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

FORM 10-Q

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

For the Quarterly Period Ended September 30, 2017

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 No. 001-31720

PIPER JAFFRAY COMPANIES

(Exact Name of Registrant as specified in its Charter)

DELAWARE

(State or Other Jurisdiction of Incorporation or Organization)

30-0168701

(IRS Employer Identification No.)

**800 Nicollet Mall, Suite 1000
Minneapolis, Minnesota**

(Address of Principal Executive Offices)

55402

(Zip Code)

(612) 303-6000

(Registrant's Telephone Number, Including Area Code)

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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer (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 Exchange Act).
Yes No

As of November 1, 2017, the registrant had 15,109,138 shares of Common Stock outstanding.

Piper Jaffray Companies
Index to Quarterly Report on Form 10-Q

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

Piper Jaffray Companies
Consolidated Statements of Financial Condition

	September 30, 2017	December 31, 2016
	(Unaudited)	
<i>(Amounts in thousands, except share data)</i>		
Assets		
Cash and cash equivalents	\$ 40,916	\$ 41,359
Cash and cash equivalents segregated for regulatory purposes	6,016	29,015
Receivables:		
Customers	—	31,917
Brokers, dealers and clearing organizations	80,880	212,730
Securities purchased under agreements to resell	—	159,697
Financial instruments and other inventory positions owned	763,946	464,610
Financial instruments and other inventory positions owned and pledged as collateral	335,382	594,361
Total financial instruments and other inventory positions owned	1,099,328	1,058,971
Fixed assets (net of accumulated depreciation and amortization of \$61,312 and \$58,308, respectively)	24,286	25,343
Goodwill	81,855	196,218
Intangible assets (net of accumulated amortization of \$81,483 and \$70,017, respectively)	25,768	37,234
Investments	179,527	168,057
Net deferred income tax assets	145,817	97,833
Other assets	55,443	67,129
Total assets	<u>\$ 1,739,836</u>	<u>\$ 2,125,503</u>
Liabilities and Shareholders' Equity		
Short-term financing	\$ 76,797	\$ 418,832
Senior notes	125,000	175,000
Payables:		
Customers	—	29,352
Brokers, dealers and clearing organizations	54,265	40,842
Securities sold under agreements to repurchase	—	15,046
Financial instruments and other inventory positions sold, but not yet purchased	357,735	299,357
Accrued compensation	288,299	288,255
Other liabilities and accrued expenses	50,955	42,553
Total liabilities	953,051	1,309,237
Shareholders' equity:		
Common stock, \$0.01 par value:		
Shares authorized: 100,000,000 at September 30, 2017 and December 31, 2016;		
Shares issued: 19,512,328 at September 30, 2017 and 19,535,307 at December 31, 2016;		
Shares outstanding: 12,899,902 at September 30, 2017 and 12,391,970 at December 31, 2016	195	195
Additional paid-in capital	786,527	788,927
Retained earnings	227,095	257,188
Less common stock held in treasury, at cost: 6,612,426 at September 30, 2017 and 7,143,337 shares at December 31, 2016	(274,089)	(284,461)
Accumulated other comprehensive loss	(1,462)	(2,599)
Total common shareholders' equity	738,266	759,250
Noncontrolling interests	48,519	57,016
Total shareholders' equity	<u>786,785</u>	<u>816,266</u>
Total liabilities and shareholders' equity	<u>\$ 1,739,836</u>	<u>\$ 2,125,503</u>

See Notes to the Consolidated Financial Statements

Piper Jaffray Companies
Consolidated Statements of Operations
(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
<i>(Amounts in thousands, except per share data)</i>	2017	2016	2017	2016
Revenues:				
Investment banking	\$ 190,482	\$ 136,682	\$ 461,260	\$ 338,034
Institutional brokerage	34,873	42,189	111,083	122,423
Asset management	12,818	15,256	44,011	43,699
Interest	7,164	7,343	22,649	24,094
Investment income/(loss)	(422)	4,806	15,406	14,019
Total revenues	244,915	206,276	654,409	542,269
Interest expense	4,348	5,429	15,568	17,383
Net revenues	240,567	200,847	638,841	524,886
Non-interest expenses:				
Compensation and benefits	169,469	135,186	438,161	356,770
Outside services	7,495	10,288	27,612	28,923
Occupancy and equipment	8,127	8,743	24,846	25,311
Communications	7,136	7,845	22,025	22,469
Marketing and business development	6,683	7,629	22,512	23,804
Trade execution and clearance	2,125	2,008	5,864	5,686
Restructuring and integration costs	—	—	—	10,206
Goodwill impairment	114,363	—	114,363	—
Intangible asset amortization	3,822	8,010	11,466	15,400
Back office conversion costs	1,293	—	3,027	—
Other operating expenses	2,290	2,687	8,525	7,915
Total non-interest expenses	322,803	182,396	678,401	496,484
Income/(loss) before income tax expense/(benefit)	(82,236)	18,451	(39,560)	28,402
Income tax expense/(benefit)	(31,423)	6,515	(26,912)	8,767
Net income/(loss)	(50,813)	11,936	(12,648)	19,635
Net income/(loss) applicable to noncontrolling interests	(1,100)	1,278	3,217	4,602
Net income/(loss) applicable to Piper Jaffray Companies	\$ (49,713)	\$ 10,658	\$ (15,865)	\$ 15,033
Net income/(loss) applicable to Piper Jaffray Companies' common shareholders	\$ (50,415) ⁽¹⁾	\$ 8,582	\$ (18,106) ⁽¹⁾	\$ 12,476
Earnings/(loss) per common share				
Basic	\$ (3.91)	\$ 0.70	\$ (1.42)	\$ 0.98
Diluted	\$ (3.91) ⁽²⁾	\$ 0.70	\$ (1.42) ⁽²⁾	\$ 0.97
Dividends declared per common share	\$ 0.31	\$ —	\$ 0.94	\$ —
Weighted average number of common shares outstanding				
Basic	12,898	12,282	12,774	12,787
Diluted	12,975 ⁽²⁾	12,298	12,945 ⁽²⁾	12,801

(1) No allocation of undistributed income was made due to loss position. See Note 17.

(2) Earnings per diluted common share is calculated using the basic weighted average number of common shares outstanding for periods in which a loss is incurred.

See Notes to the Consolidated Financial Statements

Piper Jaffray Companies
Consolidated Statements of Comprehensive Income
(Unaudited)

<i>(Amounts in thousands)</i>	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Net income/(loss)	\$ (50,813)	\$ 11,936	\$ (12,648)	\$ 19,635
Other comprehensive income/(loss), net of tax:				
Foreign currency translation adjustment	<u>142</u>	<u>(587)</u>	<u>1,137</u>	<u>(1,843)</u>
Comprehensive income/(loss)	(50,671)	11,349	(11,511)	17,792
Comprehensive income/(loss) applicable to noncontrolling interests	<u>(1,100)</u>	<u>1,278</u>	<u>3,217</u>	<u>4,602</u>
Comprehensive income/(loss) applicable to Piper Jaffray Companies	<u>\$ (49,571)</u>	<u>\$ 10,071</u>	<u>\$ (14,728)</u>	<u>\$ 13,190</u>

See Notes to the Consolidated Financial Statements

Piper Jaffray Companies
Consolidated Statements of Cash Flows
(Unaudited)

Nine Months Ended
September 30,

2017 **2016**

(Dollars in thousands)

Operating Activities:		
Net income/(loss)	\$ (12,648)	\$ 19,635
Adjustments to reconcile net income/(loss) to net cash provided by operating activities:		
Depreciation and amortization of fixed assets	5,343	4,724
Deferred income taxes	(47,984)	715
Stock-based and deferred compensation	26,459	43,839
Goodwill impairment	114,363	—
Amortization of intangible assets	11,466	15,400
Amortization of forgivable loans	5,207	6,894
Decrease/(increase) in operating assets:		
Cash and cash equivalents segregated for regulatory purposes	22,999	35,000
Receivables:		
Customers	31,917	(46,398)
Brokers, dealers and clearing organizations	131,850	(21,478)
Securities purchased under agreements to resell	159,697	(10,492)
Net financial instruments and other inventory positions owned	18,021	(72,758)
Investments	(11,470)	(4,767)
Other assets	7,185	(8,898)
Increase/(decrease) in operating liabilities:		
Payables:		
Customers	(29,352)	13,366
Brokers, dealers and clearing organizations	13,423	153,795
Securities sold under agreements to repurchase	(15,046)	(2,018)
Accrued compensation	4,666	(51,569)
Other liabilities and accrued expenses	7,864	(32,005)
Net cash provided by operating activities	443,960	42,985
Investing Activities:		
Business acquisitions, net of cash acquired	—	(71,019)
Purchases of fixed assets, net	(4,310)	(7,360)
Net cash used in investing activities	(4,310)	(78,379)

Continued on next page

Piper Jaffray Companies
Consolidated Statements of Cash Flows – Continued
(Unaudited)

	Nine Months Ended	
	September 30,	
<i>(Dollars in thousands)</i>	2017	2016
Financing Activities:		
Decrease in short-term financing	\$ (342,035)	\$ (20,405)
Repayment of variable rate senior notes	(50,000)	—
Decrease in securities sold under agreements to repurchase	—	(21,292)
Payment of cash dividend	(14,217)	—
Increase/(decrease) in noncontrolling interests	(11,714)	10,189
Repurchase of common stock	(25,065)	(70,428)
Proceeds from stock option exercises	1,703	119
Net cash used in financing activities	(441,328)	(101,817)
Currency adjustment:		
Effect of exchange rate changes on cash	1,235	(1,328)
Net decrease in cash and cash equivalents	(443)	(138,539)
Cash and cash equivalents at beginning of period	41,359	189,910
Cash and cash equivalents at end of period	\$ 40,916	\$ 51,371
Supplemental disclosure of cash flow information –		
Cash paid during the period for:		
Interest	\$ 15,397	\$ 17,679
Income taxes	\$ 7,781	\$ 22,148
Non-cash investing activities –		
Issuance of common stock related to the acquisition of Simmons & Company International:		
25,525 shares for the nine months ended September 30, 2016	\$ —	\$ 1,074
Non-cash financing activities –		
Issuance of restricted common stock for annual equity award:		
198,981 shares and 843,889 shares for the nine months ended September 30, 2017 and 2016, respectively	\$ 16,187	\$ 35,089

See Notes to the Consolidated Financial Statements

Piper Jaffray Companies
Notes to the Consolidated Financial Statements
(Unaudited)

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Piper Jaffray Companies
Notes to the Consolidated Financial Statements
(Unaudited)

Note 1 Organization and Basis of Presentation

Organization

Piper Jaffray Companies is the parent company of Piper Jaffray & Co. ("Piper Jaffray"), a securities broker dealer and investment banking firm; Piper Jaffray Ltd., a firm providing securities brokerage and mergers and acquisitions services in Europe; Advisory Research, Inc. ("ARI"), which provides asset management services to separately managed accounts, closed-end and open-end funds and partnerships; Piper Jaffray Investment Group Inc., which consists of entities providing alternative asset management services; Piper Jaffray Financial Products Inc. and Piper Jaffray Financial Products II Inc., entities that facilitate derivative transactions; and other immaterial subsidiaries.

Effective August 7, 2017, Piper Jaffray transitioned from a self clearing securities broker dealer to a fully disclosed clearing model. Pershing LLC ("Pershing") is Piper Jaffray's clearing broker dealer responsible for the clearance and settlement of firm and customer cash and security transactions.

Piper Jaffray Companies and its subsidiaries (collectively, the "Company") operate in two reporting segments: Capital Markets and Asset Management. A summary of the activities of each of the Company's business segments is as follows:

Capital Markets

The Capital Markets segment provides investment banking services and institutional sales, trading and research services. Investment banking services include management of and participation in underwritings, financial advisory services and public finance activities. Revenues are generated through the receipt of advisory and financing fees. Institutional sales, trading and research services focus on the trading of equity and fixed income products with institutions, government and non-profit entities. Revenues are generated through commissions and sales credits earned on equity and fixed income institutional sales activities, net interest revenues on trading securities held in inventory, and profits and losses from trading these securities. Also, the Company generates revenue through strategic trading and investing activities, which focus on investments in municipal bonds, U.S. government agency securities, and merchant banking activities involving equity or debt investments in late stage private companies. The Company has created alternative asset management funds in merchant banking, energy and senior living in order to invest firm capital and to manage capital from outside investors. The Company receives management and performance fees for managing these funds.

Asset Management

The Asset Management segment provides traditional asset management services with product offerings in equity securities and master limited partnerships to institutions and individuals. Revenues are generated in the form of management and performance fees. Revenues are also generated through investments in the partnerships and funds that the Company manages.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim financial information and the rules and regulations of the Securities and Exchange Commission ("SEC"). Pursuant to this guidance, certain information and disclosures have been omitted that are included within complete annual financial statements. Except as disclosed herein, there have been no material changes in the information reported in the financial statements and related disclosures in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

The consolidated financial statements include the accounts of Piper Jaffray Companies, its wholly owned subsidiaries, and all other entities in which the Company has a controlling financial interest. Noncontrolling interests represent equity interests in consolidated entities that are not attributable, either directly or indirectly, to Piper Jaffray Companies. Noncontrolling interests include the minority equity holders' proportionate share of the equity in the Company's alternative asset management funds. All material intercompany balances have been eliminated.

Management is required to make estimates and assumptions that affect 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. Although these estimates and assumptions are based on the best information available, actual results could differ from those estimates.

Piper Jaffray Companies
Notes to the Consolidated Financial Statements
(Unaudited)

Note 2 *Accounting Policies and Pronouncements*

Summary of Significant Accounting Policies

Refer to the Company's Annual Report on Form 10-K for the year ended December 31, 2016 for a full description of the Company's significant accounting policies. Changes to the Company's significant accounting policies are described below.

Stock-Based Compensation

Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 718, "Compensation – Stock Compensation," ("ASC 718") requires all stock-based compensation to be expensed on the consolidated statements of operations based on the grant date fair value of the award. Compensation expense related to stock-based awards that do not require future service are recognized in the year in which the awards were deemed to be earned. Stock-based awards that require future service are amortized over the relevant service period. Forfeitures of awards with service conditions are accounted for when they occur. See Note 16 for additional information on the Company's accounting for stock-based compensation.

Adoption of New Accounting Standards

Stock-Based Compensation

In March 2016, the FASB issued Accounting Standard Update ("ASU") No. 2016-09, "Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" ("ASU 2016-09"). ASU 2016-09 made targeted amendments to the accounting for share-based payments to employees. It became effective for the Company as of January 1, 2017. There was no impact to the Company's retained earnings upon adoption of ASU 2016-09.

Under ASU 2016-09, the Company recognizes the income tax effects of stock awards in the income statement when the awards vest or are settled. For the nine months ended September 30, 2017, this accounting change resulted in the recording of a \$9.1 million tax benefit for stock awards vesting during the period. Prior to the adoption of this ASU, this amount would have been recorded directly to additional paid-in capital. In addition, the Company has elected to account for forfeitures of awards with service conditions as they occur. This will result in dividends originally charged against retained earnings for forfeited, unvested stock-based payment awards to be reclassified to compensation expense in the period in which the forfeiture occurs. Furthermore, tax impacts from the vesting of stock-based compensation are presented as an operating activity on the consolidated statements of cash flows on a prospective basis.

Goodwill Impairment

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" ("ASU 2017-04"). ASU 2017-04 eliminates the requirement to calculate the implied fair value of goodwill (i.e., perform a hypothetical purchase price allocation) to measure a goodwill impairment charge. Instead, entities will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. ASU 2017-04 is effective for the Company's annual and any interim goodwill impairment tests in fiscal years beginning after December 15, 2019 and should be applied prospectively. Early adoption is permitted for interim and annual goodwill impairment testing dates after January 1, 2017. The Company adopted ASU 2017-04 effective July 1, 2017.

Future Adoption of New Applicable Accounting Standards

Revenue Recognition

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)," ("ASU 2014-09"), which supersedes current revenue recognition guidance, including most industry-specific guidance. ASU 2014-09, as amended, requires a company to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services, and also requires enhanced disclosures.

Piper Jaffray Companies
Notes to the Consolidated Financial Statements
(Unaudited)

The Company has identified its revenues and costs that are within the scope of the new guidance. The current broker dealer industry treatment of netting deal expenses with investment banking revenues will change under the new guidance. As a result of adopting ASU 2014-09, the Company will generally present deal expenses on a gross basis on the consolidated statements of operations, rather than the current presentation of netting deal expenses for completed investment banking deals within revenues. This change will not impact earnings, however, the Company will report higher revenues and higher non-compensation expenses. In addition, the Company expects to defer the recognition of performance fees on its merchant banking, energy and senior living alternative asset management funds until such fees are no longer subject to reversal, which will cause a delay in the recognition of these fees as revenue. The Company anticipates that its current methods of recognizing investment banking revenues will not be significantly impacted by the new guidance.

