750,000 Term Note at 11% due April 30, 2021.			75,000	75,000	
				<u>750,000</u>	<u>750,000</u>	
	<b>Total KnowledgeVision</b>			<u>1,575,001</u>	<u>1,025,001</u>	
<b>Mezmeriz, Inc. (e)(g)</b> Ithaca, NY. Technology company developing novel reality capture tools for 3D mapping, reality modeling, object tracking and classification. (Electronics Developer) www.mezmeriz.com	1,554,565 Series Seed Preferred.	1/9/08	12%	742,850	351,477	1.1%
<b>Microcision LLC (g)(m)</b> Pennsauken Township, NJ. Manufacturer of precision machined medical implants, components and assemblies. (Manufacturing) www.microcision.com	\$1,500,000 Subordinated Promissory Note at 12% (1% PIK) due December 31, 2024.	9/24/09	15%	1,933,353	1,933,353	8.1%
	15% Class A Common Membership Interest.			—	610,000	
	<b>Total Microcision</b>			<u>1,933,353</u>	<u>2,543,353</u>	
<b>New Monarch Machine Tool, Inc. (g)</b> Cortland, NY. Manufactures and services vertical/horizontal machining centers. (Manufacturing) www.monarchmt.com	22.84 Common.	9/24/03	15%	22,841	22,841	0.1%
<b>OnCore Golf Technology, Inc. (e)(g)</b> Buffalo, NY. Patented and Proprietary Golf Balls utilizing breakthrough technology and innovation, inspiring golfers at all skill levels and abilities. (Consumer Product) www.oncoregolf.com	300,483 Preferred AA.	12/31/14	8%	752,712	300,000	1.0%
<b>SciAps, Inc. (e)(g)</b>	187,500 Series A Preferred.	7/12/13	6%	1,500,000	700,000	6.4%

Woburn, MA. Instrumentation company producing portable analytical devices using XRF, LIBS and RAMAN spectroscopy to identify compounds, minerals, and elements. (Manufacturing) www.sciaps.com	274,299 Series A-1 Convertible Preferred.	504,710	250,000
	117,371 Series B Convertible Preferred.	250,000	250,000
	113,636 Series C Convertible Preferred.	175,000	175,000
	369,698 Series C-1 Convertible Preferred.	399,274	399,274
	147,059 Series D Convertible Preferred.	250,000	250,000
<b>Total SciAps</b>		<u>3,078,984</u>	<u>2,024,274</u>

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018 (Continued)**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>Teleservices Solutions Holdings, LLC (e)(g)(m)</b> Montvale, NJ. Customer contact center specializing in customer acquisition and retention for selected industries. (Contact Center) www.ipacesetters.com	250,000 Class B Preferred Units.	5/30/14	6%	250,000	—	0.0%
	1,000,000 Class C Preferred Units.			1,190,680	—	
	80,000 Class D Preferred Units.			91,200	—	
	104,198 Class E Preferred Units.			104,198	—	
	PIK dividend for Series C and D at 12% and 14%, respectively.				—	
	<b>Total Teleservices</b>				<u>1,636,078</u>	<u>—</u>
<b>Tilson Technology Management, Inc. (g)</b> Portland, ME. Cellular, fiber optic and wireless information systems, construction, and management. (Professional Services) www.tilsontech.com	120,000 Series B Preferred.	1/20/15	11%	600,000	600,000	8.2%
	21,391 Series C Preferred.			200,000	200,000	
	70,176 Series D Preferred.			800,000	800,000	
	\$800,000 Subordinated Promissory Notes at 8% due December 1, 2022.			800,000	800,000	
	\$200,000 Subordinated Promissory Note at 8% due September 28, 2021.			200,000	200,000	
	<b>Total Tilson</b>				<u>2,600,000</u>	<u>2,600,000</u>
<b>Other Affiliate Investments:</b>						
<b>G-TEC Natural Gas Systems(e)</b> (Manufacturing)	Membership Interest	8/31/99	17%	400,000	—	0.0%
<b>SOMS Technologies, LLC (e)(g)</b> (Consumer Products)	Membership Interest	12/2/08	9%	472,632	—	0.0%
<b>Subtotal Affiliate Investments</b>				<u>\$20,708,659</u>	<u>\$17,026,091</u>	
<b>Control Investments – 0.3% of net assets (l)</b>						
<b>Advantage 24/7 LLC (g)</b> Williamsville, NY. Marketing program for wine and spirits dealers. (Marketing Company) www.advantage24-7.com	45% Membership Interest.	12/30/10	45%	\$ 99,500	\$ 99,500	0.3%
<b>Subtotal Control Investments</b>				<u>\$ 99,500</u>	<u>\$ 99,500</u>	
<b>TOTAL INVESTMENTS – 110%</b>				<u>\$38,292,143</u>	<u>\$34,666,804</u>	
<b>LIABILITIES IN EXCESS OF OTHER ASSETS – (10%)</b>					<u>(3,142,617)</u>	
<b>NET ASSETS – 100%</b>					<u>\$31,524,187</u>	

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018 (Continued)**

**Notes to the Consolidated Schedule of Portfolio Investments**

- (a) At December 31, 2018, restricted securities represented 100% of the fair value of the investment portfolio. Restricted securities are subject to one or more restrictions on resale and are not freely marketable. Type of investment for equity position is in form of shares unless otherwise noted as units or interests, i.e., preferred shares, common shares.
- (b) The Date Acquired column indicates the date in which the Corporation first acquired an investment in the company or a predecessor company.
- (c) Each equity percentage estimates the Corporation's ownership interest in the applicable portfolio investment. The estimated ownership is calculated based on the percent of outstanding voting securities held by the Corporation or the potential percentage of voting securities held by the Corporation upon exercise of warrants or conversion of debentures, or other available data. If applicable, the symbol "<1%" indicates that the Corporation holds an equity interest of less than one percent.
- (d) The Corporation's investments are carried at fair value in accordance with Accounting Standards Codification (ASC) 820 "Fair Value Measurements and Disclosures," which defines fair value and establishes guidelines for measuring fair value. At December 31, 2018, ASC 820 designates 100% of the Corporation's investments as "Level 3" assets. Under the valuation policy of the Corporation, unrestricted publicly held securities are valued at the average closing bid price for these securities for the last three trading days of the reporting period. Restricted securities are subject to restrictions on resale, and are valued at fair value as determined by the management of the Corporation and submitted to the Board of Directors for approval. Fair value is considered to be the amount that the Corporation may reasonably expect to receive for portfolio securities when sold on the valuation date. Valuations as of any particular date, however, are not necessarily indicative of amounts which may ultimately be realized as a result of future sales or other dispositions of securities and these favorable or unfavorable differences could be material. Among the factors considered in determining the fair value of restricted securities are the financial condition and operating results, projected operations, and other analytical data relating to the investment. Also considered are the market prices for unrestricted securities of the same class (if applicable) and other matters which may have an impact on the value of the portfolio company (see Note 2 "Investments" to the Consolidated Financial Statements).
- (e) These investments are non-income producing. All other investments are income producing. Non-income producing investments have not generated cash payments of interest or dividends including LLC tax-related distributions within the last twelve months, or are not expected to do so going forward. However, if a debt or a preferred equity fails to make its most recent payment, then the investment will also be classified as non-income producing.
- (f) As of December 31, 2018 the total cost of investment securities was approximately \$38.3 million. Net unrealized depreciation was approximately (\$3.6) million, which was comprised of \$5.3 million of unrealized appreciation of investment securities and (\$8.9) million of unrealized depreciation of investment securities. At December 31, 2018, the aggregate gross unrealized gain for federal income tax purposes was \$5.2 million and the aggregate gross unrealized loss for federal income tax purposes was (\$5.9) million. The net unrealized loss for federal income tax purposes was (\$0.7) million based on a tax cost of \$35.4 million.
- (g) Rand Capital SBIC, Inc. investment.
- (h) Reduction in cost and value from previously reported balances reflects current principal repayment.
- (i) Represents interest due (amounts over \$50,000) from investments included as interest receivable on the Corporation's Consolidated Statements of Financial Position.
- (j) Non-Control/Non-Affiliate Investments are investments that are neither Control Investments nor Affiliate Investments.
- (k) Affiliate Investments are defined by the Investment Company Act of 1940, as amended ("1940 Act"), as those Non-Control investments in companies in which between 5% and 25% of the voting securities are owned by the Corporation.
- (l) Control Investments are defined by the 1940 Act as investments in companies in which more than 25% of the voting securities are owned by the Corporation or where greater than 50% of the board representation is maintained.
- (m) Payment in kind (PIK) represents earned interest that is added to the cost basis of the investment.

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARY**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2018 (Continued)**

**Investments in and Advances to Affiliates**

Company	Type of Investment	December 31, 2017 Fair Value	Gross Additions (1)	Gross Reductions (2)	December 31, 2018 Fair Value	Net Realized (Losses)	Amount of Interest/ Dividend/ Fee Income (3)
<b>Control Investments:</b>							
<b>Advantage 24/7 LLC</b>	45% Membership Interest.	\$ 99,500	\$ —	\$ —	\$ 99,500	\$ —	\$ 60,000
<b>Total Control Investments</b>		<b>\$ 99,500</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 99,500</b>	<b>\$ —</b>	<b>\$ 60,000</b>
<b>Affiliate Investments:</b>							
<b>BeetNPath, LLC</b>	1,119,024 Series A-2 Preferred Membership Units.	\$ 359,000	\$ —	(\$ 359,000)	\$ —	\$ —	\$ —
	1,032,918 Series B Preferred Membership Units.	291,000	—	(29,723)	261,277	—	—
	\$262,626.64 Convertible Secured Note at 8%	—	262,627	—	262,627	—	5,413
<b>Total BeetNPath</b>		<b>650,000</b>	<b>262,627</b>	<b>(388,723)</b>	<b>523,904</b>	<b>—</b>	<b>5,413</b>
<b>Carolina Skiff LLC</b>	6.0825% Class A Common Membership interest.	1,750,000	—	—	1,750,000	—	251,913
<b>ClearView Social, Inc.</b>	312,500 Series Seed Plus Preferred.	200,000	—	—	200,000	—	—
<b>First Wave Technologies, Inc.</b>	\$500,000 senior term notes at 10%.	250,000	—	(250,000)	—	(316,469)	—
	\$280,000 junior term notes at 10%	—	—	—	—	—	—
	Warrant for 41,619 capital securities.	—	—	—	—	( 22,000)	—
	670,443.2 Class A Common.	—	33,000	—	33,000	—	—
<b>Total First Wave</b>		<b>250,000</b>	<b>33,000</b>	<b>(250,000)</b>	<b>33,000</b>	<b>(338,469)</b>	<b>—</b>
<b>Genicon, Inc.</b>	1,586,902 Series B Preferred.	1,000,000	—	—	1,000,000	—	—
	\$3,250,000 Promissory Notes at 8%.	2,903,779	481,807	—	3,385,586	—	348,512
	Warrant for 250,000 Common.	120,000	—	(82,500)	37,500	—	—
<b>Total Genicon</b>		<b>4,023,779</b>	<b>481,807</b>	<b>(82,500)</b>	<b>4,423,086</b>	<b>—</b>	<b>348,512</b>
<b>GiveGab, Inc.</b>	5,084,329 Series Seed Preferred.	424,314	191,907	(616,221)	—	—	—
<b>G-TEC Natural Gas Systems</b>	16.639% Class A Membership Interest. 8% cumulative dividend.	100,000	—	(100,000)	—	(1,125,673)	—
<b>Intrinsiq Materials, Inc.</b>	4,161,747 Series A Preferred.	400,000	—	(400,000)	—	—	—
<b>Knoa Software, Inc.</b>	973,533 Series A-1 Convertible Preferred.	750,000	—	—	750,000	—	—
	1,876,922 Series B Preferred.	479,155	—	—	479,155	—	—
	\$48,466 Convertible Promissory Note at 8%.	48,466	—	(48,466)	—	—	773
<b>Total Knoa</b>		<b>1,277,621</b>	<b>—</b>	<b>(48,466)</b>	<b>1,229,155</b>	<b>—</b>	<b>773</b>
<b>KnowledgeVision Systems, Inc.</b>	200,000 Series A-1 Preferred.	—	—	—	—	—	—
	214,285 Series A-2 Preferred.	300,000	—	(300,000)	—	—	—

	129,033 Series A-3 Preferred.	165,001	—	—	165,001	—	—
	\$75,000 Subordinated Promissory Notes at 8%	50,000	25,000	—	75,000	—	5,408
	\$750,000 term note at 11%	—	750,000	—	750,000	—	60,241
	Warrant for 46,743 Series A-3.	35,000	—	—	35,000	—	—
	<b>Total KnowledgeVision</b>	<u>550,001</u>	<u>775,000</u>	<u>(300,000)</u>	<u>1,025,001</u>	<u>—</u>	<u>65,649</u>
<b>Mezmeriz, Inc.</b>	1,554,565 Series Seed Preferred.	351,477	—	—	351,477	—	—
<b>Microcision LLC</b>	\$1,500,000 Subordinated Promissory Note at 12% (1% PIK) due December 31, 2024.	1,914,140	19,213	—	1,933,353	—	230,559
	15% Class A Common Membership Interest.	—	610,000	—	610,000	—	—
	<b>Total Microcision</b>	<u>1,914,140</u>	<u>629,213</u>	<u>—</u>	<u>2,543,353</u>	<u>—</u>	<u>230,559</u>
<b>New Monarch Machine Tool, Inc.</b>	22.84 Common.	22,841	—	—	22,841	—	29,409

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018 (Continued)**

**Investments in and Advances to Affiliates**

Company	Type of Investment	December 31, 2017 Fair Value	Gross Additions (1)	Gross Reductions (2)	December 31, 2018 Fair Value	Net Realized (Losses)	Amount of Interest/ Dividend/ Fee Income (3)
<b>OnCore Golf Technology, Inc.</b>	150,000 Series AA Preferred.	—	300,000	—	300,000	—	—
	\$300,000 Subordinated Convertible Promissory notes at 6%.	300,000	—	(300,000)	—	—	27,370
	<b>Total OnCore</b>	<b>300,000</b>	<b>300,000</b>	<b>(300,000)</b>	<b>300,000</b>	<b>—</b>	<b>27,370</b>
<b>SciAps, Inc.</b>	187,500 Series A Convertible Preferred.	700,000	—	—	700,000	—	—
	274,299 Series A-1 Convertible Preferred.	250,000	—	—	250,000	—	—
	117,371 Series B Convertible Preferred.	250,000	—	—	250,000	—	—
	113,636 Series C Preferred.	175,000	—	—	175,000	—	—
	369,698 Series C-1 Preferred.	399,274	—	—	399,274	—	—
	147,059 Series D Convertible Preferred	—	250,000	—	250,000	—	—
	<b>Total SciAps</b>	<b>1,774,274</b>	<b>250,000</b>	<b>—</b>	<b>2,024,274</b>	<b>—</b>	<b>—</b>
<b>SOMS Technologies, LLC</b>	5,959,490 Series B membership Interests.	528,348	—	(528,348)	—	—	—
<b>Teleservices Solutions Holdings, LLC</b>	250,000 Class B Preferred Units.	—	—	—	—	—	—
	1,000,000 Class C Preferred Units.	—	—	—	—	—	—
	80,000 Class D Preferred Units.	—	—	—	—	—	—
	104,198 Class E Preferred Units.	—	—	—	—	—	—
	<b>Total Teleservices</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Tilson Technology Management, Inc.</b>	120,000 Series B Preferred.	600,000	—	—	600,000	—	20,000
	21,391 Series C Convertible Preferred.	200,000	—	—	200,000	—	—
	70,176 Series D Preferred.	750,000	50,000	—	800,000	—	19,003
	\$200,000 Subordinated Promissory Note at 8%.	200,000	—	—	200,000	—	16,000
	\$800,000 Subordinated Promissory Note at 8%.	750,000	50,000	—	800,000	—	60,822
	<b>Total Tilson</b>	<b>2,500,000</b>	<b>100,000</b>	<b>—</b>	<b>2,600,000</b>	<b>—</b>	<b>115,825</b>
	<b>Total Affiliate Investments</b>	<b>\$17,016,795</b>	<b>\$3,023,554</b>	<b>(\$3,014,258)</b>	<b>\$17,026,091</b>	<b>(\$1,464,142)</b>	<b>\$1,075,423</b>
	<b>Total Control and Affiliate Investments</b>	<b>\$17,116,295</b>	<b>\$3,023,554</b>	<b>(\$3,014,258)</b>	<b>\$17,125,591</b>	<b>(\$1,464,142)</b>	<b>\$1,135,423</b>

This schedule should be read in conjunction with the Corporation's Consolidated Financial Statements, including the Consolidated Schedule of Portfolio Investments and Notes to the Consolidated Financial Statements.

- (1) Gross additions include increases in the cost basis of investments resulting from new portfolio investments, follow on investments, capitalized interest and the accretion of discounts. Gross additions also include net increases in unrealized appreciation or net decreases in unrealized depreciation, and the movement of an existing portfolio company into this category and out of another category.
- (2) Gross reductions include decreases in the cost basis of investments resulting from principal repayments, sales, note conversions, net increases in unrealized depreciation, net decreases in unrealized appreciation, the exchange of existing securities for new securities and the movement of an existing portfolio company out of this category and into another category.
- (3) Represents the total amount of interest, fees or dividends credited to income for the portion of the period an investment was included in Control or Affiliate categories, respectively.

