COWEN

ANNUAL REPORT 2019

COWEN.COM COWEN INC. COWEN COWENRESEARCH

COWEN

LETTER FROM THE CEO

While 2019 feels like a distant memory, the strategic actions we implemented have put us in a solid position to perform well during the COVID-19 pandemic and beyond. Not only did Cowen generate record revenues in 2019, but we further simplified our business, diversified revenues, and positioned the firm for consistent profitability for the long term by making investments in our investment advisory capabilities, hiring new teams in banking and markets, and improving our technology and infrastructure. When the COVID-19 crisis hit in the first quarter of 2020, we moved rapidly to protect the health and safety of our team as we transitioned to operating remotely while seamlessly continuing to serve our clients. As we adapt to this new normal, we do not know what shape the recovery is going to take, but we believe we will continue to gain market share by helping our clients Outperform as they tackle new challenges.

DEAR SHAREHOLDERS, PARTNERS, COLLEAGUES AND FRIENDS:

During rapid change and uncertainty, organizations like Cowen, with strong, connected cultures, draw on their values as guiding tenets to make tough decisions. The COVID-19 health crisis is one of those times, as the spreading pandemic has shut down a significant portion of the global economy. Looking back, the month of March 2020 felt more like a quarter, or maybe even a year. Yet, this time has also been rich in opportunities, as we do our best to learn to forge connections and sustain our lives in new ways. Early in March, when the enormity of the pandemic became more evident, we moved quickly, prioritizing the health and safety of our team and our families in all of the decisions we made. We worked tirelessly and collaboratively across the

THE DECISION CAME DOWN TO ONE OVERRIDING FACTOR: KEEPING OUR PEOPLE HEALTHY.

entire platform to ensure that we were able to continue delivering high-quality engagement for our clients as we implemented our robust Business Continuity Plan. By mid-March over 80% of our staff globally were sheltering in place, well ahead of most of our peers. Starting in the third week in March, more than 98% of Cowen's 1,300-plus employees were working remotely.

The decision to move to a fully remote workforce was not an easy one. At the time, our actions were well beyond the government's recommended precautions. Our management team debated whether we were taking too much risk to the continuity of our business relative to the perceived health threat. The decision came down to one overriding factor: keeping our people healthy. Given the escalation of the crisis, particularly in cities where Cowen operates, we are thankful to have made the right decision early and for the foresight to have an in-depth Business Continuity Plan in place. The decision took courage, but the values to which Cowen ascribes allowed no other choice. In normal times, our ideals operate in the background like a compass giving us direction. In a crisis, our values come front and center as a roadmap to help us navigate the uncertainty.

At Cowen, we view everything we do through the lens of our core values of **Vision, Empathy, Sustainability**, and **Tenacious Teamwork**, or **VEST**.

VISION: In early March, we envisioned a worst-case scenario: the virus spreading throughout our entire organization unless we took decisive, precautionary measures. Everyone's health and safety far outweighed any potential risk of business interruption or concern that we might appear in the public eye to be panicking. Because we followed our vision, we realized a best-case scenario: taking care of our collective health so we could continue to see to the needs of others. Thanks to foresight and planning, we experienced a seamless transition not only to remote working, but also ensuring that the incredible trading volumes during this period (more than four times the daily average) were appropriately processed, cleared and settled.

EMPATHY: As the connective tissue of our organization, empathy enables us to function at a high level, even when we are physically separated. In times of stress, empathy also provides a sense of mission and greater purpose—of knowing that we are truly present for each other and our clients. Specifically, we put empathy into action with our corporate clients who suddenly needed to think through their own contingency planning and to strategize confidentially with trusted advisors at Cowen about specific scenarios they were facing—particularly around raising capital. Empathy also focused our attention on our communities, using our network to help others in need. This included raising money for front-line health care workers as well as working with a portfolio company in one of our funds to provide much needed iPads to hospitals. In addition, Cowen employees have engaged in countless individual acts of empathy during the crisis, reflecting the true nature of our organization collectively.

SUSTAINABILITY: As a central tenet, ensuring the long-term health of the firm and the importance of building and maintaining relationships, sustainability enhances resilience. We drew upon this value to provide comfort and direction amid turmoil. It spurred us to ensure that we were bringing the full weight of the firm—from research to banking to trading to investment management—to every challenge and opportunity. Many of the

COWEN **SNAPSHOT**

98%

COWEN EMPLOYEES WORKING REMOTELY BY LATE MARCH 2020

+46%

INCREASE IN RESEARCH REPORTS PRODUCED (1Q20, Y/Y)

43

INVESTMENT BANKING TRANSACTIONS COMPLETED (1Q20)

143%

INCREASE IN COWEN'S BUYSIDE TRADING VOLUME (MARCH 2020 VS. PRIOR 12M AVG)

strategic actions we made over the past few years by following our mantra of Simpler, Fewer, Deeper have enabled us to build a more resilient organization. None of us could have predicted a pandemic like COVID-19, but our focus and agility have empowered us to continue performing at a very high level even during this period of unprecedented economic disruption. Sustainability also comes from being well capitalized and from having made good decisions about how to employ our capital wisely in service of our long-term goals. Our mantra that "balance sheets are meant to be seen, not heard" is what led us to reduce our public market exposures over the past few years. That decision not only made it easier for us to navigate the volatility in March and enabled us to perform significantly better than the markets did generally, but it has positioned us well to participate in the recovery as it emerges.

TENACIOUS TEAMWORK: Working together is standard operating procedure in normal times. During periods of elevated stress and dislocation, it's mission critical. Tenacious teamwork allowed us to demonstrate to each other and our clients that "we're here for you." In research, Cowen was among the first to provide insights across the firm and to our clients on the projected impact of COVID-19 during the week of March 9, including information on diagnostics, therapies, and vaccines. We convened global experts to help clients make sense of an evolving pandemic, from the shutdown of the global economy to fiscal and monetary responses. By working together and sharing information, we have promoted diverse thought and fostered healthy debate. Now, amid discussions of economic reopening and recovery, we see it is as our responsibility and a privilege to provide expert opinion and market perspective. Tenacious teamwork also enabled us to maintain our business operations continuously through the market turmoil as our teams in IT and operations, accounting and finance, and legal and compliance moved quickly to ensure that we were able to prosecute our business every minute of every day without interruption. I cannot say enough how thankful all of us are for their tireless efforts on behalf of the entire organization.

IN THE FACE OF SIGNIFICANT CHALLENGES, COWEN REMAINS A DEDICATED, PASSIONATE, AND CONNECTED TEAM OF PEOPLE LOCATED AROUND THE WORLD, WORKING SAFELY TO HELP OUR CLIENTS IN EVERY WAY WE CAN.

Overall, Cowen remains in a solid financial and operating position today. We have a strong balance sheet, deep relationships with clients for whom we have become an even more critical source of advice and research, a robust markets business that has become one of the go-to organizations for the buy side to seek liquidity, and a differentiated investment management division that has continued to raise assets by helping clients invest in areas we feel have significant tailwinds for the foreseeable future. As we collectively chart a course towards recovery, here are some thoughts about what the new normal looks like for Cowen specifically:

THE FUTURE IS HERE: COVID-19 may have upended the business models of many companies, but many of the investment trends that were in place pre-COVID have accelerated. These trends include growth in healthcare and biopharma, the rise of working from home, increased use of robotics, the adoption of direct-to-consumer sales. Cowen has been a leading player in these areas for years and is well positioned to capitalize on their continued growth.

FUNDAMENTALS MATTER: The re-emergence of fundamental investing is upon us. Because of COVID-19, model-driven investing based on historical factors is more uncertain. We are here to help investors make sense of the new normal as it unfolds with our cutting-edge, collaborative research platform. We see tremendous opportunities to help clients invest in fundamental trends that were already in place before the crisis, trends that have accelerated meaningfully. We are doing so in every aspect of our business, from banking to research to investment management.

GREAT EXPECTATIONS: The bar for making the cut as a service provider to our clients just got raised. Our clients have been demanding top-tier trade execution for years. We invested in that technology beginning 8 years ago when we bought Algorithmic Trading Management (ATM). Today, we have a leading independent, non-conflicted equity trading platform, and it is one that cannot be easily replicated.

CAPITAL IS CRUCIAL: The business of financing companies ebbs and flows. While it may not be flashy, it is a valuable service which rarely, if ever, goes out of style. In times of crisis, almost every company has to figure out whether it has the financial wherewithal to execute on its revised business plans. At Cowen, we are a leader in providing financing advice and execution to our clients, and that has never been more important than it is now.

In the face of significant challenges, Cowen remains a dedicated, passionate, and connected team of people located around the world, working safely to help our clients in every way we can. Over the past several years we made investments that make us not only more resilient, but better positioned for operating in this environment. However, at this time our responsibility to improve our world broadly extends way beyond the specific things we do for ourselves, our clients and our shareholders. That is why we are using our network to connect key influencers, scientists, doctors and officials with important capital providers that can help accelerate

SUPPORTING **FRONTLINE WORKERS AND LOCAL COMMUNITIES**

3,020

PERSONAL CARE KITS SUPPLIED TO HEALTHCARE WORKERS

2,000

HEALTHCARE WORKERS REACHED THROUGH OUR EFFORTS

20,400

MEALS PROVIDED TO LOCAL FOOD BANKS

important medical developments. The social distancing we have been practicing, the testing strategies, and the antiviral treatments and vaccines racing towards development—we believe all of these will ultimately defeat COVID-19. We are proud to be doing our part to bring about that eventuality. The lessons learned from the pandemic, particularly those around the importance of the uniquely human values of empathy and collaboration, will endure into the new normal—and beyond. At Cowen, these are values to which we already subscribe, enabling us to march into the future with confidence, knowing that we are well positioned to help our clients, partners and shareholders make sense of it all. That is what we do best.

We only get to help others because you have entrusted us to shepherd your capital intelligently. Our ability to do the all the things we do every day emanates from that trust and confidence as shareholders. For that, we are grateful and humbled to be doing our part.

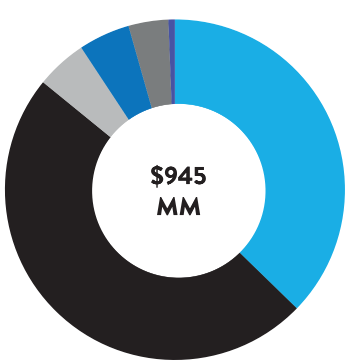
With thanks for your continuing support,

Jeffrey M. Solomon
Chairman and Chief Executive Officer

OUR CORE BUSINESSES (“OPERATING CO”)
DRIVE RETURN ON EQUITY

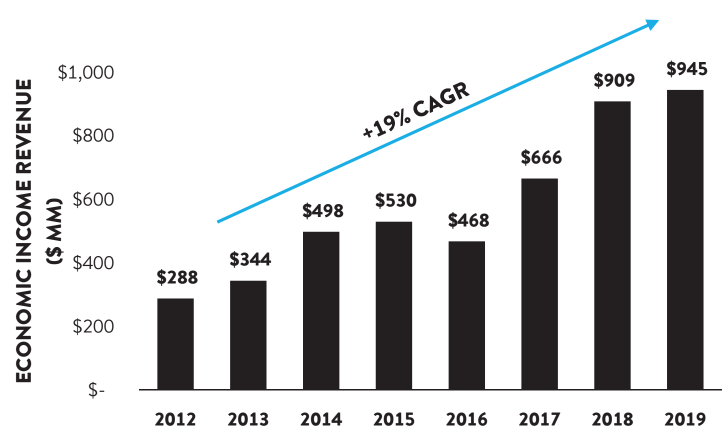
	OPERATING CO	ASSET CO	COWEN INC.
ECONOMIC INCOME REVENUE	$939 MM	$6 MM	$945 MM
ECONOMIC OPERATING INCOME	$79 MM	($10) MM	$69 MM
RETURN ON COMMON EQUITY	12%	-26%	10%

INCREASED REVENUE DIVERSITY*



INVESTMENT BANKING	37%
BROKERAGE	49%
MANAGEMENT FEES	5%
INCENTIVE INCOME	5%
INVESTMENT INCOME	4%
OTHER	1%

A **GROWING** PLATFORM



* Economic income revenue

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

FORM 10-K

(Mark One)

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

For the fiscal year ended: December 31, 2019

or

☐ **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: 001-34516

Cowen Inc.

(Exact name of registrant as specified in its charter)

Delaware	**27-0423711**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

599 Lexington Avenue
New York, New York 10022
(212) 845-7900

(Address, including zip code, and telephone number, including area code, of registrant's principal executive office)

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

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Class A Common Stock, par value $0.01 per share	COWN	The Nasdaq Global Market
7.35% Senior Notes due 2027	COWNZ	The Nasdaq Global Market
7.75% Senior Notes due 2033	COWNL	The Nasdaq Global Market

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☒	Non-accelerated filer (Do not check if a smaller reporting company)	☐	Smaller reporting company	☐	Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the 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 Class A common stock held by non-affiliates of the registrant on June 30, 2019, the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price of the Class A common stock on the NASDAQ Global Market on that date was $488,181,217.

As of March 3, 2020 there were 28,656,136 shares of the registrant's Class A common stock outstanding.

Documents incorporated by reference:

Part III of this Annual Report on Form 10-K incorporates by reference information (to the extent specific sections are referred to herein) from the Registrant's Proxy Statement for its 2020 Annual Meeting of Stockholders.

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Special Note Regarding Forward-Looking Statements

We have included or incorporated by reference into our Annual Report on Form 10-K (the "Annual Report"), and from time to time may make in our public filings, press releases or other public documents, certain statements, including (without limitation) those under Item 1—"Business," Item 1A—"Risk Factors," Item 3—"Legal Proceedings," Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 7A—"Quantitative and Qualitative Disclosures about Market Risk" that may constitute "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In some cases, you can identify these statements by forward-looking terms such as "may," "might," "will," "would," "could," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "project," "possible," "potential," "intend," "seek" or "continue," the negative of these terms and other comparable terminology or similar expressions. In addition, our management may make forward-looking statements to analysts, representatives of the media and others. These forward-looking statements represent only the Company's beliefs regarding future events (many of which, by their nature, are inherently uncertain and beyond our control) and are predictions only, based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from those expressed or implied by the forward-looking statements. In particular, you should consider the risks outlined under Item 1A—"Risk Factors" in this Annual Report.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy or completeness of any of these forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. We undertake no obligation to update any of these forward-looking statements after the date of this filing to conform our prior statements to actual results or revised expectations.

PART I

When we use the terms "we," "us," "Cowen" and the "Company," we mean Cowen Inc., a Delaware corporation, its consolidated subsidiaries and entities in which it has a controlling financial interest, taken as a whole, as well as any predecessor entities, unless the context otherwise indicates.

Item 1. Business

Overview

Cowen Inc., a Delaware corporation formed in 2009, is a diversified financial services firm that, together with its consolidated subsidiaries (collectively, "Cowen" or the "Company"), provides investment banking, research, sales and trading, prime brokerage, global clearing and commission management services and investment management through its two business segments: the Operating Company ("Op Co") and the Asset Company ("Asset Co").

Operating Company

The Op Co segment consists of four divisions: the Cowen Investment Management ("CIM") division, the Investment Banking division, the Markets division and the Research division. The Company refers to the Investment Banking division, the Markets division and the Research division collectively as its investment banking businesses. Op Co's CIM division includes advisers to investment funds (including private equity structures and privately placed hedge funds), and registered funds. Op Co's investment banking businesses offer industry focused investment banking for growth-oriented companies including advisory and global capital markets origination and domain knowledge-driven research, sales and trading platforms for institutional investors, global clearing and commission management services and also a comprehensive suite of prime brokerage services.

The CIM division is the Company's investment management business, which operates primarily under the Cowen Investment Management name. CIM offers innovative investment products and solutions across the liquidity spectrum to institutional and private clients. The predecessor to this business was founded in 1994 and, through one of its subsidiaries, has been registered with the United States ("U.S.") Securities and Exchange Commission (the "SEC") as an investment adviser under the Investment Advisers Act of 1940, as amended (the "Advisers Act") since 1997. The Company's investment management business offers investors access to a number of strategies to meet their specific needs including private healthcare investing, private sustainable investing, healthcare royalties, activism and merger arbitrage. A portion of the Company’s capital is invested alongside the Company's investment management clients. The Company has also invested some of its capital in its reinsurance businesses.

Op Co's investment banking businesses include investment banking, research, sales and trading, prime brokerage, global clearing and commission management services provided primarily to companies and institutional investor clients. Sectors covered by Op Co's investment banking business include healthcare, technology, media and telecommunications, consumer, industrials, information and technology services, and energy. We provide research and brokerage services to over 6,000 domestic and international clients seeking to trade securities and other financial instruments, principally in our sectors. The investment banking businesses also offer a full-service suite of introduced prime brokerage services targeting emerging private fund managers. Historically, we have focused our investment banking efforts on small to mid-capitalization public companies as well as private companies. From time to time, the Company invests in private capital raising transactions of its investment banking clients.

Asset Company

The Asset Co segment consists of the Company's private investments, private real estate investments and other legacy investment strategies. The focus of Asset Co is to drive future monetization of the invested capital of the segment.

Change in Segments

The Company continually monitors and reviews its segment reporting structure in accordance with authoritative guidance to determine whether any changes have occurred that would impact its reportable segments. Because of the change in the Chief Operating Decision Maker ("CODM") of the Company at the end of 2017, the Company experienced a strategic shift to refocus the Company's businesses on a set of differentiated products which are aligned to the content and insight within the Company's domain of expertise.

During the second quarter of 2019, the Company realigned the business and reportable segment information that the CODM regularly reviews to evaluate performance for operating decision-making purposes, including evaluation and allocation of resources. As a result, the Company changed its segment reporting structure based on the Company's domain expertise as a driver of balance sheet harmonization and repeatable revenues for its operating business versus the Company's long-term monetization strategies.

As a result of the change in segments during the second quarter of 2019, the Company has the following business segments:

- The Op Co segment consists of four divisions: Investment Banking, Markets, Research and Cowen Investment Management. Each of Op Co's four divisions leverage the Research division's core domain expertise to drive harmonized repeatable revenue for the segment.
    - The Investment Banking division includes public and private capital raising transactions and providing strategic advisory services.
    - The Markets division includes trading equity, equity-linked and fixed income securities on behalf of institutional investors as well as a full-service suite of prime brokerage services, cross-asset trading, securities finance, global execution, clearing and commission management businesses.
    - The Research division provides thought leadership and domain expertise. The research content that is created helps to facilitate brokerage revenue in the Markets division, provides research coverage for clients of the Investment Banking division and facilitate investor relationships and investing within CIM's innovative investment products and solutions.
    - The CIM division offers innovative investment products and solutions across the liquidity spectrum to institutional and private clients. CIM offers investors access to a number of strategies to meet their specific needs including merger arbitrage, activism, healthcare royalties, private healthcare investing and private sustainable investing many of which leverage the content and domain expertise that are aligned with the Company's core areas of expertise, which the Company refers to as Cowen DNA.
- The Asset Co segment consists of certain of the Company's private investments, private real estate investments and other legacy investment strategies.

Principal Business Lines

Investment Banking

Our investment banking department provides strategic advisory and capital raising services to U.S. and international public and private companies in our sectors. Our strategic advisory services include, among other things, acquisitions, divestitures, fairness opinions, spin-offs, and partnerships. Our capital markets group consists of two groups: (i) equity capital markets (including convertible securities), which focuses on raising equity capital in the public markets, and (ii) private capital solutions, which focuses on providing alternative sources of capital and balance sheet solutions, including private equity, family offices, alternative lenders and liability management. A significant amount of our investment banking revenue has been earned from high-growth small and mid-capitalization companies. From time to time, the Company invests in private capital raising transactions of its clients.

Brokerage

Our team of brokerage professionals serves institutional investor clients in the U.S. and internationally. We trade common stocks, listed options, equity-linked securities and other financial instruments on behalf of our clients and offer a full-service suite of introduced prime brokerage services targeting emerging private fund managers. We provide our clients with an electronic execution suite. We provide global, multi-asset class algorithmic execution trading models to both buy side and sell side clients and also offer execution capabilities relating to these trading models through ATM Execution LLC ("ATM Execution"). We also provide our clients with commentary on political, economic and market conditions. We have relationships with over 6,000 institutional investor clients. Our brokerage team is comprised of experienced professionals dedicated to our sectors, which allows us to develop a level of knowledge and focus that we believe differentiates our brokerage capabilities from those of many of our competitors. We tailor our account coverage to the unique needs of our clients. We believe that our sector traders are able to provide superior execution because of their knowledge of the interests of our institutional investor clients in specific companies in our sectors.

In connection with the brokerage services we provide, our sales professionals also provide our institutional investor clients with corporate access to our investment banking clients outside the context of financing transactions. These meetings are commonly referred to as non-deal road shows. Non-deal road shows allow our investment banking clients to increase their visibility within the institutional investor community while providing our institutional investor clients with the opportunity to further educate themselves on companies and industries through meetings with management. We believe our deep relationships with company management teams and our sector-focused approach provide us with broad access to management for the benefit of our institutional investor and investment banking clients.

Research

As of December 31, 2019, we had a research team of 52 senior analysts covering over 800 stocks. Within our equity coverage universe, approximately 31% are healthcare companies, 26% are TMT (technology, media and telecom) companies, 14% are energy companies, 11% are capital goods and industrial companies, 3% are basic materials companies and 14% are consumer companies. Our approach to research, underpinned by our marquee Ahead Of The Curve® Series reports, focuses our analysts' efforts toward delivering differentiated investment ideas and de-emphasizes maintenance research. We place significant emphasis on analyst collaboration, both within and between sectors. We sponsor a number of conferences every year that are focused on our sectors and sub-sectors. During these conferences we highlight our investment research and provide significant investor access to corporate management teams. We provide research solely through our broker-dealers in connection with our provision of brokerage services.

Investment Management Strategies

The Company's investment management business, within the Op Co segment, focuses on addressing the needs of institutional investors and high net worth individuals to preserve and grow allocated capital. The Company and its affiliated investment advisors offer a variety of investment management products that provide access to a number of strategies, including merger arbitrage, activism, private healthcare investing, and private sustainable investing.

The Company's investment management business, within the Asset Co segment, consists of the Company's private investments, private real estate investments and other legacy investment strategies. Certain multi-strategy hedge funds managed by the Company are currently in wind-down. The majority of assets remaining in these hedge funds include investments in private companies, real estate investments and special situations.

Information About Geographic Areas

We are principally engaged in providing investment management services to global institutional investors and investment banking sales and trading and research services to corporations and institutional investor clients primarily in the United States and Europe. We provide brokerage services to companies and institutional investor clients in Europe through our broker-dealers located in the United Kingdom ("U.K.") Cowen International Limited ("Cowen International Ltd") and Cowen Execution Services Limited ("Cowen Execution Ltd"). Cowen and Company (Asia) Limited ("Cowen Asia") is registered with and subject to the financial resources requirements of the Securities and Futures Commission ("SFC") of Hong Kong.

Employees

As of March 3, 2020, the Company had 1,325 employees.

Competition

We compete with many other firms in all aspects of our business, including raising funds, seeking investment opportunities and hiring and retaining professionals, and we expect our business will continue to be highly competitive. The investment management and investment banking industries are currently undergoing contraction and consolidation, reducing the number of industry participants and generally resulting in the larger firms being better positioned to retain and gain market share. We compete in the United States and globally for investment opportunities, investor capital, client relationships, reputation and talent. We face competitors that are larger than we are and have greater financial, technical and marketing resources. Certain of these competitors continue to raise additional amounts of capital to pursue investment strategies that may be similar to ours. Some of these competitors may also have access to liquidity sources that are not available to us, which may pose challenges for us with respect to investment opportunities. In addition, some of these competitors may have higher risk tolerances or make different risk assessments than we do, allowing them to consider a wider variety of investments and establish broader networks of business relationships. Our competitive position depends on our reputation, our investment performance and processes, the breadth of our business platform and our ability to continue to attract and retain qualified employees while managing compensation and other costs. For additional information regarding the competitive risks that we face, see "Item 1A Risk Factors".

Regulation and Compliance

Our businesses, as well as the financial services industry generally, are subject to extensive regulation, including periodic examinations by governmental and self-regulatory organizations, in the United States and the jurisdictions in which we operate around the world. As a publicly traded company in the United States, we are subject to the U.S. federal securities laws and regulation by the SEC. Through our investment management and/or investment bank businesses we are subject to regulation by the SEC, the U.S. Commodity Futures Trading Commission ("CFTC"), the Financial Industry Regulatory Authority, Inc. ("FINRA") the National Futures Association ("NFA"), other self-regulatory organizations and exchanges related to the financial services industry and the fifty state securities commissions in the U.S. and by the U.K. Financial Conduct Authority ("FCA") and the SFC of Hong Kong.

Virtually all aspects of our business are subject to various laws and regulations both inside and outside the U.S., some of which are summarized below. Regulatory bodies in the United States and the rest of the world are charged with safeguarding the integrity of the securities and other financial markets and with protecting the interests of customers participating in those markets. Governmental authorities in the United States and in the other countries in which we operate from time to time propose additional disclosure requirements and regulations covering our broker-dealers and investment management businesses. The rules governing the regulation of the various aspects of our business are very detailed and technical. Accordingly, the discussion below is general in nature, does not purport to be complete and is current only as of the date of this report.

Rigorous legal and compliance analysis of our businesses and investments is important to our culture and risk management. We conduct regular training of our personnel regarding the laws and regulations governing our business and applicable to our clients as well as with our company's policies and procedures. In addition, we have adopted and implemented disclosure controls and procedures and internal controls over financial reporting, which have been documented, tested and assessed for design and operating effectiveness in compliance with the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act"). We strive to maintain a culture of compliance through the use of policies and procedures such as oversight compliance, codes of conduct, compliance systems, communication of compliance guidance, conduct of annual compliance reviews and on-going employee education and training. Our corporate risk management function further analyzes our business, investment and other key risks, reinforcing their importance in our environment. We have a compliance group that monitors our compliance with all of the regulatory requirements to which we are subject and manages our compliance policies and procedures. Our General Counsel supervises our compliance group, which is responsible for addressing all regulatory and compliance matters that affect our activities. Our compliance policies and procedures address a variety of regulatory and compliance risks such as the handling of material non-public information, position reporting, personal securities trading, valuation of investments, document retention, potential conflicts of interest and the allocation of investment opportunities. Our compliance group also monitors the information barriers that we maintain between those of our different businesses that we are required to conduct separately or which present conflicts of interest, which we address through the use of physical and systematic information barriers. We believe that our various businesses' access to the intellectual capital, contacts and relationships benefit all of our businesses. However, in order to maximize that access without compromising our legal and contractual obligations, our compliance group oversees and monitors the communications between or among our different businesses to ensure that we maintain material non-public information, client information and other confidential information in strict confidence. All parts of our business from time to time are subject to regulatory exams, investigations and proceedings, and our broker-dealers have received fines and penalties for infractions of various regulations relating to our activities. For additional information regarding the regulatory and compliance risks that we face, see "Item 1A Risk Factors".

The investment advisers responsible for the Company's investment management businesses are all registered as investment advisers with the SEC or rely upon the registration of an affiliated adviser, and all are currently exempt from registration as Commodity Pool Operators and Commodity Trading Advisors.

Registered investment advisers are subject to the requirements of the Advisers Act and the regulations promulgated thereunder. Such requirements relate to, among other things, fiduciary duties to clients, maintaining an effective compliance program, operational and marketing requirements, disclosure obligations, conflicts of interest, fees and prohibitions on fraudulent activities.

The investment activities of our investment management businesses are also subject to regulation under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Securities Act of 1933, as amended, the Investment Company Act of 1940, as amended ("the Investment Company Act") and various other statutes, as well as the laws of the fifty states and the rules of various United States and non-United States securities exchanges and self-regulatory organizations, including laws governing trading on inside information, market manipulation and a broad number of technical requirements (e.g., options and futures position limits, execution requirements and reporting obligations) and market regulation policies in the United States and globally. Congress, regulators, tax authorities and others continue to explore and implement regulations governing all aspects of the financial services industry. Pursuant to systemic risk reporting requirements adopted by the SEC, the Company's affiliated registered investment advisers with private investment fund clients are required to report certain information about their investment funds to the SEC.

In addition, certain of our investment advisers act as a "fiduciaries" under the Employee Retirement Income Security Act of 1974 ("ERISA") and similar state laws with respect to private and public benefit plan clients. As such, the advisers, and certain of the investment funds they advise, may be subject to ERISA and similar state law requirements and to regulations promulgated thereunder. ERISA, similar state laws and applicable provisions of the Internal Revenue Code of 1986 (the "IRC"), which regulate services provided to individual retirement accounts, impose duties on persons who are fiduciaries and other types of service providers to benefit plans and individual retirement accounts under ERISA, such state laws and the IRC, prohibit specified transactions involving IRA and benefit plan clients subject to ERISA or similar state laws (absent the availability of specified exemptions) and provide monetary penalties for violations of these prohibitions.

Enacted on July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") was expansive in scope and led to the adoption of extensive regulations by the CFTC, the prudential regulators, the SEC and other governmental agencies. The current administration has suggested that it will seek to roll back some of this regulation, although it is not possible to predict whether changes will be made. Since its adoption, the Dodd-Frank Act has had an impact on the costs associated with derivatives trading by the Company and its clients, including as a result of requirements that transactions be margined, trade reported and, in some cases, centrally cleared.

The Dodd-Frank Act established the Financial Services Oversight Council (the "FSOC") to identify threats to the financial stability of the United States, promote market discipline, and respond to emerging risks to the stability of the United States financial system. The FSOC is empowered to determine whether the material financial distress or failure of a non-bank financial company would threaten the stability of the United States financial system, and such a determination can subject a non-banking finance company to supervision by the Board of Governors of the Federal Reserve and the imposition of standards and supervision including stress tests, liquidity requirements and enhanced public disclosures including the authority to require the supervision and regulation of systemically significant non-bank financial companies. We do not believe we are at risk of being considered a systemically significant non-bank financial company.

The regulation of swaps and derivatives under the Dodd-Frank Act directly affects the manner by which our investment management businesses utilizes and trades swaps and other derivatives, and has generally increased the costs of derivatives trading conducted on behalf of our clients. The European Union ("E.U.") (and some other countries) are now in the process of implementing similar requirements that will affect derivatives transactions with a counterparty organized in that country or otherwise subject to that country's derivatives regulation. The mandatory minimum margin requirements for bilateral derivatives adopted by the U.S. government and the E.U. came into effect in March 2017 in respect to variation margin and will be transitioned in through 2020 in respect to initial margin. Required margining of derivatives has affected our investment management businesses as these requirements generally increase costs associated with derivatives transactions and makes derivatives transactions more expensive.

Given our investment and insurance activities are carried out around the globe, we are subject to a variety of regulatory regimes that vary country by country. Our captive insurance and reinsurance companies are regulated by both the New York State Department of Finance and the Luxembourg Commissariat aux Assurances, respectively. E.U. financial reforms included a number of initiatives to be reflected in new or updated directives and regulations, the most significant of which is the amendment to the pan-European regulatory regime, the Markets in Financial Instruments Directive ("MiFID II"), which went into effect in January 2018. MiFID II regulates the provision of investment services and activities throughout the European Economic Area. MiFID II requires that investment managers and investment advisers located in the E.U. "unbundle" research costs from commissions. As a result, investment firms subject to MiFID II may no longer pay for research using client commissions or "soft dollars." Going forward, such costs must be paid directly by the investment firm or through a research payment account funded by clients and governed by a budget that is agreed by the client. In the U.S., our investment management businesses expect to continue to pay for research using soft dollars consistent with applicable law. The change in regulations has also impacted the provisions of research by our U.S. broker-dealers. Because the acceptance of hard dollar payments would, under U.S. law, require registration as an investment adviser, our broker-dealers are requiring clients to continue to pay for research on a soft dollar basis unless the client is subject to MiFID II and we can rely on SEC relief so as not to have to register as an investment adviser.

Our businesses have operated for many years within a legal framework that requires us to be able to monitor and comply with a broad range of legal and regulatory developments that affect our activities both in the United States and abroad. As noted above, certain of our businesses are subject to compliance with laws and regulations of United States federal and state governments, foreign governments, their respective agencies and/or various self-regulatory organizations or exchanges relating to the privacy of client information, and any failure to comply with these regulations could expose us to liability and/or reputational damage. Additional legislation, changes in rules promulgated by the SEC, our other regulators and self-regulatory organizations or changes in the interpretation or enforcement of existing laws and rules, either in the United States or elsewhere, may directly affect the mode of our operation and profitability. The United States and non-United States government agencies and self-regulatory organizations, as well as state securities commissions in the United States, are empowered to conduct administrative proceedings that can result in censure, fine, the issuance of cease-and-desist orders or the suspension or expulsion or deregulation of a broker-dealer, an investment advisor or its directors, officers or employees.

Cowen and Company, LLC ("Cowen and Company"), ATM Execution LLC ("ATM Execution"), Cowen Prime Services LLC ("Cowen Prime"), Cowen Execution Services LLC ("Cowen Execution") and Westminster Research Associates LLC ("Westminster") are registered as broker-dealers with the SEC and are members in good standing with FINRA. All broker-dealers are registered with various U.S states and territories except for ATM Execution. In addition to FINRA, some of these Cowen broker-dealers are also are members of other self-regulatory organizations, including various registered securities exchanges. Self-regulatory organizations adopt and enforce rules governing the conduct and activities of their member firms. Accordingly, Cowen and Company, ATM Execution, Cowen Prime, Cowen Execution and Westminster are subject to regulation and oversight by the SEC, the U.S states and territories in which they are registered, and FINRA and the other self-regulatory organizations of which they are members. Cowen Prime is also registered with the CFTC and is a member of the NFA and, consequently, is subject to regulation and oversight by them. Additionally, Cowen International Ltd and Cowen Execution Ltd are primarily regulated in the U.K. by the FCA and Cowen Asia is-registered with and subject to the financial resources requirements of the SFC of Hong Kong.

Broker-dealers are subject to regulations that cover all aspects of the securities business, including sales methods, trade practices among broker-dealers, use and safekeeping of customers' funds, conflicts of interest, securities and information, capital structure, research/banking interaction, record-keeping, the financing of customers' purchases and the conduct and qualifications of directors, officers and employees. In particular, as registered broker-dealers and members of various self-regulatory organizations, Cowen and Company, ATM Execution, Cowen Prime, Cowen Execution and Westminster are subject to the SEC's uniform net capital rule. Rule 15c3-1 specifies the minimum level of net capital a broker-dealer must maintain and also requires that a significant part of a broker-dealer's assets be kept in relatively liquid form. The SEC and various self-regulatory organizations impose rules that require notification when net capital falls below certain predefined criteria, limit the ratio of subordinated debt to equity in the regulatory capital composition of a broker-dealer and constrain the ability of a broker-dealer to expand its business under certain circumstances. Additionally, the SEC's uniform net capital rule requires us to give prior notice to the SEC for certain withdrawals of capital. As a result, our ability to withdraw capital from our broker-dealer subsidiaries may be limited.

The effort to combat money laundering and terrorist financing is a priority in governmental policy with respect to financial institutions. The Bank Secrecy Act ("BSA"), as amended by Title III of the USA PATRIOT Act of 2001 and its implementing regulations ("Patriot Act"), requires broker-dealers and other financial services companies to maintain an anti-money laundering compliance program that includes written policies and procedures, designated compliance officer(s), appropriate training, independent review of the program, standards for verifying client identity at account opening and obligations to report suspicious activities and certain other financial transactions. Through these and other provisions, the BSA and Patriot Act seek to promote the identification of parties that may be involved in financing terrorism or money laundering. We must also comply with sanctions programs administered by the U.S. Department of Treasury's Office of Foreign Asset Control, which may include prohibitions on transactions with designated individuals and entities and with individuals and entities from certain countries.

Anti-money laundering laws of certain countries outside the United States contain similar diligence and verification provisions. The obligation of financial institutions, including ours, to identify their customers, watch for and report suspicious transactions, respond to requests for information by regulatory authorities and law enforcement agencies, and share information with other financial institutions, has required the implementation and maintenance of internal practices, procedures and controls that have increased, and may continue to increase, our costs. Any failure with respect to our programs in this area could subject us to serious regulatory consequences, including substantial fines, and potentially other liabilities.

Available Information

We routinely file annual, quarterly and current reports, proxy statements and other information required by the Exchange Act with the SEC. Our SEC filings also are available to the public from the SEC's internet site at http://www.sec.gov.

We maintain a public internet site at http://www.cowen.com and make available free of charge through this site our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements and Forms 3, 4 and 5 filed on behalf of directors and executive officers, as well as any amendments to those reports filed or furnished pursuant to the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We also post on our website the charters for our Board of Directors' Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee, as well as our Corporate Governance Guidelines, our Code of Business Conduct and Ethics governing our directors, officers and employees and other related materials. The information on or accessible through our website is not incorporated by reference into this Annual Report.

Item 1A. Risk Factors

Risks Related to the Company's Businesses and Industry

For purposes of the following risk factors, references made to the Company's investment funds include the various investment management products advised by the Company's investment management business and the investment funds through *which the Company invests its own capital. The Company's investment banking businesses include the Investment Banking division, the Markets division and the Research division.*

Market, Strategy and Industry Risk

Difficult market conditions, market disruptions and volatility have adversely affected, and may in the future adversely affect, the Company's businesses, results of operations and financial condition.

The Company's businesses, by their nature, do not produce predictable earnings, and all of the Company's businesses have in the past been, and may in the future be, materially affected by conditions in the global financial markets and by global economic conditions, such as interest rates, the availability of credit, inflation rates, economic uncertainty, changes in laws, commodity prices, asset prices (including real estate), currency exchange rates and controls and national and international political circumstances (including wars, terrorist acts, protests or security operations). Challenging market conditions have in the past affected and in the future could affect the level and volatility of securities prices and the liquidity and the value of investments in the Company's investment funds or other investments in which the Company has investments of its own capital, and the Company may not be able to effectively manage its investment management business's exposure to challenging market conditions. Challenging market conditions have in the past adversely affected and in the future could also adversely affect the Company's investment banking business as increased volatility and lower stock prices can make companies less likely to conduct transactions.

The Company may be unable to successfully identify, manage and execute future acquisitions, investments and strategic alliances, which could adversely affect our results of operations.

We intend to continually evaluate potential acquisitions, investments and strategic alliances to expand our business. In the future, we may seek additional acquisitions, investments, strategic alliances or similar arrangements, which may expose us to risks such as:

- the difficulty of identifying appropriate acquisitions, investments, strategic allies or opportunities on terms acceptable to us;
- the possibility that senior management may be required to spend considerable time negotiating agreements and monitoring these arrangements;
- potential regulatory issues applicable to the financial services business;
- the loss or reduction in value of the capital investment;
- our inability to capitalize on the opportunities presented by these arrangements; and
- the possibility of insolvency of a strategic ally.

Furthermore, any future acquisitions of businesses could entail a number of risks, including:

- problems with the effective integration of operations;
- inability to maintain key pre-acquisition business relationships;
- increased operating costs;
- exposure to unanticipated liabilities; and
- difficulties in realizing projected efficiencies, synergies and cost savings.

There can be no assurance that we would successfully overcome these risks or any other problems encountered with these acquisitions, investments, strategic alliances or similar arrangements.

The Company's future results will suffer if the Company does not effectively manage its expanded operations.

The Company may continue to expand its operations through new product and service offerings and through additional strategic investments, acquisitions or joint ventures, some of which may involve complex technical and operational challenges. The Company's future success depends, in part, upon its ability to manage its expansion opportunities, which pose numerous risks and uncertainties, including the need to integrate new operations into its existing business in an efficient and timely manner, to combine accounting and data processing systems and management controls and to integrate relationships with customers and business partners. In addition, future acquisitions or joint ventures may involve the issuance of additional shares of common stock of the Company, which may dilute the ownership of the Company's stockholders.

Volatility in the value of the Company's investments and securities portfolios or other assets and liabilities, including investment funds, or negative returns from the investments made by the Company have in the past and could in the future adversely affect the Company's results of operations and statement of financial condition.

The Company invests a significant portion of its capital base to help drive results and facilitate growth of its investment management and investment bank businesses. As of December 31, 2019, the Company's invested capital amounted to a net value of $717.6 million (supporting a long market value of $724.8 million), representing approximately 89% of Cowen's stockholders' equity presented in accordance with accounting principles generally accepted in the United States of America ("US GAAP"). In accordance with US GAAP, we define fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. US GAAP also establishes a framework for measuring fair value and a valuation hierarchy based upon the transparency of inputs used in the valuation of an asset or liability. Changes in fair value are reflected in the statement of operations at each measurement period. Therefore, continued volatility in the value of the Company's investments and securities portfolios or other assets and liabilities, including investment funds, will result in volatility of the Company's results. We have experienced this type of volatility in prior periods. In addition, the investments made by the Company may not generate positive returns. As a result, changes in value or negative returns from investments made by the Company may have an adverse effect on the Company's financial condition or operations in the future.

Our investment in Linkem may not prove to be successful and may adversely affect our results of operations or financial condition.

As of December 31, 2019, we had an approximately $72.4 million investment in Linkem S.p.A. ("Linkem"), the largest fixed wireless broadband service provider in Italy. Many factors, most of which are outside of our control, can affect Linkem's business, including the state of the Italian economy and capital markets in general, competition in the Italian telecommunications markets and other factors that directly and indirectly affect the results of operations, including the sales and profitability of Linkem, and consequently may adversely affect our results of operations or financial condition.

The Company faces strong competition from larger firms.

The research, brokerage and investment banking industries are intensely competitive, and the Company expects them to remain so. The Company competes on the basis of a number of factors, including client relationships, reputation, the abilities of the Company's professionals, market focus and the relative quality and price of the Company's services and products. The Company has experienced intense price competition in some of its businesses, including trading commissions and spreads in its brokerage business. In addition, pricing and other competitive pressures in investment banking, including the trends toward multiple book runners, co-managers and financial advisors, and a larger share of the underwriting fees and discounts being allocated to the book-runners, could adversely affect the Company's revenues from its investment bank business.

The Company is a relatively small investment bank. Many of the Company's competitors in the research, brokerage and investment banking industries have a broader range of products and services, greater financial resources, larger customer bases, greater name recognition and marketing resources, a larger number of senior professionals to serve their clients' needs, greater global reach and more established relationships with clients than the Company has. These larger competitors may be better able to respond to changes in the research, brokerage and investment banking industries, to compete for skilled professionals, to finance acquisitions, to fund internal growth and to compete for market share generally.

The scale of our competitors in the investment banking industry has increased in recent years as a result of substantial consolidation among companies in the research, brokerage and investment banking industries. In addition, a number of large commercial banks and other broad-based financial services firms have established or acquired underwriting or financial advisory practices and broker-dealers or have merged with other financial institutions. These firms have the ability to offer a wider range of products than the Company does which may enhance their competitive position. They also have the ability to support their investment banking and advisory groups with commercial banking and other financial services in an effort to gain market share, which has resulted, and could further result, in pricing pressure in the Company's businesses. If we are unable to compete effectively with our competitors in the investment banking industry, the Company's business and results of operations may be adversely affected.

Human Capital Risk

The Company depends on its key senior personnel and the loss of their services would have a material adverse effect on the Company's businesses and results of operations, financial condition and prospects.

The Company depends on the efforts, skill, reputations and business contacts of its principals and other key senior personnel, the information and investment activity these individuals generate during the normal course of their activities and the synergies among the diverse fields of expertise and knowledge held by the Company's senior professionals. Accordingly, the Company's continued success will depend on the continued service of these individuals. Key senior personnel may leave the Company in the future, and we cannot predict the impact that the departure of any key senior personnel will have on our ability to achieve our investment and business objectives. The loss of the services of any of them could have a material adverse effect on the Company's revenues, net income and cash flows and could harm our ability to maintain or grow assets under management in existing investment funds or raise additional funds in the future. Our senior and other key personnel possess substantial experience and expertise and have strong business relationships with the investors in its investment funds, clients and other members of the business community. As a result, the loss of such personnel could have a material adverse effect on the Company's businesses and results of operations, financial condition and prospects.

The Company's ability to retain its senior professionals is critical to the success of its businesses, and its failure to do so may materially affect the Company's reputation, business and results of operations.

Our people are our most valuable resource. Our success depends upon the reputation, judgment, business generation capabilities and project execution skills of our senior professionals. Our employees' reputations and relationships with our clients are critical elements in obtaining and executing client engagements. The Company may encounter intense competition for qualified employees from other companies inside and outside of their industries. From time to time, the Company has experienced departures of professionals. Losses of key personnel have occurred and may occur in the future. Moreover, if any of our client-facing employees or executive officers were to join an existing competitor or form a competing company, some of our clients could choose to use the services of that competitor instead of the services of the Company.

The success of our businesses is based largely on the quality of our employees and we must continually monitor the market for their services and seek to offer competitive compensation. In challenging market conditions, which occurred in recent years, it may be difficult to pay competitive compensation without the ratio of our compensation and benefits expense to revenues becoming higher. In addition, for our investment professionals whose performance-based compensation represents substantially all of the compensation the professional is entitled to receive in any year, negative performance which results in the professional not being entitled to receive any performance-based compensation could incentivize the professional to join a competitor.

Employee misconduct could harm the Company by, among other things, impairing the Company's ability to attract and retain investors and subjecting the Company to significant legal liability, reputational harm and the loss of revenue from its own invested capital.

It is not always possible to detect and deter employee misconduct. The precautions that the Company takes to detect and prevent this activity may not be effective in all cases, and we may suffer significant reputational harm and financial loss for any misconduct by our employees. The potential harm to the Company's reputation and to our business caused by such misconduct is impossible to quantify.

There is a risk that the Company's employees or partners could engage in misconduct that materially adversely affects the Company's business, including a decrease in returns on its own invested capital. The Company is subject to a number of obligations and standards arising from its businesses. The violation of these obligations and standards by any of the Company's employees could materially adversely affect the Company and its investors. For instance, the Company's businesses require that the Company properly deal with confidential information. If the Company's employees were to improperly use or disclose confidential information, we could suffer serious harm to our reputation, financial position and current and future business relationships. If one of the Company's employees were to engage in misconduct or were to be accused of such misconduct, the business and reputation of the Company could be materially adversely affected.

Business Risks

The Company has incurred losses in prior periods and may incur losses in the future.

While the Company's business was profitable on an economic income basis for the year ended December 31, 2019, the Company's investment bank businesses and investment management business have incurred losses in prior periods. For example, the Company's investment bank businesses incurred losses in the year ended December 31, 2016. In addition, the Company's investment management business incurred losses in each of the years ended December 31, 2017 and 2016. The Company may incur losses in any of its future periods. Future losses may have a significant effect on the Company's liquidity as well as our ability to operate. In addition, we may incur significant expenses in connection with any expansion, strategic acquisition or investment with respect to our businesses. Specifically, we have invested, and will continue to invest in, and hire senior professionals to expand, our investment banking businesses. Accordingly, the Company will need to increase its revenues at a rate greater than its expenses to achieve and maintain profitability. If the Company's revenues do not increase sufficiently, or even if its revenues increase but it is unable to manage its expenses, the Company will not achieve and maintain profitability in future periods. As an alternative to increasing its revenues, the Company may seek additional capital through the sale of additional common stock or other forms of debt or equity financing. The Company cannot be certain that it would have access to such financing on acceptable terms.

The Company's investment banking businesses focus principally on specific sectors of the economy, and deterioration in the business environment in these sectors or a decline in the market for securities of companies within these sectors could materially affect our investment banking businesses.

Volatility in the business environment in the Company's sectors or in the market for securities of companies within these sectors could substantially affect the Company's financial results. The business environment for companies in these sectors has been subject to substantial volatility, and the Company's financial results have consequently been subject to significant variations from year to year. The market for securities in each of the Company's sectors may also be subject to industry-specific risks. For example, changes in policies of the United States Food and Drug Administration, along with changes to Medicare and government reimbursement policies, may affect the market for securities of healthcare companies, and changes to how the U.S. government reviews foreign acquisitions of U.S. based companies may make executing M&A transactions more difficult. In addition, revenue generated by the Company in its consumer sector could be adversely affected by changes in law or regulatory action with respect to companies that are in cannabis related businesses.

As an investment bank which focuses primarily on specific growth sectors of the economy, the Company also depends significantly on private company transactions for sources of revenues and potential business opportunities. To the extent the pace of these private company transactions slows or the average size declines due to a decrease in private equity financings, difficult market conditions in the Company's sectors or other factors, the Company's business and results of operations may be adversely affected.

The financial results of the Company's investment banking businesses may fluctuate substantially from period to period.

The Company has experienced, and we expect the Company to experience in the future, significant periodic variations in its revenues and results of operations. These variations may be attributed in part to the fact that its investment banking revenues are typically earned upon the successful completion of a transaction, the timing of which is uncertain and beyond the Company's control. In most cases, the Company receives little or no payment for investment banking engagements that do not result in the successful completion of a transaction. As a result, our investment bank business is highly dependent on market conditions as well as the decisions and actions of its clients and interested third parties. For example, a client's acquisition transaction may be delayed or terminated because of a failure to agree upon final terms with the counterparty, failure to obtain necessary regulatory consents or board or stockholder approvals, failure to secure necessary financing, adverse market conditions or unexpected financial or other problems in the client's or counterparty's business. If the parties fail to complete a transaction on which the Company is advising or an offering in which the Company is participating, we will earn little or no revenue from the transaction, and we may incur significant expenses that may not be recouped. This risk may be intensified by the Company's focus on growth companies in its sectors as the market for securities of these companies has experienced significant variations in the number and size of equity offerings. Many companies initiating the process of an IPO are simultaneously exploring other strategic alternatives, such as a merger and acquisition transaction. The Company's investment bank revenues would be adversely affected in the event that an IPO for which it is acting as an underwriter is preempted by the company's sale if the Company is not also engaged as a strategic advisor in such sale. As a result, our investment banking businesses are unlikely to achieve steady and predictable earnings on a quarterly basis.

Pricing and other competitive pressures may impair the revenues of the Company's brokerage business.

The Company's brokerage business accounted for approximately 38.4% of the Company's revenues during 2019. Along with other firms, the Company has experienced price competition in this business in recent years. In particular, the ability to execute trades electronically and through alternative trading systems has increased the pressure on trading commissions and spreads. We expect to continue to experience competitive pressures in these and other areas in the future as some of our competitors in the investment banking industry seek to obtain market share by competing on the basis of price or use their own capital to facilitate client trading activities. In addition, the Company faces pressure from larger competitors, who may be better able to offer a broader range of complementary products and services to clients in order to win their trading or prime brokerage business. We are committed to maintaining and improving the Company's comprehensive research coverage to support its brokerage business and the Company may be required to make additional investments in the Company's research capabilities.

The Company's capital markets and strategic advisory engagements are singular in nature, do not generally provide for subsequent engagements and can lead to payment risk.

The Company's investment banking clients generally retain the Company on a short-term, engagement-by-engagement basis in connection with specific capital markets or mergers and acquisitions transactions, rather than on a recurring basis under long-term contracts. As these transactions are typically singular in nature and the Company's engagements with these clients may not recur, the Company must seek out new engagements when its current engagements are successfully completed or are terminated. As a result, high activity levels in any period are not necessarily indicative of continued high levels of activity in any subsequent period. If the Company is unable to generate a substantial number of new engagements that generate fees from new or existing clients, the Company's investment bank business and results of operations would likely be adversely affected.

In addition, investment banking clients may on occasion refuse to pay investment banking fees owed pursuant to the terms of our engagement and we may need to expend resources to enforce our contracts. Any failure to pay the investment banking fees owed to us could adversely affect our results of operations.

Larger and more frequent capital commitments in the Company's trading and underwriting businesses increase the potential for significant losses.

There has been a trend toward larger and more frequent commitments of capital by financial services firms in many of their activities. For example, in order to compete for certain transactions, investment banks may commit to purchase large blocks of stock from publicly traded issuers or significant stockholders, instead of the more traditional marketed underwriting process in which marketing is completed before an investment bank commits to purchase securities for resale. To the extent the total net capital of the Company's broker-dealers allows it, the Company anticipates participating in this trend and, as a result, the Company will be subject to increased risk as it commits capital to facilitate business. Furthermore, the Company may suffer losses as a result of the positions taken in these transactions even when economic and market conditions are generally favorable for others in the industry.

The Company may enter into large transactions in which it commits its own capital as part of its trading business to facilitate client trading activities. The number and size of these large transactions may materially affect the Company's results of operations in a given period. Market fluctuations may also cause the Company to incur significant losses from its trading activities. To the extent that the Company owns assets (i.e., has long positions), a downturn in the value of those assets or in the markets in which those assets are traded could result in losses. Conversely, to the extent that the Company has sold assets it does not own (i.e., has short positions), in any of those markets, an upturn in the value of those assets or in markets in which those assets are traded could expose the Company's investment banking businesses to potentially large losses as they attempt to cover short positions by acquiring assets in a rising market.

The market structure in which our market-making business operates may make it difficult for this business to maintain profitability.

Market structure changes have had an adverse effect on the results of operations of our market-making business. These changes may make it difficult for us to maintain and/or predict levels of profitability of, or may cause us to generate losses in, our market-making business.

The growth of electronic trading and the introduction of new technology in the markets in which our market-making business operates may adversely affect this business and may increase competition.

The continued growth of electronic trading and the introduction of new technologies is changing our market-making business and presenting new challenges. Securities, futures and options transactions are increasingly occurring electronically, through alternative trading systems. It appears that the trend toward alternative trading systems will continue to accelerate. This acceleration could further increase program trading, increase the speed of transactions and decrease our ability to participate in transactions as principal, which would reduce the profitability of our market-making business. Some of these alternative trading systems compete with our market-making business and with our algorithmic trading platform, and we may experience continued competitive pressures in these and other areas. Significant resources have been invested in the development of our electronic trading systems, which includes our ATM business, but there is no assurance that the revenues generated by these systems will yield an adequate return on the investment, particularly given the increased program trading and increased percentage of stocks trading off of the historically manual trading markets.

We are subject to potential losses and default risks as a result of our clearing and execution activities.

As a clearing member firm providing services to certain of our brokerage customers, we are ultimately responsible for their financial performance in connection with various securities transactions. Our clearing operations require a commitment of our capital and involve risks of losses due to the potential failure of our customers to perform their obligations under these transactions. We are required to finance customers' unsettled positions from time to time, and we could be held responsible for the defaults of those customers. If customers default on their obligations, we remain financially liable for such obligations, and while some of these obligations may be collateralized, we are still subject to market risk in the liquidation of customer collateral to satisfy those obligations. While we have risk management procedures designed to mitigate certain risks, there can be no assurance that our risk management procedures will be adequate. Although we regularly review our credit exposure to customers, default risk may arise from events or circumstances that may be difficult to detect or foresee. Default by our customers may also give rise to the Company incurring penalties imposed by execution venues, regulatory authorities and clearing and settlement organizations. Any liability arising from clearing operations could have a material adverse effect on our business, financial condition and results of operations.

We are also exposed to credit risk from third parties that owe us money, securities or other obligations, including our trading counterparties. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons, and we could be held responsible for such defaults. In addition, customer trading errors may cause us to incur financial losses, which customers may be unable or unwilling to cover. Volatile securities markets, credit markets and regulatory changes may increase our exposure to our customers' and counterparties' credit profiles, which could adversely affect our financial condition and operating results. Our review of the credit risk of customers and trading counterparties may not be adequate to provide sufficient protection from these risks.

Our securities business and related clearing operations expose us to material liquidity risk.

We may be required to provide considerable additional funds with clearing and settlement organizations of which we are members, such as the National Securities Clearing Corporation ("NSCC") or Depository Trust and Clearing Corporation in the U.S., especially during periods of high market volatility or when we are obligated to clear large notional amounts of securities that are not eligible for settlement through the NSCC's Continuous Net Settlement system and, consequently, may be subject to higher margin requirements. In addition, regulatory agencies have recently required these clearing and settlement organizations to increase the level of margin deposit requirements, and they may continue to do so in the future. We rely on our excess cash, certain established credit facilities and the use of outsourced clearing arrangements to meet or reduce these demands. While we have historically met requests for additional margin deposits, there is no guarantee that our excess cash and our established credit facilities and clearing arrangements will be sufficient for future needs, particularly if there is an increase in requirements. There is also no guarantee that these established credit facilities will be extended beyond their expiration.

As a clearing member firm of securities clearing houses in the U.S., we are also exposed to clearing member credit risk. Securities clearing houses require member firms to deposit cash and/or government securities to a clearing fund. If a clearing member defaults in its obligations to the clearing house in an amount larger than its own margin and clearing fund deposits, the shortfall is absorbed pro rata from the deposits of the other clearing members. The clearing houses of which we are members also have the authority to assess their members for additional funds if the clearing fund is depleted. A large clearing member default could result in a substantial cost to us if we are required to pay such assessments.

In certain jurisdictions we are dependent on third-party clearing agents and any failures by such clearing agents could materially impact our business and operating results.

In certain jurisdictions we are dependent on agents for the clearing and settlement of securities transactions. If our agents fail to properly facilitate the clearing and settlement of our customer trades, we could be subject to financial, legal and regulatory risks and costs that may impact our business and operating results. In addition, it could cause our clients to reduce or cease their trading with us, which would adversely affect our revenues and financial results.

Moreover, certain of the clearing agreements provide our clearing agents with rights to increase our deposit requirements or to terminate the agreements upon short notice. There is no guarantee we will be able to satisfy any increased deposit requirements within the time frames demanded by our clearing agents, and if we fail to satisfy such demands on a timely basis, it could constitute a default under our clearing agreements. If our clearing agents terminate a clearing agreement on short notice, there is no guarantee that we could obtain alternative services in a timely manner and any interruption of the normal course of our trading and clearing operations could have a material impact on our business and results of operations.

Our clearing and execution operations are global and international market events could materially adversely impact our financial results.

Because we offer brokerage products and services on a global basis, our revenues derived from non-U.S. operations are subject to risk of loss from social or political instability, changes in government policies or policies of central banks, downgrades in the credit ratings of sovereign countries, expropriation, nationalization, confiscation of assets and unfavorable legislative and political developments in such non-U.S. jurisdictions. Revenues from the trading of non-U.S. securities may be subject to negative fluctuations as a result of the above factors. The impact of these fluctuations on our results could be magnified because generally non-U.S. trading markets, particularly in emerging market countries, are smaller, less liquid and more volatile than U.S. trading markets.

Decreases in equity trading activity by active fund managers and declining securities prices could harm our business and profitability.

Declines in the trading activity of active fund managers generally result in lower revenues from our brokerage products and services. In addition, securities' price declines adversely affect our trading commissions outside North America, which are based on the value of transactions. The demand for our brokerage products and services is directly affected by factors such as economic, regulatory and political conditions that may lead to decreased trading activity and prices in the securities markets in the U.S. and in all of the foreign markets we serve. Significant flows of investments out of actively managed equity funds have curtailed their trading activity, which has weighed on our buy-side trading volumes and the use of some of our higher value services. Volatility levels also impact the amount of trading activity. Sustained periods of low volatility can result in lower levels of trading activity and trading activity tends to decline in periods following extreme levels of volatility. In addition, any substantial shift from active fund management to passive fund management could have an adverse effect on our trading commissions.

The Company's revenues and, in particular, its ability to earn incentive and investment income, would be adversely affected if its investment funds fall beneath their "high-water marks" as a result of negative performance or if there are reversals to previously accrued incentive fees.

Incentive income, which has historically comprised a substantial portion of the Company's investment management business annual revenues, is, in most cases, subject to "high-water marks" whereby incentive income is earned by the Company only to the extent that the net asset value of an investment advisory product at the end of a measurement period exceeds the highest net asset value as of the end of a preceding measurement period for which the Company earned incentive income. The Company recognizes incentive income charged to the Company's hedge funds based on the net profits of the hedge funds. The Company recognizes such incentive income when the fees are no longer subject to reversal or are crystalized. For a majority of the hedge funds, the incentive fee crystallizes annually when the high-water mark for such hedge funds is reset, which delays recognition of the incentive fee until year end. For our private equity funds, the incentive fee crystallizes upon realization of the investment. In those circumstances, until the investment is realized, the accrued incentive fees are subject to reversal even if those accruals were made in prior years. The Company's incentive allocations are also subject, in some cases, to performance hurdles or benchmarks. To the extent the Company's investment funds experience negative investment performance, the investors in or beneficial owners of these investment funds would need to recover cumulative losses before the Company can earn investment income at the end of the performance period with respect to the investments of those who previously suffered losses.

The Company's ability to increase revenues and improve profitability will depend on increasing assets under management in existing investment strategies and developing and marketing new investment products and strategies, including identifying and hiring or affiliating with new investment teams.

The Company's investment management business generates management and incentive fee income based on its assets under management. If the Company is unable to increase its assets under management in its existing products it may be difficult to increase its revenues. The Company may launch new investment management products and hire or affiliate with new investment teams focusing on new investment strategies. If these products or strategies are not successful, or if the Company is unable to hire or affiliate with new investment teams, or successfully manage its relationships with its affiliated investment teams, the Company's profitability could be adversely affected.

Certain of the Company's investment funds may invest in relatively high-risk, illiquid assets, and the Company may fail to realize any profits from these activities for a considerable period of time or lose some or all of the principal amounts of these investments.

Certain of the Company's investment funds invest a significant portion of their assets in securities that are not publicly traded. In many cases, they may be prohibited by contract or by applicable securities laws from selling such securities for a period of time or there may not be a public market for such securities. Even if the securities are publicly traded, large holdings of securities can often be disposed of only over a substantial length of time, exposing the investment returns to risks of downward movement in market prices during the disposition period. Accordingly, under certain conditions, the Company's investment funds may be forced to either sell securities at lower prices than they had expected to realize or defer, potentially for a considerable period of time, sales that they had planned to make. Investing in these types of investments can involve a high degree of risk, and the Company's investment funds may lose some or all of the principal amount of such investments, including our own invested capital.

The due diligence process that the Company's investment management business undertakes in connection with investments by the Company's investment funds is inherently limited and may not reveal all facts that may be relevant in connection with making an investment.

Before making investments, particularly investments in securities that are not publicly traded, the Company endeavors to conduct a due diligence review of such investment that it deems reasonable and appropriate based on the facts and circumstances applicable to each investment. When conducting due diligence, the Company is often required to evaluate critical and complex business, financial, tax, accounting, environmental and legal issues. Outside consultants, legal advisors, accountants, investment bankers and financial analysts may be involved in the due diligence process in varying degrees depending on the type of investment. Nevertheless, when conducting due diligence and making an assessment regarding an investment, the Company is limited to the resources available, including information provided by the target of the investment and, in some circumstances, third party investigations. The due diligence investigation that the Company conducts with respect to any investment opportunity may not reveal or highlight all relevant facts that may be necessary or helpful in evaluating such investment opportunity. Moreover, such an investigation will not necessarily result in the investment being successful, which may adversely affect the performance of the Company's investment funds and the Company's ability to generate returns on its own invested capital from any such investment.

Investors and beneficial owners in the Company's hedge funds can generally redeem investments with prior notice. The rate of redemptions could accelerate at any time. Historically, redemptions have created difficulties in managing the liquidity of certain of the Company's hedge funds, reduced assets under management and adversely affected the Company's revenues, and may do so in the future.

Investors and beneficial owners in the Company's hedge funds may generally redeem their investments with prior notice, subject to certain initial holding periods. Investors may reduce the aggregate amount of their investments, or transfer their investments to other hedge funds or asset managers with different fee rate arrangements, for any number of reasons, including investment performance, changes in prevailing interest rates and financial market performance. Furthermore, investors in the Company's hedge funds may be investors in products managed by other asset managers where redemptions have been restricted or suspended. Such investors may redeem capital from Company's hedge funds, even if the Company's hedge funds' performance is superior, due to an inability to redeem capital from other managers. Increased volatility in global markets could accelerate the pace of redemptions. Redemptions of investments in the Company's hedge funds could also take place more quickly than assets may be sold by those hedge funds to meet the price of such redemptions, which could result in the relevant hedge funds and/or the Company being in breach of applicable legal, regulatory and contractual requirements in relation to such redemptions, resulting in possible regulatory and investor actions against the Company and/or the Company's hedge funds. If the Company's hedge funds underperform, existing investors may decide to reduce or redeem their investments or transfer asset management responsibility to other asset managers and the Company may be unable to obtain new investment management business. Any such action could potentially cause further redemptions and/or make it more difficult to attract new investors.

The redemption of investments in the Company's hedge funds could also adversely affect the revenues of the Company's investment management business, which are substantially dependent upon its assets under management. If redemptions of investments cause revenues to decline, they would likely have a material adverse effect on our business, results of operations or financial condition. If market conditions, negative performance or other factors cause an increased level of redemption activity returns, it could become more difficult to manage the liquidity requirements of the Company's hedge funds, making it more difficult or more costly for the Company's hedge funds to liquidate positions rapidly to meet redemption requests or otherwise. This in turn may negatively impact the Company's returns on its own invested capital.

In addition to the impact on the market value of assets under management, illiquidity and volatility of the global financial markets could negatively affect the ability of the Company's investment management business to manage inflows and outflows from the Company's hedge funds. A number of asset management firms, including the Company's investment management business, have in the past exercised, and may in the future exercise, their rights to limit, and in some cases, suspend, redemptions from the investment management products they advise. The Company's investment management business has also negotiated, and may in the future negotiate, with investors or exercise such rights in an attempt to limit redemptions or create a variety of other investor structures to bring assets and liquidity requirements into a more manageable balance. To the extent that the Company's investment management business has negotiated with investors to limit redemptions, it may be likely that such investors will continue to seek further redemptions in the future. Such actions may have an adverse effect on the ability of the Company's hedge funds to attract new capital or to develop new investment platforms. Poor performance relative to other asset management firms may result in reduced investments in the Company's hedge funds and increased redemptions. As a result, investment underperformance would likely have a material adverse effect on the Company's results of operations and financial condition.

Investments made by investment funds, including the investments of the Company's own capital in the Company's investment funds, are subject to other additional risks.

Investments by the Company's investment funds are subject to certain risks that may result in losses. Decreases to assets under management as a result of investment losses or client redemptions may have a material adverse effect on the Company's revenues, net income and cash flows and could harm our ability to maintain or grow assets under management in existing investment funds or raise additional funds in the future. Additional risks include the following:

- Generally, there are few limitations on investment funds' strategies, which are often subject to the sole discretion of the management company or the general partner of such funds.
- Investment funds may engage in short selling, which is subject to a theoretically unlimited risk of loss because there is no limit on how much the price of a security sold short may appreciate before the short position is closed out. An investment fund may be subject to losses if a security lender demands return of the lent securities and an alternative lending source cannot be found or if the investment fund is otherwise unable to borrow securities that are necessary to

hedge its positions. Furthermore, the SEC and other regulatory authorities outside the United States have imposed trading restrictions and reporting requirements on short selling, which in certain circumstances may impair an investment fund's ability to use short selling effectively.

- The efficacy of investment and trading strategies depend largely on the ability to establish and maintain an overall market position through a combination of financial instruments. An investment fund's trading orders may not be executed in a timely and efficient manner due to various circumstances, including systems failures or human error. In such event, the investment fund might only be able to acquire some but not all of the components of the position, or if the overall position were in need of adjustment, the investment fund might not be able to make such an adjustment. As a result, an investment fund would not be able to achieve the market position selected by the management company or general partner of such fund, and might incur a loss in liquidating its position.
- Credit risk may arise through a default by one of several large institutions that are dependent on one another to meet their respective liquidity or operational needs, so that a default by one institution causes a series of defaults by the other institutions. This "systemic risk" may adversely affect the financial intermediaries (such as clearing agencies, clearing houses, banks, securities firms, other counterparties and exchanges) with which the investment funds interact on a daily basis.
- Investment funds are subject to risks due to the potential illiquidity of assets. Investment funds may make investments or hold trading positions in markets that are volatile and which may become illiquid. The timely sale of trading positions can be impaired by decreased trading volume, increased price volatility, concentrated trading positions, limitations on the ability to transfer positions in highly specialized or structured transactions to which they may be a party, and changes in industry and government regulations. It may be impossible or highly costly for investment funds to liquidate positions rapidly to meet margin calls, redemption requests or otherwise, particularly if there are other market participants seeking to dispose of similar assets at the same time, if the relevant market is otherwise moving against a position or in the event of trading halts or daily price movement limitations on the market. In addition, increased levels of redemptions may result in increased illiquidity as more liquid assets are sold to fund redemptions.
- Investment fund assets are subject to risks relating to investments in commodities, futures, options and other derivatives, the prices of which are highly volatile and may be subject to the theoretically unlimited risk of loss in certain circumstances. Price movements of commodities, futures and options contracts and payments pursuant to swap agreements are influenced by, among other things, interest rates, changing supply and demand relationships, trade, fiscal, monetary and exchange control programs and policies of governments and national and international political and economic events and policies. The value of futures, options and swap agreements also depends upon the price of the commodities underlying them. In addition, investment funds' assets are subject to the risk of the failure of any of the exchanges on which their positions trade.
- Investment fund assets that are not denominated in the U.S. dollar are subject to the risk that the value of a particular currency will change in relation to one or more other currencies. Among the factors that may affect currency values are trade balances, the level of short-term interest rates, differences in relative values of similar assets in different currencies, long-term opportunities for investment and capital appreciation and political developments. Officials in foreign countries may, from time to time, take actions in respect of their currencies that could significantly affect the value of an investment fund's assets denominated in those currencies or the liquidity of such investments. For example, a foreign government may unilaterally devalue its currency against other currencies, which would typically have the effect of reducing the U.S. dollar value of investments denominated in that currency. A foreign government may also limit the convertibility or repatriation of its currency or assets denominated in that currency. While the Company generally expects to hedge its exposure to currencies other than the U.S. dollar, and may do so through foreign currency futures contracts and options thereon, forward foreign currency exchange contracts, swaps or any combination thereof, but there can be no assurance that such hedging strategies will be implemented, or if implemented, will be effective. While an investment fund may enter into currency hedging transactions to seek to reduce risk, such transactions may result in a poorer overall performance than if it had not engaged in such hedging transactions. For a variety of reasons, the Company may not seek to establish a perfect correlation between the hedging instruments utilized and the portfolio holdings being hedged. Such an imperfect correlation may prevent the Company from achieving the intended hedge or expose an investment fund to risk of loss.
- Investment funds are also subject to the risk that war, terrorism, and related geopolitical events may lead to increased short-term market volatility and have adverse long-term effects on the U.S. and world economies and markets generally, as well as adverse effects on issuers of securities and the value of investments. War, terrorism, and related geopolitical events have led, and in the future may lead, to increased short-term market volatility and may have adverse long-term effects on U.S. and non-U.S. economies and markets generally. Those events, as well as other changes in U.S. and non-U.S. economic and political conditions, also could adversely affect individual issuers or

related groups of issuers, securities markets, interest rates, credit ratings, inflation, investor sentiment and other factors affecting the value of the investment fund's assets.

If the Company's investment fund's counterparty for any of its derivative or non-derivative contracts defaults on the performance of those contracts, the Company may not be able to cover its exposure under the relevant contract.

The Company's investment funds enter into numerous types of financing arrangements with a wide array of counterparties around the world, including loans, hedge contracts, swaps, repurchase agreements and other derivative and non-derivative contracts. The terms of these contracts are generally complex and often customized and generally are not subject to regulatory oversight. The Company is subject to the risk that the counterparty to one or more of these contracts may default, either voluntarily or involuntarily, on its performance under the contract. Any such default may occur at any time without notice. Additionally, the Company may not be able to take action to cover its exposure if a counterparty defaults under such a contract, either because of a lack of the contractual ability or because market conditions make it difficult to take effective action. The impact of market stress or counterparty financial condition may not be accurately foreseen or evaluated and, as a result, the Company may not take sufficient action to reduce its risks effectively.

Counterparty risk is accentuated where the investment management product has concentrated its transactions with a single or small group of counterparties. Generally, investment funds are not restricted from concentrating any or all of their transactions with one counterparty. Moreover, the Company's internal review of the creditworthiness of their counterparties may prove inaccurate. The absence of a regulated market to facilitate settlement and the evaluation of creditworthiness may increase the potential for losses.

In addition, these financing arrangements often contain provisions that give counterparties the ability to terminate the arrangements if any of a number of defaults occurs with respect to the Company's investment funds, including declines in performance or assets under management and losses of key management personnel, each of which may be beyond our control. In the event of any such termination, the Company's investment funds may not be able to enter into alternative arrangements with other counterparties and our business may be materially adversely affected.

The Company may suffer losses in connection with the insolvency of prime brokers, custodians, administrators and other agents whose services the Company uses and who may hold assets of the Company's investment funds.

Most of the Company's investment funds use the services of prime brokers, custodians, administrators or other agents to carry out certain securities transactions and to conduct certain business of the Company's investment funds. In the event of the insolvency of a prime broker and/or custodian, the Company's investment funds might not be able to recover equivalent assets in full as they may rank among the prime broker's and custodian's unsecured creditors in relation to assets which the prime broker or custodian borrows, lends or otherwise uses. In addition, the Company's investment funds' cash held with a prime broker or custodian (if any) may not be segregated from the prime broker's or custodian's own cash, and the investment funds will therefore rank as unsecured creditors in relation thereto.

Risk management activities may materially adversely affect the return on the Company's investment funds' investments if such activities do not effectively limit exposure to decreases in investment values or if such exposure is overestimated.

When managing the Company's investment funds' exposure to market risks, the relevant investment management product may use forward contracts, options, swaps, caps, collars and floors or pursue other strategies or use other forms of derivative financial instruments to limit its exposure to changes in the relative values of investments that may result from market developments, including changes in interest rates, currency exchange rates and asset prices. The success of such derivative transactions generally will depend on the Company's ability to accurately predict market changes in a timely fashion, the degree of correlation between price movements of a derivative instrument, the position being hedged, the creditworthiness of the counterparty and other factors. As a result, these transactions may result in poorer overall investment performance than if they had not been executed. Such transactions may also limit the opportunity for gain if the value of a hedged position increases. A perfect correlation between the instruments used in a hedging or other derivative transaction and the position being hedged may not be attained. An imperfect correlation could give rise to a loss. Also, it may not be possible to fully or perfectly limit exposure against all changes in the value of an investment because the value of an investment is likely to fluctuate as a result of a number of factors, many of which will be beyond the Company's control or ability to hedge.

Fluctuations in currency exchange rates could materially affect the Company's investment management business and its results of operations and financial condition.

The Company uses U.S. dollars as its reporting currency. Investments in the Company's investment funds may be made in different currencies, including Euros, Pounds Sterling, Australian Dollar and Yen. In addition, the Company's investment funds may hold investments denominated in many foreign currencies. To the extent that the Company's revenues from its investment management business are based on assets under management denominated in such foreign currencies, our reported revenues may be significantly affected by the exchange rate of the U.S. dollar against these currencies. Typically, an increase in the exchange rate between U.S. dollars and these currencies will reduce the impact of revenues denominated in these currencies in the financial results of our investment management business. For example, management fee revenues derived from each Euro and Australian Dollar of assets under management denominated in Euros and Australian Dollar will decline in U.S. dollar terms if the value of the U.S. dollar appreciates against the Euro and Australian Dollar. In addition, the calculation of the amount of assets under management is affected by exchange rate movements as assets under management denominated in foreign currencies are converted to U.S. dollars. The Company's investment management business also incurs a portion of its expenditures in currencies other than U.S. dollars. As a result, our investment management business is subject to the effects of exchange rate fluctuations with respect to any currency conversions and the Company's ability to hedge these risks and the cost of such hedging or the Company's decision not to hedge could impact the performance of the Company's investment funds and our investment management business and its results of operations and financial condition.