The AICPA industry task forces on broker dealers and asset management, the AICPA's Revenue Recognition Working Group and the AICPA's Financial Reporting Executive Committee (FinREC) continue to issue interpretive guidance on ASU 2014-09. The Company will continue to evaluate the potential impact of this guidance.

The Company will adopt this guidance effective as of January 1, 2018 under the modified retrospective method, in which the cumulative effect of applying the standard will be recognized at the date of initial application. As of September 30, 2017, the estimated cumulative effect that the Company would recognize as an adjustment to retained earnings upon adoption will be less than \$2 million, net of tax.

Recognition and Measurement of Financial Assets and Financial Liabilities

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" ("ASU 2016-01"). The amendments in ASU 2016-01 address certain aspects of the recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 is effective for annual and interim periods beginning after December 15, 2017. Except for the early application guidance outlined in ASU 2016-01, early adoption is not permitted. The adoption of ASU 2016-01 is not expected to have a material impact on the Company's results of operations or financial position, but may impact the Company's disclosures.

Leases

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). ASU 2016-02 requires lessees to recognize a right-of-use asset and lease liability on the consolidated statements of financial position and disclose key information about leasing arrangements. The recognition, measurement and presentation of expenses and cash flows arising from a lease by a lessee have not significantly changed from current U.S. GAAP. ASU 2016-02 is effective for annual and interim periods beginning after December 15, 2018. As of December 31, 2016, the Company had approximately 65 operating leases for office space with aggregate minimum lease commitments of \$78.4 million. The Company is evaluating other service contracts which may include embedded leases. Upon adoption of ASU 2016-02, the Company does not expect material changes to the recognition of rent expense in its consolidated statements of operations. The impact of the new guidance on Piper Jaffray's net capital is expected to be minimal.

Financial Instruments – Credit Losses

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). The new guidance requires an entity to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts as opposed to delaying recognition until the loss was probable of occurring. ASU 2016-13 is effective for annual and interim periods beginning after December 15, 2019. Early adoption is permitted for annual and interim periods beginning after December 15, 2018. The Company does not expect the adoption of ASU 2016-13 to have a material impact on its consolidated financial statements.

Piper Jaffray Companies
Notes to the Consolidated Financial Statements
(Unaudited)

Statement of Cash Flows

In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" ("ASU 2016-15"). ASU 2016-15 clarifies how entities should classify certain cash receipts and cash payments on the statement of cash flows. The amendments in ASU 2016-15 are effective for annual and interim periods beginning after December 31, 2017 and should be applied retrospectively. Early adoption is permitted. The Company expects that only a limited number of amendments will impact the presentation of its consolidated statements of cash flows.

In November 2016, the FASB issued ASU No. 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash" ("ASU 2016-18"). Under ASU 2016-18, restricted cash will be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the consolidated statements of cash flows. ASU 2016-18 is effective for annual and interim periods beginning after December 15, 2017 and should be applied retrospectively. Early adoption is permitted.

Note 3 *Acquisition of Simmons & Company International*

On February 26, 2016, the Company completed the acquisition of Simmons & Company International ("Simmons"), an employee-owned investment bank and broker dealer focused on the energy industry. The economic value of the acquisition was approximately \$140.0 million.

The Company acquired net assets with a fair value of \$119.3 million. As part of the purchase price, the Company issued 1,149,340 restricted shares valued at \$48.2 million as equity consideration on the acquisition date. Employees must fulfill service requirements in exchange for the rights to the shares. Compensation expense will be amortized on a straight-line basis over the requisite service period of one or three years (a weighted average service period of 2.7 years). The fair value of the restricted stock was determined using the market price of the Company's common stock on the date of the acquisition.

The Company also entered into acquisition-related compensation arrangements with certain employees of \$20.6 million which consisted of cash (\$9.0 million) and restricted stock (\$11.6 million) for retention purposes. Compensation expense related to these arrangements will be amortized on a straight-line basis over the requisite service period of three years. Additional cash compensation may be available to certain investment banking employees subject to exceeding an investment banking revenue threshold during the three year post-acquisition period to the extent they are employed by the Company at the time of payment. Amounts estimated to be payable related to this performance award plan will be recorded as compensation expense on the consolidated statements of operations over the requisite performance period of three years. As of September 30, 2017, the Company had accrued \$14.4 million related to this performance award plan.

The acquisition was accounted for pursuant to FASB Accounting Standards Codification Topic 805, "Business Combinations." Accordingly, the purchase price was allocated to the acquired assets and liabilities assumed based on their estimated fair values as of the acquisition date. The excess of the purchase price over the net assets acquired was allocated between goodwill and intangible assets within the Capital Markets segment. The Company recorded \$60.7 million of goodwill on its consolidated statements of financial condition, of which \$59.4 million is expected to be deductible for income tax purposes. In management's opinion, the goodwill represents the reputation and operating expertise of Simmons.

Identifiable intangible assets purchased by the Company consisted of customer relationships and the Simmons trade name with acquisition-date fair values of \$17.5 million and \$9.1 million, respectively. Transaction costs of \$0.9 million were incurred for the nine months ended September 30, 2016, and are included in restructuring and integration costs on the consolidated statements of operations.

Piper Jaffray Companies
Notes to the Consolidated Financial Statements
(Unaudited)

Simmons' results of operations have been included in the Company's consolidated financial statements prospectively beginning on the date of acquisition. The acquisition has been fully integrated with the Company's existing operations. Accordingly, post-acquisition revenues and net income are not discernible. The following unaudited pro forma financial data assumes the acquisition had occurred on January 1, 2015, the beginning of the prior annual period in which the acquisition occurred. Pro forma results have been prepared by adjusting the Company's historical results to include Simmons' results of operations adjusted for the following changes: amortization expense was adjusted to account for the acquisition-date fair value of intangible assets; compensation and benefits expenses were adjusted to reflect such expenses based on the Company's compensation arrangements and the restricted stock issued as equity consideration; and the income tax effect of applying the Company's statutory tax rates to Simmons' results of operations. The Company's unaudited pro forma information presented does not necessarily reflect the results of operations that would have resulted had the acquisition been completed at the beginning of the applicable period presented, does not contemplate anticipated operational efficiencies of the combined entities, nor does it indicate the results of operations in future periods.

<i>(Dollars in thousands)</i>	Nine Months Ended
	September 30, 2016
Net revenues	\$ 532,683
Net income applicable to Piper Jaffray Companies	15,642

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Note 4 Financial Instruments and Other Inventory Positions Owned and Financial Instruments and Other Inventory Positions Sold, but Not Yet Purchased

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Financial instruments and other inventory positions owned:		
Corporate securities:		
Equity securities	\$ 66,904	\$ 6,363
Convertible securities	70,900	103,486
Fixed income securities	27,480	21,018
Municipal securities:		
Taxable securities	37,073	63,090
Tax-exempt securities	374,348	559,329
Short-term securities	177,873	35,175
Mortgage-backed securities	4,321	5,638
U.S. government agency securities	300,832	205,685
U.S. government securities	17,205	29,970
Derivative contracts	22,392	29,217
Total financial instruments and other inventory positions owned	1,099,328	1,058,971
Less noncontrolling interests (1)	—	(57,700)
	\$ 1,099,328	\$ 1,001,271
Financial instruments and other inventory positions sold, but not yet purchased:		
Corporate securities:		
Equity securities	\$ 100,403	\$ 89,453
Fixed income securities	21,149	17,324
U.S. government agency securities	26,703	6,723
U.S. government securities	203,995	180,650
Derivative contracts	5,485	5,207
Total financial instruments and other inventory positions sold, but not yet purchased	357,735	299,357
Less noncontrolling interests (2)	—	(631)
	\$ 357,735	\$ 298,726

(1) Noncontrolling interests attributable to third party ownership in a consolidated municipal bond fund consist of \$1.3 million of taxable municipal securities, \$55.2 million of tax-exempt municipal securities, and \$1.2 million of derivative contracts as of December 31, 2016.

(2) Noncontrolling interests attributable to third party ownership in a consolidated municipal bond fund consist of U.S. government securities as of December 31, 2016.

At September 30, 2017 and December 31, 2016, financial instruments and other inventory positions owned in the amount of \$335.4 million and \$594.4 million, respectively, had been pledged as collateral for short-term financings and repurchase agreements.

Financial instruments and other inventory positions sold, but not yet purchased represent obligations of the Company to deliver the specified security at the contracted price, thereby creating a liability to purchase the security in the market at prevailing prices. The Company is obligated to acquire the securities sold short at prevailing market prices, which may exceed the amount reflected on the consolidated statements of financial condition. The Company economically hedges changes in the market value of its financial instruments and other inventory positions owned using inventory positions sold, but not yet purchased, interest rate derivatives, credit default swap index contracts, U.S. treasury bond futures and exchange traded options.

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Derivative Contract Financial Instruments

The Company uses interest rate swaps, interest rate locks, credit default swap index contracts, U.S. treasury bond futures and equity option contracts as a means to manage risk in certain inventory positions. The Company also enters into interest rate swaps to facilitate customer transactions. The following describes the Company's derivatives by the type of transaction or security the instruments are economically hedging.

Customer matched-book derivatives: The Company enters into interest rate derivative contracts in a principal capacity as a dealer to satisfy the financial needs of its customers. The Company simultaneously enters into an interest rate derivative contract with a third party for the same notional amount to hedge the interest rate and credit risk of the initial client interest rate derivative contract. In certain limited instances, the Company has only hedged interest rate risk with a third party, and retains uncollateralized credit risk as described below. The instruments use interest rates based upon either the London Interbank Offer Rate ("LIBOR") index or the Securities Industry and Financial Markets Association ("SIFMA") index.

Trading securities derivatives: The Company enters into interest rate derivative contracts and uses U.S. treasury bond futures to hedge interest rate and market value risks associated with its fixed income securities. These instruments use interest rates based upon either the Municipal Market Data ("MMD") index, LIBOR or the SIFMA index. The Company also enters into credit default swap index contracts to hedge credit risk associated with its taxable fixed income securities and option contracts to hedge market value risk associated with its convertible securities.

Derivatives are reported on a net basis by counterparty (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) when a legal right of offset exists and on a net basis by cross product when applicable provisions are stated in master netting agreements. Cash collateral received or paid is netted on a counterparty basis, provided a legal right of offset exists. The total absolute notional contract amount, representing the absolute value of the sum of gross long and short derivative contracts, provides an indication of the volume of the Company's derivative activity and does not represent gains and losses. The following table presents the gross fair market value and the total absolute notional contract amount of the Company's outstanding derivative instruments, prior to counterparty netting, by asset or liability position:

<i>(Dollars in thousands)</i> Derivative Category	September 30, 2017			December 31, 2016		
	Derivative Assets (1)	Derivative Liabilities (2)	Notional Amount	Derivative Assets (1)	Derivative Liabilities (2)	Notional Amount
Interest rate						
Customer matched-book	\$ 270,149	\$ 255,102	\$ 3,178,725	\$ 288,955	\$ 272,819	\$ 3,330,207
Trading securities	686	4,456	345,850	13,952	1,707	423,550
Credit default swap index						
Trading securities	—	—	—	—	127	7,470
	\$ 270,835	\$ 259,558	\$ 3,524,575	\$ 302,907	\$ 274,653	\$ 3,761,227

- (1) Derivative assets are included within financial instruments and other inventory positions owned on the consolidated statements of financial condition.
- (2) Derivative liabilities are included within financial instruments and other inventory positions sold, but not yet purchased on the consolidated statements of financial condition.

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The Company's derivative contracts do not qualify for hedge accounting, therefore, unrealized gains and losses are recorded on the consolidated statements of operations. The gains and losses on the related economically hedged inventory positions are not disclosed below as they are not in qualifying hedging relationships. The following table presents the Company's unrealized gains/(losses) on derivative instruments:

<i>(Dollars in thousands)</i>		Three Months Ended		Nine Months Ended	
Derivative Category	Operations Category	September 30,		September 30,	
		2017	2016	2017	2016
Interest rate derivative contract	Investment banking	\$ (300)	\$ (1,901)	\$ (1,076)	\$ (3,953)
Interest rate derivative contract	Institutional brokerage	1,627	8,438	(16,028)	819
Credit default swap index contract	Institutional brokerage	4,304	74	4,482	3,958
Futures and equity option derivative contracts	Institutional brokerage	—	107	—	255
		<u>\$ 5,631</u>	<u>\$ 6,718</u>	<u>\$ (12,622)</u>	<u>\$ 1,079</u>

Credit risk associated with the Company's derivatives is the risk that a derivative counterparty will not perform in accordance with the terms of the applicable derivative contract. Credit exposure associated with the Company's derivatives is driven by uncollateralized market movements in the fair value of the contracts with counterparties and is monitored regularly by the Company's financial risk committee. The Company considers counterparty credit risk in determining derivative contract fair value. The majority of the Company's derivative contracts are substantially collateralized by its counterparties, who are major financial institutions. The Company has a limited number of counterparties who are not required to post collateral. Based on market movements, the uncollateralized amounts representing the fair value of the derivative contract can become material, exposing the Company to the credit risk of these counterparties. As of September 30, 2017, the Company had \$20.8 million of uncollateralized credit exposure with these counterparties (notional contract amount of \$181.8 million), including \$15.4 million of uncollateralized credit exposure with one counterparty.

Note 5 Fair Value of Financial Instruments

Based on the nature of the Company's business and its role as a "dealer" in the securities industry or as a manager of alternative asset management funds, the fair values of its financial instruments are determined internally. The Company's processes are designed to ensure that the fair values used for financial reporting are based on observable inputs wherever possible. In the event that observable inputs are not available, unobservable inputs are developed based on an evaluation of all relevant empirical market data, including prices evidenced by market transactions, interest rates, credit spreads, volatilities and correlations and other security-specific information. Valuation adjustments related to illiquidity or counterparty credit risk are also considered. In estimating fair value, the Company may utilize information provided by third party pricing vendors to corroborate internally-developed fair value estimates.

The Company employs specific control processes to determine the reasonableness of the fair value of its financial instruments. The Company's processes are designed to ensure that the internally-estimated fair values are accurately recorded and that the data inputs and the valuation techniques used are appropriate, consistently applied, and that the assumptions are reasonable and consistent with the objective of determining fair value. Individuals outside of the trading departments perform independent pricing verification reviews as of each reporting date. The Company has established parameters which set forth when the fair value of securities are independently verified. The selection parameters are generally based upon the type of security, the level of estimation risk of a security, the materiality of the security to the Company's financial statements, changes in fair value from period to period, and other specific facts and circumstances of the Company's securities portfolio. In evaluating the initial internally-estimated fair values made by the Company's traders, the nature and complexity of securities involved (e.g., term, coupon, collateral, and other key drivers of value), level of market activity for securities, and availability of market data are considered. The independent price verification procedures include, but are not limited to, analysis of trade data (both internal and external where available), corroboration to the valuation of positions with similar characteristics, risks and components, or comparison to an alternative pricing source, such as a discounted cash flow model. The Company's valuation committee, comprised of members of senior management and risk management, provides oversight and overall responsibility for the internal control processes and procedures related to fair value measurements.

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The following is a description of the valuation techniques used to measure fair value.

Cash Equivalents

Cash equivalents include highly liquid investments with original maturities of 90 days or less. Actively traded money market funds are measured at their net asset value and classified as Level I.

Financial Instruments and Other Inventory Positions Owned

The Company records financial instruments and other inventory positions owned and financial instruments and other inventory positions sold, but not yet purchased at fair value on the consolidated statements of financial condition with unrealized gains and losses reflected on the consolidated statements of operations.

Equity securities – Exchange traded equity securities are valued based on quoted prices from the exchange for identical assets or liabilities as of the period-end date. To the extent these securities are actively traded and valuation adjustments are not applied, they are categorized as Level I. Non-exchange traded equity securities (principally hybrid preferred securities) are measured primarily using broker quotations, prices observed for recently executed market transactions and internally-developed fair value estimates based on observable inputs and are categorized within Level II of the fair value hierarchy.

Convertible securities – Convertible securities are valued based on observable trades, when available. Accordingly, these convertible securities are categorized as Level II.

Corporate fixed income securities – Fixed income securities include corporate bonds which are valued based on recently executed market transactions of comparable size, internally-developed fair value estimates based on observable inputs, or broker quotations. Accordingly, these corporate bonds are categorized as Level II.

Taxable municipal securities – Taxable municipal securities are valued using recently executed observable trades or market price quotations and therefore are generally categorized as Level II. Certain illiquid taxable municipal securities are valued using market data for comparable securities (maturity and sector) and management judgment to infer an appropriate current yield or other model-based valuation techniques deemed appropriate by management based on the specific nature of the individual security and are therefore categorized as Level III.