**RAND CAPITAL CORPORATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2018 (Continued)**

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<u>Industry Classification</u>	<u>Percentage of Total Investments (at fair value) as of December 31, 2018</u>
Software	33.8%
Healthcare	32.4
Manufacturing	19.2
Professional Services	7.5
Consumer Product	2.4
Contact Center	2.0
Oil and Gas	1.4
Electronics	1.0
Marketing	0.3
<b>Total Investments</b>	<b>100%</b>

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>Non-Control/Non-Affiliate Investments – 47.5% of net assets: (j)</b>						
<b>ACV Auctions, Inc. (e)(g)</b> Buffalo, NY. Live mobile wholesale auctions for new and used car dealers. (Software) www.acvauctions.com	1,181,160 Series A preferred shares.	8/12/16	<1%	\$ 163,000	\$ 282,356	0.9%
<b>Centivo Corporation (e)(n)</b> New York, NY. Tech-enabled health solutions company that helps self-insured employers and their employees save money and have a better experience. (Health Care)	\$100,000 convertible unsecured note at 2% due February 1, 2019.	7/5/17	0%	100,000	100,000	0.3%
<b>eHealth Global Technologies, Inc.</b> Henrietta, NY. eHealth Connect® improves health care delivery through intelligently aggregated clinical record and images for patient referrals. (Health Care) www.ehealthtechnologies.com	(g) \$1,500,000 term note at 10% due September 2, 2019. (n) \$2,000,000 term note at 10% due September 2, 2019.	6/28/16	0%	1,500,000	1,500,000	11.0%
<b>Total eHealth</b>				<u>2,000,000</u>	<u>2,000,000</u>	
				<u>3,500,000</u>	<u>3,500,000</u>	
<b>Empire Genomics, LLC (g)</b> Buffalo, NY. Molecular diagnostics company that offers a comprehensive menu of assay services for diagnosing and guiding patient therapeutic treatments. (Health Care) www.empiregenomics.com	\$1,101,489 senior secured convertible term notes at 10% due April 30, 2018. \$250,000 promissory note at 12% due December 31, 2019. (i) Interest receivable \$65,906.	6/13/14	0%	1,101,489	1,101,489	4.2%
<b>Total Empire</b>				<u>1,351,489</u>	<u>1,351,489</u>	
<b>GoNoodle, Inc. (g)(m)</b> <b>(Formerly HealthTeacher, Inc.)</b> Nashville, TN. Student engagement education software providing core aligned physical activity breaks. (Software) www.gonoodle.com	\$1,000,000 secured note at 12% due January 31, 2020, (1% Payment in Kind (PIK)). Warrant for 47,324 Series C Preferred shares.	2/6/15	<1%	1,029,330	1,029,330	3.2%
<b>Total GoNoodle</b>				<u>25</u>	<u>25</u>	
				<u>1,029,355</u>	<u>1,029,355</u>	
<b>Mercantile Adjustment Bureau, LLC (g)</b> Williamsville, NY. Full service accounts receivable management and collections company. (Contact Center) www.mercantilesolutions.com	\$1,199,039 subordinated secured note at 13% (3% for the calendar year 2017) due January 31, 2018. (e) \$150,000 subordinated debenture at 8% due June 30, 2018. Warrant for 3.29% membership interests. Option for 1.5% membership interests. (i) Interest receivable \$55,983.	10/22/12	4%	1,199,040	949,040	3.0%
				150,000	—	
				<u>97,625</u>	<u>—</u>	
<b>Total Mercantile</b>				<u>1,446,665</u>	<u>949,040</u>	
<b>Outmatch Holdings, LLC (e)(g)</b> <b>(Chequed Holdings, LLC)</b> Dallas, TX. Web based predictive employee selection and reference checking. (Software) www.outmatch.com	2,641,899 Class P1 Units. 109,788 Class C1 Units.	11/18/10	4%	2,140,007	2,140,007	6.7%
				5,489	5,489	
<b>Total Outmatch</b>				<u>2,145,496</u>	<u>2,145,496</u>	

<b>PostProcess Technologies LLC (e)(g)</b> Buffalo, NY. Provides innovative solutions for the post-processing of additive manufactured 3D parts. (Manufacturing) <a href="http://www.postprocess.com">www.postprocess.com</a>	\$300,000 convertible promissory note at 5% due July 28, 2018.	7/25/16	0%	300,000	300,000	0.9%
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[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017 (Continued)**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>Rheonix, Inc. (e)</b> Ithaca, NY. Developer of fully automated microfluidic based molecular assay and diagnostic testing devices. (Health Care) www.rheonix.com	9,676 common shares. (g) 1,839,422 Series A preferred shares. (g) 50,593 common shares. (g) 589,420 Series B preferred shares.	10/29/09	4%	— 2,099,999 — 702,732	11,000 2,165,999 59,000 702,732	9.2%
<b>Total Rheonix</b>				<u>2,802,731</u>	<u>2,938,731</u>	
<b>SocialFlow, Inc. (e)(g)</b> New York, NY. Provides instant analysis of social networks using a proprietary, predictive analytic algorithm to optimize advertising and publishing. (Software) www.socialflow.com	1,049,538 Series B preferred shares. 1,204,819 Series B-1 preferred shares.  717,772 Series C preferred shares.	4/5/13	4%	500,000 750,000  500,000	731,431 839,648  500,221	6.5%
<b>Total Social Flow</b>				<u>1,750,000</u>	<u>2,071,300</u>	
<b>Somerset Gas Transmission Company, LLC (e)</b> Columbus, OH. Natural gas transportation. (Oil and Gas) www.somersetgas.com	26.5337 units.	7/10/02	3%	719,097	500,000	1.6%
<b>Other Non-Control/Non-Affiliate Investments:</b>						
<b>DataView, LLC (Software) (e)</b>	Membership Interest.	—	—	310,357	—	0.0%
<b>UStec/Wi3 (Manufacturing) (e)</b>	Common Stock.	—	—	100,500	—	0.0%
<b>Subtotal Non-Control/Non-Affiliate Investments</b>				<u>\$15,718,690</u>	<u>\$ 15,167,767</u>	
<b>Affiliate Investments – 53.3% of net assets (k)</b>						
<b>BeetNPath, LLC (Grainful) (e)(g)</b> Ithaca, NY. Frozen entrées and packaged dry side dishes made from 100% whole grain steel cut oats under Grainful brand name. (Consumer Product) www.grainful.com	1,119,024 Series A-2 Preferred Membership Units.  1,032,918 Series B Preferred Membership Units.	10/20/14	9%	\$ 359,000  261,277	\$ 359,000  291,000	2.0%
<b>Total BeetNPath</b>				<u>620,277</u>	<u>650,000</u>	
<b>Carolina Skiff LLC (g)</b> Waycross, GA. Manufacturer of fresh water, ocean fishing and pleasure boats. (Manufacturing) www.carolinaskiff.com	6.0825% Class A common membership interest.	1/30/04	7%	15,000	1,750,000	5.5%
<b>ClearView Social, Inc. (e)(g)</b> Buffalo, NY. Social media publishing tool for law, CPA and professional firms. (Software) www.clearviewsocial.com	312,500 Series seed plus preferred shares.	1/4/16	6%	200,000	200,000	0.6%
<b>First Wave Products Group, LLC (e)(g)</b> Batavia, NY. Sells First Crush automated pill crusher that crushes and grinds medical pills for nursing homes and medical institutions. (Health Care) www.firstwaveproducts.com	\$500,000 senior term notes at 10% due July 31, 2017. \$280,000 junior term notes at 10% due July 31, 2017.	4/19/12	7%	661,563 316,469	250,000 —	0.8%

	Warrant for 41,619 capital securities.			22,000	—	
				<u>1,000,032</u>	<u>250,000</u>	
	<b>Total First Wave</b>					
<b>Genicon, Inc.</b>	<b>(g)</b> 1,586,902 Series B preferred shares.	4/10/15	6%	1,000,000	1,000,000	12.6%
Winter Park, FL. Designs, produces and distributes patented surgical instrumentation. (Health Care)	<b>(g)</b> \$2,000,000 promissory note at 8% due May 1, 2020.			1,936,002	1,936,002	
www.geniconendo.com	<b>(g)</b> Warrant for 250,000 common shares.			80,000	80,000	
	<b>(n)</b> \$1,000,000 promissory note at 8% due May 1, 2020.			967,777	967,777	
	<b>(n)</b> Warrant for 125,000 common shares.			40,000	40,000	
	<b>Total Genicon</b>			<u>4,023,779</u>	<u>4,023,779</u>	

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017 (Continued)**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>GiveGab, Inc. (e)(g)</b> Ithaca, NY. Online fundraising, day of giving supporter engagement software for non-profit organizations. (Software) www.givegab.com	5,084,329 Series Seed preferred shares.	3/13/13	6%	616,221	424,314	1.3%
<b>G-TEC Natural Gas Systems (e)</b> Buffalo, NY. Manufactures and distributes systems that allow natural gas to be used as an alternative fuel to gases. (Manufacturing) www.gas-tec.com	16.639% Class A membership interest. 8% cumulative dividend.	8/31/99	17%	400,000	100,000	0.3%
<b>Intrinsiq Materials, Inc. (e)(g)</b> Rochester, NY. Produces printable electronics utilizing a unique process of nanomaterial based ink in a room-temperature environment. (Manufacturing) www.intrinsiqmaterials.com	4,161,747 Series A preferred shares.	9/19/13	12%	1,125,673	400,000	1.3%
<b>Knoa Software, Inc. (g)</b> New York, NY. End user experience management and performance (EMP) solutions utilizing enterprise applications. (Software) www.knoa.com	973,533 Series A-1 convertible preferred shares. 1,876,922 Series B preferred shares. \$48,466 convertible promissory note at 8% due May 9, 2018.	11/20/12	7%	750,000 479,155 48,466	750,000 479,155 48,466	4.0%
<b>Total Knoa</b>				<u>1,277,621</u>	<u>1,277,621</u>	
<b>KnowledgeVision Systems, Inc. (e)(g)</b> Lincoln, MA. Online presentation and training software. (Software) www.knowledgevision.com	200,000 Series A-1 preferred shares. 214,285 Series A-2 preferred shares. 129,033 Series A-3 preferred shares. Warrant for 46,743 Series A-3 shares. \$50,000 subordinated promissory note at 8% payable on demand of majority of noteholders after August 31, 2017.	11/13/13	7%	250,000 300,000 165,001 35,000 50,000	— 300,000 165,001 35,000 50,000	1.7%
<b>Total KnowledgeVision</b>				<u>800,001</u>	<u>550,001</u>	
<b>Mezmeriz, Inc. (e)(g)</b> Ithaca, NY. Micro-electronic mechanical systems (MEMS) developer of carbon fiber MEMS mirror modules for gesture recognition and 3D scanning. (Electronics Developer) www.mezmeriz.com	1,554,565 Series Seed preferred shares.	1/9/08	14%	742,850	351,477	1.1%
<b>Microcision LLC (g)(m)</b> Pennsauken Township, NJ. Manufacturer of precision machined medical implants, components and assemblies. (Manufacturing) www.microcision.com	\$1,500,000 subordinated promissory note at 12% (1% PIK) due December 31, 2024. 15% Class A common membership interest.	9/24/09	15%	1,914,140 —	1,914,140 —	6.0%
<b>Total Microcision</b>				<u>1,914,140</u>	<u>1,914,140</u>	
<b>New Monarch Machine Tool, Inc. (g)</b>	22.84 common shares.	9/24/03	15%	22,841	22,841	0.1%

Cortland, NY. Manufactures and services  
vertical/horizontal machining centers.  
(Manufacturing)  
[www.monarchmt.com](http://www.monarchmt.com)

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017 (Continued)**

Company, Geographic Location, Business Description, (Industry) and Website	(a) Type of Investment	(b) Date Acquired	(c) Equity	Cost	(d)(f) Fair Value	Percent of Net Assets
<b>OnCore Golf Technology, Inc. (e)(g)</b> Buffalo, NY. Maker of patented golf balls. (Consumer Product) www.oncoregolf.com	150,000 Series AA preferred shares. \$300,000 subordinated convertible promissory notes at 6% (10% for calendar year 2017) due January 24, 2018. (i) Interest receivable \$50,342.	12/31/14	9%	375,000	—	0.9%
<b>Total OnCore</b>				<u>675,000</u>	<u>300,000</u>	
<b>SciAps, Inc. (e)(g)</b> Woburn, MA. Instrumentation company producing portable analytical devices using XRF, LIBS and RAMAN spectroscopy to identify compounds, minerals, and elements. (Manufacturing) www.sciaps.com	187,500 Series A convertible preferred shares. 274,299 Series A-1 convertible preferred shares. 117,371 Series B convertible preferred shares. 113,636 Series C preferred shares. 369,698 Series C-1 preferred shares.	7/12/13	8%	1,500,000	700,000	5.6%
<b>Total SciAps</b>				<u>2,828,984</u>	<u>1,774,274</u>	
<b>SOMS Technologies, LLC (e)(g)</b> Valhalla, NY. Produces and markets the microGreen Extended Performance Oil Filter. (Consumer Products) www.microgreenfilter.com	5,959,490 Series B membership interests.	12/2/08	9%	472,632	528,348	1.7%
<b>Teleservices Solutions Holdings, LLC (e)(g)(m)</b> Montvale, NJ. Customer contact center specializing in customer acquisition and retention for selected industries. (Contact Center) www.ipacesetters.com	250,000 Class B preferred units. 1,000,000 Class C preferred units. 80,000 Class D preferred units. 104,198 Class E preferred units. PIK dividend for Series C and D at 12% and 14%, respectively.	5/30/14	6%	250,000 1,190,680 91,200 104,198	— — — —	0.0%
<b>Total Teleservices</b>				<u>1,636,078</u>	<u>—</u>	
<b>Tilson Technology Management, Inc</b> Portland, ME. Cellular, fiber optic and wireless information systems, construction, and management. (Professional Services) www.tilsonotech.com	(g) 120,000 Series B preferred shares. 21,391 Series C convertible preferred shares. (g) \$200,000 subordinated promissory note at 8% due September 28, 2021. (n) 65,790 Series D preferred shares. (n) \$750,000 subordinated promissory note at 8% due December 1, 2022.	1/20/15	11%	600,000 200,000 200,000 750,000	600,000 200,000 200,000 750,000	7.8%
<b>Total Tilson</b>				<u>2,500,000</u>	<u>2,500,000</u>	
<b>Subtotal Affiliate Investments</b>				<u>\$20,871,129</u>	<u>\$17,016,795</u>	
<b>Control Investments – 0.3% of net assets (l)</b>						
<b>Advantage 24/7 LLC (e)(g)</b> Williamsville, NY. Marketing program for wine and spirits dealers. (Marketing Company) www.advantage24-7.com	53% Membership interest.	12/30/10	53%	\$ 99,500	\$ 99,500	0.3%

<b>Subtotal Control Investments</b>	<u>\$ 99,500</u>	<u>\$ 99,500</u>
<b>TOTAL INVESTMENTS –</b>		
<b>101.1%</b>	\$36,689,319	\$32,284,062
<b>LIABILITIES IN EXCESS OF</b>		
<b>OTHER ASSETS – (1.1%)</b>		<u>(365,377)</u>
<b>NET ASSETS – 100%</b>		<u><b>\$31,918,685</b></u>

**RAND CAPITAL CORPORATION AND SUBSIDIARIES  
CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS  
December 31, 2017 (Continued)**

**Notes to the Consolidated Schedule of Portfolio Investments**

- (a) At December 31, 2017, restricted securities represented 100% of the fair value of the investment portfolio. Restricted securities are subject to one or more restrictions on resale and are not freely marketable.
- (b) The Date Acquired column indicates the year in which the Corporation first acquired an investment in the company or a predecessor company.
- (c) Each equity percentage estimates the Corporation's ownership interest in the applicable portfolio investment. The estimated ownership is calculated based on the percent of outstanding voting securities held by the Corporation or the potential percentage of voting securities held by the Corporation upon exercise of warrants or conversion of debentures, or other available data. If applicable, the symbol "<1%" indicates that the Corporation holds an equity interest of less than one percent.
- (d) The Corporation's investments are carried at fair value in accordance with Accounting Standards Codification (ASC) 820 "Fair Value Measurements and Disclosures," which defines fair value and establishes guidelines for measuring fair value. At December 31, 2017, ASC 820 designates 100% of the Corporation's investments as "Level 3" assets. Under the valuation policy of the Corporation, unrestricted publicly held securities are valued at the average closing bid price for these securities for the last three trading days of the reporting period. Restricted securities are subject to restrictions on resale, and are valued at fair value as determined by the management of the Corporation and submitted to the Board of Directors for approval. Fair value is considered to be the amount that the Corporation may reasonably expect to receive for portfolio securities when sold on the valuation date. Valuations as of any particular date, however, are not necessarily indicative of amounts which may ultimately be realized as a result of future sales or other dispositions of securities and these favorable or unfavorable differences could be material. Among the factors considered in determining the fair value of restricted securities are the financial condition and operating results, projected operations, and other analytical data relating to the investment. Also considered are the market prices for unrestricted securities of the same class (if applicable) and other matters which may have an impact on the value of the portfolio company (see Note 2 "Investments" to the Consolidated Financial Statements).
- (e) These investments are non-income producing. All other investments are income producing. Non-income producing investments have not generated cash payments of interest or dividends including LLC tax-related distributions within the last twelve months, or are not expected to do so going forward.
- (f) As of December 31, 2017, the total cost of investment securities was approximately \$36.7 million. Net unrealized depreciation was approximately (\$4.4) million, which was comprised of \$2.4 million of unrealized appreciation of investment securities and (\$6.8) million of unrealized depreciation of investment securities. At December 31, 2017, the aggregate gross unrealized gain for federal income tax purposes was \$2.8 million and the aggregate gross unrealized loss for federal income tax purposes was (\$4.4) million. The net unrealized loss for federal income tax purposes was (\$1.6) million based on a tax cost of \$33.9 million.
- (g) Rand Capital SBIC, Inc. investment.
- (h) Reduction in cost and value from previously reported balances reflects current principal repayment. There were no principal repayments during the year ended December 31, 2017.
- (i) Represents interest due (amounts over \$50,000) from investments included as interest receivable on the Corporation's Consolidated Statements of Financial Position.
- (j) Non-Control/Non-Affiliate Investments are investments that are neither Control Investments nor Affiliate Investments.
- (k) Affiliate Investments are defined by the Investment Company Act of 1940, as amended ("1940 Act"), as those Non-Control investments in companies in which between 5% and 25% of the voting securities are owned by the Corporation.
- (l) Control Investments are defined by the 1940 Act as investments in companies in which more than 25% of the voting securities are owned by the Corporation or where greater than 50% of the board representation is maintained.
- (m) Payment in kind (PIK) represents earned interest that is added to the cost basis of the investment.
- (n) Rand Capital SBIC II, L.P. investment.