The Company's real estate investments are subject to the risks inherent in the ownership and operation of real estate and the construction and development of real estate.

The Company's real estate investments are subject to the risks inherent in the ownership and operation of real estate and real estate-related businesses and assets. These risks include those associated with general and local economic conditions, changes in supply of and demand for competing properties in an area, changes in environmental regulations and other laws, various uninsured or uninsurable risks, natural disasters, changes in real property tax rates, changes in interest rates, the reduced availability of mortgage financing which may render the sale or refinancing of properties difficult or impracticable, environmental liabilities, contingent liabilities on disposition of assets, terrorist attacks, war and other factors that are beyond our control. Further, the U.S. Environmental Protection Agency has found that global climate change could increase the severity and perhaps the frequency of extreme weather events, which could subject real property to increased weather-related risks in the coming years. There are also presently a number of current and proposed regulatory initiatives, both domestically and globally, that are geared towards limiting and scaling back the emission of greenhouse gases, which certain scientists have linked to global climate change. Although not known with certainty at this time, such regulation could adversely affect the costs to construct and operate real estate in the coming years, such as through increased energy costs.

The commercial real estate markets in the United States generally have experienced major disruptions in the past due to the lack of available capital, in the form of either debt or equity, and declines in value as a result of overall economic decline. If these conditions were to occur again transaction volume may drop precipitously, negatively impacting the valuation and performance of the Company's real estate investments significantly. Additionally, if the Company acquires direct or indirect interests in undeveloped land or underdeveloped real property, which may often be non-income producing, they will be subject to the risks normally associated with such assets and development activities, including risks relating to the availability and timely receipt of zoning and other regulatory or environmental approvals, the cost, potential for cost overruns and timely completion of construction (including risks beyond the control of the investor, such as weather or labor conditions or material shortages) and the availability of both construction and permanent financing on favorable terms.

Our third party reinsurance business could expose us to losses.

We provide third party reinsurance coverage through our Luxembourg subsidiary, Hollenfels Re S.A ("Hollenfels"). We have written polices relating to property and casualty, workers' compensation, general liability and construction performance bonds and may issue reinsurance policies relating to other types of insurance. Because we write reinsurance, the success of our underwriting efforts depends, in part, upon the policies, procedures and expertise of the ceding companies making the original underwriting decisions. We face the risk that these ceding companies may fail to accurately assess the risks that they assume initially, which, in turn, may lead us to inaccurately assess the risks we assume. If we fail to establish and receive appropriate premium rates or the claims we receive exceed the premiums and retrocession recoverables we are able to collect, we will suffer losses.

We may be unable to purchase retrocession reinsurance and our retrocession agreements subject us to third-party credit risk.

We may enter into retrocession agreements with third parties in order to limit our exposure to losses from the reinsurance coverage provided by Hollenfels. Changes in the availability and cost of retrocession reinsurance, which are subject to market conditions that are outside of our control, may reduce to some extent our ability to use retrocession reinsurance to balance exposures across our reinsurance operations. Accordingly, we may not be able to obtain our desired amounts of retrocession reinsurance. In addition, even if we are able to obtain such reinsurance, we may not be able to negotiate terms that we deem appropriate or acceptable or obtain such reinsurance from entities with satisfactory creditworthiness. While we seek to do business with creditworthy counterparties, if the parties who provide us with retrocession are not able to meet their obligations to us or fail to make timely payments under the terms of our retrocession agreements, we could be materially and adversely affected because we may remain liable under the terms.

Operational Risks

Our information and technology systems are critical components of our business and operations, and a failure of those systems or other aspects of our business operations may disrupt our business, cause financial loss, increase our legal liability and constrain our growth.

Our operations rely extensively on the secure processing, storage and transmission of confidential financial, personal and other information in our computer systems and networks. Although we take protective measures and devote significant resources to maintaining and upgrading our systems and networks with measures such as intrusion and detection prevention systems, monitoring firewalls to safeguard critical business applications and supervising third party providers that have access to our systems, our computer systems, software and networks may be vulnerable to unauthorized access, computer viruses or other malicious code, and other events that could have a security impact. Additionally, if a client's computer system, network or other technology is compromised by unauthorized access, we may face losses or other adverse consequences by unknowingly entering into unauthorized transactions. If one or more of such events occur, this potentially could jeopardize our or our clients' or counterparties' confidential and other information processed and stored in and transmitted through our computer systems and networks. Furthermore, such events may cause interruptions or malfunctions in our, our clients', our counterparties' or third parties' operations, including the transmission and execution of unauthorized transactions. We may be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures, and we may be subject to litigation and financial losses that are either not covered or not fully covered through our insurance. The increased use of smartphones, tablets and other mobile devices as well as cloud computing may also heighten these and other operational risks. Similar to other firms, we and our third party providers continue to be the subject of attempted unauthorized access, computer viruses and malware, and cyber attacks designed to disrupt or degrade service or cause other damage and denial of service. Additional challenges are posed by external parties, including foreign state actors. There can be no assurance that such unauthorized access or cyber incidents will not occur in the future, and they could occur more frequently and on a larger scale. We are also subject to laws and regulations relating to the privacy and security of the information of our clients, employees or others, and any failure to comply with these regulations could expose us to liability and/or reputational damage.

Operational risks relating to the failure of data processing systems and other information systems and technology or other infrastructure may disrupt the Company's business and result in losses or limit our operations and growth in the industry.

The Company's business is highly dependent on its ability to process, on a daily basis, a large number of transactions across diverse markets, and the transactions that the Company processes have become increasingly complex. The inability of the Company's systems to accommodate an increasing volume of transactions could also constrain the Company's ability to expand its business. If any of these systems do not operate properly or are disabled, or if there are other shortcomings or failures in the Company's internal processes, people or systems, the Company could suffer impairments, financial loss, a disruption of its business, liability to clients, regulatory intervention or reputational damage.

The Company has outsourced certain aspects of its technology infrastructure including data centers and wide area networks, as well as some trading applications. The Company is dependent on its technology providers to manage and monitor those functions. A disruption of any of the outsourced services would be out of the Company's control and could negatively impact our business. The Company has experienced disruptions on occasion, none of which has been material to the Company's operations and results. However, there can be no guarantee that future material disruptions with these providers will not occur.

The Company also faces the risk of operational failure of or termination of relations with any of the clearing agents, exchanges, clearing houses or other financial intermediaries that the Company uses to facilitate its securities transactions. Any such failure or termination could adversely affect the Company's ability to effect transactions and to manage its exposure to risk.

In addition, the Company's ability to conduct its business may be adversely impacted by a disruption in the infrastructure that supports Company and the communities in which we are located. This may affect, among other things, the Company's financial, accounting or other data processing systems. This may include a disruption involving electrical, communications, transportation or other services used by us or third parties with which the Company conducts business, whether due to fire, other natural disaster, power or communications failure, act of terrorism or war or otherwise. Nearly all of our employees in our primary locations in New York, Boston, San Francisco and London work in close proximity to each other. Although the Company has a formal disaster recovery plan in place, if a disruption occurs in one location and our employees in that location are unable to communicate with or travel to other locations, the Company's ability to service and interact with its clients may suffer, and the Company may not be able to implement successfully contingency plans that depend on communication or travel.

Our business also relies on the secure processing, storage and transmission of confidential and other information in its computer systems and networks. The Company's computer systems, software and networks may be vulnerable to unauthorized access, computer viruses or other malicious code and other events that could have a security impact. If one or more of such events occur, this could jeopardize our or our clients' or counterparties' confidential and other information processed and stored in, and transmitted through, the Company's computer systems and networks, or otherwise cause interruptions or malfunctions in our business', its clients', its counterparties' or third parties' operations. The Company may be required to expend significant additional resources to modify its protective measures, to investigate and remediate vulnerabilities or other exposures or to make required notifications, and the Company may be subject to litigation and financial losses that are either not insured against or not fully covered through any insurance maintained by the Company.

Any cyber attack or other security breach of or vulnerability in our technology systems, or those of our clients or other third party vendors we rely on, could have operational impacts, subject us to significant liability and harm our reputation.

Our operations rely heavily on the secure processing, storage and transmission of sensitive and confidential financial, personal and other information in our computer systems and networks. There have been several highly publicized cases involving financial services companies reporting the unauthorized disclosure of client or other confidential information in recent years, as well as cyber attacks involving theft, dissemination and destruction of corporate information or other assets, in some cases as a result of failure to follow procedures by employees or contractors or as a result of actions by third parties. Like other financial services firms, we have been the target of attempted cyber attacks. Cyber attacks can originate from a variety of sources, including third parties affiliated with foreign governments, organized crime or terrorist organizations. Third parties may also attempt to place individuals within our firm or induce employees, clients or other users of our systems to disclose sensitive information or provide access to our data, and these types of risks may be difficult to detect or prevent. Although cybersecurity incidents among financial services firms are on the rise, we are not aware of any material losses relating to cyber attacks or other information security breaches. However, the techniques used in these attacks are increasingly sophisticated, change frequently and are often not recognized until launched. Although we seek to maintain a robust suite of authentication and layered information security controls, these controls could fail to detect, mitigate or remediate these risks in a timely manner. Despite our implementation of protective measures and endeavoring to modify them as circumstances warrant, our computer systems, software and networks may be vulnerable to human error, natural disasters, power loss, spam attacks, unauthorized access, distributed denial of service attacks, computer viruses and other malicious code, and other events that could result in significant liability and damage to our reputation, and have an ongoing impact on the security and stability of our operations.

We also rely on numerous third-party service providers to conduct other aspects of our business operations, and we face similar risks relating to them. While we regularly conduct security assessments on these third-party vendors, we cannot be certain that their information security protocols are sufficient to withstand a cyber attack or other security breach. In addition, in order to access our products and services, our customers may use computers and other devices that are beyond our security control systems and processes.

Notwithstanding the precautions we take, if a cyber attack or other information security breach were to occur, this could jeopardize the information we confidentially maintain, or otherwise cause interruptions in our operations or those of our clients and counterparties, exposing us to liability. As attempted attacks continue to evolve in scope and sophistication, we may be required to expend substantial additional resources to modify or enhance our protective measures, to investigate and remediate vulnerabilities or other exposures or to communicate about cyber attacks to our customers. Though we have insurance against some cyber risks and attacks, we may be subject to litigation and financial losses that exceed our policy limits or are not covered under any of our current insurance policies. A technological breakdown could also interfere with our ability to comply with financial reporting and other regulatory requirements, exposing us to potential disciplinary action by regulators. Additionally, the SEC issued guidance in February 2018 stating that, as a public company, we are expected to have controls and procedures that relate to cybersecurity disclosure, and are required to disclose information relating to certain cyber attacks or other information security breaches in disclosures required to be made under the federal securities laws. Further, successful cyber attacks at other large financial institutions or other market participants, whether or not we are affected, could lead to a general loss of customer confidence in financial institutions that could negatively affect us, including harming the market perception of the effectiveness of our security measures or the financial system in general, which could result in a loss of business.

Further, in light of the high volume of transactions we process, the large number of our clients, partners and counterparties, and the increasing sophistication of malicious actors, a cyber attack could occur and persist for an extended period of time without detection. We expect that any investigation of a cyber attack would take substantial amounts of time and resources, and that there may be extensive delays before we obtain full and reliable information. During such time we would not necessarily know the extent of the harm or how best to remediate it, and certain errors or actions could be repeated or compounded before they are discovered. All of which would further increase the costs and consequences of such an attack.

We may also be subject to liability under various data protection laws including, for example, the General Data Protection Regulation, or GDPR, adopted by the European Union or the recently enacted California Consumer Privacy Act, or CCPA. We are subject to numerous laws and regulations designed to protect personally identifiable information, such as U.S. federal, state and international laws, including GDPR and CCPA. These laws and regulations are increasing in complexity and number. If any person, including any of our associates, vendors or other service providers, negligently disregards or intentionally breaches our established controls with respect to sensitive or confidential client, employee or other data, or otherwise mismanages or misappropriates such data, we could be subject to significant monetary damages, regulatory enforcement actions, fines and/or criminal prosecution. In addition, unauthorized disclosure of sensitive or confidential client, employee or other data, whether through system failure, vendor fault, employee negligence, fraud or misappropriation, could damage our reputation and cause us to lose clients and related revenue. Potential liability in the event of a security breach of sensitive or confidential data could be significant. Depending on the circumstances giving rise to the breach, this liability may not be subject to a contractual limit or an exclusion of consequential or indirect damages.

Liquidity Risks

Limitations on access to capital by the Company and its subsidiaries could impair its liquidity and its ability to conduct its businesses.

Liquidity, or ready access to funds, is essential to the operations of financial services firms. Failures of financial institutions have often been attributable in large part to insufficient liquidity. Liquidity is of particular importance to our trading and clearing businesses and perceived liquidity issues may affect the willingness of the Company's clients and counterparties to engage in brokerage transactions with us. Our liquidity could be impaired due to circumstances that the Company may be unable to control, such as a general market disruption or an operational problem that affects the Company, its trading clients or third parties. Furthermore, the Company's ability to sell assets may be impaired if other market participants are seeking to sell similar assets at the same time.

The Company primarily depends on its subsidiaries to fund its operations. Cowen and Company, ATM Execution, Cowen Prime, Cowen Execution, and Westminster are subject to the net capital requirements of the SEC and various self-regulatory organizations of which they are members. These requirements typically specify the minimum level of net capital a broker-dealer must maintain and also mandate that a significant part of its assets be kept in relatively liquid form. Cowen International Ltd, and Cowen Execution Ltd. are also subject to capital requirements in the U.K. by the FCA. Any failure to comply with these capital requirements could impair the Company's ability to conduct its investment banking businesses.

We are a holding company and rely upon our subsidiaries for cash flow to make payments of principal and interest on our outstanding indebtedness.

We are a holding company with no business operations or assets other than the capital stock of our direct and indirect subsidiaries. Consequently, we are dependent on dividends, distributions, loans and other payments from these subsidiaries to make payments of principal and interest on all of our indebtedness including our senior notes due 2024 (the "2024 Notes"), our senior notes due 2027 (the "2027 Notes"), our senior notes due 2033 (the "2033 Notes") and our convertible notes due 2022 (the "2022 Convertible Notes")(the 2022 Convertible Notes, and together with the 2024 Notes, the 2027 Notes and the 2033 Notes, the "Notes"). The ability of our subsidiaries to pay dividends and make other payments to us will depend on their cash flows and earnings, which, in turn, will be affected by all of the factors discussed in this annual report. The ability of our direct and indirect subsidiaries to pay dividends and make distributions to us may be restricted by, among other things, applicable laws and regulations and by the terms of any debt agreements or other agreements into which they enter. If we are unable to obtain funds from our direct and indirect subsidiaries as a result of restrictions under their debt or other agreements, applicable laws and regulations or otherwise, we may not be able to pay cash interest or principal on the Notes when due.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

Our ability to make scheduled payments of the principal to pay interest on or to refinance our indebtedness, including the Notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Despite our current consolidated debt levels, we may still incur substantially more debt or take other actions which would intensify the risks discussed above.

Despite our current consolidated debt levels, we may be able to incur substantially more debt in the future, including secured debt. While there are some provisions under the terms of the indentures governing the 2024 Notes that could restrict us from incurring additional debt, so long as we comply with the financial covenants in the 2024 Notes we are not restricted from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of the indentures governing the Notes but that could diminish our ability to make payments on the Notes.

The conditional conversion feature of the 2022 Convertible Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the 2022 Convertible Notes is triggered, holders of 2022 Convertible Notes will be entitled to convert the 2022 Convertible Notes at any time during specified periods at their option. If one or more holders elect to convert their 2022 Convertible Notes, we may be required to pay cash to settle any such conversion, which could adversely affect our liquidity.

The accounting method for convertible debt securities that may be settled in cash, such as the 2022 Convertible Notes, could have a material effect on our reported financial results.

Accounting Standards Codification ("The Accounting Standards") 470-20, Debt with Conversion and Other Options, or ASC 470-20 requires an entity to separately account for the liability and equity components of convertible debt instruments whose conversion may be settled entirely or partially in cash (such as the 2022 Convertible Notes) in a manner that reflects the issuer's economic interest cost for non-convertible debt. The equity component of the 2022 Convertible Notes is included in the additional paid-in capital section of our stockholders' equity on our consolidated balance sheet, and the value of the equity component is treated as original issue discount for purposes of accounting for the debt component. This original issue discount will be amortized to non-cash interest expense over the term of the 2022 Convertible Notes, and we will record a greater amount of non-cash interest expense as a result of this amortization. Accordingly, we will report lower net income in our financial results because ASC 470-20 will require the interest expense associated with the 2022 Convertible Notes to include both amortization of the original issue discount and the 2022 Convertible Notes' coupon interest, which could adversely affect our reported or future financial results and the trading price of our securities.

In addition, under certain circumstances, convertible debt instruments whose conversion may be settled entirely or partly in cash (such as the 2022 Convertible Notes) are currently accounted for using the treasury stock method. Under this method, the shares issuable upon conversion of the 2022 Convertible Notes are not included in the calculation of diluted earnings per share unless the conversion value of the 2022 Convertible Notes exceeds their principal amount at the end of the relevant reporting period. If the conversion value exceeds their principal amount, then, for diluted earnings per share purposes, the 2022 Convertible Notes are accounted for as if the number of shares of common stock that would be necessary to settle the excess, if we elected to settle the excess in shares, are issued. The Accounting Standards in the future may not continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares, if any, issuable upon conversion of the 2022 Convertible Notes, then our diluted earnings per share could be adversely affected.

As a result, we may experience related non-cash volatility to our net income (loss). In addition, as a result of the amortization of the debt discount, the interest expense associated with the 2022 Convertible Notes will be greater than the coupon rate on the 2022 Convertible Notes, which will result in lower reported net income.

Certain provisions in the indentures governing the 2022 Convertible Notes could delay or prevent an otherwise beneficial takeover or takeover attempt of us.

Certain provisions in the 2022 Convertible Notes and the indenture governing the 2022 Convertible Notes could make it more difficult or more expensive for a third party to acquire us. For example, if a takeover would constitute a fundamental change, holders of the 2022 Convertible Notes will have the right to require us to repurchase their 2022 Convertible Notes in cash. In addition, if a takeover constitutes a make-whole fundamental change, we may be required to increase the conversion rate for holders who convert their 2022 Convertible Notes in connection with such takeover. In either case, and in other cases, our obligations under the 2022 Convertible Notes and the indenture governing the 2022 Convertible Notes could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management.

Litigation and Regulatory Risk

The Company's subsidiaries may become subject to additional regulations which could increase the costs and burdens of compliance or impose additional restrictions which could have a material adverse effect on the Company's businesses and the performance of the Company's investment funds.

Market disruptions like those experienced in 2008 have led to an increase in governmental as well as regulatory scrutiny from a variety of regulators, including the SEC, CFTC, FINRA, NFA, U.S. Treasury, the NYSE and state attorneys general. Penalties and fines sought by regulatory authorities have increased substantially over the last several years. In light of current conditions in the global financial markets and the global economy, regulators have increased their focus on the regulation of the financial services industry. The Company may be adversely affected by changes in the interpretation or enforcement of existing laws and rules by these governmental authorities and self-regulatory organizations. The Company also may be adversely affected as a result of new or revised legislation or regulations imposed by the SEC, other U.S. or foreign governmental regulatory authorities or self-regulatory organizations that supervise the financial markets. The Company could be fined, prohibited from engaging in some of its business activities or subjected to limitations or conditions on its business activities. In addition, the Company could incur significant expense associated with compliance with any such legislation or regulations or the regulatory and enforcement environment generally. Substantial legal liability or significant regulatory action against the Company could have a material adverse effect on the financial condition and results of operations of the Company or cause significant reputational harm to the Company, which could seriously affect its business prospects.

The activities of certain of the Company's subsidiaries and affiliates are regulated primarily within the U.S. by the SEC, FINRA, the NFA, the CFTC and other self-regulatory organizations, as well as various state agencies, and are also subject to regulation by other agencies in the various jurisdictions in which they operate and are offered, including the FCA, the European Securities and Markets Authority and the SFC of Hong Kong. Certain legislation proposing greater regulation of the industry is regularly considered by the U.S. Congress - as well as by the governing bodies of non-U.S. jurisdictions - and from time to time adopted as in the case of the Dodd-Frank Act in the U.S. and MiFID II in the E.U.

The investment advisers responsible for the Company's investment management business are all registered as investment advisers with the SEC or rely upon the registration of an affiliated adviser. Certain investment advisors and/or the investment funds they advise are also subject to regulation by various regulatory authorities outside the U.S., including the U.K. FCA, the Swedish FCA and the European Securities and Markets Authority and may indirectly be subject to MiFID II regulations. Moreover, recent rulemaking by the SEC and certain non-U.S. regulatory bodies have imposed trading restrictions and reporting requirements on short selling, which have impacted certain of the investment strategies implemented on behalf of the investment funds it manages, and continued restrictions on or further regulations of short sales could also negatively impact their performance.

These and other regulators in these jurisdictions have broad regulatory powers dealing with all aspects of financial services including, among other things, the authority to make inquiries of companies regarding compliance with applicable regulations, to grant permits and to regulate marketing and sales practices and the maintenance of adequate financial resources as well as significant reporting obligations to regulatory authorities. Under the E.U. Alternative Investment Fund Managers Directive, the Company will only be permitted to actively market its investment funds in the E.U. if certain disclosure and reporting obligations are met, and certain cooperation arrangements with the domicile of the investment vehicle are in place. As such, the Company may need to modify its strategies or operations, face increased constraints on its investment management business or incur additional costs in order to satisfy new regulatory requirements or to compete in a changed business environment. It is difficult to predict the impact of such legislative initiatives on the Company and the markets in which it operates and/or invests.

It is difficult to predict what other changes may be instituted in the future in the regulation of the Company or the markets in which they invest, or the counterparties with which it does business, in addition to those changes already proposed or adopted in the U.S. or other countries. Any such regulation could have a material adverse effect on the profit potential of the Company's operations.

Finally, financial services firms are subject to numerous perceived or actual conflicts of interest, which have drawn and which we expect will continue to draw scrutiny from the SEC, other federal and state regulators, and self-regulatory organizations. For example, the research areas of investment banks have been and remain the subject of heightened regulatory scrutiny, which has led to increased restrictions on the interaction between equity research analysts and investment banking personnel at securities firms. Regulations have also been focusing on potential conflicts of interest or issues relating to impermissible disclosure of material nonpublic information. Appropriately dealing with conflicts of interest is complex and difficult, and our reputation could be damaged if it fails to do so. Such policies and procedures to address or limit actual or perceived conflicts may also result in increased costs, additional operational personnel and increased regulatory risk. Failure to adhere to these policies and procedures may result in regulatory sanctions or client litigation.

The Company is subject to third party litigation risk and regulatory risk which could result in significant liabilities and reputational harm which, in turn, could materially adversely affect its business, results of operations and financial condition.

The Company depends to a large extent on its reputation for integrity and high-caliber professional services to attract and retain clients. As a result, if a client is not satisfied with the Company's services, it may be relatively more damaging to the Company than to other businesses. Moreover, the Company's role as advisor to clients on underwriting or merger and acquisition transactions involves complex analysis and the exercise of professional judgment, including rendering "fairness opinions" in connection with mergers and other transactions. Such activities may subject the Company to the risk of significant legal liabilities, not covered by insurance, to clients and aggrieved third parties, including stockholders of clients who could commence litigation against the Company. Moreover, many of the clients within the Company’s sectors tend to have higher risk profiles than more established companies, particularly healthcare and cannabis companies. Cowen currently is, and may in the future be, named as a defendant in securities-class action lawsuits alleging violations of the securities laws. Although the Company's investment banking engagements typically include broad indemnities from its clients and provisions to limit exposure to legal claims relating to such services, these provisions may not protect the Company, may not be enforceable, or may be with foreign companies requiring enforcement in foreign jurisdictions which may raise the costs and decrease the likelihood of enforcement. As a result, the Company may incur significant legal and other expenses in defending against litigation and may be required to pay substantial damages for settlements and/or adverse judgments. In addition, in some instances Cowen Prime serves as a registered investment advisor providing advice to retail investors and retaining discretion over some retail investment accounts. The Company could be exposed to potential litigation and liability if any of these clients are not satisfied with the investment advisory services being provided. Substantial legal liability or significant regulatory action against the Company could have a material adverse effect on our results of operations or cause significant reputational harm, which could seriously harm our business and prospects.

In general, the Company is exposed to risk of litigation by investors in its investment management business if the management of any of its investment funds is alleged to have been grossly negligent or fraudulent. Investors or beneficial owners of investment funds could sue to recover amounts lost due to any alleged misconduct, up to the entire amount of the loss. In addition, the Company faces the risk of litigation from investors and beneficial owners of any of its investment funds if applicable restrictions are violated. In addition, the Company is exposed to risks of litigation or investigation relating to transactions that presented conflicts of interest that were not properly addressed. In the majority of such actions the Company would be obligated to bear legal, settlement and other costs, which may be in excess of any available insurance coverage. In addition, although the Company is contractually entitled to indemnification from its investment funds, our rights to indemnification may be challenged. If the Company is required to incur all or a portion of the costs arising out of litigation or investigations as a result of inadequate insurance proceeds, if any, or is not wholly indemnified, our business, results of operations and financial condition could be materially adversely affected. In its investment management business, the Company is exposed to the risk of litigation if an investment fund suffers catastrophic losses due to the failure of a particular investment strategy or due to the trading activity of an employee who has violated market rules or regulations. Any litigation arising in such circumstances is likely to be protracted, expensive and surrounded by circumstances which are materially damaging to the Company's reputation and businesses.

The potential for conflicts of interest within the Company, and a failure to appropriately identify and deal with conflicts of interest could adversely affect our businesses.

Due to the combination of our investment management and investment banking businesses, we face an increased potential for conflicts of interest, including situations where our services to a particular client or investor or our own interests in our investments conflict with the interests of another client. Such conflicts may also arise if our investment banking businesses have access to material non-public information that may not be shared with our investment management business or vice versa. Additionally, our regulators have the ability to scrutinize our activities for potential conflicts of interest, including through detailed examinations of specific transactions.

Appropriately identifying and dealing with conflicts of interest is complex and difficult, and the willingness of clients to enter into transactions or engagements in which such a conflict might arise may be affected if we fail to identify and appropriately address potential conflicts of interest. In addition, potential or perceived conflicts could give rise to litigation or enforcement actions.

Increased regulatory focus could result in regulation that may limit the manner in which the Company and its investment management business invest, materially impacting the Company's business.

The Company's investment management business may be adversely affected if new or revised legislation or regulations are enacted, or by changes in the interpretation or enforcement of existing rules and regulations imposed by the SEC, other U.S. or foreign governmental regulatory authorities or self-regulatory organizations that supervise the financial markets and their participants. Such changes could place limitations on the type of investor that can invest in the Company's investment funds or on the conditions under which such investors may invest. Further, such changes may limit the scope of investing activities that may be undertaken by the Company's investment funds. It is impossible to determine the extent of the impact of any new or recently enacted laws, including the Dodd-Frank Act and MiFID II, or any other regulations or initiatives that may be proposed, or whether any proposed regulations or initiatives will become law. Compliance with any new laws or regulations could be difficult and expensive and affect the manner in which the Company's investment management business conducts itself, which may adversely impact its results of operations, financial condition and prospects.

Additionally, as a result of highly publicized financial scandals, investors, regulators and the general public have exhibited concerns over the integrity of both the U.S. financial markets and the regulatory oversight of these markets. As a result, the business environment in which Company's investment management business operates is subject to heightened regulation. With respect to the Company's investment funds, in recent years, there has been debate in both U.S. and foreign governments about new rules or regulations, including increased oversight or taxation, in addition to the recently enacted legislation described above. As calls for additional regulation have increased, there may be a related increase in regulatory investigations of the trading and other investment activities of investment funds, including the Company's investment funds. Such investigations may impose additional expenses on the Company, may require the attention of senior management and may result in fines if any of the Company's investment funds are deemed to have violated any regulations.

Our business could be adversely affected by the ongoing impact of MiFID II in Europe.

MiFID II, which went into effect in January 2018, regulates the provision of investment services and activities throughout the European Economic Area. MiFID II requires that investment managers and investment advisors located in the E.U. "unbundle" research costs from commissions. As a result, investment firms subject to MiFID II may no longer pay for research using client commissions or "soft dollars". Such costs must now be paid directly by the investment firm or through a research payment account funded by clients and governed by a budget that is agreed by the client. We cannot predict the long-term effects that this new regulation will have on our research and sales and trading businesses. If investment managers and investment advisors reduce their spending on research or decide to trade with other broker-dealers as a result of the MiFID II regulations our business could be adversely affected.

The U.K. exit from the E.U. could adversely impact our business, results of operations and financial condition.

The effects of the U.K.'s decision to leave the European Union (commonly referred to as "Brexit") on us will depend on any agreements the U.K. makes to retain access to E.U. markets (including for financial services) either during the transitional period or more permanently. Brexit is expected to significantly affect the fiscal, monetary and regulatory landscape in the U.K., and could have a material impact on its economy and the future growth of its various industries, including the financial services industry in which we operate.

We conduct business in Europe primarily through our U.K. subsidiaries. Depending on the final terms of Brexit, we could face new regulatory costs and challenges. For instance, our U.K. subsidiaries may not be able to rely on the existence of a "passporting" regime that allows immediate access to the single E.U. market. If this occurred, we may need to establish one or more new regulated subsidiaries in the E.U. in order to provide our trading platform and certain post-trade services to clients in the E.U.

Changes to U.K. immigration policy could likewise occur as a result of Brexit. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which E.U. laws to replace or replicate. Any such new laws and regulations in the U.K. may be difficult and/or costly to implement.

Although it is not possible at this point in time to predict the effects of the exit of the U.K. from the E.U., any of the foregoing factors could have a material adverse effect on our business, financial condition and results of operations. In addition, Brexit may impact our ability to comply with the extensive government regulation to which we are subject.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 has adversely affected, and may continue to adversely affect, the Company's business.

Enacted on July 21, 2010, the Dodd-Frank Act was expansive in scope and led to the adoption of extensive regulations by the CFTC, the prudential regulators, the SEC and other governmental agencies. The current administration has suggested that it may seek to roll back some of this regulation, although the timing and scope of potential changes remains uncertain. Since its adoption, the Dodd-Frank Act has had an impact on the costs associated with derivatives trading by the Company and its clients, including as a result of requirements that transactions be margined, trade reported and, in some cases, centrally cleared.

If the Company were deemed an investment company under the U.S. Investment Company Act, applicable restrictions could make it impractical for the Company to continue its respective businesses as contemplated and could have a material adverse effect on the Company's businesses and prospects.

We are primarily engaged in a non-investment company business and believe the nature of our assets and the sources of our income exclude us from the definition of an investment company under the Investment Company Act.

The Investment Company Act and the rules thereunder contain detailed requirements for the organization and operation of investment companies. Among other things, the Investment Company Act and the rules thereunder limit transactions with affiliates, impose limitations on the issuance of debt and equity securities, generally prohibit the issuance of options and impose certain governance requirements. The Company intends to conduct its operations so that the Company will not be deemed to be an investment company under the Investment Company Act. If anything were to happen which would cause the Company to be deemed to be an investment company under the Investment Company Act, requirements imposed by the Investment Company Act, including limitations on its capital structure, ability to transact business with affiliates (including subsidiaries) and ability to compensate key employees, could make it impractical for the Company to continue its business as currently conducted, impair the agreements and arrangements between and among it, its subsidiaries and its senior personnel, or any combination thereof, and materially adversely affect its business, financial condition and results of operations. Accordingly, the Company may be required to limit the amount of investments that it makes as a principal or otherwise conduct its business in a manner that does not subject the Company to the registration and other requirements of the Investment Company Act.

Other Risks to Our Stockholders

The ability to use our tax net operating loss ("NOL") carryforwards could be limited.

As of December 31, 2019, we had NOL carryforwards of $175.1 million available for use in future years. Section 382 of the IRC, as amended, provides that if a loss corporation undergoes an "ownership change" the use of its pre-change losses is limited, generally, to an amount each year equal to the product of the value of the Company's equity and the long-term tax-exempt rate for the month in which the ownership change occurs. An "ownership change" is defined as an increase in the ownership of the loss corporation by so-called 5% shareholders of more than 50% over a rolling three-year period. Cowen did not undergo an ownership change during 2019.

Based on the facts in existence on the date hereof, we do not believe any material portion of our losses is subject to limitation under Section 382, or that conversion of the Convertible Notes into our common stock would trigger an ownership change. There can be no assurance that purchases or other acquisitions of our shares will not in the future trigger an ownership change, thereby substantially limiting our ability to use our NOLs going forward.

We may not be able to realize the value of our deferred tax assets.

At December 31, 2019, we have significant deferred tax assets that we have recognized based on differences between the financial statement carrying amounts and the tax basis of assets and liabilities. We have recognized deferred tax assets because management believes, based on earnings and financial projections, that it is more likely than not that we will have sufficient future earnings to utilize these assets to offset future income tax liabilities. We regularly review our deferred tax assets for recoverability based on our history of earnings, expectations for future earnings and expected timing of reversals of temporary differences. Realization of deferred tax assets requires us to apply significant judgment and is inherently speculative because it requires the future occurrence of circumstances that cannot be predicted with certainty and ultimately depends on the existence of sufficient future taxable income. There can be no assurance that we will achieve sufficient future taxable income as the basis for the ultimate realization of our deferred tax assets. Changes in facts and circumstances or unforeseen negative economic developments could require us to establish a valuation allowance in the future, potentially causing a material adverse effect on our future operating results and financial condition. Our deferred tax assets may also be impacted by new legislation or regulation.

The terms of our Series A Convertible Preferred Stock contains certain restrictions on our operations.

The certificate of designations governing our Series A Convertible Preferred Stock contains certain restrictions on our and our subsidiaries' ability to, among other things, pay dividends on, redeem or repurchase our Class A common stock and, under certain circumstances, our Series A Convertible Preferred Stock, and to issue additional preferred stock. Additionally, if dividends on our Series A Convertible Preferred Stock are in arrears and unpaid for at least six or more quarterly periods, the holders (voting as a single class) of our outstanding Series A Convertible Preferred Stock will be entitled to elect two additional directors to our Board of Directors until paid in full.

The Company's failure to maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on the Company's financial condition, results of operations and business and the price of our Class A common stock.

The Sarbanes-Oxley Act and the related rules require our management to conduct an annual assessment of the effectiveness of our internal control over financial reporting and require a report by our independent registered public accounting firm addressing our internal control over financial reporting. To comply with Section 404 of the Sarbanes-Oxley Act, we are required to document formal policies, processes and practices related to financial reporting that are necessary to comply with Section 404. Such policies, processes and practices are important to ensure the identification of key financial reporting risks, assessment of their potential impact and linkage of those risks to specific areas and activities within our organization.

If we fail for any reason to comply with the requirements of Section 404 in a timely manner, our independent registered public accounting firm may, at that time, issue an adverse report regarding the effectiveness of our internal control over financial reporting. Matters impacting our internal controls may cause us to be unable to report our financial information on a timely basis and thereby subject us to adverse regulatory consequences, including sanctions by the SEC or violations of applicable stock exchange listing rules. There could also be a negative reaction in the financial markets due to a loss of investor confidence in us and the reliability of our financial statements. Any such event could adversely affect our financial condition, results of operations and business, and result in a decline in the price of our Class A common stock.

Certain provisions of the Company's amended and restated certificate of incorporation and bylaws and Delaware law may have the effect of delaying or preventing an acquisition by a third party.

The Company's amended and restated certificate of incorporation and bylaws contain several provisions that may make it more difficult for a third party to acquire control of the Company, even if such acquisition would be financially beneficial to the Company's stockholders. These provisions also may delay, prevent or deter a merger, acquisition, tender offer, proxy contest or other transaction that might otherwise result in the Company's stockholders receiving a premium over the then-current trading price of our common stock. For example, the Company's amended and restated certificate of incorporation authorizes its board of directors to issue up to 10,000,000 shares of "blank check" preferred stock. Without stockholder approval, the board of directors has the authority to attach special rights, including voting and dividend rights, to this preferred stock. With these rights, preferred stockholders could make it more difficult for a third party to acquire the Company. In addition, the Company's amended and restated bylaws provide for an advance notice procedure with regard to the nomination of candidates for election as directors and with regard to business to be brought before a meeting of stockholders. The Company is also subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. Under these provisions, if anyone becomes an "interested stockholder," the Company may not enter into a "business combination" with that person for three years without special approval, which could discourage a third party from making a takeover offer and could delay or prevent a change of control. For the purposes of Section 203, "interested stockholder" means, generally, someone owning 15% or more of the Company's outstanding voting stock or an affiliate of the Company that owned 15% or more of our outstanding voting stock during the past three years, subject to certain exceptions as described in Section 203.

If securities analysts stop publishing research or reports about us or our business or if they downgrade our common stock, the market price of our common stock and, consequently, the trading price of our other securities could decline.

The market for our common stock relies in part on the research and reports that industry or financial analysts publish about us or our business. We do not control these analysts. If any analyst who covers us downgrades our stock or lowers its future stock price targets or estimates of our operating results, our stock price could decline rapidly. Furthermore, if any analyst ceases to cover us, we could lose visibility in the market, which in turn could cause the market price of our securities to decline.

Future sales of our common stock in the public market could adversely impact the trading price of our securities.

In the future, we may sell additional shares of our common stock to raise capital. In addition, a substantial number of shares of our common stock are reserved for issuance upon vesting of restricted stock units and upon the conversion of the 2022 Convertible Notes. We cannot predict the size of future issuances or the effect, if any, that they may have on the market price for our common stock. The issuance and sale of substantial amounts of common stock, or the perception that such issuances and sales may occur, could adversely affect the trading price of our securities and impair our ability to raise capital through the sale of additional equity securities.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal offices, all of which are leased, are located in New York City, Boston, San Francisco and London. Our other offices, all of which are leased, are located in Atlanta, Chicago, Cleveland, Greenwich, Houston, Lake Mary, Stamford, Washington D.C., Luxembourg, Belfast, and other various locations. Our corporate headquarters are located in New York, New York and comprise approximately 124,000 square feet of leased space pursuant to a lease agreement through 2024. Our additional New York locations are comprised of approximately 46,000 square feet pursuant to lease agreements through 2025. We lease approximately 23,000 square feet of space in Boston pursuant to lease agreements expiring through 2023. In San Francisco, we lease approximately 26,000 square feet of space, pursuant to lease agreements expiring through 2025. Our London offices are subject to lease agreements expiring through 2022.

Item 3. Legal Proceedings

In the ordinary course of business, the Company and its affiliates, subsidiaries and current and former officers, directors and employees (the "Company and Related Parties") are named as defendants in, or as parties to, various legal actions and proceedings. Certain of these actions and proceedings assert claims or seek relief in connection with alleged violations of securities, banking, anti-fraud, anti-money laundering, employment and other statutory and common laws. Certain of these actual or threatened legal actions and proceedings include claims for substantial or indeterminate compensatory or punitive damages, or for injunctive relief.

In the ordinary course of business, the Company and Related Parties are also subject to governmental and regulatory examinations, information gathering requests (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. Certain of our affiliates and subsidiaries are registered broker-dealers, futures commission merchants, investment advisers or other regulated entities and, in those capacities, are subject to regulation by various U.S., state and foreign securities, commodity futures and other regulators. In connection with formal and informal inquiries by these regulators, we receive requests and orders seeking documents and other information in connection with various aspects of our regulated activities.

Due to the global scope of our operations, and presence in countries around the world, the Company and Related Parties may be subject to litigation, governmental and regulatory examinations, information gathering requests, investigations and proceedings (both formal and informal), in multiple jurisdictions with legal and regulatory regimes that may differ substantially, and present substantially different risks, from those to which the Company and Related Parties are subject in the United States.

The Company seeks to resolve all litigation and regulatory matters in the manner management believes is in the best interests of the Company and its shareholders, and contests liability, allegations of wrongdoing and, where applicable, the amount of damages or scope of any penalties or other relief sought as appropriate in each pending matter.

In accordance with US GAAP, the Company establishes reserves for contingencies when the Company believes that it is probable that a loss has been incurred and the amount of loss can be reasonably estimated. The Company discloses a contingency if there is at least a reasonable possibility that a loss may have been incurred and there is no reserve for the loss because the conditions above are not met. The Company's disclosure includes an estimate of the reasonably possible loss or range of loss for those matters, for which an estimate can be made. Neither a reserve nor disclosure is required for losses that are deemed remote.

The Company appropriately reserves for certain matters where, in the opinion of management, the likelihood of liability is probable and the extent of such liability is reasonably estimable. Such amounts are included within accounts payable, accrued expenses and other liabilities in the accompanying consolidated statements of financial condition. Estimates, by their nature, are based on judgment and currently available information and involve a variety of factors, including, but not limited to, the type and nature of the litigation, claim or proceeding, the progress of the matter, the advice of legal counsel, the Company's defenses and its experience in similar cases or proceedings as well as its assessment of matters, including settlements, involving other defendants in similar or related cases or proceedings. The Company may increase or decrease its legal reserves in the future, on a matter-by-matter basis, to account for developments in such matters. The Company accrues legal fees as incurred.

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

Stock Price Information and Stockholders

Our Class A common stock is listed and trades on the NASDAQ Global Market under the symbol "COWN." As of March 3, 2020, there were approximately 38 holders of record of our Class A common stock. This number does not include stockholders for whom shares were held in "nominee" or "street" name.

Dividend Policy

On February 11, 2020 the Board of Directors declared a quarterly cash dividend of $0.04 per share of Class A common stock payable on March 16, 2020, to stockholders of record on March 2, 2020.

We credit dividend equivalents on all unvested Restricted Stock Units and Performance Share Awards concurrently with the payment of dividends to the holders of Class A common shares. The dividend equivalents have the same vesting and delivery terms as the underlying award agreements relating to the Restricted Stock Units and Performance Share Awards.

The declaration and payment of any future dividends will be at the sole discretion of our board of directors. Our board of directors will take into account: general economic and business conditions; our financial condition and operating results; our available cash and current and anticipated cash needs; capital requirements; contractual, legal, tax and regulatory restrictions and implications on the payment of dividends by us to our stockholders or by our subsidiaries to us; and such other factors as our board of directors may deem relevant.

Issuer Purchases of Equity Securities: Sales of Unregistered Securities

As of December 31, 2019, the Company's Board of Directors has approved a share repurchase program that authorizes the Company to purchase up to $216.0 million of Cowen Class A common stock from time to time through a variety of methods, including in the open market or through privately negotiated transactions, in accordance with applicable securities laws. The specific timing and amount of repurchases will vary depending on various factors, including, among others, market conditions and competing needs for the use of our capital. We may elect to conduct future share repurchases through open market purchases, private transactions or automatic share repurchase programs under SEC Rule 10b5-1. During the year ended December 31, 2019, through the share repurchase program, the Company repurchased 2,233,636 shares of Cowen Class A common stock at an average price of $15.44 per share.

The table below sets forth the information with respect to purchases made by or on the behalf of the Company or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Exchange Act, as amended), of our common stock during the year ended December 31, 2019.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
Month 1 (January 1, 2019 – January 31, 2019)				
Common stock repurchases(1)	—	$ —	—	$ 10,000,465
Employee transactions(2)	1,032	$ 14.37	—	—
Other (3)	3,331	$ 14.52	—	—
Total	4,363	$ 16.46	—	
Month 2 (February 1, 2019 – February 28, 2019)				
Common stock repurchases(1)	—	$ —	—	$ 10,000,465
Employee transactions(2)	1,461	$ 15.03	—	—
Other (3)	—	—	—	—
Total	1,461	$ 15.03	—	
Month 3 (March 1, 2019 – March 31, 2019)				
Common stock repurchases(1)	315,400	$ 14.77	315,400	$ 5,342,862
Employee transactions(2)	320,734	$ 14.45	—	—
Other (3)	—	—	—	—
Total	636,134	$ 14.61	315,400	
Month 4 (April 1, 2019 – April 30, 2019)				
Common stock repurchases(1)	—	$ —	—	$ 25,000,000
Employee transactions(2)	8,961	$ 14.65	—	—
Other (3)	—	—	—	—
Total	8,961	$ 14.48	—	
Month 5 (May 1, 2019 – May 31, 2019)				
Common stock repurchases(1)	—	$ —	—	$ 25,000,000
Employee transactions(2)	8,903	$ 15.87	—	—
Other (3)	4,737	$ 15.40	—	—
Total	13,640	$ 15.71	—	
Month 6 (June 1, 2019 – June 30, 2019)				
Common stock repurchases(1)	461,830	$ 15.93	461,830	$ 17,643,048
Employee transactions(2)	201,353	$ 15.57	—	—
Other (3)	—	$ —	—	
Total	663,183	$ 15.82	461,830	
Month 7 (July 1, 2019 – July 31, 2019)				
Common stock repurchases(1)	—	$ —	—	$ 17,643,131
Employee transactions(2)	7,643	$ 16.46	—	—
Other (3)	—	$ —	—	—
Total	7,643	$ 16.46	—	
Month 8 (August 1, 2019 – August 31, 2019)				
Common stock repurchases(1)	378,364	$ 15.73	378,364	$ 11,691,185
Employee transactions(2)	—	$ —	—	—
Other (3)	2,849	$ 16.19	—	—
Total	381,213	$ 15.73	378,364	
Month 9 (September 1, 2019 – September 30, 2019)				

Period	Total Number of Shares Purchased		Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs		Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
Common stock repurchases(1)	284,802	$	15.64	284,802	$	7,237,804
Employee transactions(2)	124,705	$	15.62	—		—
Other (3)	—	$	—	—		—
Total	409,507	$	15.63	284,802		
Month 10 (October 1, 2019 – October 31, 2019)						
Common stock repurchases(1)	—	$	—	—	$	25,000,000
Employee transactions(2)	1,308	$	15.18	—		—
Other (3)	882	$	15.82	—		—
Total	2,190	$	15.44	—		
Month 11 (November 1, 2019 – November 30, 2019)						
Common stock repurchases(1)	432,308	$	14.99	432,308	$	18,521,025
Employee transactions(2)	—	$	—	—		—
Total	432,308	$	14.99	432,308		
Month 12 (December 1, 2019 – December 31, 2019)						
Common stock repurchases(1)	360,932	$	15.48	360,932	$	12,934,590
Employee transactions(2)	329,287	$	15.32	—		—
Other (3)	17,888	$	15.37	—		—
Total	708,107	$	15.40	360,932		
Total (January 1, 2019 – December 31, 2019)						
Common stock repurchases(1)	2,233,636	$	15.44	2,233,636	$	12,934,590
Employee transactions(2)	1,005,387	$	15.14	—		—
Other (3)	29,687	$	15.37	—		—
Total	3,268,710	$	15.35	2,233,636		

(1) The Company's Board of Directors have authorized the repurchase, subject to market conditions, of up to $216.0 million of the Company's outstanding common stock.

(2) Represents shares of common stock withheld in satisfaction of tax withholding obligations upon the vesting of equity awards or other similar transactions.

(3) Represents shares of common stock distributed to the Company from an escrow account established to satisfy the Company's indemnification claims arising under the terms of the purchase agreement entered into in connection with the Company's acquisition of Convergex Group, LLC.

Item 6. Selected Financial Data

The following table sets forth our selected consolidated financial and other data for the years ended December 31, 2019, 2018, 2017, 2016, and 2015. The selected consolidated statements of financial condition data and consolidated statements of operations data as of and for the years ended December 31, 2019, 2018, 2017, 2016, and 2015 have been derived from our audited consolidated financial statements. Any presentation reclassifications made in filings subsequent to the associated Form 10-K filing for each year have been applied here retrospectively as well. Our selected consolidated financial data are only a summary and should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and with our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	(dollars in thousands except per share data)				
Consolidated Statements of Operations Data:					
Revenues					
Investment banking	$ 375,025	$ 357,222	$ 223,614	$ 133,279	$ 222,781
Brokerage	402,747	413,582	293,610	199,180	157,722
Management fees	32,608	29,658	33,245	40,612	41,906
Incentive income	1,547	3,117	5,383	8,334	1,466
Interest and dividends	174,913	108,009	49,440	14,732	13,796
Reimbursement from affiliates	1,026	1,038	2,860	10,504	21,557
Aircraft lease revenue	—	1,852	3,751	4,161	—
Reinsurance premiums	46,335	38,096	30,996	32,459	—
Other revenues	5,433	4,504	8,561	22,355	3,726
Consolidated Funds revenues	9,809	9,838	7,321	5,949	1,613
Total revenues	1,049,443	966,916	658,781	471,565	464,567
Interest and dividends expense	168,628	104,116	60,949	29,308	26,220
Total net revenues	880,815	862,800	597,832	442,257	438,347
Expenses					
Employee compensation and benefits	535,772	512,627	404,087	310,038	321,386
Non-compensation expense	355,959	328,616	249,550	168,804	154,458
Reinsurance claims, commissions and amortization of deferred acquisition costs	44,070	41,086	30,486	29,904	—
Goodwill impairment	4,100	—	—	—	—
Consolidated Funds expenses	8,963	8,615	12,526	9,064	2,310
Total expenses	948,864	890,944	696,649	517,810	478,154
Other income (loss)					
Net gains (losses) on securities, derivatives and other investments	80,409	68,043	76,179	23,381	36,789
Bargain purchase gain	—	—	6,914	—	—
Gain/(loss) on debt extinguishment	—	(556)	(16,039)	—	—
Consolidated Funds net gains (losses)	58,363	56,255	38,725	20,685	14,497
Total other income (loss)	138,772	123,742	105,779	44,066	51,286
Income (loss) before income taxes	**70,723**	**95,598**	**6,962**	**(31,487)**	**11,479**
Income tax expense (benefit)	14,853	15,719	44,053	(19,092)	(47,496)
Net income (loss)	55,870	79,879	(37,091)	(12,395)	58,975
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	31,239	37,060	23,791	6,882	15,246
Net income (loss) attributable to Cowen Inc.	24,631	42,819	(60,882)	(19,277)	43,729
Preferred stock dividends	6,792	6,792	6,792	6,792	4,075
Net income (loss) attributable to Cowen Inc. common stockholders	**$ 17,839**	**$ 36,027**	**$ (67,674)**	**$ (26,069)**	**$ 39,654**
Weighted average common shares outstanding:					
Basic (a)	29,525	29,545	29,492	26,857	27,522
Diluted (a)	31,286	30,735	29,492	26,857	29,043
Earnings (loss) per share:					
Basic (a)	$ 0.60	$ 1.22	$ (2.29)	$ (0.97)	$ 1.44
Diluted (a)	$ 0.57	$ 1.17	$ (2.29)	$ (0.97)	$ 1.37

(a) Share and per share amounts have been retroactively updated to reflect the one-for-four reverse stock split effective as of December 5, 2016.

	As of December 31,				
	2019	2018	2017	2016	2015
	(dollars in thousands)				
Consolidated Statements of Financial Condition Data:					
Total assets	$ 5,162,025	$ 3,346,303	$ 3,296,252	$ 2,018,523	$ 1,787,659
Total liabilities	3,866,575	2,270,093	2,107,629	866,668	810,755
Redeemable non-controlling interests	391,275	216,923	335,017	280,527	140,039
Nonredeemable non-controlling interests	94,320	64,880	105,587	98,678	46,872
Total Stockholders' Equity	**$ 809,855**	**$ 794,407**	**$ 748,019**	**$ 772,650**	**$ 789,993**

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with our audited consolidated financial statements and the related notes that appear elsewhere in this Annual Report. In addition to historical information, this discussion includes forward-looking information that involves risks and assumptions, which could cause actual results to differ materially from management's expectations. See "Special Note Regarding Forward-Looking Statements" included elsewhere in this Annual Report on Form 10-K.

Overview

Cowen Inc., a Delaware corporation formed in 2009, is a diversified financial services firm that, together with its consolidated subsidiaries (collectively, "Cowen" or the "Company"), provides investment banking, research, sales and trading, prime brokerage, global clearing and commission management services and investment management through its two business segments: the Operating Company ("Op Co") and the Asset Company ("Asset Co").

Operating Company

The Op Co segment consists of four divisions: the Cowen Investment Management ("CIM") division, the Investment Banking division, the Markets division and the Research division. The Company refers to the Investment Banking division, the Markets division and the Research division collectively as its investment banking businesses. Op Co's CIM division includes advisers to investment funds (including private equity structures and privately placed hedge funds), and registered funds. Op Co's investment banking businesses offer industry focused investment banking for growth-oriented companies including advisory and global capital markets origination and domain knowledge-driven research, sales and trading platforms for institutional investors, global clearing and commission management services and also a comprehensive suite of prime brokerage services.

The CIM division is the Company's investment management business, which operates primarily under the Cowen Investment Management name. CIM offers innovative investment products and solutions across the liquidity spectrum to institutional and private clients. The predecessor to this business was founded in 1994 and, through one of its subsidiaries, has been registered with the SEC as an investment adviser under the Investment Advisers Act of 1940, as amended (the "Advisers Act") since 1997. The Company's investment management business offers investors access to a number of strategies to meet their specific needs including private healthcare investing, private sustainable investing, healthcare royalties, activism and merger arbitrage. A portion of the Company's capital is invested alongside the Company's investment management clients. The Company has also invested some of its capital in its reinsurance businesses.

Op Co's investment banking businesses include investment banking, research, sales and trading, prime brokerage, global clearing and commission management services provided primarily to companies and institutional investor clients. Sectors covered by Op Co's investment banking business include healthcare, technology, media and telecommunications, consumer, industrials, information and technology services, and energy. We provide research and brokerage services to over 6,000 domestic and international clients seeking to trade securities and other financial instruments, principally in our sectors. The investment banking businesses also offer a full-service suite of introduced prime brokerage services targeting emerging private fund managers. Historically, we have focused our investment banking efforts on small to mid-capitalization public companies as well as private companies. From time to time, the Company invests in private capital raising transactions of its investment banking clients.

Asset Company

The Asset Co segment consists of the Company's private investments, private real estate investments and other legacy investment strategies. The focus of Asset Co is to drive future monetization of the invested capital of the segment.

Certain Factors Impacting Our Business

Our Company's businesses and results of operations are impacted by the following factors:

- *Underwriting, private placement and strategic/financial advisory fees.* Our revenues from investment banking are directly linked to the underwriting fees we earn in equity and debt securities offerings in which the Company acts as an underwriter, private placement fees earned in non-underwritten transactions, sales commissions earned in at-the-market offerings and success fees earned in connection with advising both buyers and sellers, principally in mergers and acquisitions. As a result, the future performance of our investment banking business will depend on, among other things, our ability to secure lead manager and co-manager roles in clients' capital raising transactions as well as our ability to secure mandates as a client's strategic financial advisor.

- *Liquidity.* As a clearing broker-dealer in the U.S., we are subject to cash deposit requirements with clearing organizations, brokers and banks that may be large in relation to our total liquid assets.
- *Equity research fees.* Equity research fees are paid to the Company for providing access to equity research. The Company also permits institutional customers to allocate a portion of their commissions to pay for research products and other services provided by third parties. Our ability to generate revenues relating to our equity research depends on the quality of our research and its relevance to our institutional customers and other clients.
- *Principal transactions.* Principal transactions revenue includes net trading gains and losses from the Company's market-making activities and net trading gains and losses on inventory and other Company positions. Commissions associated with these transactions are also included herein. In certain cases, the Company provides liquidity to clients buying or selling blocks of shares of listed stocks without previously identifying the other side of the trade at execution, which subjects the Company to market risk.
- *Commissions.* Our commission revenues depend for the most part on our customer trading volumes and on the notional value of the non-U.S. securities traded by our customers.
- *Investment performance.* Our revenues from incentive income are linked to the performance of the investment funds and accounts that we manage. Performance also affects assets under management because it influences investors' decisions to invest assets in, or withdraw assets from, the investment funds and accounts managed by us.
- *Fee and allocation rates.* Our management fee revenues are linked to the management fee rates we charge as a percentage of contributed and invested capital. Our incentive income revenues are linked to the incentive allocation rates we charge as a percentage of performance-driven asset growth. Our incentive allocations are generally subject to "high-water marks," whereby incentive income is generally earned by us only to the extent that the net asset value of an investment fund at the end of a measurement period exceeds the highest net asset value as of the end of the earlier measurement period for which we earned incentive income. Our incentive allocations, in some cases, are subject to performance hurdles. Additionally, our revenues from management fees are directly linked to assets under management. Positive performance in our legacy funds increases assets under management which results in higher management fees.
- *Investment performance of our own capital.* We invest our own capital and the performance of such invested capital affects our revenues. Investment income in the investment bank business includes gains and losses generated by the capital the Company invests in private capital raising transactions of its investment banking clients. Our revenues from investment income are linked to the performance of the underlying investments.

External Factors Impacting Our Business

Our financial performance is highly dependent on the environment in which our businesses operate. We believe a favorable business environment is characterized by many factors, including a stable geopolitical climate, transparent financial markets, low inflation, low interest rates, low unemployment, strong business profitability and high business and investor confidence. Unfavorable or uncertain economic or market conditions can be caused by declines in economic growth, business activity or investor or business confidence, limitations on the availability (or increases in the cost of) credit and capital, increases in inflation or interest rates, exchange rate volatility, unfavorable global asset allocation trends, outbreaks of hostilities or other geopolitical instability, corporate, political or other scandals that reduce investor confidence in the capital markets, or a combination of these or other factors. Our businesses and profitability have been and may continue to be adversely affected by market conditions in many ways, including the following:

- Our investment bank business has been, and may continue to be, adversely affected by market conditions. Increased competition continues to affect our investment banking and capital markets businesses. The same factors also affect trading volumes in secondary financial markets, which affect our brokerage business. Commission rates, market volatility, increased competition from larger financial firms and other factors also affect our brokerage revenues and may cause these revenues to vary from period to period.
- Our investment management business can be adversely affected by unanticipated levels of requested redemptions. We experienced significant levels of requested redemptions during the 2008 financial crisis and, while the environment for investing in investment management products has since improved, it is possible that we could intermittently experience redemptions above historical levels, regardless of investment fund performance.
- Our investment bank business focuses primarily on small to mid-capitalization and private companies in specific industry sectors. These sectors may experience growth or downturns independent of general economic and market conditions, or may face market conditions that are disproportionately better or worse than those impacting the economy and markets generally. In addition, increased government regulation has had, and may continue to have, a

disproportionate effect on capital formation by smaller companies. Therefore, our investment bank business could be affected differently than overall market trends.

Our businesses, by their nature, do not produce predictable earnings. Our results in any period can be materially affected by conditions in global financial markets and economic conditions generally. We are also subject to various legal and regulatory actions that impact our business and financial results.

Recent Developments

On February 11, the Board of Directors declared a quarterly cash dividend payable on its common stock of $1.25 million, or $0.04 per common share, payable on March 16, 2020, to stockholders of record on March 2, 2020.

Basis of presentation

The Company's consolidated financial statements are prepared in accordance with US GAAP as promulgated by the Financial Accounting Standards Board ("FASB") through Accounting Standards Codification as the source of authoritative accounting principles in the preparation of financial statements of the Company appearing in Part IV of this Form 10-K and include the accounts of the Company, its subsidiaries, and entities in which the Company has a controlling financial interest or a substantive, controlling general partner interest. All material intercompany transactions and balances have been eliminated in consolidation. Certain fund entities that are consolidated in the consolidated financial statements, are not subject to these consolidation provisions with respect to their own investments pursuant to their specialized accounting.

The Company serves as the managing member/general partner and/or investment manager to affiliated fund entities which it sponsors and manages. Certain of these funds in which the Company has a substantive, controlling managing member/general partner interest are consolidated with the Company pursuant to US GAAP as described below (the "Consolidated Funds"). Consequently, the Company's consolidated financial statements reflect the assets, liabilities, income and expenses of the Consolidated Funds on a gross basis. The ownership interests in the Consolidated Funds which are not owned by the Company are reflected as redeemable or nonredeemable non-controlling interests, depending on the non-controlling interest holder's redemption rights, in consolidated subsidiaries in the consolidated financial statements appearing elsewhere in this Form 10-K. The management fees and incentive income earned by the Company from the Consolidated Funds are eliminated in consolidation.

Acquisition

On January 2, 2019, the Company, together with its indirect wholly owned subsidiaries, Cowen International Ltd and Cowen QN Acquisition LLC, completed its previously announced acquisition of Quarton International AG through the acquisition of all of the outstanding equity interest of Quarton International AG's affiliated combining companies, Quarton Management AG, Quarton International Europe AG, Quarton Partners, LLC and Quarton Securities GP, LLC (which owns a U.S. Securities Exchange Commission ("SEC") registered broker-dealer that was subsequently renamed to Cowen Securities LP), comprising the U.S. and European operations of the acquired combining companies (collectively "Quarton"). Quarton is a group of leading global financial advisory companies serving the middle market.

Expenses

The Company's expenses consist of compensation and benefits, reinsurance costs, general, administrative and other, and Consolidated Funds expenses.

- *Compensation and Benefits.* Compensation and benefits is comprised of salaries, benefits, discretionary cash bonuses and equity-based compensation. Annual incentive compensation is variable, and the amount paid is generally based on a combination of employees' performance, their contribution to their business segment, and the Company's performance. Generally, compensation and benefits comprise a significant portion of total expenses, with annual incentive compensation comprising a significant portion of total compensation and benefits expenses.
- *Reinsurance claims, commissions and amortization of deferred acquisition costs.* Reinsurance related expenses reflect loss and claim reserves, acquisition costs and other expenses incurred with respect to our insurance and reinsurance operations.
- *Operating, General and Administrative.* General, administrative and other expenses are primarily related to professional services, occupancy and equipment, business development expenses, communications, expenses associated with our reinsurance business and other miscellaneous expenses. These expenses may also include certain one-time charges and non-cash expenses.
- *Consolidated Funds Expenses.* The Company's consolidated financial statements reflect the expenses of the Consolidated Funds and the portion attributable to other investors is allocated to a non-controlling interest.

Income Taxes

The taxable results of the Company's U.S. operations are subject to U.S. federal, state and local taxation as a corporation. The Company is also subject to foreign taxation on income it generates in certain countries.

The Company records deferred tax assets and liabilities for the future tax benefit or expense that will result from differences between the carrying value of its assets for income tax purposes and for financial reporting purposes, as well as for operating or capital loss and tax credit carryovers. A valuation allowance is recorded to bring the net deferred tax assets to a level that, in management's view, is more likely than not to be realized in the foreseeable future. This level will be estimated based on a number of factors, especially the amount of net deferred tax assets of the Company that are actually expected to be realized, for tax purposes, in the foreseeable future. Deferred tax liabilities that cannot be realized in a similar future time period and thus that cannot offset the Company's deferred tax assets are not taken into account when calculating the Company's net deferred tax assets.

The Company continues to monitor the financial statement impact of the Tax Cuts and Jobs Act ("TCJ Act") enacted in 2017 as regulations and formal guidance continue to be issued.

Non-controlling Interests

Non-controlling interests represent the pro rata share of the income or loss of the non-wholly owned consolidated entities attributable to the other owners of such entities. When non-controlling interest holders have redemption features that can be exercised at the option of the holder currently or contingent upon the occurrence of future events, their ownership has been classified as temporary equity. The remaining non-controlling interests have been classified in permanent equity as the non-controlling interests are either not redeemable at the option of the holder or the holder does not have the unilateral right to redeem their ownership interests.

Investment Fund Performance and Assets Under Management

For the quarter ended December 31, 2019, the Company's activist and merger arbitrage investment strategies (including the merger arbitrage focused UCITS fund) had, in the aggregate, positive results. The Company's healthcare royalty strategy's third investment fund is now fully committed and allocations are now being made to the strategy's fourth fund. Our private healthcare strategy continues to deploy capital, having made sixteen investments in its second fund by the end of the quarter ended December 31, 2019 and with a pipeline of opportunities ahead. The liquidation of certain multi-strategy hedge funds advised by the Company also continues.

As of December 31, 2019, the Company had assets under management of $11.4 billion.

Capability	Private Healthcare Investments	Healthcare Royalties	Activism	Merger Arbitrage	Sustainability	Other (a)
			(dollars in millions)			
AUM	$681	$3,261	$5,958	$590	$211	$709
Team						
Private Equity	✓	✓			✓	
Hedge Fund			✓	✓		
Managed Account		✓	✓	✓		
UCITS				✓		
Other						✓

(a) Other capabilities include private equity funds, legacy funds, and other trading strategies.

The Company's Invested Capital

The Company invests a significant portion of its capital base to help drive results and facilitate the growth of the Op Co and Asset Co business segments. Within Op Co, management allocates capital to three primary investment categories: (i) broker-dealer capital and related trading strategies; (ii) liquid alternative trading strategies; and (iii) public and private health care strategies. Broker-dealer capital and related trading strategies include capital investments in the Company's broker-dealers as well as securities finance and special purpose acquisition company trading strategies to grow liquidity and returns within operating businesses. Much of the Company's public and private healthcare strategies and liquid alternative trading strategies portfolios are invested alongside the Company's investment management clients. The Company's liquid alternative trading strategies include merger arbitrage and activist fund strategies. In addition, from time to time, the Company makes investments in private capital raising transactions of its investment banking clients.

The Company allocates capital to Asset Co's private investments. Asset Co's private investments include the Company's investment in Italian wireless broadband provider Linkem, private equity funds Formation8 and Eclipse and legacy real estate investments.

As of December 31, 2019, the Company's invested capital amounted to a net value of $717.6 million (supporting a long market value of $724.8 million), representing approximately 89% of Cowen's stockholders' equity presented in accordance with US GAAP. The table below presents the Company's invested equity capital by strategy and as a percentage of Cowen's stockholders' equity as of December 31, 2019. The total net values presented in the table below do not tie to Cowen's consolidated statement of financial condition as of December 31, 2019 because they represent only some of the line items in the accompanying consolidated statement of financial condition.

Strategy	Net Value	% of Stockholders' Equity
	(dollars in millions)	
Op Co		
Broker-dealer capital and related trading	$ 436.1	61%
Public and Private Healthcare	65.4	9%
Liquid Alternative Trading	79.1	11%
Asset Co		
Private Investments	126.5	18%
Private Real Estate	10.5	2%
Total	**717.6**	**89%**
Cowen Inc. Stockholders' Equity	$ 809.9	100%

The allocations shown in the table above will change over time.

Results of Operations

To provide comparative information of the Company's operating results for the periods presented, a discussion of Economic Income (Loss) (which is a non-GAAP measure) of our Op Co and Asset Co segments follows the discussion of our total consolidated US GAAP results. Economic Income (Loss) reflects, on a consistent basis for all periods presented in the Company's consolidated financial statements, income earned from the Company's investment funds and managed accounts and from its own invested capital. Economic Income (Loss) excludes certain adjustments required under US GAAP. See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations of the Company-Segment Analysis and Economic Income (Loss)," and Note 27 to the accompanying Company's consolidated financial statements, appearing elsewhere in this Form 10-K, for a reconciliation of Economic Income (Loss) to total Company US GAAP net income (loss).

Year Ended December 31, 2019 Compared with Year Ended December 31, 2018

	Consolidated Statements of Operations			
	Year Ended December 31,		Period to Period	
	2019	2018	$ Change	% Change
	(dollars in thousands)			
Revenues				
Investment banking	$ 375,025	$ 357,222	$ 17,803	5 %
Brokerage	402,747	413,582	(10,835)	(3)%
Management fees	32,608	29,658	2,950	10 %
Incentive income	1,547	3,117	(1,570)	(50)%
Interest and dividends	174,913	108,009	66,904	62 %
Reimbursement from affiliates	1,026	1,038	(12)	(1)%
Aircraft lease revenue	—	1,852	(1,852)	NM
Reinsurance premiums	46,335	38,096	8,239	22 %
Other revenues	5,433	4,504	929	21 %
Consolidated Funds revenues	9,809	9,838	(29)	— %
Total revenues	**1,049,443**	**966,916**	**82,527**	**9 %**
Interest and dividends expense	168,628	104,116	64,512	62 %
Total net revenues	**880,815**	**862,800**	**18,015**	**2 %**
Expenses				
Employee compensation and benefits	535,772	512,627	23,145	5 %
Reinsurance claims, commissions and amortization of deferred acquisition costs	44,070	41,086	2,984	7 %
Operating, general, administrative and other expenses	335,499	316,180	19,319	6 %
Depreciation and amortization expense	20,460	12,436	8,024	65 %
Goodwill impairment	4,100	—	4,100	NM
Consolidated Funds expenses	8,963	8,615	348	4 %
Total expenses	**948,864**	**890,944**	**57,920**	**7 %**
Other income (loss)				
Net gains (losses) on securities, derivatives and other investments	80,409	68,043	12,366	18 %
Gain/(loss) on debt extinguishment	—	(556)	556	NM
Consolidated Funds net gains (losses)	58,363	56,255	2,108	4 %
Total other income (loss)	**138,772**	**123,742**	**15,030**	**12 %**
Income (loss) before income taxes	**70,723**	**95,598**	**(24,875)**	**(26)%**
Income tax expense (benefit)	14,853	15,719	(866)	(6)%
Net income (loss)	**55,870**	**79,879**	**(24,009)**	**(30)%**
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	31,239	37,060	(5,821)	(16)%
Net income (loss) attributable to Cowen Inc.	**24,631**	**42,819**	**(18,188)**	**(42)%**
Preferred stock dividends	6,792	6,792	—	— %
Net income (loss) attributable to Cowen Inc. common stockholders	**$ 17,839**	**$ 36,027**	**$ (18,188)**	**(50)%**

Revenues

Investment Banking

Investment banking revenues increased $17.8 million to $375.0 million for the year ended December 31, 2019 compared with $357.2 million in the prior year period. During the year ended December 31, 2019, the Company completed 126 capital markets transactions, 48 strategic advisory transactions and 14 debt capital markets transactions. During the year ended December 31, 2018, the Company completed 114 underwriting transactions, 30 strategic advisory transactions and seven debt capital markets transactions.

Brokerage

Brokerage revenues decreased $10.9 million to $402.7 million for the year ended December 31, 2019 compared with $413.6 million in the prior year period. This was attributable to a decrease in institutional services and cross asset revenues partially offset by an increase in commission management revenue. Customer trading volumes across the industry (according to Bloomberg) decreased 4% for the year ended December 31, 2019 compared to the prior year period.

Management Fees

Management fees increased $2.9 million to $32.6 million for the year ended December 31, 2019 compared with $29.7 million in the prior year period. This increase is primarily related to the healthcare royalty business.

Incentive Income

Incentive income decreased $1.6 million to $1.5 million for the year ended December 31, 2019, compared with $3.1 million in the prior year period. This decrease is primarily related to the merger arbitrage business. Revenue recognition standards, effective January 1, 2018, require the Company to recognize the majority of incentive income allocated to the Company as net gains (losses) on securities, derivatives and other investments or as incentive income when the fees are no longer subject to reversal or are crystalized.

Interest and Dividends

Interest and dividends increased $66.9 million to $174.9 million for the year ended December 31, 2019 compared with $108.0 million in the prior year period. This is primarily attributable to securities financing activities. The increase in the securities finance activity is due to customer demand which has created greater matched book opportunities for both domestic and international securities.

Reimbursements from Affiliates

Reimbursements from affiliates remained fairly flat at $1.0 million for the year ended December 31, 2019 and the prior year period.

Aircraft Lease Revenue

Aircraft lease revenue ceased at the end of 2018 due to our exit from the aviation business.

Reinsurance Premiums

Reinsurance premiums increased $8.2 million to $46.3 million for the year ended December 31, 2019 compared with $38.1 million in the prior year period. This increase is due to a higher change in unearned premiums in 2019 compared to 2018 as well as higher premium volume from renewed policies in 2019 compared to 2018.

Other Revenues

Other revenues increased $0.9 million to $5.4 million for the year ended December 31, 2019 compared with $4.5 million in the prior year period.

Consolidated Funds Revenues

Consolidated Funds revenues decreased $0.1 million to $9.8 million for the year ended December 31, 2019 compared with $9.8 million in the prior year period. The decrease is due to earning less interest and dividends income from the Consolidated Funds.

Interest and Dividends Expenses

Interest and dividends expenses increased $64.5 million to $168.6 million for the year ended December 31, 2019 compared with $104.1 million in the prior year period. This is primarily attributable to securities finance activities. The increase in the securities finance activity is due to customer demand which has created greater matched book opportunities for both domestic and international securities.

Expenses

Employee Compensation and Benefits

Employee compensation and benefits expenses increased $23.2 million to $535.8 million for the year ended December 31, 2019 compared with $512.6 million in the prior year period. The increase is primarily due to a higher compensation and benefits accrual. The compensation to revenue ratio, including other income (loss), was 45% for the year ended December 31, 2019, compared with 47% in the prior year period.

Reinsurance Claims, Commissions and Amortization of Deferred Acquisition Costs

Reinsurance related expenses increased $3.0 million to $44.1 million for the year ended December 31, 2019 compared with $41.1 million in the prior year period. This increase is primarily due to additional reinsurance related expenses in 2019 from additional reinsurance policies, partially offset by a better claims experience in 2019 compared to 2018.

Operating, General, Administrative and Other Expenses

Operating, general, administrative and other expenses increased $19.3 million to $335.5 million for the year ended December 31, 2019 compared with $316.2 million in the prior year period. The increase is primarily related to increased professional fees and client servicing and business development costs.

Depreciation and Amortization Expenses

Depreciation and amortization expenses increased $8.1 million to $20.5 million for the year ended December 31, 2019 compared with $12.4 million in the prior year period. The increase in amortization expense primarily related to intangibles acquired through the Quarton acquisition in January 2019.

Goodwill Impairment

In conjunction with the Company's change in segments, during the second quarter of 2019, the Company restructured its historical investment management reporting unit between the Op Co's CIM division reporting unit and the Asset Co reporting unit. Based on the change in segments and restructuring of reporting units, the Company determined that it was necessary to perform a quantitative impairment test. The Company estimated the fair value of its reporting units immediately before and after the change in segments and restructuring of reporting units using the income and market approach, which involves estimates of future cash flows, discount rates, economic forecast and other assumptions, which are then used in the market approach (earnings and/or transactions multiples) and/or income approach (discounted cash flow method). During the second quarter of 2019, based on the results of the impairment analysis performed, the Company recognized a goodwill impairment in the amount of $4.1 million within the Asset Co reporting unit.

Consolidated Funds Expenses

Consolidated Funds expenses increased $0.4 million to $9.0 million for the year ended December 31, 2019 compared with $8.6 million in the prior year period. The increase is due to increased professional, advisory and other fees expenses in the Consolidated Funds.

Other Income (Loss)

Other income (loss) increased $15.1 million to $138.8 million for the year ended December 31, 2019 compared with $123.7 million in the prior year period. The increase primarily relates to an increase in performance in the Company's own invested capital. The gains and losses shown under Consolidated Funds reflect the consolidated total performance for such investment funds, and the portion of those gains or losses that are attributable to other investors is allocated to non-controlling interests.