Tax-exempt municipal securities – Tax-exempt municipal securities are valued using recently executed observable trades or market price quotations and therefore are generally categorized as Level II. Certain illiquid tax-exempt municipal securities are valued using market data for comparable securities (maturity and sector) and management judgment to infer an appropriate current yield or other model-based valuation techniques deemed appropriate by management based on the specific nature of the individual security and are therefore categorized as Level III.

Short-term municipal securities – Short-term municipal securities include auction rate securities, variable rate demand notes, and other short-term municipal securities. Variable rate demand notes and other short-term municipal securities are valued using recently executed observable trades or market price quotations and therefore are generally categorized as Level II. Auction rate securities with limited liquidity are categorized as Level III and are valued using discounted cash flow models with unobservable inputs such as the Company's expected recovery rate on the securities.

Mortgage-backed securities – Mortgage-backed securities are valued using observable trades, when available. Certain mortgage-backed securities are valued using models where inputs to the model are directly observable in the market, or can be derived principally from or corroborated by observable market data. These mortgage-backed securities are categorized as Level II. Other mortgage-backed securities, which are principally collateralized by residential mortgages, have experienced low volumes of executed transactions resulting in less observable transaction data. Certain mortgage-backed securities collateralized by residential mortgages are valued using cash flow models that utilize unobservable inputs including credit default rates, prepayment rates, loss severity and valuation yields. As judgment is used to determine the range of these inputs, these mortgage-backed securities are categorized as Level III.

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U.S. government agency securities – U.S. government agency securities include agency debt bonds and mortgage bonds. Agency debt bonds are valued by using either direct price quotes or price quotes for comparable bond securities and are categorized as Level II. Mortgage bonds include bonds secured by mortgages, mortgage pass-through securities, agency collateralized mortgage-obligation ("CMO") securities and agency interest-only securities. Mortgage pass-through securities, CMO securities and interest-only securities are valued using recently executed observable trades or other observable inputs, such as prepayment speeds and therefore are generally categorized as Level II. Mortgage bonds are valued using observable market inputs, such as market yields ranging from 205-853 basis points ("bps") on spreads over U.S. treasury securities, or models based upon prepayment expectations ranging from 0%-18% conditional prepayment rate ("CPR"). These securities are categorized as Level II.

U.S. government securities – U.S. government securities include highly liquid U.S. treasury securities which are generally valued using quoted market prices and therefore categorized as Level I. The Company does not transact in securities of countries other than the U.S. government.

Derivatives – Derivative contracts include interest rate swaps, interest rate locks, credit default swap index contracts, U.S. treasury bond futures and equity option contracts. These instruments derive their value from underlying assets, reference rates, indices or a combination of these factors. The Company's equity option derivative contracts are valued based on quoted prices from the exchange for identical assets or liabilities as of the period-end date. To the extent these contracts are actively traded and valuation adjustments are not applied, they are categorized as Level I. The Company's credit default swap index contracts are valued using market price quotations and are classified as Level II. The majority of the Company's interest rate derivative contracts, including both interest rate swaps and interest rate locks, are valued using market standard pricing models based on the net present value of estimated future cash flows. The valuation models used do not involve material subjectivity as the methodologies do not entail significant judgment and the pricing inputs are market observable, including contractual terms, yield curves and measures of volatility. These instruments are classified as Level II within the fair value hierarchy. Certain interest rate locks transact in less active markets and were valued using valuation models that included the previously mentioned observable inputs and certain unobservable inputs that required significant judgment, such as the premium over the MMD curve. These instruments are classified as Level III.

Investments

The Company's investments valued at fair value include equity investments in private companies and partnerships, investments in registered mutual funds, warrants of public and private companies and private company debt. Investments in registered mutual funds are valued based on quoted prices on active markets and classified as Level I. Company-owned warrants, which have a cashless exercise option, are valued based upon the Black-Scholes option-pricing model and certain unobservable inputs. The Company applies a liquidity discount to the value of its warrants in public and private companies. For warrants in private companies, valuation adjustments, based upon management's judgment, are made to account for differences between the measured security and the stock volatility factors of comparable companies. Company-owned warrants are reported as Level III assets. Investments in private companies are valued based on an assessment of each underlying security, considering rounds of financing, third party transactions and market-based information, including comparable company transactions, trading multiples (e.g., multiples of revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA")) and changes in market outlook, among other factors. These securities are generally categorized as Level III.

Fair Value Option – The fair value option permits the irrevocable fair value option election 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 fair value option was elected for certain merchant banking and other investments at inception to reflect economic events in earnings on a timely basis. Merchant banking and other equity investments of \$13.9 million and \$19.7 million, included within investments on the consolidated statements of financial condition, are accounted for at fair value and are classified as Level III assets at September 30, 2017 and December 31, 2016, respectively. The realized and unrealized net gains from fair value changes included in earnings as a result of electing to apply the fair value option to certain financial assets were \$1.4 million and \$1.0 million for the nine months ended September 30, 2017 and 2016, respectively.

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The following table summarizes quantitative information about the significant unobservable inputs used in the fair value measurement of the Company's Level III financial instruments as of September 30, 2017:

	Valuation Technique	Unobservable Input	Range	Weighted Average
Assets:				
Financial instruments and other inventory positions owned:				
Municipal securities:				
Tax-exempt securities	Discounted cash flow	Expected recovery rate (% of par) (2)	5 - 60%	19.4%
Short-term securities	Discounted cash flow	Expected recovery rate (% of par) (2)	66 - 94%	91.0%
Mortgage-backed securities:				
Collateralized by residential mortgages	Discounted cash flow	Credit default rates (3)	1 - 10%	2.7%
		Prepayment rates (4)	2 - 18%	10.0%
		Loss severity (3)	5 - 50%	32.6%
		Valuation yields (3)	5 - 6%	5.3%
Derivative contracts:				
Interest rate locks	Discounted cash flow	Premium over the MMD curve (1)	4 - 20 bps	11.3 bps
Investments at fair value:				
Equity securities in private companies	Market approach	Revenue multiple (2)	2 - 6 times	4.8 times
		EBITDA multiple (2)	10 - 15 times	12.2 times
Liabilities:				
Financial instruments and other inventory positions sold, but not yet purchased:				
Derivative contracts:				
Interest rate locks	Discounted cash flow	Premium over the MMD curve (1)	1 - 21 bps	10.9 bps

Sensitivity of the fair value to changes in unobservable inputs:

- (1) Significant increase/(decrease) in the unobservable input in isolation would result in a significantly lower/(higher) fair value measurement.
- (2) Significant increase/(decrease) in the unobservable input in isolation would result in a significantly higher/(lower) fair value measurement.
- (3) Significant changes in any of these inputs in isolation could result in a significantly different fair value. Generally, a change in the assumption used for credit default rates is accompanied by a directionally similar change in the assumption used for the loss severity and a directionally inverse change in the assumption for valuation yields.
- (4) The potential impact of changes in prepayment rates on fair value is dependent on other security-specific factors, such as the par value and structure. Changes in the prepayment rates may result in directionally similar or directionally inverse changes in fair value depending on whether the security trades at a premium or discount to the par value.

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The following table summarizes the valuation of the Company's financial instruments by pricing observability levels defined in FASB Accounting Standards Codification Topic 820, "Fair Value Measurement" ("ASC 820") as of September 30, 2017:

<i>(Dollars in thousands)</i>	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>	<u>Counterparty and Cash Collateral Netting (1)</u>	<u>Total</u>
Assets:					
Financial instruments and other inventory positions owned:					
Corporate securities:					
Equity securities	\$ 2,466	\$ 64,438	\$ —	\$ —	\$ 66,904
Convertible securities	—	70,900	—	—	70,900
Fixed income securities	—	27,480	—	—	27,480
Municipal securities:					
Taxable securities	—	37,073	—	—	37,073
Tax-exempt securities	—	373,598	750	—	374,348
Short-term securities	—	177,168	705	—	177,873
Mortgage-backed securities	—	—	4,321	—	4,321
U.S. government agency securities	—	300,832	—	—	300,832
U.S. government securities	17,205	—	—	—	17,205
Derivative contracts	—	270,149	686	(248,443)	22,392
Total financial instruments and other inventory positions owned	19,671	1,321,638	6,462	(248,443)	1,099,328
Cash equivalents	4,112	—	—	—	4,112
Investments at fair value	37,778	—	130,160 ⁽²⁾	—	167,938
Total assets	<u>\$ 61,561</u>	<u>\$ 1,321,638</u>	<u>\$ 136,622</u>	<u>\$ (248,443)</u>	<u>\$ 1,271,378</u>
Liabilities:					
Financial instruments and other inventory positions sold, but not yet purchased:					
Corporate securities:					
Equity securities	\$ 100,181	\$ 222	\$ —	\$ —	\$ 100,403
Fixed income securities	—	21,149	—	—	21,149
U.S. government agency securities	—	26,703	—	—	26,703
U.S. government securities	164,084	39,911	—	—	203,995
Derivative contracts	—	255,308	4,250	(254,073)	5,485
Total financial instruments and other inventory positions sold, but not yet purchased	<u>\$ 264,265</u>	<u>\$ 343,293</u>	<u>\$ 4,250</u>	<u>\$ (254,073)</u>	<u>\$ 357,735</u>

(1) Represents cash collateral and the impact of netting on a counterparty basis. The Company had no securities posted as collateral to its counterparties.

(2) Noncontrolling interests of \$44.9 million are attributable to third party ownership in consolidated merchant banking and senior living funds.

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The following table summarizes the valuation of the Company's financial instruments by pricing observability levels defined in ASC 820 as of December 31, 2016:

<i>(Dollars in thousands)</i>	<u>Level I</u>	<u>Level II</u>	<u>Level III</u>	<u>Counterparty and Cash Collateral Netting (1)</u>	<u>Total</u>
Assets:					
Financial instruments and other inventory positions owned:					
Corporate securities:					
Equity securities	\$ 82	\$ 6,281	\$ —	\$ —	\$ 6,363
Convertible securities	—	103,486	—	—	103,486
Fixed income securities	—	21,018	—	—	21,018
Municipal securities:					
Taxable securities	—	60,404	2,686	—	63,090
Tax-exempt securities	—	558,252	1,077	—	559,329
Short-term securities	—	34,431	744	—	35,175
Mortgage-backed securities	—	273	5,365	—	5,638
U.S. government agency securities	—	205,685	—	—	205,685
U.S. government securities	29,970	—	—	—	29,970
Derivative contracts	—	288,955	13,952	(273,690)	29,217
Total financial instruments and other inventory positions owned	30,052	1,278,785	23,824	(273,690)	1,058,971
Cash equivalents	768	—	—	—	768
Investments at fair value	32,783	—	123,319 ⁽²⁾	—	156,102
Total assets	<u>\$ 63,603</u>	<u>\$ 1,278,785</u>	<u>\$ 147,143</u>	<u>\$ (273,690)</u>	<u>\$ 1,215,841</u>
Liabilities:					
Financial instruments and other inventory positions sold, but not yet purchased:					
Corporate securities:					
Equity securities	\$ 89,453	\$ —	\$ —	\$ —	\$ 89,453
Fixed income securities	—	17,324	—	—	17,324
U.S. government agency securities	—	6,723	—	—	6,723
U.S. government securities	180,650	—	—	—	180,650
Derivative contracts	—	273,166	1,487	(269,446)	5,207
Total financial instruments and other inventory positions sold, but not yet purchased	<u>\$ 270,103</u>	<u>\$ 297,213</u>	<u>\$ 1,487</u>	<u>\$ (269,446)</u>	<u>\$ 299,357</u>

(1) Represents cash collateral and the impact of netting on a counterparty basis. The Company had no securities posted as collateral to its counterparties.

(2) Noncontrolling interests of \$45.1 million are attributable to third party ownership in consolidated merchant banking and senior living funds.

The Company's Level III assets were \$136.6 million and \$147.1 million, or 10.7 percent and 12.1 percent of financial instruments measured at fair value at September 30, 2017 and December 31, 2016, respectively. The value of transfers between levels are recognized at the beginning of the reporting period. There were no significant transfers between Level I, Level II or Level III for the nine months ended September 30, 2017.

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The following tables summarize the changes in fair value associated with Level III financial instruments held at the beginning or end of the periods presented:

<i>(Dollars in thousands)</i>	Balance at June 30, 2017	Purchases	Sales	Transfers in	Transfers out	Realized gains/ (losses) (1)	Unrealized gains/ (losses) (1)	Balance at September 30, 2017	Unrealized gains/ (losses) for assets/ liabilities held at September 30, 2017 (1)
Assets:									
Financial instruments and other inventory positions owned:									
Municipal securities:									
Tax-exempt securities	\$ 1,117	\$ —	\$ (267)	\$ —	\$ —	\$ —	\$ (100)	\$ 750	\$ (100)
Short-term securities	721	—	—	—	—	—	(16)	705	(16)
Mortgage-backed securities	4,251	—	—	—	—	—	70	4,321	70
Derivative contracts	383	105	—	—	—	(105)	303	686	686
Total financial instruments and other inventory positions owned	<u>6,472</u>	<u>105</u>	<u>(267)</u>	<u>—</u>	<u>—</u>	<u>(105)</u>	<u>257</u>	<u>6,462</u>	<u>640</u>
Investments at fair value	113,885	18,250	—	—	—	—	(1,975)	130,160	(1,975)
Total assets	<u>\$ 120,357</u>	<u>\$ 18,355</u>	<u>\$ (267)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (105)</u>	<u>\$ (1,718)</u>	<u>\$ 136,622</u>	<u>\$ (1,335)</u>
Liabilities:									
Financial instruments and other inventory positions sold, but not yet purchased:									
Derivative contracts	\$ 5,573	\$ —	\$ 3,461	\$ —	\$ —	\$ (3,461)	\$ (1,323)	\$ 4,250	\$ 1,430
Total financial instruments and other inventory positions sold, but not yet purchased	<u>\$ 5,573</u>	<u>\$ —</u>	<u>\$ 3,461</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (3,461)</u>	<u>\$ (1,323)</u>	<u>\$ 4,250</u>	<u>\$ 1,430</u>

(1) Realized and unrealized gains/(losses) related to financial instruments, with the exception of customer matched-book derivatives, are reported in institutional brokerage on the consolidated statements of operations. Realized and unrealized gains/(losses) related to customer matched-book derivatives are reported in investment banking. Realized and unrealized gains/(losses) related to investments are reported in investment banking revenues or investment income/(loss) on the consolidated statements of operations.

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<i>(Dollars in thousands)</i>	Balance at June 30, 2016	Purchases	Sales	Transfers in	Transfers out	Realized gains/ (losses) (1)	Unrealized gains/ (losses) (1)	Balance at September 30, 2016	Unrealized gains/ (losses) for assets/ liabilities held at September 30, 2016 (1)
Assets:									
Financial instruments and other inventory positions owned:									
Municipal securities:									
Tax-exempt securities	\$ 1,177	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 1,177	\$ —
Short-term securities	748	—	—	—	—	—	—	748	—
Mortgage-backed securities	56,053	—	(44,006)	—	—	1,440	190	13,677	111
Derivative contracts	18	—	—	—	—	—	942	960	960
Total financial instruments and other inventory positions owned	57,996	—	(44,006)	—	—	1,440	1,132	16,562	1,071
Investments at fair value	122,786	12,011	(21,309)	—	—	10,336	(7,709)	116,115	2,570
Total assets	\$ 180,782	\$ 12,011	\$ (65,315)	\$ —	\$ —	\$ 11,776	\$ (6,577)	\$ 132,677	\$ 3,641
Liabilities:									
Financial instruments and other inventory positions sold, but not yet purchased:									
Derivative contracts	\$ 14,785	\$ (5,922)	\$ 171	\$ —	\$ —	\$ 5,751	\$ (7,497)	\$ 7,288	\$ (1,263)
Total financial instruments and other inventory positions sold, but not yet purchased	\$ 14,785	\$ (5,922)	\$ 171	\$ —	\$ —	\$ 5,751	\$ (7,497)	\$ 7,288	\$ (1,263)

(1) Realized and unrealized gains/(losses) related to financial instruments, with the exception of customer matched-book derivatives, are reported in institutional brokerage on the consolidated statements of operations. Realized and unrealized gains/(losses) related to customer matched-book derivatives are reported in investment banking. Realized and unrealized gains/(losses) related to investments are reported in investment banking revenues or investment income/(loss) on the consolidated statements of operations.