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017 (Continued)**

**Investments in and Advances to Affiliates**

Company	Type of Investment	December 31, 2016 Fair Value	Gross Additions (1)	Gross Reductions (2)	December 31, 2017 Fair Value	Net Realized Gains (Losses)	Amount of Interest/ Dividend/ Fee Income (3)
<b>Control Investments:</b>							
<b>Advantage 24/7</b>							
LLC	53% Membership interest.	\$ 99,500	\$ —	\$ —	\$ 99,500	\$ —	\$ —
<b>Total Control Investments</b>		<b>\$ 99,500</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 99,500</b>	<b>\$ —</b>	<b>\$ —</b>
<b>Affiliate Investments:</b>							
BeetNPath, LLC	1,119,024 Series A-2 Preferred Membership Units.	\$ 359,000	\$ —	\$ —	\$ 359,000	\$ —	\$ —
	1,032,918 Series B Preferred Membership Units	—	\$ 291,000	—	291,000	—	—
	\$150,000 convertible promissory note at 8%.	150,000	—	(150,000)	—	—	4,800
<b>Total BeetNPath</b>		<b>509,000</b>	<b>291,000</b>	<b>(150,000)</b>	<b>650,000</b>	<b>—</b>	<b>4,800</b>
Carolina Skiff LLC	6.0825% Class A common membership interest.	1,100,000	650,000	—	1,750,000	—	178,532
ClearView Social, Inc.	312,500 Series seed plus preferred shares.	200,000	—	—	200,000	—	—
First Wave Products Group, LLC	\$500,000 senior term notes at 10%.	250,000	—	—	250,000	—	—
	\$280,000 junior term notes at 10%.	—	—	—	—	—	—
	Warrant for 41,619 capital securities.	—	—	—	—	—	—
<b>Total First Wave</b>		<b>250,000</b>	<b>—</b>	<b>—</b>	<b>250,000</b>	<b>—</b>	<b>—</b>
Genicon, Inc.	1,586,902 Series B preferred shares.	1,000,000	—	—	1,000,000	—	—
	\$1,100,000 senior term loans at 12%.	1,100,000	—	(1,100,000)	—	—	50,234
	\$600,000 term loan at 14%.	600,000	—	(600,000)	—	—	32,200
	\$2,000,000 promissory note at 8%	—	2,016,002	(80,000)	1,936,002	—	129,752
	\$1,000,000 promissory note at 8%	—	1,007,777	(40,000)	967,777	—	60,860
	Warrant for 250,000 common shares	—	80,000	—	80,000	—	—
	Warrant for 125,000 common shares	—	40,000	—	40,000	—	—
<b>Total Genicon</b>		<b>2,700,000</b>	<b>3,143,779</b>	<b>(1,820,000)</b>	<b>4,023,779</b>	<b>—</b>	<b>273,046</b>
GiveGab, Inc.	5,084,329 Series Seed preferred shares.	424,314	—	—	424,314	—	—
G-TEC Natural Gas Systems	16.639% Class A membership interest. 8% cumulative dividend	100,000	—	—	100,000	—	—
Intrinsiq Materials, Inc.	4,161,747 Series A preferred shares.	780,000	—	(380,000)	400,000	—	—
Knoa Software, Inc.	973,533 Series A-1 convertible preferred shares.	—	750,000	—	750,000	—	—
	1,876,922 Series B preferred shares.	449,455	29,700	—	479,155	—	—
	\$48,466 convertible promissory note at 8%.	48,466	—	—	48,466	—	3,877
<b>Total Knoa</b>		<b>497,921</b>	<b>779,700</b>	<b>—</b>	<b>1,277,621</b>	<b>—</b>	<b>3,877</b>

<b>KnowledgeVision Systems, Inc.</b>	200,000 Series A-1 preferred shares.	—	—	—	—	—	—
		300,000	—	—	300,000	—	—
	214,285 Series A-2 preferred shares.	165,001	—	—	165,001	—	—
		—	50,000	—	50,000	—	3,748
	129,033 Series A-3 preferred shares.						
\$50,000 subordinated promissory note at 8%							
Warrant for 46,743 Series A-3 shares.	35,000	—	—	35,000	—	—	
<b>Total Knowledge Vision</b>	<b>500,001</b>	<b>50,000</b>	<b>—</b>	<b>550,001</b>	<b>—</b>	<b>3,748</b>	
<b>Mezmeriz, Inc.</b>	1,554,565 Series seed preferred shares.	351,477	—	—	351,477	—	—
<b>Microcision LLC</b>	\$1,500,000 subordinated promissory note at 11%.	1,891,964	22,176	—	1,914,140	—	228,239
<b>New Monarch Machine Tool, Inc.</b>	22.84 common shares.	22,841	—	—	22,841	—	28,409

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017 (Continued)**

**Investments in and Advances to Affiliates**

Company	Type of Investment	December 31, 2016 Fair Value	Gross Additions (1)	Gross Reductions (2)	December 31, 2017 Fair Value	Net Realized Gains (Losses)	Amount of Interest/ Dividend/ Fee Income (3)
<b>OnCore Golf Technology, Inc.</b>	150,000 Series AA preferred shares. \$300,000 subordinated convertible promissory notes at 6%.	—	—	—	—	—	—
	<b>Total OnCore</b>	<u>300,000</u>	<u>—</u>	<u>—</u>	<u>300,000</u>	<u>—</u>	<u>29,211</u>
<b>SciAps, Inc.</b>	187,500 Series A convertible preferred shares.	1,000,000	—	(300,000)	700,000	—	—
	274,299 Series A-1 convertible preferred shares.	504,710	—	(254,710)	250,000	—	—
	117,371 Series B convertible preferred shares.	250,000	—	—	250,000	—	—
	113,636 Series C preferred shares.	—	175,000	—	175,000	—	—
	369,698 Series C-1 preferred shares.	—	399,274	—	399,274	—	—
	\$200,000 subordinated promissory note at 10%.	200,000	—	(200,000)	—	—	4,731
	\$100,000 secured subordinated convertible note at 10%.	100,000	—	(100,000)	—	—	2,376
	<b>Total SciAps</b>	<u>2,054,710</u>	<u>574,274</u>	<u>(854,710)</u>	<u>1,774,274</u>	<u>—</u>	<u>7,107</u>
<b>SOMS Technologies, LLC</b>	5,959,490 Series B membership interests.	528,348	—	—	528,348	—	6,024
<b>Teleservices Solutions Holdings, LLC</b>	250,000 Class B shares.	—	—	—	—	—	—
	1,000,000 Class C shares.	200,000	—	(200,000)	—	—	—
	80,000 Class D preferred units.	91,200	—	(91,200)	—	—	—
	104,198 Class E preferred units.	104,198	—	(104,198)	—	—	—
	<b>Total Teleservices</b>	<u>395,398</u>	<u>—</u>	<u>(395,398)</u>	<u>—</u>	<u>—</u>	<u>—</u>
<b>Tilson Technology Management, Inc.</b>	120,000 Series B preferred shares.	600,000	—	—	600,000	—	20,000
	21,391 Series C convertible preferred shares.	200,000	—	—	200,000	—	—
	\$200,000 subordinated promissory note at 8%.	—	750,000	—	750,000	—	1,579
	65,790 Series D preferred shares. \$750,000 subordinated promissory note at 8%.	—	750,000	—	750,000	—	5,096
	<b>Total Tilson</b>	<u>1,000,000</u>	<u>1,500,000</u>	<u>—</u>	<u>2,500,000</u>	<u>—</u>	<u>42,675</u>
	<b>Total Affiliate Investments</b>	<u>\$13,605,974</u>	<u>\$7,010,929</u>	<u>(\$3,600,108)</u>	<u>\$17,016,795</u>	<u>\$ —</u>	<u>\$ 805,668</u>
	<b>Total Control and Affiliate Investments</b>	<u>\$13,705,474</u>	<u>\$7,010,929</u>	<u>(\$3,600,108)</u>	<u>\$17,116,295</u>	<u>\$ —</u>	<u>\$ 805,668</u>

This schedule should be read in conjunction with the Corporation's Consolidated Financial Statements, including the Consolidated Schedule of Portfolio Investments and Notes to the Consolidated Financial Statements.

- (1) Gross additions include increases in the cost basis of investments resulting from new portfolio investments, follow on investments, capitalized interest and the accretion of discounts. Gross additions also include net increases in unrealized appreciation or net decreases in unrealized depreciation, and the movement of an existing portfolio company into this category and out of another category.
- (2) Gross reductions include decreases in the cost basis of investments resulting from principal repayments, sales, note conversions, net increases in unrealized depreciation, net decreases in unrealized appreciation, the exchange of existing securities for new securities and the movement of an existing portfolio company out of this category and into another category.
- (3) Represents the total amount of interest, fees or dividends credited to income for the portion of the period an investment was included in Control or Affiliate categories, respectively.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED SCHEDULE OF PORTFOLIO INVESTMENTS**  
**December 31, 2017 (Continued)**

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<u>Industry Classification</u>	<u>Percentage of Total Investments (at fair value) as of December 31, 2017</u>
Healthcare	37.7%
Software	24.7
Manufacturing	19.4
Professional Services	7.7
Consumer Product	4.6
Contact Center	2.9
Oil and Gas	1.6
Electronics	1.1
Marketing	0.3
<b>Total Investments</b>	<b>100%</b>

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**FINANCIAL HIGHLIGHTS SCHEDULE**  
**For the Five Years Ended December 31, 2018, 2017, 2016, 2015 and 2014**

The following is a schedule of financial highlights for the years ended:

	2018	2017	2016	2015	2014
<b>Per Share Data:</b>					
Income from investment operations (1):					
Investment income	\$ 0.33	\$ 0.23	\$ 0.16	\$ 0.45	\$ 0.40
Expenses	0.34	0.32	0.54	0.29	0.39
Investment (loss) gain before income taxes	(0.01)	(0.09)	(0.38)	0.16	0.01
Income tax (benefit) expense	(0.00)	(0.09)	(0.13)	0.02	0.01
Net investment (loss) gain	(0.01)	(0.00)	(0.25)	0.14	0.00
Purchase of treasury stock (2)	0.00	0.00	0.00	0.00	0.02
Net realized and unrealized (loss) gain on investments	(0.05)	(0.11)	0.06	0.10	0.71
(Decrease) increase in net asset value	(0.06)	(0.11)	(0.19)	0.24	0.73
Net asset value, beginning of year, based on weighted average shares	5.05	5.16	5.35	5.11	4.38
Net asset value, end of year, based on weighted average shares	\$ 4.99	\$ 5.05	\$ 5.16	\$ 5.35	\$ 5.11
Per share market value, end of year	\$ 2.50	\$ 3.02	\$ 3.16	\$ 3.77	\$ 4.09
Total return based on market value	(17.22%)	(4.43%)	(16.1%)	(7.8%)	33.2%
Total return based on net asset value	(1.24%)	(2.18%)	(3.62%)	4.64%	15.26%
<b>Supplemental Data:</b>					
Ratio of expenses before income taxes to average net assets	6.92%	6.23%	10.23%	5.49%	8.27%
Ratio of expenses including taxes to average net assets	5.73%	6.29%	8.48%	7.89%	16.28%
Ratio of net investment (loss) gain to average net assets	(0.22%)	(0.06%)	(3.62%)	2.55%	0.07%
Portfolio turnover	7.4%	18.1%	18.4%	21.4%	21.5%
Net assets end of year	\$31,524,187	\$31,918,685	\$32,629,363	\$33,853,660	\$32,353,441
Weighted average shares outstanding, end of year	6,321,988	6,321,988	6,325,792	6,328,538	6,391,175

(1) Per share data are based on shares outstanding and results are rounded.

(2) Net increase is due to purchase of common stock at prices less than beginning of period net asset value per share.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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**NOTE 1. - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Nature of Business** - Rand Capital Corporation (“Rand”) was incorporated under the laws of New York in 1969. Beginning in 1971, Rand operated as a publicly traded, closed-end, diversified management company that was registered under Section 8 of the Investment Company Act of 1940 (the “1940 Act”). In 2001, Rand elected to be treated as a business development company (“BDC”) under the 1940 Act. In 2002, Rand formed a wholly-owned subsidiary for the purpose of operating it as a small business investment company (“SBIC”) licensed by the U.S. Small Business Administration (“SBA”). The subsidiary received an SBA license to operate as an SBIC in 2002. The subsidiary, which had been organized as a Delaware limited partnership, was converted into a New York corporation on December 31, 2008, at which time its operations as a licensed SBIC were continued by the newly formed corporation under the name of Rand Capital SBIC, Inc. (“Rand SBIC”). In 2012, the SEC granted an Order of Exemption for Rand with respect to the operations of Rand SBIC. At that time, although Rand SBIC was operated as if it were a BDC, it was registered as an investment company under the 1940 Act. Upon Rand’s receipt of the order granting the exemptions, Rand SBIC filed an election to be regulated as a BDC under the 1940 Act. The following discussion describes the operations of Rand and its wholly-owned subsidiary Rand SBIC (collectively, the “Corporation”).

**Principles of Consolidation** - The consolidated financial statements include the accounts of Rand and its wholly-owned subsidiary. All intercompany accounts and transactions have been eliminated in consolidation.

**Fair Value of Financial Instruments** – The carrying amounts reported in the consolidated statement of financial position of cash, interest receivable, accounts payable and accrued expenses approximate fair value because of the immediate or short-term maturity of these financial instruments.

**Fair Value of SBA Debentures** - In September 2018, the SBIC Funding Corporation completed a pooling of SBA debentures that have a coupon rate of 3.548%, excluding a mandatory SBA annual charge estimated to be 0.804%, resulting in a total estimated fixed rate for ten years of 4.352%. The carrying value of Rand’s SBA debentures is a reasonable estimate of fair value because their stated interest rates approximate current interest rates that are available for debt with similar terms.

**Investment Classification** – In accordance with the provisions of the 1940 Act, the Corporation classifies its investments by level of control. Under the 1940 Act “Control Investments” are investments in companies that the Corporation is deemed to “Control” if it owns more than 25% of the voting securities of the company or has greater than 50% representation on the company’s board. “Affiliate Investments” are companies in which the Corporation owns between 5% and 25% of the voting securities. “Non-Control/Non-Affiliate Investments” are those companies that are neither Control Investments nor Affiliate Investments.

**Investments** - Investments are valued at fair value as determined in good faith by the management of the Corporation and approved by the Board of Directors. The Corporation invests in loan instruments, debt instruments, and equity instruments. There is no single standard for determining fair value in good faith. As a result, determining fair value requires that judgment be applied to the specific

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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facts and circumstances of each portfolio investment while employing a consistent valuation process. The Corporation analyzes and values each investment quarterly, and records unrealized depreciation for an investment that it believes has become impaired, including where collection of a loan or debt security or realization of the recorded value of an equity security is doubtful. Conversely, the Corporation will record unrealized appreciation if it believes that an underlying portfolio company has appreciated in value and, therefore, its equity securities have also appreciated in value. These estimated fair values may differ from the values that would have been used had a ready market for the investments existed and these differences could be material if the Corporation's assumptions and judgments differ from results of actual liquidation events. (See Note 2 "Investments.")

**Qualifying Assets** - All of the Corporation's investments have been made in privately held small business enterprises, that were not investment companies, were principally based in the United States, and represent qualifying assets as defined by Section 55(a) of the 1940 Act.

**Cash and Cash Equivalents** - Temporary cash investments having a maturity of less than a year when purchased are considered to be cash equivalents.

**Revenue Recognition - Interest Income** - Interest income is recognized on the accrual basis except where the investment is in default or otherwise presumed to be in doubt. In such cases, interest is recognized at the time of receipt. A reserve for possible losses on interest receivable is maintained when appropriate.

Rand SBIC's interest accrual is also regulated by the SBA's "Accounting Standards and Financial Reporting Requirements for Small Business Investment Companies." Under these rules, interest income cannot be recognized if collection is doubtful, and a 100% reserve must be established. The collection of interest is presumed to be in doubt when there is substantial doubt about a portfolio company's ability to continue as a going concern or a loan is in default for more than 120 days. Management also uses other qualitative and quantitative measures to determine the value of a portfolio investment and the collectability of any accrued interest.

The following investments are on non-accrual status: G-TEC Natural Gas Systems (G-Tec) and a portion of the Mercantile Adjustment Bureau, LLC (Mercantile) outstanding loan balance.

The Corporation holds debt securities in its investment portfolio that contain payment-in-kind ("PIK") interest provisions. PIK interest, computed at the contractual rate specified in each debt agreement, is periodically added to the principal balance of the debt and is recorded as interest income. Thus, the actual collection of this interest may be deferred until the time of debt principal repayment.

**Revenue Recognition - Dividend Income** - The Corporation may receive cash distributions from portfolio companies that are limited liability companies or corporations and these distributions are classified as dividend income on the consolidated statement of operations. Dividend income is recognized on an accrual basis when it can be reasonably estimated.

The Corporation may hold preferred equity securities that contain cumulative dividend provisions. Cumulative dividends are recorded as dividend income, if declared and deemed collectible,

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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and any dividends in arrears are recognized into income and added to the balance of the preferred equity investment. The actual collection of these dividends in arrears may be deferred until such time as the preferred equity is redeemed.

**Revenue Recognition - Fee Income** – Primarily consists of the revenue associated with the amortization of financing fees charged to the portfolio companies upon successful closing of SBIC financings and income associated with portfolio company board attendance fees. The income associated with the amortization of financing fees was \$41,872, \$24,091 and \$22,634 for the years ended December 31, 2018, 2017 and 2016, respectively and is estimated to be approximately \$46,000 in 2019, \$21,000 in 2020 and \$6,000 in 2021. The board fees were \$2,000, \$1,000 and \$4,000 for the years ended December 31, 2018, 2017 and 2016, respectively. In addition, we recorded a fee of approximately \$142,000 for modifying a debt instrument during the year ended December 31, 2018.

**Realized Gain or Loss and Unrealized Appreciation or Depreciation of Investments** - Amounts reported as realized gains and losses are measured by the difference between the proceeds from the sale or exchange and the cost basis of the investment without regard to unrealized gains or losses recorded in prior periods. Proceeds held in escrow are reported in other assets. The cost of securities that have, in management’s judgment, become worthless are written off and reported as realized losses when appropriate. Unrealized appreciation or depreciation reflects the difference between the valuation of the investments and the cost basis of the investments.