Income Taxes

Income tax expense decreased $0.9 million to $14.9 million for the year ended December 31, 2019 compared with an income tax expense of $15.7 million in the prior year period. This change is primarily attributable to the change in the Company's income before income taxes and non-deductible expenses for the respective periods.

Net Income (Loss) Attributable to Non-controlling Interests

Net income (loss) attributable to non-controlling interests decreased $5.9 million to $31.2 million for the year ended December 31, 2019 compared with $37.1 million in the prior year period. The decrease was primarily the result of a decrease in income earned by the Consolidated Funds in the current year period. Non-controlling interests represent the pro rata share of the income or loss of the non-wholly owned consolidated entities attributable to the other owners of such entities.

Preferred Stock Dividends

On May 19, 2015, the Company completed its offering of 120,750 shares of the Company's 5.625% Series A cumulative perpetual convertible preferred stock. Each share of the Series A Convertible Preferred Stock is entitled to dividends at a rate of 5.625% per annum. The Company may, at its option, pay dividends in cash, common stock or a combination thereof.

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

	Consolidated Statements of Operations			
	Year Ended December 31,		Period to Period	
	2018	2017	$ Change	% Change
	(dollars in thousands)			
Revenues				
Investment banking	$ 357,222	$ 223,614	$ 133,608	60 %
Brokerage	413,582	293,610	119,972	41 %
Management fees	29,658	33,245	(3,587)	(11)%
Incentive income	3,117	5,383	(2,266)	(42)%
Interest and dividends	108,009	49,440	58,569	118 %
Reimbursement from affiliates	1,038	2,860	(1,822)	(64)%
Aircraft lease revenue	1,852	3,751	(1,899)	(51)%
Reinsurance premiums	38,096	30,996	7,100	23 %
Other revenues	4,504	8,561	(4,057)	(47)%
Consolidated Funds revenues	9,838	7,321	2,517	34 %
Total revenues	**966,916**	**658,781**	**308,135**	**47 %**
Interest and dividends expense	104,116	60,949	43,167	71 %
Total net revenues	**862,800**	**597,832**	**264,968**	**44 %**
Expenses				
Employee compensation and benefits	512,627	404,087	108,540	27 %
Reinsurance claims, commissions and amortization of deferred acquisition costs	41,086	30,486	10,600	35 %
Depreciation and amortization	12,436	13,078	(642)	(5)%
General, administrative and other expenses	316,180	227,709	88,471	39 %
Restructuring costs	—	8,763	(8,763)	NM
Consolidated Funds expenses	8,615	12,526	(3,911)	(31)%
Total expenses	**890,944**	**696,649**	**194,295**	**28 %**
Other income (loss)				
Net gain (loss) on securities, derivatives and other investments	68,043	76,179	(8,136)	(11)%
Bargain purchase gain, net of tax	—	6,914	(6,914)	NM
Gain/(loss) on debt extinguishment	(556)	(16,039)	15,483	(97)%
Consolidated Funds net gains (losses)	56,255	38,725	17,530	45 %
Total other income (loss)	**123,742**	**105,779**	**17,963**	**17 %**
Income (loss) before income taxes	**95,598**	**6,962**	**88,636**	**(1,273)%**
Income tax expense (benefit)	15,719	44,053	(28,334)	64 %
Net income (loss)	**79,879**	**(37,091)**	**116,970**	**315 %**
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	37,060	23,791	13,269	56 %
Net income (loss) attributable to Cowen Inc.	42,819	(60,882)	103,701	170 %
Preferred stock dividends	6,792	6,792	—	— %
Net income (loss) attributable to Cowen Inc. common stockholders	**$ 36,027**	**$ (67,674)**	**$ 103,701**	**153 %**

Revenues

Investment Banking

Investment banking revenues increased $133.6 million to $357.2 million for the year ended December 31, 2018 compared with $223.6 million in the prior year period. During the year ended December 31, 2018, the Company completed 114 underwriting transactions, 30 strategic advisory transactions and seven debt capital market transactions. During the year ended December 31, 2017, the Company completed 103 underwriting transactions, 16 strategic advisory transactions and two debt capital market transactions. The implied average underwriting fee per transaction was 21.1% greater for the year ended December 31, 2018 as compared to the prior year period. The increase is also related to adoption of the new revenue recognition standard, effective January 1, 2018, which a) requires underwriting expenses to be shown within expenses rather than net of associated investment banking revenues and b) expenses reimbursed from client to be shown gross in investment banking revenues rather than net in their respective expense category.

Brokerage

Brokerage revenues increased $120.0 million to $413.6 million for the year ended December 31, 2018 compared with $293.6 million in the prior year period. This was attributable to an increase in revenues due to the acquisition of Convergex Group in June 2017 and increased revenue in our options and electronic trading businesses. Customer trading volumes across the industry (according to Bloomberg) increased 12% for the year ended December 31, 2018 compared to the prior year period.

Management Fees

Management fees decreased $3.5 million to $29.7 million for the year ended December 31, 2018 compared with $33.2 million in the prior year period. This decrease in management fees was primarily related to a decrease in management fees from the healthcare royalty business and as a result of the company's exit of two investment management strategies, one in the fourth quarter of 2017 and the other in the first quarter of 2018.

Incentive Income

Incentive income decreased $2.3 million to $3.1 million for the year ended December 31, 2018, compared with $5.4 million in the prior year period. This decrease was related to the new revenue recognition standards, effective January 1, 2018, for which the Company now recognizes the majority of incentive income allocated to the Company as net gains (losses) on securities, derivatives and other investments.

Interest and Dividends

Interest and dividends increased $58.6 million to $108.0 million for the year ended December 31, 2018 compared with $49.4 million in the prior year period. This was primarily attributable to securities financing activities related to the June 2017 acquisition of Convergex Group.

Reimbursements from Affiliates

Reimbursements from affiliates decreased $1.9 million to $1.0 million for the year ended December 31, 2018 compared with $2.9 million in the prior year period. The decrease is primarily related to a decrease in reimbursements from the activist business.

Aircraft Lease Revenues

Aircraft lease revenues decreased $1.9 million to $1.9 million for the year ended December 31, 2018 compared to $3.8 million in the prior year period. This decrease was related to the sale of one plane during the third quarter of 2017 and several more planes sold during the fourth quarter of 2018.

Reinsurance Premiums

Reinsurance premiums increased $7.1 million to $38.1 million for the year ended December 31, 2018 compared with $31.0 million in the prior year period. This increase reflects premiums earned in 2018 from additional reinsurance policies in force compared to 2017 as well as the change in unearned premiums during 2018 from policies that were in force at the end of 2017.

Other Revenues

Other revenues decreased $4.1 million to $4.5 million for the year ended December 31, 2018 compared with $8.6 million in the prior year period. This decrease is primarily related to a gain on the sale of one of the Company's planes in the third quarter of 2017.

Consolidated Funds Revenues

Consolidated Funds revenues increased $2.5 million to $9.8 million for the year ended December 31, 2018 compared with $7.3 million in the prior year period. The increase is due to interest and dividends income from the Consolidated Funds.

Interest and Dividends Expenses

Interest and dividends expenses increased $43.2 million to $104.1 million for the year ended December 31, 2018 compared with $60.9 million in the prior year period. This was primarily attributable to securities finance activities related to the June 2017 acquisition of Convergex Group.

Expenses

Employee Compensation and Benefits

Employee compensation and benefits expenses increased $108.5 million to $512.6 million for the year ended December 31, 2018 compared with $404.1 million in the prior year period. The increase is primarily due to $308.1 million higher total revenues and $17.9 million higher other income (loss) during 2018 as compared to 2017 resulting in a higher compensation and benefits accrual. The compensation to revenue ratio, including other income (loss), was 47% for the year ended December 31, 2018, compared with 53% in the prior year period.

Reinsurance Claims Commissions

Reinsurance related expenses increased $10.6 million to $41.1 million for the year ended December 31, 2018 compared with $30.5 million in the prior year period. This increase reflects reinsurance-related expenses incurred from additional policies in force compared to 2017 as well as the occurrence of several highly unlikely events that led to higher claims in 2018 such as widespread wildfires in California, extreme flash floods in Australia and devastating floods in Germany.

Operating, General, Administrative and Other Expenses

Operating, general, administrative and other expenses increased $88.5 million to $316.2 million for the year ended December 31, 2018 compared with $227.7 million in the prior year period. The increase is primarily related to higher brokerage and trade execution costs, due to higher brokerage revenue, increased marketing and business development expenses and increased occupancy costs, which are mostly related to the acquisition of Convergex Group in June 2017.The increase is also related to adoption of the new revenue recognition standard, effective January 1, 2018, which a) requires underwriting expenses to be shown within expenses rather than net of associated investment banking revenues and b) expenses reimbursed from client to be shown gross in investment banking revenues rather than net in their respective expense category.

Depreciation and Amortization Expenses

Depreciation and amortization expenses decreased $0.7 million to $12.4 million for the year ended December 31, 2018 compared with $13.1 million in the prior year period. There was a decrease in amortization from certain intangibles which have been fully amortized partially offset by an increase in depreciable fixed assets related to the acquisition of Convergex Group in June 2017.

Restructuring Costs

Restructuring costs expenses were $8.8 million for the year ended December 31, 2017 and there were none in the current period. In conjunction with the integration of the acquired businesses of Convergex Group, the Company evaluated the combined investment bank businesses and operations and incurred integration and restructuring costs, which primarily related to exit and disposal costs, discontinuation of redundant technology services and severance costs.

Consolidated Funds Expenses

Consolidated Funds expenses decreased $3.9 million to $8.6 million for the year ended December 31, 2018 compared with $12.5 million in the prior year period. The decrease is due to decreased interest and dividends expense in the Consolidated Funds.

Other Income (Loss)

Other income (loss) increased $17.9 million to $123.7 million for the year ended December 31, 2018 compared with $105.8 million in the prior year period. The increase primarily relates to an increase in performance in the Company's own invested capital offset only partially by the bargain purchase gain related to the acquisition of Convergex Group in June 2017. The gains and losses shown under Consolidated Funds reflect the consolidated total performance for such investment funds, and the portion of those gains or losses that are attributable to other investors is allocated to non-controlling interests.

Income Taxes

Income tax expense decreased $28.4 million to $15.7 million for the year ended December 31, 2018 compared with an income tax expense of $44.1 million in the prior year period. This decrease in expense is primarily attributable to the re-measurement in 2017 of the Company's deferred tax assets using the reduced statutory Federal tax rate of the federal tax reform enacted in 2017.

Net Income (Loss) Attributable to Non-controlling Interests

Net income (loss) attributable to non-controlling interests increased $13.3 million to $37.1 million for the year ended December 31, 2018 compared with $23.8 million in the prior year period. The increase was primarily the result of an increase in income earned by the merger arbitrage Consolidated Fund in the current year period. Non-controlling interests represent the pro rata share of the income or loss of the non-wholly owned consolidated entities attributable to the other owners of such entities.

Preferred Stock Dividends

On May 19, 2015, the Company completed its offering of 120,750 shares of the Company's 5.625% Series A cumulative perpetual convertible preferred stock. Each share of the Series A Convertible Preferred Stock is entitled to dividends at a rate of 5.625% per annum. The Company may, at its option, pay dividends in cash, common stock or a combination thereof.

Segment Analysis and Economic Income (Loss)

Segments

The Company conducts its operations through two segments: Op Co and Asset Co. For a more detailed discussion regarding the Company's recent change in segments, see Part I Item 1. Business "Overview" section.

Economic Income (Loss)

The performance measure used by the Company for each segment is Economic Income (Loss), which management uses to evaluate the financial performance of and to make operating decisions for the Company as a whole and each segment. Accordingly, management assesses its business by analyzing the performance of each segment and believes that investors should review the same performance measure that it uses to analyze its segment and business performance. In addition, management believes that Economic Income (Loss) is helpful to gain an understanding of its segment results of operations because it reflects such results on a consistent basis for all periods presented.

Our Economic Income (Loss) may not be comparable to similarly titled measures used by other companies. We use Economic Income (Loss) as a measure of each segment's operating performance, not as a measure of liquidity. Economic Income (Loss) should not be considered in isolation or as a substitute for operating income, net income, operating cash flows, investing and financing activities, or other income or cash flow statement data prepared in accordance with US GAAP. As a result of the adjustments made to arrive at Economic Income (Loss), Economic Income (Loss) has limitations in that it does not take into account certain items included or excluded under US GAAP, including our Consolidated Funds. Economic Income (Loss) is considered by management as a supplemental measure to the US GAAP results to provide a more complete understanding of each segment's performance as measured by management. For a reconciliation of Economic Income (Loss) to US GAAP net income (loss) for the periods presented and additional information regarding the reconciling adjustments discussed above, see Note 27 to the Company's consolidated financial statements included elsewhere in this Form 10-K.

In general, Economic Income (Loss) is a pre-tax measure that (i) eliminates the impact of consolidation for Consolidated Funds and excludes (ii) goodwill and intangible impairment (iii) certain other transaction-related adjustments and/or reorganization expenses and (iv) certain costs associated with debt. Economic Operating Income (Loss) represents Economic Income (Loss) before depreciation and amortization expenses. In addition, Economic Income (Loss) revenues include investment income that represents the income the Company has earned in investing its own capital, including realized and unrealized gains and losses, interest and dividends, net of associated investment related expenses. For US GAAP purposes, these items are included in each of their respective line items. Economic Income (Loss) revenues also include management fees, incentive income and investment income earned through the Company's investment as a general partner in certain real estate entities and the Company's investment in the activist business and certain investment funds. For US GAAP purposes, all of these items, are recorded in other income (loss). Economic Income (Loss) recognizes (a) incentive fees during periods when the fees are not yet crystallized for US GAAP reporting, (b) start-up costs of a fund over the expected life of the fund and (c) retainer fees, relating to investment banking activities, earned during the period that would otherwise be deferred until closing for US GAAP reporting. In addition, Economic Income (Loss) expenses are reduced by reimbursement from affiliates, which for US GAAP purposes is presented gross as part of revenue.

Economic Income (Loss) Revenues

The Company's principal sources of Economic Income (Loss) revenues are derived from activities in the following business segments:

The Op Co segment generates revenue through five principal sources: investment banking revenue, brokerage revenue, management fees, incentive income and investment income from the Company's own capital.

The Asset Co segment generates revenue through three principal sources: management fees, incentive income and investment income from the Company's own capital.

Economic Income (Loss) Expenses

The Company's Economic Income (Loss) expenses consist of non-interest expenses and interest expense. Non-interest expenses consist of compensation and benefits and non-compensation expenses (fixed and variable), less reimbursement from affiliates.

Non-controlling Interests

Non-controlling interests represent the pro rata share of the income or loss of the non-wholly owned consolidated entities attributable to the partners of such entities.

Year Ended December 31, 2019 Compared with Year Ended December 31, 2018

	Year Ended December 31,						Total Period-to-Period	
	2019			2018				
	Operating Company	Asset Company	Total	Operating Company	Asset Company	Total	$ Change	% Change
	(dollars in thousands)							
Economic Income Revenues								
Investment banking	$ 352,192	$ —	**$ 352,192**	$ 329,061	$ —	**$ 329,061**	$ 23,131	7 %
Brokerage	440,413	—	**440,413**	452,299	—	**452,299**	(11,886)	(3)%
Management fees	43,698	1,976	**45,674**	43,466	5,709	**49,175**	(3,501)	(7)%
Incentive income (loss)	45,041	1,152	**46,193**	16,851	6,896	**23,747**	22,446	95 %
Investment income (loss)	51,344	3,111	**54,455**	53,593	2,753	**56,346**	(1,891)	(3)%
Other income (loss)	5,785	58	**5,843**	(1,619)	451	**(1,168)**	7,011	(600)%
Total economic income revenues	**938,473**	**6,297**	**944,770**	**893,651**	**15,809**	**909,460**	**35,310**	**4 %**
Interest expense	22,576	5,449	**28,025**	17,489	5,524	**23,013**	**5,012**	22 %
Total net revenues	**$ 915,897**	**$ 848**	**$ 916,745**	**$ 876,162**	**$ 10,285**	**$ 886,447**	**$ 30,298**	**3 %**

Economic Income (Loss)

Total Economic Operating Income (Loss) (which is Economic Income (Loss) before depreciation and amortization) was $69.1 million for the year ended December 31, 2019, a decrease of $11.8 million compared to Economic Operating Income (Loss) of $80.9 million in the prior year period. Total Economic Income (Loss) was $48.6 million for the year ended December 31, 2019, a decrease of $20.7 million compared to Economic Income (Loss) of $69.3 million in the prior year period.

Total Economic Income (Loss) revenues were $944.8 million for the year ended December 31, 2019, an increase of $35.3 million compared to Economic Income (Loss) revenues of $909.5 million in the prior year period. This was primarily related to an increase in investment banking and incentive income offset partially by a decrease in brokerage income.

Operating Company Segment Revenues

The Op Co segment Economic Income (Loss) revenues were $938.5 million for the year ended December 31, 2019, an increase of $44.8 million compared to Economic Income (Loss) revenues of $893.7 million in the prior year period.

Investment Banking. Investment banking revenues increased $23.1 million to $352.2 million for the year ended December 31, 2019 compared with $329.1 million in the prior year period. During the year ended December 31, 2019, the Company completed 126 capital markets transactions, 48 strategic advisory transactions and 14 debt capital markets transactions. During the year ended December 31, 2018, the Company completed 114 underwriting transactions, 30 strategic advisory transactions and seven debt capital markets transactions.

Brokerage. Brokerage revenues decreased $11.9 million to $440.4 million for the year ended December 31, 2019, compared with $452.3 million in the prior year period. This was attributable to a decrease in institutional services and cross asset revenues partially offset by an increase in commission management revenue. Customer trading volumes across the industry (according to Bloomberg) decreased 4% for the year ended December 31, 2019 compared to the prior year period.

Management Fees. Management fees for the segment increased $0.2 million to $43.7 million for the year ended December 31, 2019 compared with $43.5 million in the prior year period. This increase in management fees was primarily related to an increase from our healthcare royalty business partially offset by a decrease in management fees from our activist business.

Incentive Income (Loss). Incentive income for the segment increased $28.1 million to $45.0 million for the year ended December 31, 2019 compared with $16.9 million in the prior year period. This increase was related to an increase in performance fees from our activist and healthcare investments businesses.

Investment Income (Loss). Investment income for the segment decreased $2.3 million to $51.3 million for the year ended December 31, 2019 compared with $53.6 million in the prior year period. The decrease primarily relates to a decrease in performance of the Company's own invested capital.

Other Income (Loss). Other income (loss) for the segment increased $7.4 million to $5.8 million for the year ended December 31, 2019 compared with a loss of $1.6 million in the prior year period. The increase is due to higher premiums and lower claims and claims related reserves from our reinsurance business through 2019 compared to the same period in 2018.

Asset Company Segment Revenues

The Asset Company segment Economic Income (Loss) revenues were $6.3 million for the year ended December 31, 2019, a decrease of $9.5 million compared with Economic Income (Loss) revenues of $15.8 million in the prior year.

Management Fees. Management fees for the segment decreased $3.7 million to $2.0 million for the year ended December 31, 2019 compared with $5.7 million in the prior year period. This decrease in management fees was primarily related to a decrease in management fees from the real estate investments.

Incentive Income (Loss). Incentive income for the segment decreased $5.7 million to $1.2 million for the year ended December 31, 2019 compared with income of $6.9 million in the prior year period. This decrease was related to a decrease in performance fees from the real estate investments and was partially offset by an increase in performance fees from the multi-strategy business.

Investment Income (Loss). Investment income for the segment increased $0.3 million to $3.1 million for the year ended December 31, 2019, compared with income of $2.8 million in the prior year period. The increase primarily relates to an increase in performance of the Company's own invested capital.

Other Income (Loss). Other income (loss) for the segment decreased $0.4 million to $0.1 million for the year ended December 31, 2019, compared with $0.5 million in the prior year period.

Interest expense

Interest expense increased $5.0 million to $28.0 million for the year ended December 31, 2019 compared with $23.0 million in the prior year period. Interest expense primarily relates to debt issued. The increase is primarily related to new debt issued in June of 2018 and May of 2019.

Non-Interest Expenses

Non-interest expenses. Total non-interest expenses increased $51.1 million to $856.5 million for the year ended December 31, 2019, compared with $805.4 million in the prior year period.

Compensation and benefits expenses. Compensation and benefits expenses, included within non-interest expenses, increased $28.0 million to $537.5 million for the year ended December 31, 2019 compared with $509.6 million in the prior year period. The increase is due to a slightly higher compensation to revenue ratio which was 57% for the year ended December 31, 2019 compared with 56% in the prior year period.

Non-compensation Expenses—Fixed. Fixed non-compensation expenses, included within non-interest expenses, increased $6.2 million to $146.7 million for the year ended December 31, 2019 compared with $140.5 million in the prior year period. The increase is primarily related to increased professional, advisory and other fees offset partially by lower expenses from equity investments.

The following table shows the components of the non-compensation expenses—fixed, for the year ended December 31, 2019 and 2018:

	Year Ended December 31,		Period-to-Period	
	2019	2018	$ Change	% Change
	(dollars in thousands)			
Non-compensation expenses—fixed:				
Communications	$ 30,097	$ 29,325	$ 772	3 %
Professional, advisory and other fees	27,975	22,647	5,328	24 %
Occupancy and equipment	38,334	39,560	(1,226)	(3)%
Service fees	23,647	20,034	3,613	18 %
Expenses from equity investments	7,690	12,001	(4,311)	(36)%
Reimbursement from affiliates	(1,130)	(1,304)	174	(13)%
Other	20,059	18,248	1,811	10 %
Total	**$ 146,672**	**$ 140,511**	**$ 6,161**	**4 %**

Depreciation and amortization expenses. Depreciation and amortization expenses increased to $20.4 million for the year ended December 31, 2019 compared with $11.6 million in the prior year period. The increase in amortization expense primarily related to intangibles acquired through the Quarton acquisition in January 2019.

Non-compensation Expenses—Variable. Variable non-compensation expenses, included within non-interest expenses, which primarily are comprised of expenses that are incurred as a direct result of the processing and soliciting of revenue generating activities, increased $8.3 million to $151.9 million for the year ended December 31, 2019 compared with $143.6 million in the prior year period. The increase is related to increased marketing and business development costs offset partially by lower brokerage and trade execution costs.

The following table shows the components of the non-compensation expenses—variable, for the year ended December 31, 2019 and 2018:

	Year Ended December 31,		Period-to-Period	
	2019	2018	$ Change	% Change
	(dollars in thousands)			
Non-compensation expenses—Variable:				
Brokerage and trade execution costs	$ 102,336	$ 106,115	$ (3,779)	(4)%
HealthCare Royalty Partners syndication costs	264	529	(265)	(50)%
Expenses related to Luxembourg companies	2,631	3,831	(1,200)	(31)%
Marketing and business development	41,305	31,255	10,050	32 %
Other	5,330	1,919	3,411	178 %
Total	**$ 151,866**	**$ 143,649**	**$ 8,217**	**6 %**

Non-Controlling Interests

Net income (loss) attributable to non-controlling interests decreased by $0.2 to $4.8 million for the year ended December 31, 2019 compared with $5.0 million in the prior year period. Non-controlling interest represents the portion of the net income or loss attributable to certain non-wholly owned subsidiaries that is allocated to our partners in those subsidiaries.

Preferred Stock Dividends

On May 19, 2015, the Company completed its offering of 120,750 shares of the Company's 5.625% Series A cumulative perpetual convertible preferred stock. Each share of the Series A Convertible Preferred Stock is entitled to dividends at a rate of 5.625% per annum. The Company may, at its option, pay dividends in cash, common stock or a combination thereof.

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

	Year Ended December 31, 2018			Year Ended December 31, 2017			Total Period-to-Period	
	Operating Company	Asset Company	Total	Operating Company	Asset Company	Total	$ Change	% Change
	(dollars in thousands)							
Economic Income Revenues								
Investment banking	$ 329,061	$ —	$ 329,061	$ 223,614	$ —	$ 223,614	$ 105,447	47 %
Brokerage	452,299	—	452,299	312,780	—	312,780	139,519	45 %
Management fees	43,466	5,709	49,175	45,007	10,380	55,387	(6,212)	(11)%
Incentive income (loss)	16,851	6,896	23,747	17,872	8,156	26,028	(2,281)	(9)%
Investment income (loss)	53,593	2,753	56,346	7,204	37,938	45,142	11,204	25 %
Other income (loss)	(1,619)	451	(1,168)	3,307	(76)	3,231	(4,399)	(136)%
Total economic income revenues	**893,651**	**15,809**	**909,460**	**609,784**	**56,398**	**666,182**	**243,278**	**37 %**
Interest Expense	17,489	5,524	23,013	13,599	5,289	18,888	4,125	22 %
Total net revenues	**$ 876,162**	**$ 10,285**	**$ 886,447**	**$ 596,185**	**$ 51,109**	**$ 647,294**	**$ 239,153**	**37 %**

Economic Income (Loss)

Total Economic Operating Income (Loss) (which is Economic Income (Loss) before depreciation and amortization) was $80.9 million for the year ended December 31, 2018, an increase of $60.3 million compared to Economic Operating Income (Loss) of $20.6 million in the prior year period. Total Economic Income (Loss) was $76.1 million for the year ended December 31, 2018, an increase of $60.3 million compared to Economic Income (Loss) of $15.8 million in the prior year period.

Total Economic Income (Loss) revenues were $909.5 million for the year ended December 31, 2018, an increase of $243.3 million compared to Economic Income (Loss) revenues of $666.2 million in the prior year period. This was primarily related to an increase in investment banking and brokerage activity.

Operating Company Segment Revenues

The Op Co Segment Economic Income (Loss) revenues were $893.7 million for the year ended December 31, 2018, an increase of $283.9 million compared to Economic Income (Loss) revenues of $609.8 million in the prior year period.

Investment Banking. Investment banking revenues increased $105.5 million to $329.1 million for the year ended December 31, 2018 compared with $223.6 million in the prior year period. During the year ended December 31, 2018, the Company completed 114 underwriting transactions, 30 strategic advisory transactions and seven debt capital markets transactions. During the year ended December 31, 2017, the Company completed 103 underwriting transactions, 16 strategic advisory transactions and two debt capital markets transactions. The implied average underwriting fee per transaction was 21.1% greater for the year ended December 31, 2018 as compared to the prior year period.

Brokerage. Brokerage revenues increased $139.5 million to $452.3 million for the year ended December 31, 2018, compared with $312.8 million in the prior year period. This was attributable to an increase in revenues due to the acquisition of Convergex Group in June 2017 and increased revenue in our options and electronic trading businesses. Customer trading volumes across the industry (according to Bloomberg) increased 12% for the year ended December 31, 2018 compared to the prior year period.

Management Fees. Management fees for the segment decreased $1.5 million to $43.5 million for the year ended December 31, 2018 compared with $45.0 million in the prior year period. This decrease in management fees was primarily related to a decrease in management fees from the activist business and healthcare royalty business which was only partially offset with an increase in management fees from our private healthcare business.

Incentive Income (Loss). Incentive income for the segment decreased $1.0 million to $16.9 million for the year ended December 31, 2018 compared with $17.9 million in the prior year period. This decrease was related to a decrease in performance fees from the activist business offset almost completely by an increase in performance fees in our private healthcare and merger arbitrage businesses.

Investment Income (Loss). Investment income for the segment increased $46.4 million to $53.6 million for the year ended December 31, 2018 compared with $7.2 million in the prior year period. The increase primarily relates to an increase in performance of the Company's own invested capital.

Other Income (Loss). Other income (loss) for the segment decreased $4.9 million to a loss of $1.6 million for the year ended December 31, 2018 compared with income of $3.3 million in the prior year period. The decrease primarily relates to a decrease in income from the Company's reinsurance business.

Asset Company Segment Revenues

Asset Co segment Economic Income (Loss) revenues were $15.8 million for the year ended December 31, 2018, a decrease of $40.6 million compared with Economic Income (Loss) revenues of $56.4 million in the prior year. .

Management Fees. Management fees for the segment decreased $4.6 million to $5.8 million for the year ended December 31, 2018 compared with $10.4 million in the prior year period. This decrease in management fees was primarily related to the company's exit of two investment management strategies, one in the fourth quarter of 2017 and the other in the first quarter of 2018. .

Incentive Income (Loss).. Incentive income for the segment decreased $1.3 million to $6.9 million for the year ended December 31, 2018 compared with $8.2 million in the prior year period. This decrease was related to a net payout related to the performance of certain multi-strategy assets.

Investment Income (Loss). Investment income for the segment decreased $35.1 million to $2.8 million for the year ended December 31, 2018, compared with $37.9 million in the prior year period. The decrease primarily relates to a decrease in performance of the Company's own invested capital.

Other Income (Loss). Other income (loss) for the segment increased $0.6 million to $0.5 million for the year ended December 31, 2018, compared with a loss of $0.1 million in the prior year period.

Interest expense

Interest expense increased $4.1 million to $23.0 million for the year ended December 31, 2018 compared with $18.9 million in the prior year period. Interest expense primarily relates to debt issued. The increase is primarily related to new debt issued in June of 2018.

Non-Interest Expenses

Non-interest expenses. Total non-interest expenses increased $180.1 million to $805.4 million for the year ended December 31, 2018, compared with $625.3 million in the prior year period.

Compensation and benefits expenses. Compensation and benefits expenses, included within non-interest expenses, increased $121.6 million to $509.6 million for the year ended December 31, 2018 compared with $388.0 million in the prior year period. The increase is due to $243.3 million higher revenues during 2018 as compared to 2017 which resulted in a higher compensation and benefits accrual. The compensation to revenue ratio was 56% for the year ended December 31, 2018 compared with 58% in the prior year period.

Non-compensation Expenses—Fixed. Fixed non-compensation expenses, included within non-interest expenses, increased $20.4 million to $140.5 million for the year ended December 31, 2018 compared with $120.1 million in the prior year period. The increase is primarily related to the acquisition of Convergex Group in June 2017.

The following table shows the components of the non-compensation expenses—fixed, for the year ended December 31, 2018 and 2017:

	Year Ended December 31,		Period-to-Period	
	2018	2017	$ Change	% Change
	(dollars in thousands)			
Non-compensation expenses—fixed:				
Communications	$ 29,325	$ 23,378	$ 5,947	25 %
Professional, advisory and other fees	22,647	20,944	1,703	8 %
Occupancy and equipment	39,560	33,928	5,632	17 %
Service fees	20,034	14,896	5,138	34 %
Expenses from equity investments	12,002	11,156	846	8 %
Reimbursement from affiliates	(1,304)	(2,033)	729	(36)%
Other	18,248	17,819	429	2 %
Total	**$ 140,512**	**$ 120,088**	**$ 20,424**	**17 %**

Depreciation and amortization expenses. Depreciation and amortization expenses remained flat at $11.6 million for the year ended December 31, 2018 and the prior year period. This is due to an increase in depreciable fixed assets related to the acquisition of Convergex Group in June 2017, offset by a decrease in amortization from certain intangibles which have been fully amortized.

Non-compensation Expenses—Variable. Variable non-compensation expenses, included within non-interest expenses, which primarily are comprised of expenses that are incurred as a direct result of the processing and soliciting of revenue generating activities, increased $37.8 million to $143.6 million for the year ended December 31, 2018 compared with $105.8 million in the prior year period. The increase is primarily related to higher brokerage and trade execution costs, related to the acquisition of Convergex Group in June 2017.

The following table shows the components of the non-compensation expenses—variable, for the year ended December 31, 2018 and 2017:

	Year Ended December 31,		Period-to-Period	
	2018	2017	$ Change	% Change
	(dollars in thousands)			
Non-compensation expenses—Variable:				
Brokerage and trade execution costs	$ 106,115	$ 73,133	$ 32,982	45 %
HealthCare Royalty Partners syndication costs	529	528	1	— %
Expenses related to Luxembourg companies	3,831	3,279	552	17 %
Marketing and business development	31,255	27,336	3,919	14 %
Other	1,919	1,510	409	27 %
Total	**$ 143,649**	**$ 105,786**	**$ 37,863**	**36 %**

Reimbursement from Affiliates. Reimbursements from affiliates, included within non-interest expenses, which relate to the investment management segment decreased $0.7 million to $1.3 million for the year ended December 31, 2018 compared to $2.0 million in the prior year period.

Non-Controlling Interests

Net income (loss) attributable to non-controlling interests decreased by $1.1 million to $5.0 million for the year ended December 31, 2018 compared with $6.1 million in the prior year period. Non-Controlling interest represents the portion of the net income or loss attributable to certain non-wholly owned subsidiaries that is allocated to our partners in those subsidiaries.

Preferred Stock Dividends

On May 19, 2015, the Company completed its offering of 120,750 shares of the Company's 5.625% Series A cumulative perpetual convertible preferred stock. Each share of the Series A Convertible Preferred Stock is entitled to dividends at a rate of 5.625% per annum. The Company may, at its option, pay dividends in cash, common stock or a combination thereof.

Liquidity and Capital Resources

We continually monitor our liquidity position. The working capital needs of the Company's business have been met through current levels of equity capital, current cash and cash equivalents, and anticipated cash generated from our operating activities, including management fees, incentive income, returns on the Company's own capital, investment banking fees and brokerage commissions. The Company expects that its primary working capital liquidity needs over the next twelve months will be:

- pay our operating expenses, primarily consisting of compensation and benefits, interest on debt and other general and administrative expenses; and
- provide capital to facilitate the growth of our existing business.

Based on our historical results, management's experience, our current business strategy and current assets under management, the Company believes that its existing cash resources will be sufficient to meet its anticipated working capital and capital expenditure requirements for at least the next twelve months. Our cash reserves include cash, cash equivalents and assets readily convertible into cash such as our securities held in inventory. Securities inventories are stated at fair value and are generally readily marketable. As of December 31, 2019, we had cash and cash equivalents of $301.1 million and net liquid investment assets of $542.3 million, which includes cash and cash equivalents and short-term investments held by foreign subsidiaries as of December 31, 2019 of $43.7 million. The Company continues to permanently reinvest the capital and accumulated earnings of its subsidiaries in the United Kingdom, Germany, Switzerland, Canada, South Africa and Hong Kong.

The timing of cash bonus payments to our employees may significantly affect our cash position and liquidity from period to period. While our employees are generally paid salaries semi-monthly during the year, cash bonus payments, which can make up a significant portion of total compensation, are generally paid once a year by March 15th.

As a clearing member firm providing services to certain of our brokerage customers, we are subject to cash deposit requirements with clearing organizations, brokers and banks that may be large in relation to total liquid assets and may fluctuate significantly based upon the nature and size of customers' trading activity and market volatility. At December 31, 2019, we had security deposits totaling $91.8 million with clearing organizations in the U.S. for the settlement of equity trades. In the normal course of our U.S. settlement activities, we may also need to temporarily finance customer securities positions from short settlements or delivery failures.

Unfunded commitments

The following table summarizes unfunded commitments as of December 31, 2019:

Entity	Unfunded Commitments		Commitment term
	(dollars in thousands)		
HealthCare Royalty Partners funds (a)	$	7,605	5 years
Eclipse Ventures Fund I, L.P. (formerly Formation8 Partners Hardware Fund I, L.P.)	$	88	5 years
Lagunita Biosciences, LLC	$	500	4 years
Eclipse Fund II, L.P.	$	180	6 years
Eclipse Continuity Fund I, L.P.	$	152	7 years
Cowen Healthcare Investments II LP	$	3,406	2 years
Cowen Healthcare Investments III LP	$	8,602	7 years
Cowen Sustainable Investments I LP	$	25,000	10 years

(a) The Company is a limited partner of the HealthCare Royalty Partners funds (which are managed by Healthcare Royalty Management) and is a member of HealthCare Royalty Partners General Partners. The Company will make its pro-rata investment in the HealthCare Royalty Partners funds along with the other limited partners.

Due to the nature of the securities business and our role as a market-maker and execution agent, the amount of our cash and short-term investments, as well as operating cash flow, may vary considerably due to a number of factors, including the dollar value of our positions as principal, whether we are net buyers or sellers of securities, the dollar volume of executions by our customers and clearing house requirements, among others. Certain regulatory requirements constrain the use of a portion of our liquid assets for financing, investing or operating activities. Similarly, due to the nature of our business lines, the capital necessary to maintain current operations and our current funding needs subject our cash and cash equivalents to different requirements and uses.

Preferred Stock and Purchase of Capped Call Option

On May 19, 2015, the Company completed its offering of 120,750 shares of the Company's 5.625% Series A cumulative perpetual convertible preferred stock ("Series A Convertible Preferred Stock") that provided $117.2 million of proceeds, net of underwriting fees and issuance costs of $3.6 million. Each share of the Series A Convertible Preferred Stock is entitled to dividends at a rate of 5.625% per annum which will be payable, when and if declared by the board of directors of the Company, quarterly, in arrears, on February 15, May 15, August 15 and November 15 of each year. The Company may, at its option, pay dividends in cash, common stock or a combination thereof.

Each share of Series A Convertible Preferred Stock is non-voting and has a liquidity preference over the Company's Class A common stock and ranks senior to all classes or series of the Company's Class A common stock, but junior to all of the Company's existing and future indebtedness with respect to dividend rights and rights upon the Company's involuntary liquidation, dissolution or winding down.

Each share of Series A Convertible Preferred Stock is convertible, at the option of the holder, into a number of shares of our Class A common stock equal to the liquidation preference of $1,000 divided by the conversion rate. The initial conversion rate (subsequent to the December 5, 2016 reverse stock split) is 38.0619 shares (which equates to $26.27 per share) of the Company's Class A common stock for each share of the Series A Convertible Preferred Stock. At any time on or after May 20, 2020, the Company may elect to convert all outstanding shares of the Series A Convertible Preferred Stock into shares of the Company's Class A common stock, cash or a combination thereof, at the Company's election, in each case, based on the then-applicable conversion rate, if the last reported sale price of the Company's Class A common stock equals or exceeds 150% of the then-current conversion price on at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days (including on the last trading day of such period) immediately prior to such election. At the time of conversion, the conversion rate may be adjusted based on certain events including but not limited to the issuance of cash dividends or Class A common stock as dividends to the Company's Class A common shareholders or a share split or combination.

In connection with the issuance and sale of the Series A Convertible Preferred Stock, the Company entered into a capped call option transaction (the "Capped Call Option Transaction") with Nomura Global Financial Products Inc. for $15.9 million. The Capped Call Option Transaction is expected generally to reduce the potential dilution to the Company's Class A common stock (if the Company elects to convert to common shares) and/or offset any cash payments that the Company is required to make upon conversion of any Series A Convertible Preferred Stock. The Capped Call Option Transaction has an initial effective strike price of $26.27 per share, which matches the initial conversion price of the Series A Convertible Preferred Stock, and a cap price of $33.54 per share. However, to the extent that the market price of Class A common stock, as measured under the terms of the Capped Call Option Transaction, exceeds the cap price thereof, there would nevertheless be dilution and/or such cash payments would not be offset. As the Capped Call Option Transaction is a free standing derivative that is indexed to the Company's own stock price and the Company controls if it is settled in cash or stock it qualifies for equity classification as a reduction to additional paid in capital.

The Company may also incur additional indebtedness or raise additional capital under certain circumstances to respond to market opportunities and challenges. Current market conditions may make it more difficult or costly to borrow additional funds or raise additional capital.

Regulation

As registered broker-dealers, Cowen and Company, Cowen Execution, ATM Execution, Cowen Prime and Westminster are subject to the SEC's Uniform Net Capital Rule 15c3-1 ("SEC Rule 15c3-1"), which requires the maintenance of minimum net capital. Each registered broker-dealer has elected to compute net capital under the alternative method permitted by that rule. Under the alternative method, Cowen and Company's minimum net capital requirement, as defined in (a)(4) of SEC Rule 15c3-1, is $1.0 million. Cowen Execution, ATM Execution, Cowen Prime and Westminster are required to maintain minimum net capital, as defined in (a)(1)(ii) of SEC Rule 15c3-1, equal to the greater of $250,000 or 2% of aggregate debits arising from customer transactions. Advances to affiliates, repayment of borrowings, distributions, dividend payments and other equity withdrawals are subject to certain notification and other provisions of SEC Rule 15c3-1 and other regulatory bodies.

On February 7, 2019, FINRA approved the transfer of all of Cowen Securities' business and personnel to Cowen and Company. Cowen Securities subsequently filed a Form BDW, pursuant to Section 15(b) of the Securities Exchange Act of 1934, with FINRA to withdraw its status as a broker-dealer given that it will no longer conduct a securities business. On May 21, 2019, Cowen Securities Form BDW was approved and officially deregistered with the SEC. As of December 31, 2019, the entity has been dissolved.

Cowen Prime is also subject to Commodity Futures Trading Commission Regulation 1.17 ("Regulation 1.17"). Regulation 1.17 requires net capital equal to or in excess of $45,000 or the amount of net capital required by SEC Rule 15c3-1, whichever is greater. Cowen Execution is also subject to Options Clearing Corporation ("OCC") Rule 302. OCC Rule 302 requires maintenance of net capital equal to the greater of $2,000,000 or 2% of aggregate debit items. At December 31, 2019, Cowen Execution had $103.2 million of net capital in excess of this minimum requirement.

Cowen International Ltd and Cowen Execution Ltd are subject to the capital requirements of the FCA, as defined, and must exceed the minimum capital requirement set forth by the FCA. Effective June 1, 2018, the FCA approved Ramius UK's application to cancel all of its FCA authorization permissions. Accordingly, Ramius UK is no longer an FCA regulated and authorized firm. In April 2019, Cowen Execution Ltd was formally approved to trade in a principal capacity.

Cowen Asia, a previously established entity, was re-registered with regulatory approval on May 17, 2019. Cowen Asia is subject to the financial resources requirements of the Securities and Futures Commission ("SFC") of Hong Kong. Financial Resources must exceed the Total Financial Resources requirement of the SFC.

As of December 31, 2019, these regulated broker-dealers had regulatory net capital or financial resources, regulatory net capital requirements or minimum FCA or SFC requirement and excess as follows:

Subsidiary	Net Capital		Net Capital Requirement		Excess Net Capital	
			(dollars in thousands)			
Cowen and Company	$	91,348	$	1,000	$	90,348
Cowen Execution	$	105,822	$	2,673	$	103,149
ATM Execution	$	5,354	$	250	$	5,104
Cowen Prime	$	13,659	$	250	$	13,409
Westminster	$	14,797	$	250	$	14,547
Cowen International Ltd	$	15,988	$	7,597	$	8,391
Cowen Execution Ltd	$	11,808	$	2,509	$	9,299
Cowen Asia	$	1,307	$	385	$	922

The Company's U.S. broker-dealers must also comply with SEC's Customer Protection Rule ("SEC Rule 15c3-3") or claim an exemption pursuant to subparagraphs (k)(2)(i) (the "(k)(2)(i) exemption") or (k)(2)(ii) (the "(k)(2)(ii) exemption") of that rule. Firms can rely on more than one exemption. Cowen and Company, Cowen Prime, Cowen Execution and ATM Execution claim the (k)(2)(ii) exemption with regards to some or all of their customer accounts and transactions that are introduced on a fully-disclosed basis to their clearing agents for clearing, settlement and custody. Cowen and Company, Cowen Prime and Westminster claim the (k)(2)(i) exemption with regards to customer transactions and balances that are cleared, settled and custodied in bank accounts designated as Special Accounts for the Exclusive Benefit of Customers ("Special Bank Account").

In accordance with the requirements of SEC Rule 15c3-3, Cowen Execution may be required to deposit in a Special Reserve Account cash or acceptable qualified securities for the exclusive benefit of customers. As of December 31, 2019, Cowen Execution had segregated approximately $17.6 million of cash, while its required deposit was $5.5 million.

As a clearing broker-dealer, Cowen Execution is required to compute a reserve requirement for proprietary accounts of broker-dealers ("PAB"), as defined in SEC Rule 15c3-3. Cowen Execution conducts PAB reserve computations in order to determine the amount it is required to deposit in its PAB Reserve Bank Accounts pursuant to SEC Rule 15c3-3. This allows each correspondent firm that uses Cowen Execution as its clearing broker-dealer to classify its PAB account assets held at Cowen Execution as allowable assets in the correspondent's net capital calculation. At December 31, 2019, Cowen Execution had $22.5 million of cash on deposit in PAB Reserve Bank Accounts, which was more than its required deposit of $14.8 million.

Cowen and Company, ATM Execution, Cowen Prime and Cowen Execution also maintain certain assets in PAB accounts held at their respective clearing brokers. Each treats its assets held in those PAB accounts at the respective clearing brokers as allowable assets for net capital purposes.

Cowen's Luxembourg reinsurance companies, Vianden RCG Re SCA and Hollenfels, individually and their Luxembourg parent holding company, Ramius Enterprise Luxembourg Holdco S.à r.l., on a combined basis with the reinsurance companies, are required to maintain a solvency capital ratio as calculated by relevant European Commission directives and local regulatory rules in Luxembourg. Each reinsurance company's individual solvency capital ratio as well as the combined solvency capital ratio of the holding and reinsurance companies calculated as of December 31 of each year must exceed a minimum requirement. As of the last testing date, December 31, 2019, all of these entities were in excess of this minimum requirement. The companies are currently, and management expects they will be at the next testing date of December 31, 2020, in compliance with these requirements.

Based on minimum capital and surplus requirements pursuant to the laws of the state of New York that apply to captive insurance companies, RCG Insurance Company, Cowen's captive insurance company incorporated and licensed in the state of New York, was required to maintain capital and surplus of approximately $0.3 million as of December 31, 2019. RCG Insurance Company's capital and surplus as of December 31, 2019 totaled approximately $32.8 million.

Cash Flows Analysis

The Company's primary sources of cash are derived from its operating activities, fees and realized returns on its own invested capital. The Company's primary uses of cash include compensation and general and administrative expenses.

Operating Activities. Net cash used in operating activities of $179.9 million for the year ended December 31, 2019 was primarily related to the purchases of securities owned, at fair value, held at broker dealer, offset partially by stock borrow stock loan activity. Net cash provided by operating activities of $324.5 million for the year ended December 31, 2018 was primarily related to the (i) proceeds from sales of other investments in consolidated funds (ii) proceeds from sales of securities owned, at fair value, (iii) increase in payable to customers offset by decrease in receivable from brokers, dealers and clearing organizations and purchases of securities owned, at fair value. Net cash provided by operating activities of $3.4 million for the year ended December 31, 2017 was primarily related to purchases of securities owned, at fair value and decrease in securities borrowed partially offset by proceeds from sales of securities owned, at fair value.

Investing Activities. Net cash used in investing activities of $47.6 million for the year ended December 31, 2019 was primarily related to the purchase of Quarton and other investments. Net cash used in investing activities of $17.9 million for the year ended December 31, 2018 was primarily related to purchases of other investments partially offset by proceeds from sales of other investments. Net cash used in investing activities of $2.4 million for the year ended December 31, 2017 was primarily related to the purchase of Convergex Group, loans issued and purchases of other investments offset partially by sales of other investments and fixed assets.

Financing Activities. Net cash provided by financing activities for the year ended December 31, 2019 of $200.4 million was primarily related to (i) capital contributions by non-controlling interests offset only partially by capital withdrawals by non-controlling interests in Consolidating Funds and (ii) borrowings on notes and other debt. Net cash provided by financing activities for the year ended December 31, 2018 of $128.7 million was primarily related to capital withdrawal to non-controlling interests in Consolidating Funds offset partially contributions from non-controlling interests in Consolidated Funds. Net cash provided by financing activities for the year ended December 31, 2017 of $137.9 million was primarily related to proceeds from the issuance of convertible debt, borrowings on notes and other debt and contributions from non-controlling interests in Consolidated Funds offset partially by repayments on convertible debt, notes and other debt, withdrawals from non-controlling interests in Consolidated Funds and purchase of treasury stock.

Debt

Convertible Debt

December 2022 Convertible Notes

The Company, on December 14, 2017, issued $135.0 million aggregate principal amount of 3.00% convertible senior notes due December 2022 (the “December 2022 Convertible Notes”). The December 2022 Convertible Notes are due on December 15, 2022 unless earlier repurchased by the Company or converted by the holder in accordance with their terms prior to such date. The interest on the December 2022 Convertible Notes is payable semi-annually on December 15 and June 15 of each year. The December 2022 Convertible Notes are senior unsecured obligations of Cowen. The December 2022 Convertible Notes may be converted into cash or shares of Class A common stock at the Company's election based on the current conversion price. The December 2022 Convertible Notes were issued with an initial conversion price of $17.375 per share of Cowen's Class A common stock.

The Company used the net proceeds, together with cash on hand, from the offering for general corporate purposes, including the repurchase or repayment of $115.1 million of the Company's outstanding 3.0% cash convertible senior notes due March 2019 (the "March 2019 Convertible Notes") and the repurchase of approximately $19.5 million of the Company's shares of its Class A common stock, which were consummated substantially concurrently with the closing of the offering. As of December 31, 2019, the outstanding principal amount of the December 2022 Convertible Notes was $135.0 million. On June 26, 2018, the Company received shareholder approval for the Company to settle the December 2022 Convertible Notes entirely in Class A common stock. Upon receiving shareholder approval, the Company reclassified the separately recognized conversion option from a derivative liability to equity.

The Company recorded interest expense of $4.1 million, $4.1 million and $0.2 million for the year ended December 31, 2019, 2018 and 2017, respectively. The Company recognized the embedded cash conversion option at issuance date fair value, which also represents the initial unamortized discount on the December 2022 Convertible Notes of $23.4 million and is shown net in convertible debt in the accompanying consolidated statements of financial condition. Amortization on the discount, included within interest and dividends expense in the accompanying consolidated statements of operations is $4.3 million,$4.0 million and $0.2 million for the years ended December 31, 2019, 2018 and 2017, respectively, based on an effective interest rate of 7.13%. The Company capitalized the debt issuance costs in the amount of $2.2 million, which is a direct deduction from the carrying value of the debt and will be amortized over the life of the December 2022 Convertible Notes in interest and dividends expense in the accompanying consolidated statements of operations.

March 2019 Convertible Notes

On March 10, 2014, the Company issued $149.5 million of 3.0% cash convertible senior notes (the "March 2019 Convertible Notes"). The March 2019 Convertible Notes matured on March 15, 2019 and were fully repaid by the Company. The Company recorded interest expense of $0.1 million, $1.1 million, and $4.3 million for the years ended December 31, 2019, 2018 and 2017, respectively. Amortization on the discount, included within interest and dividends expense in the accompanying consolidated statements of operations was $0.3 million, $1.5 million and $7.3 million for the years ended December 31, 2019, 2018 and 2017, respectively, based on an effective interest rate of 8.89%.

Notes Payable

May 2024 Notes

On May 7, 2019, the Company completed its private placement of $53.0 million aggregate principal amount of 7.25% senior notes due May 2024 (the "May 2024 Notes") with certain institutional investors. On September 30, 2019, the Company issued an additional $25.0 million of the same series of notes. The additional May 2024 Notes were purchased at a premium of $0.5 million, which is shown net in notes payable in the accompanying consolidated statement of financial condition. To date the May 2024 Notes have maintained their initial private rating, and the interest rate has remained unchanged. Interest on the May 2024 Notes is payable semi-annually in arrears on May 6 and November 6. The Company recorded interest expense of $2.9 million for the year ended December 31, 2019. The Company capitalized debt issuance costs of approximately $1.5 million in May 2019 and $0.6 million in December 2019, which is a direct deduction from the carrying value of the debt and will be amortized over the life of the May 2024 Notes in interest and dividends expense in the accompanying consolidated statements of operations.

June 2033 Notes

On June 11, 2018, the Company completed its public offering of $90.0 million of 7.75% senior notes due June 2033 (the "June 2033 Notes") and subsequently the underwriters exercised in full their option to purchase an additional $10.0 million principal amount of the June 2033 Notes. Interest on the June 2033 Notes is payable quarterly in arrears on March 15, June 15, September 15 and December 15. The Company recorded interest expense of $7.7 million and $4.3 million for the years ended December 31, 2019 and 2018, respectively. The Company capitalized debt issuance costs of approximately $3.6 million which is a direct deduction from the carrying value of the debt and will be amortized over the life of the June 2033 Notes in interest and dividends expense in the accompanying consolidated statements of operations.

December 2027 Notes

On December 8, 2017, the Company completed its public offering of $120.0 million of 7.35% senior notes due December 2027 (the "December 2027 Notes") and subsequently the underwriters exercised in full their option to purchase an additional $18.0 million principal amount of the December 2027 Notes. Interest on the December 2027 Notes is payable quarterly in arrears on March 15, June 15, September 15 and December 15. The Company recorded interest expense of $10.1 million, $10.1 million and $0.6 million for the years ended December 31, 2019, 2018 and 2017, respectively. The Company capitalized debt issuance costs of approximately $5.0 million which is a direct deduction from the carrying value of the debt and will be amortized over the life of the December 2027 Notes in interest and dividends expense in the accompanying consolidated statements of operations. The net proceeds of the offering, after deducting the underwriting discount and estimated offering expenses payable by the Company were used to redeem all of its 8.25% senior notes due October 2021 and for general corporate purposes.

Term Loan

On June 30, 2017, a subsidiary of the Company borrowed $28.2 million to fund general corporate purposes. This term loan has an effective interest rate of LIBOR plus 3.75% with a lump sum payment of the entire principal amount due (as amended) on June 26, 2020. In July 2019, the subsidiary of the Company borrowed an additional $4.0 million to fund general corporate purposes. The loan is secured by the value of the Company's limited partnership interests in two affiliated investment funds. The Company has provided a guarantee for this loan. The Company recorded interest expense of $1.8 million, $1.6 million and $0.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Other Notes Payable

During January 2019, the Company borrowed $2.2 million to fund insurance premium payments. This note had an effective interest rate of 2.51% and was due on December 31, 2019, with monthly payment requirements of $0.2 million. As of December 31, 2019, the note was fully repaid. Interest expense was $0.1 million for the year ended December 31, 2019.

During November 2019, the Company borrowed $2.6 million to fund general corporate capital expenditures. This note is due November 2024, with monthly payment requirements of $0.1 million. As of December 31, 2019, the note had a balance of $2.5 million. Interest expense for the year ended December 31, 2019 was insignificant.

Revolver

The Company, in December 2019, entered into a two-year committed credit facility with a capacity of $25 million. This agreement has an effective interest rate of LIBOR plus 3.25% on any money drawn from the credit facility and the commitment or unused line fee is 50 basis points on the undrawn amount.

Finance Lease Obligations

The Company has entered into various finance leases for computer equipment. These finance lease obligations are included in notes payable and other debt in the accompanying consolidated statements of financial condition, and have a weighted average lease term of 3.21 years and weighted average interest rate of 4.88% as of December 31, 2019.

For the year ended December 31, 2019, 2018 and 2017, quantitative information regarding the Company's finance lease obligations reflected in the accompanying consolidated statement of operations, the supplemental cash flow information and certain other information related to finance leases were as follows:

	Year Ended December 31,	
	2019	2018
Lease Cost		
Finance Lease Cost:		
Amortization of finance lease right-of-use assets	$ 1,266	$ 1,627
Interest on lease liabilities	227	231
Other Information		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from finance leases	227	231
Financing cash flows from finance leases	$ 1,266	$ 2,186

Letters of Credit

As of December 31, 2019, the Company has the following six irrevocable letters of credit, related to leased office space, for which there is cash collateral pledged, which the Company pays a fee on the stated amount of the letter of credit. The Company also has pledged collateral for reinsurance agreements which amounted to $2.0 million as of December 31, 2019, and $1.0 million as of December 31, 2018, which are released annually between March 2020 and March 2023 based on the policy periods covered by the reinsurance agreements.

Location	Amount	Maturity
	(dollars in thousands)	
Boston	$ 382	March 2020
New York	$ 359	April 2020
New York	$ 398	October 2020
New York	$ 1,125	October 2020
New York	$ 1,629	November 2020
San Francisco	$ 716	October 2025

To the extent any letter of credit is drawn upon, interest will be assessed at the prime commercial lending rate. As of December 31, 2019 and 2018, there were no amounts due related to these letters of credit.

Contractual Obligations

The following tables summarize the Company's contractual cash obligations as of December 31, 2019:

	Total	< 1 Year	1-3 Years	3-5 Years	More Than 5 Years
	(dollars in thousands)				
Equipment, Service and Facility Leases					
Real Estate and Other Facility Rental	$ 110,509	$ 22,848	$ 45,037	$ 32,399	$ 10,225
Service Payments	56,683	22,217	24,032	6,033	4,401
Operating Equipment Leases	639	360	279	—	—
Total	**167,831**	**45,425**	**69,348**	**38,432**	**14,626**
Debt					
Convertible Debt	147,150	4,050	143,100	—	—
Notes Payable	527,217	23,548	47,096	122,269	334,304
Finance Lease Obligation	4,276	1,290	2,564	422	—
Term Loan	33,126	33,126	—	—	—
Other Notes Payable	2,915	593	1,186	1,136	—
Total	**$ 714,684**	**$ 62,607**	**$ 193,946**	**$ 123,827**	**$ 334,304**

Clawback obligations

For financial reporting purposes, the general partners of a real estate fund had recorded a liability for potential clawback obligations to the limited partners, due to changes in the unrealized value of the real estate fund's remaining investments and where the real estate fund's general partner has previously received carried interest distributions. The clawback liability was not realized until the end of the real estate fund's life. The clawback obligations for the real estate fund were $6.5 million at December 31, 2019. The liability was fully repaid in December 2019. (see Notes 6 and 22 to the Company's consolidated financial statements).

Minimum payments for all debt outstanding

Annual scheduled maturities of debt and minimum payments for all debt outstanding as of December 31, 2019, are as follows:

	Convertible Debt	Notes Payable	Term Loan	Other Notes Payable	Finance Lease Obligation
	(dollars in thousands)				
2020	$ 4,050	$ 23,548	$ 33,126	$ 593	$ 1,290
2021	4,050	23,548	—	593	1,398
2022	139,050	23,548	—	593	1,166
2023	—	23,548	—	593	411
2024	—	98,721	—	543	11
Thereafter	—	334,304	—	—	—
Subtotal	147,150	527,217	33,126	2,915	4,276
Less (a)	(28,462)	(220,399)	(946)	(399)	(339)
Total	**$ 118,688**	**$ 306,818**	**$ 32,180**	**$ 2,516**	**$ 3,937**

(a) Amount necessary to reduce net minimum payments to present value calculated at the Company's implicit rate at inception. This amount also includes capitalized debt costs and the unamortized discount on the convertible debt.

Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements as of December 31, 2019. However, through indemnification provisions in our clearing agreements, customer activities may expose us to off-balance-sheet credit risk. Pursuant to the clearing agreements, we are required to reimburse our clearing broker, without limit, for any losses incurred due to a counterparty's failure to satisfy its contractual obligations. However, these transactions are collateralized by the underlying security, thereby reducing the associated risk to changes in the market value of the security through the settlement date.

Cowen and Company, Cowen Prime, Cowen Execution and ATM Execution are members of various securities exchanges and clearing organizations. Under the standard membership agreement, members are required to guarantee the performance of other members and, accordingly, if another member becomes unable to satisfy its obligations to the various securities exchanges and clearing organizations, all other members would be required to meet the shortfall. The Company's liability under these arrangements is not quantifiable. Accordingly, no contingent liability is carried in the accompanying consolidated statements of financial condition for these arrangements.

Cowen Execution loans securities temporarily to other brokers in connection with its securities lending activities. Cowen Execution receives cash as collateral for the securities loaned. Increases in security prices may cause the market value of the securities loaned to exceed the amount of cash received as collateral. In the event the counterparty to these transactions does not return the loaned securities, Cowen Execution may be exposed to the risk of acquiring the securities at prevailing market prices in order to satisfy its client obligations. Cowen Execution controls this risk by requiring credit approvals for counterparties, by monitoring the market value of securities loaned on a daily basis, and by requiring additional cash as collateral or returning collateral when necessary.

Cowen Execution borrows securities temporarily from other brokers in connection with its securities borrowing activities. Cowen Execution deposits cash as collateral for the securities borrowed. Decreases in security prices may cause the market value of the securities borrowed to fall below the amount of cash deposited as collateral. In the event the counterparty to these transactions does not return collateral, Cowen Execution may be exposed to the risk of selling the securities at prevailing market prices. Cowen Execution controls this risk by requiring credit approvals for counterparties, by monitoring the collateral values on a daily basis, and by depositing additional collateral with counterparties or receiving cash when deemed necessary.

Critical Accounting Policies and Estimates

Critical accounting policies are those that require the Company to make significant judgments, estimates or assumptions that affect amounts reported in its consolidated financial statements or the notes thereto. The Company bases its judgments, estimates and assumptions on current facts, historical experience and various other factors that the Company believes to be reasonable and prudent. Actual results may differ materially from these estimates.

The following is a summary of what the Company believes to be its most critical accounting policies and estimates.

Consolidation

The Company's consolidated financial statements include the accounts of the Company, its subsidiaries, and entities in which the Company has a controlling financial interest, including the Consolidated Funds, in which the Company has a controlling general partner interest. All material intercompany transactions and balances have been eliminated in consolidation. The Company's investment funds are not subject to these consolidation provisions with respect to their investments pursuant to their specialized accounting.

The Company's consolidated financial statements reflect the assets, liabilities, revenues, expenses and cash flows of the Consolidated Funds on a gross basis. The management fees and incentive income earned by the Company from the Consolidated Funds were eliminated in consolidation; however, the Company's allocated share of net income from these investment funds was increased by the amount of this eliminated income. Hence, the consolidation of these investment funds had no net effect on the Company's net earnings.

The Company consolidates all entities that it controls through a majority voting interest or otherwise, including those investment funds in which the Company either directly or indirectly has a controlling financial interest. In addition, the Company consolidates all variable interest entities for which it is the primary beneficiary.

The Company consolidates five investment funds for which it acts as the managing member/general partner and investment manager. At December 31, 2019, the Company consolidated the following investment funds: Ramius Enterprise LP ("Enterprise LP"), Ramius Merger Fund LLC (the "Merger Fund"), Cowen Private Investments LP ("Cowen Private"), Ramius Merger Arbitrage UCITS Fund ("UCITS Fund"), and Cowen Sustainable Investments I LP ("CSI I LP") (each a "Consolidated Fund" and collectively the "Consolidated Funds").

The Company determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting operating entity ("VOE") or a variable interest entity ("VIE") under US GAAP.

Voting Operating Entities—VOEs are entities in which (i) the total equity investment at risk is sufficient to enable the entity to finance its activities independently, (ii) the equity holders at risk have the obligation to absorb losses, the right to receive residual returns and the right to direct the activities of the entity that most significantly impact the entity's economic performance and (iii) voting rights of equity holders are proportionate to their obligation to absorb losses or the right to receive returns.

Under US GAAP consolidation requirements, the usual condition for a controlling financial interest in a VOE is ownership of a majority voting interest. Accordingly, the Company consolidates all VOEs in which it owns a majority of the entity's voting shares or units.

Variable Interest Entities—VIEs are entities that lack one or more of the characteristics of a VOE. In accordance with US GAAP, an enterprise must consolidate all VIEs of which it is the primary beneficiary. Under the US GAAP consolidation model for VIEs, an enterprise that (1) has the power to direct the activities of a VIE that most significantly impacts the VIE's economic performance, and (2) has an obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE, is considered to be the primary beneficiary of the VIE and thus is required to consolidate it.

The Company determines whether it is the primary beneficiary of a VIE upon its initial involvement with the VIE and reassesses whether it is the primary beneficiary on an ongoing basis as long as it has any continuing involvement with the VIE by performing a periodic qualitative and/or quantitative analysis of the VIE that includes a review of, among other things, its capital structure, contractual agreements between the Company and the VIE, the economic interests that create or absorb variability, related party relationships and the design of the VIE.

In the ordinary course of business, the Company also sponsors various other entities that it has determined to be VIEs. These VIEs are primarily investment funds for which the Company serves as the general partner, managing member and/or investment manager with decision-making rights.

The Company does not consolidate certain funds that are VIEs due to the Company's conclusion that it is not the primary beneficiary of these funds in each instance. Investment fund investors are entitled to all of the economics of these VIEs with the exception of the management fee and incentive income, if any, earned by the Company. The Company has equity interests in the funds as both general partner and limited partner. In these instances the Company has concluded that the variable interests are not potentially significant to the VIE. Although the Company may advance amounts and pay certain expenses on behalf of the investment funds that it considers to be VIEs, it does not provide, nor is it required to provide, any type of substantive financial support to these entities outside of regular investment management services.

Equity Method Investments—For operating entities over which the Company exercises significant influence but which do not meet the requirements for consolidation as outlined above, the Company uses the equity method of accounting. The Company's investments in equity method investees are recorded in other investments in the accompanying consolidated statements of financial condition. The Company's share of earnings or losses from equity method investees is included in net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

The Company evaluates its equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amounts of such investments may not be recoverable. The difference between the carrying value of the equity method investment and its estimated fair value is recognized as an impairment charge when the loss in value is deemed other than temporary.

Other—If the Company does not consolidate an entity or apply the equity method of accounting, the Company accounts for such entities (primarily, all securities of such entity which are bought and held principally for the purpose of selling them in the near term as trading securities), at fair value with unrealized gains (losses) resulting from changes in fair value reflected within net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

Retention of Specialized Accounting—The Consolidated Funds and certain other consolidated companies are investment companies and apply specialized industry accounting. The Company reports its investments on the consolidated statements of financial condition at their estimated fair value, with unrealized gains (losses) resulting from changes in fair value reflected within net realized and unrealized gains (losses) on investments and other transactions. Accordingly, the accompanying consolidated financial statements reflect different accounting policies for investments depending on whether or not they are held through a consolidated investment company.

In addition, the Company's broker-dealer subsidiaries apply the specialized industry accounting for brokers and dealers in securities. The Company also retains specialized accounting upon consolidation.

Valuation of investments and derivative contracts

US GAAP establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 Inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date;

Level 2 Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly, including inputs in markets that are not considered to be active; and

Level 3 Fair value is determined based on pricing inputs that are unobservable and includes situations where there is little, if any, market activity for the asset or liability. The determination of fair value for assets and liabilities in this category requires significant management judgment or estimation.

Inputs are used in applying the various valuation techniques and broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, specific and broad credit data, liquidity statistics, and other factors. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. However, the determination of what constitutes "observable" requires significant judgment by the Company. The Company considers observable data to be that market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant market. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of the instrument and does not necessarily correspond to the Company's perceived risk of that instrument. For additional information regarding the use of unobservable inputs to fair value assets and liabilities see Note 7 in the accompanying consolidated financial statement in Part 1 Item 1.

The Company and its operating subsidiaries act as the manager for the Consolidated Funds. Both the Company and the Consolidated Funds hold certain investments which are valued by the Company, acting as the investment manager. The fair value of these investments is generally estimated based on proprietary models developed by the Company, which include discounted cash flow analysis, public market comparables, and other techniques and may be based, at least in part, on independently sourced market information. The material estimates and assumptions used in these models include the timing and expected amount of cash flows, the appropriateness of discount rates used, and, in some cases, the ability to execute, timing of, and estimated proceeds from expected financings. Significant judgment and estimation impact the selection of an appropriate valuation methodology as well as the assumptions used in these models, and the timing and actual values realized with respect to investments could be materially different from values derived based on the use of those estimates. The valuation methodologies applied impact the reported value of the Company's investments and the investments held by the Consolidated Funds in the consolidated financial statements. Certain of the Company's investments are relatively illiquid or thinly traded and may not be immediately liquidated on demand if needed. Fair values assigned to these investments may differ significantly from the fair values that would have been used had a ready market for the investments existed and such differences could be material.

The Company primarily uses the "market approach" to value its financial instruments measured at fair value. In determining an instrument's level within the hierarchy, the Company categorizes the Company's financial instruments into three categories: securities, derivative contracts and other investments. To the extent applicable, each of these categories can further be divided between those held long or sold short.

The Company has the option to measure certain financial assets and financial liabilities at fair value with changes in fair value recognized in earnings each period. The election is made on an instrument by instrument basis at initial recognition of an asset or liability or upon an event that gives rise to a new basis of accounting for that instrument. The Company has elected the fair value option for certain of its investments held by its operating companies. This option has been elected because the Company believes that it is consistent with the manner in which the business is managed, as well as the way that financial instruments in other parts of the business are recorded.

Securities— Securities with values based on quoted market prices in active markets for identical assets are classified within level 1 of the fair value hierarchy. These securities include active listed equities, certain U.S. government and sovereign obligations, Exchange Traded Funds ("ETFs"), mutual funds and certain money market securities. The Company does not adjust the quoted price for such instruments, even in situations where the Company holds a large position and a sale could reasonably impact the quoted price.

Certain positions for which trading activity may not be readily visible, consisting primarily of convertible debt, corporate debt and loans and restricted equities, are stated at fair value and classified within level 2 of the fair value hierarchy. The estimated fair values assigned by management are determined in good faith and are based on available information considering, trading activity, broker quotes, quotations provided by published pricing services, counterparties and other market participants, and pricing models using quoted inputs, and do not necessarily represent the amounts which might ultimately be realized. As level 2 investments include positions that are not always traded in active markets and/or are subject to transfer restrictions, valuations may be adjusted to reflect illiquidity and/or non-transferability.

Derivative contracts—Derivative contracts can be exchange-traded or privately negotiated over-the-counter ("OTC"). Exchange-traded derivatives, such as futures contracts and exchange-traded option contracts, are typically classified within level 1 or level 2 of the fair value hierarchy depending on whether or not they are deemed to be actively traded. OTC derivatives, such as generic forwards, swaps and options, have inputs which can generally be corroborated by market data and are therefore classified within level 2. OTC derivatives, such as swaps and options where market data is not readily available or observable are classified as level 3.

Other investments—Other investments consist primarily of investment funds, real estate investments, carried interest and equity method investments, which are valued as follows:

i. **Portfolio funds**—Portfolio funds ("Portfolio Funds") include interests in private investment partnerships, foreign investment companies and other collective investment vehicles which may be managed by the Company or its affiliates. The Company applies the practical expedient provided by the US GAAP fair value measurements and disclosures guidance relating to investments in certain entities that calculate net asset value ("NAV") per share (or its equivalent). The guidance permits an entity holding investments in certain entities that either are investment companies as defined by the American Institute of Certified Public Accountants ("AICPA") Audit and Accounting Guide, Investment Companies, or have attributes similar to an investment company, and calculate net asset value per share or its equivalent for which the fair value is not readily determinable, to measure the fair value of such investments on the basis of that NAV per share, or its equivalent, without adjustment. Investments which are valued using NAV per share as a practical expedient are not categorized within the fair value hierarchy.

ii. **Real estate investments**—Real estate debt and equity investments are measured at fair value. The fair value of real estate investments is estimated based on the price that would be received to sell an asset in an orderly transaction between marketplace participants at the measurement date. Real estate investments without a public market are valued based on assumptions and valuation techniques used by the Company. Such valuation techniques may include discounted cash flow analysis, prevailing market capitalization rates or earnings multiples applied to earnings from the investment, analysis of recent comparable sales transactions, actual sale negotiations and bona fide purchase offers received from third parties, consideration of the amount that currently would be required to replace the asset, as adjusted for obsolescence, as well as independent external appraisals. In general, the Company considers several valuation techniques when measuring the fair value of a real estate investment. However, in certain circumstances, a single valuation technique may be appropriate. Real estate investments are reviewed on a quarterly basis by the Company for significant changes at the property level or a significant change in the overall market which would impact the value of the real estate investment resulting in unrealized appreciation or depreciation.

   Real estate and capital markets are cyclical in nature. Property and investment values are affected by, among other things, the availability of capital, occupancy rates, rental rates and interest and inflation rates. In addition, the Company invests in real estate and real estate-related investments for which no liquid market exists. The market prices for such investments may be volatile and may not be readily ascertainable. Amounts ultimately realized by the Company from investments sold may differ from the fair values presented, and the differences could be material.

   The Company's real estate investments are typically categorized as level 3 investments within the fair value hierarchy as management uses significant unobservable inputs in determining their estimated fair value.

iii. **Carried Interest—**For the private equity and debt fund products the Company offers, the company is allocated incentive income by the investment funds based on the extent of which the investment funds performance exceeds predetermined thresholds. Carried interest allocations are generally structured from a legal standpoint as an allocation of capital in the Company's capital account. The Company accounts for carried interest allocations by applying an equity ownership model. Accordingly, the Company accrues performance allocations quarterly based on the fair value of the underlying investments assuming hypothetical liquidation at book value.

iv. **Equity Method Investments—**For operating entities over which the Company exercises significant influence but which do not meet the requirements for consolidation as outlined above, the Company applies the equity method of accounting. The Company's investments in equity method investees are recorded in other investments in the accompanying consolidated statements of financial condition. The Company's share of earnings or losses from equity method investees is included in net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

Goodwill and Intangible Assets

Goodwill

Goodwill represents the excess of the purchase price consideration of acquired companies over the estimated fair value assigned to the individual assets acquired and liabilities assumed. Goodwill is allocated to the Company's reporting units at the date the goodwill is initially recorded. Once goodwill has been allocated to the reporting units, it generally no longer retains its identification with a particular acquisition, but instead becomes identifiable with the reporting unit. As a result, all of the fair value of each reporting unit is available to support the value of goodwill allocated to the unit.

In accordance with US GAAP requirements for testing for impairment of goodwill, inclusive of the newly adopted amendments, the Company tests goodwill for impairment on an annual basis or at an interim period if events or changed circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. In testing for goodwill impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances led to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events and circumstances, the Company concludes that fair value exceeds its carrying amount, then performing a quantitative impairment test is not necessary. If the Company concludes otherwise, the Company is required to perform a quantitative impairment test that requires a comparison of the fair value of the reporting unit to its carrying value, including goodwill. If the fair value of the reporting unit exceeds its carrying value, the related goodwill is not considered impaired and no further analysis is required. If the carrying value of the reporting unit exceeds its fair value, then the Company recognizes an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value.

Intangible assets

Intangible assets with finite lives are amortized over their estimated average useful lives. The Company does not have any intangible assets deemed to have indefinite lives. Intangible assets are tested for potential impairment whenever events or changes in circumstances suggest that an asset or asset group's carrying value may not be fully recoverable. An impairment loss, calculated as the difference between the estimated fair value and the carrying value of an asset or asset group, is recognized in the accompanying consolidated statements of operations if the sum of the estimated undiscounted cash flows relating to the asset or asset group is less than the corresponding carrying value. The Company continually monitors the estimated average useful lives of existing intangible assets.

Income taxes

The Company accounts for income taxes in accordance with US GAAP which requires the recognition of tax benefits or expenses based on the estimated future tax effects of temporary differences between the financial statement and tax basis of its assets and liabilities. The effect on deferred taxes of a change in tax rates is recognized as income or loss in the period that includes the enactment date. Valuation allowances are established to reduce deferred tax assets to an amount that is more likely than not to be realized. We evaluate our deferred tax assets for recoverability considering negative and positive evidence, including our historical financial performance, projections of future taxable income, future reversals of existing taxable temporary differences, and tax planning strategies. We record a valuation allowance against our deferred tax assets to bring them to a level that it is more likely than not to be utilized. In evaluating the need for a valuation allowance, we estimate future taxable income based on management-approved business plans. This process involves significant management judgment about assumptions that are subject to change from period to period. Because the recognition of deferred tax assets requires management to make significant judgments about future earnings, the periods in which items will impact taxable income and the application of inherently complex tax laws, we have identified the assessment of deferred tax assets and the need for any related valuation allowance as a critical accounting estimate.