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<i>(Dollars in thousands)</i>	Balance at December 31, 2016	Purchases	Sales	Transfers in	Transfers out	Realized gains/ (losses) (1)	Unrealized gains/ (losses) (1)	Balance at September 30, 2017	Unrealized gains/ (losses) for assets/ liabilities held at September 30, 2017 (1)
Assets:									
Financial instruments and other inventory positions owned:									
Municipal securities:									
Taxable securities	\$ 2,686	\$ —	\$ (2,703)	\$ —	\$ —	\$ 716	\$ (699)	\$ —	\$ —
Tax-exempt securities	1,077	—	(267)	—	—	—	(60)	750	(60)
Short-term securities	744	—	(25)	—	—	2	(16)	705	(16)
Mortgage-backed securities	5,365	997	(1,854)	—	—	296	(483)	4,321	(90)
Derivative contracts	13,952	350	(11,978)	—	—	11,628	(13,266)	686	686
Total financial instruments and other inventory positions owned	23,824	1,347	(16,827)	—	—	12,642	(14,524)	6,462	520
Investments at fair value	123,319	25,444	(25,211)	—	(601)	9,399	(2,190)	130,160	7,704
Total assets	\$ 147,143	\$ 26,791	\$ (42,038)	\$ —	\$ (601)	\$ 22,041	\$ (16,714)	\$ 136,622	\$ 8,224
Liabilities:									
Financial instruments and other inventory positions sold, but not yet purchased:									
Derivative contracts	\$ 1,487	\$ (719)	\$ 11,219	\$ —	\$ —	\$ (10,500)	\$ 2,763	\$ 4,250	\$ 4,125
Total financial instruments and other inventory positions sold, but not yet purchased	\$ 1,487	\$ (719)	\$ 11,219	\$ —	\$ —	\$ (10,500)	\$ 2,763	\$ 4,250	\$ 4,125

(1) Realized and unrealized gains/(losses) related to financial instruments, with the exception of customer matched-book derivatives, are reported in institutional brokerage on the consolidated statements of operations. Realized and unrealized gains/(losses) related to customer matched-book derivatives are reported in investment banking. Realized and unrealized gains/(losses) related to investments are reported in investment banking revenues or investment income/(loss) on the consolidated statements of operations.

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(Dollars in thousands)	Balance at December 31, 2015	Purchases	Sales	Transfers in	Transfers out	Realized gains/ (losses) (1)	Unrealized gains/ (losses) (1)	Balance at September 30, 2016	Unrealized gains/ (losses) for assets/ liabilities held at September 30, 2016 (1)
Assets:									
Financial instruments and other inventory positions owned:									
Municipal securities:									
Taxable securities	\$ 5,816	\$ —	\$ (611)	\$ —	\$ (5,216)	\$ 11	\$ —	\$ —	\$ —
Tax-exempt securities	1,177	—	—	—	—	—	—	1,177	—
Short-term securities	720	—	—	—	—	—	28	748	28
Mortgage-backed securities	121,124	26,519	(133,913)	—	—	3,285	(3,338)	13,677	241
Derivative contracts	—	246	—	—	—	(246)	960	960	960
Total financial instruments and other inventory positions owned	128,837	26,765	(134,524)	—	(5,216)	3,050	(2,350)	16,562	1,229
Investments at fair value	109,444	27,683	(21,309)	—	(9,088)	10,336	(951)	116,115	(1,223)
Total assets	<u>\$ 238,281</u>	<u>\$ 54,448</u>	<u>\$ (155,833)</u>	<u>\$ —</u>	<u>\$ (14,304)</u>	<u>\$ 13,386</u>	<u>\$ (3,301)</u>	<u>\$ 132,677</u>	<u>\$ 6</u>
Liabilities:									
Financial instruments and other inventory positions sold, but not yet purchased:									
Derivative contracts	\$ 7,148	\$ (23,700)	\$ 171	\$ —	\$ —	\$ 23,529	\$ 140	\$ 7,288	\$ 7,288
Total financial instruments and other inventory positions sold, but not yet purchased	<u>\$ 7,148</u>	<u>\$ (23,700)</u>	<u>\$ 171</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 23,529</u>	<u>\$ 140</u>	<u>\$ 7,288</u>	<u>\$ 7,288</u>

(1) Realized and unrealized gains/(losses) related to financial instruments, with the exception of customer matched-book derivatives, are reported in institutional brokerage on the consolidated statements of operations. Realized and unrealized gains/(losses) related to customer matched-book derivatives are reported in investment banking. Realized and unrealized gains/(losses) related to investments are reported in investment banking revenues or investment income/(loss) on the consolidated statements of operations.

The carrying values of the Company's cash, securities either purchased or sold under agreements to resell, receivables and payables either from or to customers and brokers, dealers and clearing organizations and short-term financings approximate fair value due to their liquid or short-term nature.

Non-Recurring Fair Value Measurement

During the third quarter of 2017, the Company recorded a goodwill impairment charge of \$114.4 million representing the full value of goodwill attributable to the asset management reporting unit. The fair value measurement used in the analysis was calculated using the income approach (discounted cash flow method) and market approach (earnings multiples of public company comparables). The discounted cash flow model was calculated using unobservable inputs, such as revenue and EBITDA forecasts, which are classified as Level III within the fair value hierarchy. See Note 11 for further discussion.

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Note 6 Variable Interest Entities ("VIEs")

The Company has investments in and/or acts as the managing partner of various partnerships, limited liability companies, and registered mutual funds. These entities were established for the purpose of investing in securities of public or private companies, or municipal debt obligations, or providing financing to senior living facilities, and were initially financed through the capital commitments or seed investments of the members.

VIEs are entities in which equity investors lack the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities. The determination as to whether an entity is a VIE is based on the structure and nature of each entity. The Company also considers other characteristics such as the power through voting rights or similar rights to direct the activities of an entity that most significantly impact the entity's economic performance and how the entity is financed.

The Company is required to consolidate all VIEs for which it is considered to be the primary beneficiary. The determination as to whether the Company is considered to be the primary beneficiary is based on whether the Company has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE.

Consolidated VIEs

The Company's consolidated VIEs at September 30, 2017 include certain alternative asset management funds in which the Company has an investment and, as the managing partner, is deemed to have both the power to direct the most significant activities of the funds and the right to receive benefits (or the obligation to absorb losses) that could potentially be significant to these funds.

The following table presents information about the carrying value of the assets and liabilities of the VIEs which are consolidated by the Company and included on the consolidated statements of financial condition at September 30, 2017. The assets can only be used to settle the liabilities of the respective VIE, and the creditors of the VIEs do not have recourse to the general credit of the Company. The assets and liabilities are presented prior to consolidation, and thus a portion of these assets and liabilities are eliminated in consolidation.

<i>(Dollars in thousands)</i>	Alternative Asset Management Funds
Assets:	
Receivables from brokers, dealers and clearing organizations	\$ 15,765
Financial instruments and other inventory positions owned and pledged as collateral	149,632
Investments	112,834
Other assets	4,621
Total assets	<u>\$ 282,852</u>
Liabilities:	
Short-term financing	\$ 76,797
Payables to brokers, dealers and clearing organizations	46,627
Financial instruments and other inventory positions sold, but not yet purchased	21,813
Other liabilities and accrued expenses	18,344
Total liabilities	<u>\$ 163,581</u>

The Company has investments in a grantor trust which was established as part of a nonqualified deferred compensation plan. The Company is the primary beneficiary of the grantor trust. Accordingly, the assets and liabilities of the grantor trust are consolidated by the Company on the consolidated statements of financial condition. See Note 16 for additional information on the nonqualified deferred compensation plan.

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Nonconsolidated VIEs

The Company determined it is not the primary beneficiary of certain VIEs and accordingly does not consolidate them. These VIEs had net assets approximating \$0.6 billion and \$0.8 billion at September 30, 2017 and December 31, 2016, respectively. The Company's exposure to loss from these VIEs is \$6.4 million, which is the carrying value of its capital contributions recorded in investments on the consolidated statements of financial condition at September 30, 2017. The Company had no liabilities related to these VIEs at September 30, 2017 and December 31, 2016, respectively. Furthermore, the Company has not provided financial or other support to these VIEs that it was not previously contractually required to provide as of September 30, 2017.

Note 7 Receivables from and Payables to Brokers, Dealers and Clearing Organizations

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Receivable arising from unsettled securities transactions	\$ 15,765	\$ 132,724
Deposits paid for securities borrowed	—	27,573
Receivable from clearing organizations	36,891	3,293
Deposits with clearing organizations	12,409	35,713
Securities failed to deliver	—	975
Other	15,815	12,452
Total receivables from brokers, dealers and clearing organizations	<u>\$ 80,880</u>	<u>\$ 212,730</u>

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Payable arising from unsettled securities transactions	\$ 49,160	\$ 13,948
Payable to clearing organizations	—	15,893
Securities failed to receive	—	3,043
Other	5,105	7,958
Total payables to brokers, dealers and clearing organizations	<u>\$ 54,265</u>	<u>\$ 40,842</u>

The Company has established an arrangement to obtain financing from Pershing related to the majority of its trading activities. Under the Company's fully disclosed clearing agreement, the majority of its securities inventories and all of its customer activities are held by or cleared through Pershing. Financing under this arrangement is secured primarily by securities, and collateral limitations could reduce the amount of funding available under this arrangement. The funding is at the discretion of Pershing and could be denied. The Company's clearing arrangement activities are recorded net from trading activity. The Company's fully disclosed clearing agreement includes a covenant requiring Piper Jaffray to maintain excess net capital of \$120 million.

Deposits paid for securities borrowed approximate the market value of the securities. Securities failed to deliver and receive represent the contract value of securities that have not been delivered or received by the Company on settlement date.

Note 8 Collateralized Securities Transactions

As discussed in Note 1, Piper Jaffray transitioned from a self clearing securities broker dealer to a fully disclosed clearing model in the third quarter of 2017.

The Company's current financing and prior customer securities activities involve the Company using securities as collateral. In the event that the counterparty does not meet its contractual obligation to return securities used as collateral (e.g., pursuant to the terms of a repurchase agreement), or customers did not deposit additional securities or cash for margin when required, the Company may be exposed to the risk of reacquiring the securities or selling the securities at unfavorable market prices in order to satisfy its obligations. The Company seeks to control this risk by monitoring the market value of securities pledged or used as collateral on a daily basis and requiring adjustments in the event of excess market exposure. The Company also uses unaffiliated third party custodians to administer the underlying collateral for certain of its short-term financings to mitigate risk.

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In a reverse repurchase agreement the Company purchases financial instruments from a seller, typically in exchange for cash, and agrees to resell the same or substantially the same financial instruments to the seller at a stated price plus accrued interest in the future. In a repurchase agreement, the Company sells financial instruments to a buyer, typically for cash, and agrees to repurchase the same or substantially the same financial instruments from the buyer at a stated price plus accrued interest at a future date. Even though repurchase and reverse repurchase agreements involve the legal transfer of ownership of financial instruments, they are accounted for as financing arrangements because they require the financial instruments to be repurchased or resold at maturity of the agreement.

In a securities borrowed transaction, the Company borrows securities from a counterparty in exchange for cash. When the Company returns the securities, the counterparty returns the cash. Interest is generally paid periodically over the life of the transaction.

Prior to transitioning to a fully disclosed clearing model, the Company obtained securities purchased under agreements to resell, securities borrowed and margin agreements on terms that permit it to repledge or resell the securities to others, typically pursuant to repurchase agreements. The Company obtained securities with a fair value of approximately \$192.2 million at December 31, 2016, of which \$185.2 million had been pledged or otherwise transferred to satisfy its commitments under financial instruments and other inventory positions sold, but not yet purchased.

Reverse repurchase agreements, repurchase agreements and securities borrowed and loaned are reported on a net basis by counterparty when a legal right of offset exists. The Company had no outstanding securities lending arrangements as of September 30, 2017 or December 31, 2016. See Note 4 for information related to the Company's offsetting of derivative contracts.

Note 9 Investments

The Company's investments include investments in private companies and partnerships, registered mutual funds, warrants of public and private companies and private company debt.

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Investments at fair value	\$ 167,938	\$ 156,102
Investments at cost	3,068	2,755
Investments accounted for under the equity method	8,521	9,200
Total investments	<u>179,527</u>	<u>168,057</u>
Less investments attributable to noncontrolling interests (1)	<u>(44,932)</u>	<u>(45,123)</u>
	<u>\$ 134,595</u>	<u>\$ 122,934</u>

(1) Noncontrolling interests are attributable to third party ownership in consolidated merchant banking and senior living funds.

At September 30, 2017, investments carried on a cost basis had an estimated fair market value of \$4.6 million. Because valuation estimates were based upon management's judgment, investments carried at cost would be categorized as Level III assets in the fair value hierarchy, if they were carried at fair value.

Investments accounted for under the equity method include general and limited partnership interests. The carrying value of these investments is based on the investment vehicle's net asset value. The net assets of investment partnerships consist of investments in both marketable and non-marketable securities. The underlying investments held by such partnerships are valued based on the estimated fair value determined by management in the Company's capacity as general partner or investor and, in the case of investments in unaffiliated investment partnerships, are based on financial statements prepared by the unaffiliated general partners.

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Note 10 Other Assets

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Fee receivables	\$ 21,968	\$ 22,840
Accrued interest receivables	7,612	9,259
Forgivable loans, net	8,422	9,307
Prepaid expenses	5,122	6,363
Secured loan receivables	2,975	6,236
Other	9,344	13,124
Total other assets	<u>\$ 55,443</u>	<u>\$ 67,129</u>

Note 11 Goodwill and Intangible Assets

<i>(Dollars in thousands)</i>	Capital Markets	Asset Management	Total
Goodwill			
Balance at December 31, 2016	\$ 81,855	\$ 114,363	\$ 196,218
Impairment charge	—	(114,363)	(114,363)
Balance at September 30, 2017	<u>\$ 81,855</u>	<u>\$ —</u>	<u>\$ 81,855</u>
Intangible assets			
Balance at December 31, 2016	\$ 19,320	\$ 17,914	\$ 37,234
Amortization of intangible assets	(7,633)	(3,833)	(11,466)
Balance at September 30, 2017	<u>\$ 11,687</u>	<u>\$ 14,081</u>	<u>\$ 25,768</u>

The Company tests goodwill and indefinite-life intangible assets for impairment on an annual basis and on an interim basis when circumstances exist that could indicate possible impairment. The Company tests for impairment at the reporting unit level, which is generally one level below its operating segments. The Company has identified two reporting units: capital markets and asset management. When testing for impairment, the Company has the option to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after making an assessment, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then further analysis is unnecessary. However, if the Company concludes otherwise, then the Company is required to perform a two-step impairment test, which requires management to make judgments in determining what assumptions to use in the calculation. The first step requires a comparison of the fair value of the reporting unit to its carrying value, including allocated goodwill. The estimated fair value of the reporting unit is derived based on valuation techniques that a market participant would use. The Company estimates the fair value of the reporting unit using the income approach (discounted cash flow method) and market approach (earnings and/or transaction multiples). As discussed in Note 2, the Company adopted ASU 2017-04 effective July 1, 2017. ASU 2017-04 eliminates the second step from the goodwill impairment test. Accordingly, the Company will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value.

The Company identified impairment indicators in the third quarter of 2017 related to the asset management reporting unit and performed an interim goodwill impairment test as of July 31, 2017, which resulted in a non-cash goodwill impairment charge of \$114.4 million. The fair value of the asset management reporting unit was calculated using the income approach (discounted cash flow method based on revenue and EBITDA forecasts) and market approach (earnings multiples of comparable public companies). The impairment charge resulted from declining profitability in 2017 as decreases in revenues relating to higher fee product offerings have not been fully offset by new revenues on assets gained in lower fee product offerings. The shift in revenue mix is attributable, in part, to the extended cycle of investors favoring passive investment vehicles over active management.

The Company also evaluated its intangible assets (indefinite and definite-lived) related to the asset management reporting unit and concluded there was no impairment.

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Note 12 Short-Term Financing

	Outstanding Balance		Weighted Average Interest Rate	
	September 30, 2017	December 31, 2016	September 30, 2017	December 31, 2016
<i>(Dollars in thousands)</i>				
Commercial paper (secured)	\$ —	\$ 147,021	N/A	2.12%
Prime broker arrangements	76,797	271,811	1.98%	1.49%
Total short-term financing	<u>\$ 76,797</u>	<u>\$ 418,832</u>		

The Company issues secured commercial paper to fund a portion of its securities inventory. The commercial paper notes ("CP Notes") can be issued with maturities of 27 days to 270 days from the date of issuance. The CP Notes are currently issued under two separate programs, CP Series A and CP Series II A, and are secured by different inventory classes. CP Series III A was discontinued during the third quarter of 2017. The CP Notes are interest bearing or sold at a discount to par with an interest rate based on LIBOR plus an applicable margin. CP Series II A includes a revised covenant that requires the Company's U.S. broker dealer subsidiary to maintain excess net capital of \$100 million. At September 30, 2017, the Company had no CP Notes outstanding.