**Original Issue Discount** – Investments may include “original issue discount”, or OID, income. This occurs, for example, when the Corporation purchases a warrant and a note from a portfolio company simultaneously, which requires an allocation of a portion of the purchase price to the warrant and reduces the purchase price allocated to the note by an equal amount in the form of a note discount or OID. The note is reported net of the OID and the OID is accreted into interest income over the life of the loan. The Corporation recognized \$39,653, \$32,129 and \$9,996 in OID income for the years ended December 31, 2018, 2017 and 2016, respectively. OID income is estimated to be approximately \$41,000 for 2019.

**Deferred Debenture Costs** - SBA debenture origination and commitment costs, which are netted against the debenture obligation (See Note 5 “SBA Debenture Obligations”), will be amortized ratably over the terms of the SBA debentures. Amortization expense was \$27,400 for each of the years ended December 31, 2018, 2017 and 2016, respectively. Amortization expense on currently outstanding debentures for the next five years is estimated to average \$29,000 per year.

**Net Assets Per Share** - Net assets per share are based on the number of shares of common stock outstanding. There are no common stock equivalents outstanding.

**Supplemental Cash Flow Information** - Income taxes refunded (paid) during the years ended December 31, 2018, 2017 and 2016 amounted to \$26,448, (\$486,769) and (\$2,560,614), respectively. Interest paid during the years ended December 31, 2018, 2017 and 2016 was \$282,875, \$282,875 and \$283,650, respectively. During 2018, 2017 and 2016, the Corporation converted \$609,817, \$269,445 and \$19,252, respectively, of interest receivable and payment-in-kind (PIK) interest into debt investments. During the year ended December 31, 2016, the Corporation recorded one escrow receivable for \$1,100,000 from the sale of Gemcor II LLC, which was collected during 2017. During the year ended December 31, 2016, the Corporation collected \$1,510,248 in escrow receivable from BinOptics Corporation.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**Concentration of Credit and Market Risk** – The Corporation’s financial instruments potentially subject it to concentrations of credit risk. Cash is invested with banks in amounts which, at times, exceed insured limits. Management does not anticipate non-performance by the banks.

As of December 31, 2018, 45% of the Corporation’s total investment value was held in debt and equity securities of five portfolio companies. As of December 31, 2017, 47% of the Corporation’s total investment value was held in debt and equity securities in five portfolio companies.

The following are the concentrations of the top five portfolio company values to the fair value of the Corporation’s total investment portfolio:

	<b>December 31, 2018</b>
Genicon, Inc. (Genicon)	13%
eHealth Global Technologies, Inc. (eHealth),	10%
ACV Auctions, Inc. (ACV)	8%
Tilson Technology Management, Inc. (Tilson)	7%
Microcision, LLC. (Microcision)	7%

	<b>December 31, 2017</b>
Genicon, Inc. (Genicon)	12%
eHealth Global Technologies, Inc. (eHealth),	11%
Rheonix, Inc. (Rheonix)	9%
Tilson Technology Management, Inc. (Tilson)	8%
Outmatch (Outmatch)	7%

**Income Taxes** - The Corporation reviews the tax positions it has taken to determine if they meet the “more likely than not threshold” for the benefit of the tax position to be recognized in the financial statements. A tax position that fails to meet the more likely than not recognition threshold will result in either a reduction of a current or deferred tax asset or receivable, or the recording of a current or deferred tax liability. (See Note 4 “Income Taxes.”)

**Accounting Estimates** - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**SBA Debenture** - The Corporation had \$8,750,000 and \$8,000,000 in outstanding SBA debentures at December 31, 2018 and December 31, 2017, respectively, with a weighted average interest rate of 3.58% as of December 31, 2018. The \$8,750,000 in outstanding SBA debentures matures from 2022 through 2029.

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**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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As a requirement of being licensed the SBA, Rand SBIC has accepted the SBA's standard default language which states that Rand SBIC has consented to the exercise by the SBA of all rights of the SBA under 13 C.F.R. 107.1810(i) "SBA remedies for automatic events of default" and has agreed to take all actions that the SBA may so require, which may include automatic consent to the appointment of the SBA or its designee as receiver under Section 311(c) of the Small Business Investment Act of 1958.

**NOTE 2. – INVESTMENTS**

The Corporation's investments are carried at fair value in accordance with Accounting Standards Codification (ASC) 820, "Fair Value Measurements and Disclosures", which defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosures about fair value measurements.

Loan investments are defined as traditional loan financings with no equity features. Debt investments are defined as debt financings that include one or more equity features such as conversion rights, stock purchase warrants, and/or stock purchase options. A financing may also be categorized as a debt financing if it is accompanied by the direct purchase of an equity interest in a portfolio company.

The Corporation uses several approaches to determine the fair value of an investment. The main approaches are:

- Loan and debt securities are valued at cost when it is representative of the fair value of the investment or sufficient assets or liquidation proceeds are expected to exist from a sale of a portfolio company at its estimated fair value. However, they may be valued at an amount other than cost given the carrying interest rate versus the related inherent portfolio risk of the investment. A loan or debt instrument may be reduced in value if it is judged to be of poor quality, collection is in doubt or insufficient liquidation proceeds exist.
- Equity securities may be valued using the "asset approach", "market approach" or "income approach." The asset approach involves estimating the liquidation value of the portfolio company's assets. This approach values the equity at the value remaining after the portfolio company pays of its debt and loan balances and its outstanding liabilities. The market approach uses observable prices and other relevant information generated by similar market transactions. It may include the use of market multiples derived from a set of comparables to assist in pricing the investment. Additionally, the Corporation adjusts valuations if a subsequent significant equity financing has occurred that includes a meaningful portion of the financing by a sophisticated, unrelated new investor. The income approach employs a cash flow and discounting methodology to value an investment.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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ASC 820 classifies the inputs used to measure fair value into the following hierarchy:

Level 1: Quoted prices in active markets for identical assets or liabilities, used in the Corporation's valuation at the measurement date.

Level 2: Quoted prices for similar assets or liabilities in active markets, or quoted prices for identical or similar assets or liabilities in markets that are not active, or other observable inputs other than quoted prices.

Level 3: Unobservable and significant inputs to determining the fair value.

Financial assets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Any changes in estimated fair value are recorded in the consolidated statement of operations.

There were no Level 1 or 2 investments as of December 31, 2018.

In the valuation process, the Corporation values restricted securities, categorized as Level 3 investments, using information from these portfolio companies, which may include:

- Audited and unaudited statements of operations, balance sheets and operating budgets;
- Current and projected financial, operational and technological developments of the portfolio company;
- Current and projected ability of the portfolio company to service its debt obligations;
- The current capital structure of the business and the seniority of the various classes of equity if a deemed liquidation event were to occur;
- Pending debt or capital restructuring of the portfolio company;
- Current information regarding any offers to purchase the investment, or recent fundraising transactions;
- Current ability of the portfolio company to raise additional financing if needed;
- Changes in the economic environment which may have a material impact on the operating results of the portfolio company;
- Internal circumstances and events that may have an impact (both positive and negative) on the operating performance of the portfolio company;
- Qualitative assessment of key management;
- Contractual rights, obligations or restrictions associated with the investment; and
- Other factors deemed relevant by the Corporation's management to assess valuation.

The valuation may be reduced if a portfolio company's performance and potential have deteriorated significantly. If the factors that led to a reduction in valuation are overcome, the valuation may be readjusted.

Equity Securities

Equity securities may include preferred stock, common stock, warrants and limited liability company membership interests.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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The significant unobservable inputs used in the fair value measurement of the Corporation's equity investments are earnings before interest, tax and depreciation and amortization (EBITDA) and revenue multiples, where applicable, the financial and operational performance of the business, and the debt and senior equity preferences that may exist in a deemed liquidation event. Standard industry multiples may be used when available; however, the Corporation's portfolio companies are typically small and in early stages of development and these industry standards may be adjusted to more closely match the specific financial and operational performance of the portfolio company. Due to the nature of certain investments, fair value measurements may be based on other criteria, which may include third party appraisals. Significant changes in any of these unobservable inputs may result in a significantly higher or lower fair value estimate.

Another key factor used in valuing equity investments is a significant recent arms-length equity transaction entered into by the portfolio company with a sophisticated, non-strategic, unrelated, new investor. The terms of these equity transactions may not be identical to the equity transactions between the portfolio company and the Corporation, and the impact of the difference in transaction terms on the market value of the portfolio company may be difficult or impossible to quantify.

When appropriate the Black-Scholes pricing model is used to estimate the fair value of warrants for accounting purposes. This model requires the use of highly subjective inputs including expected volatility and expected life, in addition to variables for the valuation of minority equity positions in small private and early stage companies. Significant changes in any of these unobservable inputs may result in a significantly higher or lower fair value estimate.

For recent investments of less than one year old, the Corporation generally relies on the cost basis, which is deemed to represent the fair value, unless other fair value inputs are identified causing the Corporation to depart from this basis.

Loan and Debt Securities

The significant unobservable inputs used in the fair value measurement of the Corporation's loan and debt securities are the financial and operational performance of the portfolio company, similar debt with similar terms with other portfolio companies, as well as the market acceptance for the portfolio company's products or services. These inputs will likely provide an indicator as to the probability of principal recovery of the investment. The Corporation's loan and debt investments are often junior secured or unsecured debt securities. Fair value may also be determined based on other criteria where appropriate. Significant changes to the unobservable inputs may result in a change in fair value.

For recent investments, the Corporation generally relies on the cost basis, which is deemed to represent the fair value, unless other fair value inputs are identified causing the Corporation to depart from this basis.

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

The following table provides a summary of the significant unobservable inputs used to determine the fair value of the Corporation's Level 3 portfolio investments as of December 31, 2018:

Investment Type	Market Approach EBITDA Multiple	Market Approach Liquidation Seniority	Market Approach Revenue Multiple	Market Approach Transaction Pricing	Totals
Non-Control/Non-Affiliate Equity	\$ —	\$ 25	\$ 2,645,496	\$ 7,968,502	\$10,614,023
Non-Control/Non-Affiliate Debt	\$ 700,000	5,316,413	—	910,777	6,927,190
<b>Total Non-Control/Non-Affiliate</b>	<b>\$ 700,000</b>	<b>\$ 5,316,438</b>	<b>\$ 2,645,496</b>	<b>\$ 8,879,279</b>	<b>\$17,541,213</b>
Affiliate Equity	\$ 2,360,000	\$ 22,841	\$ 4,690,930	\$ 2,545,754	\$ 9,619,525
Affiliate Debt	1,933,353	—	3,385,586	2,087,627	7,406,566
<b>Total Affiliate</b>	<b>\$ 4,293,353</b>	<b>\$ 22,841</b>	<b>\$ 8,076,516</b>	<b>\$ 4,633,381</b>	<b>\$17,026,091</b>
Control Equity	\$ —	\$ —	\$ —	\$ 99,500	\$ 99,500
<b>Total Control</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 99,500</b>	<b>\$ 99,500</b>
<b>Total Level 3 Investments</b>	<b>\$ 4,993,353</b>	<b>\$ 5,339,279</b>	<b>\$ 10,722,012</b>	<b>\$ 13,612,160</b>	<b>\$34,666,804</b>
Range	3.9X-7X	1X	1X-4.0X	Not Applicable	
Unobservable Input	EBITDA Multiple	Asset Value	Revenue Multiple	Transaction Price	
Weighted Average	5.3X	1X	2.6X	Not Applicable	

The following table provides a summary of the components of Level 1, 2 and 3 Assets Measured at Fair Value at December 31, 2018:

Description	December 31, 2018	Fair Value Measurements at Reported Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Other Significant Unobservable Inputs (Level 3)
Loan investments	\$ 4,935,777	\$ —	\$ —	\$ 4,935,777
Debt investments	9,397,979	—	—	9,397,979
Equity investments	20,330,048	—	—	20,330,048
Total	\$34,666,804	\$ —	\$ —	\$ 34,666,804

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

The following table provides a summary of changes in Assets Measured at Fair Value Using Significant Unobservable Inputs (Level 3) for the year ended December 31, 2018:

Description	Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Venture Capital Investments			
	Loan	Debt	Equity	Total
	Investments	Investments	Investments	
<b>Ending Balance, December 31, 2017, of Level 3 Assets</b>	\$3,550,000	\$10,096,244	\$18,637,818	\$32,284,062
<b>Realized loss included in net change in net assets from operations:</b>				
First Wave Products Group, LLC (First Wave)	—	(316,469)	(22,000)	(338,469)
Intrinsicq Material, Inc. (Intrinsicq)	—	—	(1,125,673)	(1,125,673)
<b>Total Realized Losses</b>	—	(316,469)	(1,147,673)	(1,464,142)
<b>Unrealized Gains and Losses included in net change in net assets from operations:</b>				
ACV Auctions, Inc. (ACV Auctions)	—	—	2,494,551	2,494,551
BeetNPath, LLC (Beetnpath)	—	—	(388,723)	(388,723)
Empire Genomics, LLC (Empire Genomics)	—	(901,360)	—	(901,360)
First Wave	—	66,469	55,000	121,469
Genicon, Inc. (Genicon)	—	—	(82,500)	(82,500)
GiveGab, Inc. (Givegab)	—	—	191,907	191,907
G-TEC Natural Gas Systems (G-tec)	—	—	(100,000)	(100,000)
Intrinsicq	—	—	725,673	725,673
KnowledgeVision Systems, Inc. (Knowledgevision)	—	—	(300,000)	(300,000)
Mercantile Adjustment Bureau, LLC (Mercantile)	—	(249,040)	—	(249,040)
Microcision LLC (Microcision)	—	—	610,000	610,000
OnCore Golf Technology, Inc. (Oncore Golf)	—	—	(77,712)	(77,712)
Rheonix, Inc. (Rheonix)	—	—	(735,999)	(735,999)
SOMS Technologies, LLC (SOMS)	—	—	(528,348)	(528,348)
<b>Total Unrealized Gains and Losses</b>	—	(1,083,931)	1,863,849	779,918
<b>Purchases of Securities/Changes to Securities/Non-cash conversions:</b>				
BeetNPath, LLC (Beetnpath)	—	262,627	—	262,627
Centivo Corporation (Centivo)	—	—	201,342	201,342
Empire Genomics	—	348,287	—	348,287
Genicon, Inc. (Genicon)	—	481,806	—	481,806
GoNoodle, Inc. (GoNoodle)	—	10,333	—	10,333
Knowledgevision	775,000	—	—	775,000
Microcision LLC (Microcision)	—	19,213	—	19,213
Oncore Golf	—	—	77,712	77,712
SciAps, Inc. (Sciaps)	—	—	250,000	250,000
Tech 2000, Inc. (Tech 2000)	610,777	—	—	610,777
Tilson Technology Management, Inc. (Tilson)	—	50,000	50,000	100,000
<b>Total Purchases of Securities/Changes to Securities/Non-cash conversions</b>	1,385,777	1,172,266	579,054	3,137,097

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

<b>Repayments and Sale of Securities:</b>				
Empire Genomics	—	(21,665)	—	(21,665)
Knoa Software, Inc. (Knoa)	—	(48,466)	—	(48,466)
<b>Total Repayments and Sale of Securities</b>	<b>—</b>	<b>(70,131)</b>	<b>—</b>	<b>(70,131)</b>
<b>Transfers within Level 3</b>	<b>—</b>	<b>(400,000)</b>	<b>400,000</b>	<b>—</b>
<b>Ending Balance, December 31, 2018, of Level 3 Assets</b>	<b>\$4,935,777</b>	<b>\$9,397,979</b>	<b>\$20,333,048</b>	<b>\$ 34,666,804</b>
Change in unrealized depreciation on investments for the period included in changes in net assets				\$ 779,918
Net realized loss on investments for the period included in changes in net assets				(\$ 994,295)

The following table provides a summary of the significant unobservable inputs used to determine the fair value of the Corporation's Level 3 portfolio investments as of December 31, 2017:

Investment Type	Market Approach EBITDA Multiple	Market Approach Liquidation Seniority	Market Approach Revenue Multiple	Market Approach Transaction Pricing	Totals
Non-Control/Non-Affiliate Equity	\$ -	\$ 25	\$ 2,145,496	\$ 5,792,387	\$ 7,937,908
Non-Control/Non-Affiliate Debt	949,040	2,380,819	3,500,000	400,000	7,229,859
<b>Total Non-Control/Non-Affiliate</b>	<b>\$ 949,040</b>	<b>\$ 2,380,844</b>	<b>\$ 5,645,496</b>	<b>\$ 6,192,387</b>	<b>\$ 15,167,767</b>
Affiliate Equity	\$ 4,420,000	\$ 22,841	\$ 5,156,092	\$ 1,001,477	\$ 10,600,410
Affiliate Debt	5,767,919	—	98,466	550,000	6,416,385
<b>Total Affiliate</b>	<b>\$ 10,187,919</b>	<b>\$ 22,841</b>	<b>\$ 5,254,558</b>	<b>\$ 1,551,477</b>	<b>\$ 17,016,795</b>
Control Equity	\$ —	\$ —	\$ 99,500	\$ —	\$ 99,500
Control Debt	—	—	—	—	—
<b>Total Control</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 99,500</b>	<b>\$ —</b>	<b>\$ 99,500</b>
<b>Total Level 3 Investments</b>	<b>\$ 11,136,959</b>	<b>\$ 2,403,685</b>	<b>\$ 10,999,554</b>	<b>\$ 7,743,864</b>	<b>\$ 32,284,062</b>
Range	4X-9X	1X	0.5X-6.2X	Not Applicable	
Unobservable Input	EBITDA Multiple	Asset Value	Revenue Multiple	Transaction Price	
Weighted Average	5.8X	1X	2.3X	Not Applicable	

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

The following table provides a summary of the components of Level 1, 2 and 3 Assets Measured at Fair Value on a Recurring Basis at December 31, 2017:

Description	December 31, 2017	Fair Value Measurements at Reported Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Other Significant Unobservable Inputs (Level 3)
Loan investments	\$ 3,550,000	\$ —	\$ —	\$ 3,550,000
Debt investments	10,096,244	—	—	10,096,244
Equity investments	18,637,818	—	—	18,637,818
Total	<u>\$32,284,062</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 32,284,062</u>