Legal Reserves

The Company estimates potential losses that may arise out of legal and regulatory proceedings and records a reserve and takes a charge to income when losses with respect to such matters are deemed probable and can be reasonably estimated, in accordance with US GAAP. These amounts are reported in other expenses, net of recoveries, in the consolidated statements of operations. See Note 22 "Commitments and Contingencies" in our accompanying consolidated financial statements for the annual ended December 31, 2019 for further discussion.

Recently adopted and future adoption of accounting pronouncements

For a detailed discussion, see Note 2 "Recent pronouncements" in our accompanying consolidated financial statements for the annual ended December 31, 2019.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

The Company's primary exposure to market risk is a function of our role as investment manager for our funds and managed accounts, our role as a financial intermediary in customer trading and market making activities, as well as the fact that a significant portion of our own capital is invested in securities. Adverse movements in the prices of securities that are either owned or sold short may negatively impact the Company's management fees and incentive income, as well as the value of our own invested capital.

The market value of the assets and liabilities in our investment funds and managed accounts, as well as the Company's own securities, may fluctuate in response to changes in equity prices, interest rates, credit spreads, currency exchange rates, commodity prices, implied volatility, dividends, prepayments, recovery rates and the passage of time. The net effect of market value changes caused by fluctuations in these risk factors will result in gains (losses) for our investment funds and managed accounts which will impact our management fees and incentive income and for the Company's securities which will impact the value of our own invested capital as well as the capital utilized in facilitating customer trades. Some of the Company's investments are in private companies and other investments are in securities that are subject, from time to time, to contractual lock-up agreements or other resale restrictions. The private investments we have made generally have no established trading market or are generally subject to restrictions on resale. Our inability to liquidate these securities when it may be otherwise advantageous for us to do so could lead to volatility in the market value ascribed to these investments and securities which could adversely affect our investment income.

The Company's risk measurement and risk management processes are an integral part of our proprietary investment process as well as market making and customer facilitation trading activities. These processes are implemented at the individual position, strategy and total portfolio levels and are designed to provide a complete picture of the risks of the Company's balance sheet. The key elements of our risk reporting include sensitivities, exposures, stress testing and profit and loss attribution. As a result of our views of levels of risk being taken, the Company may undertake to hedge out some or all of any or all risks at either the individual position, strategy or total portfolio levels.

Impact on Management Fees

The Company's management fees are generally based on the net asset value of the Company's investment funds and managed accounts. Accordingly, management fees will change in proportion to changes in the market value of investments held by the Company's investment funds and managed accounts.

Impact on Incentive Income

The Company's incentive income is generally based on a percentage of the profits of the Company's various investment funds and managed accounts, which is impacted by global economies and market conditions as well as other factors. Consequently, incentive income cannot be readily predicted or estimated.

Custody and prime brokerage risks

There are risks involved in dealing with the custodians or prime brokers who settle trades. Under certain circumstances, including certain transactions where the Company's assets are pledged as collateral for leverage from a non-broker-dealer custodian or a non-broker-dealer affiliate of the prime broker, or where the Company's assets are held at a non-U.S. prime broker, the securities and other assets deposited with the custodian or broker may be exposed to credit risk with regard to such parties. In addition, there may be practical or timing problems associated with enforcing the Company's rights to its assets in the case of an insolvency of any such party.

Market risk

Market risk represents the risk of loss that may result from the change in value of a financial instrument due to fluctuations in its market price. Market risk may be exacerbated in times of trading illiquidity when market participants refrain from transacting in normal quantities and/or at normal bid-offer spreads. Our exposure to market risk is primarily related to the fluctuation in the fair values of securities owned and sold, but not yet purchased in the Company's investment funds and our role as a financial intermediary in customer trading and to our market making and investment activities. Market risk is inherent in financial instruments and risks arise in options, warrants and derivative contracts from changes in the fair values of their underlying financial instruments. Securities sold, but not yet purchased, represent obligations of the Company's investment funds to deliver specified securities at contracted prices and thereby create a liability to repurchase the securities at prevailing future market prices. We trade in equity securities as an active participant in both listed and over the counter markets. We typically maintain securities in inventory to facilitate our market making activities and customer order flow. We may use a variety of risk management techniques and hedging strategies in the ordinary course of our trading business to manage our exposures. In connection with our trading business, management also reviews reports appropriate to the risk profile of specific trading activities. Typically, market conditions are evaluated and transaction details and securities positions are reviewed. These activities are intended to ensure that our trading strategies are conducted within acceptable risk tolerance parameters, particularly when we commit our own capital to facilitate client trading. Activities include price verification procedures, position reconciliations and reviews of transaction booking. We believe these procedures, which stress timely communications between traders, trading management and senior management, are important elements of the risk management process.

A 10% change in the fair value of the investments held by the Company's investment funds as of December 31, 2019 would result in a change of approximately $1.1 billion in our assets under management and would impact management fees by approximately $4.4 million on an annual basis. This number is an estimate. The amount would be dependent on the fee structure of the particular investment fund or funds that experienced such a change.

Currency risk

The Company is also exposed to foreign currency fluctuations. Currency risk arises from the possibility that fluctuations in foreign currency exchange rates will affect the value of such financial instruments, including direct or indirect investments in securities of non-U.S. companies. A 10% weakening or strengthening of the U.S. dollar against all or any combination of currencies to which the Company's investments or the Company's investment funds have exposure to exchange rates would not have a material effect on the Company's revenues, net loss or Economic Income.

Inflation risk

Because our assets are, to a large extent, liquid in nature, they are not significantly affected by inflation. However, the rate of inflation affects such expenses as employee compensation and communications charges, which may not be readily recoverable in the prices of services we offer. To the extent inflation results in rising interest rates and has other adverse effects on the securities markets, it may adversely affect our financial condition and results of operations in certain businesses.

Leverage and interest rate risk

There is no guarantee that the Company's borrowing arrangements or other arrangements for obtaining leverage will continue to be available, or if available, will be available on terms and conditions acceptable to the Company. Unfavorable economic conditions also could increase funding costs, limit access to the capital markets or result in a decision by lenders not to extend credit to the Company. In addition, a decline in market value of the Company's assets may have particular adverse consequences in instances where we have borrowed money based on the market value of those assets. A decrease in market value of those assets may result in the lender (including derivative counterparties) requiring the Company to post additional collateral or otherwise sell assets at a time when it may not be in the Company's best interest to do so.

Credit risk

The Company clears all of its securities transactions through clearing brokers on a fully disclosed basis. Pursuant to the terms of the agreements between the Company and the clearing brokers, the clearing brokers have the right to charge the Company for losses that result from a counterparty's failure to fulfill its contractual obligations. As the right to charge the Company has no maximum amount and applies to all trades executed through the clearing brokers, we believe there is no maximum amount assignable to this right. Accordingly, at December 31, 2019, the Company had recorded no liability.

Credit risk is the potential loss the Company may incur as a result of the failure of a counterparty or an issuer to make payments according to the terms of a contract. The Company's exposure to credit risk at any point in time is represented by the fair value of the amounts reported as assets at such time.

In the normal course of business, our activities may include trade execution for our clients as well as agreements to borrow or lend securities. These activities may expose us to risk arising from price volatility which can reduce clients' ability to meet their obligations. To the extent investors are unable to meet their commitments to us, we may be required to purchase or sell financial instruments at prevailing market prices to fulfill clients' obligations.

In accordance with industry practice, client trades are settled generally two business days after trade date. Should either the client or the counterparty fail to perform, we may be required to complete the transaction at prevailing market prices.

We manage credit risk by monitoring the credit exposure to and the standing of each counterparty, requiring additional collateral where appropriate, and using master netting agreements whenever possible.

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. We outsource all or a portion of certain critical business functions, such as clearing. Accordingly, we negotiate our agreements with these firms with attention focused not only on the delivery of core services but also on the safeguards afforded by back-up systems and disaster recovery capabilities. We make specific inquiries on any relevant exceptions noted in a service provider's System and Organization Controls (SOC) report on the state of its internal controls, when available.

Our service offerings in electronic and algorithmic trading require us to maintain consistent levels of speed and accuracy in the management of orders generated by our models. We monitor these activities on a continuous basis and do not believe that they comprise a material risk.

Our Internal Audit department oversees, monitors, measures, analyzes and reports on operational risk across the Company. The scope of Internal Audit encompasses the examination and evaluation of the adequacy and effectiveness of the Company's system of internal controls and is sufficiently broad to help determine whether the Company's network of risk management, control and governance processes, as designed by management, is adequate and functioning as intended. Internal Audit works with the senior management to help ensure a transparent, consistent and comprehensive framework exists for managing operational risk within each area, across the Company and globally.

We are focused on maintaining our overall operational risk management framework and minimizing or mitigating these risks through a formalized control assessment process to ensure awareness and adherence to key policies and control procedures. Primary responsibility for management of operational risk is with the businesses and the business managers therein. The business managers, generally, maintain processes and controls designed to identify, assess, manage, mitigate and report operational risk. As new products and business activities are developed and processes are designed and modified, operational risks are considered.

Legal risk

Legal risk includes the risk of non-compliance with applicable legal and regulatory requirements and standards. Legal risk also includes contractual and commercial risk such as the risk that a counterparty's performance obligations will be unenforceable. The Company has established procedures based on legal and regulatory requirements that are designed to achieve compliance with applicable statutory and regulatory requirements. The Company, principally through the Legal and Compliance Division, also has established procedures that are designed to require that the Company's policies relating to conduct, ethics and business practices are followed. In connection with its businesses, the Company has and continuously develops various procedures addressing issues such as regulatory capital requirements, sales and trading practices, new products, potential conflicts of interest, use and safekeeping of customer funds and securities, money laundering, privacy and recordkeeping. In addition, the Company has established procedures to mitigate the risk that a counterparty's performance obligations will be unenforceable, including consideration of counterparty legal authority and capacity, adequacy of legal documentation, the permissibility of a transaction under applicable law and whether applicable bankruptcy or insolvency laws limit or alter contractual remedies. The legal and regulatory focus on the financial services industry presents a continuing business challenge for the Company.

Item 8. Financial Statements and Supplementary Data

The financial statements and supplementary data required by this item are listed in Item 15—"Exhibits and Financial Statement Schedules" of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures

We maintain disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act, that are designed to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of December 31, 2019, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective and were operating at the reasonable assurance level.

For Management's report on internal control over financial reporting see page F-2, and attestation report of our independent registered public accounting firm see page F-3.

In addition, there were no changes in our internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act, that occurred in the fourth quarter.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information in the definitive proxy statement for our 2020 annual meeting of stockholders under the captions "Executive Officers," "Board of Directors," "Information Regarding the Board of Directors and Corporate Governance—Committees of the Board—Audit Committee," "Information Regarding the Board of Directors and Corporate Governance—Director Nomination Process," "Information Regarding the Board of Directors and Corporate Governance—Procedures for Nominating Director Candidates," "Information Regarding the Board of Directors and Corporate Governance—Code of Business Conduct and Ethics" and "Section 16(a) Beneficial Ownership Reporting Compliance" is incorporated herein by reference.

Item 11. Executive Compensation

The information in the definitive proxy statement for our 2020 annual meeting of stockholders under the captions "Executive Compensation—Compensation and Benefits Committee Report," "Certain Relationships and Related Transactions—Compensation and Benefits Committee Interlocks and Insider Participation" and "Information Regarding the Board of Directors and Corporate Governance—Compensation Program for Non-Employee Directors" is incorporated herein by reference.

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

The information in the definitive proxy statement for our 2020 annual meeting of stockholders under the captions "Security Ownership—Beneficial Ownership of Directors, Nominees and Executive Officers," "Security Ownership—Beneficial Owners of More than Five Percent of our Common Stock" and "Securities Authorized for Issuance Under Equity Compensation Plans" are incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions

The information in the definitive proxy statement for our 2020 annual meeting of stockholders under the captions "Information Regarding the Board of Directors and Corporate Governance—Director Independence," "Certain Relationships and Related Transactions—Transactions with Related Persons," and "Certain Relationships and Related Transactions—Review and Approval of Transactions with Related Persons" is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information in the definitive proxy statement for our 2020 annual meeting of stockholders under the captions "Audit Committee Report and Payment of Fees to Our Independent Auditor—Auditor Fees" and "Audit Committee Report and Payment of Fees to Our Independent Auditor—Auditor Services Pre-Approval Policy" is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Documents filed as part of this Annual Report on Form 10-K:

1. Consolidated Financial Statements

   The consolidated financial statements required to be filed in the Annual Report on Form 10-K are listed on page F-1 hereof. The required financial statements appear on pages F-1 through F-82 hereof.

2. Financial Statement Schedules

   Separate financial statement schedules have been omitted either because they are not applicable or because the required information is included in the consolidated financial statements.

3. Exhibits

Exhibit No.	Description
2.1	Securities Purchase Agreement, dated as of April 2, 2017, by and among Convergex Holdings LLC, Convergex Group, LLC, GTCR Convergex Holdings LLC, Cowen CV Acquisition LLC and Cowen Inc. (previously filed as Exhibit 2.1 to the Form 8-K filed on April 6, 2017)
2.2	Purchase Agreement, dated as of November 20, 2018, by and among Cowen Inc., Cowen International Limited, Cowen QN Acquisition LLC, the Sellers signatory thereto, the Beneficial Owners signatory thereto and the Seller Representatives signatory thereto (previously filed as Exhibit 2.1 to the Form 8-K filed on November 21, 2018).
3.1	Amended and Restated Certificate of Incorporation of Cowen Inc. (previously filed as Exhibit 3.1 to the Form 10-Q filed November 25, 2009).
3.2	Second Amended and Restated By-Laws of Cowen Inc. (previously filed as Exhibit 3.1 to the Form 8-K filed on February 18, 2020).
3.3	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Cowen Inc. (previously filed as Exhibit 3.3 to the Form 10-Q filed November 25, 2009).
3.4	Certificate of Designations of the Company for its Series A Cumulative Perpetual Preferred Stock (previously filed as Exhibit 3.1 to Form 8-K filed May 20, 2015).
3.5	Amendment to the Amended and Restated Certificate of Incorporation of Cowen Inc. (previously filed as Exhibit 3.1 to the Form 8-K filed December 5, 2016).
3.6	Certificate of Amendment of Amended and Restated Certificate of Incorporation of Cowen Inc. (previously filed as Exhibit 3.1 to the Form 8-K filed on May 16, 2017)
4.1	Form of Class A Common Stock Certificate (previously filed as Exhibit 4.1 to Amendment No. 2 to Form S-1 filed on December 14, 2009).
4.2	Indenture, dated March 10, 2014 by and between Cowen Inc., as Issuer and The Bank of New York Mellon, as Trustee (previously filed as Exhibit 4.1 to Form 8-K filed on March 11, 2014).
4.3	First Supplemental Indenture by and between Cowen Inc., as Issuer and The Bank of New York Mellon, as Trustee (previously filed as Exhibit 4.1 to the Form 10-Q filed May 8, 2014).
4.4	Senior Notes Indenture dated October 10, 2014, by and between Cowen Inc. and The Bank of New York Mellon (previously filed as Exhibit 4.1 to Form 8-K filed on October 10, 2014).
4.5	First Supplemental Indenture dated October 10, 2014, by and between Cowen Inc. and The Bank of New York Mellon (previously filed as Exhibit 4.2 to Form 8-K filed on October 10, 2014).
4.6	Certificate of Designations of the Company for its Series A Cumulative Perpetual Preferred Stock (previously filed as Exhibit 3.1 to Form 8-K filed May 20, 2015).
4.7	Indenture, dated as of December 14, 2017 between Cowen Inc. and The Bank of New York Mellon (previously filed as Exhibit 4.1 to Form 8-K filed on December 14, 2017).
4.8	Second Supplemental Indenture, dated as of December 8, 2017, by and between Cowen Inc. and The Bank of New York Mellon, as Trustee. (previously filed as Exhibit 4.2 to Form 8-K filed on December 8, 2017).
4.9	Third Supplemental Indenture, dated June 11, 2018, by and between Cowen Inc. and The Bank of New York Mellon (previously filed as Exhibit 4.2 to the Form 8-K filed June 11, 2018).
4.10	Form of Note Purchase Agreement including Form of Note attached thereto (previously filed as Exhibit 4.1 to the Form 8-K filed April 29, 2019).
4.11	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (filed herewith).
10.1	Lease, dated as of June 22, 2007 by and between 599 Lexington Avenue LLC and Cowen Investment Management LLC (as successor in interest to RCG Holdings LLC (f/k/a Ramius Capital Group, LLC)), as amended by the First Amendment to Lease, dated as of June 9, 2008, by and between BP 599 Lexington Avenue LLC and Cowen Investment Management LLC (as successor in interest to RCG Holdings LLC (f/k/a Ramius LLC)) (previously filed as Exhibit 10.14 to Amendment No. 2 to Form S-1 filed on December 14,
10.2	Cowen Inc. 2006 Equity and Incentive Plan (previously filed as Exhibit 10.20 to Amendment No. 2 to Form S-1 filed on December 14, 2009).*
10.3	Cowen Inc. 2007 Equity and Incentive plan (previously filed as Exhibit 10.21 to Amendment No. 2 to Form S-1 filed on December 14, 2009).*
10.4	Cowen Inc. 2010 Equity and Incentive Plan (incorporated by reference to Appendix A to the Definitive Proxy Statement of Cowen Inc., on Schedule 14A for the year ended December 31, 2009, as filed on April 30, 2010).*

Exhibit No.	Description
10.5	Second Amendment to Lease dated August 20, 2010 between BP 599 Lexington Avenue and the Company, amending that certain Lease dated as of June 22, 2007 by and between 599 Lexington Avenue LLC and Cowen Investment Management LLC (as successor in interest to RCG Holdings LLC (f/k/a Ramius Capital Group, LLC)), as amended by the First Amendment to Lease, dated as of June 9, 2008, by and between BP 599 Lexington Avenue LLC and Ramius LLC (previously filed as Exhibit 10.2 to Form 8-K filed August 24, 2010).
10.6	Form of Restricted Stock Unit and Deferred Cash Award Agreement (previously filed as Exhibit 10.18 to the Form 10-K filed on March 9, 2012).*
10.7	Employment Agreement, dated as of May 31, 2012, by and between Cowen Inc. and Jeffrey Solomon (previously filed as Exhibit 10.1 to the Form 8-K filed June 1, 2012).*
10.8	Employment Agreement, dated as of August 2, 2012, by and between Cowen Inc. and Stephen Lasota (previously filed as Exhibit 10.1 to the Form 8-K filed August 3, 2012).*
10.9	Employment Agreement, dated as of August 2, 2012, by and between Cowen Inc. and Owen Littman (previously filed as Exhibit 10.2 to the Form 8-K filed August 3, 2012).*
10.10	Employment Agreement, dated as of August 2, 2012, by and between Cowen Inc. and John Holmes (previously filed as Exhibit 10.1 to the Form 10-Q filed August 7, 2013.*
10.11	Amendment to the Employment Agreement between the Company and Stephen Lasota dated April 24, 2015 (previously filed as Exhibit 10.1 to Form 8-K filed April 27, 2015).*
10.12	Amendment to the Employment Agreement between the Company and John Holmes dated April 24, 2015 (previously filed as Exhibit 10.2 to Form 8-K filed April 27, 2015).*
10.13	Amendment to the Employment Agreement between the Company and Owen Littman dated April 24, 2015 (previously filed as Exhibit 10.3 to Form 8-K filed April 27, 2015).*
10.14	Initial capped call confirmation, dated as of May 13, 2015, by and between Nomura Global Financial Products Inc. and the Company (previously filed as Exhibit 10.1 to Form 8-K filed May 20, 2015).
10.15	Additional capped call confirmation, dated as of May 19, 2015, by and between Nomura Global Financial Products Inc. and the Company (previously filed as Exhibit 10.2 to Form 8-K filed May 20, 2015).
10.16	Form of Performance Shares Award Agreement (previously filed as Exhibit 10.1 to the Form 10-Q filed May 2, 2016).*
10.17	Underwriting Agreement, dated as of December 5, 2017, by and between Cowen Inc. and with Morgan Stanley & Co. LLC and UBS Securities LLC, as representatives of the several Underwriters named therein. (previously filed as Exhibit 1.1 to the Form 8-K filed December 8, 2017).
10.18	Letter Amendment between the Company and Mr. Solomon dated November 30, 2017 (previously filed as Exhibit 10.1 to the Form 8-K filed December 1, 2017).*
10.19	Underwriting Agreement, dated as of June 6, 2018, by and between Cowen Inc. and with Morgan Stanley & Co. LLC and UBS Securities LLC, as representatives of the several Underwriters named therein (previously filed as Exhibit 1.1 to the Form 8-K filed June 11, 2018).
10.20	Form of Performance Shares Award Agreement (previously filed as Exhibit 10.1 to the Form 10-Q filed August 1, 2019).*
10.21	Credit Agreement dated December 2, 2019 (previously filed as Exhibit 10.1 to the Form 8-K filed December 4. 2019).
10.22	Form of Restricted Stock Unit and Deferred Cash Award (filed herewith).*
10.23	Amended and Restated Employment Agreement between the Company and Jeffrey Solomon dated January 31, 2020 (previously filed as Exhibit 10.1 to Form 8-K filed February 3, 2020). *
10.24	Amended and Restated Employment Agreement between the Company and John Holmes dated January 31, 2020 (previously filed as Exhibit 10.2 to Form 8-K filed February 3, 2020). *
10.25	Amended and Restated Employment Agreement between the Company and Stephen Lasota dated January 31, 2020 (previously filed as Exhibit 10.3 to Form 8-K filed February 3, 2020).*
10.26	Amended and Restated Employment Agreement between the Company and Owen Littman dated January 31, 2020 (previously filed as Exhibit 10.4 to Form 8-K filed February 3, 2020).*
21.1	Subsidiaries of Cowen Inc. (filed herewith).
23.1	Consent of Independent Registered Public Accounting Firm (filed herewith).
31.1	Certification of CEO Pursuant to Section 302 of Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certification of CFO Pursuant to Section 302 of Sarbanes-Oxley Act of 2002 (filed herewith).
32	Certification of CEO and CFO Pursuant to Section 906 of Sarbanes-Oxley Act of 2002 (furnished herewith).

Exhibit No.	Description
101.INS	XBRL INSTANCE DOCUMENT
101.SCH	XBRL TAXONOMY EXTENSION SCHEMA DOCUMENT
101.CAL	XBRL TAXONOMY EXTENSION CALCULATION LINKBASE DOCUMENT
101.DEF	XBRL TAXONOMY EXTENSION DEFINITION LINKBASE DOCUMENT
101.LAB	XBRL TAXONOMY EXTENSION LABEL LINKBASE DOCUMENT
101.PRE	XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE DOCUMENT
104	Cover Page Interactive Data File - (formatted as inline XBRL and contained in Exhibit 101)

* Signifies management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

Not Applicable.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Management's Report on Internal Control over Financial Reporting

Management of Cowen Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive and principal financial officers to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles.

As of the end of the Company's 2019 fiscal year, management conducted an assessment of the Company's internal control over financial reporting based on the framework established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has determined that the Company's internal control over financial reporting as of December 31, 2019 was effective.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of management and the directors of the Company; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on our financial statements.

The Company's internal control over financial reporting as of December 31, 2019 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report included herein, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2019.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Cowen Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated statements of financial condition of Cowen Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income (loss), changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting 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 Company in accordance with the 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, 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 consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

We have served as the Company's auditor since 2017.

New York, New York
March 4, 2020

Cowen Inc.
Consolidated Statements of Financial Condition
(dollars in thousands, except share and per share data)

Assets	**As of December 31, 2019**	**As of December 31, 2018**
Cash and cash equivalents	$ 301,123	$ 259,148
Cash collateral pledged	6,563	6,318
Segregated cash	107,328	176,647
Securities owned, at fair value ($112,451 and $57,583 were pledged to various parties)	1,633,552	520,888
Receivable on derivative contracts, at fair value	62,977	25,125
Securities borrowed	754,441	407,795
Other investments ($125,240 and $123,241 at fair value, respectively)	185,722	181,407
Deposits with clearing organizations, brokers and banks	91,755	89,423
Receivable from brokers, dealers and clearing organizations, net of allowance of $721 and $472, respectively	681,695	786,113
Receivable from customers, net of allowance of $650 and $516, respectively	105,647	37,858
Fees receivable, net of allowance of $2,620 and $1,569, respectively	126,358	111,946
Due from related parties	26,749	33,870
Fixed assets, net of accumulated depreciation and amortization of $32,846 and $31,630, respectively	33,661	26,443
Operating lease right-of-use assets	92,852	—
Goodwill	137,728	60,678
Intangible assets, net of accumulated amortization of $26,395 and $38,093, respectively	35,200	24,943
Deferred tax asset, net	79,166	93,057
Other assets	84,158	79,014
Consolidated Funds		
Cash and cash equivalents	30,874	38,118
Securities owned, at fair value	375,278	187,633
Receivable on derivative contracts, at fair value	5,833	4,416
Other investments	175,769	186,395
Receivable from brokers	25,964	8,328
Other assets	1,632	740
Total Assets	**$ 5,162,025**	**$ 3,346,303**
Liabilities and Stockholders' Equity		
Liabilities		
Securities sold, not yet purchased, at fair value	$ 451,836	$ 195,307
Securities sold under agreements to repurchase	23,244	—
Payable for derivative contracts, at fair value	60,761	16,082
Securities loaned	1,601,866	414,852
Payable to brokers, dealers and clearing organizations	271,018	228,731
Payable to customers	430,224	525,153
Commission management payable	71,620	95,270
Compensation payable	223,139	226,971
Operating lease liabilities	97,581	—
Notes payable and other debt	345,451	262,965
Convertible debt	118,688	134,489
Fees payable	21,540	22,565
Due to related parties	1	571
Accounts payable, accrued expenses and other liabilities	141,556	110,423

Cowen Inc.
Consolidated Statements of Financial Condition
(dollars in thousands, except share and per share data)

	As of December 31, 2019		As of December 31, 2018	
(continued)				
Consolidated Funds				
Due to related parties		581		—
Payable for derivative contracts, at fair value		4,769		1,663
Payable to brokers		864		23,521
Capital withdrawals payable		1,276		11,106
Accounts payable, accrued expenses and other liabilities		560		424
Total Liabilities	**$**	**3,866,575**	**$**	**2,270,093**
Commitments and Contingencies (Note 22)				
Temporary Equity				
Redeemable non-controlling interests	**$**	**391,275**	**$**	**216,923**
Permanent Equity				
Cowen Inc. stockholders' equity				
Preferred stock, par value $0.01 per share: 10,000,000 shares authorized, 120,750 shares issued and outstanding as of December 31, 2019 (aggregate liquidation preference of $120,750,000) and 10,000,000 shares authorized, 120,750 shares issued and outstanding as of December 31, 2018 (aggregate liquidation preference of $120,750,000), respectively	$	1	$	1
Class A common stock, par value $0.01 per share: 62,500,000 shares authorized, 47,215,938 shares issued and 28,610,357 outstanding as of December 31, 2019 and 62,500,000 shares authorized, 43,774,731 shares issued and 28,437,860 outstanding as of December 31, 2018, respectively (including 216,912 and 253,772 restricted shares, respectively)		334		324
Class B common stock, par value $0.01 per share: 62,500,000 authorized, no shares issued and outstanding as of December 31, 2019 and 2018, respectively		—		—
Additional paid-in capital		1,110,635		1,062,877
(Accumulated deficit) retained earnings		(16,809)		(34,648)
Accumulated other comprehensive income (loss)		(5)		(5)
Less: Class A common stock held in treasury, at cost, 18,605,581 and 15,336,871 shares as of December 31, 2019 and 2018, respectively		(284,301)		(234,142)
Total Cowen Inc. Stockholders' Equity		**809,855**		**794,407**
Nonredeemable non-controlling interests		94,320		64,880
Total Permanent Equity	**$**	**904,175**	**$**	**859,287**
Total Liabilities, Temporary Equity and Permanent Equity	**$**	**5,162,025**	**$**	**3,346,303**

The accompanying notes are an integral part of these consolidated financial statements.

Cowen Inc.
Consolidated Statements of Operations
(in thousands, except per share data)

	Year Ended December 31,		
	2019	**2018**	**2017**
Revenues			
Investment banking	$ 375,025	$ 357,222	$ 223,614
Brokerage	402,747	413,582	293,610
Management fees	32,608	29,658	33,245
Incentive income	1,547	3,117	5,383
Interest and dividends	174,913	108,009	49,440
Reimbursement from affiliates	1,026	1,038	2,860
Aircraft lease revenue	—	1,852	3,751
Reinsurance premiums	46,335	38,096	30,996
Other revenues	5,433	4,504	8,561
Consolidated Funds			
Interest and dividends	9,772	9,816	5,870
Other revenues	37	22	1,451
Total revenues	**1,049,443**	**966,916**	**658,781**
Interest and dividends expense	168,628	104,116	60,949
Total net revenues	**880,815**	**862,800**	**597,832**
Expenses			
Employee compensation and benefits	535,772	512,627	404,087
Brokerage and trade execution costs	103,235	109,399	75,601
Underwriting expenses	15,067	15,282	—
Professional, advisory and other fees	48,385	40,957	31,942
Service fees	23,707	20,198	14,999
Communications	31,894	30,801	23,460
Occupancy and equipment	39,726	41,602	35,184
Depreciation and amortization	20,460	12,436	13,078
Client services and business development	50,371	35,927	28,327
Goodwill impairment	4,100	—	—
Reinsurance claims, commissions and amortization of deferred acquisition costs	44,070	41,086	30,486
Restructuring costs	—	—	8,763
Other expenses	23,114	22,014	18,196
Consolidated Funds			
Interest and dividends	4,602	6,534	9,836
Professional, advisory and other fees	2,426	938	1,145
Brokerage and trade execution costs	122	256	318
Other expenses	1,813	887	1,227
Total expenses	**948,864**	**890,944**	**696,649**
Other income (loss)			
Net gains (losses) on securities, derivatives and other investments	80,409	68,043	76,179
Bargain purchase gain, net of tax	—	—	6,914
Gain/(loss) on debt extinguishment	—	(556)	(16,039)
Consolidated Funds			
Net realized and unrealized gains (losses) on investments and other transactions	59,384	46,656	19,660
Net realized and unrealized gains (losses) on derivatives	(1,003)	9,408	19,476
Net gains (losses) on foreign currency transactions	(18)	191	(411)
Total other income (loss)	**138,772**	**123,742**	**105,779**
Income (loss) before income taxes	**70,723**	**95,598**	**6,962**
Income tax expense (benefit)	14,853	15,719	44,053
Net income (loss)	**55,870**	**79,879**	**(37,091)**

Cowen Inc.
Consolidated Statements of Operations
(in thousands, except per share data)

	Year Ended December 31,		
	2019	**2018**	**2017**
(continued)			
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	31,239	37,060	23,791
Net income (loss) attributable to Cowen Inc.	**24,631**	**42,819**	**(60,882)**
Preferred stock dividends	6,792	6,792	6,792
Net income (loss) attributable to Cowen Inc. common stockholders	**$ 17,839**	**$ 36,027**	**$ (67,674)**
Weighted average common shares outstanding:			
Basic	29,525	29,545	29,492
Diluted	31,286	30,735	29,492
Earnings (loss) per share:			
Basic	$ 0.60	$ 1.22	$ (2.29)
Diluted	$ 0.57	$ 1.17	$ (2.29)

The accompanying notes are an integral part of these consolidated financial statements.

Cowen Inc.
Consolidated Statements of Comprehensive Income (Loss)
(dollars in thousands)

	Year Ended December 31,		
	2019	**2018**	**2017**
Net income (loss)	$ 55,870	$ 79,879	$ (37,091)
Other comprehensive income (loss), net of tax:			
Foreign currency translation	—	3	(6)
Total other comprehensive income (loss), net of tax	—	3	(6)
Comprehensive income (loss)	**$ 55,870**	**$ 79,882**	**$ (37,097)**
Less: Comprehensive income attributable to non-controlling interests	31,239	37,060	23,791
Comprehensive income (loss) attributable to Cowen Inc.	**$ 24,631**	**$ 42,822**	**$ (60,888)**

The accompanying notes are an integral part of these consolidated financial statements.

Cowen Inc.
Consolidated Statements of Changes in Equity
(dollars in thousands, except share data)

	Common Shares Outstanding	Common Stock	Preferred Shares Outstanding	Preferred Stock	Treasury Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings/ (Accumulated deficit)	Total Cowen Inc. Stockholders' Equity	Nonredeemable Non-controlling Interests	Total Permanent Equity	Redeemable Non-controlling Interest
Balance, December 31, 2016	**26,731,289**	**$ 292**	**120,750**	**$ 1**	**$ (153,845)**	**$ 928,646**	**$ (2)**	**$ (2,442)**	**$ 772,650**	**$ 98,678**	**$ 871,328**	**$ 280,527**
Net income (loss) attributable to Cowen Inc.	—	—	—	—	—	—	—	(60,882)	(60,882)	—	(60,882)	—
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	—	—	—	—	—	—	—	—	—	16,134	16,134	7,657
Foreign currency translation	—	—	—	—	—	—	(6)	—	(6)	—	(6)	—
Capital contributions	—	—	—	—	—	—	—	—	—	30,078	30,078	89,034
Capital withdrawals	—	—	—	—	—	—	—	—	—	(39,303)	(39,303)	(42,201)
Restricted stock awards issued	2,060,927	—	—	—	—		—	—	—	—	—	—
Common stock issuance upon acquisition (See Note 3)	3,162,278	32	—	—	—	47,575	—	—	47,607	—	47,607	—
Purchase of treasury stock, at cost	(2,322,474)	—	—	—	(33,001)	—	—	—	(33,001)	—	(33,001)	—
Preferred stock dividends (See Note 24)	—	—	—	—	—	—	—	(6,792)	(6,792)	—	(6,792)	—
Amortization of share based compensation	—	—	—	—	—	28,443	—	—	28,443	—	28,443	—
Balance, December 31, 2017	**29,632,020**	**$ 324**	**120,750**	**$ 1**	**$ (186,846)**	**$ 1,004,664**	**$ (8)**	**$ (70,116)**	**$ 748,019**	**$ 105,587**	**$ 853,606**	**$ 335,017**
Cumulative effect of the adoption of the new revenue recognition standard (See Note 3)	—	—	—	—	—	—	—	(559)	(559)	—	(559)	—
Net income (loss) attributable to Cowen Inc.	—	—	—	—	—	—	—	42,819	42,819	—	42,819	—
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	—	—	—	—	—	—	—	—	—	12,308	12,308	24,752
Foreign currency translation	—	—	—	—	—	—	3	—	3	—	3	—
Capital contributions	—	—	—	—	—	—	—	—	—	7,888	7,888	107,117
Capital withdrawals	—	—	—	—	—	—	—	—	—	(28,344)	(28,344)	(249,963)
Deconsolidation of entity	—	—	—	—	—	—	—	—	—	(32,559)	(32,559)	—
Restricted stock awards issued	2,009,435	—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury stock, at cost	(3,203,595)	—	—	—	(47,296)	—	—	—	(47,296)	—	(47,296)	—
Preferred stock dividends (See Note 24)	—	—	—	—	—	—	—	(6,792)	(6,792)	—	(6,792)	—
Embedded cash conversion option, net of tax (See Note 24)	—	—	—	—	—	21,195	—	—	21,195	—	21,195	—
Amortization of share based compensation	—	—	—	—	—	37,018	—	—	37,018	—	37,018	—
Balance, December 31, 2018	**28,437,860**	**$ 324**	**120,750**	**$ 1**	**$ (234,142)**	**$ 1,062,877**	**$ (5)**	**$ (34,648)**	**$ 794,407**	**$ 64,880**	**$ 859,287**	**$ 216,923**

	Common Shares Outstanding	Common Stock	Preferred Shares Outstanding	Preferred Stock	Treasury Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings/ (Accumulated deficit)	Total Cowen Inc. Stockholders' Equity	Nonredeemable Non-controlling Interests	Total Permanent Equity	Redeemable Non-controlling Interest
Net income (loss) attributable to Cowen Inc.	—	—	—	—	—	—	—	24,631	24,631	—	24,631	—
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	—	—	—	—	—	—	—	—	—	22,797	22,797	8,442
Foreign currency translation	—	—	—	—	—	—	—	—	—	—	—	—
Capital contributions	—	—	—	—	—	—	—	—	—	11,655	11,655	266,504
Capital withdrawals	—	—	—	—	—	—	—	—	—	(5,012)	(5,012)	(100,594)
Restricted stock awards issued	2,407,857	—	—	—	—	—	—	—	—	—	—	—
Purchase of treasury stock, at cost	(3,268,710)	—	—	—	(50,159)	—	—	—	(50,159)	—	(50,159)	—
Common stock issuance upon acquisition (See Note 3)	1,033,350	10	—	—	—	14,436	—	—	14,446	—	14,446	—
Preferred stock dividends (See Note 24)	—	—	—	—	—	—	—	(6,792)	(6,792)	—	(6,792)	—
Embedded cash conversion option, net of tax (See Note 24)	—	—	—	—	—	(596)	—	—	(596)	—	(596)	—
Amortization of share-based compensation	—	—	—	—	—	33,918	—	—	33,918	—	33,918	—
Balance, December 31, 2019	**28,610,357**	**$ 334**	**120,750**	**$ 1**	**$ (284,301)**	**$ 1,110,635**	**$ (5)**	**$ (16,809)**	**$ 809,855**	**$ 94,320**	**$ 904,175**	**$ 391,275**

The accompanying notes are an integral part of these consolidated financial statements.

Cowen Inc.
Consolidated Statements of Cash Flows
(dollars in thousands)

	Year Ended December 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net income (loss)	$ 55,870	$ 79,879	$ (37,091)
Adjustments to reconcile net income (loss) to net cash provided by / (used in) operating activities:			
Bargain purchase gain, net of tax	—	—	(6,914)
Depreciation and amortization	20,460	12,436	13,078
Goodwill impairment	4,100	—	—
Amortization of debt issuance costs	1,129	1,153	1,261
Amortization of debt discount	4,598	5,473	7,435
Noncash lease expense	(2,148)	—	—
Gain / (loss) on extinguishment of debt	—	652	10,551
Share-based compensation	33,918	37,018	28,443
Change in deferred taxes	13,295	15,486	45,856
Deferred rent obligations	—	(3,036)	(2,192)
Net loss (gain) on disposal of fixed assets	233	15,343	(2,346)
Purchases of securities owned, at fair value	(2,107,956)	(3,830,757)	(4,943,394)
Proceeds from sales of securities owned, at fair value	2,042,946	4,032,937	5,131,938
Proceeds from sales of securities sold, not yet purchased, at fair value	1,360,075	2,794,434	2,455,876
Payments to cover securities sold, not yet purchased, at fair value	(1,408,043)	(2,927,916)	(2,444,010)
Proceeds from other investments	23,886	10,157	—
Net (gains) losses on securities, derivatives and other investments	(74,284)	(54,032)	(78,303)
Consolidated Funds			
Purchases of securities owned, at fair value	(2,725,439)	(887,728)	(385,544)
Proceeds from sales of securities owned, at fair value	2,618,200	835,002	338,268
Proceeds from sales of securities sold, not yet purchased, at fair value	—	—	217
Payments to cover securities sold, not yet purchased, at fair value	—	—	(899)
Purchases of other investments	(3,408)	(2,835)	(26,206)
Proceeds from other investments	23,954	231,559	64,867
Net realized and unrealized (gains) losses on investments and other transactions	(90,900)	(52,807)	(28,267)
(Increase) decrease in operating assets:			
Cash acquired through acquisition	—	—	159,587
Securities owned, at fair value, held at broker-dealer	(990,356)	(57,732)	(102,137)
Receivable on derivative contracts, at fair value	(37,522)	44,053	(46,277)
Securities borrowed	(346,646)	35,353	(184,827)
Deposits with clearing organizations, brokers and banks	(2,332)	4,573	(32,460)
Receivable from brokers, dealers and clearing organizations	104,418	(277,935)	(366,297)
Receivable from customers, net of allowance	(67,789)	12,033	(6,422)
Fees receivable, net of allowance	(7,143)	(6,401)	(29,669)
Due from related parties	7,120	1,405	4,815
Other assets	(6,501)	6,017	(33,454)
Consolidated Funds			
Cash and cash equivalents	7,299	(19,501)	(4,227)
Receivable on derivative contracts, at fair value	(1,417)	(1,896)	(1,627)
Receivable from brokers	(17,636)	(2,684)	334
Other assets	(159)	(538)	123
Increase (decrease) in operating liabilities:			
Securities sold, not yet purchased, at fair value, held at broker-dealer	277,119	26,232	19,226
Securities sold under agreement to repurchase	23,244	—	—
Payable for derivative contracts, at fair value	44,679	2,305	(1,399)
Securities loaned	1,187,014	(41,979)	170,472
Payable to brokers, dealers and clearing organizations	42,287	(23,422)	(32,440)
Payable to customers	(94,929)	172,686	340,666
Commission management payable	(23,650)	24,819	(15,857)
Compensation payable	(38,954)	64,456	9,150
Fees payable	(1,025)	14,518	(639)
Due to related parties	(5,320)	1	(3)

Cowen Inc.
Consolidated Statements of Cash Flows
(dollars in thousands)

	Year Ended December 31,		
	2019	2018	2017
(continued)			
Accounts payable, accrued expenses and other liabilities	(3,148)	17,723	13,046
Consolidated Funds			
Contributions received in advance	50	—	(2,000)
Payable to brokers	(22,657)	22,770	(2,949)
Payable for derivative contracts, at fair value	3,106	(5,467)	6,558
Due to related parties	581	—	(189)
Accounts payable, accrued expenses and other liabilities	(129)	369	(330)
Net cash provided by / (used in) operating activities	**(179,910)**	**324,176**	**3,398**
Cash flows from investing activities:			
Purchases of other investments	(19,812)	(28,092)	(10,419)
Purchase of business (See Note 3)	(48,581)	—	(55,049)
Proceeds from sales of other investments	35,648	18,782	71,749
Loans issued	—	—	(13,745)
Proceeds from loans held for investment	—	14	3,203
Purchase of fixed assets and intangibles	(14,882)	(8,586)	(5,986)
Sale of fixed assets	—	—	7,850
Net cash provided by / (used in) investing activities	**(47,627)**	**(17,882)**	**(2,397)**
Cash flows from financing activities:			
Proceeds from issuance of convertible debt	—	—	135,000
Repayments on convertible debt	(20,860)	(13,500)	(115,140)
Deferred debt issuance cost	(2,077)	(3,985)	(7,176)
Borrowings on notes and other debt	87,365	102,382	171,148
Repayments on notes and other debt	(10,263)	(16,601)	(72,757)
Purchase of treasury stock	(15,217)	(31,762)	(19,662)
Contingent liability payment	(1,234)	(797)	(393)
Capital contributions by non-controlling interests in operating entities	11,110	941	—
Capital withdrawals to non-controlling interests in operating entities	(3,785)	(2,774)	(5,178)
Consolidated Funds			
Capital contributions by non-controlling interests in Consolidated Funds	267,049	114,064	117,812
Capital withdrawals to non-controlling interests in Consolidated Funds	(111,650)	(276,357)	(65,803)
Net cash provided by / (used in) financing activities	**200,438**	**(128,389)**	**137,851**
Change in cash and cash equivalents	(27,099)	177,905	138,852
Cash and cash equivalents, including cash collateral pledged and segregated cash, beginning of period	442,113	264,208	125,356
Cash and equivalents at end of period:			
Cash and cash equivalents	301,123	259,148	130,052
Cash collateral pledged	6,563	6,318	17,888
Segregated cash	107,328	176,647	116,268
Cash and cash equivalents, including cash collateral pledged and segregated cash, end of period	**$ 415,014**	**$ 442,113**	**$ 264,208**
Supplemental information			
Cash paid during the year for interest	$ 145,877	$ 90,843	$ 26,632
Cash paid during the year for taxes	$ 4,310	$ 3,881	$ 2,172
Supplemental non-cash information			
Purchase of treasury stock, at cost, through net settlement (See Note 24)	$ 15,217	$ 12,310	$ 11,889
Preferred stock dividends declared (See Note 19)	$ 6,792	$ 6,792	$ 6,792
Net assets (liabilities) acquired upon acquisition (net of cash)	$ 90,727	$ —	$ 77,790
Transfer of investment from consolidated funds, securities owned, fair value to securities owned, fair value	$ —	$ 8,820	$ —
Initial recognition of operating lease right-of-use assets	$ 103,694	$ —	$ —
Initial recognition of operating lease liabilities	$ 110,505	$ —	$ —
Noncash transfer of net assets from Unconsolidated Master Fund to Consolidated Fund	$ 97,655	$ —	$ —
Net decrease in non-controlling interests in Consolidated Funds due to deconsolidation of consolidated fund (See Note 2)	$ —	$ 32,559	$ —
Separately recognized conversion option reclassification from a derivative liability to equity (See Note 24)	$ —	$ 28,974	$ —
Common stock issuance upon close of acquisition (See Note 3)	$ 14,446	$ —	$ 47,607

The accompanying notes are an integral part of these consolidated financial statements.

Notes to Consolidated Financial Statements

1. Organization and Business

Cowen Inc., a Delaware corporation formed in 2009, is a diversified financial services firm that, together with its consolidated subsidiaries (collectively, "Cowen" or the "Company"), provides investment banking, research, sales and trading, prime brokerage, global clearing and commission management services and investment management through its two business segments: the Operating Company ("Op Co") and the Asset Company ("Asset Co").

The Op Co segment consists of four divisions: the Investment Banking division, the Markets division, the Research division and the Cowen Investment Management ("CIM") division. The Company refers to the Investment Banking division, the Markets division and the Research division combined as its investment banking businesses. Op Co's investment banking businesses offer investment banking, research, sales and trading, prime brokerage, global execution, clearing and commission management services to companies and primarily institutional investor clients. Sectors covered by Op Co's investment banking business include healthcare, technology, media and telecommunications, consumer, industrials, information and technology services, and energy. Op Co's CIM division includes advisers to investment funds (including private equity structures and privately placed hedge funds) and registered funds.

The Asset Co segment consists of certain of the Company's private investments, private real estate investments and other legacy investment strategies. The focus of Asset Co is to drive future monetization of the invested capital of the segment.

Change in Segments

The Company continually monitors and reviews its segment reporting structure in accordance with authoritative guidance to determine whether any changes have occurred that would impact its reportable segments. Because of the change in the Chief Operating Decision Maker ("CODM") of the Company at the end of 2017, the Company experienced a strategic shift to refocus the Company's businesses on a set of differentiated products which are aligned to the content and insight within the Company's domain of expertise.

During the second quarter of 2019, the Company realigned the business and reportable segment information that the CODM regularly reviews to evaluate performance for operating decision-making purposes, including evaluation and allocation of resources. As a result, the Company changed its segment reporting structure based on the Company's domain expertise as a driver of balance sheet harmonization and repeatable revenues for its operating business versus the Company's long-term monetization strategies.

As a result of the change in segments during the second quarter of 2019, the Company has the following business segments:

- The Op Co segment consists of four divisions: Investment Banking, Markets, Research and Cowen Investment Management. Each of Op Co's four divisions leverage the Research division's core domain expertise to drive harmonized repeatable revenue for the segment.
    - The Investment Banking division includes public and private capital raising transactions and providing strategic advisory services.
    - The Markets division includes trading equity, equity-linked and fixed income securities on behalf of institutional investors as well as a full-service suite of prime brokerage services, cross-asset trading, securities finance, global execution, clearing and commission management businesses.
    - The Research division provides thought leadership and domain expertise. The research content that is created helps to facilitate brokerage revenue in the Markets division, provides research coverage for clients of the Investment Banking division and facilitate investor relationships and investing within CIM's innovative investment products and solutions.
    - The CIM division offers innovative investment products and solutions across the liquidity spectrum to institutional and private clients. CIM offers investors access to a number of strategies to meet their specific needs including merger arbitrage, activism, healthcare royalties, private healthcare investing and private sustainable investing many of which leverage the content and domain expertise that are aligned with the Company's core areas of expertise, which the Company refers to as Cowen DNA.
- The Asset Co segment consists of certain of the Company's private investments, private real estate investments and other legacy investment strategies.

2. Significant Accounting Policies

a. Basis of presentation

These financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") as promulgated by the Financial Accounting Standards Board ("FASB") through Accounting Standards Codification ("The Accounting Standards") as the source of authoritative accounting principles in the preparation of financial statements, and include the accounts of the Company, its operating and other subsidiaries, and entities in which the Company has a controlling financial interest or a general partner interest. All material intercompany transactions and balances have been eliminated on consolidation. Certain investment funds that are consolidated in these accompanying consolidated financial statements, as further discussed below, are not subject to the consolidation provisions with respect to their own controlled investments pursuant to specialized industry accounting.

The Company serves as the managing member/general partner and/or investment manager to investment funds which it sponsors and manages. Investment funds in which the Company has a controlling financial interest are consolidated with the Company. Consequently, the Company's consolidated financial statements reflect the assets, liabilities, income and expenses of these investment funds on a gross basis. The ownership interests in these investment funds that are not owned by the Company are reflected as redeemable or nonredeemable non-controlling interests, dependent on the non-controlling interest holder's redemption rights, in consolidated subsidiaries in the accompanying consolidated financial statements. The management fees and incentive income earned by the Company from these investment funds are eliminated in consolidation.

During 2019, the Company carried out an analysis to evaluate instances where non-controlling interest parties have the unilateral right to redeem their ownership interest for cash, which resulted in a change to the presentation of certain nonredeemable non-controlling interests into permanent equity. Accordingly, prior period amounts have been recast to be presented separately from redeemable non-controlling interests within the permanent equity section of the accompanying consolidated statements of financial condition. The change to the presentation of nonredeemable non-controlling interests has no impact on net income (loss) attributable to Cowen Inc. common stockholders, total assets or total liabilities.

With respect to the Company's private equity investment management strategies, a portion of the Company's carried interest is granted to employees through profit sharing awards designed to more closely align compensation with the overall realized performance of the Company. These arrangements enable certain employees to earn compensation based on performance revenue earned by the Company and are recorded within compensation payable in the accompanying consolidated statements of financial condition and employee compensation and benefits expense in the accompanying consolidated statements of operation based on the probable and estimable payments under the terms of the awards. Prior period amounts have been recast to reflect this accounting treatment.

b. Principles of consolidation

The Company consolidates all entities that it controls through a majority voting interest or otherwise, including those investment funds in which the Company either directly or indirectly has a controlling financial interest. In addition, the Company consolidates all variable interest entities for which it is the primary beneficiary.

The Company consolidates five investment funds for which it acts as the managing member/general partner and investment manager. At December 31, 2019, the Company consolidated the following investment funds: Ramius Enterprise LP ("Enterprise LP"), Ramius Merger Fund LLC (the "Merger Fund"), Cowen Private Investments LP ("Cowen Private"), Ramius Merger Arbitrage UCITS Fund ("UCITS Fund"), and Cowen Sustainable Investments I LP ("CSI I LP") (each a "Consolidated Fund" and collectively the "Consolidated Funds").

The Company determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting operating entity ("VOE") or a variable interest entity ("VIE") under US GAAP.

Voting Operating Entities—VOEs are entities in which (i) the total equity investment at risk is sufficient to enable the entity to finance its activities independently, (ii) the equity holders at risk have the obligation to absorb losses, the right to receive residual returns and the right to direct the activities of the entity that most significantly impact the entity's economic performance and (iii) voting rights of equity holders are proportionate to their obligation to absorb losses or the right to receive returns.

Under US GAAP consolidation requirements, the usual condition for a controlling financial interest in a VOE is ownership of a majority voting interest. Accordingly, the Company consolidates all VOEs in which it owns a majority of the entity's voting shares or units.

Variable Interest Entities—VIEs are entities that lack one or more of the characteristics of a VOE. In accordance with US GAAP, an enterprise must consolidate all VIEs of which it is the primary beneficiary. Under the US GAAP consolidation model for VIEs, an enterprise that (1) has the power to direct the activities of a VIE that most significantly impacts the VIE's economic performance, and (2) has an obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE, is considered to be the primary beneficiary of the VIE and thus is required to consolidate it.

The Company determines whether it is the primary beneficiary of a VIE upon its initial involvement with the VIE and reassesses whether it is the primary beneficiary on an ongoing basis as long as it has any continuing involvement with the VIE by performing a periodic qualitative and/or quantitative analysis of the VIE that includes a review of, among other things, its capital structure, contractual agreements between the Company and the VIE, the economic interests that create or absorb variability, related party relationships and the design of the VIE. As of December 31, 2019, the total assets and total liabilities of the consolidated VIEs were $685.4 million and $24.9 million, respectively. As of December 31, 2018, the total assets and total liabilities of the consolidated VIEs were $468.0 million and $40.5 million, respectively. The increase is primarily related to other investors' subscriptions which increased overall VIEs net assets. The VIEs act as investment managers and/or investment companies that may be managed by the Company or the Company may have equity interest in those investment companies. The VIEs are financed through their operations and/or loan agreements with the Company.

At December 31, 2019, the Company held a variable interest in Ramius Merger Master Fund Ltd ("Merger Master") (the "Unconsolidated Master Fund") through the consolidated Merger Fund. At December 31, 2018, the Company held variable interests in Ramius Enterprise Master Fund Ltd ("Enterprise Master") and Merger Master (collectively the "Unconsolidated Master Funds") through two Consolidated Funds. Investment companies, which account for their investments under the specialized industry accounting guidance for investment companies prescribed under US GAAP, are not subject to the consolidation provisions for their investments. Therefore, the Company has not consolidated the Unconsolidated Master Funds.

In the ordinary course of business, the Company also sponsors various other entities that it has determined to be VIEs. These VIEs are primarily investment funds for which the Company serves as the general partner, managing member and/or investment manager with decision-making rights.

The Company does not consolidate the Unconsolidated Master Fund or real estate funds that are VIEs due to the Company's conclusion that it is not the primary beneficiary of these funds in each instance. Investment fund investors are entitled to all of the economics of these VIEs with the exception of the management fee and incentive income, if any, earned by the Company. The Company has equity interests in the funds as both general partner and limited partner. In these instances the Company has concluded that the variable interests are not potentially significant to the VIE. Although the Company may advance amounts and pay certain expenses on behalf of the investment funds that it considers to be VIEs, it does not provide, nor is it required to provide, any type of substantive financial support to these entities outside of regular investment management services (see Note 6 for additional disclosures on VIEs).

Equity Method Investments—For operating entities over which the Company exercises significant influence but which do not meet the requirements for consolidation as outlined above, the Company uses the equity method of accounting. The Company's investments in equity method investees are recorded in other investments in the accompanying consolidated statements of financial condition. The Company's share of earnings or losses from equity method investees is included in net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

The Company evaluates its equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amounts of such investments may not be recoverable. The difference between the carrying value of the equity method investment and its estimated fair value is recognized as an impairment charge when the loss in value is deemed other than temporary.

Other—If the Company does not consolidate an entity or apply the equity method of accounting, the Company accounts for such entities (primarily, all securities of such entity which are bought and held principally for the purpose of selling them in the near term as trading securities), at fair value with unrealized gains (losses) resulting from changes in fair value reflected within net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

Retention of Specialized Accounting—The Consolidated Funds and certain other consolidated companies are investment companies and apply specialized industry accounting. The Company reports its investments on the consolidated statements of financial condition at their estimated fair value, with unrealized gains (losses) resulting from changes in fair value reflected within net realized and unrealized gains (losses) on investments and other transactions. Accordingly, the accompanying consolidated financial statements reflect different accounting policies for investments depending on whether or not they are held through a consolidated investment company.

In addition, the Company's broker-dealer subsidiaries, Cowen and Company, LLC ("Cowen and Company"), Cowen Execution Services LLC ("Cowen Execution"), Westminster Research Associates LLC ("Westminster"), Cowen Execution Services Limited ("Cowen Execution Ltd"), ATM Execution LLC ("ATM Execution"), Cowen International Limited ("Cowen International Ltd"), and Cowen Prime Services LLC ("Cowen Prime") apply the specialized industry accounting for brokers and dealers in securities. The Company also retains specialized accounting upon consolidation.

c. Use of estimates

The preparation of the accompanying consolidated financial statements in conformity with US GAAP requires the management of the Company to make estimates and assumptions that affect the fair value of securities and other investments, the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the accompanying consolidated financial statements, the accounting for goodwill and identifiable intangible assets and the reported amounts of revenues and expenses during the reporting period. Actual results could materially differ from those estimates.

d. Cash and cash equivalents

The Company considers investments in money market funds and other highly liquid investments with original maturities of three months or less which are deposited with a bank or prime broker to be cash equivalents. Cash and cash equivalents held at Consolidated Funds, although not legally restricted, are not available to fund the general liquidity needs of the Company. The Company may also be exposed to credit risk as a result of cash being held at several banks.

e. Allowance for credit losses

The allowance for credit losses is based on the Company's assessment of the collectability of receivables related to securities transactions, prepaid research and other receivables. The Company considers factors such as historical experience, credit quality, age of balances and current economic conditions that may affect collectability in determining the allowance for credit losses. Specifically, for prepaid research, the Company reviews clients' historical, current and forecasted trading activity in determining the allowance for credit losses. The credit loss expense related to the allowance for credit losses as well as any recoveries of amounts previously charged is reflected in other expenses in the accompanying consolidated statements of operations.

f. Valuation of investments and derivative contracts

US GAAP establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 Inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date;

Level 2 Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly, including inputs in markets that are not considered to be active; and

Level 3 Fair value is determined based on pricing inputs that are unobservable and includes situations where there is little, if any, market activity for the asset or liability. The determination of fair value for assets and liabilities in this category requires significant management judgment or estimation.

Inputs are used in applying the various valuation techniques and broadly refer to the assumptions that market participants use to make valuation decisions, including assumptions about risk. Inputs may include price information, volatility statistics, specific and broad credit data, liquidity statistics, and other factors. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. However, the determination of what constitutes "observable" requires significant judgment by the Company. The Company considers observable data to be that market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant market. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of the instrument and does not necessarily correspond to the Company's perceived risk of that instrument.

The Company and its operating subsidiaries act as the manager for the Consolidated Funds. Both the Company and the Consolidated Funds hold certain investments which are valued by the Company, acting as the investment manager. The fair value of these investments is generally estimated based on proprietary models developed by the Company, which include discounted cash flow analysis, public market comparables, and other techniques and may be based, at least in part, on independently sourced market information. The material estimates and assumptions used in these models include the timing and expected amount of cash flows, the appropriateness of discount rates used, and, in some cases, the ability to execute, timing of, and estimated proceeds from expected financings. Significant judgment and estimation impact the selection of an appropriate valuation methodology as well as the assumptions used in these models, and the timing and actual values realized with respect to investments could be materially different from values derived based on the use of those estimates. The valuation methodologies applied impact the reported value of the Company's investments and the investments held by the Consolidated Funds in the consolidated financial statements. Certain of the Company's investments are relatively illiquid or thinly traded and may not be immediately liquidated on demand if needed. Fair values assigned to these investments may differ significantly from the fair values that would have been used had a ready market for the investments existed and such differences could be material.

The Company primarily uses the "market approach" to value its financial instruments measured at fair value. In determining an instrument's level within the hierarchy, the Company categorizes the Company's financial instruments into three categories: securities, derivative contracts and other investments. To the extent applicable, each of these categories can further be divided between those held long or sold short.

The Company has the option to measure certain financial assets and financial liabilities at fair value with changes in fair value recognized in earnings each period. The election is made on an instrument by instrument basis at initial recognition of an asset or liability or upon an event that gives rise to a new basis of accounting for that instrument. The Company has elected the fair value option for certain of its investments held by its operating companies. This option has been elected because the Company believes that it is consistent with the manner in which the business is managed, as well as the way that financial instruments in other parts of the business are recorded.

Securities—Securities with values based on quoted market prices in active markets for identical assets are classified within level 1 of the fair value hierarchy. These securities primarily include active listed equities, certain U.S. government and sovereign obligations, Exchange Traded Funds ("ETFs"), mutual funds and certain money market securities.

Certain positions for which trading activity may not be readily visible, consisting primarily of convertible debt, corporate debt and loans and restricted equities, are stated at fair value and classified within level 2 of the fair value hierarchy. The estimated fair values assigned by management are determined in good faith and are based on available information considering, trading activity, broker quotes, quotations provided by published pricing services, counterparties and other market participants, and pricing models using quoted inputs, and do not necessarily represent the amounts which might ultimately be realized. As level 2 investments include positions that are not always traded in active markets and/or are subject to transfer restrictions, valuations may be adjusted to reflect illiquidity and/or non-transferability.

Derivative contracts—Derivative contracts can be exchange-traded or privately negotiated over-the-counter (“OTC”). Exchange-traded derivatives, such as futures contracts and exchange-traded option contracts, are typically classified within level 1 or level 2 of the fair value hierarchy depending on whether or not they are deemed to be actively traded. OTC derivatives, such as generic forwards, swaps and options, have inputs which can generally be corroborated by market data and are therefore classified within level 2. OTC derivatives, such as swaps and options where market data is not readily available or observable are classified as level 3.

Other investments—Other investments consist primarily of investment funds, real estate investments, carried interest and equity method investments, which are valued as follows:

i. Portfolio funds—Portfolio funds (“Portfolio Funds”) include interests in private investment partnerships, foreign investment companies and other collective investment vehicles which may be managed by the Company or its affiliates. The Company applies the practical expedient provided by the US GAAP fair value measurements and disclosures guidance relating to investments in certain entities that calculate net asset value (“NAV”) per share (or its equivalent). The guidance permits an entity holding investments in certain entities that either are investment companies as defined by the American Institute of Certified Public Accountants ("AICPA") Audit and Accounting Guide, Investment Companies, or have attributes similar to an investment company, and calculate net asset value per share or its equivalent for which the fair value is not readily determinable, to measure the fair value of such investments on the basis of that NAV per share, or its equivalent, without adjustment. Investments which are valued using NAV per share as a practical expedient are not categorized within the fair value hierarchy.

ii. **Real estate investments—**Real estate debt and equity investments are measured at fair value. The fair value of real estate investments is estimated based on the price that would be received to sell an asset in an orderly transaction between marketplace participants at the measurement date. Real estate investments without a public market are valued based on assumptions and valuation techniques used by the Company. Such valuation techniques may include discounted cash flow analysis, prevailing market capitalization rates or earnings multiples applied to earnings from the investment, analysis of recent comparable sales transactions, actual sale negotiations and bona fide purchase offers received from third parties, consideration of the amount that currently would be required to replace the asset, as adjusted for obsolescence, as well as independent external appraisals. In general, the Company considers several valuation techniques when measuring the fair value of a real estate investment. However, in certain circumstances, a single valuation technique may be appropriate. Real estate investments are reviewed on a quarterly basis by the Company for significant changes at the property level or a significant change in the overall market which would impact the value of the real estate investment resulting in unrealized appreciation or depreciation.

Real estate and capital markets are cyclical in nature. Property and investment values are affected by, among other things, the availability of capital, occupancy rates, rental rates and interest and inflation rates. In addition, the Company invests in real estate and real estate-related investments for which no liquid market exists. The market prices for such investments may be volatile and may not be readily ascertainable. Amounts ultimately realized by the Company from investments sold may differ from the fair values presented, and the differences could be material.

The Company's real estate investments are typically categorized as level 3 investments within the fair value hierarchy as management uses significant unobservable inputs in determining their estimated fair value.

See Notes 6 and 7 for further information regarding the Company's investments, including equity method investments and fair value measurements.

iii. **Carried Interest—**For the private equity and debt fund products the Company offers, the company is allocated incentive income by the investment funds based on the extent of which the investment funds performance exceeds predetermined thresholds. Carried interest allocations are generally structured from a legal standpoint as an allocation of capital in the Company’s capital account. The Company accounts for carried interest allocations by applying an equity ownership model. Accordingly, the Company accrues performance allocations quarterly based on the fair value of the underlying investments assuming hypothetical liquidation at book value.

iv. **Equity Method Investments—**For operating entities over which the Company exercises significant influence but which do not meet the requirements for consolidation as outlined above, the Company applies the equity method of accounting. The Company's investments in equity method investees are recorded in other investments in the accompanying consolidated statements of financial condition. The Company's share of earnings or losses from equity method investees is included in net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

g. Due from/due to related parties

The Company may advance amounts and pay certain expenses on behalf of employees of the Company or other affiliates of the Company. These amounts settle in the ordinary course of business. Such amounts are included in due from and due to related parties, respectively, on the accompanying consolidated statements of financial condition.

h. Receivable from and payable to brokers

Receivable from brokers, dealers, and clearing organizations includes amounts receivable for securities failed to deliver by the Company to a purchaser by the settlement date, amounts receivable from broker-dealers and clearing organizations, commissions receivable from broker-dealers, and interest receivable from securities financing arrangements.

Payable to brokers, dealers and clearing organizations includes amounts payable for securities failed to receive by the Company from a seller by the settlement date, amounts payable to broker-dealers and clearing organizations for unsettled trades, interest payable for securities financing arrangements, and payables of deposits held in proprietary account of brokers and dealers.

Pursuant to the master netting agreements the Company has entered into with its brokers, dealers and clearing organizations, receivables and payables arising from unsettled trade are presented net (assets less liabilities) across balances with the same counterparty. The Company's receivable from and payable to brokers, dealers and clearing organizations balances are held at multiple financial institutions.

i. Receivable from and payable to customers

Receivable from customers includes amounts owed by customers on cash and margin transactions, recorded on a settle-date basis on the statement of financial condition.

Payable to customers primarily consists of amounts owed to customers relating to securities transactions not completed on settlement date, recorded on a settle-date basis on the statement of financial condition, and other miscellaneous customer payables.

Securities owned by customers, including those that collateralize margin, are not reflected as assets of the Company on the statement of financial condition. The Company holds these securities with the intention of settlement against customer orders and are held as collateral for customer receivables.

j. Fees receivable

Fees related to security transactions are reported net of an allowance for credit losses. An allowance for credit losses is assessed on any commission receivables aged over 180 days.

Corporate finance and syndicate receivables, include receivables relating to the Company's investment banking and advisory engagements net of allowance for credit losses. The Company records this allowance for credit losses on these receivables on a specific identification basis. The future collectability of the receivables is reviewed on a monthly basis based on the following factors: aging (usually if outstanding greater than 90 days), known financial stability of the paying company, as well as any other factors that might impact the collection of the outstanding fees.

Management and incentive fees are earned as the managing member, general partner and/or investment manager to the Company's investment funds and are recognized in accordance with appropriate revenue recognition guidance (see Note 2v).

k. Securities financing arrangements

Securities borrowed and securities loaned are carried at the amounts of cash collateral advanced or received on a gross basis. The related rebates are recorded in the accompanying consolidated statements of operations as interest and dividends income and interest and dividends expense. Securities borrowed transactions require the Company to deposit cash collateral with the lender. With respect to securities loaned, the Company receives cash or securities as collateral from the borrower. When the Company receives securities as collateral, and has concluded it (i) is the transferor and (ii) can pledge the securities to third parties, the Company recognizes the securities received as collateral at fair value in Securities owned, at fair value with the corresponding obligation to return the securities received as collateral at fair value in Securities sold, not yet purchased, at fair value. Securities received as collateral are not recognized when the Company either (i) is not the transferor or (ii) cannot pledge the securities to third parties. The initial collateral advanced or received approximates or is greater than the market value of securities borrowed or loaned. The Company monitors the market value of securities borrowed and loaned on a daily basis, with additional collateral obtained or returned, as necessary. Securities borrowed and loaned may also result in credit exposures for the Company in an event that the counterparties are unable to fulfill their contractual obligations. The Company minimizes its credit risk by continuously monitoring its credit exposure and collateral values by demanding additional or returning excess collateral in accordance with the netting provisions available in the master securities lending contracts in place with the counterparties.

Fees and interest received or paid are recorded in interest and dividends income and interest and dividends expense, respectively, on an accrual basis in the accompanying consolidated statements of operations. In cases where the fair value basis of accounting is elected, any resulting change in fair value would be reported in net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations. Accrued interest income and expense are recorded in receivable from brokers, dealers and clearing organizations and payable to brokers, dealers and clearing organizations, respectively, on an accrual basis in the accompanying consolidated statements of financial condition.
At December 31, 2019 and 2018, the Company did not have any securities lending transactions for which fair value basis of accounting was elected.

l. Securities sold under agreements to repurchase

Securities sold under agreements to repurchase ("repos") are accounted for as collateralized financing transactions and are recorded at their contracted repurchase amount plus accrued interest. A repo is a transaction in which a firm sells financial instruments to a buyer, typically in exchange for cash, and simultaneously enters into an agreement to repurchase the same or substantially the same financial instruments from such buyer at a stated price plus accrued interest at a future date. When the Company receives securities as collateral, and has concluded it (i) is the transferor and (ii) can pledge the securities to third parties, the Company recognizes the securities received as collateral at fair value in Securities owned, at fair value with the corresponding obligation to return the securities received as collateral at fair value in Securities sold, not yet purchased, at fair value. Securities received as collateral are not recognized when the Company either (i) is not the transferor or (ii) cannot pledge the securities to third parties. The initial collateral advanced approximates or is greater than the market value of securities sold in the transaction. The Company typically enters into repo transactions with counterparties that prefer repo transactions to securities loaned transactions. The Company has executed master repo agreements with such counterparties and utilizes such counterparties to finance its own positions, or replace a securities lending transaction with a repo for matched book purposes. The Company monitors the market value of repos on a daily basis, with additional collateral obtained or returned, as necessary. Repos may also result in credit exposures for the Company in an event that the counterparties are unable to fulfill their contractual obligations. The Company mitigates its credit risk by continuously monitoring its credit exposure and collateral values by demanding additional collateral or returning excess collateral in accordance with the netting provisions available in the master repo contracts in place with the counterparties.

Interest paid is recorded in interest and dividends expense on an accrual basis in the accompanying consolidated statements of operations. In cases where the fair value basis of accounting is elected, any resulting change in fair value would be reported in net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations. At December 31, 2019 and 2018, the Company did not have any repos for which fair value basis of accounting was elected.

m. Fixed assets

Fixed assets are stated at cost less accumulated depreciation or amortization. Leasehold improvements are amortized on a straight-line basis over the lesser of their useful life or lease term. When the Company commits to a plan to abandon fixed assets or leasehold improvements before the end of its original useful life, the estimated depreciation or amortization period is revised to reflect the shortened useful life of the asset. Other fixed assets are depreciated on a straight-line basis over their estimated useful lives.

Asset	Depreciable Lives	Depreciation and/or Amortization Method
Telecommunication and computer equipment	5 years	Straight-line
Computer software	4 years	Straight-line
Furniture and fixtures	5 years	Straight-line
Leasehold improvements	Term of Lease	Straight-line
Finance lease right-of-use asset	Term of Lease	Straight-line

n. Goodwill and intangible assets

Goodwill

Goodwill represents the excess of the purchase price consideration of acquired companies over the estimated fair value assigned to the individual assets acquired and liabilities assumed. Goodwill is allocated to the Company's reporting units at the date the goodwill is initially recorded. Once goodwill has been allocated to the reporting units, it generally no longer retains its identification with a particular acquisition but instead becomes identifiable with the reporting unit. As a result, all of the fair value of each reporting unit is available to support the value of goodwill allocated to the unit.

In January 2017, the FASB issued guidance that simplifies the subsequent measurement of goodwill. The new guidance eliminated Step 2 from the goodwill impairment test, which required entities to calculate the implied fair value of goodwill and compare that amount to its carrying amount. Instead, under the new amendments, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The Company early adopted these amendments during the second quarter of 2019 in conjunction with a quantitative goodwill test performed due to the Company's change in operating segments and restructuring of reporting units. See Note 12 for the impact of the goodwill impairment test.

In accordance with US GAAP requirements for testing for impairment of goodwill, inclusive of the newly adopted amendments, the Company tests goodwill for impairment on an annual basis or at an interim period if events or changed circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. In testing for goodwill impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances led to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events and circumstances, the Company concludes that fair value exceeds its carrying amount, then performing a quantitative impairment test is not necessary. If the Company concludes otherwise, the Company is required to perform a quantitative impairment test that requires a comparison of the fair value of the reporting unit to its carrying value, including goodwill. If the fair value of the reporting unit exceeds its carrying value, the related goodwill is not considered impaired and no further analysis is required. If the carrying value of the reporting unit exceeds its fair value, then the Company recognizes an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. See Note 12 for further discussion.

Intangible assets

Intangible assets with finite lives are amortized over their estimated average useful lives. The Company does not have any intangible assets deemed to have indefinite lives. Intangible assets are tested for potential impairment whenever events or changes in circumstances suggest that an asset or asset group's carrying value may not be fully recoverable. An impairment loss, calculated as the difference between the estimated fair value and the carrying value of an asset or asset group, is recognized in the accompanying consolidated statements of operations if the sum of the estimated undiscounted cash flows relating to the asset or asset group is less than the corresponding carrying value. The Company continually monitors the estimated average useful lives of existing intangible assets.

o. Debt

Long-term debt is carried at the principal amount borrowed net of any unamortized discount/premium. The discount is accreted to interest expense using the effective interest method over the remaining life of the underlying debt obligations. Accrued but unpaid coupon interest is included in accounts payable, accrued expenses and other liabilities in the accompanying consolidated statements of financial condition.

p. Legal reserves

The Company establishes reserves for contingencies when the Company believes that it is probable that a loss has been incurred and the amount of loss can be reasonably estimated. The Company discloses a contingency if there is at least a reasonable possibility that a loss may have been incurred and there is no reserve for the loss because the conditions above are not met. The Company's disclosure includes an estimate of the reasonably possible loss or range of loss for those matters for which an estimate can be made. Neither reserve nor disclosure is required for losses that are deemed remote.

q. Capital withdrawals payable

Capital withdrawals from the Consolidated Funds are recognized as liabilities, net of any incentive income, when the amount requested in the withdrawal notice represents an unconditional obligation at a specified or determined date (or dates) or upon an event certain to occur. This generally may occur either at the time of the receipt of the notice, or on the last day of a reporting period, depending on the nature of the request. As a result, withdrawals paid after the end of the year, but based upon year-end capital balances are reflected as liabilities at the balance sheet date.

r. Non-controlling interests in consolidated subsidiaries

Non-controlling interests represent the pro rata share of the income or loss of the non-wholly owned consolidated entities attributable to the other owners of such entities. When non-controlling interest holders have redemption features that can be exercised at the option of the holder currently or contingent upon the occurrence of future events, their ownership has been classified as temporary equity. The remaining non-controlling interests have been classified in permanent equity as the non-controlling interests are either not redeemable at the option of the holder or the holder does not have the unilateral right to redeem their ownership interests.

s. Treasury stock

In accordance with US GAAP relating to repurchases of an entity's own outstanding common stock, the Company records the purchases of stock held in treasury at cost and reports them separately as a deduction from total stockholders' equity on the accompanying consolidated statements of financial condition and changes in equity.

t. Comprehensive income (loss)

Comprehensive income (loss) consists of net income and other comprehensive income (loss). The Company's other comprehensive income (loss) is comprised of foreign currency cumulative translation adjustments.

u. Right-of-use assets and lease liabilities

Effective January 1, 2019, the Company adopted ASC Topic 842, Leases ("ASC 842"). The new guidance increases transparency and comparability by requiring the recognition of right-of-use assets and lease liabilities on the consolidated statements of financial condition. The recognition of these lease assets and lease liabilities represents a change from previous US GAAP requirements, which did not require lease assets and lease liabilities to be recognized for most leases. The recognition, measurement, and presentation of expenses and cash flows arising from a lease by a lessee, have not significantly changed from previous US GAAP requirements.