The Company has established arrangements to obtain financing with prime brokers related to its municipal bond fund and convertible securities. Financing under these arrangements is primarily secured by municipal securities, and collateral limitations could reduce the amount of funding available under the arrangements. Prime broker financing activities are recorded net of receivables from trading activity. The funding is at the discretion of the prime brokers subject to a notice period.

The Company has both committed and uncommitted short-term bank line financing available on a secured basis. The Company uses these credit facilities in the ordinary course of business to fund a portion of its daily operations and the amount borrowed under these credit facilities varies daily based on the Company's funding needs.

The Company's committed short-term bank line financing at September 30, 2017 consisted of a one-year \$200 million committed revolving credit facility with U.S. Bank, N.A., which was renewed in December 2016. Advances under this facility are secured by certain marketable securities. The facility includes a covenant that requires the Company's U.S. broker dealer subsidiary to maintain minimum net capital of \$120 million, and the unpaid principal amount of all advances under this facility will be due on December 16, 2017. The Company pays a nonrefundable commitment fee on the unused portion of the facility on a quarterly basis. At September 30, 2017, the Company had no advances against this line of credit.

The Company's uncommitted secured line at September 30, 2017 totaled \$85 million and is dependent on having appropriate collateral, as determined by the bank agreement, to secure an advance under the line. The availability of the Company's uncommitted line is subject to approval by the bank each time an advance is requested and may be denied. At September 30, 2017, the Company had no advances against this line of credit.

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Note 13 Senior Notes

The Company has entered into variable and fixed rate senior notes with certain entities advised by Pacific Investment Management Company ("PIMCO"). The following table presents the outstanding balance by note class:

	Outstanding Balance	
	September 30, 2017	December 31, 2016
<i>(Dollars in thousands)</i>		
Class A Notes	\$ —	\$ 50,000
Class C Notes	125,000	125,000
Total senior notes	<u>\$ 125,000</u>	<u>\$ 175,000</u>

On October 8, 2015, the Company entered into a second amended and restated note purchase agreement ("Second Amended and Restated Note Purchase Agreement") under which the Company issued \$125 million of fixed rate Class C Notes. The Class C Notes bear interest at an annual fixed rate of 5.06 percent, are payable semi-annually and mature on October 9, 2018. The unpaid principal amount is due in full on the maturity date and may not be prepaid by the Company. The variable rate Class A Notes were repaid by the Company upon maturity on May 31, 2017.

The Second Amended and Restated Note Purchase Agreement includes customary events of default and covenants that, among other things, require the Company to maintain a minimum consolidated tangible net worth and regulatory net capital, limit the Company's leverage ratio and require the Company to maintain a minimum ratio of operating cash flow to fixed charges. At September 30, 2017, the Company was in compliance with all covenants.

The senior notes are recorded at amortized cost. As of September 30, 2017, the fair value of the fixed rate Class C Notes was approximately \$125.7 million.

Note 14 Legal Contingencies

The Company has been named as a defendant in various legal actions, including complaints and litigation and arbitration claims, arising from its business activities. Such actions include claims related to securities brokerage and investment banking activities, and certain class actions that primarily allege violations of securities laws and seek unspecified damages, which could be substantial. Also, the Company is involved from time to time in investigations and proceedings by governmental agencies and self-regulatory organizations ("SROs") which could result in adverse judgments, settlement, penalties, fines or other relief.

The Company has established reserves for potential losses that are probable and reasonably estimable that may result from pending and potential legal actions, investigations and regulatory proceedings. Reasonably possible losses in excess of amounts accrued at September 30, 2017 are not material. In many cases, however, it is inherently difficult to determine whether any loss is probable or even possible or to estimate the amount or range of any potential loss, particularly where proceedings may be in relatively early stages or where plaintiffs are seeking substantial or indeterminate damages. Matters frequently need to be more developed before a loss or range of loss can reasonably be estimated.

Given uncertainties regarding the timing, scope, volume and outcome of pending and potential legal actions, investigations and regulatory proceedings and other factors, the amounts of reserves and ranges of reasonably possible losses are difficult to determine and of necessity subject to future revision. Subject to the foregoing, management of the Company believes, based on currently available information, after consultation with outside legal counsel and taking into account its established reserves, that pending legal actions, investigations and regulatory proceedings will be resolved with no material adverse effect on the consolidated statements of financial condition, results of operations or cash flows of the Company. However, if during any period a potential adverse contingency should become probable or resolved for an amount in excess of the established reserves, the results of operations and cash flows in that period and the financial condition as of the end of that period could be materially adversely affected. In addition, there can be no assurance that material losses will not be incurred from claims that have not yet been brought to the Company's attention or are not yet determined to be reasonably possible.

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Note 15 Shareholders' Equity

Share Repurchases

Effective August 14, 2015, the Company's board of directors authorized the repurchase of up to \$150.0 million in common shares through September 30, 2017. During the nine months ended September 30, 2017, the Company repurchased 36,936 shares at an average price of \$67.62 per share for an aggregate purchase price of \$2.5 million related to this authorization. During the nine months ended September 30, 2016, the Company repurchased 1,536,226 shares at an average price of \$38.89 per share for an aggregate purchase price of \$59.7 million related to this authorization. This authorization expired on September 30, 2017.

On August 10, 2017, the Company's board of directors authorized the repurchase of up to \$150.0 million in common shares, effective from September 30, 2017 through September 30, 2019.

The Company also purchases shares of common stock from restricted stock award recipients upon the award vesting as recipients sell shares to meet their employment tax obligations. The Company purchased 308,801 shares and 255,164 shares, or \$22.6 million and \$10.7 million of the Company's common stock for this purpose during the nine months ended September 30, 2017 and 2016, respectively.

Issuance of Shares

The Company issues common shares out of treasury stock as a result of employee restricted share vesting and exercise transactions as discussed in Note 16. During the nine months ended September 30, 2017 and 2016, the Company issued 850,925 shares and 731,758 shares, respectively, related to these obligations.

Dividends

Beginning in 2017, the Company initiated the payment of a quarterly cash dividend to holders of its common stock. The Company's board of directors determines the declaration and payment of dividends on a quarterly basis, and is free to change the Company's dividend policy at any time.

On October 26, 2017, the board of directors declared a cash dividend of \$0.3125 per share to be paid on December 15, 2017, to shareholders of record as of the close of business on November 29, 2017. During the nine months ended September 30, 2017, the Company declared and paid dividends of \$0.9375 per share, totaling \$14.2 million.

Noncontrolling Interests

The consolidated financial statements include the accounts of Piper Jaffray Companies, its wholly owned subsidiaries and other entities in which the Company has a controlling financial interest. Noncontrolling interests represent equity interests in consolidated entities that are not attributable, either directly or indirectly, to Piper Jaffray Companies. Noncontrolling interests include the minority equity holders' proportionate share of the equity in merchant banking funds of \$35.1 million and a senior living fund aggregating \$13.4 million as of September 30, 2017. As of December 31, 2016, noncontrolling interests included the minority equity holders' proportionate share of the equity in a merchant banking fund of \$35.0 million, a municipal bond fund with employee investors of \$9.2 million and a senior living fund aggregating \$12.8 million.

Ownership interests in entities held by parties other than the Company's common shareholders are presented as noncontrolling interests within shareholders' equity, separate from the Company's own equity. Revenues, expenses and net income or loss are reported on the consolidated statements of operations on a consolidated basis, which includes amounts attributable to both the Company's common shareholders and noncontrolling interests. Net income or loss is then allocated between the Company and noncontrolling interests based upon their relative ownership interests. Net income applicable to noncontrolling interests is deducted from consolidated net income to determine net income applicable to the Company. There was no other comprehensive income or loss attributed to noncontrolling interests for the nine months ended September 30, 2017 and 2016, respectively.

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The following table presents the changes in shareholders' equity for the nine months ended September 30, 2017:

<i>(Amounts in thousands, except share amounts)</i>	Common Shares Outstanding	Common Shareholders' Equity	Noncontrolling Interests	Total Shareholders' Equity
Balance at December 31, 2016	12,391,970	\$ 759,250	\$ 57,016	\$ 816,266
Net income/(loss)	—	(15,865)	3,217	(12,648)
Dividends	—	(14,228)	—	(14,228)
Amortization/issuance of restricted stock (1)	—	31,163	—	31,163
Issuance of treasury shares for options exercised	26,149	1,703	—	1,703
Issuance of treasury shares for restricted stock vestings	824,776	—	—	—
Repurchase of common stock through share repurchase program	(36,936)	(2,497)	—	(2,497)
Repurchase of common stock for employee tax withholding	(308,801)	(22,568)	—	(22,568)
Shares reserved/issued for director compensation	2,744	171	—	171
Other comprehensive income	—	1,137	—	1,137
Fund capital distributions, net	—	—	(11,714)	(11,714)
Balance at September 30, 2017	12,899,902	\$ 738,266	\$ 48,519	\$ 786,785

(1) Includes amortization of restricted stock as part of deal consideration for the acquisition of Simmons. See Note 3 for further discussion.

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Note 16 Compensation Plans**Stock-Based Compensation Plans**

The Company maintains two stock-based compensation plans, the Piper Jaffray Companies Amended and Restated 2003 Annual and Long-Term Incentive Plan (the "Incentive Plan") and the 2016 Employment Inducement Award Plan (the "Inducement Plan"). The Company's equity awards are recognized on the consolidated statements of operations at grant date fair value over the service period of the award less forfeitures.

The following table provides a summary of the Company's outstanding equity awards (in shares or units) as of September 30, 2017:

Incentive Plan

Restricted Stock	
Annual grants	906,347
Sign-on grants	247,341
	<u>1,153,688</u>

Inducement Plan

Restricted Stock	
	<u>260,231</u>
Total restricted stock related to compensation	<u>1,413,919</u>
Simmons Deal Consideration (1)	<u>821,141</u>
Total restricted stock outstanding	<u><u>2,235,060</u></u>

Incentive Plan

Restricted Stock Units	
Leadership grants	<u>273,574</u>

(1) The Company issued restricted stock with service conditions as part of deal consideration for the acquisition of Simmons. See Note 3 for further discussion.

Incentive Plan

The Incentive Plan permits the grant of equity awards, including restricted stock, restricted stock units and non-qualified stock options, to the Company's employees and directors for up to 8.2 million shares of common stock (1.0 million shares remained available for future issuance under the Incentive Plan as of September 30, 2017). The Company believes that such awards help align the interests of employees and directors with those of shareholders and serve as an employee retention tool. The Incentive Plan provides for accelerated vesting of awards if there is a severance event, a change in control of the Company (as defined in the Incentive Plan), in the event of a participant's death, and at the discretion of the compensation committee of the Company's board of directors.

Restricted Stock Awards

Restricted stock grants are valued at the market price of the Company's common stock on the date of grant and are amortized over the requisite service period. The Company grants shares of restricted stock to employees as part of year-end compensation ("Annual Grants") and upon initial hiring or as a retention award ("Sign-on Grants").

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The Company's Annual Grants are made each year in February. Annual Grants vest ratably over three years in equal installments. The Annual Grants provide for continued vesting after termination of employment, so long as the employee does not violate certain post-termination restrictions set forth in the award agreement or any agreements entered into upon termination. The Company determined the service inception date precedes the grant date for the Annual Grants, and that the post-termination restrictions do not meet the criteria for an in-substance service condition, as defined by ASC 718. Accordingly, restricted stock granted as part of the Annual Grants is expensed in the one-year period in which those awards are deemed to be earned, which is generally the calendar year preceding the February grant date. For example, the Company recognized compensation expense during fiscal 2016 for its February 2017 Annual Grant. If an equity award related to the Annual Grants is forfeited as a result of violating the post-termination restrictions, the lower of the fair value of the award at grant date or the fair value of the award at the date of forfeiture is recorded within the consolidated statements of operations as a reversal of compensation expense.

Sign-on Grants are used as a recruiting tool for new employees and are issued to current employees as a retention tool. These awards have both cliff and ratably vesting terms, and the employees must fulfill service requirements in exchange for rights to the awards. Compensation expense is amortized on a straight-line basis from the grant date over the requisite service period, generally one to five years. Employees forfeit unvested shares upon termination of employment and a reversal of compensation expense is recorded.

Annually, the Company grants stock to its non-employee directors. The stock-based compensation paid to non-employee directors is fully expensed on the grant date and included within outside services expense on the consolidated statements of operations.

Restricted Stock Units

The Company grants restricted stock units to its leadership team ("Leadership Grants").

2017 Leadership Grant

Restricted stock units granted in 2017 will vest and convert to shares of common stock at the end of the performance period only if the Company satisfies predetermined performance and/or market conditions over the 36-month performance period from January 1, 2017 through December 31, 2019. Under the terms of the award, the number of units that will actually vest and convert to shares will be based on the extent to which the Company achieves specified targets during the performance period. The maximum payout leverage under this grant is 150 percent.

Up to 75 percent of the award can be earned based on the Company achieving certain average adjusted return on equity targets, as defined in the terms of the award agreement. The fair value of this portion of the award was based on the closing price of the Company's common stock on the grant date. If the Company determines that it is probable that the performance condition will be achieved, compensation expense is amortized on a straight-line basis over the 36-month performance period. The probability that the performance condition will be achieved is reevaluated each reporting period with changes in estimated outcomes accounted for using a cumulative effect adjustment to compensation expense. Compensation expense will be recognized only if the performance condition is met. Employees forfeit unvested share units upon termination of employment with a corresponding reversal of compensation expense. As of September 30, 2017, the Company has determined that the performance condition is probable of achieving 50 percent of the grant award.

Up to 75 percent of the award can be earned based on the Company's total shareholder return relative to members of a predetermined peer group. The market condition must be met for the award to vest and compensation cost will be recognized regardless if the market condition is satisfied. Compensation expense is amortized on a straight-line basis over the 36-month requisite service period. Employees forfeit unvested share units upon termination of employment with a corresponding reversal of compensation expense. For this portion of the award, the fair value on the grant date was determined using a Monte Carlo simulation with the following assumptions:

Grant Year	Risk-free Interest Rate	Expected Stock Price Volatility
2017	1.62%	35.9%

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Because the market condition portion of the award vesting depends on the Company's total shareholder return relative to a peer group, the valuation modeled the performance of the peer group as well as the correlation between the Company and the peer group. The expected stock price volatility assumption was determined using historical volatility, as correlation coefficients can only be developed through historical volatility. The risk-free interest rate was determined based on the three-year U.S. Treasury bond yield.

Leadership Grants Prior to 2017

Restricted stock units granted prior to 2017 contain market condition criteria and will vest and convert to shares of common stock at the end of each 36-month performance period only if the Company's stock performance satisfies predetermined market conditions over the performance period. Under the terms of the grants, the number of units that will vest and convert to shares will be based on the Company's stock performance achieving specified targets during each performance period. Compensation expense is recognized over each 36-month performance period.

Up to 50 percent of these awards can be earned based on the Company's total shareholder return relative to members of a predetermined peer group and up to 50 percent of the awards can be earned based on the Company's total shareholder return. The fair value of the awards on the grant date was determined using a Monte Carlo simulation with the following assumptions:

Grant Year	Risk-free Interest Rate	Expected Stock Price Volatility
2016	0.98%	34.9%
2015	0.90%	29.8%
2014	0.82%	41.3%

The expected stock price volatility assumptions were determined using historical volatility, as correlation coefficients can only be developed through historical volatility. The risk-free interest rates were determined based on three-year U.S. Treasury bond yields.

Stock Options

The Company previously granted options to purchase Piper Jaffray Companies common stock to employees and non-employee directors in fiscal years 2004 through 2008. Employee and director options were expensed by the Company on a straight-line basis over the required service period, based on the estimated fair value of the award on the date of grant using a Black-Scholes option-pricing model. As described above pertaining to the Company's Annual Grants of restricted shares, stock options granted to employees were expensed in the calendar year preceding the annual February grant date. For example, the Company recognized compensation expense during fiscal 2007 for its February 2008 option grant. The maximum term of the stock options granted to employees and directors was ten years. The Company has not granted stock options since 2008, and all awards have been exercised or expired as of March 31, 2017.

Inducement Plan

The Company established the Inducement Plan in conjunction with the acquisition of Simmons. The Company granted \$11.6 million (286,776 shares) in restricted stock under the Inducement Plan on May 15, 2016. These shares cliff vest in three years. Inducement Plan awards are amortized as compensation expense on a straight-line basis over the vesting period. Employees forfeit unvested Inducement Plan shares upon termination of employment and a reversal of compensation expense is recorded.

Stock-Based Compensation Activity

The Company recorded compensation expense of \$13.5 million and \$17.9 million for the three months ended September 30, 2017 and 2016, respectively, and \$25.8 million and \$42.0 million for the nine months ended September 30, 2017 and 2016, respectively, related to employee restricted stock and restricted stock unit awards. Forfeitures were \$0.7 million and \$0.5 million for the three months ended September 30, 2017 and 2016, respectively, and \$3.0 million and \$0.6 million, for the nine months ended September 30, 2017 and 2016, respectively. The tax benefit related to stock-based compensation totaled \$4.5 million and \$5.2 million for the three months ended September 30, 2017 and 2016, respectively, and \$16.2 million and \$11.8 million for the nine months ended September 30, 2017 and 2016, respectively.