The following table provides a summary of changes in Assets Measured at Fair Value on a Recurring Basis Using Significant Unobservable Inputs (Level 3) for the year ended December 31, 2017:

Description	Fair Value Measurements Using Significant Unobservable Inputs (Level 3) Venture Capital Investments			
	Loan Investments	Debt Investments	Equity Investments	Total
<b>Ending Balance, December 31, 2016, of Level 3 Assets</b>	\$3,200,000	\$6,700,221	\$17,600,260	\$27,500,481
<b>Realized Loss included in net change in net assets from operations:</b>				
City Dining Cards, Inc. (Loupe)	—	—	(500,000)	(500,000)
<b>Total Realized Loss</b>	—	—	(500,000)	(500,000)
<b>Unrealized Gains and Losses included in net change in net assets from operations:</b>				
ACV Auctions, Inc. (ACV Auctions)	—	—	119,356	119,356
BeetNPath, LLC (Beetnpath)	—	—	29,723	29,723
Carolina Skiff LLC (Carolina Skiff)	—	—	650,000	650,000
Intrinsiq Material, Inc. (Intrinsiq)	—	—	(380,000)	(380,000)
Knoa Software, Inc. (Knoa)	—	—	779,700	779,700
Mercantile Adjustment Bureau, LLC (Mercantile)	—	(250,000)	—	(250,000)
SciAps, Inc. (Sciaps)	—	—	(554,710)	(554,710)
Teleservices Solutions Holdings, LLC (Teleservices)	—	—	(395,398)	(395,398)
<b>Total Unrealized Gains and Losses</b>	—	(250,000)	248,671	(1,329)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

<b>Purchases of Securities/Changes to Securities/Non-cash conversions:</b>				
Beetnpath	—	100,000	11,277	111,277
Centivo Corporation (Centivo)	—	100,000	—	100,000
eHealth Global Technologies, Inc. (eHealth)	2,000,000	—	—	2,000,000
Empire Genomics, LLC (Empire Genomics)	—	201,489	—	201,489
Genicon, Inc. (Genicon)	300,000	903,779	120,000	1,323,779
GoNoodle, Inc. (GoNoodle)	—	10,229	—	10,229
KnowledgeVision Systems, Inc. (Knowledge Vision)	50,000	—	—	50,000
Mercantile	—	108,350	—	108,350
Microcision LLC (Microcision)	—	22,176	—	22,176
Sciaps	—	—	274,274	274,274
Tilson Technology Management, Inc. (Tilson)	—	750,000	750,000	1,500,000
<b>Total Purchases of Securities/Changes to Securities/Non-cash conversions</b>	<b>2,350,000</b>	<b>2,196,023</b>	<b>1,155,551</b>	<b>5,701,574</b>
<b>Transfers within Level 3</b>	<b>(2,000,000)</b>	<b>1,450,000</b>	<b>550,000</b>	<b>—</b>
<b>Transfers out of Level 3</b>	<b>—</b>	<b>—</b>	<b>(416,664)</b>	<b>(416,664)</b>
<b>Ending Balance, December 31, 2017, of Level 3 Assets</b>	<b>\$ 3,550,000</b>	<b>\$10,096,244</b>	<b>\$18,637,818</b>	<b>\$ 32,284,062</b>
Decrease in unrealized depreciation on investments for the period included in changes in net assets				(\$ 274,708)
Net realized gain on investments for the period included in changes in net assets				\$ 138,240

**NOTE 3. - OTHER ASSETS**

Other assets was comprised of the following at December 31:

	<b>2018</b>	<b>2017</b>
Operating receivables	\$11,428	\$ 3,204
Equipment (net)	262	2,490
Dividend receivable	—	37,160
Total other assets	<b>\$11,690</b>	<b>\$42,854</b>

**NOTE 4. - INCOME TAXES**

Deferred tax assets and liabilities are recorded for temporary differences between the financial statement and tax bases of assets and liabilities using the tax rate expected to be in effect when the taxes are actually paid or recovered.

In December 2017, the Tax Cuts and Jobs Act (the "Act") was signed into law. The Act decreases the U.S. corporate federal income tax rate from a maximum of 35% to a flat 21% effective January 1, 2018. The impact of the re-measurement on the Corporation's net deferred tax asset, as of December 31, 2017, was approximately \$346,000 in additional income tax expense. The Act also

[Table of Contents](#)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

includes a number of other provisions including, among others, the elimination of net operating loss carrybacks and limitations on the use of future losses, the repeal of the Alternative Minimum Tax regime and the repeal of the domestic production activities deduction. These provisions are not expected to have a material effect on the Corporation. For the year ended December 31, 2018, approximately \$164,000 of income tax benefit was recorded based on the additional tax benefit expected to be claimed on a capital loss carryback. At December 31, 2018, the Corporation has completed its accounting for the income tax effects of the Act.

The tax effect of the major temporary differences and carryforwards that give rise to the Corporation's net deferred tax asset at December 31, 2018 and 2017 are approximately as follows:

	2018	2017
Operations	(\$ 50,000)	(\$134,000)
Investments	504,000	638,000
NOL & tax credit carryforwards	145,000	91,000
Valuation allowance	(74,000)	(43,000)
Deferred tax asset, net	<u>\$ 525,000</u>	<u>\$ 552,000</u>

The major temporary differences cited above include differences in the book and tax bases of the Corporation's portfolio company investments, as well as unrealized gains and losses on corporate investments that will be taxed when realized in future years. The Corporation assesses the recoverability of its deferred tax assets annually to determine if a valuation allowance is necessary. In performing this assessment, it considers estimated future taxable income and ongoing tax planning strategies. Based on this assessment, it was determined that a valuation allowance was necessary against the deferred tax asset relating to certain state net operating loss carryforwards (NOL).

The components of income tax expense (benefit) reported in the consolidated statements of operations are as follows for the years ended December 31:

	2018	2017	2016
<b>Current:</b>			
Federal	(\$ 411,509)	(\$ 490,730)	\$ 2,571,560
State	8,400	(104,556)	374,290
	<u>(403,109)</u>	<u>(595,286)</u>	<u>2,945,850</u>
<b>Deferred:</b>			
Federal	110,426	601,777	(3,151,558)
State	(83,761)	11,524	(374,792)
	<u>26,665</u>	<u>613,301</u>	<u>(3,526,350)</u>
Total	<u>(\$ 376,444)</u>	<u>\$ 18,015</u>	<u>(\$ 580,500)</u>

A reconciliation of the (benefit) expense for income taxes at the federal statutory rate to the expense reported is as follows:

	2018	2017	2016
Net investment (loss) gain, realized gain and unrealized (loss) gain before income tax expense	(\$ 770,942)	(\$692,663)	(\$1,783,183)
Expected tax (benefit) expense at statutory rate	(\$ 161,898)	(\$235,505)	(\$ 606,282)
State - net of federal effect	(57,110)	(59,906)	(2,586)
Pass-through expense (benefit) from portfolio investment	24,075	(3,536)	31,213
Dividend received deduction	(13,946)	(11,659)	(15,368)
Federal Act Rate Change	(164,395)	346,292	0
Other	(3,170)	(17,671)	12,523
Total	<u>(\$ 376,444)</u>	<u>\$ 18,015</u>	<u>(\$ 580,500)</u>

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**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

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At December 31, 2018 and 2017, the Corporation had no federal net operating loss carryforwards or capital loss carryforwards. For state tax purposes, there were various state net operating loss carryforwards totaling \$1,501,811 and \$837,526 at December 31, 2018 and 2017, respectively. The related deferred tax asset has a valuation allowance of \$74,000 and \$43,000 at December 31, 2018 and 2017, respectively on the Pennsylvania net operating loss, which is not expected to be utilized. For state tax purposes the Corporation has a Georgia Employer's Jobs Tax Credit carryforward of \$49,619 and \$40,081 at December 31, 2018 and 2017, respectively and this credit expires in the next five to ten years.

The Corporation is currently open to audit under the statute of limitations by the Internal Revenue Service for the years ended December 31, 2015 through 2018. In general, the Corporation's state income tax returns are open to audit under the statute of limitations for the years ended December 31, 2015 through 2018.

It is the Corporation's policy to include interest and penalties related to income tax liabilities in income tax expense on the Statement of Operations. In addition, the Corporation records uncertain tax positions in accordance with ASC 740, "Income Taxes", ("ASC 740"). ASC 740 provides guidance for how uncertain tax positions should be recognized, measured, presented, and disclosed in the financial statements. The uncertain tax benefits for the years ended December 31, 2018, 2017 and 2016 were de minimus and no amounts were recorded for interest and penalties related to unrecognized tax positions for the years ended December 31, 2018, 2017, and 2016.

**NOTE 5. - SBA DEBENTURE OBLIGATIONS**

At December 31, 2018 and 2017, Rand SBIC had debentures payable to and guaranteed by the SBA totaling \$8,750,000 and 8,000,000, respectively. The weighted average interest rate at December 31, 2018 was 3.58%.

The debenture terms require semiannual payments of interest at annual interest rates ranging from 2.245% to 3.644%, plus an annual charge of 0.804%. The debentures have fixed interest rates and a 10 year maturity date. As of December 31, 2018, the Corporation had \$5,250,000 in additional leverage available from the SBA.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

The debentures outstanding at December 31, 2018 will mature as follows:

<u>Maturity Date</u>	<u>Leverage</u>
2022	\$3,000,000
2023	2,500,000
2024	1,500,000
2025	1,000,000
2029	750,000
<b>Total Outstanding</b>	<b>\$8,750,000</b>

The Corporation is required to pre-pay a SBA commitment fee equal to 1% of the face amount of the SBA leverage reserved as a partial prepayment of the SBA's nonrefundable 3% leverage draw fees. The Corporation paid a commitment fee of \$60,000 to the SBA during the year ended December 31, 2018 to secure \$6,000,000 in SBA leverage through September 30, 2023. In addition, the Corporation paid \$18,188 in leverage draw down fees during the fourth quarter of 2018 in conjunction with the drawdown of \$750,000 in SBA leverage. There were no commitment and leverage draw fees paid during the years ended December 31, 2017 and 2016.

Rand SBIC has consented to the exercise by the SBA of all rights of the SBA under 13 C.F.R. 107.1810(i) "SBA remedies for automatic events of default" and has agreed to take all actions that the SBA may so require, which may include an automatic consent to the appointment of SBA or its designee as receiver under section 311(c) of the Act.

Pursuant to Accounting Standard Update (ASU) 2015-03, the debt origination costs directly associated with the SBA debt obligations are presented as a direct deduction from the related debt liability.

	<u>December 31,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
Debentures guaranteed by the SBA	\$ 8,750,000	\$ 8,000,000
Less unamortized issue costs	(195,557)	(144,827)
Debentures guaranteed by the SBA, net	<u>\$ 8,554,443</u>	<u>\$ 7,855,173</u>

**NOTE 6. - STOCKHOLDERS' EQUITY (NET ASSETS)**

At December 31, 2018 and 2017, there were 500,000 shares of \$10.00 par value preferred stock authorized and unissued.

On October 25, 2018, the Board of Directors extended the repurchase authorization for up to 1,000,000 shares of the Corporation's outstanding common stock on the open market through October 25, 2019 at prices that are no greater than the then current net asset value. No shares were repurchased during the years ended December 31, 2018 or 2017. At December 31, 2018 and 2017 the total treasury shares held was 541,046 shares with a total cost of \$1,469,105.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

Summary of change in equity accounts:

	<b>Accumulated Net Investment Loss</b>	<b>Undistributed Net Realized Gain on Investments</b>	<b>Net Unrealized Depreciation or Appreciation on Investments</b>
<b>Balance, December 31, 2016</b>	(\$ 1,577,848)	\$ 27,127,054	(\$ 2,718,831)
Net (decrease) increase in net assets from operations	(19,298)	88,684	(780,064)
<b>Balance, December 31, 2017</b>	(1,597,146)	27,215,738	(3,498,895)
Net (decrease) increase in net assets from operations	(68,406)	(994,295)	668,203
<b>Balance, December 31, 2018</b>	(\$ 1,665,552)	\$ 26,221,443	(\$ 2,830,692)

**NOTE 7. - STOCK OPTION PLANS**

In 2001, the stockholders of the Corporation authorized the establishment of an Employee Stock Option Plan (the “Option Plan”) that provides for the award of options to purchase up to 200,000 common shares to eligible employees. In 2002, the Corporation placed the Option Plan on inactive status as it developed a new profit sharing plan for the Corporation’s employees in connection with the formation of its SBIC subsidiary. As of December 31, 2018, 2017 and 2016, no stock options had been awarded under the Option Plan. Because Section 57(n) of the 1940 Act prohibits maintenance of a profit sharing plan for the officers and employees of a BDC where any option, warrant or right is outstanding under an executive compensation plan, no options will be granted under the Option Plan while any profit sharing plan is in effect with respect to the Corporation (See Note 8. “Employee Benefit Plans”).

**NOTE 8. - EMPLOYEE BENEFIT PLANS**

The Corporation has a defined contribution 401(k) Plan (the “401K Plan”). The 401K Plan provides a base contribution of 1% for eligible employees and also provides up to 5% matching contributions. The employer contributions to the 401K Plan amounted to \$45,990, \$29,199 and \$39,673 for the years ended December 31, 2018, 2017 and 2016, respectively.

In 2002, the Corporation established a Profit Sharing Plan (the “Plan”) for its executive officers in accordance with Section 57(n) of the 1940 Act. Under the Plan, the Corporation will pay its executive officers aggregate profit sharing payments equal to 12% of the net realized gains on investments of its SBIC subsidiary, net of all realized losses and unrealized depreciation on the investments of the SBIC subsidiary, for the fiscal year, computed in accordance with the Plan and the Corporation’s interpretation of the Plan. Any profit sharing paid or accrued cannot exceed 20% of the Corporation’s net income, as defined in the Plan. For purposes of the 20% profit sharing test, the Corporation interprets net income to be the total of the Corporation’s net investment (loss) gain and its net realized gain (loss) on sales and dispositions of investments, prior to inclusion of the estimated profit sharing obligation. The profit sharing payments are split equally between the Corporation’s two executive officers, each of whom is fully vested in the Plan.

The Corporation did not record any expense under the Plan for the years ended December 31, 2018 or 2017 and recorded \$1,270,052 during the year ended December 31, 2016. Included in the profit sharing and bonus payable line on the accompanying consolidated statement of financial position at December 31, 2017 is \$132,000 that was paid in 2018. Estimated payroll taxes and benefits on the profit sharing have been accrued. The amounts approved do not exceed the defined limits.

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 9. - COMMITMENTS AND CONTINGENCIES**

The Corporation has a lease for office space which expires in December 2020. Rent expense under this operating lease for the years ended December 31, 2018, 2017 and 2016 was \$20,100, \$19,800 and \$19,500, respectively. The operating lease obligations are approximately as follows:

<u>Year</u>	<u>Amount</u>
2019	19,400
2020	19,700
Total	<u>\$39,100</u>

On March 2, 2017, the Corporation filed with the Securities and Exchange Commission (the "SEC") certain Change in Control Agreements, which have been executed with each of its named executive officers, ("NEOs"), which provide each NEO with certain financial benefits in the event that (i) such NEO's employment is terminated without cause (as defined in the Change in Control Agreement) in connection with, or within eighteen months after, a Change in Control (as defined in the Change in Control Agreement) of the Corporation or (ii) such NEO terminates his employment in connection with, or within eighteen months after, a Change in Control for good reason (as defined in the Change in Control Agreement). Upon the occurrence of such events, each Change in Control Agreement provides for a lump sum payment to the NEO in an amount equal to (i) one (1.0) times such NEO's annual base salary then in effect plus (ii) the average of the annual incentive bonuses and profit sharing payments earned by such NEO for the last five fiscal years ended prior to such NEO's employment termination date. However, the amount of the payment to any NEO cannot exceed (and will be reduced in order not to exceed) 1.5% of the total equity capitalization of the Corporation implied by the Change in Control event.

**NOTE 10. - QUARTERLY OPERATIONS AND EARNINGS DATA – UNAUDITED**

	<u>4th</u> <u>Quarter</u>	<u>3rd</u> <u>Quarter</u>	<u>2nd</u> <u>Quarter</u>	<u>1st</u> <u>Quarter</u>
<b>2018</b>				
Investment income	\$668,325	\$ 662,302	\$ 413,518	\$ 362,809
Net increase (decrease) in net assets from operations	\$936,511	(\$179,302)	(\$631,294)	(\$520,413)
Basic and diluted net increase (decrease) in net assets per share from operations	\$ 0.15	(\$ 0.03)	(\$ 0.10)	(\$ 0.08)
<b>2017</b>				
Investment income	\$379,987	\$ 397,019	\$ 349,139	\$ 328,637
Net increase (decrease) in net assets from operations	\$226,209	\$ 57,931	(\$635,337)	(\$359,481)
Basic and diluted net increase (decrease) in net assets per share from operations	\$ 0.04	\$ 0.01	(\$ 0.10)	(\$ 0.06)

**RAND CAPITAL CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**NOTE 11. – ALLOWANCE FOR DOUBTFUL ACCOUNTS**

The Corporation maintains an allowance for doubtful accounts for estimated uncollectible interest payments due from portfolio investments. The allowance for doubtful accounts is based on a review of the overall condition of the receivable balances and a review of past due amounts. Changes in the allowance for doubtful accounts consist of the following:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Balance at beginning of year	(\$161,000)	(\$161,000)	(\$122,000)
Provision for losses	—	—	(39,000)
Balance at end of year	<u>(\$161,000)</u>	<u>(\$161,000)</u>	<u>(\$161,000)</u>

**NOTE 12. – SUBSEQUENT EVENT**

In January 2019 the Corporation entered into a stock purchase agreement to sell approximately 8.3 million shares of Rand's common stock to East Asset Management, LLC for \$25 million in cash and portfolio assets. Additionally, a new entity, Rand Capital Management, LLC will be established as an external management company and will be retained by Rand Capital to be its investment advisor. The sale and issuance of common stock pursuant to the stock purchase agreement as well as the externalization of the management structure are subject to shareholder and other regulatory approvals.