Under the effective date transition method selected by the Company, leases existing at, or entered into after January 1, 2019 were required to be recognized and measured. Prior reported financial statements, including footnotes, have not been recast to the reflect the impact of ASC 842 to all comparative periods presented. In applying ASC 842, the Company made an accounting policy election not to recognize the right-of-use assets and lease liabilities relating to short-term leases. Implementation of ASC 842 included an analysis of contracts, including real estate leases and service contracts to identify embedded leases, to determine the initial recognition of right-of-use assets and lease liabilities, which required subjective assessment over the determination of the associated discount rates. ASC 842 also provided various practical expedients which were assessed to determine the ultimate impact of ASC 842 upon adoption. The standard includes a package of three practical expedients which permit the Company to not reassess (1) whether any expired or existing contracts are or contain a lease, (2) the lease classification for any expired or existing leases and (3) any initial direct costs for any existing leases as of the effective date. The Company has elected to apply the package of practical expedients, as well as the hindsight practical expedient, and land easement practical expedient.

The adoption of ASC 842 resulted in the recording of operating lease right-of-use assets of $103.7 million and operating lease liabilities of $110.5 million at January 1, 2019.

The Company determines if an arrangement is or contains a lease at inception. The Company's operating lease arrangements are primarily for real estate and facility leases as well as office equipment. The Company has applied an accounting policy election to combine its lease and nonlease components for its real estate and facility leases. Right-of-use assets represent the Company's right to use the underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Right-of-use assets and lease liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. The Company's variable lease payments consist of nonlease services related to the lease. Variable lease payments are excluded from the right-of-use asset and lease liabilities to the extent they are not based on a consumer priced index or a market index and are recognized in the period in which the obligation for those payments is incurred. As most of the Company's leases do not provide an implicit rate and the implicit rate is not readily determinable, the Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. Right-of-use assets also include any lease payments made and exclude lease incentives. Many of the Company's operating lease agreements include options to extend the lease, which the Company does not include in the determination of the minimum lease term unless the options are reasonably certain to be exercised. Expense for lease payments related to operating leases is recognized on a straight-line basis over the lease term.

The Company reconciles the operating lease expense with operating lease payments by presenting the amortization of the operating Right-of-use asset and change in the operating lease liability in a single line item within the adjustments to reconcile net income (loss) to net cash provided by / (used in) operating activities in the accompanying Consolidated Statements of Cash Flows.

Please refer to Note 23 for information on the Company's finance leases (formerly capital leases).

v. Revenue recognition

The Company recognizes revenue in accordance with ASC Topic 606, Revenue from Contracts with Customers ("ASC Topic 606"), which requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company follows a five-step model to (a) identify the contract(s) with a customer, (b) identify the performance obligations in the contract, (c) determine the transaction price, (d) allocate the transaction price to the performance obligations in the contract, and (e) recognize revenue when (or as) the entity satisfies a performance obligation. In determining the transaction price, the Company includes variable consideration only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized would not occur when the uncertainty associated with the variable consideration is resolved. Significant judgments are required in the application of the five-step model including; when determining whether performance obligations are satisfied at a point in time or over time; how to allocate transaction prices where multiple performance obligations are identified; when to recognize revenue based on the appropriate measure of the Company's progress under the contract; and whether constraints on variable consideration should be applied due to uncertain future events.

The Company's principal sources of revenue are generated within two segments: Op Co and Asset Co as more fully described below. Revenue from contracts with customers includes management fees, incentive income, investment banking revenue and brokerage services revenue excluding principal transactions. ASC Topic 606 does not apply to revenue associated with financial instruments, interest income and expense, leasing and insurance contracts. The following is a description of principal activities, separated by business segments, from which the Company generates its revenue. For more detailed information about reportable segments, see Note 27.

Operating Company

The Op Co segment generates revenue through five principal sources: investment banking revenue, brokerage revenue, management fees, incentive income and investment income from the Company's own capital. Investment income is excluded from ASC Topic 606.

Investment banking

The Company earns investment banking revenue primarily from fees associated with public and private capital raising transactions and providing strategic advisory services. Investment banking revenues are derived primarily from public and private small- and mid-capitalization companies within the Company's sectors.

Investment banking revenue consists of underwriting fees, strategic/financial advisory fees, expenses reimbursed from clients and placement and sales agent fees.

- **Underwriting fees.** The Company earns underwriting fees in securities offerings in which the Company acts as an underwriter, such as initial public offerings, follow-on equity offerings, debt offerings, and convertible securities offerings. Fee revenue relating to underwriting commitments is recorded at the point in time when all significant items relating to the underwriting process have been completed and the amount of the underwriting revenue has been determined. This generally is the point at which all of the following have occurred: (i) the issuer's registration statement has become effective with the SEC or the other offering documents are finalized; (ii) the Company has made a firm commitment for the purchase of securities from the issuer; (iii) the Company has been informed of the number of securities that it has been allotted; and (iv) the issuer obtains control and benefits of the offering; which generally occurs on trade date.

  Underwriting fees are recognized gross of transaction-related expenses, and such amounts are adjusted to reflect actual expenses in the period in which the Company receives the final settlement, typically within 90 days following the closing of the transaction.

- **Strategic/financial advisory fees.** The Company's strategic advisory revenue includes success fees earned in connection with advising companies, principally in mergers, acquisitions and restructuring transactions. The Company also earns fees for related advisory work such as providing fairness opinions. A significant portion of the Company's advisory revenue (i.e., success-related advisory fees) is considered variable consideration and recognized when it is probable that the variable consideration will not be reversed in a future period. The variable consideration is constrained until satisfaction of the performance obligation. The Company records strategic advisory revenues at the point in time, gross of related expenses, when the services for the transactions are completed or the contract is canceled under the terms of each assignment or engagement.

- **Placement and sales agent fees.** The Company earns agency placement fees and sales agent commissions in non-underwritten transactions, such as private placements of loans and debt and equity securities, including private investment in public equity transactions ("PIPEs"), and as sales agent in at-the-market offerings of equity securities. The Company records placement revenues (which may be in cash and/or securities) at the point in time when the services for the transactions are completed under the terms of each assignment or engagement. The Company records sales agent commissions on a trade-date basis.

- **Expense reimbursements from clients.** Investment banking revenue includes expense reimbursements for transaction-related expenses, primarily consisting of legal, travel and other costs directly associated with the transaction. Expense reimbursements associated with investment banking engagements are recognized in revenue at the point in time when the Company is contractually entitled to reimbursement. The related expenses are presented gross within their respective expense category in the accompanying consolidated statements of operations.

Brokerage

Brokerage revenue consists of commissions, principal transactions, equity research fees and trade conversion revenue.

- **Commissions.** Commission revenue includes fees from executing and clearing client transactions and commission sharing arrangements. Trade execution and clearing services, when provided together, represent a single performance obligation as the services are not separately identifiable in the context of the contract. Commission revenues associated with combined trade execution and clearing services on a standalone basis, are recognized at a point in time on trade-date. Commissions revenues are generally paid on settlement date and the Company records a receivable between trade-date and payment on settlement date. The Company permits institutional customers to allocate a portion of their commissions to pay for research products and other services provided by third parties. The amounts allocated for those purposes are commonly referred to as "soft dollar arrangements". The Company also offers institutional clients the ability to allocate a portion of their gross commissions incurred on trades executed with various brokers to pay for research products and other services provided by third parties by entering into commission sharing arrangements. The Company acts as an agent in the soft dollar and commission sharing arrangements as the customer controls the use of the soft dollars and directs payments to third-party service providers on its behalf. Accordingly, amounts allocated to soft dollar arrangements are netted against commission revenues and recorded on trade date. Commissions on soft dollar brokerage are recorded net of the related expenditures. The costs of commission sharing arrangements are recorded for each eligible trade and shown net of commission revenue.

- **Principal transactions.** Principal transactions revenue includes net trading gains and losses from the Company's market-making activities in over-the-counter equity and fixed income securities, trading of convertible securities, and trading gains and losses on inventory and other Company positions, which include securities previously received as part of investment banking transactions. In certain cases, the Company provides liquidity to clients by buying or selling blocks of shares of listed stocks without previously identifying the other side of the trade at execution, which subjects the Company to market risk. These positions are typically held for a short duration.
- **Equity research fees.** Equity research fees are paid to the Company for providing access to equity research. In the US, revenue is recognized once an arrangement exists, access to research has been provided and the customer has benefited from the research. As part of MiFID II, the Company's international broker-dealers have executed equity research contracts with its clients. The contracts either contain a fixed price for providing access to research or a price at the discretion of the customer with a contract minimum. Fixed equity research fees are recognized over the contract period as the customer is benefiting from the research throughout the contract term. When the equity research fees are based on the customer's discretion with a contract minimum, the Company recognizes the contract minimum over the life of the contract as the customer benefits from the research provided and adjusts the revenue when the Company can estimate the amount of equity research fees over the contract minimum. Additionally, the Company earns variable consideration for attending client conferences and events. Revenue is recognized when the Company attends a client conference or event.
- **Trade conversion revenue.** Trade conversion revenue includes fees earned from converting foreign securities into an American Depository Receipt ("ADR") and fees earned from converting an ADR into foreign securities on behalf of customers, and margins earned from facilitating customer foreign exchange transactions. Trade conversion revenue is recognized on a trade-date basis.

Management fees

The Company earns management fees from investment funds and certain managed accounts for which it serves as the investment manager; such fees earned are typically based on committed and invested capital. The Company has determined that the primary drivers of management fees are committed and invested capital relating to private equity funds. The management fees are earned as the investment management services are provided and are not subject to reversals. The performance obligation related to the transfer of these services is satisfied over time because the customer is receiving and consuming the benefits as they are provided by the Company.

Several investment managers and/or general partners of the investment funds are owned jointly by the Company and third parties. Accordingly, the management fees generated by these funds are split between the Company and these third parties based on the proportionate ownership of the management company. Pursuant to US GAAP, these fees received by the management companies are accounted for under the equity method of accounting and are reflected under net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

Management fees are generally paid on a quarterly basis and are prorated for capital inflows (or commitments) and redemptions (or distributions) and are recognized as revenue at that time as they relate specifically to the services provided in that period, which are distinct from the services provided in other periods. While some investors may have separately negotiated fees, in general the management fees are as follows:

- **Private equity funds.** Management fees for the Company's private equity or debt funds are generally charged at an annual rate of 1% to 2% of committed capital during the investment period (as defined in the relevant partnership agreement). After the investment period, management fees for these private equity funds are generally charged at an annual rate of 0.5% to 2% of the net asset value or the aggregate cost basis of the unrealized investments held by the private equity funds. For certain other private equity funds (and managed accounts), the management fees range from 0.2% to 1% and there is no adjustment based on the investment period. Management fees for the Company's private equity funds are generally paid on a quarterly basis.

- **Hedge funds.** Management fees for the Company's hedge funds are generally charged at an annual rate of up to 2% of utilized invested capital, committed capital or notional trading level. Management fees are generally calculated monthly at the end of each month.
- **Cowen trading strategies.** Advisory fees for the Company's collateral management advisory business are typically paid quarterly based on utilized invested capital or committed capital, generally subject to a minimum fee.

Incentive income

The Company earns incentive income based on net profits (as defined in the respective investment management or partnership agreements) with respect to certain of the Company's investment funds and managed accounts. The incentive income is either allocated to the Company or is charged to the investment funds in accordance with their respective investment management or partnership agreements. For the hedge funds the Company offers, incentive income earned is typically up to 20% (in certain cases on performance in excess of a benchmark) of the net profits earned for the full year that are attributable to each fee-paying investor. For the private equity and debt fund products the Company offers, the carried interest earned is typically up to 20% of the distributions made to investors after return of their contributed capital and generally a preferred return. With respect to the Company's private equity investment management strategies, the Company grants its employees that act as portfolio managers for its private equity fund products membership into the respective general partner entities that are the general partner of the funds they manage. These awards entitle the employees to share in future distributions of carried interest earned by the general partners. These arrangements are accounted for as profit sharing awards and accordingly amounts are reflected in compensation payable in the accompanying consolidated financial statements of financial condition and employee compensation and benefits expense in the accompanying consolidated statements of operation based on the probable and estimable payments under the terms of the awards.

In relation to ASC Topic 606, the Company applies an accounting policy election to recognize incentive income allocated to the Company under an equity ownership model as net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations. The Company previously recognized these amounts as incentive income. Under the equity method of accounting the Company recognizes its allocations of incentive income or carried interest within net gains (losses) along with the allocations proportionate to the Company’s ownership interests in the investment funds.

The Company recognizes incentive income charged to the Company's hedge funds based on the net profits of the hedge funds. The Company recognizes such incentive income when the fees are no longer subject to reversal or are crystalized. For a majority of the hedge funds, the incentive fee crystallizes annually when the high-water mark for such hedge funds is reset, which delays recognition of the incentive fee until year end.

In periods following a period of a net loss attributable to an investor, the Company generally does not earn incentive income on any future profits attributable to such investor until the accumulated net loss from prior periods is recovered, an arrangement commonly referred to as a "high-water mark."

Investment income

Investment income earned by the Op Co segment is earned from investing the Company's capital in various strategies which align to existing businesses within Op Co and from investments in private capital raising transactions of its investment banking clients.

Asset Company

The Asset Co segment generates revenue through three principal sources: management fees, incentive income and investment income from the Company's own capital. Investment income is excluded from ASC Topic 606.

Management fees

The Company earns management fees from investment funds and certain managed accounts for which it serves as the investment manager; such fees earned are typically based on committed and invested capital. The management fees are earned as the investment management services are provided and are not subject to reversals. The performance obligation related to the transfer of these services is satisfied over time because the customer is receiving and consuming the benefits as they are provided by the Company.

Several investment managers and/or general partners of the investment funds are owned jointly by the Company and third parties. Accordingly, the management fees generated by these funds are split between the Company and these third parties based on the proportionate ownership of the management company. Pursuant to US GAAP, these fees received by the management companies are accounted for under the equity method of accounting and are reflected under net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

Management fees are generally paid on a quarterly basis and are prorated for capital inflows (or commitments) and redemptions (or distributions) and are recognized as revenue at that time as they relate specifically to the services provided in that period, which are distinct from the services provided in other periods. While some investors may have separately negotiated fees, in general, the management fees are as follows:

- **Hedge funds.** Management fees for the Company's hedge funds are generally charged at an annual rate of up to 2% of utilized invested capital, committed capital or notional trading level. Management fees are generally calculated monthly at the end of each month.
- **Real estate.** Management fees from the Company's real estate investments are generally charged at an annual rate from 0.25% to 1.50% of total capital commitments during the investment period and of invested capital or net asset value of the applicable real estate fund after the investment period has ended. Management fees are typically paid to the general partners on a quarterly basis, at the beginning of the quarter in arrears.

Incentive income

The Company earns incentive income based on net profits (as defined in the respective investment management or partnership agreement) related to certain of the Company's investment funds and managed accounts. The incentive income is either allocated to the Company or is charged to the investment funds in accordance with their corresponding investment management or partnership agreement. For the hedge funds the Company offers, incentive income earned is typically up to 20% (in certain cases on performance in excess of a benchmark) of the net profits earned for the full year that are attributable to each fee-paying investor. For the private equity and debt fund products the Company offers, the carried interest earned is typically up to 20% of the distributions made to investors after return of their contributed capital and generally a preferred return.

In relation to ASC Topic 606, the Company applies an accounting policy election to recognize incentive income allocated to the Company under an equity ownership model as net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations. The Company previously recognized these amounts as incentive income. Under the equity method of accounting the Company recognizes its allocations of incentive income or carried interest within net gains (losses) along with the allocations proportionate to the Company's ownership interests in the investment funds.

The Company recognizes incentive income charged to the Company's hedge funds based on the net profits of the hedge funds. The Company recognizes such incentive income when the fees are no longer subject to reversal or are crystalized. For certain hedge funds, the incentive fee crystallizes annually when the high-water mark for such hedge funds is reset, which delays recognition of the incentive fee until year end. In periods following a period of a net loss attributable to an investor, the Company generally does not earn incentive income on any future profits attributable to such investor until the accumulated net loss from prior periods is recovered, an arrangement commonly referred to as a "high-water mark."

Generally, incentive income or carried interest is earned after the investor has received a full return of its invested capital, plus a preferred return. However, for certain private equity structures, the Company is entitled to receive incentive fees earlier, provided that the investors have received their preferred return on a current basis or on an investor by investor basis. These private equity structures are generally subject to a potential clawback of these incentive fees upon the liquidation of the private equity structure if the investor has not received a full return of its invested capital plus the preferred return thereon.

Several investment managers and/or general partners of the Company's investment funds are jointly owned by the Company and third parties. Accordingly, the incentive fees generated by these investment funds are split between the Company and these third parties. Pursuant to US GAAP, incentive income received by the general partners that are accounted for under the equity method of accounting are reflected under net gains (losses) on securities, derivatives and other investments in the accompanying consolidated statements of operations.

Investment Income

Investment income earned by the Asset Co segment is earned from investing the Company's capital in various strategies.

Revenue from contracts with customers

For the years ended December 31, 2019 and 2018, the following tables presents revenues from contracts with customers disaggregated by fee type and segment.

	Year Ended December 31,	
	2019	2018
	(dollars in thousands)	
Revenue from contracts with customers	**Operating Company**	
Investment banking		
Underwriting fees	$ 211,666	$ 215,723
Strategic/financial advisory fees	79,208	81,733
Placement and sales agent fees	69,070	46,888
Expense reimbursements from clients	15,081	12,878
Total investment banking revenue	375,025	357,222
Brokerage		
Commissions	356,668	366,090
Trade conversion revenue	12,531	17,061
Equity research fees	19,006	20,184
Total brokerage revenue from customers	388,205	403,335
Management fees	31,361	26,080
Incentive income	1,532	3,117
Total revenue from contracts with customers - Op Co	**$ 796,123**	**$ 789,754**
	Asset Company	
Management fees	1,248	3,578
Incentive income	15	—
Total revenue from contracts with customers - Asset Co	**1,263**	**3,578**
Total revenue from contracts with customers	**$ 797,386**	**$ 793,332**

Investments transactions and related income/expenses

Purchases and sales of securities, net of commissions, and derivative contracts, and the related revenues and expenses are recorded on a trade-date basis with net trading gains and losses included as a component of net gains (losses) on securities, derivatives and other investments, and with respect to the Consolidated Funds and other real estate entities as a component of net realized and unrealized gains (losses) on investments and other transactions and net realized and unrealized gains (losses) on derivatives, respectively, in the accompanying consolidated statements of operations.

Interest and dividends

Interest and dividends are earned by the Company from various sources. The Company receives interest and dividends primarily from securities finance activities and securities held by the Company for purposes of investing capital, investments held by its Consolidated Funds and its brokerage balances. Interest is recognized in accordance with US GAAP and market convention for the imputation of interest of the host financial instrument. Interest income is recognized on the debt of those issuers that is deemed collectible. Interest income and expense includes premiums and discounts amortized and accreted on debt investments based on criteria determined by the Company using the effective yield method, which assumes the reinvestment of all interest payments. Dividends are recognized on the ex-dividend date.

Reimbursement from affiliates

The Company allocates, at its discretion, certain expenses incurred on behalf of its investment management businesses. These expenses relate to the administration of such subsidiaries and assets that the Company manages for its investment funds. In addition, pursuant to the investment funds' offering documents, the Company charges certain allowable expenses to the investment funds, including charges and personnel costs for legal, compliance, accounting, tax compliance, risk and technology expenses that directly relate to administering the assets of the investment funds. Such expenses that have been reimbursed at their actual costs are included in the accompanying consolidated statements of operations as employee compensation and benefits, professional, advisory and other fees, communications, occupancy and equipment, client services and business development and other expenses.

Reinsurance-related contracts

Premiums for reinsurance-related contracts are earned over the coverage period. In most cases, premiums are recognized as revenues ratably over the term of the contract with unearned premiums computed on a monthly basis. For each of its contracts, the Company determines if the contract provides indemnification against loss or liability relating to insurance risk, in accordance with US GAAP. If the Company determines that a contract does not expose it to a reasonable possibility of a significant loss from insurance risk, the Company records the contract under the deposit method of accounting with any net amount receivable reflected as an asset in other assets, and any net amount payable reflected as a liability within accounts payable, accrued expenses and other liabilities on the consolidated statements of financial condition.

The liabilities for losses and loss adjustment expenses are recorded at the estimated ultimate payment amounts, including reported losses. Estimated ultimate payment amounts are based upon (1) reports of losses from policyholders, (2) individual case estimates and (3) estimates of incurred but unreported losses.

Provisions for losses and loss adjustment expenses are charged to earnings after deducting amounts recovered and estimates of recoverable amounts and are included in other expenses on the consolidated statements of operations.

Costs of acquiring new policies, which vary with and are directly related to the production of new policies, have been deferred to the extent that such costs are deemed recoverable from future premiums or gross profits. Such costs include commissions and allowances as well as certain costs of policy issuance and underwriting and are included within other assets in the consolidated statements of financial condition.

Impacts of adopting ASC Topic 606

The following tables summarize the impacts of adopting ASC Topic 606 on the Company's consolidated financial statements.

Consolidated Statements of Financial Condition	**As of December 31, 2018**		
	As Reported	**ASC 606 Impact**	**Adjusted (a)**
	(dollars in thousands)		
Assets			
Fees receivable, net of allowance	$ 111,946	$ 17,995	$ 129,941
Other investments	181,407	(17,995)	163,412
Stockholder's equity	**$ 794,407**	**$ 1,002**	**$ 795,409**

Consolidated Statements of Operation	**Year Ended December 31, 2018**		
	As Reported	**ASC 606 Impact**	**Adjusted (a)**
	(dollars in thousands)		
Revenues			
Investment banking	$ 357,222	$ (28,160)	$ 329,062
Incentive income	3,117	15,911	19,028
Total revenues	**966,916**	**(12,249)**	**954,667**
Expenses			
Underwriting expenses	15,282	(15,282)	—
Professional, advisory and other fees	40,957	(7,861)	33,096
Service fees	20,198	(42)	20,156
Communications	30,801	(1,449)	29,352
Occupancy and equipment	41,602	(14)	41,588
Client services and business development	35,927	(3,373)	32,554
Other expenses	22,014	(139)	21,875
Total expenses	890,944	(28,160)	862,784
Net gains (losses) on securities, derivatives and other investments	68,043	15,469	83,512
Net income (loss) attributable to Cowen Inc. common stockholders	**$ 36,027**	**$ 442**	**$ 36,469**

Consolidated Statements of Cash Flows	Year Ended December 31, 2018		
	As Reported	ASC 606 Impact	Adjusted (a)
	(dollars in thousands)		
Cash flows from operating activities:			
Net income (loss)	$ 79,879	$ 442	$ 80,321
Adjustments to reconcile net income (loss) to net cash provided by / (used in) operating activities:			
Net (gains) losses on securities, derivatives, and other investments	(54,032)	12,331	(41,701)
(Increase) decrease in operating assets:			
Fees receivable, net of allowance	(6,401)	(11,962)	(18,363)
Net cash provided by / (used in) operating activities	**324,176**	**811**	**324,987**
Cash flows from investing activities:			
Purchase of other investments	(28,092)	(812)	(28,904)
Net cash provided by / (used in) investing activities	**$ (17,882)**	**$ (812)**	**$ (18,694)**

(a) The amounts reflected above represent items as they would have been reported prior to adoption of ASC 606.

Interest and dividends expense

Interest and dividends expense relates primarily to securities finance activities, trading activity with respect to the Company's investments and interest expense on debt.

w. Share-based compensation

The Company accounts for its share-based awards granted to individuals as payment for employee services and values such awards based on grant date fair value. Unearned compensation associated with share-based awards is amortized over the vesting period of the option or award. The Company estimates forfeiture for equity-based awards that are not expected to vest. See Note 19 for further information regarding the Company's share-based compensation plans.

x. Income taxes

The Company accounts for income taxes in accordance with US GAAP which requires the recognition of tax benefits or expenses based on the estimated future tax effects of temporary differences between the financial statement and tax basis of its assets and liabilities. The effect on deferred taxes of a change in tax rates is recognized as income or loss in the period that includes the enactment date. Valuation allowances are established to reduce deferred tax assets to an amount that is more likely than not to be realized.. The Company evaluates our deferred tax assets for recoverability considering negative and positive evidence, including our historical financial performance, projections of future taxable income, future reversals of existing taxable temporary differences, and tax planning strategies. The Company records a valuation allowance against our deferred tax assets to bring them to a level that it is more likely than not to be utilized. In evaluating the need for a valuation allowance, the Company estimates future taxable income based on management-approved business plans. This process involves significant management judgment about assumptions that are subject to change from period to period. Because the recognition of deferred tax assets requires management to make significant judgments about future earnings, the periods in which items will impact taxable income and the application of inherently complex tax laws, we have identified the assessment of deferred tax assets and the need for any related valuation allowance as a critical accounting estimate.

US GAAP clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements, requiring the Company to determine whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. For tax positions meeting the more likely than not threshold, the tax amount recognized in the financial statements is reduced by the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant taxing authority. The Company recognizes accrued interest and penalties related to its uncertain tax positions as a component of income tax expense.

In accordance with federal and state tax laws, the Company and its subsidiaries file consolidated federal, state, and local income tax returns as well as stand-alone state and local tax returns. The Company also has subsidiaries that are resident in foreign countries where tax filings have to be submitted on a stand-alone or combined basis. These subsidiaries are subject to tax in their respective countries and the Company is responsible for and, thus, reports all taxes incurred by these subsidiaries in the consolidated statement of operations. The countries where the Company owns subsidiaries and has tax filing obligations are the United Kingdom, Luxembourg, Germany, Switzerland, South Africa, Canada and Hong Kong.

y. Foreign currency transactions

The Company consolidates certain foreign subsidiaries that have designated a foreign currency as their functional currency. For entities that have designated a foreign currency as their functional currency, assets and liabilities are translated into U.S. dollars based on current rates, which are the spot rates prevailing at the end of each statement of financial condition date, and revenues and expenses are translated at historical rates, which are the average rates for the relevant periods. The resulting translation gains and losses, and the tax effects of such gains and losses, are recorded in accumulated other comprehensive income (loss), a separate component of stockholders' equity.

For subsidiaries that have designated the U.S. Dollar as their functional currency, securities and other assets and liabilities denominated in foreign currencies are translated into U.S. Dollar amounts at the date of valuation. Purchases and sales of securities and other assets and liabilities and the related income and expenses denominated in foreign currencies are translated into U.S. Dollar amounts on the respective dates of the transactions. The Company does not isolate that portion of the results of operations resulting from changes in foreign exchange rates on these balances from fluctuations arising from changes in market prices of securities and other assets/liabilities held or sold. Such fluctuations are included in the accompanying consolidated statements of operations as a component of net gains (losses) on securities, derivatives and other investments. Gains and losses primarily relating to foreign currency broker balances are included in other income (loss) in the accompanying consolidated statements of operations.

z. Recent pronouncements

Recently adopted

In 2018, the FASB issued guidance related to the Tax Cuts and Jobs Act of 2017 ("TCJ Act") for the optional reclassification of the residual tax effects, arising from the change in corporate tax rate, in accumulated other comprehensive loss to retained earnings. The reclassification is the difference between the amount previously recorded in other comprehensive income at the historical U.S. federal tax rate that remains in accumulated other comprehensive loss at the time the TCJ Act was effective and the amount that would have been recorded using the newly enacted rate. This guidance became effective during the first quarter of 2019; however, the Company did not elect to make the optional reclassification.

In 2018, the FASB issued final guidance aligning the measurement and classification guidance for share-based payments to nonemployees with the guidance for share-based payments to employees, with certain exceptions. Under the guidance, the measurement of equity-classified nonemployee awards will be fixed at the grant date, which may lower their cost and reduce volatility in the income statement. The guidance became effective during the first quarter of 2019 and impacted the Company's recognition and measurement of the retention bonus pool established in connection with the Company's acquisition of Quarton International AG, which includes share-based payment to employees and nonemployees. Please refer to Note 3 for more information.

In 2018, as part of its disclosure framework project, the FASB amended the disclosure requirements for fair value measurement. The amendments update and eliminate various disclosure requirements that improve the overall usefulness of the disclosure requirement for financial statement users and reduce costs by eliminating disclosures that may not be useful. The new guidance eliminates the requirement to disclose the amounts and reasons for transfers between level 1 and level 2 of the fair value hierarchy and modifies the disclosure requirement relating to investments in funds at NAV. The Company early adopted this guidance in 2019 and it did not have a material impact on the Company's consolidated financial statements.

In 2017, the FASB issued guidance to amend the amortization period for certain purchased callable debt securities held at a premium. Under prior guidance, entities generally amortized the premium as an adjustment of yield over the contractual life of the instrument. The new guidance shortened the amortization period for the premium to the earliest call date. The amendments do not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity. This guidance became effective during the first quarter of 2019; however, the guidance did not have an impact on the Company's financials as it does not have investments in callable debt securities measured on an amortized cost basis.

In 2017, the FASB issued guidance that simplifies the subsequent measurement of goodwill. The new guidance eliminated Step 2 from the goodwill impairment test, which required entitites to compute the implied fair value of goodwill and compare that amount to its carrying amount. Instead, under the new amendments, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The Company early adopted these amendments during the second quarter of 2019. Please refer to Note 2v for more information.

In 2016, the FASB issued guidance that amends and supersedes its previous guidance regarding leases. The new guidance requires the lessee to recognize the right to use lease assets and lease liabilities that arise from leases greater than one year, and present them in its statement of financial condition. The guidance became effective during the first quarter of 2019. Please refer to Note 22 for more information.

Recently issued

In October 2018, the FASB issued guidance that made targeted changes to the related party consolidation guidance. The new guidance changes how entities evaluate decision-making fees under the variable interest entity guidance. To determine whether decision-making fees represent a variable interest, an entity will consider indirect interests held through related parties under common control on a proportionate basis under the new guidance, rather than in their entirety, as has been the case under current guidance. The guidance is effective in annual periods beginning after December 15, 2019 and interim periods within those fiscal years with early adoption permitted. The Company is currently evaluating the impact of the new guidance and does not expect this guidance to have a material impact on its consolidated statements of financial condition or its consolidated statements of operations.

In August 2018, the FASB issued guidance for accounting for upfront costs and fees paid by a customer in a cloud computing arrangement. The guidance requires capitalization of implementation costs incurred in connection with a hosting arrangement or the development or obtainment of internal use software. The guidance is effective for public business entities for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years for any implementation costs incurred after adoption. The Company is currently evaluating the impact of this guidance on the Company's consolidated financial statements and does not expect this guidance to have a material impact on its consolidated statements of financial condition or its consolidated statements of operations.

In June 2016, the FASB issued guidance that impacts the impairment model for certain financial assets measured at amortized cost by requiring a current expected credit loss ("CECL") methodology to estimate expected credit losses over the entire life of the financial asset, recorded at inception or purchase. The Company has performed a scoping assessment and identified securities borrowed and other financial instruments carried at amortized cost as impacted. Under the accounting update, the Company has the ability to determine there are no expected credit losses in certain circumstances, e.g., based on collateral arrangements for lending and financing transactions or based on the credit quality of the borrower or issuer. For securities borrowed, the Company will apply a practical expedient to measure the allowance for credit losses based on the fair value of the collateral. If the fair value of the collateral held exceeds the amortized cost and the borrower is expected to continue to replenish the collateral as needed, the Company will not recognize an allowance. If the fair value of collateral is less than amortized cost and the borrower is expected to continue to replenish the collateral as needed, the CECL model will be applied only to the shortfall between the fair value of the collateral and amortized cost. For public companies, the guidance is effective for reporting periods beginning after December 15, 2019 and interim periods within those fiscal years. Based on the Company's scoping analysis and impact assessment, the Company does not expect the increase in the allowance for credit losses, resulting from the adoption of this standard, to be significant to its consolidated statements of financial condition or its consolidated statements of operations.

In December 2019, the FASB issued guidance simplifying the accounting for income taxes. The guidance simplifies the accounting for income taxes by removing the exceptions (i) the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items (for example, discontinued operations or other comprehensive income), (ii) the requirement to recognize a deferred tax liability for equity method investments when a foreign subsidiary becomes an equity method investment, (iii) the ability not to recognize a deferred tax liability for a foreign subsidiary when a foreign equity method investment becomes a subsidiary and (iv) general methodology for calculating income taxes in an interim period when a year-to-date loss exceeds the anticipated loss for the year. Additionally the guidance requires that an entity (a) recognize a franchise tax (or similar tax) that is partially based on income as an income-based tax and account for any incremental amount incurred as a non-income-based tax, (b) evaluate when a step up in the tax basis of goodwill should be considered part of the business combination in which the book goodwill was originally recognized and when it should be considered a separate transaction and (c) reflect the effect of an enacted change in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date as well as specifying that an entity is not required to allocate the consolidated amount of current and deferred tax expense to a legal entity that is not subject to tax in its separate financial statements. However, an entity may elect to do so (on an entity-by-entity basis) for a legal entity that is both not subject to tax and disregarded by the taxing authority. The guidance also makes minor codification improvements for income taxes related to employee stock ownership plans and investments in qualified affordable housing projects accounted for using the equity method. For public business entities, the guidance is effective for reporting periods beginning after December 15, 2020 and interim periods within those fiscal years with early adoption permitted. The Company is currently evaluating the impact of this guidance on the Company's consolidated financial statements.

3. Acquisition

Quarton

On January 2, 2019 (the "Acquisition Date"), the Company, together with its indirect wholly owned subsidiaries, Cowen International Ltd and Cowen QN Acquisition LLC, completed its previously announced acquisition (the "Acquisition") of Quarton International AG through the acquisition of all of the outstanding equity interest of Quarton International AG's affiliated combining companies, Quarton Management AG, Quarton International Europe AG, Quarton Partners, LLC and Quarton Securities GP, LLC (which owns a formerly U.S. Securities Exchange Commission ("SEC") registered broker-dealer that was subsequently renamed to Cowen Securities L.P. ("Cowen Securities") (see Note 28), comprising the U.S. and European operations of the acquired combining companies (collectively "Quarton"). Quarton is a group of leading global financial advisory companies serving the middle market. Quarton's operations were primarily conducted through eight entities based in the United States, Switzerland, and Germany.

The Acquisition was accounted for under the acquisition method of accounting in accordance with US GAAP. As such, results of operations for Quarton are included in the accompanying consolidated statements of operations since the Acquisition Date, and the assets acquired and liabilities assumed were recorded at their fair value as of the Acquisition Date. Subsequent to the Acquisition, the operations of Quarton were integrated within the Company's existing businesses.

The aggregate estimated purchase price of the Acquisition was $103.0 million. On the Acquisition Date the Company paid upfront consideration of $75.3 million subject to certain net working capital and other customary adjustments, with additional maximum contingent consideration of $40.0 million that will become payable dependent on the achievement of certain milestones by Quarton in each of the first four years (five years if certain conditions are met) following the Acquisition Date subject to a $10 million maximum in each year and a $40.0 million cumulative maximum. The Company estimated the contingent consideration at $27.7 million using the Monte Carlo valuation model which requires the Company to make estimates and assumptions regarding the future cash flows and profits. The contingent consideration liability is included within accounts payable, accrued expenses and other liabilities on the consolidated statements of financial condition. Changes in these estimates and assumptions could have a significant impact on the amounts recognized. A portion of the preliminary purchase price was deposited into escrow, in the amount of $0.6 million, as a reserve for any future claims against the sellers of Quarton. All consideration, including the upfront consideration and contingent consideration, consists of a combination of 80% cash and 20% shares of the Company's Class A common stock. Shares issued on the Acquisition Date of 1,033,350 were valued based on the 30-trading day volume-weighted average price per share of $14.52 as of December 31, 2018. The fair value of the shares of Class A common stock issued was determined on the basis of the closing market price of the Company's shares on the Acquisition Date. Any shares of Class A common stock issued in connection with any such contingent payments will be valued based on the 30-trading day volume-weighted average price per share as of the day immediately prior to the date on which such shares are to be issued. In addition, Quarton and the Company have established a retention bonus pool, for Quarton employees that remain employed at the end of each year there is a contingent payment which will be settled in a combination of 80% cash and 20% shares of the Company's Class A common stock based on Quarton meeting certain economic performance hurdles. The bonus pool has an aggregate maximum of $10.0 million over a five-year period with $2.5 million maximum in each year. The Company is recognizing the retention bonus over each contingent payment period based upon the Company's revenue projections for Quarton.

The table below summarizes the purchase price allocation of net tangible and intangible assets acquired and liabilities assumed as of January 2, 2019:

		(dollars in thousands)
Cash and cash equivalents	$	12,236
Fees receivable		7,269
Fixed assets		1,085
Operating lease right-of-use assets		3,200
Intangible assets		22,200
Other assets		667
Compensation payable		(637)
Operating lease liabilities		(3,200)
Due to related parties		(4,750)
Accounts payable, accrued expenses and other liabilities		(16,257)
Total identifiable net assets acquired and liabilities assumed		**21,813**
Goodwill		81,150
Total estimated purchase price	**$**	**102,963**

As of the Acquisition Date, the estimated fair value of the Company's intangible assets, as acquired through the Acquisition, was $22.2 million. The allocation of the intangible assets is shown within the following table:

	Estimated intangible assets acquired	Estimated average remaining useful lives
	(dollars in thousands)	(in years)
Intangible asset class		
Trade name	$ 900	3
Customer relationships	7,100	4
Backlog	12,600	2
Proprietary software	1,600	3
Total intangible assets	**$ 22,200**	

Amortization expense for the year ended December 31, 2019 was $8.9 million, and is included in depreciation and amortization in the accompanying consolidated statements of operations. The estimated amortization expense related to these intangible assets in future periods is as follows:

	(dollars in thousands)
2020	$ 8,908
2021	2,608
2022	1,775
2023	—
2024	—
Thereafter	—
	$ 13,291

In addition to the purchase price consideration, for the year ended December 31, 2019, the Company has incurred acquisition-related expenses of $1.2 million, including financial advisory, legal and valuation services, which are included in professional, advisory and other fees in the accompanying consolidated statements of operations.

Included in the accompanying consolidated statements of operations for the year ended December 31, 2019 is revenue of $34.8 million and net income of $5.7 million related to the results of operations of Quarton.

Subsequent to the Acquisition, Quarton's businesses were integrated within the Op Co segment and therefore are included within their respective line items in the accompanying consolidated statements of operations. The following table provides supplemental pro forma financial information for the year ended December 31, 2018, as if the acquisition were completed as of January 1, 2018. This unaudited supplemental pro forma information has been prepared for comparative purposes only and is not intended to be indicative of what the Company's financial results would have been had the acquisition been completed on January 1, 2018, nor does it purport to be indicative of any future results.

	Year Ended December 31, 2018
	(dollars in thousands, except per share data)
Net revenues	$ 922,001
Net income (loss) attributable to Cowen Inc. common stockholders	35,616
Net income (loss) per common share:	
Basic	$ 1.20
Diluted	1.15

4. Cash Collateral Pledged

As of December 31, 2019 and 2018, the Company pledged cash collateral in the amount of $4.6 million and $5.3 million, respectively, which relates to letters of credit issued to the landlords of the Company's premises in New York City, Boston, Stamford and San Francisco. The Company also has pledged collateral for reinsurance agreements which amounted to $2.0 million, as of December 31, 2019, and $1.0 million, as of December 31, 2018, which are released annually between March 2020 and March 2023 based on the policy periods covered by the reinsurance agreements (see Note 23).

5. Segregated Cash

As of December 31, 2019 and 2018, cash segregated in compliance with federal regulations and other restricted deposits of $107.3 million and $176.6 million, respectively, consisted of cash deposited in Special Reserve Accounts for the exclusive benefit of customers under SEC Rule 15c3-3 and cash held in accounts designated as Special Reserve Bank Accounts for Proprietary Accounts of Broker-Dealers ("PAB").

6. Investments of Operating Entities and Consolidated Funds

a. Operating Entities

Securities owned, at fair value

Securities owned, at fair value are held by the Company and are considered held for trading. Substantially all equity securities, which are not part of the Company's self-clearing securities finance activities, are pledged to external clearing brokers under terms which permit the external clearing broker to sell or re-pledge the securities to others subject to certain limitations.

As of December 31, 2019 and 2018, securities owned, at fair value consisted of the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Common stock (*)	$ 1,546,484	$ 472,299
Preferred stock (*)	12,656	5,617
Warrants and rights (*)	22,109	7,990
Government bonds (a)	15,916	13,398
Corporate bonds (c)	25,500	13,041
Convertible bonds (b) (*)	2,500	3,000
Term loan (*)	1,067	—
Trade claims (*)	7,320	5,543
	$ 1,633,552	**$ 520,888**

(a) As of December 31, 2019, maturities ranged from January 2020 to June 2020 with an interest rate of 0%. As of December 31, 2018, maturities ranged from April 2019 to August 2019 with an interest rate of 0%.

(b) As of December 31, 2019, maturities ranged from April 2020 to March 2022 with an interest rate of 8%. As of December 31, 2018, the maturity was June 2020 with an interest rate of 8%.

(c) As of December 31, 2019, maturities ranged from January 2020 to May 2037 and interest rates ranged from 0% to 15%. As of December 31, 2018, maturities ranged from April 2019 to April 2049 and interest rates ranged from 2% to 15.5%.

* The Company has elected the fair value option for securities owned, at fair value with a fair value of $14.9 million and $9.4 million, respectively, at December 31, 2019 and 2018.

Receivable on and Payable for derivative contracts, at fair value

The Company's direct involvement with derivative financial instruments includes total return swaps, futures, currency forwards, equity swaps, credit default swaps and options. The Company's derivatives trading activities expose the Company to certain risks, such as price and interest rate fluctuations, volatility risk, credit risk, counterparty risk, foreign currency movements and changes in the liquidity of markets.

The Company's long and short exposure to derivatives is as follows:

Receivable on derivative contracts	As of December 31,			
	2019		2018	
	Number of contracts / Notional Value	Fair value	Number of contracts / Notional Value	Fair value
	(dollars in thousands)			
Futures	$ —	$ —	$ 42,288	$ 334
Currency forwards	$ —	—	$ 395	1
Swaps	$ 383,752	2,911	$ 13,702	917
Options other (a)	550,188	60,066	654,506	23,130
Pay to hold	$ —	—	$ —	743
		$ 62,977		$ 25,125

(a) Includes the volume of contracts for index, equity, commodity future and cash conversion options.

Payable for derivative contracts	As of December 31,			
	2019		2018	
	Number of contracts / Notional Value	Fair value	Number of contracts / Notional Value	Fair value
	(dollars in thousands)			
Futures	$ 10,224	$ 217	$ —	$ —
Currency forwards	$ 77,790	851	$ 96,406	709
Swaps	$ 607,717	23,169	$ 52,905	2,162
Options other (a)	306,306	36,524	90,730	13,211
		$ 60,761		$ 16,082

(a) Includes the volume of contracts for index, equity, commodity future and cash conversion options.

The following tables present the gross and net derivative positions and the related offsetting amount, as of December 31, 2019 and 2018. This table does not include the impact of over-collateralization.

				Gross amounts not offset in the Consolidated Statements of Financial Condition		
	Gross amounts recognized	Gross amounts offset on the Consolidated Statements of Financial Condition (a)	Net amounts included on the Consolidated Statements of Financial Condition	Financial instruments	Cash Collateral pledged (b)	Net amounts
	(dollars in thousands)					
As of December 31, 2019						
Receivable on derivative contracts, at fair value	$ 66,217	$ 3,240	$ 62,977	$ —	$ 2,911	$ 60,066
Payable for derivative contracts, at fair value	64,001	3,240	60,761	—	24,020	36,741
As of December 31, 2018						
Receivable on derivative contracts, at fair value	$ 25,125	$ —	$ 25,125	$ —	$ 1,662	$ 23,463
Payable for derivative contracts, at fair value	16,082	—	16,082	—	2,871	13,211

(a) Includes financial instruments subject to enforceable master netting provisions that are permitted to be offset to the extent an event of default has occurred.

(b) Includes the amount of collateral held or posted.

The realized and unrealized gains/(losses) related to derivatives trading activities were $(13.0) million, $14.3 million, and $3.9 million for the years ended December 31, 2019, 2018 and 2017, respectively, and are included in other income in the accompanying consolidated statements of operations.

Pursuant to the various derivatives transactions discussed above, except for exchange traded derivatives and certain options, the Company is required to post/receive collateral. As of December 31, 2019 and 2018, collateral consisting of $10.5 million and $11.2 million of cash is included in receivable from brokers, dealers and clearing organizations of $681.7 million and $786.1 million, respectively, and payable to brokers, dealers and clearing organizations, of $271.0 million and $228.7 million, respectively, on the accompanying consolidated statements of financial condition. As of December 31, 2019 and 2018, all derivative contracts were with major financial institutions.

Other investments

As of December 31, 2019 and 2018, other investments included the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Portfolio funds, at fair value (1)	$ 114,504	$ 124,741
Carried interest (2)	30,360	17,995
Equity method investments (3)	40,858	38,671
	$ 185,722	**$ 181,407**

(1) Portfolio Funds, at fair value

The Portfolio Funds, at fair value as of December 31, 2019 and 2018, included the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Starboard Value and Opportunity Fund LP (c)(*)	$ 37,895	$ 32,579
Formation8 Partners Fund I, L.P. (f)	33,613	34,099
RCG Longview Debt Fund V, L.P. (g)(*)	1,732	4,394
RCG Longview II LP (g) (*)	110	4,400
Cowen Healthcare Investments II LP (i) (*)	14,652	14,939
Eclipse Ventures Fund I, L.P. (b)	3,960	4,412
HealthCare Royalty Partners LP (a)(*)	1,326	1,833
Lagunita Biosciences, LLC (d)	4,802	3,833
Starboard Leaders Fund LP (e)(*)	1,560	1,230
Eclipse SPV I, LP (j)(*)	1,447	1,447
Triartisan ES Partners LLC (k)(*)	1,082	1,500
Triartisan PFC Partners LLC (l)(*)	909	—
RCG Longview Equity Fund, LP (g) (*)	835	802
RCG Longview Debt Fund VI, LP (g) (*)	—	1,586
RCG Park Liberty GP Member LLC (g) (*)	—	1,023
HealthCare Royalty Partners II LP (a)(*)	1,781	1,037
RCGL PE MPA, LLC (g)(*)	—	618
RCG LPP2 PNW5 Co-Invest, L.P. (h)(*)	—	296
Cowen Healthcare Investments III LP	1,398	—
Difesa Partners, LP (o) (*)	508	—
Other private investment (m)(*)	4,448	11,625
Other affiliated funds (n)(*)	2,446	3,088
	$ 114,504	**$ 124,741**

* These Portfolio Funds are affiliates of the Company.

The Company has no unfunded commitments regarding the Portfolio Funds held by the Company except as noted in Note 22.

(a) HealthCare Royalty Partners, L.P. and HealthCare Royalty Partners II, L.P. are private equity funds and therefore distributions will be made when cash flows are received from the underlying investments, typically on a quarterly basis.

(b) Eclipse Ventures Fund I, L.P. is a private equity fund which invests in early stage and growth hardware companies. Distributions will be made when the underlying investments are liquidated.

(c) Starboard Value and Opportunity Fund LP permits quarterly withdrawals upon 90 days' notice.

(d) Lagunita Biosciences, LLC, is a healthcare investment company that creates and grows early stage companies to commercialize impactful translational science that addresses significant clinical needs, is a private equity structure and therefore distributions will be made when the underlying investments are liquidated.

(e) Starboard Leaders Fund LP does not permit withdrawals, but instead allows terminations with respect to capital commitments upon 30 days' prior written notice at any time following the first anniversary of an investor's initial capital contribution.

(f) Formation8 Partners Fund I, L.P. is a private equity fund which invests in early stage and growth transformational information and energy technology companies. Distributions will be made when the underlying investments are liquidated.

(g) RCG Longview Debt Fund V, L.P., RCG Longview II LP, RCG Park Liberty GP Member LLC, RCG Longview Equity Fund, LP, RCGL PE MPA, LLC and RCG Longview Debt Fund VI, LP are real estate private equity structures. The timing of distributions depends on the nature of the underlying investments and therefore will be made either quarterly or when the underlying investments are liquidated.

(h) RCG LPP2 PNW5 Co-Invest, L.P. is a single purpose entity formed to participate in a joint venture which acquired five multi-unit residential rental properties located in the Pacific Northwest. RCG LPP2 PNW5 Co-Invest, L.P. is a private equity structure and therefore distributions will be made when the underlying investments are liquidated.

(i) Cowen Healthcare Investments II LP is a private equity fund. Distributions are made from the fund when cash flows or securities are received from the underlying investments. Investors do not have redemption rights.

(j) Eclipse SPV I, L.P. is a co-investment vehicle organized to invest in a private company focused on software-driven automation projects. Distributions will be made when the underlying investments are liquidated.

(k) TriArtisan ES Partners LLC is a co-investment vehicle organized to invest in a privately-held nuclear services company. Distributions will be made when the underlying investment is liquidated.

(l) TriArtisan PFC Partners LLC is a co-investment vehicle organized to invest in a privately-held casual dining restaurant chain. Distributions will be made when the underlying investment in liquidated.

(m) Other private investment represents the Company's closed end investment in a Portfolio Fund that invests in a wireless broadband communication provider in Italy.

(n) The majority of these investment funds are affiliates of the Company or are managed by the Company and the investors can redeem from these funds as investments are liquidated.

(o) Difesa Partners, LP permits semi annual withdrawals occurring on or after the anniversary of initial contribution upon 90 days written notice.

(2) Carried interest

The Company applies an accounting policy election to recognize incentive income allocated to the Company under an equity ownership model in other investments in the accompanying consolidated statements of financial condition (see Note 2v). Carried interest allocated to the Company from certain Portfolio Funds represents Cowen's general partner capital accounts from those funds. These balances are subject to change upon cash distributions, additional allocations or reallocations back to limited partners within the respective funds.

A portion of the Company's carried interest is granted to employees through profit sharing awards designed to more closely align compensation with the overall realized performance of the Company. These arrangements enable certain employees to earn compensation based on performance revenue earned by the Company are recorded within compensation payable in the accompanying consolidated statements of financial condition.

The carried interest as of December 31, 2019 and 2018, included the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Cowen Healthcare Investments II LP (*)	$ 23,759	$ 6,778
Other private investment (a) (*)	4,737	4,273
RCG IO Renergys Sarl	1,251	6,369
Ramius Multi-Strategy Fund LP (*)	613	575
	$ 30,360	**$ 17,995**

(a) Other private investment represents the Company's closed end investment in a Portfolio Fund that invests in a wireless broadband communication provider in Italy.

* These carried interest balances are earned from affiliates of the Company.

(3) Equity method investments

Equity method investments include investments held by the Company in several operating companies whose operations primarily include the day to day management of a number of real estate funds, including the portfolio management and administrative services related to the acquisition, disposition, and active monitoring of the real estate funds' underlying debt and equity investments. The Company's ownership interests in these equity method investments range from 15% to 55%. The Company holds a majority of the outstanding ownership interest (i.e., more than 50%) in RCG Longview Partners II, LLC and 40% in Surf House Ocean Views Holdings, LLC (which is a joint venture in a real estate development project). The operating agreement that governs the management of day-to-day operations and affairs of these entities stipulates that certain decisions require support and approval from other members in addition to the support and approval of the Company. As a result, all operating decisions made in these entities requires the support of both the Company and an affirmative vote of a majority of the other managing members who are not affiliates of the Company. As the Company does not possess control over any of these entities, the presumption of consolidation has been overcome pursuant to current Accounting Standards and the Company accounts for these investments under the equity method of accounting. Also included in equity method investments are the investments in (a) HealthCare Royalty Partners General Partners and (b) Starboard Value (and certain related parties) which serves as an operating company whose operations primarily include the day-to-day management (including portfolio management) of several activist investment funds and related managed accounts. During 2019, the Company completed the sale of its interests in RCG Longview Management, the management company for certain real estate investment funds in which the Company was invested, and various other real estate assets held by the Company for which an impairment charge was recognized at September 30, 2019. The transactions resulted in the recognition of a $0.2 million loss for the year ended December 31, 2019.

During the third quarter of 2018, the Company completed an assessment of the recoverability of the Company's equity method investments and determined that the carrying value of the investment in Surf House Ocean View Holdings, LLC exceeded the estimated fair value of the Company's interest, which was other than temporary. Accordingly, an other than temporary impairment charge of $7.1 million was recognized to reduce the carrying value of the investment to fair value at December 31, 2018 and an additional other than temporary impairment charge of $2.6 million was recognized during the fourth quarter of 2019.

The Company elected to use the cumulative earnings approach for the distributions it receives from its equity method investments. Under the cumulative earnings approach, any distributions received up to the amount of cumulative earnings are treated as return on investment and classified in operating activities within the cash flows. Any excess distributions would be considered as return of investments and classified in investing activities.

The following table summarizes equity method investments held by the Company:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Surf House Ocean Views Holdings, LLC	$ 7,804	$ 7,589
Starboard Value LP	24,292	12,699
RCG Longview Debt Fund V Partners, LLC	2,889	11,000
RCG Longview Management, LLC	583	1,167
RCG Longview Debt Fund VI Partners LLC	—	1,254
HealthCare Royalty GP, LLC	108	149
HealthCare Royalty GP II, LLC	302	176
RCG Longview Debt Fund IV Management, LLC	331	331
HealthCare Royalty GP III, LLC	2,230	1,573
RCG Kennedy House, LLC	—	131
RCG Longview Equity Management, LLC	105	114
RCG LPP II GP, LLC	—	272
RCG Park Liberty GP Member Manager, LLC	—	1,248
HCR Stafford Fund GP, LLC	880	—
Liberty Harbor North	292	—
Other	1,042	968
	$ 40,858	**$ 38,671**

The Company's income (loss) from equity method investments was $24.6 million, $6.4 million and $21.3 million for the years ended December 31, 2019, 2018 and 2017, respectively, and is included in net gains (losses) on securities, derivatives and other investments on the accompanying consolidated statements of operations.

For financial reporting purposes, the general partners of a real estate fund had recorded a liability for potential clawback obligations to the limited partners, due to changes in the unrealized value of the real estate fund's remaining investments and where the real estate fund's general partner has previously received carried interest distributions. The clawback liability was not realized until the end of the real estate fund's life. The clawback obligations for the real estate fund were $6.5 million at December 31, 2018, which is included in accounts payable, accrued expenses and other liabilities in the accompanying consolidated statements of financial condition. The liability was fully repaid in December 2019 (see Note 22 to the Company's consolidated financial statements).

Regulation S-X Rule 4-08(g)

For the period ended December 31, 2019, certain investments subject to Regulation S-X Rule 4-08(g) held by the Company in aggregate have met the significance criteria as defined under SEC guidance. As such, the Company is required to present summarized financial information for these significant investees for the years ended December 31, 2019, 2018, and 2017, and such information is as follows:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Assets	$ 1,374,077	$ 1,189,669
Liabilities	205,873	244,088
Equity	**$ 1,168,204**	**$ 945,581**

	Year Ended December 31,		
	2019	2018	2017
	(dollars in thousands)		
Revenues	$ 200,854	$ 105,499	$ 165,550
Expenses	(79,811)	(67,893)	(62,175)
Net realized and unrealized gains (losses)	221,616	95,855	133,695
Income (loss) before income taxes	342,659	133,461	237,070
Income tax expense	(2,234)	(51)	(99)
Net income	**$ 340,425**	**$ 133,410**	**$ 236,971**

Securities sold, not yet purchased, at fair value

Securities sold, not yet purchased, at fair value represent obligations of the Company to deliver a specified security at a contracted price and, thereby, create a liability to purchase that security at prevailing prices. The Company's liability for securities to be delivered is measured at their fair value as of the date of the consolidated financial statements. However, these transactions result in off-balance sheet risk, as the Company's ultimate cost to satisfy the delivery of securities sold, not yet purchased, at fair value may exceed the amount reflected in the accompanying consolidated statements of financial condition. Substantially all equity securities and options are pledged to the clearing broker under terms which permit the clearing broker to sell or re-pledge the securities to others subject to certain limitations. As of December 31, 2019 and 2018, securities sold, not yet purchased, at fair value consisted of the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Common stock	$ 425,448	$ 194,305
Corporate bonds (a)	5,933	750
Government bonds (b)	1,950	—
Preferred stock	3,686	199
Warrants and rights	14,819	53
	$ 451,836	**$ 195,307**

(a) As of December 31, 2019, the maturities ranged from January 2024 to May 2037 and interest rates ranged from 4.88% to 6.25%. As of December 31, 2018, the maturities ranged from October 2022 to January 2034 and interest rates ranged from 2.25% to 9.38%.

(b) As of December 31, 2019, the maturities ranged from October 2024 to March 2038 and interest rates ranged from 7.00% to 8.25%.

Securities sold under agreements to repurchase and securities lending and borrowing transactions

The following tables present the contractual gross and net securities borrowing and lending agreements and securities sold under agreements to repurchase and the related offsetting amount as of December 31, 2019 and 2018.

	Gross amounts recognized	Gross amounts offset on the Consolidated Statements of Financial Condition (a)	Net amounts included on the Consolidated Statements of Financial Condition	Gross amounts not offset on the Consolidated Statements of Financial Condition: Additional Amounts Available	Financial instruments	Cash Collateral pledged (b)	Net amounts
	(dollars in thousands)						
As of December 31, 2019							
Securities borrowed	$ 754,441	$ —	$ 754,441	$ —	$ 751,913	$ —	$ 2,528
Securities loaned	1,601,866	—	1,601,866	—	1,585,036	—	16,830
Securities sold under agreements to repurchase	23,244	—	23,244	—	27,384	—	(4,140)
As of December 31, 2018							
Securities borrowed	$ 407,795	$ —	$ 407,795	$ —	$ 383,593	$ —	$ 24,202
Securities loaned	414,852	—	414,852	—	391,310	—	23,542

(a) Includes financial instruments subject to enforceable master netting provisions that are permitted to be offset to the extent an event of default has occurred.

(b) Includes the amount of cash collateral held/posted.

The following tables present gross obligations for securities loaned and securities sold under agreements to repurchase by remaining contractual maturity and class of collateral pledged as of December 31, 2019 and 2018:

	Open and Overnight	Up to 30 days	31 - 90 days	Greater than 90 days	Total
	(dollars in thousands)				
As of December 31, 2019					
Securities loaned					
Common stock	$ 1,343,478	$ —	$ —	$ —	$ 1,343,478
Corporate bonds	258,388	—	—	—	258,388
Securities sold under agreements to repurchase	—	—	23,244	—	23,244
As of December 31, 2018					
Securities loaned					
Common stock	$ 414,852	$ —	$ —	$ —	$ 414,852

Variable Interest Entities

The total assets and liabilities of the variable interest entities for which the Company has concluded that it holds a variable interest, but for which it is not the primary beneficiary, are $6.1 billion and $617.5 million as of December 31, 2019 and $5.4 billion and $377.2 million as of December 31, 2018, respectively. The carrying value of the Company's exposure to loss for these variable interest entities as of December 31, 2019 was $241.2 million, and as of December 31, 2018 was $301.4 million, all of which is included in other investments, at fair value in the accompanying consolidated statements of financial condition. The exposure to loss primarily relates to the Consolidated Fund's investment in the Unconsolidated Master Fund and the Company's investment in unconsolidated investment companies. Additionally, the Company's maximum exposure to loss for the variable interest entities noted above as of December 31, 2019 and 2018, was $261.7 million and $332.4 million, respectively. The maximum exposure to loss often differs from the carrying value of exposure to loss of the variable interests. The maximum exposure to loss is dependent on the nature of the variable interests in the VIEs and is limited to the notional amounts of certain commitments and guarantees.

b. Consolidated Funds

Securities owned, at fair value

As of December 31, 2019 and 2018, securities owned, at fair value, held by the Consolidated Funds consisted of the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Preferred stock	$ 4,393	$ 24,314
Common stock	200,306	95,565
Government bonds (a)	161,607	38,377
Corporate bonds (b)	3,405	24,098
Warrants and rights	5,567	5,279
	$ 375,278	$ 187,633

(a) As of December 31, 2019, maturities ranged from February 2020 to March 2020 and interest rates were 0%. As of December 31, 2018, maturities ranged from January 2019 to April 2019 and interest rates were 0%.

(b) As of December 31, 2019, the maturity was July 2023 with an interest rate of 7.50%. As of December 31, 2018, maturities ranged from August 2020 to March 2026 and interest rates ranged from 5.88% to 7.63%.

Receivable on derivative contracts

As of December 31, 2019 and 2018, receivable on derivative contracts, at fair value, held by the Consolidated Funds are comprised of:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Currency forwards	$ 3,302	$ 186
Equity swaps	927	2,477
Options	1,604	1,753
	$ 5,833	$ 4,416

Payable for derivative contracts

As of December 31, 2019 and 2018, payable for derivative contracts, at fair value, held by the Consolidated Funds are comprised of:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Currency forwards	$ 88	$ 96
Equity swaps	3,931	713
Options	750	854
	$ 4,769	$ 1,663

Other investments, at fair value

Investments in Portfolio Funds, at fair value

As of December 31, 2019 and 2018, investments in Portfolio Funds, at fair value, included the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Investments of Enterprise LP	$ 99,153	$ 97,656
Investments of Merger Fund	76,616	88,739
	$ 175,769	$ 186,395

Consolidated portfolio fund investments of Enterprise LP

On May 12, 2010, the Company announced its intention to close Enterprise Master. Enterprise LP operated under a "master-feeder" structure up until January 1, 2019, when Enterprise Master distributed its capital to each feeder and was liquidated. As of December 31, 2019, the consolidated investments in Portfolio Funds include Enterprise LP's investment in RCG Special Opportunities Fund, Ltd which is a portfolio fund that invests in a limited number of private equity investments directly as well as through affiliated portfolio funds. As of December 31, 2018, the consolidated investments in Portfolio Funds included Enterprise LP's investment of $97.7 million in Enterprise Master. Prior to liquidation, strategies utilized by Enterprise Master included merger arbitrage and activist investing, investments in distressed securities, convertible hedging, capital structure arbitrage, equity market neutral, investments in private placements of convertible securities, proprietary mortgages, structured credit investments, investments in mortgage backed securities and other structured finance products, investments in real estate and real property interests, structured private placements and other relative value strategies. Enterprise Master had broad investment powers and maximum flexibility in seeking to achieve its investment objective. Enterprise Master was permitted to invest in equity securities, debt instruments, options, futures, swaps, credit default swaps and other derivatives. There are no unfunded commitments at Enterprise LP.

Consolidated portfolio fund investments of Merger Fund

The Merger Fund operates under a "master-feeder" structure, whereby Merger Master shareholders are Merger Fund and Ramius Merger Fund Ltd. The consolidated investments in Portfolio Funds include Merger Fund's investment of $76.6 million and $88.7 million in Merger Master as of December 31, 2019 and 2018, respectively. The Merger Master's investment objective is to achieve consistent absolute returns while emphasizing the preservation of investor capital. The Merger Master seeks to achieve these objectives by taking a fundamental, research-driven approach to investing, primarily in the securities of issuers engaged in, or subject to, announced (or unannounced but otherwise anticipated) extraordinary corporate transactions, which may include, but are not limited to, mergers, acquisitions, leveraged buyouts, tender offers, hostile takeover bids, sale processes, exchange offers, and recapitalizations. Merger Master invests in the securities of one or more issuers engaged in or subject to such extraordinary corporate transactions. Merger Master typically seeks to derive a profit by realizing the price differential, or "spread," between the market price of securities purchased or sold short and the market price or value of securities realized in connection with the completion or termination of the extraordinary corporate transaction, or in connection with the adjustment of market prices in anticipation thereof, while seeking to minimize the market risk associated with the aforementioned investment activities. Merger Master will, depending on market conditions, generally focus the majority of its investment program on announced transactions. If the investment manager of Merger Master considers it necessary, it may either alone or as part of a group, also initiate shareholder actions seeking to maximize value. Such shareholder actions may include, but are not limited to, re-orienting management's focus or initiating the sale of the company (or one or more of its divisions) to a third party. There are no unfunded commitments at Merger Fund.

Indirect Concentration of the Underlying Investments Held by Consolidated Funds

From time to time, either directly or indirectly through its investments in the Consolidated Funds, the Company may maintain exposure to a particular issue or issuer (both long and/or short) which may account for 5% or more of the Company's equity. Based on information that is available to the Company as of December 31, 2019 and 2018, the Company assessed whether or not its interests in an issuer for which the Company's pro-rata share exceeds 5% of the Company's equity. There was one indirect concentration that exceeded 5% of the Company's equity as of December 31, 2019 and one at December 31, 2018.

Through its investments in a Consolidated Fund and combined with direct Company investments, the Company maintained exposure to a particular investment which accounted for 5% or more of the Company's equity.

	Investment's percentage of the Company's stockholders' equity					
	Issuer	Security Type	Country	Industry	Percentage of Stockholders' Equity	Market Value
						(dollars in thousands)
As of December 31, 2019	Linkem	Equity	Italy	Wireless Broadband	8.94 %	$ 72,404
As of December 31, 2018	Linkem	Equity	Italy	Wireless Broadband	8.36 %	$ 66,439

Underlying Investments of Unconsolidated Funds Held by Consolidated Funds

Enterprise Master and Merger Master

At December 31, 2018, Enterprise LP's investment in Enterprise Master represented Enterprise LP's proportionate share of Enterprise Master's net assets; as a result, the investment balances of Enterprise Master reflected below may exceed the net investment which Enterprise LP has recorded. Merger Fund's investment in Merger Master represents Merger Fund's proportionate share of Merger Master's net assets; as a result, the investment balances of Merger Master reflected below may exceed the net investment which Merger Fund has recorded. The following tables present summarized investment information for the underlying investments and derivatives held by Enterprise Master and Merger Master as of December 31, 2019 and 2018:

Securities owned by Enterprise Master, at fair value

	As of December 31, 2018 (dollars in thousands)
Common stock	$ 469
	$ 469

Portfolio Funds, owned by Enterprise Master, at fair value

	Strategy	As of December 31, 2018 (dollars in thousands)
RCG Special Opportunities Fund, Ltd*	Multi-Strategy	$ 111,548
Other Private Investments	Various	846
		$ 112,394

* Affiliates of the Company.

Merger Master

	As of December 31, 2019	2018
	(dollars in thousands)	
Securities owned by Merger Master, at fair value		
Common stock	$ 76,531	$ 162,811
Warrants and rights	748	—
Corporate bonds	2,074	116,488
	$ 79,353	**$ 279,299**
Securities sold, not yet purchased, by Merger Master, at fair value		
Common stock	$ 29,623	$ 4,959
Exchange traded funds	38,527	4,651
	$ 68,150	**$ 9,610**

Receivable on derivative contracts, at fair value, owned by Merger Master

	As of December 31, 2019	2018
Description	(dollars in thousands)	
Options	$ 2,047	$ 3,450
Equity swaps	406	5,320
	$ 2,453	**$ 8,770**

Payable for derivative contracts, at fair value, owned by Merger Master

	As of December 31, 2019	2018
Description	(dollars in thousands)	
Options	$ 1,158	$ 1,430
Currency forwards	—	270
Equity swaps	268	28
	$ 1,426	**$ 1,728**

7. Fair Value Measurements for Operating Entities and Consolidated Funds

The following table presents the assets and liabilities that are measured at fair value on a recurring basis on the accompanying consolidated statements of financial condition by caption and by level within the valuation hierarchy as of December 31, 2019 and 2018:

	Assets at Fair Value as of December 31, 2019			
	Level 1	Level 2	Level 3	Total
	(dollars in thousands)			
Operating Entities				
Securities owned, at fair value				
Government bonds	$ 15,916	$ —	$ —	$ 15,916
Preferred stock	4,821	—	7,835	12,656
Common stock	1,527,769	1,249	17,466	1,546,484
Convertible bonds	—	—	2,500	2,500
Corporate bonds	—	23,079	2,421	25,500
Trade claims	—	—	7,320	7,320
Term loan	—	1,067	—	1,067
Warrants and rights	21,515	—	594	22,109
Receivable on derivative contracts, at fair value				
Swaps	—	2,911	—	2,911
Options	59,730	—	336	60,066
Consolidated Funds				
Securities owned, at fair value				
Government bonds	161,607	—	—	161,607
Preferred stock	—	—	4,393	4,393
Common stock	200,306	—	—	200,306
Corporate bonds	—	3,405	—	3,405
Warrants and rights	—	—	5,567	5,567
Receivable on derivative contracts, at fair value				
Currency forwards	—	3,302	—	3,302
Equity swaps	—	927	—	927
Options	1,604	—	—	1,604
	$ 1,993,268	**$ 35,940**	**$ 48,432**	**$ 2,077,640**
Percentage of total assets measured at fair value on a recurring basis	95.9 %	1.7 %	2.3 %	
Portfolio Funds measured at net asset value (a)				114,504
Carried interest (a)				30,360
Consolidated Funds' Portfolio Funds measured at net asset value (a)				175,769
Equity method investments				40,858
Total investments				**$ 2,439,131**

	Liabilities at Fair Value as of December 31, 2019			
	Level 1	Level 2	Level 3	Total
	(dollars in thousands)			
Operating Entities				
Securities sold, not yet purchased, at fair value				
Government bonds	$ —	$ —	$ 1,950	$ 1,950
Common stock	425,448	—	—	425,448
Corporate bonds	—	4,933	1,000	5,933
Preferred stock	3,686	—	—	3,686
Warrants and rights	14,819	—	—	14,819
Payable for derivative contracts, at fair value				
Futures	217	—	—	217
Currency forwards	—	851	—	851
Swaps	—	23,169	—	23,169
Options	33,604	—	2,920	36,524
Accounts payable, accrued expenses and other liabilities				
Contingent consideration liability (b)	—	—	30,896	30,896
Consolidated Funds				
Payable for derivative contracts, at fair value				
Currency forwards	—	88	—	88
Options	750	—	—	750
Equity swaps	—	3,931	—	3,931
	$ 478,524	**$ 32,972**	**$ 36,766**	**$ 548,262**
Percentage of total liabilities measured at fair value	87.3 %	6.0 %	6.7 %	

(a) In accordance with US GAAP, certain investments are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient. Carried interest in portfolio funds have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated statement of financial condition.

(b) In accordance with the terms of the purchase agreements for acquisitions that closed during the second quarter of 2016 and the first quarter of 2019, the Company is required to pay to the sellers a portion of future net income and/or revenues of the acquired businesses, if certain targets are achieved through the periods ended December 31, 2019 and December 31, 2023, respectively. For the acquisition that closed during 2016, the Company estimated the contingent consideration liability using the income approach (discounted cash flow method) which requires the Company to make estimates and assumptions regarding the future cash flows and profits. For the acquisition that closed during 2019, the Company estimated the contingent consideration liability using the present value of the Monte Carlo simulated revenue. Changes in these estimates and assumptions could have a significant impact on the amounts recognized. The undiscounted amounts as of December 31, 2019 can range from $1.3 million to $40.0 million.

	Assets at Fair Value as of December 31, 2018			
	Level 1	Level 2	Level 3	Total
	(dollars in thousands)			
Operating Entities				
Securities owned, at fair value				
Government bonds	$ 13,398	$ —	$ —	$ 13,398
Preferred stock	449	—	5,168	5,617
Common stock	459,601	2,848	9,850	472,299
Convertible bonds	—	—	3,000	3,000
Corporate bonds	—	13,041	—	13,041
Trade claims	—	—	5,543	5,543
Warrants and rights	6,324	—	1,666	7,990
Receivable on derivative contracts, at fair value				
Futures	334	—	—	334
Currency forwards	—	1	—	1
Swaps	—	917	—	917
Options	23,130	—	—	23,130
Pay to hold	—	743	—	743
Consolidated Funds				
Securities owned, at fair value				
Government bonds	38,377	—	—	38,377
Preferred stock	—	—	24,314	24,314
Common stock	95,471	—	94	95,565
Corporate bonds	—	24,098	—	24,098
Warrants and rights	—	—	5,279	5,279
Receivable on derivative contracts, at fair value				
Currency forwards	—	186	—	186
Equity swaps	—	2,477	—	2,477
Options	1,753	—	—	1,753
	$ 638,837	**$ 44,311**	**$ 54,914**	**$ 738,062**
Percentage of total assets measured at fair value on a recurring basis	86.6 %	6.0 %	7.4 %	
Portfolio Funds measured at net asset value (a)				124,741
Carried interest (a)				17,995
Consolidated Funds' Portfolio Funds measured at net asset value (a)				186,395
Equity method investments				38,671
Total investments				**$ 1,105,864**

	Liabilities at Fair Value as of December 31, 2018			
	Level 1	Level 2	Level 3	Total
	(dollars in thousands)			
Operating Entities				
Securities sold, not yet purchased, at fair value				
Common stock	$ 194,305	$ —	$ —	$ 194,305
Corporate bonds	—	750	—	750
Preferred stock	199	—	—	199
Warrants and rights	53	—	—	53
Payable for derivative contracts, at fair value				
Currency forwards	—	709	—	709
Swaps	—	2,162	—	2,162
Options	11,115	—	2,096	13,211
Accounts payable, accrued expenses and other liabilities				
Contingent consideration liability (b)	—	—	3,070	3,070
Consolidated Funds				
Payable for derivative contracts, at fair value				
Currency forwards	—	96	—	96
Options	854	—	—	854
Equity swaps	—	713	—	713
	$ 206,526	**$ 4,430**	**$ 5,166**	**$ 216,122**
Percentage of total liabilities measured at fair value	95.6 %	2.0 %	2.4 %	

(a) In accordance with US GAAP, certain investments are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient. Carried interest in portfolio funds have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated statement of financial condition.

(b) In accordance with the terms of the purchase agreements for the acquisition that closed during the second quarter of 2016, the Company is required to pay to the sellers a portion of future net income and/or revenues of the acquired business, if certain targets are achieved through the periods ended December 31, 2020. The Company estimated the contingent consideration liability using the income approach (discounted cash flow method) which requires the Company to make estimates and assumptions regarding the future cash flows and profits. Changes in these estimates and assumptions could have a significant impact on the amounts recognized. The undiscounted amounts as of December 31, 2018 can range from $2.8 million to $3.4 million.

The following table includes a roll forward of the amounts for the years ended December 31, 2019 and 2018 for financial instruments classified within level 3. The classification of a financial instrument within level 3 is based upon the significance of the unobservable inputs to the overall fair value measurement.