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The following table summarizes the changes in the Company's unvested restricted stock:

	Unvested Restricted Stock (in Shares)	Weighted Average Grant Date Fair Value
December 31, 2016	2,874,117	\$ 43.12
Granted	241,691	77.95
Vested	(701,380)	44.85
Canceled	(179,368)	42.68
September 30, 2017	2,235,060	\$ 46.38

The following table summarizes the changes in the Company's unvested restricted stock units:

	Unvested Restricted Stock Units	Weighted Average Grant Date Fair Value
December 31, 2016	374,460	\$ 21.63
Granted	35,981	84.10
Vested	(115,290)	23.42
Canceled	(21,577)	27.81
September 30, 2017	273,574	\$ 28.61

As of September 30, 2017, there was \$29.4 million of total unrecognized compensation cost related to restricted stock and restricted stock units expected to be recognized over a weighted average period of 1.6 years.

The following table summarizes the changes in the Company's outstanding stock options:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in Years)	Aggregate Intrinsic Value
December 31, 2016	30,613	\$ 65.86	0.3	\$ 203,291
Granted	—	—		
Exercised	(26,149)	65.13		
Canceled	—	—		
Expired	(4,464)	70.13		
September 30, 2017	—	\$ —	0.0	\$ —

As of September 30, 2017, there was no unrecognized compensation cost related to stock options expected to be recognized over future years. The intrinsic value of options exercised was \$0.3 million and the resulting tax benefit realized was \$0.1 million for the nine months ended September 30, 2017. The intrinsic value of options exercised and the resulting tax benefit realized were immaterial for the nine months ended September 30, 2016.

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Deferred Compensation Plans

The Company maintains various deferred compensation arrangements for employees.

The nonqualified deferred compensation plan is an unfunded plan which allows certain highly compensated employees, at their election, to defer a percentage of their base salary, commissions and/or cash bonuses. The deferrals vest immediately and are non-forfeitable. The amounts deferred under this plan are held in a grantor trust. The Company invests, as a principal, in investments to economically hedge its obligation under the nonqualified deferred compensation plan. Investments in the grantor trust, consisting of mutual funds, totaled \$29.9 million and \$24.4 million as of September 30, 2017 and December 31, 2016, respectively, and are included in investments on the consolidated statements of financial condition. The compensation deferred by the employees is expensed in the period earned. The deferred compensation liability was \$30.0 million and \$24.5 million as of September 30, 2017 and December 31, 2016, respectively. Changes in the fair value of the investments made by the Company are reported in investment income and changes in the corresponding deferred compensation liability are reflected as compensation and benefits expense on the consolidated statements of operations. On August 9, 2017, the Company's board of directors approved the discontinuance of future deferral elections by participants for performance periods beginning after December 31, 2017.

The Piper Jaffray Companies Mutual Fund Restricted Share Investment Plan is a fully funded deferred compensation plan which allows eligible employees to elect to receive a portion of the incentive compensation they would otherwise receive in the form of restricted stock, instead in restricted mutual fund shares ("MFRS Awards") of investment funds. MFRS Awards are awarded to qualifying employees in February of each year, and represent a portion of their compensation for performance in the preceding year similar to the Company's Annual Grants. MFRS Awards vest ratably over three years in equal installments and provide for continued vesting after termination of employment so long as the employee does not violate certain post-termination restrictions set forth in the award agreement or any agreement entered into upon termination. Forfeitures are recorded as a reduction of compensation and benefits expense within the consolidated statements of operations. MFRS Awards are owned by employee recipients (subject to aforementioned vesting restrictions) and as such are not included on the consolidated statements of financial condition.

The Company has also granted MFRS Awards to new employees as a recruiting tool. Employees must fulfill service requirements in exchange for rights to the awards. Compensation expense from these awards are amortized on a straight-line basis over the requisite service period of two to five years.

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Note 17 Earnings Per Share

The Company calculates earnings per share using the two-class method. Basic earnings per common share is computed by dividing net income/(loss) applicable to Piper Jaffray Companies' common shareholders by the weighted average number of common shares outstanding for the period. Net income/(loss) applicable to Piper Jaffray Companies' common shareholders represents net income/(loss) applicable to Piper Jaffray Companies reduced by the allocation of earnings to participating securities. No allocation of undistributed earnings is made for periods in which a loss is incurred. Distributed earnings (e.g., dividends) are allocated to participating securities. All of the Company's unvested restricted shares are deemed to be participating securities as they are eligible to share in the profits (e.g., receive dividends) of the Company. The Company's restricted stock units are not participating securities as they are not eligible to receive dividends, or the dividends are forfeitable until vested. Diluted earnings per common share is calculated by adjusting the weighted average outstanding shares to assume conversion of all potentially dilutive stock options and restricted stock units.

The computation of earnings per share is as follows:

<i>(Amounts in thousands, except per share data)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net income/(loss) applicable to Piper Jaffray Companies	\$ (49,713)	\$ 10,658	\$ (15,865)	\$ 15,033
Earnings allocated to participating securities (1)	(702)	(2,076)	(2,241)	(2,557)
Net income/(loss) applicable to Piper Jaffray Companies' common shareholders (2)	\$ (50,415)	\$ 8,582	\$ (18,106)	\$ 12,476
Shares for basic and diluted calculations:				
Average shares used in basic computation	12,898	12,282	12,774	12,787
Stock options	—	16	—	14
Restricted stock units	77	—	171	—
Average shares used in diluted computation	12,975 ⁽³⁾	12,298	12,945 ⁽³⁾	12,801
Earnings/(loss) per common share:				
Basic	\$ (3.91)	\$ 0.70	\$ (1.42)	\$ 0.98
Diluted	\$ (3.91) ⁽³⁾	\$ 0.70	\$ (1.42) ⁽³⁾	\$ 0.97

(1) Represents the allocation of distributed and undistributed earnings to participating securities. No allocation of undistributed earnings is made for periods in which a loss is incurred. Distributed earnings (e.g., dividends) are allocated to participating securities. Participating securities include all of the Company's unvested restricted shares. The weighted average participating shares outstanding were 2,246,663 and 2,974,676 for the three months ended September 30, 2017 and 2016, respectively, and 2,389,755 and 2,623,095 for the nine months ended September 30, 2017 and 2016, respectively.

(2) Net income/(loss) applicable to Piper Jaffray Companies' common shareholders for diluted and basic EPS may differ under the two-class method as a result of adding the effect of the assumed exercise of stock options and restricted stock units to dilutive shares outstanding, which alters the ratio used to allocate earnings to Piper Jaffray Companies' common shareholders and participating securities for purposes of calculating diluted and basic EPS.

(3) Earnings per diluted common share is calculated using the basic weighted average number of common shares outstanding for periods in which a loss is incurred. Common shares of 2,235,060 were excluded from diluted EPS at September 30, 2017, as the Company had a net loss for these periods.

The anti-dilutive effects from stock options and restricted stock units were immaterial for the nine months ended September 30, 2017 and 2016, respectively.

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Note 18 Segment Reporting

Basis for Presentation

The Company structures its segments primarily based upon the nature of the financial products and services provided to customers and the Company's management organization. The Company evaluates performance and allocates resources based on segment pre-tax operating income or loss and segment pre-tax operating margin. Revenues and expenses directly associated with each respective segment are included in determining their operating results. Other revenues and expenses that are not directly attributable to a particular segment are allocated based upon the Company's allocation methodologies, including each segment's respective net revenues, use of shared resources, headcount or other relevant measures. Segment assets are based on those directly associated with each segment, and include an allocation of certain assets based on the most relevant measures applicable, including headcount and other factors. The substantial majority of the Company's net revenues and long-lived assets are located in the U.S.

Reportable segment financial results are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
<i>(Dollars in thousands)</i>				
Capital Markets				
Investment banking				
Financing				
Equities	\$ 22,117	\$ 30,479	\$ 70,229	\$ 53,831
Debt	21,687	30,898	60,066	80,195
Advisory services	146,816	75,230	332,205	204,971
<i>Total investment banking</i>	190,620	136,607	462,500	338,997
Institutional sales and trading				
Equities	18,410	20,492	59,085	62,773
Fixed income	20,676	25,812	63,137	71,818
<i>Total institutional sales and trading</i>	39,086	46,304	122,222	134,591
<i>Management and performance fees</i>	678	1,353	4,172	4,112
<i>Investment income/(loss)</i>	(660)	4,472	15,155	14,009
<i>Long-term financing expenses</i>	(1,736)	(2,253)	(6,003)	(6,838)
Net revenues	227,988	186,483	598,046	484,871
Operating expenses (1)	196,409	169,745	524,702	460,628
Segment pre-tax operating income	\$ 31,579	\$ 16,738	\$ 73,344	\$ 24,243
Segment pre-tax operating margin	13.9 %	9.0%	12.3 %	5.0%

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	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
<i>(Dollars in thousands)</i>	2017	2016	2017	2016
Asset Management				
Management and performance fees				
Management fees	\$ 12,140	\$ 13,903	\$ 39,839	\$ 39,587
Performance fees	—	—	—	—
<i>Total management and performance fees</i>	<u>12,140</u>	<u>13,903</u>	<u>39,839</u>	<u>39,587</u>
<i>Investment income</i>	<u>439</u>	<u>461</u>	<u>956</u>	<u>428</u>
Net revenues	12,579	14,364	40,795	40,015
Operating expenses (1)	<u>126,394</u>	<u>12,651</u>	<u>153,699</u>	<u>35,856</u>
Segment pre-tax operating income/(loss)	<u>\$ (113,815)</u>	<u>\$ 1,713</u>	<u>\$ (112,904)</u>	<u>\$ 4,159</u>
Segment pre-tax operating margin	(904.8)%	11.9%	(276.8)%	10.4%
Total				
Net revenues	\$ 240,567	\$ 200,847	\$ 638,841	\$ 524,886
Operating expenses (1)	<u>322,803</u>	<u>182,396</u>	<u>678,401</u>	<u>496,484</u>
Pre-tax operating income/(loss)	<u>\$ (82,236)</u>	<u>\$ 18,451</u>	<u>\$ (39,560)</u>	<u>\$ 28,402</u>
Pre-tax operating margin	(34.2)%	9.2%	(6.2)%	5.4%

(1) Operating expenses include a \$114.4 million goodwill impairment charge for the Asset Management segment, as well as intangible asset amortization as set forth in the table below:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
<i>(Dollars in thousands)</i>	2017	2016	2017	2016
Capital Markets	\$ 2,544	\$ 6,623	\$ 7,633	\$ 11,239
Asset Management	1,278	1,387	3,833	4,161
Total intangible asset amortization	<u>\$ 3,822</u>	<u>\$ 8,010</u>	<u>\$ 11,466</u>	<u>\$ 15,400</u>

Reportable segment assets are as follows:

	September 30,	December 31,
<i>(Dollars in thousands)</i>	2017	2016
Capital Markets	\$ 1,627,722	\$ 1,934,528
Asset Management	112,114	190,975
Total assets	<u>\$ 1,739,836</u>	<u>\$ 2,125,503</u>

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Note 19 *Net Capital Requirements and Other Regulatory Matters*

Piper Jaffray is registered as a securities broker dealer with the SEC and is a member of various SROs and securities exchanges. The Financial Industry Regulatory Authority, Inc. ("FINRA") serves as Piper Jaffray's primary SRO. Piper Jaffray is subject to the uniform net capital rule of the SEC and the net capital rule of FINRA. Piper Jaffray has elected to use the alternative method permitted by the SEC rule which requires that it maintain minimum net capital of \$1.0 million. Advances to affiliates, repayment of subordinated debt, dividend payments and other equity withdrawals by Piper Jaffray are subject to certain approvals, notifications and other provisions of SEC and FINRA rules.

At September 30, 2017, net capital calculated under the SEC rule was \$215.5 million, and exceeded the minimum net capital required under the SEC rule by \$214.5 million.

The Company's committed short-term credit facility and its senior notes include covenants requiring Piper Jaffray to maintain minimum net capital of \$120 million. CP Notes issued under CP Series II A include a covenant that requires Piper Jaffray to maintain excess net capital of \$100 million. The Company's fully disclosed clearing agreement with Pershing also includes a covenant requiring Piper Jaffray to maintain excess net capital of \$120 million.

Piper Jaffray Ltd., a broker dealer subsidiary registered in the United Kingdom, is subject to the capital requirements of the Prudential Regulation Authority and the Financial Conduct Authority. As of September 30, 2017, Piper Jaffray Ltd. was in compliance with the capital requirements of the Prudential Regulation Authority and the Financial Conduct Authority.

Piper Jaffray Hong Kong Limited is licensed by the Hong Kong Securities and Futures Commission, which is subject to the liquid capital requirements of the Securities and Futures (Financial Resources) Rule promulgated under the Securities and Futures Ordinance. At September 30, 2017, Piper Jaffray Hong Kong Limited was in compliance with the liquid capital requirements of the Hong Kong Securities and Futures Commission.

Note 20 *Income Taxes*

The Company recorded an income tax benefit of \$31.4 million and \$26.9 million for the three and nine months ended September 30, 2017, respectively, as a result of pre-tax losses related to the \$114.4 million non-cash goodwill impairment charge for the asset management reporting unit, generating a \$44.2 million deferred income tax asset. See Note 11 for additional information related to the goodwill impairment charge.

The tax benefit related to stock-based compensation awards vesting at values greater than the grant price was \$0.3 million and \$9.1 million for the three and nine months ended September 30, 2017, respectively. See Note 2 regarding the tax impact from the adoption of ASU 2016-09.

The Company's effective tax rate, excluding noncontrolling interests, for the nine months ended September 30, 2017 was 62.9 percent, compared to 36.8 percent for the nine months ended September 30, 2016. The effective tax rate was higher for the nine months ended September 30, 2017, due to the impact of the \$9.1 million tax benefit related to stock-based compensation awards vesting at values greater than the grant price during a period of pre-tax losses.

ITEM 2. *MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.*

The following information should be read in conjunction with the accompanying unaudited consolidated financial statements and related notes and exhibits included elsewhere in this report. Certain statements in this report may be considered forward-looking. Statements that are not historical or current facts, including statements about beliefs and expectations, are forward-looking statements. These forward-looking statements include, among other things, statements other than historical information or statements of current condition and may relate to our future plans and objectives and results, and also may include our belief regarding the effect of various legal proceedings, as set forth under "Legal Proceedings" in Part I, Item 3 of our Annual Report on Form 10-K for the year ended December 31, 2016 and in our subsequent reports filed with the SEC. Forward-looking statements involve inherent risks and uncertainties, and important factors could cause actual results to differ materially from those anticipated, including those factors discussed below under "External Factors Impacting Our Business" as well as the factors identified under "Risk Factors" in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2016, as updated in our subsequent reports filed with the SEC and under "Risk Factors" in Part II, Item 1A of this Quarterly Report on Form 10-Q. These reports are available at our Web site at www.piperjaffray.com and at the SEC Web site at www.sec.gov. Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update them in light of new information or future events.

Explanation of Non-GAAP Financial Measures

We have included financial measures that are not prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). These non-GAAP financial measures include adjustments to exclude (1) revenues and expenses related to noncontrolling interests, (2) amortization of intangible assets related to acquisitions, (3) compensation and non-compensation expenses from acquisition-related agreements, (4) restructuring and acquisition integration costs and (5) goodwill impairment charges. These adjustments affect the following financial measures: net revenues, compensation expenses, non-compensation expenses, net income applicable to Piper Jaffray Companies, earnings per diluted common share, return on average common shareholders' equity, segment net revenues, segment operating expenses, segment pre-tax operating income and segment pre-tax operating margin. Management believes that presenting these results and measures on an adjusted basis in conjunction with the corresponding U.S. GAAP measures provides the most meaningful basis for comparison of our operating results across periods, and enhances the overall understanding of our current financial performance by excluding certain items that may not be indicative of our core operating results. The non-GAAP financial measures should be considered in addition to, not as a substitute for, measures of financial performance prepared in accordance with U.S. GAAP.

Executive Overview

Our business principally consists of providing investment banking, institutional brokerage, asset management and related financial services to corporations, private equity groups, public entities, non-profit entities and institutional investors in the United States and Europe. We operate through two reportable business segments: Capital Markets and Asset Management. Refer to our Annual Report on Form 10-K for the year ended December 31, 2016 for a full description of our business, including our strategic growth initiatives.