In connection with the anticipated closing of the above-described transactions and contingent upon meeting certain tax-related conditions, the Corporation intends to elect to become a regulated investment company ("RIC") for U.S. federal tax purposes. This will enable the pass through of capital gains and investment income to shareholders without payment of corporate-level U.S. federal income tax by Rand.

**RAND CAPITAL CORPORATION AND SUBSIDIARY**  
**SCHEDULE OF CONSOLIDATED CHANGES IN INVESTMENTS AT**  
**COST AND REALIZED LOSS**  
**For the Year Ended December 31, 2018**

	Cost Increase (Decrease)	Realized Loss
<b>New investments:</b>		
KnowledgeVision Systems, Inc. (Knowledgevision)	\$ 775,000	\$ —
Tech 2000, Inc. (Tech 2000)	600,000	—
BeetNPath, LLC (Beetnpath)	262,627	—
Genicon Inc. (Genicon)	250,000	—
SciAps, Inc. (Sciaps)	250,000	—
Centivo Corporation (Centivo)	200,000	—
Tilson Technology Management, Inc. (Tilson)	100,000	—
Empire Genomics, LLC (Empire Genomics)	50,000	—
Total of new investments	2,487,627	
<b>Other changes to investments:</b>		
Empire Genomics capitalized fee income and interest conversion	298,287	—
Genicon interest conversion and OID amortization	231,806	—
OnCore Golf Technology, Inc. (Oncore) interest conversion	77,712	—
Microcision LLC (Microcision) interest conversion	19,213	—
Tech 2000 interest conversion	10,777	—
GoNoodle, Inc. (GoNoodle) interest conversion	10,333	—
Centivo interest conversion	1,342	—
Total of other changes to investments	649,470	
<b>Investments repaid, sold or liquidated:</b>		
Intrinsiq Material, Inc. (Intrinsiq) realized loss	(1,125,673)	(1,125,673)
First Wave Technologies, Inc. (First Wave) realized loss	(338,469)	(338,469)
Knoa Software Inc. (Knoa) repayment	(48,466)	—
Empire Genomics repayment	(21,666)	—
Total of investments repaid, sold or liquidated	(1,534,274)	(1,464,142)
<b>Net change in investments, at cost</b>	<b>\$ 1,602,823</b>	<b>(\$ 1,464,142)</b>

**Report of Independent Registered Public Accounting Firm**

To the Stockholders and the Board of Directors of Rand Capital Corporation and Subsidiaries

**Opinion on the Financial Statements**

We have audited the accompanying consolidated statements of financial position, including the consolidated schedules of portfolio investments, of Rand Capital Corporation and Subsidiaries (the Corporation) as of December 31, 2018 and 2017, and the related consolidated statements of operations, changes in net assets and cash flows for each of the three years in the period ended December 31, 2018, and the related notes to the consolidated financial statements, and the financial highlights schedule for each of the five years in the period ended December 31, 2018 (collectively, the financial statements). In our opinion, the financial statements and financial highlights schedule present fairly, in all material respects, the financial position of Rand Capital Corporation and Subsidiaries as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, and the financial highlights for each of the five years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America.

**Basis for Opinion**

These financial statements and the financial highlights schedule are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's financial statements and financial highlights schedule based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Corporation in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights schedule are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Corporation's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements and financial highlights schedule, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements and financial highlights schedule. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and financial highlights schedule. Our procedures included confirmation of investments as of December 31, 2018 and 2017, by correspondence with portfolio companies and custodian(s); when replies were not received, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 2, the investment securities included in the financial statements valued at \$34,666,804 (110% of net assets) and \$32,284,062 (101% of net assets) as of December 31, 2018 and 2017, respectively, include securities valued at \$34,666,804 and \$32,284,062, respectively, whose fair values have been estimated by management in the absence of readily ascertainable fair value. The fair value estimates are then approved by the Board of Directors. We have reviewed the procedures used by management in preparing the valuations of investment securities and have inspected the underlying documentation, and in the circumstances we believe the procedures are reasonable and the documentation appropriate. Those estimated values may differ from the values that would have been used had a ready market for the investments existed.

The supplemental schedule of consolidated changes in investments at cost and realized gain for the year ended December 31, 2018 has been subjected to audit procedures performed in conjunction with the audit of the Corporation's financial statements. The supplemental schedule is the responsibility of the Corporation's management. Our audit procedures included determining whether the supplemental schedule reconciles to the financial statements or the underlying accounting and other records, as applicable and performing procedures

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[Table of Contents](#)

to test the completeness and accuracy of the information presented in the supplemental schedule. In forming our opinion on the supplemental schedule, we evaluated whether the supplemental schedule, including its form and content, is presented in conformity with accounting principles generally accepted in the United States of America. In our opinion, the supplemental schedule of consolidated changes in investments at cost and realized gain for the year ended December 31, 2018 is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ FREED MAXICK CPAs, P.C.

We have served as the Corporation's auditor since 2003.

Buffalo, New York  
March 7, 2019

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## Table of Contents

### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None

#### **Item 9A. Controls and Procedures**

*Disclosure Controls and Procedures.* The Corporation maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in reports that it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that this information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. The Chief Executive Officer and the Chief Financial Officer carried out an evaluation of the effectiveness of the design and operation of the Corporation's disclosure controls and procedures as of December 31, 2018. Based on the evaluation of these disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer concluded that the Corporation's controls and procedures were effective as of December 31, 2018.

*Management Report on Internal Control Over Financial Reporting.* The management of the Corporation is responsible for establishing and maintaining adequate internal control over financial reporting. The Corporation's internal control system is a process designed to provide reasonable assurance to the Corporation's management and board of directors regarding the preparation and fair presentation of published financial statements.

Management assessed the effectiveness of the Corporation's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013). Based on its assessment, management believes that, as of December 31, 2018, the Corporation's internal control over financial reporting is effective.

This annual report does not include an attestation report of the Corporation's independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Corporation's independent registered public accounting firm pursuant to rules of the SEC that permit the Corporation to provide only management's report in this Annual Report.

*Changes in Internal Control over Financial Reporting.* There have been no changes in our internal control over financial reporting during the Corporation's most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Corporation's internal control over financial reporting.

#### **Item 9B. Other Information**

None

[Table of Contents](#)

**Part III**

**Item 10. Directors, Executive Officers, and Corporate Governance**

**Information regarding Directors and Executive Officers**

The following table provides information concerning all persons who are Directors or executive officers of Rand. Rand is not part of a fund complex.

<u>Name, Age and Address</u>	<u>Position(s) held with Fund</u>	<u>Length of Time Served as a Director (1)</u>	<u>Business Experience and Occupations During Last Five Years</u>	<u>Other Directorships (2)</u>
<b><u>Directors who are Interested Persons (3)</u></b>				
<b>Allen F. Grum</b> (61) c/o 2200 Rand Building Buffalo NY 14203	President and Chief Executive Officer of Rand and a Director	1996	President and Chief Executive Officer since 1996. Prior thereto, Mr. Grum served as Senior Vice President of Rand Capital Corporation commencing in June 1995. From 1994 to 1995, Mr. Grum was Executive Vice President of Hamilton Financial Corporation and from 1991-1994 he served as Senior Vice President of Marine Midland Mortgage Corporation. Mr. Grum serves on a number of Boards of Directors of companies in which Rand Capital Corporation has an investment. His in-depth knowledge of Rand Capital Corporation's operations, and the industries in which the Corporation operates makes Mr. Grum qualified to serve as a Director.	None
<b><u>Directors who are not Interested Persons</u></b>				
<b>Erland E. Kailbourne</b> (77) c/o 2200 Rand Building Buffalo, NY 14203	Director and Chair of the Board	1999	Director of Albany International Corporation since May 2009. From May 2009 until February 2019, Mr. Kailbourne was Chairman of Albany International Corporation. From January 2006 until May 2010, Mr. Kailbourne was Chairman of Financial Institutions, Inc. and its subsidiary Five Star Bank. He retired as Chairman and Chief Executive Officer (New York Region) of Fleet National Bank, a banking subsidiary of Fleet Financial Group, Inc., in 1998. From 1995 to 2000, he was Vice Chairman State University of New York (SUNY). He was Chairman and Chief Executive Officer of Fleet Bank, also a subsidiary of Fleet Financial Group, Inc., from 1993 until its merger into Fleet National Bank in 1997. He is a Director of REV LNG, LLC, Albany International Corporation, Allegany Co-op Insurance Company, Conemaugh Valley Insurance Company, and The Thomas and Laura Moogan Foundation. Mr. Kailbourne's extensive banking and financial experience provide necessary attributes as a Director of Rand.	Director of Albany International Corporation

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## Table of Contents

<b>Ross B. Kenzie</b> (87) 1961 Wehrle Drive Suite 5 Buffalo, NY 14221	Director	1996	Mr. Kenzie has been retired since 1989. Prior thereto, he was the Chairman of the Board and Chief Executive Officer of Goldome Bank, Buffalo, NY, a savings bank, from 1980. Prior thereto, Mr. Kenzie was Executive Vice President and Director of Merrill Lynch, Pierce, Fenner & Smith as well as Merrill Lynch & Co. Mr. Kenzie is a former Director of Biophan Technologies, Inc. and Natural Nano, Inc., development companies specializing in highly marketable business devices and naturally occurring nanotube technologies; and a former Director of Merchants Mutual Insurance Company. Mr. Kenzie is a former Director of Chicago Board of Options Exchange (CBOE). Mr. Kenzie's banking and financial experience in addition to his involvement with emerging companies, provide invaluable expertise as a Director of Rand.	None
<b>Jayne K. Rand</b> (58) c/o 2200 Rand Building Buffalo, NY 14203	Director	1989	Since 1993, Miss Rand has been a Vice President of M&T Bank. Miss Rand's banking experience and credit underwriting abilities provide necessary expertise as a Director of Rand.	None
<b>Robert M. Zak</b> (61) 250 Main Street Buffalo, NY 14202	Director and Vice Chair of the Board	2005	Since 1995, Mr. Zak has been President and Chief Executive Officer of Merchants Mutual Insurance Company, which operates under the trade name Merchants Insurance Group. Mr. Zak joined Merchants in 1985. Prior to that his career was in public accounting. Mr. Zak served as a director of Manning & Napier, Inc. from November 2011 until June 2016. Mr. Zak's executive leadership and public accounting experience provide desirable attributes as a Director of Rand.	None
<b><u>Non-Director Executive Officers (3)</u></b>				
<b>Daniel P. Penberthy</b> (56) c/o 2200 Rand Building Buffalo, NY 14203	Executive Vice President, Treasurer and Chief Financial Officer of Rand	N/A	Mr. Penberthy has served as Treasurer of Rand since August 1997. Since January 2002, Mr. Penberthy has served as Executive Vice President, and he has continued to serve as the Chief Financial Officer since 1997. From 1993 to 1997, Mr. Penberthy served as Chief Financial Officer for both the Greater Buffalo Partnership (formerly the Chamber of Commerce) and the Greater Buffalo Convention and Visitors Bureau. Prior thereto, from 1990 to 1993, Mr. Penberthy was employed by Greater Buffalo Development Foundation and KPMG.	None

(1) Indicates initial year in which such person became a Director. All Directors' terms of office will be through the next annual meeting of shareholders and until their successors have been duly elected and qualified.

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## Table of Contents

- (2) Indicates current directorships of companies with a class of equity securities registered under Section 12 of the Exchange Act, subject to the requirements of Section 15(d) of the Exchange Act, or registered as an investment company under the 1940 Act.
- (3) Indicates an executive officer of Rand, who is deemed to be an “interested person” under Section 2(a)(19) of the 1940 Act.

### **Committee Information**

The Committees of the Board of Directors have the following members:

<u>Compensation Committee</u>	<u>Governance and Nominating Committee</u>	<u>Audit Committee</u>
Robert M. Zak (Chair)	Erland E. Kailbourne (Chair)	Ross B. Kenzie (Chair)
Erland E. Kailbourne	Ross B. Kenzie	Erland E. Kailbourne
Jayne K. Rand	Jayne K. Rand	Robert M. Zak

### Compensation Committee

The Compensation Committee is comprised of independent Board members, each of whom meet the independence requirements of the Nasdaq Stock Market and applicable law, and advises the independent members of the Board with respect to the compensation of the executive officers and reviews the criteria that form the basis for management compensation. None of the persons on the Compensation Committee are “interested persons” as defined in Section 2(a)(19) of the 1940 Act.

The compensation levels of Rand’s President/CEO and Executive Vice President/CFO were recommended by Rand’s Compensation Committee and approved by the independent members of the Board, which represents a majority of its membership.

The Compensation Committee’s charter may be accessed at Rand’s website, [www.randcapital.com](http://www.randcapital.com).

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## Table of Contents

### Governance and Nominating Committee

The primary purposes of the Governance and Nominating Committee include:

- developing, recommending to the Board and assessing corporate governance policies for Rand;
- overseeing the evaluation of the Board and its committees; and
- recommending to the Board the individuals qualified to serve on the Board for election by shareholders at each annual meeting of shareholders, and recommending to the Board candidates to fill vacancies on the Board.

The Governance and Nominating Committee's charter may be accessed at Rand's website, [www.randcapital.com](http://www.randcapital.com). None of the persons on the Governance and Nominating Committee are "interested persons" as defined in Section 2(a)(19) of the 1940 Act. The Governance and Nominating Committee is comprised of members each of whom meet the independence requirements of the Nasdaq Stock Market.

### Audit Committee

The Board of Directors has determined that none of the members of the Audit Committee are "interested persons" as defined in Section 2(a)(19) of the 1940 Act. The Audit Committee is comprised of independent Directors, all of whom meet the independence requirements of the Nasdaq Stock Market and the rules of the SEC. The Board has determined that Ross B. Kenzie is an audit committee financial expert (as defined by SEC regulations) (see Mr. Kenzie's relevant work experience is described in the table above under "Information regarding Directors and Executive Officers") and each of the other members of the Audit Committee also have qualifications and experience to be considered financial experts.

The Audit Committee's charter may be accessed at Rand's website, [www.randcapital.com](http://www.randcapital.com). The Audit Committee reviews the scope and results of the annual audit, receives reports from Rand's independent registered public accountants, and reports the Audit Committee's findings and recommendations to the Board.

The Audit Committee has adopted necessary reporting procedures for the confidential submission, receipt, retention and treatment of accounting and auditing complaints.

### Factors used in the Audit Committee's Assessment of the External Auditor Qualifications and Work Quality:

The Audit Committee is responsible for appointment, compensation and oversight of external auditors.

The Audit Committee annually reviews the Corporation's independent public registered accountants' (the "audit firm") performance and independence in deciding whether to continue to retain such audit firm. In the course of these reviews, the Audit Committee considers, among other things:

- The quality and efficiency of the audit firm's historical and recent audit plans.

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## Table of Contents

- The audit firm's capabilities and expertise in handling the breadth and complexity of private equity accounting, portfolio valuation and public company reporting.
- The desired balance of the audit firm's experience and the fresh perspective occasioned by mandatory audit partner rotation every five years, and the audit firm's periodic rotation of other audit management.
- Public Company Accounting Oversight Board (PCAOB) reports on the audit firm, if any.
- The appropriateness of the audit firm's fees, which the Audit Committee evaluates, reviews and approves.
- The effectiveness of the audit firm's communications and working relationships with the Audit Committee and management.
- The audit firm's independence and objectivity.
- The audit firm's tenure, having served as the Corporation's independent registered public accounting firm since 2003.
- Evaluation of the audit by management and the Audit Committee.

The Audit Committee considers non-audit fee/services provided when assessing auditor independence.

### **Code of Conduct and Business Ethics**

Our Code of Conduct and Business Ethics policy each requires that all employees and Directors avoid conflicts of interests that interfere with the performance of their duties or the best interests of the Corporation. The Business Ethics policy includes additional procedures modeled on Rule 17j-1 under the 1940 Act to prevent employees and Directors from abusing their access to information about the Corporation's investments.

Rand has adopted a Code of Conduct that applies to Rand's Chief Executive Officer, Chief Financial Officer and Vice President of Finance, and a Business Ethics Policy applicable to Rand's Directors, officers and employees. The Code of Conduct and the Business Ethics Policy are each available in the Governance section of Rand's website at [www.randcapital.com](http://www.randcapital.com).

They are also available in print to any shareholder who requests it. Rand will disclose any substantive amendments to, or waiver from provisions of, the Code of Conduct made with respect to the Chief Executive Officer, Chief Financial Officer or Vice President of Finance on its website.

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## [Table of Contents](#)

### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Exchange Act requires Rand's Directors and executive officers, and persons who own more than ten percent of Rand's shares, to file with the SEC initial reports of stock ownership and reports of changes to stock ownership. Reporting persons are required by SEC regulations to furnish Rand with all Section 16(a) reports that they file.

To our knowledge, based solely on review of the copies of such reports furnished to Rand and written representations that no other reports were required, Rand believes all Section 16(a) filing requirements applicable to its executive officers, Directors and greater than ten percent beneficial owners of Rand's shares were complied with during the year ended December 31, 2018.

### **Item 11. Executive Compensation**

#### **Compensation Discussion and Analysis**

Rand's principal executive officer is its President/Chief Executive Officer, Allen F. Grum, and Rand's principal financial officer is its Executive Vice President/Chief Financial Officer, Daniel P. Penberthy. They are Rand's Named Executive Officers ("NEOs").

The President/Chief Executive Officer and Executive Vice President/Chief Financial Officer serve as the Management and Investment Committee of Rand SBIC, and are parties to a Profit Sharing Plan (the "Profit Sharing Plan") of Rand SBIC that was adopted by Rand as a requirement for the licensing of Rand SBIC as a SBIC by the SBA.

The Compensation Committee, all of the members of which are independent Directors of the Board, makes determinations and recommendations to the Board with respect to the compensation of the NEOs. Each member (i) satisfies all of the independence requirements under the current rules and guidelines of the Nasdaq Stock Market, (ii) is an "outside Director" (as defined in the regulations pursuant to Section 162(m) of the IRS Code), and (iii) are non-employee Directors (as defined in Rule 16b-3 of the Exchange Act). The Compensation Committee's responsibilities and authority are set forth in the Compensation Committee charter, which is disclosed on Rand's website. The Compensation Committee recommendations are then reviewed by the independent Directors of the Board, who are responsible for establishing such compensation. Rand's President and Chief Executive Officer is responsible for establishing the compensation of Rand's staff other than the NEOs.