	Year Ended December 31, 2019							
	Balance at December 31, 2018	Transfers in	Transfers out	Purchases/ (covers)	(Sales)/ shorts	Realized and Unrealized gains/losses	Balance at December 31, 2019	Change in unrealized gains/ losses relating to instruments still held (1)
	(dollars in thousands)							
Operating Entities								
Preferred stock	$ 5,168	$ —	$ (1,000) (e)	$ 3,513	$ (1,270)	$ 1,424	$ 7,835	$ 2,285
Common stock	9,850	10,242 (d)(g)	(3) (f)	11,477	(11,002)	(3,098)	17,466	(3,098)
Convertible bonds	3,000	—	(4,826) (b) (e)	11,354	(7,072)	44	2,500	(25)
Corporate bond	—	4 (d)	—	2,811	(533)	139	2,421	140
Options, asset	—	330 (g)	—	—	—	6	336	6
Options, liability	2,096	—	—	—	(4)	828	2,920	828
Warrants and rights	1,666	—	—	—	(189)	(883)	594	31
Trade claims	5,543	—	—	7,205	(5,506)	78	7,320	76
Corporate bond, liability	—	2,525 (d)	—	—	—	(1,525)	1,000	(1,525)
Government bonds, liability	—	4,681 (d)	—	—	—	(2,731)	1,950	(2,731)
Contingent consideration liability	3,070	—	—	27,700	(1,234)	1,360	30,896	1,360
Consolidated Funds								
Preferred stock	24,314	—	(19,929) (e)	—	—	8	4,393	—
Common stock	94	—	(94) (e)	407	(958)	551	—	—
Warrants and rights	$ 5,279	$ —	$ —	$ —	$ (1,758)	$ 2,046	$ 5,567	$ 289

	Year Ended December 31, 2018							
	Balance at December 31, 2017	Transfers in	Transfers out	Purchases/ (covers)	(Sales)/ shorts	Realized and Unrealized gains/losses	Balance at December 31, 2018	Change in unrealized gains /losses relating to instruments still held (1)
	(dollars in thousands)							
Operating Entities								
Preferred stock	$ 8,115	$ —	$ (1,141) (b)	$ 1,415	$ (695)	$ (2,526)	$ 5,168	$ 860
Common stock	7,570	—	(569)	3,324	(1,416)	941	9,850	1,797
Convertible bonds	282	—	—	3,000	(307)	25	3,000	—
Options, asset	1,455	—	—	—	(1,455)	—	—	—
Options, liability	22,401	—	(28,973) (c)	—	(259)	8,927	2,096	8,927
Warrants and rights	2,517	—	—	—	(143)	(708)	1,666	(850)
Trade claim	5,950	—	—	44	(536)	85	5,543	—
Lehman claim	301	—	—	—	(234)	(67)	—	—
Contingent consideration liability	3,440	—	—	427	(797)	—	3,070	—
Consolidated Funds								
Preferred stock	50,445	—	(38,552) (a)	3,066	—	9,355	24,314	9,355
Common stock	50	—	—	—	—	44	94	44
Warrants and rights	$ 3,568	$ —	$ (20) (a)	$ —	$ (1,340)	$ 3,071	$ 5,279	$ 1,730

(1) Unrealized gains/losses are reported in other income (loss) in the accompanying consolidated statements of operations.

(a) The Company deconsolidated an investment fund.

(b) The investments were converted to common stock.

(c) On June 26, 2018, the Company received shareholder approval which allows the Company to settle its convertible note (see Note 23) entirely in class A common shares. Upon receiving shareholder approval, the Company reclassified the embedded conversion option, associated with the convertible debt, to equity (see Note 24).

(d) The investments had a change of valuation methodology due to increased activity in foreign market.

(e) The entity in which the Company is invested completed an initial public offering.

(f) Shares of common stock were exchanged for liquid warrants and rights of an acquired company.

(g) The holding Company which held common stock and options was liquidated.

All realized and unrealized gains (losses) in the table above are reflected in other income (loss) in the accompanying consolidated statements of operations.

Certain assets and liabilities are measured at fair value on a nonrecurring basis and therefore are not included in the tables above.

The Company recognizes all transfers and the related unrealized gain (loss) at the beginning of the reporting period.

Transfers between level 1 and 2 generally relate to whether the principal market for the security becomes active or inactive. Transfers between level 2 and 3 generally relate to whether significant relevant observable inputs are available for the fair value measurements or due to change in liquidity restrictions for the investments.

The following table includes quantitative information as of December 31, 2019 and 2018 for financial instruments classified within level 3. The table below quantifies information about the significant unobservable inputs used in the fair value measurement of the Company's level 3 financial instruments.

	Quantitative Information about Level 3 Fair Value Measurements					
	Fair Value December 31, 2019		Valuation Techniques	Unobservable Inputs	Range	Weighted Average
Level 3 Assets	(dollars in thousands)					
Common and preferred stocks	$	10,876	Discounted cash flows Guideline companies	Discount rate Market Multiples	8% - 11.25% 6.5x - 7x	10.4% 6.75x
Options		336	Discounted cash flows Guideline companies	Discount rate Market Multiples	9.75% - 11.25% 6.5x - 7x	10.5% 6.75x
Trade claims		24	Discounted cash flows	Discount rate	20%	20%
Warrants and rights		6,162	Model based Discounted cash flows	Volatility Discount rate	30% 6% to 7%	0% 6.1%
Corporate and convertible bonds		311	Discounted cash flows Recovery	Discount rate Probability of recovery	20% 1% to 3%	20% 2.3%
Other level 3 assets (a)		30,723				
Total level 3 assets	**$**	**48,432**				
Level 3 Liabilities						
Options		2,920	Option pricing models	Volatility	35% to 40%	35%
Contingent consideration liability		30,896	Discounted cash flows Monte Carlo simulation	Discount rate Volatility	15%-22% 17%	15% 17%
Other level 3 liabilities (a)		2,950				
Total level 3 liabilities	**$**	**36,766**				

	Quantitative Information about Level 3 Fair Value Measurements					
	Fair Value at December 31, 2018		Valuation Techniques	Unobservable Inputs	Range	Weighted Average
Level 3 Assets	(dollars in thousands)					
Common and preferred stocks	$	4,323	Discounted cash flows / Guideline companies	Discount rate Market multiples	8%-14% 6.5x to 7x	8% 6.75x
Trade claims		25	Discounted cash flows	Discount rate	20%	20%
Warrants and rights		1,666	Model based Discounted cash flows	Discount rate	7% to 9%	7.8%
Other level 3 assets (a)		48,900				
Total level 3 assets	**$**	**54,914**				
Level 3 Liabilities						
Options		2,096	Option pricing models	Volatility	35% to 40%	35%
Contingent consideration liability		3,070	Discounted cash flows	Projected cash flow and discount rate	21% to 23%	23%
Total level 3 liabilities	**$**	**5,166**				

(a) The quantitative disclosures exclude financial instruments for which the determination of fair value is based on prices from recent transactions.

The Company has established valuation policies and procedures and an internal control infrastructure over its fair value measurement of financial instruments which includes ongoing oversight by the valuation committee as well as periodic audits performed by the Company's internal audit group. The valuation committee is comprised of senior management, including non-investment professionals, who are responsible for overseeing and monitoring the pricing of the Company's investments, including the review of the results of the independent price verification process, approval of new trading asset classes and use of applicable pricing models and approaches.

The US GAAP fair value leveling hierarchy is designated and monitored on an ongoing basis. In determining the designation, the Company takes into consideration a number of factors including the observability of inputs, liquidity of the investment and the significance of a particular input to the fair value measurement. Designations, models, pricing vendors, third party valuation providers and inputs used to derive fair market value are subject to review by the valuation committee and the internal audit group. The Company reviews its valuation policy guidelines on an ongoing basis and may adjust them in light of improved valuation metrics and models, the availability of reliable inputs and information, and prevailing market conditions. The Company reviews a daily profit and loss report, as well as other periodic reports, and analyzes material changes from period to period in the valuation of its investments as part of its control procedures. The Company also performs back testing on a regular basis by comparing prices observed in executed transactions to previous valuations.

The fair market value for level 3 securities may be highly sensitive to the use of industry-standard models, unobservable inputs and subjective assumptions. The degree of fair market value sensitivity is also contingent upon the subjective weight given to specific inputs and valuation metrics. The Company holds various equity and debt instruments where different weight may be applied to industry-standard models representing standard valuation metrics such as: discounted cash flows, market multiples, comparative transactions, capital rates, recovery rates and timing, and bid levels. Generally, changes in the weights ascribed to the various valuation metrics and the significant unobservable inputs in isolation may result in significantly lower or higher fair value measurements. Volatility levels for warrants and options are not readily observable and subject to interpretation. Changes in capital rates, discount rates and replacement costs could significantly increase or decrease the valuation of the real estate investments. The interrelationship between unobservable inputs may vary significantly amongst level 3 securities as they are generally highly idiosyncratic. Significant increases (decreases) in any of those inputs in isolation can result in a significantly lower (higher) fair value measurement.

Other financial assets and liabilities

The following table presents the carrying values and fair values, at December 31, 2019 and 2018, of financial assets and liabilities and information on their classification within the fair value hierarchy which are not measured at fair value on a recurring basis. For additional information regarding the financial instruments within the scope of this disclosure, and the methods and significant assumptions used to estimate their fair value (see Note 2f).

	December 31, 2019				December 31, 2018				
	Carrying Amount		Fair Value		Carrying Amount		Fair Value		Fair Value Hierarchy
	(dollars in thousands)								
Financial Assets									
Operating companies									
Cash and cash equivalents	$ 301,123		$ 301,123		$ 259,148		$ 259,148		Level 1
Cash collateral pledged	6,563		6,563		6,318		6,318		Level 2
Segregated cash	107,328		107,328		176,647		176,647		Level 1
Securities borrowed	754,441		754,441		407,795		407,795		Level 2
Loans receivable	42,830		42,830	(d)	36,021		36,021	(d)	Level 3
Consolidated Funds									
Cash and cash equivalents	30,874		30,874		38,118		38,118		Level 1
Financial Liabilities									
Securities sold under agreements to repurchase	23,244		27,384		—		—		Level 2
Securities loaned	1,601,866		1,601,866		414,852		414,852		Level 2
Convertible debt	118,688	(a)	148,786	(b)	134,489	(a)	157,433	(b)	Level 2
Notes payable and other debt	345,451	(e)	372,591	(c)	262,965		258,546	(c)	Level 2

(a) The carrying amount of the convertible debt includes an unamortized discount of $14.9 million and $19.5 million as of December 31, 2019 and 2018, respectively.

(b) The convertible debt includes the conversion option and is based on the last broker quote available.

(c) Notes payable and other debt are based on the last broker quote available.

(d) The fair market value of level 3 loans is calculated using discounted cash flows where applicable.

(e) The carrying amount of the notes payable and other debt includes an unamortized premium of $0.5 million as of December 31, 2019.

8. Deposits with Clearing Organizations, Brokers and Banks

Under the terms of agreements between the Company and some of its clearing organizations, brokers and banks, balances owed are collateralized by certain of the Company's cash and securities balances. As of December 31, 2019 and 2018, the Company had a total of $91.8 million and $89.4 million, respectively, in deposit accounts with clearing organizations, brokers and banks that could be used as collateral to offset losses incurred by the clearing organizations, brokers and banks, on behalf of the Company's activities, if such losses were to occur.

9. Receivable From and Payable To Brokers, Dealers and Clearing Organizations

Receivable from and payable to brokers, dealers and clearing organizations includes cash held at the clearing brokers, amounts receivable or payable for unsettled transactions, monies borrowed and proceeds from short sales equal to the fair value of securities sold, not yet purchased, at fair value, which are restricted until the Company purchases the securities sold short. Pursuant to the master netting agreements the Company entered into with its brokers, dealers and clearing organizations, these balances are presented net (assets less liabilities) across balances with the same counterparty. The Company's receivable from and payable to brokers, dealers and clearing organizations balances are held at multiple financial institutions.

As of December 31, 2019 and 2018, amounts receivable from brokers, dealers and clearing organizations include:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Broker-dealers	$ 623,523	$ 692,581
Securities failed to deliver	45,673	72,918
Clearing organizations	3,180	15,319
Securities borrowed interest receivable	9,319	5,295
	$ 681,695	**$ 786,113**

As of December 31, 2019 and 2018, amounts payable to brokers, dealers and clearing organizations include:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Broker-dealers	$ 185,838	$ 159,443
Securities failed to receive	57,580	28,826
Clearing organizations	18,063	36,338
Securities loaned interest payable	9,537	4,124
	$ 271,018	**$ 228,731**

10. Receivable From and Payable To Customers

As of December 31, 2019 and 2018, receivable from customers of $105.6 million and $37.9 million, respectively, consist of amounts owed by customers relating to securities transactions not completed on settlement date and receivables arising from the prepayment of Commission Sharing Agreements ("CSA"), net of an allowance for credit losses. A prepaid CSA is established for research-related disbursements in advance of anticipated customer commission volumes.

As of December 31, 2019 and 2018, payable to customers of $430.2 million and $525.2 million, respectively, include amounts due on cash and margin transactions to the Company's clients, some of which have their assets held by a Company omnibus account, which are included within receivables from brokers, dealers and clearing organizations in the accompanying consolidated statements of financial condition. In the omnibus structure, positions that are owned by Cowen International Ltd are fully cross collateralized by client funds, meaning that the Company, for all intents and purposes, has no market risk. Additionally, Cowen International Ltd has no obligation to settle any trade that it deems inappropriate from a risk perspective, adding an important market and counterparty risk mitigating factor.

11. Fixed Assets

As of December 31, 2019 and 2018, fixed assets consisted of the following:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Telecommunication and computer equipment	$ 7,556	$ 3,301
Computer software	8,952	4,214
Furniture and fixtures	3,526	2,829
Leasehold improvements	40,301	37,652
Finance lease right-of-use asset (See Note 22)	6,172	10,077
	66,507	58,073
Less: Accumulated depreciation and amortization	(32,846)	(31,630)
	$ 33,661	**$ 26,443**

Depreciation and amortization expense related to fixed assets was $7.3 million, $7.4 million and $7.0 million for the years ended December 31, 2019, 2018, and 2017, respectively, and are included in depreciation and amortization expense in the accompanying consolidated statements of operations.

Assets acquired under finance leases were $6.2 million and $10.1 million as of December 31, 2019 and 2018, respectively. If the assets acquired under finance leases transfer title at the end of the lease term or contain a bargain purchase option, the assets are amortized over their estimated useful lives; otherwise, the assets are amortized over the respective lease term. The depreciation of assets capitalized under finance leases is included in depreciation and amortization expenses and was $1.3 million, $1.6 million, and $1.0 million for the years ended December 31, 2019, 2018, and 2017, respectively. As of December 31, 2019 and 2018, accumulated depreciation related to assets acquired under finance leases was $2.2 million and $5.0 million, respectively.

12. Goodwill and Intangible Assets

Goodwill

In accordance with US GAAP, the Company tests goodwill for impairment on an annual basis or at an interim period if events or changed circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Under US GAAP, the Company first assesses the qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amounts as a basis for determining if it is necessary to perform a quantitative impairment test. Periodically estimating the fair value of a reporting unit requires significant judgment and often involves the use of significant estimates and assumptions. These estimates and assumptions could have a significant effect on whether or not an impairment charge is recorded and the magnitude of such a charge.

Change in Segments

During the second quarter of 2019, the Company realigned its business segments to Op Co and Asset Co (See Note 1). Prior to the reorganization, the Investment Management segment was also a reporting unit for purposes of measuring and reporting goodwill. The goodwill that was previously attributable to the Investment Management reporting unit was reallocated to the CIM reporting unit within the Op Co segment and the Asset Co reporting unit based on the relative fair value of the respective portions that became attributable to those reporting units. The Asset Co segment is also a reporting unit for purposes of measuring and reporting goodwill.

Based on the change in segments and restructuring of reporting units, the Company determined that it was necessary to perform a quantitative impairment test which involved estimates of future cash flows, discount rates, economic forecast and other assumptions which are then used in the market approach (earnings and / or transactions multiples) and / or income approach (discounted cash flow method).

Based on the results of the impairment analysis, the Company recognized a goodwill impairment, during the second quarter of 2019, in the amount of $4.1 million within the Asset Co reporting unit.

Annual impairment test

The Company performed its annual impairment test at December 31, 2019 by assessing qualitative factors to determine whether it is more likely than not that the fair value of its reporting units is less than their carrying amounts. The Company determined that a quantitative impairment test was not necessary based on the analysis.

Based on the results of the annual impairment analysis at December 31, 2019, the Company did not recognize any additional impairment relating to the CIM or Investment Bank reporting units. Additionally, no impairment charges for goodwill were recognized during the years ended December 31, 2018 and 2017 respectively.

The following table presents the changes in the Company's goodwill balance, by reporting unit for the periods ended December 31, 2019 and 2018:

	Investment Management	Investment Bank	Cowen Investment Management	Asset Co	Total
		(dollars in thousands)			
Beginning balance - December 31, 2017					
Goodwill	$ 29,026	$ 51,337	$ —	$ —	80,363
Accumulated impairment charges	(10,200)	(9,485)	—	—	(19,685)
Net	**18,826**	**41,852**	**—**	**—**	**60,678**
Activity: 2018					
Recognized goodwill	—	—	—	—	—
Goodwill impairment charges	—	—	—	—	—
Ending balance: December 31, 2018					
Goodwill	29,026	51,337	—	—	80,363
Accumulated impairment charges	(10,200)	(9,485)	—	—	(19,685)
Net	**18,826**	**41,852**	**—**	**—**	**60,678**
Activity: 2019					
Recognized goodwill (See note 3)	—	81,150	—	—	81,150
Realignment of segment goodwill:					
Goodwill	(29,026)	—	22,705	6,321	—
Accumulated impairment charges	10,200	—	(7,979)	(2,221)	—
Goodwill impairment charges	—	—	—	(4,100)	(4,100)
Ending balance: December 31, 2019					
Goodwill	—	132,487	22,705	6,321	161,513
Accumulated impairment charges	—	(9,485)	(7,979)	(6,321)	(23,785)
Net	**$ —**	**$ 123,002**	**$ 14,726**	**$ —**	**$ 137,728**

In connection with the Quarton transaction (see Note 3), in January 2019, the Company recognized goodwill of $81.2 million and intangible assets (including customer relationships, trade name, backlog and proprietary software) with an estimated fair value of $22.2 million which are included within intangible assets, net in the consolidated statements of financial condition with the expected useful lives ranging from 2 to 4 years with a weighted average useful life of 2.8 years. Amortization expense related to intangibles from the Quarton acquisition for the year ended December 31, 2019 is $8.9 million. Goodwill, the excess of the purchase price over the fair value of net assets, primarily relates to expected synergies from combining operations and has been assigned to the Op Co segment of the Company. Tax deductible goodwill will differ from goodwill recognized by the Company in an amount equal to the difference between actual contingent consideration and estimated contingent consideration (see Note 3).

Intangible assets

Information for the Company's intangible assets that are subject to amortization is presented below as of December 31, 2019 and 2018.

		December 31, 2019			December 31, 2018		
	Amortization Period	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	(in years)	(in thousands)			(in thousands)		
Trade names	2.6 - 3	$ 960	$ (360)	$ 600	$ 10,622	$ (10,599)	$ 23
Customer relationships	2 - 14	51,724	(21,065)	30,659	41,134	(18,960)	22,174
Customer contracts	1.2	—	—	—	800	(800)	—
Non compete agreements and covenants with limiting conditions acquired	5	400	(347)	53	2,237	(2,055)	182
Intellectual property	8	1,188	(119)	1,069	—	—	—
Acquired software	3 - 10	7,323	(4,504)	2,819	8,243	(5,679)	2,564
		$ 61,595	**$ (26,395)**	**$ 35,200**	**$ 63,036**	**$ (38,093)**	**$ 24,943**

The Company tests intangible assets for impairment if events or circumstances suggest that the asset groups carrying value may not be fully recoverable. For the years ended December 31, 2019 and 2018, no impairment charge for intangible assets was recognized.

Amortization expense related to intangible assets was $13.1 million, $5.0 million, and $6.1 million for the years ended December 31, 2019, 2018, and 2017, respectively, which is included in depreciation and amortization expense in the accompanying consolidated statements of operations. All of the Company's intangible assets have finite lives.

The estimated future amortization expense for the Company's intangible assets placed in service as of December 31, 2019 is as follows:

	(dollars in thousands)
2020	$ 13,035
2021	6,735
2022	5,120
2023	3,006
2024	2,707
Thereafter	4,597
	$ 35,200

13. Other Assets

Other assets in Operating Entities are as follows:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Prepaid expenses	$ 9,957	$ 11,989
Reinsurance business receivables (b)	14,688	18,167
Tax receivables	8,464	7,029
Interest and dividends receivable	1,944	2,413
Deferred acquisition costs (b)	4,808	4,696
The Military Mutual loan (a)	27,459	21,504
Other (c)	16,838	13,216
	$ 84,158	**$ 79,014**

(a) The terms of the loan were revised as of December 31, 2019 to a maturity date of December 2029 and interest rate of 3%, related to the Company's commercial reinsurance activities.

(b) Balances relate to the Company's reinsurance business entered into during 2016 (See Note 17).

(c) As of December 31, 2019 and 2018, the balance includes prepaid expenses, receivables and other assets used for reinsurance activities of $7.5 million and$4.9 million, respectively.

14. Commission Management Payable

The Company receives a gross commission from various clearing brokers, which is then used to fund commission sharing and recapture arrangements, less the portion retained as income to the Company. Accrued commission sharing and commission recapture payable of $71.6 million and $95.3 million, as of December 31, 2019 and 2018, respectively, are classified as commission management payable in the accompanying consolidated statements of financial condition.

15. Accounts Payable, Accrued Expenses and Other Liabilities

Accounts payable, accrued expenses and other liabilities in Operating Entities are as follows:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Deferred rent obligations	$ —	$ 8,242
Contingent consideration payable (see Note 3)	30,896	3,070
Equity in RCG Longview Partners II, LLC (see Note 6)	—	6,367
Interest and dividends payable	5,828	2,483
Loss reserves and claims incurred but not reported (a)	30,282	23,714
Professional fees payable	4,789	5,177
Unearned premiums (a)	16,092	12,483
Fees payable	4,628	594
Accrued tax liabilities	2,778	1,742
Software contracts payable	2,884	—
Performance fees payable	3,708	5,959
Accrued expenses and accounts payable (b)	39,671	40,592
	$ 141,556	**$ 110,423**

(a) Balances relate to the Company's reinsurance business entered into during 2016 (See Note 17).

(b) As of December 31, 2019 and 2018, the balance includes reinsurance premiums payable of $13.2 million and $15.7 million, respectively.

16. Non-Controlling Interests in Consolidated Subsidiaries and Investment Funds

Redeemable and nonredeemable non-controlling interests in consolidated subsidiaries and investment funds and the related net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds are comprised as follows:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Redeemable non-controlling interests in consolidated subsidiaries and investment funds		
Consolidated Funds	$ 391,275	$ 216,923
Nonredeemable non-controlling interests in consolidated subsidiaries and investment funds		
Operating companies	11,513	7,457
Consolidated Funds	82,807	57,423
	$ 485,595	**$ 281,803**

	Year Ended December 31,		
	2019	2018	2017
	(dollars in thousands)		
Income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds			
Operating companies	$ (3,264)	$ 3,177	$ 2,353
Consolidated Funds	34,503	33,883	21,438
	$ 31,239	**$ 37,060**	**$ 23,791**

17. Reinsurance

The Company's wholly-owned Luxembourg subsidiary, Hollenfels Re SA ("Hollenfels") provides reinsurance to third party insurance and reinsurance companies. Hollenfels's share of incurred and paid claims, as well as claims incurred but not reported plus expected development on reported claims ("Claims IBNR") were as follows:

	Year Ended December 31,	
	2019	2018
	(dollars in thousands)	
Incurred and paid claims	$ 24,380	$ 14,800
Claims IBNR	$ 5,647	$ 11,800

Hollenfels utilizes several methods to determine its Claims IBNR. It generally employs an estimation methodology whereby historical average claims ratios over a period of up to 10 years are utilized, based on availability of data. In cases where current claims development contradicts historical results, Hollenfels employs a method to average claims ratios derived through different actuarial calculation methods. Also, if an event occurs that may give rise to significant future claims in excess of the amount calculated using the above-mentioned methodologies, the impact of such an event is calculated using existing claims data and actuarial estimation methods to adjust Hollenfels's Claims IBNR. During the year ended December 31, 2019, Hollenfels calculated its claim liability or claim adjustment expenses using the above-mentioned methods consistent with prior years.

While Hollenfels typically settles its premiums and claim payments on a quarterly basis, the frequency of claims in the underlying policies is impractical for Hollenfels to obtain. Certain contracts Hollenfels has written are on a quota-share basis while the rest of the policies provide aggregate loss protection, rendering the collection of information for all underlying contracts impracticable. Hollenfels did not discount any of its reserves and did not cede any portion of its exposures during the years ended December 31, 2019, 2018 and 2017.

18. Other Revenues and Expenses

Other expenses, during the years ended December 31, 2019, 2018, and 2017, are primarily the general administrative expenses of the various operating company subsidiaries or the Consolidated Funds.

19. Share-Based and Deferred Compensation and Employee Ownership Plans

The Company issues share-based compensation under the 2010 Equity and Incentive Plan (the "Equity Plan"). The Equity Plan permits the grant of options, restricted shares, restricted stock units, stock appreciation rights ("SARs") and other equity-based awards to the Company's employees and directors. Stock options granted generally vest over two-to-five-year periods and expire seven years from the date of grant. Restricted shares and restricted share units issued may be immediately vested or may generally vest over a two-to-five-year period. SARs vest and expire after five years from grant date. Awards are subject to the risk of forfeiture. As of December 31, 2019, there were no shares available for future issuance under the Equity Plan.

Under the Equity Plan, the Company awarded $42.5 million of deferred cash awards to its employees during the year ended December 31, 2019. These awards vest over a four-year period and accrue interest at 0.70% per year. As of December 31, 2019, the Company had unrecognized compensation expense related to the Equity Plan deferred cash awards of $60.3 million.

The Company measures compensation cost for share-based awards according to the equity method. In accordance with the expense recognition provisions of those standards, the Company amortizes unearned compensation associated with share-based awards on a straight-line basis over the vesting period of the option or award, net of estimated forfeitures. In relation to awards under the Equity Plan, the Company recognized compensation expense of $34.0 million, $37.0 million, and $28.4 million for the years ended December 31, 2019, 2018 and 2017, respectively. The income tax effect recognized for the Equity Plan was a benefit of $8.8 million, $9.7 million, and $7.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The following table summarizes the Company's SARs for the years ended December 31, 2019 and 2018:

	Class A Common Shares Subject to Option		Weighted Average Exercise Price/Share	Weighted Average Remaining Term		Aggregate Intrinsic Value
				(in years)		(dollars in thousands)
Balance outstanding at December 31, 2017	75,000	$	11.60	0.21	$	173
SARs vested	(75,000)		14.21	—		—
Balance outstanding at December 31, 2018	—	$	—	0	$	—
SARs granted	—		—	—		—
SARs vested	—		—	—		—
SARs expired	—		—	—		—
Balance outstanding at December 31, 2019	—	$	—	0	$	—
SARs exercisable at December 31, 2018	—	$	—	0	$	—
SARs exercisable at December 31, 2019	—	$	—	0	$	—

As of December 31, 2019 and 2018 the Company's SARs were fully expensed.

Restricted Stock Units Granted to Employees

Restricted shares and restricted stock units are referred to collectively as restricted stock. The following table summarizes the Company's restricted share and restricted stock unit activity for the years ended December 31, 2019 and 2018:

	Year Ended December 31, 2019			Year Ended December 31, 2018		
	Nonvested Restricted Class A Common Shares and Class A Common Restricted Stock Units		Weighted-Average Grant Date Fair Value	Nonvested Restricted Class A Common Shares and Class A Common Restricted Stock Units		Weighted-Average Grant Date Fair Value
Beginning balance outstanding	5,962,295	$	15.73	5,579,293	$	16.33
Granted	2,435,058		16.58	2,413,727		14.20
Vested	(2,291,032)		15.63	(1,961,824)		15.60
Canceled	(584,333)		11.49	—		—
Forfeited	(157,502)		13.98	(68,901)		14.21
Ending balance outstanding	**5,364,486**	**$**	**16.67**	**5,962,295**	**$**	**15.73**

Included in the restricted share and restricted stock unit activity are performance linked restricted stock units of 481,438 which were awarded to employees of the Company in December 2013 and January 2014. An additional 700,000 performance linked restricted stock units were awarded in March 2016 and 333,333 in April of 2019. Of the awards granted, 130,438 have been forfeited and 584,333 have been canceled, as they did not meet the performance criteria, through December 31, 2019. The remaining awards, included in the outstanding balance as of December 31, 2019, vest between March 2020 and December 2021 and will be earned only to the extent that the Company attains specified market conditions relating to its volume-weighted average share price and total shareholder return in relation to certain benchmark indices and performance goals relating to aggregate net income and average return on shareholder equity. The actual number of RSUs ultimately earned could vary from zero, if performance goals are not met, to as much as 200% of the targeted award. Each RSU is equal to the one share of the Company's Class A common stock. Compensation expense is recognized to the extent that it is probable that the Company will attain the performance goals.

The fair value of restricted stock (excluding certain performance linked units which are valued using the Monte Carlo valuation model) is determined based on the number of shares granted and the quoted price of the Company's common stock on the date of grant.

As of December 31, 2019, there was $62.6 million of unrecognized compensation expense related to the Company's grant of nonvested restricted shares and restricted stock units to employees. Unrecognized compensation expense related to nonvested restricted shares and restricted stock units granted to employees is expected to be recognized over a weighted-average period of 2.11 years.

Restricted Shares and Restricted Stock Units Granted to Non-employee Board Members

There were no restricted stock units awarded to non-employee board members during the year ended December 31, 2019 and 120,430 were delivered. As of December 31, 2019 there were 216,912 restricted stock units outstanding. There were

88,504 restricted stock units awarded during the year ended December 31, 2018. As of December 31, 2018 there were 253,772 restricted stock units outstanding.

20. Defined Contribution Plans

The Company sponsors a Retirement and Savings Plan which is a defined contribution plan pursuant to Section 401(k) of the Internal Revenue Code (the "401(k) Plans"). All full-time employees of the Company can contribute on a tax deferred basis and an after-tax basis to the 401(k) Plans up to federal contribution limits or up to 100% of their annual compensation, subject to certain limitations. The Company provides matching and profit sharing contributions to employees that are equal to a specified percentage of the eligible participant's contribution as defined by the 401(k) Plans. For the years ended December 31, 2019, 2018, and 2017, the Company's contributions to the 401(k) Plans were $1.0 million, $1.0 million, and $0.7 million, respectively.

21. Income Taxes

The taxable results of the Company's U.S. operations are included in the consolidated income tax returns of Cowen Inc. as well as stand-alone state and local tax returns. The Company has subsidiaries that are resident in foreign countries where tax filings have to be submitted on a stand-alone or combined basis. These subsidiaries are subject to tax in their respective countries and the Company is responsible for and, thus, reports all taxes incurred by these subsidiaries. The countries where the Company owns subsidiaries with tax filing obligations are the United Kingdom, Luxembourg, Germany, Switzerland, South Africa, Canada and Hong Kong.

The Company has reflected the impact of the TCJ Act in the financial statements, including a policy election to account for taxes on Global Intangible Low Tax Income ("GILTI") as incurred on the current year basis and not included in deferred taxes. The Company continues to monitor the impact of the TCJ Act as additional regulations and formal guidance are provided.

The components of the Company's income tax expense for the years ended December 31, 2019, 2018 and 2017 are as follows:

	Year ended December 31,		
	2019	2018	2017
		(dollars in thousands)	
Current tax expense/(benefit)			
Federal	$ (731)	$ (1,883)	$ 421
State and local	457	(2,148)	2,034
Foreign	1,831	785	428
Total	$ 1,557	$ (3,246)	$ 2,883
Deferred tax expense/(benefit)			
Federal	$ 10,242	$ 12,018	$ 44,071
State and local	3,598	6,956	(2,938)
Foreign	(544)	(9)	37
Total	13,296	18,965	41,170
Total tax expense/(benefit)	**$ 14,853**	**$ 15,719**	**$ 44,053**

Consolidated U.S. income/(loss) before income taxes was $68.9 million in 2019, $93.0 million in 2018, and $3.9 million in 2017. The corresponding amounts for non-U.S.-based income/(loss) were $2.2 million in 2019, $6.0 million in 2018, and $3.1 million in 2017.

The reconciliations of the Company's federal statutory rate to the effective income tax rate for the years ended December 31, 2019, 2018, and 2017 are as follows:

	Year ended December 31,		
	2019	**2018**	**2017**
Pre-tax loss at U.S. statutory rate	21.0 %	21.0 %	35.0 %
Dividend received deduction	—	—	(25.9)
Bargain purchase gain	—	—	(34.8)
Basis adjustment on investments	—	3.5	65.2
Nondeductible expenses	4.1	1.2	14.2
Goodwill impairment	1.2	—	—
Change in valuation allowance	(4.0)	7.1	—
Impact of tax law change	—	—	669.8
State and foreign tax	8.0	(10.0)	25.3
Reversal of income attributable to non-controlling interests	(9.2)	(8.6)	(119.6)
Other, net	(0.1)	1.7	3.7
Total	**21.0 %**	**15.9 %**	**632.9 %**

As of December 31, 2019, the Company has net income taxes receivable of approximately $6.5 million representing federal, state and foreign tax overpayments, which is included in other assets on the accompanying consolidated statements of financial condition.

The components of the Company's deferred tax assets and liabilities as of December 31, 2019 and 2018 are as follows:

	As of December 31,	
	2019	**2018**
	(dollars in thousands)	
Deferred tax assets, net of valuation allowance		
Net operating loss	$ 60,160	$ 48,294
Deferred compensation	46,545	59,697
Intangible assets	2,969	—
Tax credits	6,716	9,036
Lease liability	24,623	2,098
Other	3,043	2,444
Total deferred tax assets	144,056	121,569
Valuation allowance	(5,234)	(9,135)
Deferred tax assets, net of valuation allowance	138,822	112,434
Deferred tax liabilities		
Right-of-use assets	(23,028)	—
Unrealized gains on investments	(26,545)	(13,092)
Amortization of bond discount	(3,980)	(4,643)
Other	(6,103)	(1,642)
Total deferred tax liabilities	(59,656)	(19,377)
Deferred tax assets/(liabilities), net	**$ 79,166**	**$ 93,057**

Deferred tax assets, net of valuation allowance, are reported in the accompanying consolidated statements of financial condition. In addition to the deferred tax balances in the table above, the Company records balances related to its operating losses in Luxembourg, which are discussed below.

The Company records deferred tax assets and liabilities for the future tax benefit or expense that will result from differences between the carrying value of its assets for income tax purposes and for financial reporting purposes, as well as for operating or capital loss and tax credit carryovers. A valuation allowance is recorded to bring the net deferred tax assets to a level that, in management's view, is more likely than not to be realized in the foreseeable future. This level will be estimated based on a number of factors, especially the amount of net deferred tax assets of the Company that are actually expected to be realized, for tax purposes, in the foreseeable future. The Company recorded approximately $5.2 million valuation allowance against its deferred tax assets of $144.1 million as of December 31, 2019 and recorded approximately $9.1 million valuation allowance against its deferred tax assets of $121.6 million as of December 31, 2018. Separately, the Company has deferred tax liabilities of $59.7 million as of December 31, 2019 and $19.4 million as of December 31, 2018.

For tax year 2019, the Company's total deferred tax expense of $13.3 million was derived by the reversal of timing differences in the normal course of business. The deferred tax expense of $19.0 million in 2018 was derived by the basis difference from the disposal of assets and the reversal of timing differences in the normal course of business. The deferred tax expense of $41.2 million in 2017 predominantly related to the impact of the TCJ Act, and the reversal of timing differences in the normal course of business.

As of December 31, 2019, the Company has foreign tax credit carryforwards of $5.6 million which expire between 2019 and 2029. Valuation allowance of $4.2 million was established against foreign tax credit carryforward as the Company determined that it is not more likely than not that the credits will be utilized.

The Company has the following net operating loss carryforwards at December 31, 2019:

Jurisdiction:	Federal	New York State	New York City	Hong Kong
Net operating loss (in millions)	$175.1	$67.9	$108.8	$12.5
Year of expiration	2037	2037	2037	Indefinite

In addition to the net operating loss carryforwards in the table above, the Company also has net operating loss carryforwards in Luxembourg. These loss carryforwards are only accessible to the extent of taxable income generated by the Luxembourg reinsurance companies, including any deferred income that will be generated in the future. Consequently, the Company recorded a deferred tax asset of $258.4 million, net of deferred tax liabilities of $224.5 million in connection with future taxable income, and an offsetting valuation allowance of $258.4 million against its Luxembourg net operating loss carryforwards that are in excess of such taxable income.

In June 2011, the Company underwent a change of control under Section 382 of the Internal Revenue Code by the acquisition of a subsidiary with net operating loss carryovers. According, a portion of the Company's deferred tax assets, are subject to an annual limitation under Section 382. The deduction limitation is approximately $6.7 million annually and applies to approximately $30.3 million of net operating losses. The Company is not expected to lose any deferred tax assets as a result of these limitations.

The components of unrecognized tax benefits are as follows:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Beginning balance at January 1	$ 299	$ 3,947
Increases/(Decreases) due to current year positions	—	(3,648)
Ending balance at December 31	**$ 299**	**$ 299**

No unrecognized tax benefit was recognized in the consolidated statement of operations for the year ended December 31, 2019. No income tax-related interest and penalties are recognized in the consolidated statement of financial condition at December 31, 2019.

The following are the major tax jurisdictions in which the Company has significant business operations and the earliest tax year subject to examination:

Jurisdiction:	Federal	New York State	New York City	United Kingdom	Luxembourg	Germany	Switzerland
Tax Year	2016	2013	2016	2015	2017	2015	2014

Currently, the Company is under audit by New York State for the 2013 to 2017 tax years. Management is not expecting a material tax liability from these audits.

The Company continues to permanently reinvest the capital and accumulated earnings of its subsidiaries in the United Kingdom, Germany, Switzerland, Canada, South Africa and Hong Kong.

22. Commitments and Contingencies

Operating Lease Obligations

The Company has entered into leases for real estate and other facilities. These leases contain rent escalation clauses and options to extend the lease term. The Company does not include renewal options in the lease term for calculating the Company's lease liability as the renewal options allow the Company operational flexibility and the Company is not reasonably certain to exercise these renewal options at this time. The Company records the expenses related to occupancy and equipment on a straight-line basis over the lease term and these expenses are included in occupancy and equipment expense and client services and business development expense in the accompanying consolidated statements of operations.

For the year ended December 31, 2019, quantitative information regarding the Company's operating lease obligations reflected in the accompanying consolidated statement of operations were as follows:

	Year Ended December 31, 2019	
	(dollars in thousands)	
Lease cost		
Operating lease cost	$	23,540
Short-term lease cost		253
Variable lease cost		1,017
Sublease income		(953)
Total lease costs	**$**	**23,857**

The following table summarizes the supplemental cash flow information and certain other information related to operating leases for the year ended December 31, 2019:

	Year Ended December 31, 2019	
	(dollars in thousands)	
Other information		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$	24,743
Weighted average remaining lease term - operating leases (in years)		5.34
Weighted average discount rate - operating leases		4.13 %

As of December 31, 2019, maturities of the outstanding operating lease liabilities for the Company were as follows:

	Equipment Leases (operating) (b)		Real Estate and Other Facility Rental (a)	
	(dollars in thousands)			
2020	$	360	$	22,848
2021		206		24,271
2022		73		20,766
2023		—		17,610
2024		—		14,789
Thereafter		—		10,225
Total operating leases		639		110,509
Less discount		24		13,290
Less short-term leases		—		253
Total lease liability	**$**	**615**	**$**	**96,966**

(a) The Company has entered into various agreements to sublease certain of its premises.

(b) During the twelve months ended December 31, 2019, the Company recognized operating right-of-use assets and leases liabilities of $6.9 million for equipment leases.

See Note 23 for further information on the finance lease minimum payments.

Prior to the adoption of the new lease accounting guidance, the minimum rental commitments under non-cancelable operating leases at December 31, 2018, were as follows:

	Equipment Leases (a)	Service Payments	Real Estate and Other Facility Rental (b)
		(dollars in thousands)	
2019	$ 2,434	$ 21,758	$ 24,584
2020	1,492	7,514	22,608
2021	1,382	1,877	22,321
2022	1,123	1,372	19,166
2023	374	735	16,204
Thereafter	—	735	21,478
	$ 6,805	**$ 33,991**	**$ 126,361**

(a) Equipment Leases includes the Company's commitments relating to operating and finance leases. See Note 23 for further information on the finance lease minimum payments which are included in the table.

(b) The Company has entered into various agreements to sublease certain of its premises. The Company recorded sublease income related to these leases of $1.4 million and $1.1 million for the years ended December 31, 2018 and 2017, respectively.

Other Commitments

As of December 31, 2019, future minimum annual service payments for the Company were as follows:

	Service Payments
	(dollars in thousands)
2020	$ 22,217
2021	14,674
2022	9,358
2023	4,095
2024	1,938
Thereafter	4,401
Total service payment commitments	**$ 56,683**

Clawback Obligations

For financial reporting purposes, the general partners of a real estate fund had recorded a liability for potential clawback obligations to the limited partners, due to changes in the unrealized value of the real estate fund's remaining investments and where the real estate fund's general partner has previously received carried interest distributions. The clawback liability was not realized until the end of the real estate fund's life. The Company's share of the clawback obligations for the real estate fund, for which the Company has an interest in the general partner, was $6.5 million at December 31, 2018, which is included in accounts payable, accrued expenses and other liabilities in the accompanying consolidated statements of financial condition. The liability was fully repaid in December 2019 (see Note 6 to the Company's consolidated financial statements).

The Company serves as the general partner/managing member and/or investment manager to various affiliated and sponsored investment funds. As such, the Company is contingently liable for obligations for those entities. These amounts are not included above as the Company believes that the assets in these investment funds are sufficient to discharge any liabilities.

Unfunded Commitments

The following table summarizes unfunded commitments as of December 31, 2019:

Entity	Unfunded Commitments		Commitment Term
	(dollars in thousands)		
HealthCare Royalty Partners funds (a)	$	7,605	5 years
Eclipse Ventures Fund I, L.P. (formerly Formation8 Partners Hardware Fund I, L.P.)	$	88	5 years
Lagunita Biosciences, LLC	$	500	4 years
Eclipse Fund II, L.P.	$	180	6 years
Eclipse Continuity Fund I, L.P.	$	152	7 years
Cowen Healthcare Investments II LP	$	3,406	2 years
Cowen Healthcare Investments III LP	$	8,602	7 years
Cowen Sustainable Investments I LP	$	25,000	10 years

(a) The Company is a limited partner of the HealthCare Royalty Partners funds (which are managed by Healthcare Royalty Management) and is a member of HealthCare Royalty Partners General Partners. The Company will make its pro-rata investment in the HealthCare Royalty Partners funds along with the other limited partners.

Litigation

In the ordinary course of business, the Company and its affiliates, subsidiaries and current and former officers, directors and employees (the "Company and Related Parties") are named as defendants in, or as parties to, various legal actions and proceedings. Certain of these actions and proceedings assert claims or seek relief in connection with alleged violations of securities, banking, anti-fraud, anti-money laundering, employment and other statutory and common laws. Certain of these actual or threatened legal actions and proceedings include claims for substantial or indeterminate compensatory or punitive damages, or for injunctive relief.

In the ordinary course of business, the Company and Related Parties are also subject to governmental and regulatory examinations, information gathering requests (both formal and informal), certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. Certain of the Company's affiliates and subsidiaries are registered broker-dealers, futures commission merchants, investment advisers or other regulated entities and, in those capacities, are subject to regulation by various U.S., state and foreign securities, commodity futures and other regulators. In connection with formal and informal inquiries by these regulators, the Company receives requests and orders seeking documents and other information in connection with various aspects of the Company's regulated activities.

Due to the global scope of the Company's operations, and its presence in countries around the world, the Company and Related Parties may be subject to litigation, governmental and regulatory examinations, information gathering requests, investigations and proceedings (both formal and informal), in multiple jurisdictions with legal and regulatory regimes that may differ substantially, and present substantially different risks, from those to which the Company and Related Parties are subject in the United States.

The Company seeks to resolve all litigation and regulatory matters in the manner management believes is in the best interests of the Company and its shareholders, and contests liability, allegations of wrongdoing and, where applicable, the amount of damages or scope of any penalties or other relief sought as appropriate in each pending matter.

In accordance with US GAAP, the Company establishes reserves for contingencies when the Company believes that it is probable that a loss has been incurred and the amount of loss can be reasonably estimated. The Company discloses a contingency if there is at least a reasonable possibility that a loss may have been incurred and there is no reserve for the loss because the conditions above are not met. The Company's disclosure includes an estimate of the reasonably possible loss or range of loss for those matters, for which an estimate can be made. Neither a reserve nor disclosure is required for losses that are deemed remote.

The Company appropriately reserves for certain matters where, in the opinion of management, the likelihood of liability is probable and the extent of such liability is reasonably estimable. Such amounts are included within accounts payable, accrued expenses and other liabilities in the accompanying consolidated statements of financial condition. Estimates, by their nature, are based on judgment and currently available information and involve a variety of factors, including, but not limited to, the type and nature of the litigation, claim or proceeding, the progress of the matter, the advice of legal counsel, the Company's defenses and its experience in similar cases or proceedings as well as its assessment of matters, including settlements, involving other defendants in similar or related cases or proceedings. The Company may increase or decrease its legal reserves in the future, on a matter-by-matter basis, to account for developments in such matters. The Company accrues legal fees as incurred.

23. Convertible Debt and Notes Payable

As of December 31, 2019 and 2018, the Company's outstanding debt was as follows:

	As of December 31,	
	2019	2018
	(dollars in thousands)	
Convertible debt	$ 118,688	$ 134,489
Notes payable	306,818	229,740
Term loan	32,180	28,200
Other notes payable	2,516	—
Finance lease obligations	3,937	5,025
	$ 464,139	**$ 397,454**

Convertible Debt

December 2022 Convertible Notes

The Company, on December 14, 2017, issued $135.0 million aggregate principal amount of 3.00% convertible senior notes due December 2022 (the "December 2022 Convertible Notes"). The December 2022 Convertible Notes are due on December 15, 2022 unless earlier repurchased by the Company or converted by the holder in accordance with their terms prior to such date. The interest on the December 2022 Convertible Notes is payable semi-annually on December 15 and June 15 of each year. The December 2022 Convertible Notes are senior unsecured obligations of Cowen. The December 2022 Convertible Notes may be converted into cash or shares of Class A common stock at the Company's election based on the current conversion price. The December 2022 Convertible Notes were issued with an initial conversion price of $17.375 per share of Cowen's Class A common stock.

The Company used the net proceeds, together with cash on hand, from the offering for general corporate purposes, including the repurchase or repayment of $115.1 million of the Company's outstanding 3.0% cash convertible senior notes due March 2019 (the "March 2019 Convertible Notes") and the repurchase of approximately $19.5 million of the Company's shares of its Class A common stock, which were consummated substantially concurrently with the closing of the offering. As of December 31, 2019, the outstanding principal amount of the December 2022 Convertible Notes was $135.0 million. On June 26, 2018, the Company received shareholder approval for the Company to settle the December 2022 Convertible Notes entirely in Class A common stock. Upon receiving shareholder approval, the Company reclassified the separately recognized conversion option from a derivative liability to equity.

The Company recorded interest expense of $4.1 million, $4.1 million and $0.2 million for the years ended December 31, 2019, 2018 and 2017, respectively. The Company recognized the embedded cash conversion option at issuance date fair value, which also represents the initial unamortized discount on the December 2022 Convertible Notes of $23.4 million and is shown net in convertible debt in the accompanying consolidated statements of financial condition. Amortization on the discount, included within interest and dividends expense in the accompanying consolidated statements of operations is $4.3 million, $4.0 million and $0.2 million for the years ended December 31, 2019, 2018 and 2017, respectively, based on an effective interest rate of 7.13%. The Company capitalized the debt issuance costs in the amount of $2.2 million, which is a direct deduction from the carrying value of the debt and will be amortized over the life of the December 2022 Convertible Notes in interest and dividends expense in the accompanying consolidated statements of operations.

March 2019 Convertible Notes

On March 10, 2014, the Company issued $149.5 million of 3.0% cash convertible senior notes (the "March 2019 Convertible Notes"). The March 2019 Convertible Notes matured on March 15, 2019 and were fully repaid by the Company. The Company recorded interest expense of $0.1 million, $1.1 million, and $4.3 million for the years ended December 31, 2019, 2018 and 2017, respectively. Amortization on the discount, included within interest and dividends expense in the accompanying consolidated statements of operations was $0.3 million, $1.5 million and $7.3 million for the years ended December 31, 2019, 2018 and 2017, respectively, based on an effective interest rate of 8.89%.

Notes Payable

May 2024 Notes

On May 7, 2019, the Company completed its private placement of $53.0 million aggregate principal amount of 7.25% senior notes due May 2024 (the "May 2024 Notes") with certain institutional investors. On September 30, 2019, the Company issued an additional $25.0 million of the same series of notes. The additional May 2024 Notes were purchased at a premium of $0.5 million, which is shown net in notes payable in the accompanying consolidated statement of financial condition. To date the May 2024 Notes have maintained their initial private rating, and the interest rate has remained unchanged. Interest on the May 2024 Notes is payable semi-annually in arrears on May 6 and November 6. The Company recorded interest expense of $2.9 million for the year ended December 31, 2019. The Company capitalized debt issuance costs of approximately $1.5 million in May 2019 and $0.6 million in December 2019, which is a direct deduction from the carrying value of the debt and will be amortized over the life of the May 2024 Notes in interest and dividends expense in the accompanying consolidated statements of operations.

June 2033 Notes

On June 11, 2018, the Company completed its public offering of $90.0 million of 7.75% senior notes due June 2033 (the "June 2033 Notes") and subsequently the underwriters exercised in full their option to purchase an additional $10.0 million principal amount of the June 2033 Notes. Interest on the June 2033 Notes is payable quarterly in arrears on March 15, June 15, September 15 and December 15. The Company recorded interest expense of $7.7 million and $4.3 million for the years ended December 31, 2019 and 2018, respectively. The Company capitalized debt issuance costs of approximately $3.6 million which is a direct deduction from the carrying value of the debt and will be amortized over the life of the June 2033 Notes in interest and dividends expense in the accompanying consolidated statements of operations.

December 2027 Notes

On December 8, 2017, the Company completed its public offering of $120.0 million of 7.35% senior notes due December 2027 (the "December 2027 Notes") and subsequently the underwriters exercised in full their option to purchase an additional $18.0 million principal amount of the December 2027 Notes. Interest on the December 2027 Notes is payable quarterly in arrears on March 15, June 15, September 15 and December 15. The Company recorded interest expense of $10.1 million, $10.1 million and $0.6 million for the years ended December 31, 2019, 2018 and 2017, respectively. The Company capitalized debt issuance costs of approximately $5.0 million which is a direct deduction from the carrying value of the debt and will be amortized over the life of the December 2027 Notes in interest and dividends expense in the accompanying consolidated statements of operations. The net proceeds of the offering, after deducting the underwriting discount and estimated offering expenses payable by the Company were used to redeem all of its 8.25% senior notes due October 2021 and for general corporate purposes.

Term Loan

On June 30, 2017, a subsidiary of the Company borrowed $28.2 million to fund general corporate purposes. This term loan has an effective interest rate of LIBOR plus 3.75% with a lump sum payment of the entire principal amount due (as amended) on June 26, 2020. In July 2019, the subsidiary of the Company borrowed an additional $4.0 million to fund general corporate purposes. The loan is secured by the value of the Company's limited partnership interests in two affiliated investment funds. The Company has provided a guarantee for this loan. The Company recorded interest expense of $1.8 million, $1.6 million and $0.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Other Notes Payable

During January 2019, the Company borrowed $2.2 million to fund insurance premium payments. This note had an effective interest rate of 2.51% and was due on December 31, 2019, with monthly payment requirements of $0.2 million. As of December 31, 2019, the note was fully repaid. Interest expense was $0.1 million for the year ended December 31, 2019.

During November 2019, the Company borrowed $2.6 million to fund general corporate capital expenditures. This note is due November 2024, with monthly payment requirements of $0.1 million. As of December 31, 2019, the note had a balance of $2.5 million. Interest expense for the year ended December 31, 2019 was insignificant.

Revolver

The Company, in December 2019, entered into a two-year committed credit facility with a capacity of $25 million. This agreement has an effective interest rate of LIBOR plus 3.25% on any money drawn from the credit facility and the commitment or unused line fee is 50 basis points on the undrawn amount.

Finance Lease Obligations

The Company has entered into various finance leases for computer equipment. These finance lease obligations are included in notes payable and other debt in the accompanying consolidated statements of financial condition, and have a weighted average lease term of 3.21 years and weighted average interest rate of 4.88% as of December 31, 2019.

For the years ended December 31, 2019, 2018 and 2017, quantitative information regarding the Company's finance lease obligations reflected in the accompanying consolidated statement of operations, the supplemental cash flow information and certain other information related to finance leases were as follows:

	Year Ended December 31,	
	2019	2018
	(dollars in thousands)	
Lease cost		
Finance lease cost:		
Amortization of finance lease right-of-use assets	$ 1,266	$ 1,627
Interest on lease liabilities	227	231
Other information		
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from finance leases	227	231
Financing cash flows from finance leases	$ 1,266	$ 2,186

Annual scheduled maturities of debt and minimum payments (of principal and interest) for all debt outstanding as of December 31, 2019, are as follows:

	Convertible Debt	Notes Payable	Term Loan	Other Notes Payable	Finance Lease Obligation
	(dollars in thousands)				
2020	$ 4,050	$ 23,548	$ 33,126	$ 593	$ 1,290
2021	4,050	23,548	—	593	1,398
2022	139,050	23,548	—	593	1,166
2023	—	23,548	—	593	411
2024	—	98,721	—	543	11
Thereafter	—	334,304	—	—	—
Subtotal	147,150	527,217	33,126	2,915	4,276
Less (a)	(28,462)	(220,399)	(946)	(399)	(339)
Total	**$ 118,688**	**$ 306,818**	**$ 32,180**	**$ 2,516**	**$ 3,937**

(a) Amount necessary to reduce net minimum payments to present value calculated at the Company's implicit rate at inception. This amount also includes capitalized debt costs and the unamortized discount on the convertible debt.

Letters of Credit

As of December 31, 2019, the Company has the following six irrevocable letters of credit, related to leased office space, for which there is cash collateral pledged, which the Company pays a fee on the stated amount of the letter of credit. The Company also has pledged collateral for reinsurance agreements which amounted to $2.0 million as of December 31, 2019, and $1.0 million as of December 31, 2018, which are released annually between March 2020 and March 2023 based on the policy periods covered by the reinsurance agreements.

Location	Amount	Maturity
	(dollars in thousands)	
Boston	$ 382	March 2020
New York	$ 359	April 2020
New York	$ 398	October 2020
New York	$ 1,125	October 2020
New York	$ 1,629	November 2020
San Francisco	$ 716	October 2025

To the extent any letter of credit is drawn upon, interest will be assessed at the prime commercial lending rate. As of December 31, 2019 and 2018 there were no amounts due related to these letters of credit.

24. Stockholder's Equity

The Company is authorized to issue 125,000,000 shares of common stock, which shall consist of 62,500,000 shares of Class A common stock, par value $0.01 per share, and 62,500,000 shares of Class B common stock, par value $0.01 per share. The Company is also authorized to issue 10,000,000 shares of preferred stock, par value $0.01 per share. Subject to the rights of holders of any outstanding preferred stock, the number of authorized shares of common stock or preferred stock may be increased or decreased by the affirmative vote of the holders of a majority of the shares entitled to vote on such matters, but in no instance can the number of authorized shares be reduced below the number of shares then outstanding.

Common stock

The certificate of incorporation of the Company provides for two classes of common stock, and for the conversion of each class into the other, to provide a mechanism by which holders of Class A common stock of the Company who may be limited in the amount of voting common stock of the Company they can hold pursuant to federal, state or foreign bank laws, to convert their shares into non-voting Class B common stock to prevent being in violation of such laws. Each holder of Class A common stock is entitled to one vote per share in connection with the election of directors and on all other matters submitted to a stockholder vote, provided, however, that, except as otherwise required by law, holders of Class A common stock are not entitled to vote on any amendment to the Company's amended and restated certificate of incorporation that relates solely to the terms of one or more outstanding series of the Company's preferred stock, if holders of the preferred stock series are entitled to vote on the amendment under the Company's certificate of incorporation or Delaware law. No holder of Class A common stock may accumulate votes in voting for directors of the Company.

Each holder of Class B common stock is not entitled to vote except as otherwise provided by law, provided however that the Company must obtain the consent of a majority of the holders of Class B common stock to effect any amendment, alteration or repeal of any provision of the Company's amended and restated certificate of incorporation or amended and restated by-laws that would adversely affect the voting powers, preferences or rights of holders of Class B common stock. Except as otherwise provided by law, Class B common stock shares will not be counted as shares held by stockholders for purposes of determining whether a vote or consent has been approved or given by the requisite percentage of shares.

Each share of Class A common stock is convertible at the option of the holder and at no cost into one share of Class B common stock, and each share of Class B common stock is convertible at the option of the holder and at no cost into one share of Class A common stock. The conversion ratios will be adjusted proportionally to reflect any stock split, stock dividend, merger, reorganization, recapitalization or other change in the Class A common stock and Class B common stock. Upon conversion, converted shares resume the status of authorized and unissued shares.

Subject to the preferences of the holders of any of the Company's preferred stock that may be outstanding from time to time, each share of Class A common stock and Class B common stock will have an equal and ratable right to receive dividends and other distributions in cash, property or shares of stock as may be declared by the Company's board of directors out of assets or funds legally available for the payment of dividends and other distributions.

In the event of the liquidation, dissolution or winding up of the Company, subject to the preferences of the holders of any preferred stock of the Company that may be outstanding from time to time, holders of Class A common stock and Class B common stock will be entitled to share equally and ratably in the assets available for distribution to the Company's stockholders. There are no redemption or sinking fund provisions applicable to the Class A or the Class B common stock.

Preferred stock

The Company's amended and restated certificate of incorporation permits the Company to issue up to 10,000,000 shares of preferred stock in one or more series with such designations, titles, voting powers, preferences and rights and such qualifications, limitations and restrictions as may be fixed by the board of directors of the Company without any further action by the Company's stockholders. The Company's board of directors may increase or decrease the number of shares of any series of preferred stock following the issuance of that series of preferred stock, but in no instance can the number of shares of a series of preferred stock be reduced below the number of shares of the series then outstanding.

Preferred Stock and Purchase of Capped Call Option

On May 19, 2015, the Company completed its offering of 120,750 shares of the Company's 5.625% Series A cumulative perpetual convertible preferred stock ("Series A Convertible Preferred Stock") that provided $117.2 million of proceeds, net of underwriting fees and issuance costs of $3.6 million. Each share of the Series A Convertible Preferred Stock is entitled to dividends at a rate of 5.625% per annum which will be payable, when and if declared by the board of directors of the Company, quarterly, in arrears, on February 15, May 15, August 15 and November 15 of each year. The Company may, at its option, pay dividends in cash, common stock or a combination thereof. The Company declared and accrued a cash dividend of $6.8 million $6.8 million, and $6.8 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Each share of Series A Convertible Preferred Stock is non-voting and has a liquidity preference over the Company's Class A common stock and ranks senior to all classes or series of the Company's Class A common stock, but junior to all of the Company's existing and future indebtedness with respect to dividend rights and rights upon the Company's involuntary liquidation, dissolution or winding down.

Each share of Series A Convertible Preferred Stock is convertible, at the option of the holder, into a number of shares of the Company's Class A common stock equal to the liquidation preference of $1,000 divided by the conversion rate. The initial conversion rate (subsequent to the December 5, 2016 reverse stock split) is 38.0619 shares (which equates to $26.27 per share) of the Company's Class A common stock for each share of the Series A Convertible Preferred Stock. At any time on or after May 20, 2020, the Company may elect to convert all outstanding shares of the Series A Convertible Preferred Stock into shares of the Company's Class A common stock, cash or a combination thereof, at the Company's election, in each case, based on the then-applicable conversion rate, if the last reported sale price of the Company's Class A common stock equals or exceeds 150% of the then-current conversion price on at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days (including on the last trading day of such period) immediately prior to such election. At the time of conversion, the conversion rate may be adjusted based on certain events including but not limited to the issuance of cash dividends or Class A common stock as dividends to the Company's Class A common shareholders or a share split or combination.

In connection with the issuance and sale of the Series A Convertible Preferred Stock, the Company entered into a capped call option transaction (the "Capped Call Option Transaction") with Nomura Global Financial Products Inc. for $15.9 million. The Capped Call Option Transaction is expected generally to reduce the potential dilution to the Company's Class A common stock (if the Company elects to convert to common shares) and/or offset any cash payments that the Company is required to make upon conversion of any Series A Convertible Preferred Stock. The Capped Call Option Transaction has an initial effective strike price of $26.27 per share, which matches the initial conversion price of the Series A Convertible Preferred Stock, and a cap price of $33.54 per share. However, to the extent that the market price of Class A common stock, as measured under the terms of the Capped Call Option Transaction, exceeds the cap price thereof, there would nevertheless be dilution and/or such cash payments would not be offset. As the Capped Call Option Transaction is a free standing derivative that is indexed to the Company's own stock price and the Company controls if it is settled in cash or stock it qualifies for equity classification as a reduction to additional paid in capital.

Embedded Cash Conversion Option on the December 2022 Convertible Notes

Upon issuance of the December 2022 Convertible Notes (see Note 23), the Company recognized the embedded cash conversion option at fair value of $23.4 million which was valued as of June 26, 2018 at $29.0 million. On June 26, 2018, the Company received shareholder approval for the Company to settle the December 2022 Convertible Notes entirely in Class A common stock. Upon receiving shareholder approval, the Company reclassified the separately recognized conversion option from a derivative liability to equity.

Treasury Stock

Treasury stock of $284.3 million as of December 31, 2019, compared to $234.1 million as of December 31, 2018, resulted from $15.2 million acquired through repurchases of shares to cover employee minimum tax withholding obligations related to stock compensation vesting events under the Company's Equity Plan or other similar transactions, $0.5 million received from an escrow account established to satisfy the Company's indemnification claims arising under the terms of the purchase agreement entered into in connection with the Company's acquisition of Convergex Group, LLC and $34.5 million purchased in connection with a share repurchase program.

The following represents the activity relating to the treasury stock held by the Company during the year ended December 31, 2019:

	Treasury stock shares	Cost (dollars in thousands)	Average cost per share
Balance outstanding at December 31, 2018	15,336,871	$ 234,142	$ 15.27
Shares purchased for minimum tax withholding under the Equity Plan or other similar transactions	1,005,387	15,217	15.14
Shares of stock received in respect of indemnification claims	29,687	457	15.39
Purchase of treasury stock	2,233,636	34,485	15.44
Balance outstanding at December 31, 2019	**18,605,581**	**$ 284,301**	**$ 15.28**

25. Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income includes the after tax change in unrealized gains and losses on foreign currency translation adjustments. During the periods presented, the Company did not have material reclassifications out of other comprehensive income.

	Year Ended December 31,		
	2019	2018	2017
	(dollars in thousands)		
Beginning Balance	$ (5)	$ (8)	$ (2)
Foreign currency translation	—	3	(6)
Ending Balance	**$ (5)**	**$ (5)**	**$ (8)**

26. Earnings Per Share

Basic earnings per share is calculated by dividing net income attributable to the Company's common stockholders by the weighted average number of common shares outstanding for the period. As of December 31, 2019, there were 28,610,357 shares of Class A common stock outstanding. As of December 31, 2019, the Company has included 216,912 fully vested, unissued restricted stock units in its calculation of basic earnings per share. As of December 31, 2018, there were 28,437,860 shares of Class A common stock outstanding. As of December 31, 2018, the Company has included 253,772 fully vested, unissued restricted stock units in its calculation of basic earnings per share.

Diluted earnings per common share are calculated by adjusting the weighted average outstanding shares to assume conversion of all potentially dilutive items. The Company uses the treasury stock method to reflect the potential dilutive effect of the unvested restricted shares, restricted stock units, and SARs. In calculating the number of dilutive shares outstanding, the shares of common stock underlying unvested restricted shares and restricted stock units are assumed to have been delivered, and options and warrants are assumed to have been exercised, for the entire period being presented. The number of performance-linked unvested restricted stock units that are included in the calculation are at the amount that could be earned using current payout rates. The assumed proceeds from the assumed vesting, delivery and exercising were calculated as the amount of compensation cost attributed to future services and not yet recognized.

The Company can elect to settle the Series A Convertible Preferred Stock in shares, cash, or a combination of both. The Company's intent is to settle in cash and, based on current and projected liquidity needs, the Company has the ability to do so.

The computation of earnings per share is as follows:

	Year Ended December 31,		
	2019	2018	2017
	(dollars in thousands, except share and per share data)		
Net income (loss)	$ 55,870	79,879	$ (37,091)
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	31,239	37,060	23,791
Net income (loss) attributable to Cowen Inc.	24,631	42,819	(60,882)
Preferred stock dividends	6,792	6,792	6,792
Net income (loss) attributable to Cowen Inc. common stockholders	**$ 17,839**	**$ 36,027**	**$ (67,674)**
Shares for basic and diluted calculations:			
Weighted average shares used in basic computation	29,525	29,545	29,492
Contingently issuable common stock in connection with an acquisition (see Note 3)	26	—	—
Restricted stock	1,735	1,190	—
Weighted average shares used in diluted computation	**31,286**	**30,735**	**29,492**
Earnings (loss) per share:			
Basic	$ 0.60	$ 1.22	$ (2.29)
Diluted	$ 0.57	$ 1.17	$ (2.29)

27. Segment Reporting

Change in Segments

During the second quarter of 2019 the Company realigned the information that the CODM regularly reviews to evaluate performance for operating decision-making purposes, including evaluation and allocation of resources. As a result of this change in segment reporting, the Company retrospectively revised prior period results, by segment, to conform to the current period presentation (see Note 1). This structure includes two business segments: Op Co and Asset Co. The structure is based on the Company's domain expertise as a driver of balance sheet harmonization and repeatable revenues for its operating business versus the Company's long-term monetization strategies.

The Op Co segment consists of CIM, Investment Banking, Markets and Research. The Asset Co segment consists of the Company's private investments, private real estate investments and other legacy investment strategies.

Performance Measures

The performance measure for these segments is Economic Income (Loss), which management uses to evaluate the financial performance of and make operating decisions for the segments including determining appropriate compensation levels. Expenses not directly associated with specific segments are allocated based on the most relevant measures applicable, including headcount, square footage and other factors.

In general, Economic Income (Loss) is a pre-tax measure that (i) eliminates the impact of consolidation for Consolidated Funds and excludes (ii) goodwill and intangible impairment (iii) certain other transaction-related adjustments and/or reorganization expenses and (iv) certain costs associated with debt. Economic Operating Income (Loss) represents Economic Income (Loss) before depreciation and amortization expenses. In addition, Economic Income (Loss) revenues include investment income that represents the income the Company has earned in investing its own capital, including realized and unrealized gains and losses, interest and dividends, net of associated investment related expenses. For US GAAP purposes, these items are included in each of their respective line items. Economic Income (Loss) revenues also include management fees, incentive income and investment income earned through the Company's investment as a general partner in certain real estate entities and the Company's investment in the activist business and certain investment funds. For US GAAP purposes, all of these items, are recorded in other income (loss). Economic Income (Loss) recognizes (a) incentive fees during periods when the fees are not yet crystallized for US GAAP reporting, (b) start-up costs of a fund over the expected life of the fund and (c) retainer fees, relating to investment banking activities, earned during the period that would otherwise be deferred until closing for US GAAP reporting. In addition, Economic Income (Loss) expenses are reduced by reimbursement from affiliates, which for US GAAP purposes is presented gross as part of revenue.

As further stated below, one major difference between Economic Income (Loss) and US GAAP net income (loss) is that Economic Income (Loss) presents the segments' results of operations without the impact resulting from the full consolidation of any of the Consolidated Funds. The consolidation of these investment funds' results include the pro rata share of the income or loss attributable to other owners of such entities which is reflected in net income (loss) attributable to non-controlling interest in consolidated subsidiaries in the accompanying consolidated statements of operations. This pro rata share has no effect on the overall financial performance for the segments, as ultimately, this income or loss is not income or loss for the segments themselves. Included in Economic Income (Loss) is the actual pro rata share of the income or loss attributable to the Company as an investor in such entities, which is relevant in management making operating decisions and evaluating financial performance. The Company does not disclose total asset information for its business segments as the information is not reviewed by the CODM.

The following tables set forth operating results for the Company's Op Co and Asset Co segments and related adjustments necessary to reconcile the Company's Economic Income (Loss) measure to arrive at the Company's consolidated US GAAP net income (loss):

	Year Ended December 31, 2019						
				Adjustments			
	Operating Company	Asset Company	Total Economic Income (Loss)	Funds Consolidation	Other Adjustments		US GAAP Net Income (Loss)
	(dollars in thousands)						
Revenues							
Investment banking	$ 352,192	$ —	$ 352,192	$ —	$ 22,833	(a)	$ 375,025
Brokerage	440,413	—	440,413	—	(37,666)	(b)	402,747
Management fees	43,698	1,976	45,674	(2,270)	(10,796)	(c)	32,608
Incentive income (loss)	45,041	1,152	46,193	(600)	(44,046)	(c)	1,547
Investment income (loss)	51,344	3,111	54,455	—	(54,455)	(d)	—
Interest and dividends	—	—	—	—	174,913	(b)(d)	174,913
Reimbursement from affiliates	—	—	—	(122)	1,148	(e)	1,026
Reinsurance premiums	—	—	—	—	46,335	(f)	46,335
Other revenue	5,785	58	5,843	(14)	(396)	(f)	5,433
Consolidated Funds revenues	—	—	—	9,809	—		9,809
Total revenues	**938,473**	**6,297**	**944,770**	**6,803**	**97,870**		**1,049,443**
Interest expense (Economic Income/ (Loss)) / Interest and dividend expense (US GAAP)	22,576	5,449	28,025	—	140,603	(b)(d)	168,628
Total net revenues	**915,897**	**848**	**916,745**	**6,803**	**(42,733)**		**880,815**
Expenses							
Non interest expense	847,485	9,030	856,515	—	79,286	(a)(e) (h)(i)	935,801
Goodwill impairment	—	—	—	—	4,100		4,100
Consolidated Funds expenses	—	—	—	8,963	—		8,963
Total expenses	**847,485**	**9,030**	**856,515**	**8,963**	**83,386**		**948,864**
Total other income (loss)	—	—	—	**36,663**	**102,109**	(c)(d)(i)	**138,772**
Income taxes expense / (benefit)	—	—	—	—	14,853	(h)	14,853
Income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	4,796	—	4,796	34,503	(8,060)		31,239
Income (loss) attributable to Cowen Inc.	**63,616**	**(8,182)**	**55,434**	—	**(30,803)**		**$ 24,631**
Less: Preferred stock dividends	5,434	1,358	6,792	—	—		6,792
Economic Income (Loss)/ Income (loss) attributable to Cowen Inc. common stockholders	**58,182**	**(9,540)**	**48,642**	**$ —**	**$ (30,803)**		**$ 17,839**
Add back: Depreciation and Amortization expense	20,403	36	20,439				
Economic operating income (loss)	**$ 78,585**	**$ (9,504)**	**$ 69,081**				

	Year Ended December 31, 2018						
				Adjustments			
	Operating Company	Asset Company	Total Economic Income (Loss)	Funds Consolidation	Other Adjustments		US GAAP Net Income (Loss)
	(dollars in thousands)						
Revenues							
Investment banking	$ 329,061	$ —	$ 329,061	$ —	$ 28,161	(a)	$ 357,222
Brokerage	452,299	—	452,299	—	(38,717)	(b)	413,582
Management fees	43,466	5,709	49,175	(2,513)	(17,004)	(c)	29,658
Incentive income (loss)	16,851	6,896	23,747	(52)	(20,578)	(c)	3,117
Investment income (loss)	53,593	2,753	56,346	—	(56,346)	(d)(g)	—
Interest and dividends	—	—	—	—	108,009	(d)	108,009
Reimbursement from affiliates	—	—	—	(269)	1,307	(e)	1,038
Aircraft lease revenue	—	—	—	—	1,852	(g)	1,852
Reinsurance premiums	—	—	—	—	38,096	(f)	38,096
Other revenue	(1,619)	451	(1,168)	—	5,672	(f)	4,504
Consolidated Funds revenues	—	—	—	9,838	—		9,838
Total revenues	**893,651**	**15,809**	**909,460**	**7,004**	**50,452**		**966,916**
Interest expense (Economic Income/ (Loss)) / Interest and dividend expense (US GAAP)	17,489	5,524	23,013	—	81,103	(d)	104,116
Total net revenues	**876,162**	**10,285**	**886,447**	**7,004**	**(30,651)**		**862,800**
Expenses							
Non interest expense	788,272	17,087	805,359	—	76,970	(a)(e)(h)(i)	882,329
Consolidated Funds expenses	—	—	—	8,615	—		8,615
Total expenses	**788,272**	**17,087**	**805,359**	**8,615**	**76,970**		**890,944**
Total other income (loss)	—	—	—	**35,494**	**88,248**	(c)(d)(i)(j)	**123,742**
Income taxes expense / (benefit)	—	—	—	—	15,719	(h)	15,719
Income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	4,212	742	4,954	33,883	(1,777)		37,060
Income (loss) attributable to Cowen Inc.	**83,678**	**(7,544)**	**76,134**	—	**(33,315)**		**42,819**
Less: Preferred stock dividends	5,162	1,630	6,792	—	—		6,792
Economic Income (Loss)/ Income (loss) attributable to Cowen Inc. common stockholders	**78,516**	**(9,174)**	**69,342**	**$ —**	**$ (33,315)**		**$ 36,027**
Add back: Depreciation and Amortization expense	11,402	181	11,583				
Economic operating income (loss)	**$ 89,918**	**$ (8,993)**	**$ 80,925**				

	Year Ended December 31, 2017						
				Adjustments			
	Operating Company	Asset Company	Total Economic Income (Loss)	Funds Consolidation	Other Adjustments		US GAAP Net Income (Loss)
	(dollars in thousands)						
Revenues							
Investment banking	$ 223,614	$ —	$ 223,614	$ —	$ —		$ 223,614
Brokerage	312,780	—	312,780	—	(19,170)	(b)	293,610
Management fees	45,007	10,380	55,387	(2,593)	(19,549)	(c)	33,245
Incentive income (loss)	17,872	8,156	26,028	(1,739)	(18,906)	(c)	5,383
Investment income (loss)	7,204	37,938	45,142	—	(45,142)	(d)(g)	—
Interest and dividends	—	—	—	—	49,440	(b)(d)	49,440
Reimbursement from affiliates	—	—	—	(297)	3,157	(e)	2,860
Aircraft lease revenue	—	—	—	—	3,751	(g)	3,751
Reinsurance premiums	—	—	—	—	30,996	(f)	30,996
Other revenue	3,307	(76)	3,231	—	5,330	(f)	8,561
Consolidated Funds revenues	—	—	—	7,321	—		7,321
Total revenues	**609,784**	**56,398**	**666,182**	**2,692**	**(10,093)**		**658,781**
Interest expense	13,599	5,289	18,888	—	42,061	(d)	60,949
Total net revenues	**596,185**	**51,109**	**647,294**	**2,692**	**(52,154)**		**597,832**
Expenses							
Non interest expense	584,816	40,571	625,387	(199)	58,935	(a)(e)(h)(i)	684,123
Consolidated Funds expenses	—	—	—	12,526	—		12,526
Total expenses	**584,816**	**40,571**	**625,387**	**12,327**	**58,935**		**696,649**
Total other income (loss)	**—**	**—**	**—**	**31,073**	**74,706**	(c)(d)(i)(j)(k)	**105,779**
Income taxes expense / (benefit)	—	—	—	—	44,053	(h)	44,053
Income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	5,178	894	6,072	21,438	(3,719)		23,791
Income (Loss) attributable to Cowen Inc.	6,191	9,644	**$ 15,835**	**$ —**	**$ (76,717)**		**$ (60,882)**
Less: Preferred stock dividends	4,890	1,902	6,792				6,792
Income (Loss) attributable to Cowen Inc. common stockholders	**1,301**	**7,742**	**9,043**				**$ (67,674)**
Add back: Depreciation and amortization expense	11,211	347	11,558				
Economic Operating Income (Loss) attributable to Cowen Inc. common stockholders	**$ 12,512**	**$ 8,089**	**$ 20,601**				

The following is a summary of the adjustments made to US GAAP net income (loss) to arrive at Economic Income (Loss):

Funds Consolidation: The impacts of consolidation and the related elimination entries of the Consolidated Funds are not included in Economic Income (Loss). Adjustments to reconcile to US GAAP net income (loss) included elimination of incentive income and management fees earned from the Consolidated Funds and addition of investment fund expenses excluding management fees paid, investment fund revenues and investment income (loss).