Our Asset Management segment has experienced declining profitability in 2017 as decreases in revenues relating to higher fee product offerings have not been fully offset by new revenues on assets gained in lower fee product offerings. The shift in revenue mix is attributable to our efforts to remix our product offerings to a broader set of more scalable products and an extended cycle of investors favoring passive investment vehicles over active management. We identified goodwill impairment indicators in the third quarter of 2017 necessitating a full impairment testing of goodwill. The interim impairment testing related to our Asset Management segment goodwill resulted in a pre-tax non-cash impairment charge of \$114.4 million. For more information on our goodwill impairment testing, please refer to the "Critical Accounting Policies" section.

Financial Highlights

	Three Months Ended			Nine Months Ended		
	Sept. 30, 2017	Sept. 30, 2016	Percent Inc/(Dec)	Sept. 30, 2017	Sept. 30, 2016	Percent Inc/(Dec)
<i>(Amounts in thousands, except per share data)</i>						
U.S. GAAP						
Net revenues	\$240,567	\$200,847	19.8%	\$ 638,841	\$ 524,886	21.7%
Compensation and benefits expenses	169,469	135,186	25.4	438,161	356,770	22.8
Non-compensation expenses	153,334	47,210	224.8	240,240	139,714	72.0
Net income/(loss) applicable to Piper Jaffray Companies	(49,713)	10,658	N/M	(15,865)	15,033	N/M
Earnings/(loss) per diluted common share	\$ (3.91)	\$ 0.70	N/M	\$ (1.42)	\$ 0.97	N/M
Non-GAAP⁽¹⁾						
Adjusted net revenues	\$241,551	\$199,001	21.4%	\$ 633,961	\$ 518,396	22.3%
Adjusted compensation and benefits expenses	155,160	127,010	22.2	407,860	335,226	21.7
Adjusted non-compensation expenses	34,862	38,632	(9.8)	112,320	112,220	0.1
Adjusted net income applicable to Piper Jaffray Companies	32,521	20,976	55.0	81,276	45,523	78.5
Adjusted earnings per diluted common share	\$ 2.13	\$ 1.37	55.5	\$ 5.31	\$ 2.95	80.0

N/M – Not meaningful

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For the three months ended September 30, 2017

- Net revenues increased 19.8 percent from the year-ago period as significantly higher advisory services revenues were partially offset by lower equity and debt financing and institutional brokerage revenues.
- Compensation and benefits expenses increased 25.4 percent compared with the prior-year period due to higher revenues, as well as higher acquisition-related compensation costs.
- The increase in non-compensation expenses was driven by a \$114.4 million non-cash goodwill impairment charge.

For the nine months ended September 30, 2017

- Net revenues increased 21.7 percent from the year-ago period. Higher advisory services and equity financing revenues were partially offset by lower debt financing and institutional brokerage revenues.
- Compensation and benefits expenses increased 22.8 percent compared with the prior-year period due primarily to higher revenues.
- Non-compensation expenses were up 72.0 percent compared to the year-ago period, driven by a \$114.4 million goodwill impairment charge. Incremental back office conversion costs in the current period were more than offset by lower restructuring costs. In the first nine months of 2016, non-compensation expenses included \$10.2 million of restructuring and integration costs primarily related to the acquisition of Simmons & Company International ("Simmons"), which we acquired on February 26, 2016.
- For the nine months ended September 30, 2017, we recorded a tax benefit of \$9.1 million related to restricted stock vesting at values greater than the grant price. The tax benefit increased earnings per diluted common share by \$0.71 in the first nine months of 2017.
- For the twelve months ended September 30, 2017, our rolling twelve month return on average common shareholders' equity was a negative 6.8 percent due to the non-cash goodwill impairment charge, compared with 3.6 percent for the rolling twelve months ended September 30, 2016. On an adjusted basis, we generated a rolling twelve month return on average common shareholders' equity of 13.9 percent⁽²⁾ for the twelve months ended September 30, 2017, compared with 8.4 percent⁽²⁾ for the rolling twelve months ended September 30, 2016.

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(1) Reconciliation of U.S. GAAP to adjusted non-GAAP financial information

(Amounts in thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net revenues:				
Net revenues – U.S. GAAP basis	\$ 240,567	\$ 200,847	\$ 638,841	\$ 524,886
Adjustments:				
Revenue related to noncontrolling interests	984	(1,846)	(4,880)	(6,490)
Adjusted net revenues	<u>\$ 241,551</u>	<u>\$ 199,001</u>	<u>\$ 633,961</u>	<u>\$ 518,396</u>
Compensation and benefits:				
Compensation and benefits – U.S. GAAP basis	\$ 169,469	\$ 135,186	\$ 438,161	\$ 356,770
Adjustments:				
Compensation from acquisition-related agreements	(14,309)	(8,176)	(30,301)	(21,544)
Adjusted compensation and benefits	<u>\$ 155,160</u>	<u>\$ 127,010</u>	<u>\$ 407,860</u>	<u>\$ 335,226</u>
Non-compensation expenses:				
Non-compensation expenses – U.S. GAAP basis	\$ 153,334	\$ 47,210	\$ 240,240	\$ 139,714
Adjustments:				
Non-compensation expenses related to noncontrolling interests	(116)	(568)	(1,663)	(1,888)
Restructuring and integration costs	—	—	—	(10,206)
Goodwill impairment	(114,363)	—	(114,363)	—
Amortization of intangible assets related to acquisitions	(3,822)	(8,010)	(11,466)	(15,400)
Non-compensation expenses from acquisition-related agreements	(171)	—	(428)	—
Adjusted non-compensation expenses	<u>\$ 34,862</u>	<u>\$ 38,632</u>	<u>\$ 112,320</u>	<u>\$ 112,220</u>
Net income/(loss) applicable to Piper Jaffray Companies:				
Net income/(loss) applicable to Piper Jaffray Companies – U.S. GAAP basis	\$ (49,713)	\$ 10,658	\$ (15,865)	\$ 15,033
Adjustments:				
Compensation from acquisition-related agreements	9,444	5,424	19,498	14,067
Restructuring and integration costs	—	—	—	7,014
Goodwill impairment	70,219	—	70,219	—
Amortization of intangible assets related to acquisitions	2,347	4,894	7,042	9,409
Non-compensation expenses from acquisition-related agreements	224	—	382	—
Adjusted net income applicable to Piper Jaffray Companies	<u>\$ 32,521</u>	<u>\$ 20,976</u>	<u>\$ 81,276</u>	<u>\$ 45,523</u>
Earnings/(loss) per diluted common share:				
Earnings/(loss) per diluted common share – U.S. GAAP basis	\$ (3.91)	\$ 0.70	\$ (1.42)	\$ 0.97
Adjustment for loss allocated to participating shares (3)				
	<u>0.64</u>	—	<u>0.39</u>	—
	(3.27)	0.70	(1.03)	0.97
Adjustments:				
Compensation from acquisition-related agreements	0.62	0.36	1.27	0.91
Restructuring and integration costs	—	—	—	0.45
Goodwill impairment	4.61	—	4.58	—
Amortization of intangible assets related to acquisitions	0.15	0.32	0.46	0.61
Non-compensation expenses from acquisition-related agreements	0.02	—	0.03	—
Adjusted earnings per diluted common share	<u>\$ 2.13</u>	<u>\$ 1.37</u>	<u>\$ 5.31</u>	<u>\$ 2.95</u>

(2) Adjusted return on average common shareholders' equity, a non-GAAP financial measure, is computed by dividing adjusted net income applicable to Piper Jaffray Companies for the last 12 months by average monthly common shareholders' equity. For a detailed explanation of the components of adjusted net income, see "Reconciliation of U.S. GAAP to adjusted non-GAAP financial information" in footnote (1).

(3) Piper Jaffray Companies calculates earnings per common share using the two-class method, which requires the allocation of consolidated adjusted net income between common shareholders and participating security holders, which in the case of Piper Jaffray Companies, represents unvested stock with dividend rights. No allocation of undistributed earnings is made for periods in which a loss is incurred.

External Factors Impacting Our Business

Performance in the financial services industry in which we operate is highly correlated to the overall strength of economic conditions and financial market activity. Overall market conditions are a product of many factors, which are beyond our control, often unpredictable and at times inherently volatile. These factors may affect the financial decisions made by investors, including their level of participation in the financial markets. In turn, these decisions may affect our business results. With respect to financial market activity, our profitability is sensitive to a variety of factors, including the demand for investment banking services as reflected by the number and size of equity and debt financings and merger and acquisition transactions, the relative level of volatility of the equity and fixed income markets, changes in interest rates and credit spreads (especially rapid and extreme changes), overall market liquidity, the level and shape of various yield curves, the volume and value of trading in securities, overall equity valuations, and the demand for active asset management services.

Factors that differentiate our business within the financial services industry also may affect our financial results. For example, our capital markets business focuses on specific industry sectors while serving principally middle-market clientele. If the business environment for our focus sectors is impacted adversely, our business and results of operations could reflect these impacts. In addition, our business, with its specific areas of focus and investment, may not track overall market trends. Given the variability of the capital markets and securities businesses, our earnings may fluctuate significantly from period to period, and results for any individual period should not be considered indicative of future results.

Proposed Tax Reform Legislation

On November 2, 2017, the Committee on Ways and Means of the U.S. House of Representatives introduced the "Tax Cuts and Jobs Act," a bill which could have significant impacts to the federal tax code. Key provisions, as currently proposed, include a corporate rate reduction from 35 percent to 20 percent effective in 2018. A corporate rate reduction would result in a one-time non-cash write-off of an estimated \$50 to \$55 million of our deferred tax assets based on the lower proposed rate. In addition, certain corporate tax deductions may be repealed or amended. For example, corporate tax deductions for certain public company executive compensation in excess of \$1 million will no longer be allowed. The proposed legislation may impact our employee compensation arrangements and certain sectors of our businesses, such as our public finance operations. With regard to our public finance operations, the repeal of advance refunding bonds and certain private activity bond issuances may be impacted by this proposed legislation. We will continue to monitor and evaluate the impact of this proposed legislation on our businesses.

Outlook for the remainder of 2017

We would expect the U.S. economy to continue to grow at a slow and steady pace for the remainder of 2017. Administrative and legislative policies, including increased fiscal spending, deregulation and tax reform, may provide catalysts to accelerate economic growth. However, uncertainty over the details of these policies, their timing, the probability of implementation and their transition, as well as political or economic instability internationally, may inject periods of heightened volatility into the U.S. equity and debt markets. Through the first nine months of 2017, the U.S. Federal Reserve has increased short-term interest rates two times on the expectation of stronger economic growth. However, long-term interest rates have not moved in step with increases in short-term interest rates resulting in a flattening of the yield curve. We anticipate that the U.S. Federal Reserve will attempt to pursue a gradual and steady path to rate normalization, absent significant shifts in tax and monetary policy. Resistance in long-term interest rates to these policies, however, could produce an extended period of a flat yield curve, which could adversely impact our fixed income sales and trading business. In addition, exogenous conditions may trigger episodes of volatility with respect to interest rates. A rising or volatile interest rate environment could manifest itself in changes to the yield curve or relative spreads which may have a mixed impact on certain of our businesses.

We expect conditions in the equity markets to remain conducive to our equity capital raising and advisory activities for the remainder of 2017. While lower volatility benefits our capital raising business, it has the inverse effect on our equity sales and trading business. If we experience sustained bouts of higher volatility or a material market correction, however, our equity brokerage business may benefit while our equity capital raising and advisory businesses may suffer. We believe our advisory services business will continue to perform well for the remainder of 2017 on the strength of our market position, recent investments, diversity in our practice, readily available capital and a combination of high CEO and small business confidence levels. Advisory services revenues for any given quarter are impacted by the timing and size of the deals closing, which can result in fluctuations in revenues period over period.

While higher interest rates across the yield curve would be favorable to our fixed income institutional brokerage business, the move to higher rates could adversely impact our public finance business in the short-term as the level of refunding activity eases

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while greater economic growth has not yet spurred a ramp in new money issuance volumes. Although the outlook is constructive, we believe that municipal debt underwriting activity for the remainder of 2017 will remain at lower levels compared to the record market issuance volumes in 2016. Our geographic range, product capabilities, and industry expertise should serve to mitigate over time the impact of less favorable market conditions on the performance of our public finance business.

As economic growth continues, we would expect rising market valuations, which have a positive impact on our asset management business. However, this impact may be eroded by the shift to passive investment strategies as extremely low volatility in a market with slow but steady growth generally favors lower-cost passive investment vehicles. We would expect that active asset managers, ourselves included, will remain under pressure to create alpha for their clients and to maintain or grow AUM.

Results of Operations

Financial Summary for the three months ended September 30, 2017 and September 30, 2016

The following table provides a summary of the results of our operations on a U.S. GAAP basis and the results of our operations as a percentage of net revenues for the periods indicated.

	Three Months Ended September 30,			As a Percentage of Net Revenues for the Three Months Ended September 30,	
	2017	2016	2017 v2016	2017	2016
<i>(Dollars in thousands)</i>					
Revenues:					
Investment banking	\$ 190,482	\$ 136,682	39.4%	79.2 %	68.1%
Institutional brokerage	34,873	42,189	(17.3)	14.5	21.0
Asset management	12,818	15,256	(16.0)	5.3	7.6
Interest	7,164	7,343	(2.4)	3.0	3.7
Investment income/(loss)	(422)	4,806	N/M	(0.2)	2.4
Total revenues	244,915	206,276	18.7	101.8	102.7
Interest expense	4,348	5,429	(19.9)	1.8	2.7
Net revenues	240,567	200,847	19.8	100.0	100.0
Non-interest expenses:					
Compensation and benefits	169,469	135,186	25.4	70.4	67.3
Outside services	7,495	10,288	(27.1)	3.1	5.1
Occupancy and equipment	8,127	8,743	(7.0)	3.4	4.4
Communications	7,136	7,845	(9.0)	3.0	3.9
Marketing and business development	6,683	7,629	(12.4)	2.8	3.8
Trade execution and clearance	2,125	2,008	5.8	0.9	1.0
Goodwill impairment	114,363	—	N/M	47.5	—
Intangible asset amortization	3,822	8,010	(52.3)	1.6	4.0
Back office conversion costs	1,293	—	N/M	0.5	—
Other operating expenses	2,290	2,687	(14.8)	1.0	1.3
Total non-interest expenses	322,803	182,396	77.0	134.2	90.8
Income/(loss) before income tax expense/ (benefit)	(82,236)	18,451	N/M	(34.2)	9.2
Income tax expense/(benefit)	(31,423)	6,515	N/M	(13.1)	3.2
Net income/(loss)	(50,813)	11,936	N/M	(21.1)	5.9
Net income/(loss) applicable to noncontrolling interests	(1,100)	1,278	N/M	(0.5)	0.6
Net income/(loss) applicable to Piper Jaffray Companies	\$ (49,713)	\$ 10,658	N/M	(20.7)%	5.3%

N/M – Not meaningful

For the three months ended September 30, 2017, we recorded a net loss applicable to Piper Jaffray Companies of \$49.7 million, driven by a \$70.2 million, net of tax, goodwill impairment charge. Net revenues for the three months ended September 30, 2017 were \$240.6 million, a 19.8 percent increase compared to \$200.8 million in the year-ago period. In the third quarter of 2017, investment banking revenues were \$190.5 million, up 39.4 percent compared with \$136.7 million in the prior-year period, as higher advisory services revenues were partially offset by lower equity and debt financing revenues. For the three months ended

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September 30, 2017, institutional brokerage revenues decreased 17.3 percent to \$34.9 million, compared with \$42.2 million in the third quarter of 2016, due to lower fixed income and equity institutional brokerage revenues. In the third quarter of 2017, asset management fees of \$12.8 million were down 16.0 percent compared with \$15.3 million in the third quarter of 2016 due primarily to lower management fees from our equity product offerings. For the three months ended September 30, 2017, net interest income was \$2.8 million, up from \$1.9 million in the prior-year period. In the third quarter of 2017, we recorded an investment loss of \$0.4 million, compared with income of \$4.8 million in the prior-year period. In the third quarter of 2016, we recorded gains on our investment and the noncontrolling interests in the merchant banking fund that we manage compared with losses in the current period. Non-interest expenses were \$322.8 million for the three months ended September 30, 2017, up 77.0 percent compared to \$182.4 million in the prior-year period. The increase was due to the \$114.4 million goodwill impairment charge, as well as higher compensation expenses from increased revenues.

Consolidated Non-Interest Expenses

Compensation and Benefits – Compensation and benefits expenses, which are the largest component of our expenses, include salaries, incentive compensation, benefits, stock-based compensation, employment taxes, income associated with the forfeiture of stock-based compensation and other employee-related costs. A portion of compensation expense is comprised of variable incentive arrangements, including discretionary incentive compensation, the amount of which fluctuates in proportion to the level of business activity, increasing with higher revenues and operating profits. Other compensation costs, primarily base salaries and benefits, are more fixed in nature. The timing of incentive compensation payments, which generally occur in February, has a greater impact on our cash position and liquidity than is reflected on our consolidated statements of operations. We have granted restricted stock with service conditions as a component of our acquisition deal consideration, which is amortized to compensation expense over the service period.