#### **Introduction**

This Compensation Discussion and Analysis is designed to provide shareholders with an understanding of our compensation philosophy and objectives as well as the analysis that was performed in setting executive compensation. It discusses the Compensation Committee's determination of how and why, in addition to what, compensation actions were taken with respect to the NEOs.

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## [Table of Contents](#)

### **Objectives of Rand's Compensation Programs and What they are Designed to Reward**

Rand depends on the management and analytical abilities of its NEOs for its long-term success and the enhancement of long-term shareholder value. The objectives of Rand's compensation programs are to provide appropriate levels of compensation, reward above average corporate performance, recognize individual initiative and achievement, attract and retain qualified individuals to contribute to Rand's success, and motivate management to enhance shareholder value.

### **Key Elements of Rand's Compensation Plans and Why they are Paid:**

- **Base Salary** – Base salaries meet the objectives of attracting and retaining the management talent needed to operate the business successfully. Individual salary amounts are not determined by formulas, but instead reflect the Compensation Committee's judgment with respect to each NEO's responsibility, performance, experience and past compensation, internal equity considerations and other factors, including NEO retention. Annually, the Board, on recommendation of the Compensation Committee, sets base salaries for the NEOs that it believes are appropriate given the scope of their duties and responsibilities.
- **Bonus** – Rand provides the opportunity to earn bonuses to its NEOs and staff to motivate them to achieve results that exceed the annual budget and provide value to the Corporation. A bonus, if any, is based on a qualitative consideration of individual and Corporation performance. For purposes of determining whether a bonus was warranted for 2018 performance, the Compensation Committee considered the Corporation's operating performance, the price performance of the Corporation's common shares, the change in the Net Asset Value per share and the accomplishments of each officer during the year, including the achievement of strategic initiatives. The Compensation Committee considers, and may make appropriate adjustments for, unusual items that are deemed to be outside the control of the NEOs. Based upon the Compensation Committee's analysis, a \$50,000 bonus was awarded to each of the NEOs for 2018 to reflect the progress on the strategic initiatives, SBA approval, increase in interest income and the proposed transaction with East Asset Management.
- **Profit Sharing Plan** – Rand provides long-term incentives to its NEOs through the Profit Sharing Plan, which allows them to participate in the growth of Rand's portfolio and aligns their interests with those of Rand's shareholders. The terms of Rand's license to operate Rand SBIC require that it maintain a profit sharing plan, which provides for payment by Rand of designated percentages of net realized capital gains (net of all realized capital losses and unrealized depreciation) of Rand SBIC. Amounts paid or accrued pursuant to the Profit Sharing Plan cannot exceed 20% of Rand's net income in a given year. The Compensation Committee does not have discretion to change the amounts due under the Profit Sharing Plan. For 2018, no amounts were accrued nor paid pursuant to the Profit Sharing Plan and as a result, no amounts are expected to be paid in 2019 pertaining to 2018 portfolio exits.

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## Table of Contents

- Equity – Although we believe that equity ownership by management enhances shareholder value, restrictions imposed by the 1940 Act preclude Rand from offering stock options or other equity incentives to its NEOs at any time when they participate in a profit sharing plan. The Compensation Committee believes that each of the NEOs own shares in Rand that are significant to their respective net worth.
- Standard Employee Benefits – Rand provides employee benefits it considers competitive and necessary to attract and retain talented personnel. Rand maintains a 401(k) plan for its employees under which participants may elect to contribute up to 20% of their compensation on a pretax basis, to a maximum of \$18,500 (\$24,500 if age 50 or over) for 2018. Rand makes a contribution of 1% of compensation for each participant and matches participant contributions up to 5% of compensation, subject to IRS annual compensation and contribution limits. Rand may also elect to contribute discretionary amounts under the 401(k) plan as determined by the Board. No discretionary amounts have been contributed since the 401(k) plan's inception. Rand also provides life insurance, automobile reimbursement and club membership benefits to its NEOs.

### **Consideration of Prior Shareholder Advisory Vote on Executive Compensation**

At our 2019 Annual Meeting of Shareholders, we will provide our shareholders the opportunity to vote to approve, on an advisory basis, the compensation of our NEOs. At the 2018 Annual Meeting of Shareholders, our shareholders cast 1,418,622 votes, or 95%, in favor of approving the compensation of our NEOs and 58,972 votes, or 4%, against approving such compensation, with 16,694 votes, or 1%, abstaining. Our Compensation Committee and Board value the opinions expressed by our shareholders, including the non-binding advisory vote on executive compensation. We are mindful of the strong support our shareholders expressed for our philosophy of seeking to link compensation to our operating and strategic objectives and the enhancement of shareholder value. As a result, our Compensation Committee took the results of the advisory vote on executive compensation into account in determining that our 2018, and anticipated 2019, executive compensation policies remain consistent with our policies in prior years and should continue to emphasize the performance, alignment, and retention objectives described above.

### **How the Amounts of Each Element of the Compensation are Determined and How They Fit Into Rand's Overall Compensation Objectives**

#### **Salary, Bonus and Profit Sharing**

The Compensation Committee determined that the amount of the base salary paid to each of the NEOs for 2018 was in the best interests of shareholders. A discretionary bonus payment was paid for 2018 to each of the NEOs for the reasons noted previously. The NEOs did not earn a profit sharing payment under the Profit Sharing Plan in 2018. In making its determination regarding compensation for each of the NEOs, the Compensation Committee considered whether the salaries, bonuses and profit sharing amounts due to its NEOs were consistent with the compensation philosophy described above.

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## [Table of Contents](#)

### **The Analysis Used in Setting Compensation Levels**

When making individual compensation decisions for NEOs, the Compensation Committee takes many factors into account, including the individual's role and responsibilities, performance, and experience; the overall performance of Rand; the recommendations of Board committee chairs; the individual's past compensation; and a comparison to the other NEO of Rand. The Compensation Committee may engage a compensation consultant to provide insight into setting compensation levels.

Specifically, the Compensation Committee has considered factors such as:

- total compensation in relation to Rand's size, and the composition and performance of its investments and total investment capital available;
- Rand's success in identifying appropriate investment opportunities and returns on its investments;
- the value of Rand's assets in accordance with Accounting Standards Codification 820 "fair value measurement";
- the responsibilities and duties of the NEOs;
- whether there has been any adjustment or potential recovery of prior payments resulting from the restatement of prior performance measures upon which bonus or profit sharing awards were based (no such adjustments or recovery occurred during 2016, 2017 or 2018); and
- realized income from investment exits in the consolidated Rand and Rand SBIC portfolios.

### **Evaluating Performance**

The Compensation Committee evaluates the performance of the NEOs annually, and consults with the other Directors and committee chairs regarding that performance. The Compensation Committee also seeks the advice of the President and Chief Executive Officer in connection with the performance evaluation for the other NEO; however, the President and Chief Executive Officer is not present when the Compensation Committee meets to evaluate his performance and recommend compensation for the NEOs.

The Compensation Committee uses discretion in qualitatively evaluating individual performance and considers the following factors, among others, in recommending to the Board any annual bonus awards to the NEOs: the input of other Board Committee Chairs, and each NEO's contribution to Rand's leadership, management, strategic planning, business development, and investment returns.

### **Change in Control Agreements**

The Corporation and the Board believe that maintaining a Change in Control Agreement with each of our NEOs is in the best interest of the Corporation and its

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## Table of Contents

shareholders as it will assist in retaining our leadership in the event of a change in control and provides our NEOs with reasonable financial security in the case of a loss of employment resulting from a change in control. The Corporation and the Board believe that it is in the best interest of the Corporation and its shareholders to have the dedication of our NEOs, without the distraction of personal uncertainties that can result from a change in control. In addition, the Corporation believes the Change in Control Agreements help the Corporation maintain a competitive compensation program and encourages retention of the NEOs.

The Change in Control Agreement provides each NEO with a right to receive certain payments in the event that (i) such NEO's employment is terminated without cause (as defined in the Change in Control Agreement) (other than for death or disability (as defined in the Change in Control Agreement)) in connection with, or within eighteen months after, a Change in Control of the Corporation or (ii) such NEO terminates his employment in connection with, or within eighteen months after, a Change in Control for "Good Reason", which is defined in the Change in Control Agreements as (i) a change in the location at which such NEO performs his duties for the Corporation to a new location that is at least 50 miles from the prior location; (ii) a material decrease in the NEO's authority, duties or responsibilities; (iii) a reduction in the NEO's annual base salary or (iv) a reduction in the NEO's annual bonus and profit sharing opportunity as compared to the opportunity for the prior fiscal year. As defined in more detail in the Change in Control Agreements, a "Change in Control" means the occurrence of any of the following events: (1) any person or entity becomes the beneficial owner, directly or indirectly, of securities representing more than 50% of the total voting power of the Corporation's outstanding securities; (2) a merger or consolidation of the Corporation, other than one that results in the outstanding voting securities of the Corporation prior to such merger or consolidation representing at least 50% of the total voting power after such merger or consolidation; (3) the sale or disposition by the Corporation of all or substantially all of the Corporation's assets or (4) a change in the composition of the Board that results in fewer than a majority of the Directors being Incumbent Directors (as defined in the Change in Control Agreements).

Upon the occurrence of such events, the Change in Control Agreements provide for a lump sum payment to the NEO from the Corporation in an amount equal to (i) the NEO's annual base salary then in effect plus (ii) the average of the annual incentive bonus amounts and profit sharing payments earned by the NEO for the last five fiscal years ended prior to the NEO's employment termination date. However, the amount of this payment per NEO cannot exceed (and will otherwise be reduced in order not to exceed) 1.5% of the total equity capitalization of the Corporation implied by the Change in Control event. Prior to receipt of such payment, the Change in Control Agreements require the NEO to execute a general release agreement, which includes a general release of claims against the Corporation by the NEO and agreements by the NEO to comply with ongoing confidentiality and non-disparagement obligations.

The term of the Change in Control Agreements commenced on March 1, 2017 and shall continue in effect until December 31, 2019, with subsequent automatic extensions of the term for one (1) additional year, unless, not later than nine months prior to the conclusion of any term, the Corporation or the NEO provides notice to the other not to extend the term. Under the terms of the proposed East Asset Management transaction, the Change of Control Agreements will be cancelled without any payment due or payable to the NEOs.

## Table of Contents

For each of the NEOs, the table below estimates the amount that each such NEO would be paid under the Change in Control Agreements if a Change in Control of the Corporation occurs and such NEO is terminated without cause or voluntarily terminates his employment for Good Reason in connection with, or within eighteen months after, the occurrence of the Change in Control event. The amounts below assume that each employment termination was effective as of December 31, 2018.

<u>Name</u>	<u>Current Annual Base Salary</u>	<u>Five Year Average of Annual Incentive Bonus and Profit Sharing Payments(1)</u>	<u>Total Payment Amount(2)</u>
Allen F. Grum	\$ 245,000	\$ 227,005	\$ 472,005
Daniel P. Penberthy	\$ 230,000	\$ 227,005	\$ 457,005

- (1) Annual incentive bonus and profit sharing payments are computed using an average of the annual incentive bonus amount and profit sharing payments for the prior five completed fiscal years.
- (2) Assumes that the total amount of such payment to a NEO does not exceed 1.5% of the total equity capitalization of the Corporation as implied by a hypothetical Change in Control event. In the event that the total payment amount would be greater than 1.5% of the total equity capitalization implied by the Change in Control event, the amount of such payment will be reduced in order not to exceed 1.5% of the total equity capitalization implied by the Change in Control event.

### **Accounting and Tax Treatments of Compensation**

The Compensation Committee's policy is to structure compensation in a way that allows it to be fully tax deductible, where doing so will further the purposes of the executive compensation programs. The Compensation Committee also considers it important to retain flexibility to design compensation programs that recognize a full range of criteria important to Rand's success, even where compensation payable under the programs may not be fully tax deductible.

### **Compensation Consultant**

During 2018, the Corporation did not utilize a compensation consultant. The Compensation Committee anticipates that it may use an independent advisor periodically.

### **Profit Sharing Plan**

We believe Rand's base salaries, bonuses and the Profit Sharing Plan collectively create an appropriate focus on long-term objectives and promote NEO retention. The terms of the SBA's license for Rand SBIC require it to maintain a profit sharing plan that provides for payment to the NEOs of the designated percentages of the net realized capital gains (net of all unrealized capital losses and unrealized depreciation) of Rand SBIC. The Compensation Committee does not have discretion to change the amounts due under the Profit Sharing Plan.

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## [Table of Contents](#)

Under the Profit Sharing Plan, Rand pays its NEOs cumulative profit sharing payments equal to 12% of realized capital gains of Rand SBIC, net of realized capital losses and unrealized depreciation of Rand SBIC, for each fiscal year of Rand SBIC, computed in accordance with the Profit Sharing Plan.

The profit sharing payments are shared equally between Rand's two NEOs, who are fully vested in the Profit Sharing Plan. Under the Investment Advisers Act of 1940 (Section 205(b)(3)) requirements, the aggregate amount which may be paid or accrued under the Profit Sharing Plan and any other incentive based plan maintained by Rand during any fiscal year, may not exceed 20% of Rand's net income after taxes, as defined, for that fiscal year. In accordance with the 1940 Act requirements, a majority of the members of the Board who were not interested persons approved the Profit Sharing Plan on the basis that it is reasonable and fair to Rand's shareholders, and does not involve overreaching of Rand or its shareholders on the part of any person concerned.

In 2018, no payments were due or payable to the NEOs under the Profit Sharing Plan.

### **Disbursement Triggers on Non-Equity Incentive Compensation**

Realized gains from portfolio exits are typically received by Rand in a combination of lump sum payment (cash) and a release of escrow 12 to 24 months following closing. Profit sharing payments under the Profit Sharing Plan that are accrued by the Corporation are typically disbursed to the NEOs upon the receipt of cash proceeds. If a loss or deduction to funds held in escrow occurs due to post-closing adjustments or claims, the pro-rata profit sharing obligation payable to NEOs under the Profit Sharing Plan is forfeited. No money was accrued nor expected to be paid at December 31, 2018 pertaining to the Profit Sharing Plan.

### **Risk Considerations in our Compensation Program**

The compensation of the NEOs consists of fixed and variable compensation. The fixed (or salary) portion of compensation is designed to provide a steady income so executives do not feel pressured to focus exclusively on short-term gains or annual stock price performance, which may be to the detriment of long-term appreciation and other business metrics. The variable (bonus and profit sharing) portions of compensation are designed to reward both short- and long-term corporate performance. For short-term performance, bonuses are qualitatively determined by the Compensation Committee and approved by the Board. For long-term performance, profit sharing is determined based on realized income from portfolio investment exits, net of realized and unrealized losses and depreciation. In addition, the following risk mitigation components exist:

- Bonus payments are not tied directly to specific financial metrics, which reduces the risk that management is incented inappropriately to achieve desired targets and performance metrics;
- Maintenance of the Profit Sharing Plan is required under the terms of the SBA's license for Rand SBIC, and the SBA's requirement to maintain the Profit Sharing Plan suggests that it believes that the Profit Sharing Plan provides for compensation to participants in an appropriate manner and in appropriate amounts;

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## Table of Contents

- Profit sharing payments under the Profit Sharing Plan are limited by the Investment Advisers Act of 1940 to 20% of Rand's net income after taxes as defined in any fiscal year;
- The Board, Compensation Committee and independent registered public accountants review all profit sharing calculations prior to disbursement;
- Each NEO's personal investment portfolio includes a significant amount of Rand's shares, which aligns their respective interests with the interests of our shareholders in Rand's long-term success and stock price appreciation. At the end of 2018, Allen F. Grum owned 173,642 shares and Daniel P. Penberthy owned 84,467 shares.
- The Profit Sharing Plan and our approach to payment of bonuses each have been in place for a number of years, and we have seen no evidence that they encourage unnecessary or excessive risk taking;
- Rand has specific quarterly reporting, review and approval processes with its Board, which we believe are adequate to prevent manipulation by any employee, including our NEOs; and
- The compensation and bonus of non-executive officers are qualitatively determined by the President and Chief Executive Officer, which we believe encourages a balanced approach to overall corporate performance.

### **Conclusion**

Through the compensation and incentive structure described above, a significant portion of the amounts that may be payable as compensation have been, and will continue to be, contingent on Rand's performance, and realization of incentive benefits is closely linked to increases in long-term shareholder value. Rand remains committed to this philosophy of pay for performance, recognizing the volatility of Rand's investments may result in highly variable compensation from year to year.

In January 2019, the independent Directors of the Board approved a 6.1% increase in base salary for Mr. Grum, and a 10.9% increase in base salary for Mr. Penberthy.

### **Compensation Committee Report**

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on its review and discussions with management, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K.

[Table of Contents](#)

**Submitted by the Compensation Committee**

Robert M. Zak, Chair  
Erland E. Kailbourne  
Jayne K. Rand

The information provided in the preceding Compensation Committee Report will not be deemed to be “soliciting material” or “filed” with the SEC or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act, unless in the future the Corporation specifically requests that the information be treated as soliciting material or specifically incorporates it by reference into any filing under the Securities Act of 1933, as amended or the Exchange Act.

**Summary Compensation Table**

The following table sets forth information with respect to the compensation paid or earned for the 2018, 2017 and 2016 fiscal years to each NEO. Rand is not part of a fund complex.