Other Adjustments:

(a) Economic Income (Loss) presents underwriting expenses net of investment banking revenues, expenses reimbursed from clients within their respective expense category. Economic Income (Loss) also records retainer fees, relating to investment banking activities, collectible during the period that would otherwise be deferred until closing for US GAAP reporting.

(b) Economic Income (Loss) brokerage revenues included net securities borrowed and securities loaned activities which are shown gross in interest income and interest expense for US GAAP.

(c) Economic Income (Loss) recognizes revenues (i) net of fund start-up costs and distribution fees paid to agents, (ii) records income from uncrystallized incentive fees and (iii) the Company's proportionate share of management and incentive fees of certain real estate operating entities, the healthcare royalty business and the activist business.

(d) Economic Income (Loss) recognizes Company income from proprietary trading (including interest and dividends) for which the majority of this activity is shown in other income (loss) for US GAAP reporting.

(e) Reimbursement from affiliates is shown as a reduction of Economic Income expenses, but is included as a part of revenues under US GAAP.

(f) Economic Income (Loss) recognizes underwriting income from the Company's insurance related activities, net of expenses, within other revenue. The costs are recorded within expenses for US GAAP reporting.

(g) Aircraft lease revenue is shown net of expenses in investment income for Economic Income (Loss).

(h) Economic Income (Loss) excludes income taxes and acquisition related adjustments as management does not consider these items when evaluating the performance of the segment.

(i) Economic Income (Loss) recognizes the Company's proportionate share of expenses, for certain real estate operating entities and the activist business, for which the investments are recorded under the equity method of accounting for investments.

(j) Economic Income (Loss) excludes gain/(loss) on debt extinguishment.

(k) Economic Income (Loss) excludes the bargain purchase gain which resulted from the Convergex Group acquisition.

For the years ended December 31, 2019 and 2018, there was no one investment fund or other customer which represented more than 10% of the Company's total revenues.

28. Regulatory Requirements

As registered broker-dealers, Cowen and Company, Cowen Execution, ATM Execution, Cowen Prime and Westminster are subject to the SEC's Uniform Net Capital Rule 15c3-1 ("SEC Rule 15c3-1"), which requires the maintenance of minimum net capital. Each registered broker-dealer has elected to compute net capital under the alternative method permitted by that rule. Under the alternative method, Cowen and Company's minimum net capital requirement, as defined in (a)(4) of SEC Rule 15c3-1, is $1.0 million. Cowen Execution, ATM Execution, Cowen Prime and Westminster are required to maintain minimum net capital, as defined in (a)(1)(ii) of SEC Rule 15c3-1, equal to the greater of $250,000 or 2% of aggregate debits arising from customer transactions. Advances to affiliates, repayment of borrowings, distributions, dividend payments and other equity withdrawals are subject to certain notification and other provisions of SEC Rule 15c3-1 and other regulatory bodies.

On February 7, 2019, FINRA approved the transfer of all of Cowen Securities' business and personnel to Cowen and Company. Cowen Securities subsequently filed a Form BDW, pursuant to Section 15(b) of the Securities Exchange Act of 1934, with FINRA to withdraw its status as a broker-dealer given that it will no longer conduct a securities business. On May 21, 2019, Cowen Securities Form BDW was approved and officially deregistered with the SEC. As of December 31, 2019, the entity has been dissolved.

Cowen Prime is also subject to Commodity Futures Trading Commission Regulation 1.17 ("Regulation 1.17"). Regulation 1.17 requires net capital equal to or in excess of $45,000 or the amount of net capital required by SEC Rule 15c3-1, whichever is greater. Cowen Execution is also subject to Options Clearing Corporation ("OCC") Rule 302. OCC Rule 302 requires maintenance of net capital equal to the greater of $2.0 million or 2% of aggregate debit items. At December 31, 2019, Cowen Execution had $103.2 million of net capital in excess of this minimum requirement.

Cowen International Ltd and Cowen Execution Ltd are subject to the capital requirements of the FCA, as defined, and must exceed the minimum capital requirement set forth by the FCA. Effective June 1, 2018, the FCA approved Ramius UK's application to cancel all of its FCA authorization permissions. Accordingly, Ramius UK is no longer an FCA regulated and authorized firm. In April 2019, Cowen Execution Ltd was formally approved to trade in a principal capacity.

Cowen Asia, a previously established entity, was re-registered with regulatory approval on May 17, 2019. Cowen Asia is subject to the financial resources requirements of the Securities and Futures Commission ("SFC") of Hong Kong. Financial Resources must exceed the Total Financial Resources requirement of the SFC.

As of December 31, 2019, these regulated broker-dealers had regulatory net capital or financial resources, regulatory net capital requirements or minimum FCA or SFC requirement and excess as follows:

Subsidiary	Net Capital	Minimum Net Capital Requirement	Excess Net Capital
		(dollars in thousands)	
Cowen and Company	$ 91,348	$ 1,000	$ 90,348
Cowen Execution	$ 105,822	$ 2,673	$ 103,149
ATM Execution	$ 5,354	$ 250	$ 5,104
Cowen Prime	$ 13,659	$ 250	$ 13,409
Westminster	$ 14,797	$ 250	$ 14,547
Cowen International Ltd	$ 15,988	$ 7,597	$ 8,391
Cowen Execution Ltd	$ 11,808	$ 2,509	$ 9,299
Cowen Asia	$ 1,307	$ 385	$ 922

The Company's U.S. broker-dealers must also comply with SEC Rule 15c3-3 or claim an exemption pursuant to subparagraphs (k)(2)(i) or (k)(2)(ii) of that rule. Firms can rely on more than one exemption. Cowen and Company, Cowen Prime and ATM Execution claim the (k)(2)(ii) exemption with regards to some or all of their customer accounts and transactions that are introduced on a fully-disclosed basis to their clearing agents for clearing, settlement and custody. Cowen and Company, Cowen Prime and Westminster claim the (k)(2)(i) exemption with regards to customer transactions and balances that are cleared, settled and custodied in Special Bank Accounts.

In accordance with the requirements of SEC Rule 15c3-3, Cowen Execution may be required to deposit in a Special Reserve Account cash or acceptable qualified securities for the exclusive benefit of customers. As of December 31, 2019, Cowen Execution had segregated approximately $17.6 million of cash, while its required deposit was $5.5 million.

As a clearing broker-dealer, Cowen Execution is required to compute a reserve requirement for proprietary accounts of broker-dealers ("PAB"), as defined in SEC Rule 15c3-3. Cowen Execution conducts PAB reserve computations in order to determine the amount it is required to deposit in its PAB Reserve Bank Accounts pursuant to SEC Rule 15c3-3. This allows each correspondent firm that uses Cowen Execution as its clearing broker-dealer to classify its PAB account assets held at Cowen Execution as allowable assets in the correspondent's net capital calculation. At December 31, 2019, Cowen Execution had $22.5 million of cash on deposit in PAB Reserve Bank Accounts, which was more than its required deposit of $14.8 million.

Cowen and Company, ATM Execution, Cowen Prime and Cowen Execution also maintain certain assets in PAB accounts held at their respective clearing brokers. Each treats its assets held in those PAB accounts at the respective clearing brokers as allowable assets for net capital purposes.

Cowen's Luxembourg reinsurance companies, Vianden RCG Re SCA and Hollenfels, individually and their Luxembourg parent holding company, Ramius Enterprise Luxembourg Holdco S.à r.l., on a combined basis with the reinsurance companies, are required to maintain a solvency capital ratio as calculated by relevant European Commission directives and local regulatory rules in Luxembourg. Each reinsurance company's individual solvency capital ratio as well as the combined solvency capital ratio of the holding and reinsurance companies calculated as of December 31 of each year must exceed a minimum requirement. As of the last testing date, December 31, 2019, all of these entities were in excess of this minimum requirement. The companies are currently, and management expects they will be at the next testing date of December 31, 2020, in compliance with these requirements.

Based on minimum capital and surplus requirements pursuant to the laws of the state of New York that apply to captive insurance companies, RCG Insurance Company, Cowen's captive insurance company incorporated and licensed in the state of New York, was required to maintain capital and surplus of approximately $0.3 million as of December 31, 2019. RCG Insurance Company’s capital and surplus as of December 31, 2019 totaled approximately $32.8 million.

29. Related Party Transactions

The Company and its affiliated entities are the managing member, general partner and/or investment manager to the Company's investment funds and certain managed accounts. Management fees and incentive income are primarily earned from affiliated entities. As of December 31, 2019 and 2018, $20.5 million and $19.4 million, respectively, included in fees receivable, are earned from related parties. The Company may, at its discretion, reimburse certain fees charged to the investment funds that it manages to avoid duplication of fees when such funds have an underlying investment in another affiliated investment fund. For the years ended December 31, 2019, 2018 and 2017, the amounts which the Company reimbursed the investment funds it manages were immaterial. Fees receivable and fees payable are recorded at carrying value, which approximates fair value.

The Company may also make loans to employees or other affiliates, excluding executive officers of the Company. These loans are interest bearing and settle pursuant to the agreed-upon terms with such employees or affiliates, and are included in due from related parties in the accompanying consolidated statements of financial condition. As of December 31, 2019 and 2018, loans to employees of $14.9 million and $17.0 million, respectively, were included in due from related parties on the accompanying consolidated statements of financial condition. Of these amounts $7.1 million and $8.8 million, respectively, are related to forgivable loans. These forgivable loans provide for a cash payment up-front to employees, with the amount due back to the Company forgiven over a vesting period. An employee that voluntarily ceases employment, or is terminated with cause, is generally required to pay back to the Company any unvested forgivable loans granted to them. The forgivable loans are recorded as an asset to the Company on the date of grant and payment, and then amortized to compensation expense on a straight-line basis over the vesting period. The vesting period on forgivable loans is generally one to three years. The Company recorded compensation expense of $3.8 million, $3.1 million, and $2.1 million for the years ended December 31, 2019, 2018 and 2017, respectively. This expense is included in employee compensation and benefits in the accompanying consolidated statement of operations. For the year ended December 31, 2019, the interest income was $0.1 million for these related party loans and advances, respectively, and are included in interest and dividends in the accompanying consolidated statement of operations. For the year ended December 31, 2018, the interest income was immaterial, and for the year ended December 31, 2017, the interest income was $0.1 million for these related party loans and advances. This income is included in interest and dividends in the accompanying consolidated statement of operations.

As of December 31, 2019 and 2018, included in due from related parties is $6.5 million and $7.7 million, respectively, related to the sales of portions of the Company's ownership interest in the activist business of Starboard Value to the Starboard principals. It is being financed through the profits of the relevant Starboard entities over a 5 year period and earns interest at 5% per annum. The interest income for the years ended December 31, 2019, 2018, and 2017, was $0.3 million, $0.4 million, and $0.8 million, respectively.

The remaining balance included in due from related parties of $5.3 million and $8.9 million as of December 31, 2019 and 2018, respectively, relates to amounts due to the Company from affiliated investment funds and real estate entities due to expenses paid on their behalf. Included in due to related parties is approximately $0.3 million and $0.6 million as of December 31, 2019 and 2018, respectively, related to a subordination agreement with an investor in certain real estate funds. This total is based on a hypothetical liquidation of the real estate funds as of the balance sheet date.

Employees and certain other related parties invest on a discretionary basis within consolidated entities. These investments generally are subject to preferential management fee and performance fee arrangements. As of December 31, 2019 and 2018, such investments aggregated $36.0 million and $25.1 million, respectively, were included in non-controlling interests on the accompanying consolidated statements of financial condition. Their share of the net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds aggregated $7.9 million, $7.6 million, and $7.2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The Company may, at times, have unfunded commitment amounts pertaining to related parties. See Note 22 "Commitments and Contingencies" for amounts committed as of December 31, 2019.

30. Guarantees and Off-Balance Sheet Arrangements

Guarantees

US GAAP requires the Company to disclose information about its obligations under certain guarantee arrangements. Those standards define guarantees as contracts and indemnification agreements that contingently require a guarantor to make payments to the guaranteed party based on changes in an underlying security (such as an interest or foreign exchange rate, security or commodity price, an index or the occurrence or nonoccurrence of a specified event) related to an asset, liability or equity security of a guaranteed party. Those standards also define guarantees as contracts that contingently require the guarantor to make payments to the guaranteed party based on another entity's failure to perform under an agreement as well as indirect guarantees of the indebtedness of others.

In the normal course of its operations, the Company enters into contracts that contain a variety of representations and warranties which provide general indemnifications. The Company's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Company that have not yet occurred. However, based on experience, the Company expects the risk of loss to be remote.

The Company indemnifies and guarantees certain service providers, such as clearing and custody agents, trustees and administrators, against specified potential losses in connection with their acting as an agent of, or providing services to, the Company or its affiliates. The Company also indemnifies some clients against potential losses incurred in the event specified third-party service providers, including sub-custodians and third-party brokers, improperly execute transactions. The maximum potential amount of future payments that the Company could be required to make under these indemnifications cannot be estimated. However, the Company believes that it is unlikely it will have to make significant payments under these arrangements and has not recorded any contingent liability in the consolidated financial statements for these indemnifications.

The Company also provides representations and warranties to counterparties in connection with a variety of commercial transactions and occasionally indemnifies them against potential losses caused by the breach of those representations and warranties. The Company may also provide standard indemnifications to some counterparties to protect them in the event additional taxes are owed or payments are withheld, due either to a change in or adverse application of certain tax laws. These indemnifications generally are standard contractual terms and are entered into in the normal course of business. The maximum potential amount of future payments that the Company could be required to make under these indemnifications cannot be estimated. However, the Company believes it is unlikely it will have to make material payments under these arrangements and has not recorded any contingent liability in the accompanying consolidated financial statements for these indemnifications.

The Company may maintain cash and cash equivalents at financial institutions in excess of federally insured limits. The Company has not experienced any material losses in such accounts and does not believe it is exposed to significant credit risks in relation to such accounts.

Off-Balance Sheet Arrangements

The Company has no material off-balance sheet arrangements, which have not been disclosed, as of December 31, 2019 and 2018. Through indemnification provisions in clearing agreements with clients, customer activities may expose the Company to off-balance-sheet credit risk. Pursuant to the clearing agreement, the Company is required to reimburse the Company's clearing broker, without limit, for any losses incurred due to a counterparty's failure to satisfy its contractual obligations. However, these transactions are collateralized by the underlying security, thereby reducing the associated risk to changes in the market value of the security through the settlement date.

The Company's customer securities activities are transacted on a delivery versus payment, cash or margin basis. In delivery versus payment transactions, the Company is exposed to risk of loss in the event of the customers' or brokers' inability to meet the terms of their contracts.

In margin transactions, the Company extends credit to clients collateralized by cash and securities in their account. In the event the customers or brokers fail to satisfy their obligations, the Company may be required to purchase or sell securities at prevailing market prices in order to fulfill the obligations.

The Company's exposure to credit risk can be directly impacted by volatile securities markets, which may impair the ability of counterparties to satisfy their contractual obligations. The Company seeks to control its credit risk through a variety of reporting and control procedures, including establishing credit limits based upon a review of the customers' financial condition and credit ratings. The Company seeks to control the risk associated with its customer margin transactions by requiring customers to maintain margin collateral in compliance with various regulatory and internal guidelines. The Company also monitors required margin levels daily and, pursuant to its guidelines, requires customers to deposit additional collateral, or reduce positions, when necessary.

In addition, during the normal course of business, the Company has exposure to a number of risks including market risk, currency risk, credit risk, operational risk, liquidity risk and legal risk. As part of the Company's risk management process, these risks are monitored on a regular basis throughout the course of the year.

The Company enters into secured and unsecured borrowing agreements to obtain funding necessary to cover daily securities settlements with clearing corporations. At times, funding is required for unsettled customer delivery versus payment and riskless principal transactions, as well as to meet deposit requirements with clearing organizations. Secured arrangements are collateralized by the securities. The Company maintains uncommitted financing arrangements with large financial institutions, the details of which are summarized below as of December 31, 2019.

Lender	Contractual Amount	Available Amount	Maturity Date	Description
Pledge Lines	**(dollars in thousands)**			
Texas Capital Bank	$ 75,000	$ 75,000	None	Secured Depository Trust Company Pledge Line
BMO Harris Bank	75,000	75,000	None	Secured Tri-Party Pledge Facility
BMO Harris Bank	150,000	150,000	None	Secured Depository Trust Company Pledge Line
Total	**300,000**	**300,000**		
Revolving Credit Facility				
BMO Harris Bank Canadian Imperial Bank of Commerce Texas Capital Bank	70,000	70,000	August 21, 2020	(Syndicated) Unsecured liquidity facility to cover increases in National Securities Clearing Corporation margin deposit requirements
BMO Harris Bank	25,000	25,000	December 2, 2021	Secured Corporate Revolver
Total	95,000	95,000		
Total Credit Lines	**$ 395,000**	**$ 395,000**		

31. Subsequent Events

On February 11, the Board of Directors declared a quarterly cash dividend payable on its common stock of $1.3 million, or $0.04 per common share, payable on March 16, 2020, to stockholders of record on March 2, 2020. During the same meeting, the Board of Directors also approved a $12.1 million increase in the Company's share repurchase program (see Note 19) bringing the total remaining shares available for repurchase to $25.0 million.

The Company has evaluated events that have occurred after the balance sheet date but before the financial statements are issued and has determined that there were no other subsequent events requiring adjustment or disclosure in the consolidated financial statements.

Supplemental Financial Information

The following table presents unaudited quarterly results of operations for 2019 and 2018. These quarterly results reflect all normal recurring adjustments that are, in the opinion of management, necessary for a fair presentation of the results. Revenues and net income (loss) can vary significantly from quarter to quarter due to the nature of the Company's business activities.

Cowen Inc.
Quarterly Financial Information (Unaudited)

	Quarter Ended			
	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
	(dollars in thousands, except per share data)			
Total revenues	$ 224,097	$ 292,164	$ 252,047	$ 281,135
Income (loss) before income taxes	13,472	14,792	7,948	34,511
Income tax expense (benefit)	3,177	5,073	1,365	5,238
Net income (loss)	10,295	9,719	6,583	29,273
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	512	3,907	2,770	24,050
Net income (loss) attributable to Cowen Inc.	9,783	5,812	3,813	5,223
Preferred stock dividends	1,698	1,698	1,698	1,698
Net income (loss) attributable to Cowen Inc. common stockholders	$ 8,085	$ 4,114	$ 2,115	$ 3,525
Earnings (loss) per share:				
Basic	$ 0.27	$ 0.14	$ 0.07	$ 0.12
Diluted	$ 0.26	$ 0.13	$ 0.07	$ 0.11
Weighted average number of common shares:				
Basic	29,750	29,769	29,529	29,046
Diluted	31,625	31,522	31,264	30,722

	Quarter Ended			
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
	(dollars in thousands, except per share data)			
Total revenues	$ 251,384	$ 234,573	$ 221,028	$ 259,931
Income (loss) before income taxes	35,417	35,588	24,680	4,061
Income tax expense (benefit)	6,923	3,993	5,083	(280)
Net income (loss)	27,524	28,417	19,597	4,341
Net income (loss) attributable to non-controlling interests in consolidated subsidiaries and investment funds	10,671	23,018	4,109	(738)
Net income (loss) attributable to Cowen Inc.	16,853	5,399	15,488	5,079
Preferred stock dividends	1,698	1,698	1,698	1,698
Net income (loss) attributable to Cowen Inc. common stockholders	$ 15,155	$ 3,701	$ 13,790	$ 3,381
Earnings (loss) per share:				
Basic	$ 0.51	$ 0.12	$ 0.47	$ 0.12
Diluted	$ 0.50	$ 0.12	$ 0.45	$ 0.11
Weighted average number of common shares:				
Basic	29,625	29,769	29,610	29,194
Diluted	30,492	30,720	30,844	30,955

SIGNATURES

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

	COWEN INC.	
	By:	/s/ JEFFREY M. SOLOMON
	Name:	Jeffrey M. Solomon
Date: March 4, 2020	Title:	*Chairman of the Board and Chief Executive Officer*

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons in the capacities indicated and on the dates indicated.

Signature	Title	Date
/s/ JEFFREY M. SOLOMON Jeffrey M. Solomon	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	March 4, 2020
/s/ STEPHEN A. LASOTA Stephen A. Lasota	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 4, 2020
/s/ BRETT H. BARTH Brett H. Barth	Director	March 4, 2020
/s/ KATHERINE E. DIETZE Katherine E. Dietze	Director	March 4, 2020
/s/ STEVEN KOTLER Steven Kotler	Director	March 4, 2020
/s/ LAWRENCE E. LEIBOWITZ Lawrence E. Leibowitz	Director	March 4, 2020
/s/ JEROME S. MARKOWITZ Jerome S. Markowitz	Director	March 4, 2020
/s/ JACK H. NUSBAUM Jack H. Nusbaum	Director	March 4, 2020
/s/ MARGARET L. POSTER Margaret L. Poster	Director	March 4, 2020
/s/ DOUGLAS A. REDIKER Douglas A. Rediker	Director	March 4, 2020

Exhibit 31.1

Certification

I, Jeffrey M. Solomon, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cowen Inc:

2. Based on my knowledge, this 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 report;

3. Based on my knowledge, the financial statements, and other financial information included in this 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 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 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 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.

Date: March 4, 2020

/s/ JEFFREY M. SOLOMON

Name: Jeffrey M. Solomon
Title: *Chief Executive Officer*
(principal executive officer)

Exhibit 31.2

Certification

I, Stephen A. Lasota, certify that:

1. I have reviewed this Annual Report on Form 10-K of Cowen Inc:

2. Based on my knowledge, this 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 report;

3. Based on my knowledge, the financial statements, and other financial information included in this 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 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 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 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.

Date: March 4, 2020

/s/ STEPHEN A. LASOTA

Name: Stephen A. Lasota
Title: *Chief Financial Officer (principal financial officer and principal accounting officer)*

Exhibit 32

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Cowen Inc. (the "Company") on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 4, 2020

/s/ JEFFREY M. SOLOMON

Name: Jeffrey M. Solomon
Title: Chief Executive Officer
(principal executive officer)

/s/ STEPHEN A. LASOTA

Name: Stephen A. Lasota
Title: Chief Financial Officer (principal financial officer and principal accounting officer)

* The foregoing certification is being furnished solely pursuant to 18 U.S.C Section 1350 and is not being filed as part of the Report or as a separate disclosure document

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

Amendment No. 1
Annual Report Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

For the fiscal year ended: **December 31, 2019** **Commission file number: 001-34516**

Cowen Inc.

(Exact name of registrant as specified in its charter)

Delaware	**27-0423711**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

599 Lexington Avenue
New York, New York 10022
(212) 845-7900
(Address, including zip code, and telephone number, including area code, of registrant's principal executive office)

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

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Class A Common Stock, par value $0.01 per share	COWN	The Nasdaq Global Market
7.35% Senior Notes due 2027	COWNZ	The Nasdaq Global Market
7.75% Senior Notes due 2033	COWNL	The Nasdaq Global Market

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

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

Large accelerated filer ☐	Accelerated filer ☒	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the 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 Class A common stock held by non-affiliates of the registrant on June 30, 2019, the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price of the Class A common stock on the NASDAQ Global Market on that date was $488,181,217.

As of March 3, 2020, there were 28,656,136 shares of the registrant's Class A common stock outstanding.

Documents incorporated by reference:

Part III of this Annual Report on Form 10-K/A incorporates by reference information (to the extent specific sections are referred to herein) from the Registrant's Proxy Statement for its 2020 Annual Meeting of Stockholders.

Explanatory Note

This Amendment No. 1 to Annual Report on Form 10-K/A amends the Annual Report on Form 10-K for the year ended December 31, 2019 of Cowen Inc. (the "Company" or "Cowen"), which was filed with the Securities and Exchange Commission on March 4, 2020. This Form 10-K/A is being filed solely for the purpose of providing separate audited financial statements of Starboard Value A LP ("Starboard") which comprise the statements of assets, liabilities and partners' capital as of December 31, 2019 and December 31, 2018, and the related statements of income, statements of changes in partners' capital and statements of cash flows for each of the three years in the period ended December 31, 2019 in accordance with Rule 3-09 of Regulation S-X. The audited financial statements and the Reports of Independent Auditors of Starboard Value A LP, are filed as Exhibit 99.1 and are included as financial statement schedules in Item 15(c), "Exhibits and Financial Statement Schedules" of this Form 10-K/A. The Company accounts for its interest in Starboard under the equity method of accounting. The financial statements of Starboard as of December 31, 2019 and 2018 and for the three years in the period ended December 31, 2019 were not available at the time that the Company filed its Annual Report on Form 10-K on March 4, 2020.

The consent of Ernst & Young LLP, independent auditors for Starboard, is also filed as an exhibit to this Amendment No. 1 to Annual Report on Form 10-K/A. In addition, this Form 10-K/A includes an updated exhibit index in respect thereof and certifications under Section 302 and 906 of the Sarbanes-Oxley Act of 2002.

Except as described above, this Amendment No. 1 on Form 10-K/A does not update or modify any other information presented in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, as originally filed. This Amendment No. 1 does not update or modify in any way the financial position, results of operations, cash flows, equity or related disclosures in the Company's Annual Report on Form 10-K, and does not reflect events occurring after the Form 10-K's original filing date of March 4, 2020. Accordingly, this Form 10-K/A should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2019 and the other Company filings made with the SEC subsequent to the filing of the Annual Report on Form 10-K for the year ended December 31, 2019.

Item 15. Exhibits and Financial Statement Schedules

(a) Refer to Exhibit 99.1 to this Amendment No 1. to the Annual Report on Form 10-K/A for the separate audited financial statements and related disclosures of Starboard Value A LP pursuant to Rule 3-09 of Regulation S-X.

SIGNATURES

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

	COWEN INC.	
	By:	/s/ JEFFREY M. SOLOMON
	Name:	Jeffrey M. Solomon
Date: March 24, 2020	Title:	*Chief Executive Officer*

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JEFFREY M. SOLOMON Jeffrey M. Solomon	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	March 24, 2020
/s/ STEPHEN A. LASOTA Stephen A. Lasota	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 24, 2020
/s/ BRETT H. BARTH Brett H. Barth	Director	March 24, 2020
/s/ KATHERINE E. DIETZE Katherine E. Dietze	Director	March 24, 2020
/s/ STEVEN KOTLER Steven Kotler	Director	March 24, 2020
/s/ LAWRENCE E. LEIBOWITZ Lawrence E. Leibowitz	Director	March 24, 2020
/s/ JEROME S. MARKOWITZ Jerome S. Markowitz	Director	March 24, 2020
/s/ JACK H. NUSBAUM Jack H. Nusbaum	Director	March 24, 2020
/s/ MARGARET L. POSTER Margaret L. Poster	Director	March 24, 2020
/s/ DOUGLAS A. REDIKER Douglas A. Rediker	Director	March 24, 2020

Exhibit Index

Exhibit No.	Description
23.1	Consent of Independent Registered Public Accounting Firm (filed herewith).
31.1	Certification of CEO Pursuant to Section 302 of Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certification of CFO Pursuant to Section 302 of Sarbanes-Oxley Act of 2002 (filed herewith).
32	Certification of CEO and CFO Pursuant to Section 906 of Sarbanes-Oxley Act of 2002 (furnished herewith).
99.1	Starboard Value A LP Audited Financial Statements (filed herewith).

Exhibit 23.1

CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-197513, No. 333-177492, No. 333-170591 and No. 333-221496) and S-8 (No. 333-209939, No. 333-202529, No. 333-194520, No. 333-187355, No. 333-180046, No. 333-174283, No. 333-167360, No. 333-162785, No. 333-216440 and No. 333-223490) of Cowen Inc. of our report dated March 20, 2020 relating to the financial statements of Starboard Value A LP which appears in this Form 10-K/A -Amendment No. 1.

/s/ Ernst & Young LLP
New York, New York
March 24, 2020

Exhibit 31.1

Certification

I, Jeffrey M. Solomon, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of Cowen Inc:

2. Based on my knowledge, this 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 report;

3. Based on my knowledge, the financial statements, and other financial information included in this 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 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 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 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.

Date: March 24, 2020

/s/ JEFFREY M. SOLOMON

Name: Jeffrey M. Solomon
Title: *Chief Executive Officer*
(principal executive officer)

Exhibit 31.2

Certification

I, Stephen A. Lasota, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of Cowen Inc:

2. Based on my knowledge, this 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 report;

3. Based on my knowledge, the financial statements, and other financial information included in this 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 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 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 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.

Date: March 24, 2020

/s/ STEPHEN A. LASOTA

Name: Stephen A. Lasota
Title: *Chief Financial Officer (principal financial officer and principal accounting officer)*

Exhibit 32

CERTIFICATION PURSUANT TO

18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Cowen Inc. (the "Company") on Form 10-K/A for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to such officer's knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:	March 24, 2020	/s/ JEFFREY M. SOLOMON
		Name: Jeffrey M. Solomon Title: Chief Executive Officer (principal executive officer)
		/s/ STEPHEN A. LASOTA
		Name: Stephen A. Lasota Title: Chief Financial Officer (principal financial officer and principal accounting officer)

* The foregoing certification is being furnished solely pursuant to 18 U.S.C Section 1350 and is not being filed as part of the Report or as a separate disclosure document

Starboard Value A LP

(a Delaware limited partnership)

Financial Statements

For the year ended December 31, 2019

Starboard Value A LP
(a Delaware limited partnership)
Table of Contents

Report of Independent Auditors

To the General Partner of
Starboard Value A LP:

We have audited the accompanying financial statements of Starboard Value A LP, which comprise the statement of assets, liabilities and partners' capital as of December 31, 2019 and 2018, and the related statements of income, changes in partners' capital and cash flows for each of the three years in the period ended December 31, 2019, and the related notes to the financial statements

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in conformity with U.S. generally accepted accounting principles; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Starboard Value A LP at December 31, 2019 and 2018, and the results of its operations, the changes in partners' capital and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP
New York, New York
March 20, 2020

Starboard Value A LP

(a Delaware limited partnership)

Statement of Assets, Liabilities and Partners' Capital

(dollars in thousands)

December 31, 2019 and 2018

	December 31, 2019	December 31, 2018
Assets		
Cash	$ 1,941	$ 37
Accounts Receivable	—	57
Investments in Portfolio Funds, at fair value (cost 2019 - $2,539; 2018 - $1,955)	4,906	3,599
Receivable of Realized Incentive Allocation from Portfolio Funds	88,563	11,838
Receivable of Unrealized Incentive Allocation from Portfolio Funds	—	4,757
Total Assets	$ 95,410	$ 20,288
Liabilities and Partners' Capital		
Liabilities		
Capital Distributions Payable	$ 82,482	$ 11,290
Total Liabilities	$ 82,482	$ 11,290
Commitments and Contingencies (Note 6)		
Partners' Capital	12,928	8,998
Total Liabilities and Partners' Capital	$ 95,410	$ 20,288

The accompanying notes are an integral part of these financial statements.

Starboard Value A LP
(a Delaware limited partnership)
Statement of Income
(dollars in thousands)
For the Years Ended December 31, 2019, 2018 and 2017

	Year ended December 31,		
	2019	2018	2017
Revenues			
Incentive Allocation Income	$ 109,505	$ 6,864	$ 66,653
Total revenues	109,505	6,864	66,653
Gain/(loss) from Investments			
Net realized gain / (loss) on Portfolio Funds	208	(78)	—
Net change in unrealized appreciation on Portfolio Funds	723	229	366
Net Gain on investment transactions	931	151	366
Net income	$ 110,436	$ 7,015	$ 67,019

The accompanying notes are an integral part of these financial statements.

Starboard Value A LP
(a Delaware limited partnership)
Statement of Changes in Partners' Capital
(dollars in thousands)
For The Years Ended December 31, 2019, 2018 and 2017

	General Partner	Limited Partners	Total
Capital Balance at January 1, 2017	$ 80	$ 8,156	$ 8,236
Capital Contributions	3	249	252
Capital Distributions	(513)	(58,053)	(58,566)
Net Income	609	66,410	67,019
Capital Balance at December 31, 2017	179	16,762	16,941
Capital Contributions	2	245	247
Capital Distributions	(129)	(15,076)	(15,205)
Net Income	64	6,951	7,015
Capital Balance at December 31, 2018	116	8,882	8,998
Impact of adoption of ASC 606	(48)	(4,709)	(4,757)
Capital Contributions	1	148	149
Capital Distributions	(813)	(101,085)	(101,898)
Net Income	915	109,521	110,436
Capital Balance at December 31, 2019	$ 171	$ 12,757	$ 12,928

The accompanying notes are an integral part of these financial statements.

Starboard Value A LP
(a Delaware limited partnership)
Statement of Cash Flows
(dollars in thousands)
For The Years Ended December 31, 2019, 2018 and 2017

	For the year ended December 31,		
	2019	2018	2017
Cash flows from operating activities			
Net income (loss)	$ 110,436	$ 7,015	$ 67,019
Adjustments to reconcile net income (loss) to net cash provided by operating activities			
Net (gains) losses from Investments in Portfolio Funds	(931)	(151)	(366)
(Increase)/decrease in operating assets and liabilities:			
Accounts Receivable	57	(57)	—
Receivable of Realized Incentive Allocation from Portfolio Funds	(76,725)	46,207	(52,146)
Receivable of Unrealized Incentive Allocation from Portfolio Funds (1)	—	5,488	(5,970)
Net cash provided by operating activities	32,837	58,502	8,537
Cash flows from investing activities			
Purchase of Portfolio Fund Investments	(1,023)	(1,068)	(402)
Proceeds from Sale of Portfolio Fund Investments	647	743	135
Net cash provided by (used in) investing activities	(376)	(325)	(267)
Cash flows from financing activities			
Capital contributions	149	247	252
Capital distributions, net of change in capital distributions payable	(30,706)	(58,464)	(9,621)
Net cash used in financing activities	(30,557)	(58,217)	(9,369)
Net change in cash and cash equivalents	1,904	(40)	(1,099)
Cash			
Beginning of year	37	77	1,176
End of year	$ 1,941	$ 37	$ 77

(1) Includes effect of adjustment related to the impact of the adoption of ASC 606 in 2019 (Note 2)

The accompanying notes are an integral part of these financial statements.

1. Organization and Nature of Business

Starboard Value A LP (the "Partnership"), a Delaware limited partnership, was formed on February 9, 2011 for the purpose of providing a full range of investment advisory and management services and acting as a general partner, investment advisor, or in similar capacity to clients. During the years ended December 31, 2019, 2018 and 2017 funds which the Partnership acted as general partner and investment advisor, or in a similar capacity to clients, consisted of Starboard Value and Opportunity Fund LP, Starboard Intermediate Fund, L.P., Starboard Leaders Fund LP, Starboard Leaders Select Fund LP, and other managed accounts (collectively the "Funds" or "Portfolio Funds").

The general partner of the Partnership is Starboard Value A GP LLC, a Delaware limited liability company (the "General Partner"). The majority limited partners of the Partnership (the "Limited Partners") are Starboard Principal Co A LP, a Delaware limited partnership (the "Principal Co"), and Ramius V&O Holdings LLC, a Delaware limited liability company ("Ramius"), which is a wholly-owned subsidiary of Cowen Inc. ("CGI") (NASDAQ: COWN). Principal Co and Ramius are also the members of the General Partner.

Pursuant to the organization documents, the Partnership is entitled to receive an incentive allocation earned from the Funds (as described in Note 2).

2. Summary of Significant Accounting Policies

These financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and are stated in US dollars. The following is a summary of the significant accounting policies followed by the Partnership:

Cash
Cash includes cash balances held at HSBC Bank USA, N.A. Cash may exceed the amount of Federal insurance provided for such amounts. The Partnership has not experienced any losses on its cash and the General Partner believes the risk of such loss to be remote. Cash balances are not restricted.

Consolidation
In the ordinary course of business, the Partnership sponsors various entities that it has determined to be variable interest entities ("VIEs"). These VIEs are primarily funds for which the Partnership serves as the general partner and/or investment manager with decision-making rights. The Partnership would consolidate all entities that it controls through a majority voting interest or otherwise, including those funds that are limited partnerships in which the general partner has a controlling financial interest in accordance with guidance of Accounting Standard Codification ("ASC") Subtopic 810-20, *Control of Partnerships and Similar Entities* and Accounting Standard Update ("ASU") 2015-02, *Amendments to Consolidation Analysis,* which the Partnership elected to early adopt for the year ended December 31, 2016.

An entity is determined to be the primary beneficiary if it holds a controlling financial interest. A controlling financial interest is defined as (a) the power to direct the activities of a VIE that most significantly impact the entity's business, and (b) the obligation to absorb losses of the entity or the right to receive benefits from the entity that could potentially be significant to the VIE. The consolidation guidance requires an analysis to (a) determine whether an entity in which the Partnership holds a variable interest is a VIE and (b) whether the Partnership's involvement, through holding interests directly or indirectly in the entity or contractually through other variable interests (e.g., certain management and performance related fees), would give it a controlling financial interest. The Partnership does not consolidate any of these funds that are VIEs as it has concluded that it is not the primary beneficiary in each instance. Fund investors are entitled to all of the economics of these VIEs with the exception of the management fee and incentive allocation income, if any, earned by the Partnership or its affiliates. The Partnership's involvement with the Funds is limited to providing investment management services in exchange for incentive allocation income.

Investments in Portfolio Funds

Portfolio Funds include interests in funds and investment companies managed by the Partnership. The Partnership has elected the fair value option and follows US GAAP regarding fair value measurements and disclosures relating to investments in certain entities that calculate net asset value ("NAV") per share (or its equivalent). The guidance permits, as a practical expedient, an entity holding investments in certain entities that either are investment companies as defined by ASC 946, *Financial Services Investment Companies*, or have attributes similar to an investment company, and calculate NAV per share or its equivalent for which the fair value is not readily determinable, to measure the fair value of such investments on the basis of that NAV per share, or its equivalent, without adjustment. The Partnership generally holds investments in Portfolio Funds until the earlier of (a) the realization of the investment, (b) the realization of a coinvestment with the Portfolio Funds or (c) the dissolution/ termination of the respective fund.

Revenue Recognition

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"). ASU 2014-09 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The guidance requires revenue recognition of an amount the entity expects to receive in exchange for the transfer of promised goods or services to customers. An entity is required to (a) identify the contract(s) with a customer, (b) identify the performance obligations in the contract, (c) determine the transaction price, (d) allocate the transaction price to the performance obligations in the contract, and (e) recognize revenue when (or as) the entity satisfies a performance obligation. In determining the transaction price, an entity may include variable consideration only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized would not occur when the uncertainty associated with the variable consideration is resolved. The Partnership adopted ASU 2014-09 using a modified retrospective application approach as of January 1, 2019. As a result of the adopting the standard, the Partnership recognizes incentive allocation income only when such amounts are not probable of significantly reversing. The Partnership recognized an opening adjustment in 2019 to partners' capital of $4,757 as a result of adopting the standard.

Incentive Allocation

The Partnership earns incentive income based on the cumulative performance of the Portfolio Funds over a specified period. Prior to the adoption of new revenue recognition accounting guidance in 2019, incentive allocations earned were recognized on an accrual basis based on Portfolio Fund performance during the period, subject to the achievement of minimum return levels, or high water marks, as set out in the respective Portfolio Funds' confidential offering memorandums or other governing documents. Realized incentive allocations are recognized when the incentive allocations are deemed distributable to the Partnership. Unrealized incentive allocations was calculated based on an assumed liquidation of the Portfolio Funds' ending capital on the reporting date and recognized on an accrual basis.

Beginning in 2019, as a result of the adoption of the ASU 2014-09, the Partnership recognizes incentive allocation income when such amounts are probable of not significantly reversing, which is typically when incentive allocation income is realized. Determining the amount of incentive allocation income to record is subject to qualitative and quantitative factors including, timing of the sale of an investment, whether the Partnership has received or is entitled to receive incentive income distributions and potential sales of fund investments. The Partnership continuously evaluates whether there are additional considerations that could potentially impact the recognition of incentive income.

(dollars in thousands)

Net realized gains / (loss) and change in unrealized appreciation on Investments in Portfolio Funds
Net gains (losses) on investments in Portfolio Funds represents the unrealized and realized gains and losses on the Partnership's investments. Gains (losses) on investments in Portfolio Funds are realized when the Partnership redeems all or a portion of its investment or when the Partnership receives cash income, such as dividends or distributions, from its investments. Unrealized gains (losses) on investments in Portfolio Funds results from changes in the fair value of the investment in the respective Portfolio Funds.

Income Taxes
The Partnership is not subject to US Federal income tax and is generally not subject to state or local income taxes. Such taxes are the responsibility of the partners and accordingly no provision for income tax expense or benefit is reflected in the accompanying financial statements. The Partnership's activities do not subject it to tax from other jurisdictions outside the United States and, accordingly, no provision for foreign taxes has been recorded in the accompanying financial statements.

The Partnership follows the authoritative guidance on accounting for and disclosure of uncertainty in tax positions which requires the General Partner to determine whether a tax position of the Partnership is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. For tax positions meeting the more likely than not threshold, the tax amount recognized in the financial statements is reduced by the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant taxing authority. At December 31, 2019 and December 31, 2018, there were no uncertain tax positions, interest, or related penalties assessed.

Use of Estimates
The preparation of these financial statements in conformity with US GAAP requires the Partnership to make estimates and assumptions that affect the fair value of investments and the reported amounts of 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, and the differences could be material.

3. Investments and Fair Value Measurement

As of December 31, 2019 and 2018, investments in Portfolio Funds, at fair value, include the following:

		Fair Value as of December 31,		
Investments	**Strategy**	**2019**	**2018**	**Redemption Frequency and Commitments**
Starboard Value and Opportunity Fund LP	Activist	$ 705	$ 575	(a) (b)
Starboard Intermediate Fund, L.P.	Activist	2,114	1,724	(a) (b)
Starboard Leaders Fund LP	Activist	588	448	(c) (d)
Other Managed Accounts	Activist	1,499	852	(c) (d)
		$ 4,906	$ 3,599	

(a) The Partnership has no unfunded commitments related to these Portfolio Funds.
(b) Investments may only be redeemed on a quarterly basis with 90 days prior written notice.
(c) As of December 31, 2019 and 2018, the Partnership had total commitments to Starboard Leaders Fund and Other Managed Accounts of $255 and $600, respectively, of which the Partnership has $0

and $493 remaining, respectively. These commitments can be called at any time, subject to advance notice.
(d) Investments are generally distributed upon realization of all investments or the specific investment opportunity, as applicable, in the Portfolio Fund.

In accordance with US GAAP, the Partnership's investments in Portfolio Funds are measured at fair value using the NAV per share (or its equivalent) as a practical expedient and therefore have not been classified in the fair value hierarchy as described in Note 2.

Because of the inherent uncertainty of the valuation for the Partnership’s investments, the fair value assigned may differ from the values that would have been used had a ready market existed for these investments, and the differences may be material.

4. Related Parties

The investment manager of the Portfolio Funds, Starboard Value LP, a related entity with the same limited partners as the Partnership, assumes all administrative expenses and costs of operations for the Partnership, as such the Partnership does not bear any direct expenses. Amounts due from related parties at December 31, 2019 and 2018 were $88,563 and $16,652 respectively as disclosed on the Statement of Assets, Liabilities and Partners’ Capital.

5. Partners’ Capital

Pursuant to the terms of the Limited Partnership Agreement (the “Agreement”), the Partnership initially issued a total number of 1,000 profit units. One percent of these profit units were issued to the General Partner and ninety-nine percent of the profit units were issued to the Class A limited partners, Principal Co and Ramius. Class B, Class D and Class P partners are also entitled to distributions based on the Agreement, however they do not hold profit units.

According to the Agreement, the ownership interest of the Partnership may be adjusted from time to time based on the contractual terms and the respective fair values.

Net income (losses) are allocated in proportion to the Class A limited partners ownership interests in the Partnership. However, incentive allocation income is available for distribution first to Class B limited partners based on the terms as defined in the Agreement, then to Class D limited partners based on the allocation as defined in the Agreement, then to Class P limited partners (net of Class B and Class D distributions) based on the allocation as defined in the Agreement and thereafter, all remaining amounts are available for distribution to the Class A limited partners in proportion to their respective ownership interest in the Partnership, subject to certain priority distributions to Ramius as set forth in the Agreement.

In the event that the Partnership is liquidated or if all or substantially all its assets are sold, distributions shall be made pro-rata based on ownership interests.

The General Partner and Limited Partners make periodic contributions for the purpose of funding the Partnership’s investments in Portfolio Funds.

6. Commitments and Contingencies

In the normal course of business the Partnership enters into contracts that contain a variety of representations and warranties and which provide general indemnifications. The Partnership’s maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Partnership that have not yet occurred. However, the Partnership expects the risk of loss to be remote.

7. Risks

The Partnership is subject to a variety of risks in the conduct of its operations. The Partnership is economically dependent on the performance of the Funds and its related parties as the source of its incentive allocation revenues and, accordingly, may be materially affected by the actions of and the various risks associated with such Funds and related parties. For instance, market risk, currency risk, credit risk, operational risk and liquidity risk.

Legal, tax and regulatory changes could occur during the term of the Partnership that may adversely affect the Partnership. The regulatory environment for investment funds is evolving, and changes in the regulation of investment funds may adversely affect the Partnership’s operations.

8. Recent Accounting Pronouncements

Other than the adoption of ASC 606 discussed previously, none of the other changes to US GAAP that went into effect in the year ended December 31, 2019 had a material effect on the Partnership’s financial statements.

9. Subsequent Events

For the from period January 1, 2020 through March 20, 2020, the Partnership made distributions of approximately $85,061 to its partners, $81,243 of which were reflected as distributions payable at December 31, 2019. The Partnership has determined that no other material events or transactions occurred subsequent to December 31, 2019 and through March 20, 2020, the date the accompanying financial statements were available to be issued, which require additional adjustments or disclosures in the accompanying financial statements.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K/A

(Amendment No. 2)

(Mark One)

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

For the fiscal year ended: December 31, 2019

or

☐ **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: 001-34516

Cowen Inc.

(Exact name of registrant as specified in its charter)

Delaware	**27-0423711**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

599 Lexington Avenue
New York, New York 10022
(212) 845-7900
(Address, including zip code, and telephone number, including area code, of registrant's principal executive office)

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

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Class A Common Stock, par value $0.01 per share	COWN	The Nasdaq Global Market
7.35% Senior Notes due 2027	COWNZ	The Nasdaq Global Market
7.75% Senior Notes due 2033	COWNL	The Nasdaq Global Market

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting 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, indicate by check mark if the registrant has elected not to use the 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 Class A common stock held by non-affiliates of the registrant on June 30, 2019, the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price of the Class A common stock on the NASDAQ Global Market on that date was $488,181,217.

As of April 28, 2020 there were 27,688,071 shares of the registrant's Class A common stock outstanding.

Explanatory Note

Cowen Inc. (the "Company") is filing this Amendment No. 2 on Form 10-K/A to its Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (the "Form 10-K") to provide additional information required by Part III, because the definitive proxy statement for our 2020 Annual Meeting of Stockholders will not be filed within 120 days after the end of our 2019 fiscal year. This Amendment No. 2 on Form 10-K/A does not change the previously reported financial statements or any of the other disclosure contained in Part I or Part II. Part IV is being amended solely to add new certifications in accordance with Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

PART III

Item 10. Directors, Executive Officers and Corporate Governance

DIRECTORS OF THE COMPANY

The number of directors currently serving on our Board of Directors is ten. The members of our Board of Directors are elected to serve a one-year term.

Set forth below is biographical information for each of the members of our Board of Directors. All ages are as of April 28, 2020.

Jeffrey M. Solomon. Age 54. Jeffrey Solomon is Chairman of the Board and Chief Executive Officer of the Company and Chief Executive Officer of Cowen and Company, LLC ("Cowen and Company"), and was appointed a director of Cowen in December 2011. Mr. Solomon served as President of the Company prior to his appointment as Chief Executive Officer on December 27, 2017. Mr. Solomon serves as a member of the Management Committee of Cowen. Previously, Mr. Solomon served as Cowen's Chief Operating Officer and Head of Investment Banking at Cowen and Company. Mr. Solomon joined Ramius, Cowen's investment management division, when it was founded in 1994 and was responsible for the development, management and oversight of a number of the investment strategies employed by Ramius. From 1991 to 1994, Mr. Solomon was at Republic New York Securities Corporation, or Republic, the brokerage affiliate of Republic National Bank, now part of the HSBC Group, where he was the firm's Chief Administrative Officer. Prior to Republic, Mr. Solomon was in the Mergers and Acquisitions Group at Shearson Lehman Brothers. Currently, Mr. Solomon is a Director of NuGo Nutrition, the manufacturer of NuGo Nutrition Bars. Mr. Solomon is also co-chair of the Equity Capital Formation Task Force, a group composed of individuals from across the country's startup and small-capitalization company ecosystems advocating for market structure reform to encourage job creation and growth. Mr. Solomon graduated from the University of Pennsylvania in 1988 with a B.A. in Economics. Mr. Solomon provides the board with institutional knowledge of all aspects of the Company's businesses and, as Chief Executive Officer, he is able to provide in-depth knowledge of the Company's business and affairs, management's perspective on those matters and an avenue of communication between the Board and senior management.

Brett H. Barth. Age 48. Mr. Barth was elected to our Board on June 26, 2018. Mr. Barth co-founded BBR Partners in 2000 and is a Managing Partner, co-managing the firm and overseeing BBR's investment approach and implementation. He has extensive experience vetting investment opportunities across the asset class spectrum and through a range of market environments, working with both traditional and alternative investment managers. Mr. Barth is also a member of BBR's Executive Committee and Investment Committee. Prior to founding BBR, Mr. Barth was in the Equities Division of Goldman Sachs. Previously, he served in Goldman's Equity Capital Markets groups in New York and Hong Kong. He began his career in Goldman Sachs' Corporate Finance Department. Mr. Barth is a trustee of the University of Pennsylvania as well as a member of the Board of Overseers of the Graduate School of Education. He previously served as both the Chair of the Penn Fund, the University of Pennsylvania's undergraduate annual giving program, and as the Inaugural Chair of the Undergraduate Financial Aid Leadership Council. Mr. Barth is a member of the board and executive committee of the UJA-Federation of New York, he co-chairs the Annual Campaign and he serves on the endowment's Investment Committee. Mr. Barth was awarded the Alan C. Greenberg Young Leadership Award by UJA-Federation of New York, Wall Street & Financial Services Division. Mr. Barth graduated summa cum laude with concentrations in Finance and Accounting from the Wharton School of the University of Pennsylvania. Mr. Barth provides the Board with extensive investment and wealth management expertise.

Katherine E. Dietze. Age 62. Ms. Dietze was appointed to our Board in June 2011 upon the completion of Cowen's acquisition of LaBranche & Co., Inc., or LaBranche. Ms. Dietze was a member of LaBranche's board of directors since January 2007. Ms. Dietze served as the Audit Committee Chair at LaBranche. Ms. Dietze spent over 20 years in the financial services industry prior to her retirement in 2005. From 2003 to 2005, Ms. Dietze was Global Chief Operating Officer for the Investment Banking Division of Credit Suisse First Boston. From 1996 to 2003, she was a Managing Director in Credit Suisse First Boston's Telecommunications Group. Prior to that, Ms. Dietze was a Managing Director and Co-Head of the Telecommunications Group in Salomon Brothers Inc's Investment Banking Division. Ms. Dietze began her career at Merrill Lynch Money Markets after which she moved to Salomon Brothers Inc. to work on money market products and later became a member of the Investment Banking Division. Ms. Dietze is a director, a member of the Governance Committee and Chair of the Finance Committee of Matthews International Corporation (MATW), a designer, manufacturer and marketer of memorialization products and brand solutions. Ms. Dietze was a member of the Board of Trustees for Liberty Property Trust, which was purchased this past February by Prologis. Ms. Dietze holds a B.A. from Brown University and an M.B.A. from Columbia Graduate School of Business. Ms. Dietze provides the Board with extensive experience in Investment Banking management and corporate governance expertise as a public company director.

Gregg A. Gonsalves. Age 52. Mr. Gonsalves was appointed to our Board in April 2020. Mr. Gonsalves has been an advisory partner with Integrated Capital LLC, a leading, hotel-focused, private real estate advisory and investment firm since 2013. Prior to joining Integrated Capital, Mr. Gonsalves was a managing director at Goldman Sachs and was the partner responsible for the Real Estate Mergers & Acquisition business. In his 20-year career at Goldman Sachs, Mr. Gonsalves completed over 50 M&A transactions worth approximately $100 billion in deal value, working with a variety of companies in a wide range of industries. Mr. Gonsalves serves on the Board of Directors of Cedar Realty Trust, a publicly-traded retail REIT, and is on the Board of POP Tracker LLC, a private company focused on providing proof of performance to the out-of-home advertising industry. He began his career as a sales engineer at Mobil Oil Corporation from 1989 to 1991. Mr. Gonsalves received a B.S. from Columbia University and received an M.B.A. from Harvard Business School. Mr. Gonsalves is presently chairman of the board of directors of the Jackie Robinson Foundation, where he has served as a board member for approximately the past ten years. Mr. Gonsalves provides the Board with extensive investment banking and real estate investment experience.

Steven Kotler. Age 73. Mr. Kotler was elected to our Board on June 7, 2010. Mr. Kotler currently serves as Vice Chairman of the private equity firm Gilbert Global Equity Partners, which he joined in 2000. Prior to joining Gilbert Global, Mr. Kotler, for 25 years, was with the investment banking firm of Schroder & Co. and its predecessor firm, Wertheim & Co., where he served in various executive capacities including President & Chief Executive Officer, and Group Managing Director and Global Head of Investment and Merchant Banking. Mr. Kotler is a director of CPM Holdings, an international agricultural process equipment company; and Co-Chairman of Birch Grove Capital, an asset management firm. Mr. Kotler is a member of the Council on Foreign Relations; and, from 1999 to 2002, was Council President of The Woodrow Wilson International Center for Scholars. Mr. Kotler has previously served as a Governor of the American Stock Exchange, The New York City Partnership and Chamber of Commerce's Infrastructure and Housing Task Force, The Board of Trustees of Columbia Preparatory School; and, the Board of Overseers of the California Institute of the Arts. Mr. Kotler also previously served as a director of Cowen Holdings from September 2006 until June 2007. Mr. Kotler provides the Board with extensive experience in leading an international financial institution and expertise in private equity.

Lawrence E. Leibowitz. Age 60. Mr. Leibowitz was elected to our Board on June 26, 2018. Mr. Leibowitz is the President and board member of Crux Informatics, a data operations service that adopts data supply chains, ensuring they mature into cohesive, stable, and performant systems. Mr. Leibowitz has served as Crux's President and a member of its board since October 2017. Crux's features include data management platforms, professional services, and a global data supplier network. Mr. Leibowitz formerly served as Interim CEO of Incapture Technologies from September 2014 to October 2017. Mr. Leibowitz has thirty years of experience as a finance and technology entrepreneur. Most recently, Mr. Leibowitz served as Chief Operating Officer, Head of Global Equities Listing & Trading and as a Member of the board of directors of NYSE Euronext, holding such positions from 2007 to 2013. Prior to that, Mr. Leibowitz served as Chief Operating Officer of Americas Equities at UBS, Co-Head of Schwab Soundview Capital Markets, and Chief Executive Officer of Redibook. Mr. Leibowitz was a founding partner at Bunker Capital and Head of Quantitative Trading and Equities technology at CS First Boston. Mr. Leibowitz provides the Board with extensive capital markets knowledge, including trading microstructure, regulation, asset management and quantitative methods.

Jerome S. Markowitz. Age 80. Mr. Markowitz serves as Lead Director and has served as a member of our Board since November 2009. Mr. Markowitz was a Senior Partner at Conifer Securities LLC, a boutique servicing the operational needs of investment managers, from 2006 through May 2011. From 1998 to 2006, Mr. Markowitz was actively involved in managing a private investment portfolio. Prior to 1998, Mr. Markowitz was Managing Director and a member of the executive committee at Montgomery Securities and was responsible for starting their private client, high yield, equity derivatives and prime brokerage divisions. Prior to joining Montgomery, Mr. Markowitz was a Managing Director of L.F. Rothschild's Institutional Equity Department. Mr. Markowitz is a director and serves on the investment committee of Market Axess Inc., and also formerly served on the advisory board of Thomas Weisel Partners Group, Inc. Mr. Markowitz provides the Board with extensive experience in asset management and investment banking, as well as experience as a public company director.

Jack H. Nusbaum. Age 79. Mr. Nusbaum has served as a member of our Board since November 2009. Mr. Nusbaum is a Senior Partner of the New York law firm of Willkie Farr & Gallagher LLP. Mr. Nusbaum served as the firm's Chairman from 1987 through 2009 and has been a partner in that firm for more than forty-five years. Willkie Farr & Gallagher LLP is outside counsel to Cowen. Mr. Nusbaum is also a director of W. R. Berkley Corporation. Mr. Nusbaum provides the Board with experience as senior management of an international law firm and provides extensive legal and corporate governance expertise.

Margaret L. Poster. Age 68. Ms. Poster was appointed to our Board in April 2019. Ms. Poster served as Chief Operating Officer and Managing Director of Willkie Far & Gallagher LLP from 1991 through 2018. Ms. Poster is a Director of Generation Citizen, serves as the Chair of the Finance Committee and Audit Committee and has served as a member of the Generation Citizen's Executive Committee and Strategic Planning Committee. Ms. Poster previously served as President of Workbench, Inc., Chief Financial Officer of Barnes & Noble Bookstores Inc. and Chief Financial Officer of the Jewelry & Sporting Good Division at W.R. Grace & Co. Ms. Poster began her career as an auditor at PricewaterhouseCoopers LLP. Ms. Poster is a certified public accountant and received a Masters of Business Administration from Harvard Business School. Ms. Poster provides the Board with comprehensive operating and public accounting experience.

Douglas A. Rediker. Age 60. Mr. Rediker was appointed to our Board in April 2015. Mr. Rediker is the Executive Chairman of International Capital Strategies, LLC, a policy and markets advisory boutique based in Washington, D.C. Until 2012, he was a member of the Executive Board of the International Monetary Fund representing the United States. He has held senior and visiting fellowships at Brookings, the Peterson Institute for International Economics and at the New America Foundation. He has written extensively and testified before Congress on the subject of state capitalism, global finance, Sovereign Wealth Funds and other issues surrounding the relationship between international economic policy, financial markets, global capital flows and foreign policy. Mr. Rediker previously served as a senior investment banker and private equity investor for a number of investment banks, including Salomon Brothers, Merrill Lynch and Lehman Brothers. Mr. Rediker began his career as an attorney with Skadden Arps in New York and Washington, D.C. Mr. Rediker's experience on global macro issues provides the Board with expertise relating to capital markets, the economy and global governance.

EXECUTIVE OFFICERS OF THE COMPANY

Biographies of the current executive officers of the Company are set forth below, excluding Mr. Solomon's biography, which is included under "Directors of the Company" above. Each executive officer serves at the discretion of the Board.

John Holmes. Age 56. Mr. Holmes serves as Chief Operating Officer and serves as a member of the Management Committee of Cowen. Mr. Holmes previously served as the Company's Chief Administrative Officer and was appointed an executive officer in May 2013. Mr. Holmes was the Head of Technology and Operations at Cowen following the merger between Cowen and Company and Ramius. Mr. Holmes joined Ramius in June 2006 as Global Head of Operations. Prior to joining Ramius, Mr. Holmes was Global Head of the Equity Product Team at Bank of America Securities. Mr. Holmes has also held senior operations management positions at Deutsche Bank, Credit Lyonnais and Kidder Peabody. His experience includes treasury, foreign exchange, equity, fixed income & derivative operations. Mr. Holmes is NASD licensed as a General Securities Representative, General Securities Principal and a Financial & Operations Principal.

Stephen A. Lasota. Age 57. Mr. Lasota serves as Chief Financial Officer of Cowen and serves as a member of the Management Committee of Cowen. Mr. Lasota was appointed Chief Financial Officer in November 2009. Prior to the consummation of the business combination of Cowen Holdings and Ramius in November 2009, Mr. Lasota was the Chief Financial Officer of Ramius LLC and a Managing Director of the Company. Mr. Lasota began working at Ramius in November 2004 as the Director of Tax and was appointed Chief Financial Officer in May 2007. Prior to joining Ramius, Mr. Lasota was a Senior Manager at PricewaterhouseCoopers LLP.

Owen S. Littman. Age 47. Mr. Littman serves as General Counsel and Secretary of Cowen and serves as a member of the Management Committee of Cowen. Mr. Littman was appointed General Counsel and Secretary in July 2010. Following the consummation of the business combination of Cowen Holdings and Ramius in November 2009, Mr. Littman was appointed Deputy General Counsel, Assistant Secretary and Managing Director of Cowen and General Counsel and Secretary of Ramius LLC. Mr. Littman began working at Ramius in October 2005 as its senior transactional attorney and was appointed General Counsel in February 2009. Prior to joining Ramius, Mr. Littman was an associate in the Business and Finance Department of Morgan, Lewis & Bockius LLP.

CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted a current copy of the code on our website, www.cowen.com. In addition, we intend to post on our website all disclosures that are required by law or NASDAQ Stock Market listing standards concerning any amendments to, or waivers from, any provision of the code. You may also request a copy of the code by writing to Cowen Inc., Attn: Secretary, 599 Lexington Avenue, New York, NY 10022.

AUDIT COMMITTEE

Our Board has established a separately-designated standing Audit Committee which operates under a charter that has been approved by our Board.

Our Board has determined that all of the members of the Audit Committee are independent as defined under the rules of the Nasdaq Stock Market, and the independence requirements contemplated by Rule 10A-3 under the Exchange Act.

The current members of our Audit Committee are Ms. Dietze (Chairperson), Mr. Kotler and Ms. Poster. The Board has determined that Ms. Poster is an "audit committee financial expert" as defined by applicable SEC rules.

Item 11: Executive Compensation

COMPENSATION DISCUSSION AND ANALYSIS

In addition to performing the roles and responsibilities described under "Committees of the Board — Compensation Committee" above, our Compensation Committee, which is composed entirely of independent directors, determined the 2019 compensation of our named executive officers:

- Jeffrey M. Solomon, Chairman of the Board and Chief Executive Officer
- Stephen A. Lasota, Chief Financial Officer
- John Holmes, Chief Operating Officer
- Owen S. Littman, General Counsel and Secretary

Executive Summary

The following is an executive summary of our executive officer compensation program.

Business Overview

Cowen Inc., a Delaware corporation formed in 2009, is a diversified financial services firm that, together with its consolidated subsidiaries (collectively, "Cowen" or the "Company"), provides investment banking, research, sales and trading, prime brokerage, global clearing, commission management services and investment management through its two business segments: the Operating Company ("Op Co") and the Asset Company ("Asset Co").

Operating Company

The Op Co segment consists of four divisions: the Cowen Investment Management ("CIM") division, the Investment Banking division, the Markets division and the Research division. The Company refers to the Investment Banking division, the Markets division and the Research division collectively as its investment banking businesses. Op Co's CIM division includes advisers to investment funds (including private equity structures and privately placed hedge funds), and registered funds. Op Co's investment banking businesses offer industry focused investment banking for growth-oriented companies including advisory and global capital markets origination, domain knowledge-driven research, sales and trading platforms for institutional investors, global clearing, commission management services and also a comprehensive suite of prime brokerage services.

The CIM division is the Company's investment management business, which operates primarily under the Cowen Investment Management name. CIM offers innovative investment products and solutions across the liquidity spectrum to institutional and private clients. The predecessor to this business was founded in 1994 and, through one of its subsidiaries, has been registered with the United States ("U.S.") Securities and Exchange Commission ("SEC") as an investment adviser under the Investment Advisers Act of 1940, as amended (the "Advisers Act") since 1997. The Company's investment management business offers investors access to a number of strategies to meet their specific needs including private healthcare investing, private sustainable investing, healthcare royalties, activism and merger arbitrage. A portion of the Company's capital is invested alongside the Company's investment management clients. The Company has also invested some of its capital in its reinsurance businesses.

Op Co’s investment banking businesses include investment banking, research, sales and trading, prime brokerage, global clearing and commission management services provided primarily to companies and institutional investor clients. Sectors covered by Op Co’s investment banking business include healthcare, technology, media and telecommunications, consumer, industrials, information and technology services, and energy. We provide research and brokerage services to over 6,000 domestic and international clients seeking to trade securities and other financial instruments, principally in our sectors. The investment banking businesses also offer a full-service suite of introduced prime brokerage services targeting emerging private fund managers. Historically, we have focused our investment banking efforts on small to mid-capitalization public companies as well as private companies. From time to time, the Company invests in private capital raising transactions of its investment banking clients.

Asset Company

The Asset Co segment consists of the Company’s private investments, private real estate investments and other legacy investment strategies. The focus of Asset Co is to drive future monetization of the invested capital of the segment.

2019 Performance Overview

- 2019 Economic Income revenue increased 4% to a record $944.8 million compared to $909.5 million in 2018.
- Record 2019 investment banking revenues of $352.2 million were up 7% due to higher equities and debt capital markets activity.
- 2019 brokerage revenues were down 3% compared to a market-wide trading drop of 4%. Securities finance, derivatives and special situations trading all posted strong year-over-year revenue growth.
- 2019 management fees of $45.7 million were down 7% year-over-year due to exits from non-core investment strategies during 2019.
- Incentive income rose 95% to $46.2 million in 2019 due to higher performance fees in the healthcare and activist investment strategies.
- 2019 compensation and benefits costs were $537.5 million compared to $509.6 million in 2018. The increase was due to higher 2019 revenues as well as additional hires, which resulted in a higher compensation and benefits accrual. The 2019 compensation-to-revenue ratio was 56.9%, up from 56.0% in the prior year.
- Economic Operating Income, which represents Economic Income attributable to common stockholders before depreciation and amortization, was $69.1 million in 2019 versus $80.9 million in 2018.
- As of December 31, 2019, the Company had assets under management of $11.4 billion, an increase of $1.0 billion from December 31, 2018.
- On January 3, 2019, the Company completed the acquisition of Quarton International, a leading middle-market financial advisory firm, expanding the Company’s advisory business and creating a global, cross-border investment banking platform with significant scale.

Please refer to the Company’s Segment Reporting Note in its financial statements included on pages F-72 to F-77 of its Form 10-K for the year ended December 31, 2019, as filed with the SEC, for reconciliations of the non-GAAP financial measures above to their most directly comparable GAAP measures.

Advisory Vote on Executive Compensation and Stockholder Engagement

The Compensation Committee believes that our executive compensation programs are effective in driving our pay-for-performance philosophy. At our 2019 annual meeting of stockholders, over 90% of shares voted (excluding broker non-votes) were in favor of the compensation of our named executive officers as disclosed in the proxy statement for the 2019 annual meeting of stockholders. The Compensation Committee considered the results of the vote to be an endorsement of the Company's response to its continued stockholder outreach and evolving compensation practices, as described in more detail below.

Stockholder Outreach

Since 2014, we have engaged in stockholder outreach efforts regarding our compensation program. In an effort to continue to better understand our investors' perspective and thoughts regarding our executive compensation program, a team of our senior management, including our Chief Financial Officer and General Counsel, engaged in a stockholder outreach initiative in early 2020. As part of our 2020 outreach, we contacted 18 stockholders, including some of our largest stockholders, who we believe collectively hold approximately 60% of our outstanding Class A common stock, which represents in excess of 80% of our outside stockholder base.

Starting in 2015, some of our stockholders raised concerns over the evergreen nature of our 2010 Equity and Incentive Plan (the "2010 Plan"). We have continued to hear that concern from stockholders during our subsequent stockholder outreach efforts. In 2020, stockholders have expressed support for compensation decisions being reflective of the market environment and being based upon financial metrics including earnings and return on equity. The 2010 Plan expires in June 2020. The Company plans to present a new equity and incentive plan for approval by our stockholders at the 2020 Annual Meeting of Stockholders. Our stockholders have generally expressed support for our compensation philosophy and the components of our compensation, in particular, including the fact that a significant portion of named executive officer compensation is stock-based and that our stock-based awards have significant vesting periods.

Compensation Practice Changes in Response to Stockholder Feedback

Following our stockholder outreach initiatives, senior management discussed the feedback received from our stockholders with the Compensation Committee. Additionally, the Compensation Committee obtained feedback, advice and recommendations on improvements to our compensation program from its independent compensation consultant, Pay Governance LLC. The Compensation Committee also reviewed the Company's performance, the compensation practices of its peers and other materials regarding executive compensation. Since our 2014 annual meeting, the Compensation Committee has introduced the following changes to our executive compensation program, partially in response to feedback received from our stockholders:

What We Heard from Stockholders	Action Taken by the Compensation Committee
• Concerns over the evergreen nature of the 2010 Plan.	• After careful review, decided to retain the evergreen provision of the 2010 Plan (expires in 2020) to support incentive and retention needs for the business. • The Company plans to present a new equity and incentive plan for stockholder approval at its 2020 Annual Meeting of Stockholders. The new equity and incentive plan will not have an evergreen provision.
• A portion of executive compensation should be performance-based.	• As of April 2015, eliminated minimum bonus guarantees for all named executive officers. • Approved the issuance of performance share awards, or PSAs, to our named executive officers in 2016 as a component of 2015 year-end compensation. Additional PSAs were awarded to our named executive officers in April of 2019 and we intend to award PSAs to our named executive officers in the second quarter of 2020.
• No concern over the absolute amounts of compensation awarded to any of our named executive officers or the manner in which compensation is allocated.	• Continued to deliver compensation consistent with our compensation philosophy, the Compensation Committee's evaluation of Company and individual performance and industry norms. • Continued to deliver a significant portion of total compensation as stock-based awards subject to long-term vesting conditions.
• Support for our compensation governance practices.	• In March 2015, adopted stock ownership and retention guidelines for executive officers. • In March 2015, implemented a clawback policy for executive officers with respect to cash and equity performance-based compensation and annual bonus compensation paid under the Company's equity and incentive plans. • Adopted an annual (rather than triennial) say-on-pay vote in 2017.

Key Features of Our Executive Compensation Program

What We Do	What We Don't Do
• We pay for performance through a careful year-end review of financial results and individual performance	• We do not pay dividend equivalents on unvested RSUs or PSAs
• We consider peer groups in establishing compensation	• We do not pay tax gross-ups on our limited perquisites
• Meaningful annual equity awards are granted in lieu of — not in addition to — annual cash incentives	• We do not provide "single-trigger" equity vesting in the event of a change in control
• We introduced PSAs as a component of executive officer compensation in 2016.	• We do not provide golden parachute excise tax gross-ups
• We granted PSAs to executive officers in April 2019. The PSAs are earned based on forward-looking performance metrics that consider long-term performance from 2019 through 2021.	• We do not provide minimum guaranteed bonuses to our executive officers
• We intend to grant PSAs to executive officers in the second quarter of 2020.	
• We have implemented stock ownership guidelines for our directors and executive officers	
• We have double-trigger equity vesting in the event of a change in control	
• We require our executive officers to comply with reasonable restrictive covenants	
• We subject our deferred bonus awards to executive officers to a clawback policy	
• We seek to maintain a conservative compensation risk profile	
• The Compensation Committee retains an independent compensation consultant	
• We have an anti-hedging policy, and, during 2019, all executive officers were in compliance with this policy	

Compensation Philosophy and Objectives

Our compensation programs, including compensation of our named executive officers, are designed to achieve three objectives:

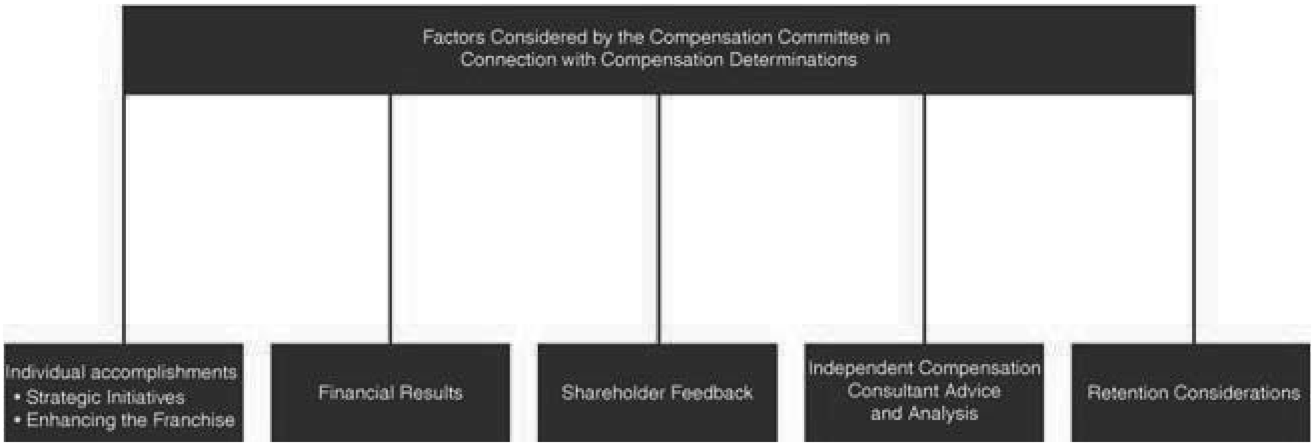
- *Pay for Performance.* A significant portion of the total compensation paid to each named executive officer is variable. Approximately 70% of our Chief Executive Officer's compensation, approximately 30% of our Chief Financial Officer, Chief Operating Officer, and General Counsel's compensation, in respect of 2019, was paid in deferred cash and equity, excluding long-term incentive compensation awards. The amount of compensation paid is determined based on: (i) the performance of the Company on an absolute basis through a comparison of our results to competitor firms; (ii) an evaluation of each named executive officer's contribution to the Company; and (iii) his performance against individualized qualitative goals.

- *Annual Compensation Reflects an Informed Review of Annual Results and Judgment of the Committee.* The Committee considers a number of factors in its pay determinations. Given the volatility and constantly changing dynamics of the markets, we believe that it makes more sense for our business to primarily determine compensation after year-end by making a careful evaluation of the business rather than establishing formulaic pre-set goals at the start of the year. An after-the-fact review of performance allows the Company and Compensation Committee to consider the quality of earnings, the combination of absolute and relative performance, organic versus non-organic sources of revenues and profits, and collaboration between our various lines of business. A pre-set formula would not allow us to fully evaluate performance and might result in negative unintended consequences for the business and the stockholders. Final compensation determinations are made at the discretion of the Committee. We believe this discretionary approach to compensation is consistent with common market practice in the financial services sector for these same reasons. Further, although the size of the incentive compensation award is based on current fiscal year results, a portion of it is delivered in the form of RSUs that vest over time to encourage retention and further link executive pay with longer-term stock performance.

- *Align Executive Officers' Interests with Stockholders' Interests.* Our Compensation Committee reviews each executive officer's performance as well as the Company's financial results in the context of the market environment when determining year-end, performance-related compensation. In addition, our Compensation Committee evaluated the Company's performance compared to the performance of its peers and also considered an analysis of competitive compensation levels of executive officers at the Company's peer firms that was conducted by Pay Governance LLC, the independent compensation consultant to the Compensation Committee. Our Compensation Committee believes year-end, performance-related compensation should be delivered in a combination of short-term and long-term instruments. We believe that deferred cash, equity and equity-related instruments align the interests of our executive officers with those of our stockholders and ensure that our executive officers are focused on the long-term performance of the Company. In connection with fiscal 2019 bonus payments, Messrs. Solomon, Lasota, Holmes and Littman received a portion of their bonus in cash, a portion in deferred equity and a portion in deferred cash, in each case subject to service-based vesting requirements of approximately 4.5 years. The Compensation Committee believes that the payment of a significant portion of an employee's compensation in the form of equity and deferred cash properly aligns the employee's interests with those of the Company's stockholders and effectively mitigates any risks associated with the Company's compensation practices. Excluding long-term incentive compensation awards, approximately 70% of our Chief Executive Officer's compensation, approximately 30% of our Chief Financial Officer, Chief Operating Officer, and General Counsel's compensation, in all cases in respect of 2019, was paid in deferred cash and equity.

- *Recruiting and Retention.* We operate in an intensely competitive industry, and we believe that our success is closely related to our recruiting and retention of highly talented employees and a strong management team. We try to keep our compensation program generally competitive with industry practices so that we can continue to recruit and retain talented executive officers and employees.

Determination of Named Executive Officer Compensation for 2019



At meetings held on December 16, 2019, January 16, 2020 and February 10, 2020 and numerous executive sessions following these meetings, the Compensation Committee considered and discussed management's compensation recommendations for our named executive officers, and the Compensation Committee approved management's recommendations. In determining the annual bonus compensation and long-term incentive compensation payable to each of our named executive officers for 2019, the Compensation Committee reviewed and considered the financial performance of the Company as a whole and each individual business unit compared to 2018 and the Company's compensation to revenue ratio. For the year ended December 31, 2019, the Company's compensation to revenue ratio was 56.9%, which the Compensation Committee viewed as reasonable given the performance of the Company during 2019. The Compensation Committee also considered each named executive officer's contributions to the Company's growth initiatives in 2019; historical compensation information for each named executive officer; the Company's desire to retain and incentivize its named executive officers; the recommendations of Mr. Solomon, our Chief Executive Officer regarding total compensation of our named executive officers (other than the Chief Executive Officer); the financial performance of the Company during 2019 compared to comparable public companies and other companies in the securities industry; a review of public filings and other market data regarding total compensation paid by certain peer investment banks and asset management companies; and base salary, cash bonus, equity awards and all other compensation paid by the compensation peer group.

The Compensation Committee considered the following achievements in 2019 when making its determination of named executive officer compensation:

- 2019 Economic Income revenue increased 4% to a record $944.8 million compared to $909.5 million in 2018.
- Record 2019 investment banking revenues of $352.2 million were up 7% due to higher equities and debt capital markets activity.

- 2019 brokerage revenues were down 3% compared to a market-wide trading drop of 4%. Securities finance, derivatives and special situations trading all posted strong year-over-year revenue growth.
- 2019 management fees of $45.7 million were down 7% year-over-year due to exits from non-core investment strategies during 2019.
- Incentive income rose 95% to $46.2 million in 2019 due to higher performance fees in the healthcare and activist investment strategies.
- The Company made significant progress integrating Quarton International, a leading middle-market financial advisory firm acquired in January 2019.
- The Company continued to improve revenue diversification in its investment banking business.
- The Company positioned the investment management platform towards strategies that are salable, scalable and reflect Cowen's DNA, such as the private healthcare investment management strategy and the sustainable investments strategy.
- The Company exited certain non-core investment strategies, included the real estate business and long/short strategies in the investment management business.

Please refer to the Company's Segment Reporting Note in its financial statements included on pages F-72 to F-77 of its Form 10-K for the year ended December 31, 2019, as filed with the SEC, for reconciliations of the non-GAAP financial measures above to their most directly comparable GAAP measures.

The Compensation Committee also considered the following individual factors in the determinations made for each named executive officer in 2019:

- *Jeffrey Solomon*. Mr. Solomon's compensation reflected his significant contributions regarding the continued enhancement and growth of the Company's business. Economic income revenue increased in 2019 compared to 2018 and Mr. Solomon played a leading role in diversifying the Company's revenues through product and industry diversification. Mr. Solomon also played a key role in improving the Company's capital allocation process and in managing the Company's balance sheet investments to reduce volatility.
- *John Holmes*. Mr. Holmes's compensation reflected significant contributions related to the continued enhancement of the Company's procedures relating to operational risk oversight and management of fixed and variable expenses across the Company. Mr. Holmes oversaw enhanced infrastructure implementation and upgrades. Mr. Holmes played a leading role in the integration of the Quarton International business. Mr. Holmes also played a significant role in managing the Company's business operations.
- *Stephen Lasota*. Mr. Lasota's compensation reflected significant contributions related to the continued enhancement of the Company's financial reporting. Mr. Lasota played a leading role in increasing the Company's access to liquidity and obtaining the Company's first investment grade credit rating. Mr. Lasota played a leading role in the financing transactions completed by the Company in 2019. Mr. Lasota also played a significant role in managing the Company's business operations.

- *Owen Littman*. Mr. Littman's compensation reflected significant contributions related to the continued enhancement of the Company's compliance structure, management of the Company's outstanding litigation and regulatory matters as well as his focus on the Company's legal disclosure and corporate governance procedures. Mr. Littman played a leading role in negotiating the terms of the transactions, including the financings completed by the Company in 2019. Mr. Littman also played a significant role in managing the Company's business operations.

The Compensation Committee approved discretionary annual bonuses for each of our named executive officers after review and consideration of the above factors.

After determining the aggregate cash values of annual bonuses payable to each of our named executive officers in respect of fiscal 2019, the Compensation Committee considered the percentage of the annual bonus compensation that each of our named executive officers would receive in the form of deferred awards. Jeffrey Solomon, our Chief Executive Officer, developed a proposal for the allocation of annual bonus compensation among the cash, deferred cash and equity components for Messrs. Holmes, Lasota and Littman. The Compensation Committee discussed and ultimately approved the proposal and established an allocation for Mr. Solomon. Excluding long-term incentive compensation awards, approximately 70% of our Chief Executive Officer's compensation, approximately 30% of our Chief Financial Officer, Chief Operating Officer, General Counsel's compensation, in all cases in respect of 2019, was paid in deferred cash and equity.

To eliminate the impact that a short-term significant price change in the market value of our Class A common stock may have on the number of RSUs that are intended to be delivered to an employee, the Compensation Committee approved valuing the RSUs using the volume-weighted average price for the 30 trading days ended January 17, 2020, which equaled $16.16 per share. Deferred cash and RSUs relating to fiscal 2019 annual bonuses were awarded to our named executive officers in February 2020. RSUs will vest with respect to 12.5% on December 1, 2020, 12.5% on September 1, 2021, 25% on September 1, 2022, 25% on September 1, 2023 and 25% on September 1, 2024. Deferred cash awards will vest with respect to 12.5% on November 15, 2020, 12.5% on August 15, 2021, 25% on August 15, 2022, 25% on August 15, 2023 and 25% on August 15, 2024.

The Company plans to grant PSA awards to the named executive officers in the second quarter of 2020.

Frequency of Say-on-Pay Vote

Consistent with the preference expressed by our stockholders at our 2017 Annual Meeting of Stockholders, the Board decided that the Company will include an advisory vote to approve the compensation of our named executive officers in our proxy materials every year until the next required advisory vote to approve the frequency of an advisory vote on executive compensation, which will occur no later than our 2023 annual meeting.

Compensation Program and Payments

The Company's compensation program and payments for its executive officers includes base salary, annual bonus compensation and long term incentive compensation.

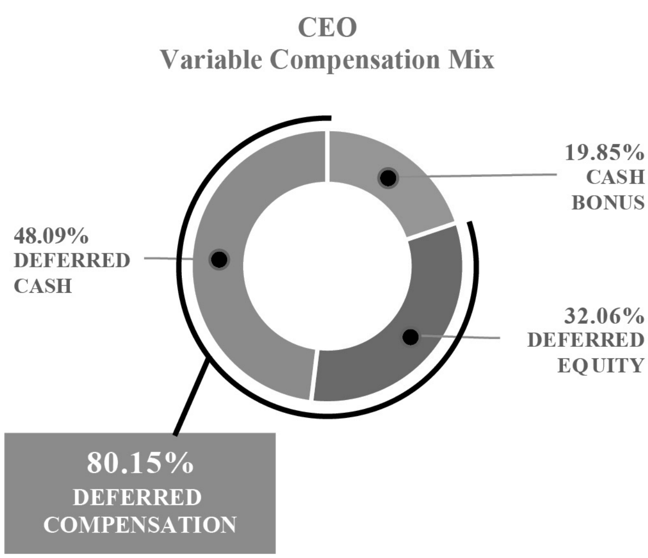
Base Salary

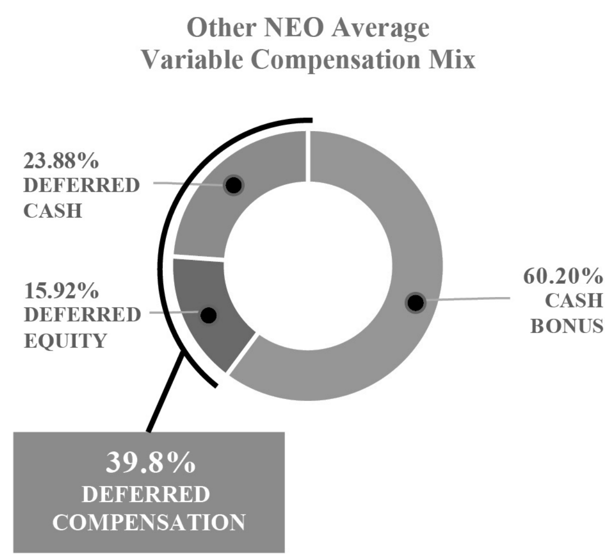
The purpose of base salary is to provide a set amount of cash compensation for each named executive officer that is not variable in nature and is generally competitive with market practices. We seek to limit the base salaries of our named executive officers such that a significant amount of their total compensation is contingent upon the performance of the Company and the named executive officer during the fiscal year. This was consistent with standard practice within the securities and asset management industries and we believe this allowed us to reward performance.

In 2019 Mr. Solomon received a base salary of $950,000 and each of Messrs. Lasota, Holmes and Littman received a base salary of $700,000. Mr. Solomon's base salary was increased to $1,000,000 effective as of January 1, 2020.

Annual Bonus Compensation

A significant portion of total compensation our named executive officers are eligible to receive is in the form of an annual bonus. Annual bonuses are determined based on an informed judgment with final amounts determined at the discretion of the Committee. This is consistent with our view that a significant portion of compensation paid is to be based on the performance of the Company and of each named executive officer. Given the volatility and constantly changing dynamics of the markets, we believe that it makes more sense for our business to determine compensation after year-end by making a careful evaluation of the business rather than establishing formulaic pre-set goals at the start of the year. We also believe this discretionary approach to compensation is consistent with common market practice in the financial services sector. The annual bonus is paid partially in cash and partially in deferred cash and equity. The deferred components of the annual bonus are paid in lieu of, not in addition to, a cash payment and are subject to service-based vesting conditions of approximately 4.5 years. The Compensation Committee believes that the practice of paying a portion of each named executive officer's annual bonus in the form of deferred awards is consistent with compensation practices at our peer companies and is a useful tool to continue aligning the long-term interests of our named executive officers with the interests of our stockholders.





In 2019, Mr. Solomon received an annual bonus of $6,550,000, consisting of a cash bonus of $1,300,000, a deferred equity award of $2,100,000 and a deferred cash award of $3,150,000. In 2019, Mr. Lasota received an annual bonus of $2,000,000, consisting of a cash bonus of $1,212,500, a deferred equity award of $315,000 and a deferred cash award of $472,500. In 2019, Mr. Holmes received an annual bonus of $2,100,000, consisting of a cash bonus of $1,247,500, a deferred equity award of $341,000 and a deferred cash award of $511,500. In 2019, Mr. Littman received an annual bonus of $2,000,000, consisting of a cash bonus of $1,212,500, a deferred equity award of $315,000 and a deferred cash award of $472,500.

Long-Term Incentive Compensation

Long-term incentive compensation includes PSAs granted in 2019 and expected to be granted in 2020. In 2019 the Company made long-term incentive grants of PSAs to the named executive officers, which cover performance periods through December 31, 2021.

2019 PSAs

In April 2019, the Company entered into a performance shares award agreement, or 2019 PSA Agreement, with each of our named executive officers. Under the terms of the 2019 PSA Agreement, each named executive officer was awarded PSAs, based on the attainment of certain performance metrics. Mr. Solomon received 56,000 2019 PSAs and each of Messrs. Lasota, Holmes and Littman received 35,000 2019 PSAs. With respect to Mr. Solomon, the Company provided Mr. Solomon with a letter of intent in 2019 committing to award 30,000 of the 2019 PSAs to Mr. Solomon in 2020. These 30,000 2019 PSAs were granted to Mr. Solomon in early 2020. The 2019 PSAs awarded are subject to a three-year performance period and are scheduled to vest on December 31, 2021. At the end of the performance period, the 2019 PSAs will be multiplied by an applicable percentage (set forth below) based on the Company's AROCE.

2019 PSA Performance Metric Calculation

Economic Operating Income represents Economic Income before depreciation and amortization expenses. This allows us to measure performance of the business without the effects of depreciation and amortization expenses that can vary period to period as a result of acquisitions. As a result, we think this is a more appropriate measure to use for our performance share awards. We set the target AROCE level by looking at our historical performance and forecasted future performance with the objective of improving the overall performance of the business to achieve an AROCE at or above 10% on a consistent basis.

AROCE will be calculated by (i) taking the sum of the Company's Adjusted Economic Operating Income less the payment of dividends on the Company's outstanding preferred stock during each of the fiscal years during the Performance Period divided by the Average Common Equity of the Company during of the each such fiscal year (with the average Common Equity for each fiscal year calculated by adding the Common Equity at the beginning of such fiscal year and the Common Equity at end of such fiscal year and dividing by two) and (ii) dividing the sum by three. For the purposes of calculating AROCE, Economic Operating Income means, with respect to each fiscal year during a performance period, the Company's Economic Operating Income (as reported in the Company's Annual Report on Form 10-K) as adjusted for the following: (i) expenses greater than one million dollars associated with strategic initiatives undertaken by the Company shall be amortized over a five year period as opposed to being expensed in the period in which they are incurred, (ii) adjustments resulting from changes in an existing, or application of a new, accounting principle that is not applied on a fully retrospective basis shall be excluded and (iii) other extraordinary items of income or loss may be excluded at the discretion of the Compensation Committee of the Board. At the end of the performance period, the PSAs will be multiplied by the percentages set forth below based on the Company's AROCE with respect to such performance period:

AROCE Performance Scale

Performance Level*	AROCE	Payout Rate
Below Threshold	Below 8%	0% Payout
Threshold	8%	50% Payout
Target	10%	100% Payout
Above Target	12%	150% Payout
Maximum (capped)	Greater than 15%	200% Payout

* Payout for performance between the Threshold and the Maximum will be interpolated

Setting Compensation

The Compensation Committee is responsible for approving the compensation paid to our named executive officers as well as certain other highly compensated employees. In making compensation determinations, the Compensation Committee reviews information presented to them by the Company's management, compensation peer group information and the recommendations of an independent compensation consultant engaged by the Compensation Committee. The Compensation Committee also reviews our compensation-to-revenue ratio on a quarterly basis and may adjust the targeted compensation-to-revenue ratio in order to maintain the Company's compensation philosophy of aligning the interests of our named executive officers and our stockholders.

Involvement of Executive Officers

Mr. Solomon, our Chief Executive Officer, in consultation with our Chief Financial Officer, our General Counsel, our Chief Operating Officer and employees in our Human Resources department, assists the Compensation Committee in making compensation determinations. These individuals prepare information that is provided to, and reviewed by, the Compensation Committee and the Chief Executive Officer makes recommendations to the Compensation Committee for their consideration. Such information and recommendations include, among other things, the compensation that should be received by the named executive officers (other than himself) and certain other highly compensated employees; financial information regarding the Company that should be reviewed in connection with compensation decisions; the firms to be included in a compensation peer group; and the evaluation and compensation process to be followed by the Compensation Committee. Our Chief Executive Officer is often invited to participate in Compensation Committee meetings; however, he recuses himself from all discussions regarding his own compensation.

Compensation Consultant

The Compensation Committee exercised its sole authority pursuant to its charter to directly engage Pay Governance LLC. Pay Governance LLC was retained by the Compensation Committee to provide advice, analysis, and assessment of alternatives related to the amount and form of executive compensation. Pay Governance LLC reviewed certain Compensation Committee presentation materials (including the peer group data described below) during November and December 2019 and early 2020 at the request of the Compensation Committee. The Compensation Committee meets with Pay Governance LLC from time to time without management present.

The Compensation Committee has assessed the independence of Pay Governance LLC pursuant to SEC and NASDAQ rules and concluded that no conflict of interest exists that would prevent Pay Governance LLC from independently representing the Compensation Committee. The Compensation Committee reviewed and was satisfied with Pay Governance LLC's policies and procedures to prevent or mitigate conflicts of interest and that there were no business or personal relationships between members of the Compensation Committee and the individuals at Pay Governance LLC supporting the Compensation Committee.

Compensation Peer Group

The Compensation Committee, with the assistance of its independent compensation consultant, annually identifies a compensation peer group of firms with which we compete for executive talent. As a middle-market investment bank with material asset management operations, we believe there are few other companies that are directly comparable to Cowen. Our peer group includes investment banks with revenues and market capitalizations similar to ours as well as companies with significant asset management operations. In making compensation decisions for 2019, our Compensation Committee reviewed compensation information for similarly titled individuals at comparable companies gathered from public filings made in 2019 related to 2018 annual compensation and from subscriptions for other market data. In instances where an employee has responsibilities for both the investment banking and investment management businesses, both investment banking and investment management companies were utilized. At the request of the Compensation Committee, Pay Governance LLC provides the Compensation Committee with compensation data from other firms of similar size. For 2019, Pay Governance provided the Compensation Committee with peer group compensation data of B. Riley Financial, Evercore Partners Inc., Greenhill & Co., Inc., Houlihan Lokey, Inc., Jefferies Group, JMP Group, Lazard Ltd., Moelis & Company, Oppenheimer & Co. Inc., Piper Sandler Companies, PJT Partners, Raymond James Financial, and Stifel Financial Corp. The Compensation Committee believes that information regarding pay practices at comparable companies is useful in two respects. First, as discussed above, we recognize that our pay practices must be competitive in our marketplace. By understanding the compensation practices and levels of the Company's peer group, we enhance our ability to attract and retain highly skilled and motivated executives, which is fundamental to the Company's success. Second, this data is one of the many factors the Compensation Committee considers in assessing the reasonableness of compensation. Accordingly, the Compensation Committee reviewed trends among these peer firms and considered this data when determining named executive officers' 2019 annual bonuses and other compensation, but did not utilize the peer firm compensation as a sole benchmark for determining executive compensation.

Relationship of Compensation Policies and Practices to Risk Management

The Board has discussed whether our compensation policies are reasonably likely to have a material adverse effect on our results. The Board noted that, consistent with our performance-based model, many of our employees receive a significant portion of their compensation through discretionary compensation tied to their individual or business unit performance, or a combination thereof. The Board noted that a lower portion of the Company's revenues are derived from proprietary trading businesses and that a significant portion of many employees' compensation is provided in the form of deferred compensation that vests over time, which has the effect of tying the individual employee's long-term financial interest to the firm's overall success. The Board believes that this helps mitigate the risks inherent in our business.

The Board noted that our risk management team continuously monitors our various business groups, the level of risk they are taking and the efficacy of potential risk mitigation strategies. Senior management also monitors risk and the Board is provided with data relating to risk at each of its regularly scheduled meetings. The Chief Risk Officer meets regularly with the Board to present his views and to respond to questions. For these reasons, the Board believes that our overall compensation policies and practices are not likely to have a material adverse effect on us.

Clawback Policy

In March 2015, the Company adopted a clawback policy that allows the Company to recover incentive compensation from any executive officer if that executive officer engages in intentional misconduct that caused or contributed to a restatement of the Company's financial results. In the event of a restatement, a committee consisting of the non-management members of the Board (the "Independent Director Committee") will review the performance-based compensation and annual bonus compensation paid in the form of both cash and equity under the Company's equity and incentive plans to any such executive (the "Awarded Compensation"). If the Independent Director Committee determines, in good faith, that the amount of such performance-based compensation or annual bonus actually paid or awarded to any such executive officer would have been a lower amount had it been calculated based on such restated financial statements (the "Actual Compensation") then the Independent Director Committee shall, subject to certain exceptions, seek to recover for the benefit of the Company the after-tax portion of the difference between the Awarded Compensation and the Actual Compensation. The clawback policy does not apply to equity-based compensation granted before March 16, 2015.

Executive Officer Stock Ownership Guidelines

The Company adopted stock ownership guidelines on March 18, 2015 that require the Company's executive officers to hold Company stock or RSUs within the later of the adoption of the policy or five years of being designated as an executive officer. All named executive officers are in compliance with the stock ownership guidelines, which are set forth below.

Chief Executive Officer	8x Base Salary	$8,000,000
Other Executive Officers	3x Base Salary	$2,100,000

Anti-Hedging Policy

In order to support alignment between the interests of stockholders and employees, the Company maintains an anti-hedging policy that prohibits the "short sale" of Company securities. The policy prohibits employees from trading in options, warrants, puts and calls or similar instruments on Company securities. We allow directors and executive officers to hold up to 50% of their Company stock in a margin account. During 2019, all named executive officers were in compliance with this policy.

Perquisites

The Company provides certain perquisites, including reimbursement of group term life and long-term disability insurance and tax and financial planning expenses to certain members of senior management, including Messrs. Solomon, Lasota and Holmes.

Employment Agreements

Each of our named executive officers is party to an employment agreement with the Company. The Compensation Committee views the employment agreements as an important tool in achieving our compensation objective of recruiting and retaining talented employees and a strong management team. The severance and change-in-control arrangements provided by the employment agreements are intended to retain our named executive officers and to provide consideration for certain restrictive covenants that apply following a termination of employment. None of the Company's executive officers have minimum guaranteed bonuses in their employment agreements.

Tax and Accounting Impact and Policy

The financial and income tax consequences to the Company of individual executive compensation elements are important considerations for the Compensation Committee when analyzing the overall design and mix of compensation. The Compensation Committee seeks to balance an effective compensation package for the executive officers with an appropriate impact on reported earnings and other financial measures.

In designing our compensation and benefit programs, we review and consider the accounting implications of our decisions, including the accounting treatment of amounts awarded or paid to our executives.

In general, Section 162(m) of the Code generally denies a publicly held corporation a deduction for federal income purposes for compensation in excess of $1 million per year paid to certain "covered employees." As in prior years, the Compensation Committee will continue to take into account the tax and accounting implications (including with respect to the expected lack of deductibility under the revised Section 162(m)) when making compensation decisions, but reserves its right to make compensation decisions based on other factors as well if the Compensation Committee determines it is in its best interests to do so. The Compensation Committee may, from time to time, design programs that are intended to further our success, including by enabling us to continue to attract, retain, reward and motivate highly-qualified executives that may not be deductible as a result of the limitations on deductibility under Section 162(m).

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis with management and has recommended to the Board the inclusion of the Compensation Discussion and Analysis in the Form 10-K and in the definitive proxy statement for our 2020 Annual Meeting of Stockholders.

Compensation Committee of the Board of Directors of Cowen Inc.
Brett H. Barth, *Chair*
Lawrence E. Leibowitz
Jerome S. Markowitz

Summary Compensation Table

The following table sets forth compensation information for our named executive officers in 2019.

Name & Principal Position	Year	Salary ($)	Bonus ($)[(1)]	Stock Awards ($)[(2)]	All Other Compensation ($)	Total ($)
Jeffrey M. Solomon	2019	950,000	1,300,000	3,588,250	1,640,563(3)	7,478,814
Chief Executive Officer	2018	950,000	1,875,000	1,053,481	1,210,376	5,088,857
	2017	950,000	725,000	839,377	874,205	3,388,582
Stephen A. Lasota	2019	700,000	1,212,500	854,236	353,358(3)	3,120,094
Chief Financial Officer	2018	500,000	1,625,000	396,485	311,652	2,833,137
	2017	500,000	725,000	411,800	257,472	1,894,272
John Holmes	2019	700,000	1,247,500	926,630	361,137(3)	3,235,267
Chief Operating Officer	2018	500,000	1,675,000	515,193	311,652	3,001,845
	2017	500,000	725,000	411,800	257,472	1,894,272
Owen S. Littman	2019	700,000	1,212,500	890,424	351,955(3)	3,154,879
General Counsel and	2018	500,000	1,650,000	396,485	311,652	2,858,137
Secretary	2017	500,000	725,000	411,800	257,472	1,894,272

(1) The amounts in this column reflect cash bonuses paid to the named executive officers in 2020 in respect of performance during the 2019 year.

(2) The entries in the stock awards column reflect the aggregate grant date value of the RSU (including the deferred equity component of the 2019 annual bonus) and PSA awards granted in 2019 in connection with 2018 performance in accordance with FASB ASC 718, disregarding for this purpose the estimate of forfeitures related to service-based vesting conditions. The value of the PSA awards reflects the grant date value of the awards based on the target level of performance, which is less than the maximum possible value. The grant date value of the PSA awards assuming that the highest level of the applicable performance conditions will be achieved is $1,710,240 for Mr. Solomon and $1,068,900 for Messrs. Lasota, Holmes and Littman, respectively. For information on the valuation assumptions with respect to awards made, refer to the Company's Share-Based Compensation and Employee Ownership Plans Note in its financial statements included in its Form 10-K for the year ended December 31, 2019, as filed with the SEC. With respect to Mr. Solomon, the Company provided Mr. Solomon with a letter of intent in 2019 committing to award 30,000 of the 2019 PSAs to Mr. Solomon in 2020. These 30,000 2019 PSAs were granted to Mr. Solomon in early 2020 and are reflected in the Stock Awards column for 2019.

(3) Other compensation includes:

Other Compensation ($)	Jeffrey M. Solomon	Stephen A. Lasota	John Holmes	Owen S. Littman
Vested Deferred Cash Awards	1,579,213	346,163	357,746	351,955
Tax and Financial Planning	61,350	7,195	3,391	—

Grants of Plan-Based Awards

The following table provides information regarding grants of compensation-related, plan-based awards made to the named executive officers during fiscal year 2019. These awards are also included in the Summary Compensation Table above.

	Grant Date	Corporate Action Date	Estimated Future Payouts Under Equity Incentive Plan Awards[1] Threshold (#)	Target (#)	Maximum (#)	All Other Stock Awards: Number of Shares of Stock or Units (#)[2]	Grant Date Fair Value of Stock Awards ($)[3]
Jeffrey M. Solomon[4]	2/20/2019	1/9/2019				160,867	2,733,130
	4/1/2019	2/12/2019	23,000	56,000	112,0000		855,120
Stephen A. Lasota	2/20/2019	1/9/2019				18,822	319,786
	4/1/2019	2/12/2019	17,500	35,000	70,000		534,450
John Holmes	2/20/2019	1/9/2019				23,083	392,180
	4/1/2019	2/12/2019	17,500	35,000	70,000		534,450
Owen S. Littman	2/20/2019	1/9/2019				20,952	355,974
	4/1/2019	2/12/2019	17,500	35,000	70,000		534,450

(1) The amounts reported in these columns represent Performance RSUs that are scheduled to vest in three tranches based on the attainment of AROE and relative TSR targets for the applicable performance period, subject to the named executive officer's continued employment through the applicable vesting date. These columns represent the number of Performance RSUs that vest at threshold achievement, target achievement and maximum achievement of the performance metrics applicable to such awards. At or below the threshold performance level, no shares will be paid out. See "Compensation Discussion and Analysis—Long-Term Incentive Compensation" above for a detailed description of the Performance RSU program.

(2) RSUs vest with respect to 12.5% on September 1, 2019, 12.5% on May 15, 2020, 25% on May 15, 2021, 25% on May 15, 2022 and 25% on May 15, 2023.

(3) The entries in the "Grant Date Fair Value of Stock Awards" column reflect the aggregate grant date fair value of the awards granted in 2019 computed in accordance with FASB ASC 718, disregarding for this purpose the estimate of forfeitures related to service-based vesting conditions. The value of the PSA awards reflects the grant date value of the awards based on the target level of performance, which is less than the maximum possible value. The grant date value of the PSA awards assuming that the highest level of the applicable performance conditions will be achieved is $1,710,240 for Mr. Solomon and $1,068,900 for Messrs. Lasota, Holmes and Littman, respectively. For information on the valuation assumptions with respect to awards made, refer to the Company's Share-Based Compensation and Employee Ownership Plans Note in its financial statements included in its Form 10-K for the year ended December 31, 2019, as filed with the SEC.

(4) With respect to Mr. Solomon, the Company provided Mr. Solomon with a letter of intent in 2019 committing to award 30,000 of the 2019 PSAs to Mr. Solomon in 2020. These 30,000 2019 PSAs were granted to Mr. Solomon in early 2020 and were taken into account in the Stock Awards column of the Summary Compensation Table for 2019.

Narrative Disclosure Relating to Summary Compensation Table and Grants of Plan-Based Awards Table

Employment Agreements

In 2019, the Company was party to an employment agreement with Mr. Solomon, dated as of May 31, 2012, as amended on November 30, 2017, and employment agreements with Messrs. Holmes, Lasota and Littman, dated as of August 2, 2012, each as amended on April 24, 2015 (the "2019 Employment Agreements"). The 2019 Employment Agreements provide for the following material terms:

- An initial term that expired April 30, 2016. Following the expiration of the initial term, the terms of the agreements automatically extend for successive one-year terms, unless either party elects not to extend the term.

- A minimum annual base salary of $950,000 for Mr. Solomon and $450,000 for Messrs. Holmes, Lasota, and Littman. Each named executive officer is also eligible to receive an annual performance-based bonus as determined by the Compensation Committee. The 2019 Employment Agreements provide that the Company may pay all or a portion of any annual bonus in the form of restricted securities, other stock or security-based awards, deferred cash, or other deferred compensation. The 2019 Employment Agreements do not provide for a minimum annual bonus.

- With respect to Mr. Solomon, his agreement provides that, if Mr. Solomon's employment is terminated by us without cause (including a decision by us not to renew the employment agreement upon the expiration of the then-current term), by Mr. Solomon for good reason, or as a result of Mr. Solomon's death or disability (as such terms are defined in the agreement), Mr. Solomon will, subject to his execution of a general release in our favor, be entitled to the following: (i) any unpaid annual bonus with respect to the previous completed fiscal year, (ii) a prorated annual bonus for the fiscal year of termination, calculated based on the average bonus paid for the two years immediately preceding the year of termination and the timing of such termination, (iii) in the case of a termination by us without cause or by Mr. Solomon for good reason only, a lump sum cash payment in an amount equal to two and one-half times the sum of his base salary and the average annual bonus paid for the two years immediately preceding his termination, provided that the payment under clause (iii) will not be less than $3,250,000 and not more than $5,000,000, (iv) immediate vesting of all equity awards and unvested deferred compensation, and (v) a cash payment equal to 24 months' COBRA premiums. In the event that Mr. Solomon breaches the restrictive covenants described below following a termination of his employment, he will be required to repay any payments or benefits received in connection with such termination.

- With respect to each of Messrs. Holmes, Lasota and Littman, each of their respective agreements provides that, if the applicable executive's employment is terminated by us without cause (including a decision by us not to renew the employment agreement upon the expiration of the then-current term), by the executive for good reason, or as a result of the executive's death or "disability" (as such terms are defined in the agreements), each executive will, subject to his execution of a general release in our favor, be entitled to the following: (i) any unpaid annual bonus with respect to the previous completed fiscal year, (ii) a prorated annual bonus for the fiscal year of termination, calculated based on the average bonus paid for the two years immediately preceding the year of termination and the timing of such termination, (iii) in the case of a termination by us without cause or by the executive for good reason only, a lump sum cash payment in an amount equal to one and one-half times the average amount of compensation reflected on the executive's Form W-2 from the Company for the two years immediately preceding his termination, provided that the payment under clause (iii) will not be more than $1,500,000, and provided further, that if such termination occurs in connection with or following a change in control (as defined in the agreement), instead of the lump sum cash payment described above, the executive shall be entitled to a lump sum cash payment in an amount equal to two and one-half times the average amount of compensation reflected on the executive's Form W-2 from the Company for the two years immediately preceding such termination, provided that such lump sum cash payment will not be more than $2,500,000, (iv) immediate vesting of all equity awards and unvested deferred compensation, and (v) a cash payment equal to 24 months' COBRA premiums. In the event that the executive breaches the restrictive covenants described below following a termination of his employment, he will be required to repay any payments or benefits received in connection with such termination.

- In the event that the executive retires after attaining age 57.5 (or age 55, in the case of Mr. Solomon) and provides the Company with at least 90 days' advance notice, all outstanding equity awards and unvested deferred compensation then held by the executive will continue to vest in accordance with their terms as if the executive had continued to be an active employee of the Company, provided he does not engage in competitive activity at any time prior to the applicable vesting date and refrains from interfering with the Company's employees and customers for 12 months following his retirement.

- Customary confidentiality and invention assignment covenants, as well as an indefinite mutual non-disparagement covenant. In addition, these executives have agreed not to compete with, or solicit customers or employees of, the Company during the term of the employment agreement and for a period of 180 days for Mr. Solomon and 120 days for Messrs. Holmes, Lasota and Littman.

2020 Employment Agreements

On January 31, 2020, the Compensation Committee approved amended and restated employment agreements with Messrs. Solomon, Holmes, Lasota and Littman (the "2020 Employment Agreements"). The 2020 Employment Agreements include the following material changes from the 2019 Employment Agreements:

- Pursuant to the terms of Mr. Solomon's amended and restated agreement (the "Solomon Agreement"), Mr. Solomon's base salary will be increased by $50,000 to $1,000,000. The term of Mr. Solomon's employment with the Company will continue through December 31, 2020, with automatic one-year extensions of the term unless either the Company or Mr. Solomon provides prior written notice of non-renewal. Pursuant to the Solomon Agreement, upon or after Mr. Solomon reaches age 55, he may provide the Company 90 days' notice of his intention to retire, or notify the Company of his intention to transition to senior advisor status pursuant to the terms of a separate Senior Advisor Agreement. Upon Mr. Solomon's retirement or transition to Senior Advisor status, the Solomon Agreement and Senior Advisor Agreement provide that Mr. Solomon's outstanding equity awards and unvested deferred compensation will continue to vest in accordance with the terms of the applicable awards, subject to Mr. Solomon's continued compliance with certain non-competition and non-interference restrictions generally arising under the Company's form of Confidentiality, Non-Interference, and Invention Assignment Agreement (subject to certain exceptions for personal or family investing or non-competitive investment activity).

- Pursuant to the Solomon Agreement, if Mr. Solomon's employment is terminated by the Company without Cause or Mr. Solomon resigns for Good Reason (as such terms are defined in the Solomon Agreement) prior to, in connection with or following a Change in Control (as described in the Solomon Agreement), then subject to Mr. Solomon executing and not revoking a release of claims, he will be entitled to a lump sum severance payment equal to two and one-half times the sum of (x) Mr. Solomon's base salary on the date of termination plus (y) the average of the highest annual bonuses paid to Mr. Solomon in two of the three calendar years preceding his date of termination, except that the foregoing severance amount will not be less than $3,250,000 or greater than $5,000,000 if Mr. Solomon's termination occurs prior to a Change in Control (such payments will continue to be subject to the existing Internal Revenue Code Section 280G "modified cutback" provisions).

- If Mr. Solomon elects to transition to Senior Advisor status upon reaching age 55, the terms of Mr. Solomon's service as a Senior Advisor will be governed by the Senior Advisor Agreement. In particular, Mr. Solomon's service as a Senior Advisor will continue until the earliest of (i) 15 days following Mr. Solomon's written notice that he is terminating as a Senior Advisor, (ii) the second anniversary of the date he commences Senior Advisor status, (iii) the date of Mr. Solomon's death or disability and (iv) the date Mr. Solomon is terminated by the Company for Cause. In consideration for providing Senior Advisor services, Mr. Solomon will receive a base salary at an annualized rate of $150,000 and will be entitled to secretarial and administrative support. Mr. Solomon will also be entitled to receive certain additional benefits while a Senior Advisor, including office space (or, at the Company's election, payment of up to $60,000 per year for office space), financial planning services at the Company's expense and continued payment by the Company of life insurance premiums.

- Pursuant to the terms of the 2020 Employment Agreements of Messrs. Holmes, Lasota and Littman (collectively, the "Executive Agreements"), each executive's term of employment with the Company will continue through December 31, 2020, with automatic one-year extensions of the term unless either the Company or the executive provides written notice of non-renewal.

- Pursuant to the Executive Agreements, if the executive's employment is terminated by the Company without Cause or the executive resigns for Good Reason (each as described in the Executive Agreements) prior to a Change in Control (as described in the Executive Agreements), the executive will receive a lump sum cash payment equal to one and one-half times the sum of (x) the executive's base salary in effect at the end of the calendar year immediately preceding termination plus (y) the average of the highest annual bonuses paid to the executive in two of the three calendar years preceding his date of termination (such sum, the "Severance Amount"), except that the foregoing severance amount will not be greater than $1,500,000. Pursuant to the Executive Agreements, if the executive's employment is terminated by the Company without Cause or the executive resigns for Good Reason in connection with or following a Change in Control, the executive will receive a lump sum cash payment equal to two and one-half times the Severance Amount, which lump sum will not be subject to a cap. The Executive Agreements require the executives to execute and not revoke a release of claims as a condition to receiving severance payments (such payments will continue to be subject to the existing Internal Revenue Code Section 280G "modified cutback" provisions).

2010 Equity and Incentive Plan

Effective as of June 7, 2010, the Company adopted the 2010 Equity and Incentive Plan (the “2010 Plan”). The 2010 Plan expires in June 2020. At the Company’s next Annual Meeting of Stockholders, which is expected to take place in June 2020, the Company plans to ask its stockholders to approve a new equity and incentive plan. If approved, the new equity and incentive plan will be adopted shortly after the Annual Meeting.

The 2010 Plan initially reserved 1,875,000 shares of Class A common stock for delivery to participants and their beneficiaries under the 2010 Plan, subject to adjustment in the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off, or other similar change in capitalization or event. Additionally, commencing on January 1, 2011 and on the first day of each fiscal year of the Company thereafter during the term of the 2010 Plan, additional shares of Class A common stock representing seven and one-half percent (7.5%) of our shares of Class A common stock outstanding on such date, less shares then available for issuance under the 2010 Plan, will automatically become available for grant or settlement of awards. Shares delivered under the 2010 Plan may be either treasury shares or newly issued shares. For purposes of determining the remaining ordinary shares available for grant under the 2010 Plan, if any shares subject to an award are forfeited, cancelled, exchanged, or surrendered, or if an award terminates or expires without a distribution of shares, those shares will again be available for issuance under the 2010 Plan. However, shares of stock that are exchanged by a grantee or withheld by us as full or partial payment in connection with any award under the 2010 Plan, as well as any shares of stock exchanged by a grantee or withheld by us to satisfy the tax withholding obligations related to any award under the 2010 Plan, will not be available for subsequent awards under the 2010 Plan.

The 2010 Plan provides that generally, unless otherwise determined by the Compensation Committee or as set forth in an award or employment agreement, in the event of a change in control (as defined in the 2010 Plan), all outstanding awards shall become fully vested and exercisable and all restrictions, forfeiture conditions or deferral periods on any outstanding awards shall immediately lapse, and payment under any awards shall become due. The Compensation Committee has determined that all awards to our named executive officers under the 2010 Plan will vest on a double-trigger basis in the event of a change in control.

Outstanding Equity Awards at 2019 Fiscal Year End

The following table contains certain information regarding equity awards held by the named executive officers as of December 31, 2019.

	Stock Awards			
	Number of Shares that Have Not Vested (#)	Market Value of Shares that Have Not Vested ($)[1]	Equity Incentive Plan Awards: Number of Unearned Units That Have Not Vested (#)	Equity Incentive Plan Awards: Market Value of Unearned Units That Have Not Vested ($)[1]
Jeffrey M. Solomon				
2016 RSU Award[2]	34,747	547,265	—	—
2016 PSA Award[3]	—	—	23,333	367,498
2017 RSU Award[4]	22,083	347,807	—	—
2017 Incentive Award[5]	17,904	281,988	—	—
2018 RSU Award[6]	36,836	580,167	—	—
2019 RSU Award[7]	140,759	2,216,954	—	—
2019 PSA Award[8]	—	—	28,000	441,000
Stephen A. Lasota				
2016 RSU Award[2]	5,195	81,821	—	—
2016 PSA Award[3]	—	—	20,000	315,000
2017 RSU Award[4]	7,650	120,488	—	—
2017 Incentive Award[5]	13,100	206,325	—	—
2018 RSU Award[6]	9,713	152,980	—	—
2018 Incentive Award[9]	8,993	141,640	—	—
2019 RSU Award[7]	16,470	259,403		
2019 PSA Award[8]	—	—	17,500	275,625
John Holmes				
2016 RSU Award[2]	5,195	81,821	—	—
2016 PSA Award[3]	—	—	20,000	315,000
2017 RSU Award[4]	7,650	120,488	—	—
2017 Incentive Award[5]	13,100	206,325	—	—
2018 RSU Award[6]	9,713	152,980	—	—
2018 Incentive Award[9]	17,986	283,280	—	—
2019 RSU Award[7]	20,198	318,119		
2019 PSA Award[8]	—	—	17,500	275,625
Owen S. Littman				
2016 RSU Award[2]	5,195	81,821	—	—
2016 PSA Award[3]	—	—	20,000	315,000
2017 RSU Award[4]	7,650	206,325	—	—
2017 Incentive Award[5]	13,100	120,488	—	—
2018 RSU Award[6]	9,713	152,980	—	—
2018 Incentive Award[9]	8,993	141,640	—	—
2019 RSU Award[7]	18,333	288,745		
2019 PSA Award[8]	—	—	17,500	275,625

(1) The values in the column are based on the $15.75 closing price of our Class A common stock on the NASDAQ Global Select Market on December 31, 2019.

(2) RSUs awarded on February 24, 2016 vest with respect to 25% on March 10, 2017, 25% on March 10, 2018, 25% on March 10, 2019 and 25% on March 10, 2020.

(3) PSAs awarded on March 15, 2016 will, to the extent earned, vest with respect to 33⅓% on March 8, 2019, 33⅓% on March 10, 2020 and 33⅓% on December 31, 2020. These PSAs are scheduled to vest in three tranches based on the attainment of AROE and relative TSR targets for the applicable performance period, subject to the named executive officer's continued employment through the applicable vesting date. In accordance with SEC rules, the number of unearned PSAs is reported in the "Equity Incentive Plan Awards: Market Value of Unearned Units That Have Not Vested" column based on achieving threshold performance goals (*i.e*., 40% of target).

(4) RSUs awarded on February 27, 2017 vest with respect to 15% on June 1, 2017, 10% on June 1, 2018, 25% on June 1, 2019, 25% on June 1, 2020 and 25% on June 1, 2021.

(5) RSUs awarded on February 27, 2017 will vest on March 10, 2021.

(6) RSUs awarded on February 21, 2018 will vest with respect to 25% on December 1, 2018, 25% on December 1, 2019, 25% on December 1, 2020 and 25% on December 1, 2021.

(7) RSUs awarded on February 20, 2019 vest with respect to 12.5% on September 1, 2019, 12.5% on May 15, 2020, 25% in May 15, 2021, 25% on May 15, 2022 and 25% on May 15, 2023.

(8) PSAs awarded on April 1, 2019 will, to the extent earned, vest on December 31, 2021. These PSAs are scheduled to vest based on the attainment of AROCE target for the applicable performance period, subject to the named executive officer's continued employment through the applicable vesting date. In accordance with SEC rules, the number of unearned PSAs is reported in the "Equity Incentive Plan Awards: Market Value of Unearned Units That Have Not Vested" column based on achieving threshold performance goals (*i.e*., 50% of target).

(9) RSUs awarded on March 29, 2018 will vest on March 10, 2022.

Option Exercises and Stock Vested

The following table sets forth certain information concerning stock vested during the year ended December 31, 2019. No stock options were exercised by any of the named executive officers in 2019.

Name	Number of Shares Acquired on Vesting	Value Realized on Vesting ($)[(1)]
Jeffrey M. Solomon	105,431	1,569,092
Stephen A. Lasota	30,870	478,302
John Holmes	31,403	486,622
Owen S. Littman	31,137	482,470

(1) The value realized upon vesting of the stock awards is based on the $14.45 closing sale price of our Class A common stock on March 8, 2019, the $15.15 closing sale price of our Class A common stock on May 31, 2019, the $16.71 closing sale price of our Class A common stock on June 10, 2019, the $15.61 closing sale price of our Class A common stock on August 30, 2019 and the $15.32 closing sale price of our Class A common stock on November 29, 2019, the applicable vesting dates of the awards.

Potential Payments Upon Termination or Change in Control

Pursuant to the employment agreements with our named executive officers, upon certain terminations of employment or a change in control of the Company, our named executive officers are entitled to certain payments of compensation and benefits as described above under “Narrative Disclosure Relating to Summary Compensation Table and Grants of Plan-Based Awards Table — Employment Agreements.” The table below reflects the amount of compensation and benefits that would have been payable to each named executive officer in the event that the named executive officer had experienced the following events as of December 31, 2019: (i) a termination for cause or resignation, or voluntary termination, (ii) involuntary termination, (iii) an involuntary termination that occurs in connection with a change in control, (iv) termination by reason of an executive’s death, or (v) termination by reason of an executive’s disability. The amounts reflected in the table below are based on the terms of the 2019 Employment Agreements, which were in effect on December 31, 2019.

			Triggering Events			
Name	**Type of Payment**	**Voluntary Termination ($)**	**Involuntary Termination ($)**	**Involuntary Termination in Connection with a Change in Control(4)(5) ($)**	**Death($)**	**Disability ($)**
Jeffrey M. Solomon	*Cash Severance(1)*	—	15,238,229	15,238,229	10,238,229	10,238,229
	Equity Acceleration(2)	—	5,774,927	5,774,927	5,774,927	5,774,927
	Total	**—**	**21,013,156**	**21,013,156**	**16,013,156**	**16,013,156**
Stephen A. Lasota	*Cash Severance(3)*	—	4,299,584	5,299,584	2,799,584	2,799,584
	Equity Acceleration(2)	—	2,301,406	2,301,406	2,301,406	2,301,406
	Total	**—**	**6,600,990**	**7,600,990**	**5,100,990**	**5,100,990**
John Holmes	*Cash Severance(3)*	—	4,477,369	5,477,369	2,977,369	2,977,369
	Equity Acceleration(2)	—	2,501,762	2,501,762	2,501,762	2,501,762
	Total	**—**	**6,979,131**	**7,979,131**	**5,479,131**	**5,479,131**
Owen S. Littman	*Cash Severance(3)*	—	4,382,969	5,382,969	2,882,969	2,882,969
	Equity Acceleration(2)	—	2,330,748	2,330,748	2,330,748	2,330,748
	Total	**—**	**6,713,717**	**7,713,717**	**5,213,717**	**5,213,717**

(1) Includes the value of a cash payment equal to the sum of (i) the average of Mr. Solomon’s 2017 and 2018 annual bonuses, comprised of cash bonus, deferred cash and deferred equity ($5,542,500), (ii) two and one-half times the sum of Mr. Solomon’s 2017 base salary ($950,000) and the average of Mr. Solomon’s 2017 and 2018 annual bonuses (subject to a $3.25 million minimum and a $5 million limit), (iii) a cash payment equal to 24 months of COBRA premiums, and (iv) the value of acceleration of unvested deferred cash compensation ($4,608,739, including interest accrued through December 31, 2019), which is payable to Mr. Solomon pursuant to the terms of his employment agreement. Mr. Solomon is not entitled to enhanced cash severance payments if his employment is involuntarily terminated in connection with or following a change in control. Had Mr. Solomon experienced a termination by reason of death or disability, he would have been entitled to a cash payment equal to the sum of the amounts described under clauses (i), (iii), and (iv) above.

(2) Includes the value of acceleration of all unvested shares of restricted stock and all performance share and PSA awards, based on a price of $15.75 per share, which was the closing price of our Class A common stock on the NASDAQ Global Select Market on December 31, 2019. Pursuant to their employment agreements and the applicable award agreements, the executives are entitled to immediate vesting of outstanding equity awards upon an involuntary termination or a termination by reason of death or disability, except for the PSAs granted in March 2016 and April 2019, which will, upon an involuntary termination, remain outstanding until the completion of the applicable performance period without regard to the continued service requirement and will vest based on the actual level of the attainment of the applicable performance goals. For reporting purposes, target level performance was assumed. In addition, pursuant to the terms of the applicable award agreements, unvested equity awards will vest in the event that a change in control occurs and, following such change in control, the executive's compensation or job responsibilities are reduced materially or the equity securities of the Company cease to trade on a national securities exchange, except for the PSAs granted in March 2016 and April 2018, which will vest based on the target level of the applicable performance goals, subject to the named executive officer's continued employment through the applicable vesting date.

(3) Includes the value of a cash payment equal to the sum of (i) the average of the 2017 and 2018 annual bonus comprised of cash bonus, deferred cash and deferred equity ($1,900,000, $2,000,000 and $1,950,000) for Messrs. Lasota, Holmes and Littman, respectively), (ii) one and one-half times the average of 2017 and 2018 compensation for each of Mr. Lasota, Mr. Holmes and Mr. Littman as reported on Form W-2 (subject to a $1.5 million limit), (iii) a cash payment equal to 24 months of COBRA premiums ($57,709 for Mr. Lasota, $56,744 for Mr. Holmes and $51,719 for Mr. Littman), and (iv) the value of acceleration of unvested deferred cash compensation ($841,875, $920,625 and $881,250) for each of Mr. Lasota, Mr. Holmes and Mr. Littman, respectively, including interest accrued through December 31, 2019), which is payable to Messrs. Lasota, Holmes and Littman pursuant to the terms of their employment agreements. Had Mr. Lasota, Mr. Holmes or Mr. Littman experienced a termination by reason of death or disability, each executive would have been entitled to a cash payment equal to the sum of the amounts described under clauses (i), (iii), and (iv) above.

(4) Includes the value of the same cash severance payments that would have been payable to Messrs. Lasota, Holmes and Littman in connection with an involuntary termination of employment (as described above), except that the applicable multiplier for average W-2 compensation will be two and one-half times instead of one and one-half times, and the applicable limit will be $2.5 million instead of $1.5 million. Pursuant to their employment agreements, Messrs. Lasota, Holmes and Littman will be entitled to receive this enhanced cash severance payment in the event of an involuntary termination of employment in connection with or following a change in control. In addition, pursuant to the terms of the applicable award agreements, each executive's unvested deferred cash compensation will vest in the event that a change in control occurs and, following such change in control, the executive's compensation or job responsibilities are reduced materially or the equity securities of the Company cease to trade on a national securities exchange.

(5) Under the employment agreements with Messrs. Solomon, Lasota, Holmes and Littman, severance payable following a change in control would have been subject to a so-called "modified golden parachute cutback" provision pursuant to which "excess parachute payments" would be reduced to the extent such reduction would result in greater after-tax benefits. The amounts disclosed above represent the full amounts payable, without application of any cutback.

PAY RATIO

Pursuant to Item 402(u) of Regulation S-K, presented below is the ratio of annual total compensation of Mr. Solomon, our Chief Executive Officer as of December 31, 2019, to the median annual total compensation of all our employees (excluding our Chief Executive Officer).

To determine the median annual total compensation of all our employees (excluding our Chief Executive Officer), a median employee was identified from the population of our 1,291 employees as of December 31, 2019. We did not include independent contractors in our determination.

In order to identify our median employee, we ranked each of our employees (other than our Chief Executive Officer) based on 2019 awarded compensation. For this purpose, 2019 awarded compensation was composed of each employee's (i) salary earned during 2019, (ii) annual cash bonus paid in respect of 2019 performance, (iii) deferred cash awards granted in respect of 2019 performance and (iv) and RSUs granted in respect of 2019 performance. In determining 2019 awarded compensation, we did not apply any cost-of-living adjustments or annualize any partial-year compensation.

Once we identified the median employee, we determined that individual's annual total compensation in accordance with the requirements for determining total compensation in the Summary Compensation Table.

The 2019 annual total compensation for Mr. Solomon, our Chief Executive Officer, as reported in the Summary Compensation Table in this Form 10-K, was $7,478,814. The 2019 annual total compensation for our median employee, determined in accordance with the requirements for determining total compensation in the Summary Compensation Table, was $185,000. The ratio of our Chief Executive Officer's annual total compensation to the annual total compensation of our median employee for 2019 is 40 to 1. We believe that this ratio represents a reasonable estimate calculated in a manner consistent with Item 402(u).

The information disclosed in this section was developed and is provided solely to comply with specific, new legal requirements. We do not use this information in managing our Company. We do not believe this information provides stockholders with a useful mechanism for evaluating our management's effectiveness, operating results, or business prospects, nor for comparing our company with any other company in any meaningful respect.

COMPENSATION PROGRAM FOR NON-EMPLOYEE DIRECTORS FOR 2019

Director Compensation Table

The following table sets forth compensation information for our non-employee directors for the year ended December 31, 2019.

Director	Fees Earned Paid in Cash ($)	Stock Awards ($)[1]	All Other Compensation ($)	Total
Brett H. Barth	--	220,000	--	220,000
Katherine E. Dietze	115,000	115,000	--	230,000
Steven Kotler	105,000	105,000	--	210,000
Lawrence E. Leibowitz	50,000	150,000	--	200,000
Jerome S. Markowitz[2]	--	250,000	--	250,000
Jack H. Nusbaum[2]	--	200,000	--	200,000
Margaret L. Poster[3]	131,250	100,000		231,250
Douglas A. Rediker	--	200,000	--	200,000

(1) Represents the aggregate grant date fair value calculated in accordance with generally accepted accounting principles, disregarding for this purpose the estimate of forfeitures related to service-based vesting conditions. For information on the valuation assumptions with respect to awards made, refer to the Company's Share-Based Compensation and Employee Ownership Plans Note in its financial statements included in its Form 10-K for the year ended December 31, 2019, as filed with the SEC on March 4, 2020. As of December 31, 2019, all outstanding stock awards held by our directors are fully vested.

(2) In 2019, Messrs. Barth, Markowitz, Nusbaum and Rediker elected to receive 100% of their director compensation in RSUs. Please see "Narrative Disclosure Relating to Director Compensation Table" below for additional information regarding non-employee director compensation in 2019.

(3) Ms. Poster received $31,250 for her Board service from April 2019 through June 2019.

Narrative Disclosure Relating to Director Compensation Table

In 2019, each of our non-employee directors received annual compensation of $200,000. Mr. Markowitz, the Company's Lead Director, received additional compensation of $50,000. Ms. Dietze, the Chair of the Audit Committee received additional compensation of $30,000 per annum. Mr. Barth, the Chair of the Compensation Committee, received additional compensation of $20,000 per annum, and Mr. Kotler, the Chair of the Nominating and Corporate Governance Committee received additional compensation of $10,000 per annum. For 2019, a minimum of 50% of a director's compensation was paid in the form of RSUs. In addition, each director was entitled to elect to receive any amount in excess of 50% of 2019 compensation in the form of RSUs. The RSUs were valued using the volume-weighted average price for the 30-day period prior to our 2019 annual meeting of stockholders. RSUs are vested and not subject to forfeiture; however, except in the event of death, the underlying shares of Class A common stock will not be delivered to the holder for at least one year from the date of grant. These equity awards are intended to further align the interests of our directors with those of our stockholders. Directors who also are employed as executive officers of the Company receive no additional compensation for their service as a director.

Compensation Committee Interlocks and Insider Participation

The Compensation Committee is comprised entirely of non-employee directors, none of whom has ever been an officer or employee of the Company and none of whom had any related person transaction involving the Company. None of our executive officers (1) served as a member of the board of directors or compensation committee of any other entity that had one or more of its executive officers serving as a member of our Compensation Committee or (2) served as a member of the compensation committee of any other entity that had one or more of its executive officers serving as a member of our Board during 2019.

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

The following table shows how many shares of our Class A common stock were beneficially owned as of April 28, 2020, by each of our directors and named executive officers and by all of our directors and named executive officers as a group. Unless otherwise noted, the stockholders listed in the table have sole voting and investment power with respect to the shares owned by them.

Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class
Brett H. Barth	77,332(1)	*
Katherine E. Dietze	12,007(2)	*
Gregg Gonsalves	—	*
Steven Kotler	2,500(3)	*
Lawrence E. Leibowitz	8,000(4)	*
Jerome S. Markowitz	132,461(5)	*
Jack H. Nusbaum	101,262(6)	*
Margaret S. Poster	—(7)	*
Douglas A. Rediker	—(8)	*
Jeffrey M. Solomon	502,851	1.8%
John Holmes	115,575	*
Stephen A. Lasota	159,931	*
Owen S. Littman	111,128(9)	*
All directors and executive officers 13 as a group (persons)	1,223,047	4.4%

* corresponds to less than 1% of Cowen Inc. Class A common stock,

(1) The amount presented does not include 13,720 fully-vested RSUs that will be delivered to Mr. Barth upon the one-year anniversary of the grant date.
(2) The amount presented does not include 55,582 fully-vested RSUs that will be delivered to Ms. Dietze upon her retirement from the Board.
(3) The amount presented does not include 53,650 fully-vested RSUs that will be delivered to Mr. Kotler upon his retirement from the Board.
(4) The amount presented does not include the 18,604 fully-vested RSUs that will be delivered to Mr. Leibowitz upon his retirement from the Board.
(5) The amount presented does not include 15,591 fully-vested RSUs that will be delivered to Mr. Markowitz upon the one-year anniversary of the grant date.
(6) The amount presented does not include 12,473 fully-vested RSUs that will be delivered to Mr. Nusbaum upon the one-year anniversary of the grant date.
(7) The amount presented does not include 6,237 fully-vested RSUs that will be delivered to Ms. Poster upon the one-year anniversary of the grant date.
(8) The amount presented does not include 41,057 fully-vested RSUs that will be delivered to Mr. Rediker upon his retirement from the Board.
(9) Includes 275 shares held in custodial accounts on behalf of Mr. Littman's children.

Beneficial Owners of More than Five Percent of Our Class A Common Stock

Based on filings made under Section 13(d) and Section 13(g) of the Securities Exchange Act of 1934, as of April 28, 2020, the persons known by us to be beneficial owners of more than 5% of our Class A common stock were as follows:

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class
Zazove Associates, LLC[1] 1001 Tahoe Boulevard Incline Village, NV 89451	2,642,000	9.54%
FMR LLC[2] 245 Summer Street Boston, MA 02210	2,309,425	8.34%
BlackRock, Inc.[3] 55 East 52nd Street New York, NY 10055	2,246,204	8.11%
Philadelphia Financial Management of San Francisco, LLC[4] 450 Sansome Street, Suite 1500 San Francisco, CA 94111	1,844,985	6.66%
Vanguard Group Inc. [5] P.O. Box 2600 V26 Valley Forge, PA 19482-2600	1,519,422	5.49%

(1) This information is based on a Schedule 13G filed with the SEC on January 6, 2020 by Zazove Associates, LLC.

(2) This information is based on a Schedule 13G filed with the SEC on February 7, 2020 by FMR LLC. FMR reported that it has sole voting power as to 1,918,275 shares and sole dispositive power as to 2,309,425 shares.

(3) This information is based on a Schedule 13G filed with SEC on February 5, 2020 by BlackRock, Inc. Blackrock reported that it has sole voting power as to 2,184,483 and sole dispositive power as to 2,246,204 shares. The beneficial ownership indicated above represents the aggregate beneficial ownership of BlackRock, Inc., and its subsidiaries, BlackRock (Netherlands) B.V., BlackRock Advisors, LLC, BlackRock Asset Management Canada Limited, BlackRock Asset Management Ireland Limited, BlackRock Asset Management Schweiz AG, BlackRock Financial Management, Inc., BlackRock Fund Advisors, BlackRock Institutional Trust Company, N.A. and BlackRock Investment Management, LLC and BlackRock Investment Management (UK) Limited.

(4) This information is based on a Schedule 13G filed with the SEC on February 14, 2020 by Philadelphia Financial Management of San Francisco, LLC.

(5) This information is based on a Schedule 13G filed with the SEC on February 11, 2020 by Vanguard Group Inc. Vanguard reported that it has sole voting power as to 43,976 shares and sole dispositive power as to 1,479,245 shares.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table summarizes, as of December 31, 2019, the number of shares of our common stock to be issued upon exercise of outstanding options granted under our 2010, 2007 and 2006 Equity and Incentive Plans, the weighted-average exercise price of such options, and the number of shares remaining available for future issuance under the plans for all awards as of December 31, 2019.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under the Equity Compensation Plan (Excluding Shares in First Column)
Equity compensation plans approved by security holders	---	----	48
Equity compensation plans not approved by security holders	None	N/A	None

(1) This number is based on the 21,061,804 shares authorized for issuance under the Company's Equity and Incentive Plans as of December 31, 2019. Commencing on January 1, 2011 and on the first day of each fiscal year of the Company thereafter during the term of the 2010 Plan, additional shares of Class A common stock representing 7.5% of our shares of Class A common stock outstanding on such date, less shares then available for issuance under the 2010 Plan, will automatically become available for grant or settlement of awards. As a result, on January 1, 2020, 2,145,729 were added to the shares available under the 2010 Plan to bring the total equal to 7.5% of the Company's outstanding shares of stock. As of March 31, 2020, we had 129,954 shares remaining under the equity plans, which exclude shares reserved for issuance based on certain performance criteria in existing agreements.

Item 13. Certain Relationships and Related Transactions and Director Independence

Director Independence

Under applicable Nasdaq Stock Market Rules, a director will only qualify as an "independent director" if, in the opinion of our Board, that person does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Our Corporate Governance Guidelines require that a majority of the Board be composed of directors who meet the independence criteria establish by NASDAQ Stock Market, Inc. Marketplace Rules. Under applicable NASDAQ Stock Market rules, a director will only qualify as an "independent director" if, in the opinion of our Board, that person does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making its determination, the Board considers all relevant facts and circumstances, both with respect to the director and with respect to any persons or organizations with which the director has an affiliation, including immediate family members.

Our Board has determined that none of Mses. Dietze or Poster nor Messrs. Barth, Gonsalves, Kotler, Leibowitz, Markowitz, Nusbaum or Rediker currently has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is an "independent director" as defined under Rule 4200(a)(15) of the NASDAQ Stock Market, Inc. Marketplace Rules.

Mr. Solomon cannot be considered an independent director under NASDAQ Stock Market rules because Mr. Solomon currently serves as our Chief Executive Officer. Therefore, the Board has determined that nine of our ten directors are independent.

Related Transactions Involving Our Executive Officers

Side-by-Side Investments

To the extent permissible by applicable law, our executive officers, directors and certain eligible employees, as well as such individuals' immediate family members and other investors they refer to us, have historically been permitted to invest their own capital either directly in, or in side-by-side investments or managed accounts with, our alternative investment management funds and certain proprietary investment vehicles established by our broker-dealer segment. Side-by-side investments are investments in assets substantially similar to the investments of the applicable fund and the managed accounts are accounts that invest in the asset classes covered by our alternative investment business. Direct investment in managed accounts or side-by-side investments with, our funds by such individuals are generally made on the same terms and conditions as the investments made by other third party investors in the funds, except that such investments are subject to discounted management and performance fees.

Employment Arrangements

Kyle Solomon, the brother of Jeffrey M. Solomon, is a Managing Director of Cowen and Company and earned approximately $1,435,338 in 2019, which amount includes Kyle Solomon's base salary, cash bonus paid in 2019 relating to 2018 performance and approximately $172,005 of deferred cash awards and RSUs granted in prior years that vested during 2019.

Review and Approval of Transactions with Related Persons

To minimize actual and perceived conflicts of interests, the Board has adopted a written policy governing transactions in which the Company is a participant, the aggregate amount involved is reasonably expected to exceed $120,000, and any of the following persons has or may have a direct or indirect material interest in the transaction: (a) our executive officers, directors (including nominees) and certain other highly compensated employees, (b) stockholders who own more than 5% of our Class A common stock, and (c) any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law or person (other than a tenant or employee) sharing the same household of any person described in (a) or (b) above. These transactions will be considered "related person transactions."

Unless exempted from such policy as described below, the policy requires that related person transactions must be reported to our General Counsel or Chief Compliance Officer who will then submit the related person transaction for review by our Audit Committee. The Audit Committee will review all relevant information available to it and will approve or ratify only those related person transactions that it determines are not inconsistent with the best interests of the Company. If our General Counsel or Chief Compliance Officer determines that advance approval of a related person transaction is not practicable under the circumstances, the Audit Committee will review, and, in its discretion, may ratify the related person transaction at its next meeting, or at the next meeting following the date that the related person transaction comes to the attention of our General Counsel or Chief Compliance Officer. However, the General Counsel or Chief Compliance Officer may present a related person transaction that arises between Audit Committee meetings to the Chair of the Audit Committee, who will review and may approve the related person transaction, subject to the Audit Committee's ratification at its next meeting.

It is anticipated that any related person transaction previously approved by the Audit Committee or otherwise already existing that is ongoing will be reviewed annually by the Audit Committee to ensure that such transaction has been conducted in accordance with the previous approval granted by the Audit Committee, if any, and that all required disclosures regarding the related person transaction are made.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, the board anticipates it will determine that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of the policy:

- interests arising solely from the related person's position as an executive officer of another entity (whether or not the person is also a director of such entity), that is a participant in the transaction, where (a) the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, (b) the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction, (c) the amount involved in the transaction equals less than the greater of $200,000 or 5% of the annual gross revenues of the company receiving payment under the transaction;

- a transaction with a significant stockholder, or such stockholder's immediate family members, who has a current Schedule 13G filed with the SEC with respect to such stockholder's ownership of our securities; and

- a transaction that is specifically contemplated by provisions of our charter or bylaws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by the Compensation Committee in the manner specified in its charter.

Item 14. Principal Accounting Fees and Services

Independent Registered Public Accounting Firm Fees and Other Matters

The following table presents the aggregate fees billed for services rendered by KPMG LLP, our independent registered public accounting firm for the fiscal years ended December 31, 2019 and December 31, 2018.

	2019	2018
Audit Fees(1)	$ 5,222,917	$ 4,906,795
Audit-Related Fees(2)	44,038	113,600
Tax Fees(3)	1,270,915	1,332,576
Total	$ 6,537,870	$ 6,352,971

(1) Audit fees reflect audit fees incurred for the Cowen Inc. integrated audit and quarterly reviews as well as the financial statement audits of its consolidated subsidiaries.

(2) Audit-Related Fees reflect fees for attestation procedures required by local regulations for consolidated subsidiaries, as well as procedures performed in connection with the second quarter 2018 comfort letters prepared in connection with the debt issuances completed by the Company.

(3) Tax fees reflect tax compliance and tax advisory services.

KPMG LLP also provided services to entities affiliated with Cowen Inc. that were billed directly to those entities and, accordingly, were not included in the amounts disclosed above. These amounts included $975,213 and $1,101,000 for the audits of private equity funds, hedge funds and other fund structures within the Cowen Investment Management segment for the years ended December 31, 2019 and December 31, 2018, respectively.

Auditor Services Pre-Approval Policy

The Audit Committee has adopted an Audit Committee Policy Regarding Outside Auditor Services which includes a pre-approval policy that applies to services performed for the Company by our independent registered public accounting firm. In accordance with this policy, we may not engage our independent registered public accounting firm to render any audit or non-audit service unless the service was approved in advance by the Audit Committee or the engagement is entered into pursuant to the pre-approval policies and procedures described below.

The pre-approval policy delegates to the Chair of the Audit Committee the authority to pre-approve any audit or non-audit services, provided that any approval by the Chair is reported to the Audit Committee at the Audit Committee’s next regularly scheduled meeting. The Audit Committee may also pre-approve services that are expected to be provided to the Company by the independent registered public accounting firm during the next 12 months and at each regularly scheduled meeting of the Audit Committee, management or the independent registered public accounting firm must report to the Audit Committee each service actually provided to the Company pursuant to the pre-approval.

Our Audit Committee has determined that the provision of the non-audit services described in the table above was compatible with maintaining the independence of our independent registered public accounting firm. The Audit Committee reviews each non-audit service to be provided and assesses the impact of the service on the registered public accounting firm’s independence.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Documents filed as part of this Annual Report on Form 10-K/A:

3. Exhibits

Exhibits are incorporated herein by reference or are filed with this report as indicated below:

Exhibit No. Description

31.5 Certification of CEO Pursuant to Section 302 of Sarbanes-Oxley Act of 2002

31.6 Certification of CFO Pursuant to Section 302 of Sarbanes-Oxley Act of 2002.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

COWEN INC.

By: /s/ Jeffrey M. Solomon

Name: Jeffrey M. Solomon

Title: Chief Executive Officer

Dated: April 29, 2020

Exhibit 31.5

Certification

I, Jeffrey M. Solomon, certify that:

1. I have reviewed this Amendment No. 2 on Form 10-K/A of Cowen Inc.; and

2. Based on my knowledge, this 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 report.

Date: April 29, 2020

/s/ Jeffrey M. Solomon
Jeffrey M. Solomon
Chief Executive Officer
(principal executive officer)

Exhibit 31.6

Certification

I, Stephen A. Lasota, certify that:

1. I have reviewed this Amendment No. 2 on Form 10-K/A of Cowen Inc.; and

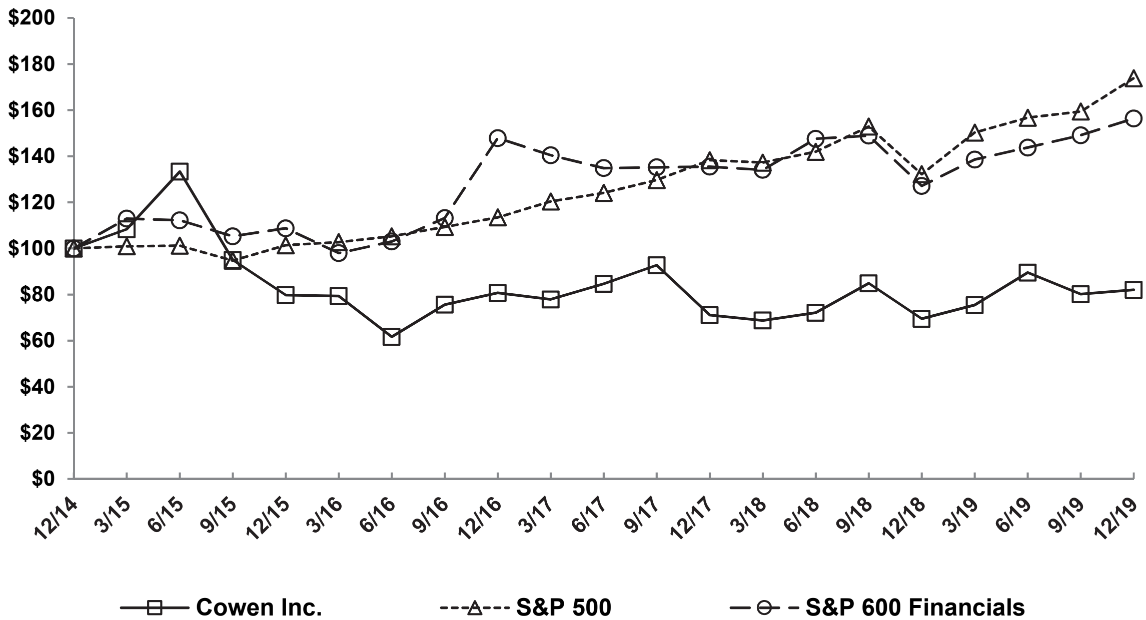
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: April 29, 2020

/s/ Stephen A. Lasota
Stephen A. Lasota
Chief Financial Officer
(principal financial officer and principal accounting officer)

Stock Performance

The following graph and table compare the performance of an investment in our common stock with investments in the S&P 500 Index and the S&P 600 Financials Index over the period of December 31, 2014 through December 31, 2019, the last day of trading in fiscal 2019. Both the graph and the table assume that $100 was invested on December 30, 2014 and the dividends, if any, were reinvested on the date of payment. The performance shown in the graph represents past performance and should not be considered indicative of future performance.



	12/31/14	12/31/19
Cowen Inc.	$100.00	$ 82.03
S&P 500	100.00	173.86
S&P 600 Financials	100.00	156.38

CAPABILITIES

INVESTMENT BANKING
MARKETS
RESEARCH
INVESTMENT MANAGEMENT

LOCATIONS

U.S.

ATLANTA
BOSTON
CHICAGO
CLEVELAND
DETROIT
HOUSTON
INDIANAPOLIS
LOS ANGELES
MINNEAPOLIS
NEW YORK
ORLANDO
SAN FRANCISCO
STAMFORD
WASHINGTON, DC

INTERNATIONAL

BELFAST
BERLIN
FRANKFURT
GRAZ
HONG KONG
LEIPZIG
LONDON
LUXEMBOURG
MUNICH
ZURICH

COWEN.COM **COWEN** INC. **COWEN** **COWEN**RESEARCH