<b>Name and Principal Position (1)</b>	<b>Year</b>	<b>Salary (2)</b>	<b>Bonus (2)(3)</b>	<b>Non-Equity Incentive Plan Compensation(3)(7) (Profit Sharing Plan)</b>	<b>All Other Compensation (4)(5)</b>	<b>Total Compensation (6)</b>
Allen F. Grum, President and Chief Executive Officer	2018	\$245,000	\$ 50,000	\$ 0	\$ 16,500(4) \$ 16,666(5)	\$ 328,166
	2017	\$240,000	\$ 0	\$ 0	\$ 16,020(4) \$ 16,666(5)	\$ 272,686
	2016	\$223,871	\$ 0	\$ 635,026	\$ 15,989(4) \$ 16,060(5)	\$ 890,946
Daniel P. Penberthy, Executive Vice President and Chief Financial Officer	2018	\$230,000	\$ 50,000	\$ 0	\$ 16,500(4) \$ 10,797(5)	\$ 307,297
	2017	\$225,000	\$ 0	\$ 0	\$ 16,020(4) \$ 10,797(5)	\$ 251,817
	2016	\$207,880	\$ 0	\$ 635,026	\$ 15,473(4) \$ 12,024(5)	\$ 870,403

- (1) Mr. Grum is Rand’s principal executive officer, and Mr. Penberthy is Rand’s principal financial officer.
- (2) Represent amounts earned, prior to employee 401(k) contributions.
- (3) Bonuses and non-equity incentive plan compensation were fully accrued as of December 31 of the respective year. Bonus amounts were disbursed subsequent to the respective year-end and, non-equity incentive compensation is expected to be paid in installments following receipt of respective realized gain proceeds, to include the completion of the escrow holdback period, which typically occurs in a 12 – 24 month period following exit from an investment.
- (4) Includes contributions made by Rand to the 401(k) plan account for the NEOs. Rand’s 401(k) plan is available to all Rand employees. Under the 401(k) plan, participants may elect to contribute up to 20% of their compensation on a pretax basis by salary reduction up to a maximum of \$18,500 (\$24,500 if age 50 or over) for 2018. For eligible employees, Rand makes a contribution of 1% of compensation and matches employee contributions up to 5%, subject to IRS annual compensation and contribution limits. In addition, Rand may elect to contribute an annual discretionary amount as determined by the Board of Directors. In 2018, 2017 and 2016, Rand did not make a discretionary contribution to the 401(k) plan.

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## Table of Contents

- (5) Amount indicated includes the cost of life insurance, disability insurance and business automobile reimbursement benefits.
- (6) Non-equity incentive compensation from the Profit Sharing Plan was 0% of total compensation for the NEOs in 2018. Total salary and bonus for the NEOs approximated 90%, 89% and 25% of total compensation in 2018, 2017 and 2016, respectively.
- (7) Non-equity incentive plan compensation consists of payments under the Profit Sharing Plan (in each case 6% of net realized capital gains of Rand SBIC as defined in the Profit Sharing Plan).

### **Option Plan**

Rand does not have any outstanding equity awards, options or stock vesting rights.

### **Pension Benefits**

Rand does not provide any tax-qualified defined benefit plan or supplemental executive retirement plan, or similar plan that provides for specified retirement payments or benefits.

### **Director Compensation**

Effective January 1, 2016, Board compensation was changed so that each Board member receives a \$25,000 per annum stipend for Board and Committee service, and per meeting fees were eliminated. Committee Chairs receive an additional stipend of \$2,500 (Audit), \$1,000 (Compensation) or \$1,000 (Governance and Nominating). The Board Chair receives an additional \$10,000 retainer. No other forms of compensation are utilized; however, Rand reimburses out-of-town Directors for travel and out-of-pocket expenses incurred in connection with their service on our Board.

The following table sets forth information with respect to the compensation paid to or earned by each non-employee Director for 2018. Rand did not pay or accrue any other compensation to Directors for 2018.

<u>Name</u>	<u>Fees Earned or Paid in Cash</u>
Erland E. Kailbourne	\$ 31,000
Ross B. Kenzie	\$ 27,500
Reginald B. Newman, II (1)	\$ 16,250
Jayne K. Rand	\$ 25,000
Robert M. Zak	\$ 26,000

- (1) Mr. Newman served as Chairman of the Board until his death on April 7, 2018

### **Pay Ratio**

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and applicable SEC rules, we are providing the following information about the relationship of the annual total compensation of our employees and the annual total compensation of our President/Chief Executive Officer. The following is a reasonable estimate, prepared under applicable SEC rules, of the ratio of the annual total compensation

## [Table of Contents](#)

of our President/Chief Executive Officer to the median of the annual total compensation of our other employees. We determined our median employee based on base salary, as reflected in our payroll records, for each of our three employees (excluding the President/Chief Executive Officer) as of December 31, 2018. The annual total compensation of our median employee (other than the President/Chief Executive Officer) for 2018 was \$175,820. As disclosed in the Summary Compensation Table, our President/Chief Executive Officer's annual total compensation for 2018 was \$328,166. Based on the foregoing, our estimate of the ratio of the annual total compensation of our President/Chief Executive Officer to the median of the annual total compensation of all other employees was 1.9 to 1. Given the different methodologies that various public companies will use to determine an estimate of their pay ratio, the estimated ratio reported above should not be used as a basis for comparison between companies.

### **Compensation Committee Interlocks and Insider Participation**

During the last fiscal year, none of the members of the Compensation Committee was an officer or employee or former officer or employee of Rand or had any relationship with respect to Rand that would require disclosure under Regulation S-K, Item 404.

## **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

### **Beneficial Ownership of Shares**

Unless otherwise indicated, the following table sets forth beneficial ownership of our shares on March 1, 2019, by (a) persons known by us to be beneficial owners of more than 5% of the outstanding shares, (b) the Directors and the NEOs, and (c) all Directors and executive officers as a group. For purposes of the table, the address for each of our Directors and NEOs is c/o 2200 Rand Building, Buffalo, NY 14203. Unless otherwise stated, each person named in the table has sole voting and investment power with respect to the shares indicated as beneficially owned by that person.

<b>Beneficial Owner</b>	<b>Amount and Nature of Beneficial Ownership (1)</b>	<b>Percent of Class (3)</b>
<b>(a) More than 5% Owners:</b>		
User-Friendly Phone Book, LLC 10200 Grogan's Mill Road Suite 44440 The Woodlands, TX77380	1,455,993	23.0%
<b>(b) Directors and named executive officers:</b>		
Allen F. Grum	173,642	2.7%
Erland E. Kailbourne	40,000	*
Ross B. Kenzie	113,000	1.8%
Jayne K. Rand	115,433	1.8%
Robert M. Zak	85,000	1.3%
Daniel P. Penberthy	84,467	1.3%
* Less than 1%.		
<b>(c) All Directors and executive officers as a group (six persons)(2)</b>	611,542	9.7%

- (1) The beneficial ownership information presented is based upon information furnished by each person or contained in filings made with the SEC.

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## Table of Contents

- (2) Members of the group have sole voting and investment power over these shares.
- (3) Percent of Class calculated based on 6,321,988 shares outstanding on March 1, 2019.

For a discussion of the Transactions, including previously announced sale of 8,333,333.33 shares of Rand's common stock to East in the Stock Purchase, please see "Part I, Item 1 – Recent Developments."

### **Item 13. Certain Relationships and Related Transactions and Director Independence**

#### **Director Independence**

The Board has affirmatively determined that all of the non-employee Directors, Erland E. Kailbourne, Ross B. Kenzie, Jayne K. Rand and Robert M. Zak are "Independent Directors" under the rules of the SEC and under the rules and guidelines of the Nasdaq Stock Market. Therefore, a majority of Rand's five-person Board is currently independent as so defined. The Board has determined that there are no relationships between Rand and any of the Directors determined to be independent, other than service on its Board and compensation paid to those Directors. In addition, Reginald B. Newman II, who served as the Chairman of the Board during 2018, until his death on April 7, 2018 was also determined to be an Independent Director during such term of service as a Director.

Allen F. Grum has been determined to be an "interested person" under Section 2(a)(19) of the 1940 Act with respect to Rand because he is an executive officer of Rand. Directors who are determined to be interested persons do not qualify as Independent Directors under the rules and guidelines of the Nasdaq Stock Market.

The Board, with reference to the SEC rules and the Nasdaq Stock Market rules and guidelines, also determined that:

- each member of the Audit Committee, the Governance and Nominating Committee, and the Compensation Committee is independent under the applicable Nasdaq Stock Market rules and guidelines and SEC rules for purposes of determining independence of members of each of those committees;
- the compensation paid to the executive officers of Rand during 2018 was determined by a majority of the Independent Directors of the Board;
- each member of the Audit Committee also meets the additional independence requirements under Rule 10A-3(b) of the Exchange Act and Nasdaq Rule 5605(c)(2)(a); and
- each member of the Compensation Committee also meets the independence requirements under the rules and guidelines of Nasdaq Rule 5605(d)(2).

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## Table of Contents

Rand's Chairman, Mr. Kailbourne, serves as chair of meetings of the Independent Directors. It is currently contemplated that "executive sessions" of the Independent Directors will occur at least twice during the year ending December 31, 2019. The Corporation will also hold separate committee meetings of the Board of Directors during 2019, which committees are comprised of Independent Directors.

### **Related Person Transactions**

For the year ended December 31, 2018, there were no transactions, or proposed transactions, exceeding \$120,000 in which the Corporation was or is a participant in which any related person had or will have a direct or indirect material interest.

In order to ensure that the Corporation does not engage in any related-party transactions with any persons affiliated with the Corporation, the Corporation requires that the Audit Committee must review in advance any "related-party" transaction, or series of similar transactions, to which the Corporation or any of its subsidiaries was or is to be a party, in which the amount involved exceeds \$120,000 and in which such related party had, or will have, a direct or indirect material interest.

### **Item 14. Principal Accountant Fees and Services**

#### **Independent Registered Public Accountant ("Independent Accountant") Fees**

The aggregate fees for each of the last two fiscal years for services rendered by Freed Maxick CPAs, P.C. ("Freed") are as follows:

<u>Fee Description</u>	<u>2018</u>	<u>2017</u>
Audit	\$111,975	\$108,475
Audit Related	\$ 0	\$ 0
Tax	\$ 37,827	\$ 31,000
All Other	\$ 0	\$ 0

For fiscal years 2018 and 2017, all of the services of Freed described in the above categories were pre-approved by the Audit Committee.

#### Audit Fees

This category consists of fees for the audit of annual consolidated financial statements, review of consolidated financial statements included in quarterly reports on Form 10-Q and services that are normally provided by the independent accountant in connection with statutory and regulatory filings or audit engagements for those fiscal years.

#### Audit Related Fees

This category consists of assurance and related services by the independent accountant that are reasonably related to the performance of the audit and review of consolidated financial statements and are not reported under audit fees.

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## Table of Contents

### Tax Fees

This category consists of professional services rendered by the independent accountant for tax compliance and tax planning. The services for the fees disclosed under this category include tax return preparation and technical advice provided by Freed.

### All Other Fees

This category consists of fees not covered by Audit Fees, Audit Related Fees and Tax Fees.

Estimates of annual audit, quarterly review and tax fees to be paid during the year are submitted annually to the Audit Committee for its review and pre-approval and then budgeted for by Rand. All other non-audit services must be pre-approved by the Audit Committee prior to engagement, as required by the Audit Committee's charter.

**Part IV**

**Item 15. Exhibits and Financial Statement Schedules**

(a) The following documents are filed as part of this report and included in Item 8:

(1) CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statements of Financial Position as of December 31, 2018 and 2017

Consolidated Statements of Operations for the three years in the period ended December 31, 2018

Consolidated Statements of Changes in Net Assets for the three years in the period ended December 31, 2018

Consolidated Statements of Cash Flows for the three years in the period ended December 31, 2018

Consolidated Schedule of Portfolio Investments as of December 31, 2018

Consolidated Schedule of Portfolio Investments as of December 31, 2017

Financial Highlights Schedule for the five years in the period ended December 31, 2018

Notes to the Consolidated Financial Statements

Supplemental Schedule of Consolidated Changes in Investments at Cost and Realized Gain for the year ended December 31, 2018

Report of Independent Registered Public Accounting Firm

(2) FINANCIAL STATEMENT SCHEDULES

The required financial statement Schedule II – Valuation and Qualifying Accounts has been omitted because the information required is included in the Note 11 to the consolidated financial statements.

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## Table of Contents

(b) The following exhibits are filed with this report or are incorporated herein by reference to a prior filing, in accordance with Rule 12b-32 under the Securities Exchange Act of 1934, as amended.

- (3.1)(i) [Certificate of Incorporation of the Corporation, incorporated by reference to Exhibit \(a\)\(1\) of Form N-2 filed with the SEC on April 22, 1997. \(File No. 333-25617\).](#)
- (3.1)(ii) [By-laws of the Corporation, incorporated by reference to Exhibit 3\(ii\) to the Corporation's Quarterly Report on Form 10-Q for the period ended September 30, 2016 filed with the SEC on November 2, 2016. \(File No. 814-00235\).](#)
- (3.2)(i) [Certificate of Incorporation of Rand Merger Corporation as filed by the NY Department of State on 12/18/08 – incorporated by reference to Exhibit 1\(a\) to Registration Statement No. 811-22276 on Form N-5 of Rand Capital SBIC, Inc. filed with the SEC on February 6, 2009. \(File No. 811-22276\).](#)
- (3.2)(ii) [By-laws of Rand Capital SBIC, Inc. – incorporated by reference to Exhibit 2 to Registration Statement No. 811-22276 on Form N-5 of Rand Capital SBIC, Inc. filed with the SEC on February 6, 2009. \(File No. 811-22276\).](#)
- (4) [Specimen certificate of common stock certificate, incorporated by reference to Exhibit \(b\) of Form N-2 filed with the SEC on April 22, 1997. \(File No. 333-25617\).](#)
- (10.2) [Certificate of Merger of Rand Capital SBIC, L.P. and Rand Capital Management, LLC into Rand Merger Corporation, as filed by the NY Department of State on 12/18/08 – incorporated by reference to Exhibit 1\(b\) to Registration Statement No. 811-22276 on Form N-5 of Rand Capital SBIC, Inc. filed with the SEC on February 6, 2009. \(File No. 811-22276\).](#)
- (10.3) [Rand Capital Corporation Amended and Restated Profit Sharing Plan applicable to Rand Capital SBIC, Inc. – incorporated by reference to Exhibit 7 to Registration Statement No. 811-22276 on Form N-5 of Rand Capital SBIC, Inc. filed with the SEC on February 6, 2009. \(File No. 811-22276\).\\*](#)
- (10.4) [Change in Control Agreement, dated as of March 1, 2017, by and between the Corporation and Allen F. Grum, incorporated by reference to Exhibit 10.1 to the Corporation's Current Report on Form 8-K filed with the SEC on March 3, 2017. \(File No. 814-00235\).\\*](#)
- (10.5) [Change in Control Agreement, dated as of March 1, 2017, by and between the Corporation and Daniel P. Penberthy, incorporated by reference to Exhibit 10.2 to the Corporation's Current Report on Form 8-K filed with the SEC on March 3, 2017. \(File No. 814-00235\).\\*](#)

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**Table of Contents**

- (10.6) [Stock Purchase Agreement dated as of January 24, 2019 by and among East Asset Management LLC, Rand Capital Corporation and, solely for purposes of being bound by Sections 7.10 and 10.9\(a\) and \(b\) thereof, Rand Capital Management LLC, incorporated by reference to exhibit 10.1 to the Corporation's Current Report on Form 8-K filed with the SEC on January 25, 2019.](#)
- (31.1) [Certification of Principal Executive Officer Pursuant to Rules 13a-14\(a\)/15d-14\(a\) under the Securities Exchange Act of 1934, as amended – filed herewith.](#)
- (31.2) [Certification of Principal Financial Officer Pursuant to Rules 13a-14\(a\)/15d-14\(a\) under the Securities Exchange Act of 1934, as amended – filed herewith.](#)
- (32.1) [Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 – Rand Capital Corporation – filed herewith.](#)

\* Management contract or compensatory plan.

**Item 16. Form 10-K Summary**

None

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[Table of Contents](#)

**Signatures**

**Pursuant to the requirements of Section 13 or 15(d) of Securities Exchange Act of 1934, the registrant has duly caused this Report on Form 10-K to be signed on its behalf by the undersigned thereunto duly authorized.**

Date: March 7, 2019

RAND CAPITAL CORPORATION

By: /s/ Allen F. Grum

Allen F. Grum, President

**Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Corporation in the capacities and on the dates indicated.**

Signature/Title

**(i) Principal Executive Officer:**

/s/ Allen F. Grum

Allen F. Grum / President

March 7, 2019

**(ii) Principal Accounting & Financial Officer:**

/s/ Daniel P. Penberthy

Daniel P. Penberthy / Treasurer

March 7, 2019

**(iii) Directors:**

/s/ Allen F. Grum

Allen F. Grum / Director

March 7, 2019

/s/ Erland E. Kailbourne

Erland E. Kailbourne / Director

March 7, 2019

/s/ Ross B. Kenzie

Ross B. Kenzie / Director

March 7, 2019

/s/ Jayne K. Rand

Jayne K. Rand / Director

March 7, 2019

/s/ Robert M. Zak

Robert M. Zak / Director

March 7, 2019

**EXHIBIT 31.1**

**CERTIFICATION  
of**

**Principal Executive Officer Pursuant to Rules 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended**

I, Allen F. Grum, certify that:

1. I have reviewed this annual report on Form 10-K of Rand Capital Corporation and subsidiary;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 7, 2019

*/s/ Allen F. Grum*

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Allen F. Grum, President  
(Principal Executive Officer of Rand Capital  
Corporation and Principal Executive Officer of  
Rand Capital SBIC, Inc.)

**EXHIBIT 31.2  
CERTIFICATION  
of**

**Principal Financial Officer Pursuant to Rules 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended**

I, Daniel P. Penberthy, certify that:

1. I have reviewed this annual report on Form 10-K of Rand Capital Corporation and subsidiary;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 7, 2019

*/s/ Daniel P. Penberthy*

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Daniel P. Penberthy, Treasurer  
(Principal Financial Officer of Rand Capital  
Corporation and Principal Financial Officer  
of Rand Capital SBIC, Inc.)

**EXHIBIT 32.1**

**CERTIFICATION**

**Pursuant to 18 U.S.C Section 1350 as Adopted Pursuant to Section 906  
Of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of Rand Capital Corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2018 (the Form 10-K) of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 7, 2019

*/s/ Allen F. Grum*

\_\_\_\_\_  
Allen F. Grum, President  
(Chief Executive Officer)

Dated: March 7, 2019

*/s/ Daniel P. Penberthy*

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Daniel P. Penberthy, Treasurer  
(Chief Financial Officer)