For the three months ended September 30, 2017, compensation and benefits expenses increased to \$169.5 million, compared with \$135.2 million in the corresponding period of 2016, due to higher revenues as well as higher acquisition-related compensation costs primarily resulting from the Simmons acquisition. Compensation and benefits expenses as a percentage of net revenues was 70.4 percent in the third quarter of 2017, compared with 67.3 percent in the third quarter of 2016. The increased compensation ratio was primarily attributable to higher acquisition-related compensation costs.

Outside Services – Outside services expenses include securities processing expenses, outsourced technology functions, outside legal fees, fund expenses associated with our consolidated alternative asset management funds and other professional fees. Outside services expenses decreased 27.1 percent to \$7.5 million in the third quarter of 2017, compared with \$10.3 million in the corresponding period of 2016. Excluding the portion of expenses from non-controlled equity interests in our consolidated alternative asset management funds, outside services expenses decreased 21.4 percent due primarily to lower professional and legal fees during the current period resulting from strong market conditions which enabled us to complete a high percentage of investment banking transactions whereby we can recover expenses. The year-ago period included incremental expenses related to our acquisition of Simmons.

Occupancy and Equipment – For the three months ended September 30, 2017, occupancy and equipment expenses decreased 7.0 percent to \$8.1 million, compared with \$8.7 million for the three months ended September 30, 2016.

Communications – Communication expenses include costs for telecommunication and data communication, primarily consisting of expenses for obtaining third party market data information. For the three months ended September 30, 2017, communication expenses decreased 9.0 percent to \$7.1 million, compared with \$7.8 million for the three months ended September 30, 2016. The decrease was primarily due to lower market data services.

Marketing and Business Development – Marketing and business development expenses include travel and entertainment costs, advertising and third party marketing fees. For the three months ended September 30, 2017, marketing and business development expenses decreased 12.4 percent to \$6.7 million, compared with \$7.6 million in the corresponding period of 2016. The decline was attributable to lower travel expenses, driven by strong market conditions which enabled us to complete a high percentage of investment banking transactions whereby we can recover expenses.

Trade Execution and Clearance – For the three months ended September 30, 2017, trade execution and clearance expenses increased slightly to \$2.1 million, compared with \$2.0 million in the corresponding period of 2016.

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Goodwill Impairment – During the third quarter of 2017, we performed an interim goodwill impairment test, which resulted in a non-cash goodwill impairment charge of \$114.4 million related to the asset management reporting unit.

Intangible Asset Amortization – Intangible asset amortization includes the amortization of definite-lived intangible assets consisting of customer relationships and the Simmons trade name. For the three months ended September 30, 2017, intangible asset amortization was \$3.8 million, compared with \$8.0 million in the corresponding period of 2016. In the third quarter of 2016, we recorded a measurement period adjustment to reflect the final fair value of Simmons intangible assets. Based on this final fair value, we recorded additional amortization of \$2.3 million in the third quarter of 2016.

Back Office Conversion Costs – In the third quarter of 2017, we migrated to a fully disclosed clearing model and are no longer self clearing. Back office conversion costs include costs incurred to transition to a fully disclosed clearing model, such as contract termination fees, vendor migration fees, professional fees, and severance benefits for impacted personnel. For the three months ended September 30, 2017, we incurred back office conversion costs of \$1.3 million. We expect to incur additional back office conversion costs in the fourth quarter of 2017.

Other Operating Expenses – Other operating expenses include insurance costs, license and registration fees, expenses related to our charitable giving program and litigation-related expenses, which consist of the amounts we reserve and/or pay out related to legal and regulatory matters. Other operating expenses were \$2.3 million in the third quarter of 2017, compared with \$2.7 million in the third quarter of 2016.

Income Taxes – For the three months ended September 30, 2017, our benefit from income taxes was \$31.4 million as a result of pre-tax losses related to the \$114.4 million non-cash goodwill impairment charge. Our effective tax rate, excluding noncontrolling interests, was 38.7 percent for the third quarter of 2017. For the three months ended September 30, 2016, our provision for income taxes was \$6.5 million equating to an effective tax rate, excluding noncontrolling interests, of 37.9 percent.

Segment Performance

We measure financial performance by business segment. Our two reportable segments are Capital Markets and Asset Management. We determined these segments based upon the nature of the financial products and services provided to customers and our management organization. Segment pre-tax operating income and segment pre-tax operating margin are used to evaluate and measure segment performance by our chief operating decision maker in deciding how to allocate resources and in assessing performance in relation to our competitors. Revenues and expenses directly associated with each respective segment are included in determining segment operating results. Revenues and expenses that are not directly attributable to a particular segment are allocated based upon our allocation methodologies, generally based on each segment's respective net revenues, use of shared resources, headcount or other relevant measures.

Throughout this section, we have presented segment results on both a U.S. GAAP and non-GAAP basis. Management believes that presenting adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin in conjunction with the U.S. GAAP measures provides a more meaningful basis for comparison of its operating results and underlying trends between periods, and enhances the overall understanding of our current financial performance by excluding certain items that may not be indicative of our core operating results. The non-GAAP segment results should be considered in addition to, not as a substitute for, the segment results prepared in accordance with U.S. GAAP.

Adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin exclude (1) revenues and expenses related to noncontrolling interests, (2) amortization of intangible assets related to acquisitions, (3) compensation and non-compensation expenses from acquisition-related agreements, (4) restructuring and acquisition integration costs and (5) goodwill impairment charges. For U.S. GAAP purposes, these items are included in each of their respective line items on the consolidated statements of operations.

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Capital Markets

The following table sets forth the Capital Markets adjusted segment financial results and adjustments necessary to reconcile to our consolidated U.S. GAAP pre-tax operating income and pre-tax operating margin for the periods presented:

	Three Months Ended September 30,							
	2017				2016			
	Total Adjusted	Adjustments (1)		U.S. GAAP	Total Adjusted	Adjustments (1)		U.S. GAAP
Noncontrolling Interests		Other Adjustments	Noncontrolling Interests			Other Adjustments		
<i>(Dollars in thousands)</i>								
Investment banking								
Financing								
Equities	\$ 22,117	\$ —	\$ —	\$ 22,117	\$ 30,479	\$ —	\$ —	\$ 30,479
Debt	21,687	—	—	21,687	30,898	—	—	30,898
Advisory services	146,816	—	—	146,816	75,230	—	—	75,230
Total investment banking	190,620	—	—	190,620	136,607	—	—	136,607
Institutional sales and trading								
Equities	18,410	—	—	18,410	20,492	—	—	20,492
Fixed income	20,676	—	—	20,676	25,399	413	—	25,812
Total institutional sales and trading	39,086	—	—	39,086	45,891	413	—	46,304
Management and performance fees	678	—	—	678	1,353	—	—	1,353
Investment income/(loss)	324	(984)	—	(660)	3,039	1,433	—	4,472
Long-term financing expenses	(1,736)	—	—	(1,736)	(2,253)	—	—	(2,253)
Net revenues	228,972	(984)	—	227,988	184,637	1,846	—	186,483
Operating expenses	179,269	116	17,024	196,409	154,378	568	14,799	169,745
Segment pre-tax operating income	\$ 49,703	\$ (1,100)	\$ (17,024)	\$ 31,579	\$ 30,259	\$ 1,278	\$ (14,799)	\$ 16,738
Segment pre-tax operating margin	21.7%			13.9%	16.4%			9.0%

(1) The following is a summary of the adjustments needed to reconcile our consolidated U.S. GAAP segment pre-tax operating income and segment pre-tax operating margin to the adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin:

Noncontrolling interests – The impacts of consolidating noncontrolling interests in our alternative asset management funds are not included in adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin.

Other adjustments – The following table sets forth the items not included in adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin for the periods presented:

	Three Months Ended September 30,	
	2017	2016
<i>(Dollars in thousands)</i>		
Compensation from acquisition-related agreements	\$ 14,309	\$ 8,176
Amortization of intangible assets related to acquisitions	2,544	6,623
Non-compensation expenses from acquisition-related agreements	171	—
	<u>\$ 17,024</u>	<u>\$ 14,799</u>

Capital Markets net revenues on a U.S. GAAP basis were \$228.0 million for the three months ended September 30, 2017, compared with \$186.5 million in the prior-year period. For the three months ended September 30, 2017, adjusted net revenues were \$229.0 million, compared with \$184.6 million in the third quarter of 2016. The variance explanations for net revenues and adjusted net revenues are consistent on both a U.S. GAAP and non-GAAP basis.

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Investment banking revenues comprise all of the revenues generated through equity and debt financing and advisory services activities, which include mergers and acquisitions, equity private placements, debt advisory, and municipal financial advisory transactions. To assess the profitability of investment banking, we aggregate investment banking fees with the net interest income or expense associated with these activities.

In the third quarter of 2017, investment banking revenues increased 39.5 percent to \$190.6 million, compared with \$136.6 million in the corresponding period of the prior year. For the three months ended September 30, 2017, advisory services revenues were \$146.8 million, up 95.2 percent compared to \$75.2 million in the third quarter of 2016. The results reflect the continuation of our strong performance over the past three quarters elevated by several large fees. We completed 43 transactions with an aggregate enterprise value of \$11.3 billion in the third quarter of 2017, compared with 46 transactions with an aggregate enterprise value of \$5.8 billion in the third quarter of 2016. For the three months ended September 30, 2017, equity financing revenues were \$22.1 million, down 27.4 percent compared with \$30.5 million in a strong prior-year period due to fewer completed transactions, which was partially offset by higher revenue per transaction. During the third quarter of 2017, we completed 16 equity financings, raising \$1.9 billion for our clients, compared with 25 equity financings, raising \$4.9 billion for our clients in the comparable year-ago period. Debt financing revenues for the three months ended September 30, 2017 were \$21.7 million, down 29.8 percent compared with \$30.9 million in a strong year-ago period. The decrease was due to a decline in municipal market issuance volumes, driven by lower levels of refunding activity. During the third quarter of 2017, we completed 139 negotiated municipal issues with a total par value of \$3.4 billion, compared with 184 negotiated municipal issues with a total par value of \$4.3 billion during the prior-year period.

Institutional sales and trading revenues comprise all of the revenues generated through trading activities, which consist of facilitating customer trades, executing competitive municipal underwritings and our strategic trading activities in municipal bonds, mortgage-backed securities and U.S. government agency securities. To assess the profitability of institutional brokerage activities, we aggregate institutional brokerage revenues with the net interest income or expense associated with financing, economically hedging and holding long or short inventory positions. Our results may vary from quarter to quarter as a result of changes in trading margins, trading gains and losses, net interest spreads, trading volumes and the timing of transactions based on market opportunities.

For the three months ended September 30, 2017, institutional brokerage revenues were \$39.1 million, a decrease of 15.6 percent compared with \$46.3 million in the prior-year period, due to lower equity and fixed income institutional brokerage revenues. Equity institutional brokerage revenues were \$18.4 million in the third quarter of 2017, down 10.2 percent compared with \$20.5 million in the corresponding period of 2016. Historically low volatility resulted in lower trading volumes in the third quarter of 2017. For the three months ended September 30, 2017, fixed income institutional brokerage revenues were \$20.7 million, down 19.9 percent compared with \$25.8 million in the prior-year period. A decline in customer flow activity and fewer trading opportunities due to the lack of volatility reduced our revenues.

Management and performance fees include the fees generated from our merchant banking, energy and senior living funds with outside investors. For the three months ended September 30, 2017, management and performance fees were \$0.7 million, compared with \$1.4 million in the prior-year period.

Investment income/(loss) includes realized and unrealized gains and losses on investments, including amounts attributable to noncontrolling interests, in our merchant banking, energy and senior living funds, and other firm investments. For the three months ended September 30, 2017, investment loss was \$0.7 million compared with investment income of \$4.5 million in the corresponding period of 2016. In the third quarter of 2016, we recorded gains on the merchant banking fund that we manage compared with losses in the current period. Excluding the impact of noncontrolling interests, adjusted investment income was \$0.3 million for the three months ended September 30, 2017.

Long-term financing expenses primarily represent interest paid on our senior notes. For the three months ended September 30, 2017, long-term financing expenses decreased to \$1.7 million, from \$2.3 million in the prior-year period. We repaid the \$50 million of Class A senior notes upon maturity on May 31, 2017.

Capital Markets segment pre-tax operating margin for the three months ended September 30, 2017 was 13.9 percent, compared with 9.0 percent for the corresponding period of 2016. Pre-tax operating margin was higher in the third quarter of 2017 compared to the prior-year period due to a lower non-compensation ratio driven by an increase in revenues, which was partially offset by higher acquisition-related costs. Adjusted segment pre-tax operating margin for the three months ended September 30, 2017 was 21.7 percent, compared with 16.4 percent for the corresponding period of 2016. Adjusted pre-tax operating margin was higher compared to the third quarter of 2016 due to operating leverage as a result of higher revenues. Adjusted net revenues increased

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24.0 percent and adjusted operating expenses increased 16.1 percent compared to the third quarter of 2016, reflecting operating leverage in the business.

Asset Management

The following table sets forth the Asset Management segment financial results and adjustments necessary to reconcile to our consolidated U.S. GAAP pre-tax operating income and pre-tax operating margin for the periods presented:

	Three Months Ended September 30,							
	2017				2016			
	Total Adjusted	Adjustments (1)		U.S. GAAP	Total Adjusted	Adjustments (1)		U.S. GAAP
Noncontrolling Interests		Other Adjustments	Noncontrolling Interests			Other Adjustments		
<i>(Dollars in thousands)</i>								
Management fees								
Equity	\$ 5,296	\$ —	\$ —	\$ 5,296	\$ 6,750	\$ —	\$ —	\$ 6,750
MLP	6,844	—	—	6,844	7,153	—	—	7,153
Total management fees	12,140	—	—	12,140	13,903	—	—	13,903
Performance fees								
Equity	—	—	—	—	—	—	—	—
MLP	—	—	—	—	—	—	—	—
Total performance fees	—	—	—	—	—	—	—	—
Total management and performance fees	12,140	—	—	12,140	13,903	—	—	13,903
Investment income	439	—	—	439	461	—	—	461
Total net revenues	12,579	—	—	12,579	14,364	—	—	14,364
Operating expenses	10,753	—	115,641	126,394	11,264	—	1,387	12,651
Segment pre-tax operating income/(loss)	\$ 1,826	\$ —	\$ (115,641)	\$ (113,815)	\$ 3,100	\$ —	\$ (1,387)	\$ 1,713
Segment pre-tax operating margin	14.5%			(904.8)%	21.6%			11.9%
Adjusted segment pre-tax operating margin excluding investment income (2)	11.4%				19.0%			

(1) Other Adjustments – The following table sets forth the items not included in adjusted segment pre-tax operating income/(loss) and adjusted segment pre-tax operating margin for the periods presented:

	Three Months Ended September 30,	
	2017	2016
<i>(Dollars in thousands)</i>		
Goodwill impairment	\$ 114,363	\$ —
Amortization of intangible assets related to acquisitions	1,278	1,387
	\$ 115,641	\$ 1,387

(2) Management believes that presenting adjusted segment pre-tax operating margin excluding investment income, a non-GAAP measure, provides the most meaningful basis for comparison of Asset Management operating results across periods.

Management and performance fee revenues comprise the revenues generated from management and investment advisory services performed for separately managed accounts, registered funds and partnerships. Client asset inflows and outflows and investment performance have a direct effect on management and performance fee revenues. Management fees are generally based on the level of AUM measured monthly or quarterly, and an increase or reduction in AUM, due to market price fluctuations or net client asset flows, will result in a corresponding increase or decrease in management fees. Fees vary with the type of assets managed and the vehicle in which they are managed. Performance fees are earned when the investment return on AUM exceeds certain benchmark targets or other performance targets over a specified measurement period. The level of performance fees earned can vary significantly from period to period and these fees may not necessarily be correlated to changes in total AUM. The majority of performance fees, if earned, are generally recorded in the fourth quarter of the applicable year or upon withdrawal of client assets. At September 30, 2017, approximately four percent of our AUM was eligible to earn performance fees.

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For the three months ended September 30, 2017, management fees were \$12.1 million, a decrease of 12.7 percent, compared with \$13.9 million in the prior-year period, due primarily to lower management fees from our equity product offerings. In the third quarter of 2017, management fees related to our equity strategies were \$5.3 million, down 21.5 percent compared to \$6.8 million in the corresponding period of 2016 due to lower average AUM resulting from net client outflows, and a lower average effective revenue yield. The net client outflows were exacerbated by our efforts to remix our product offerings to a broader set of products and the lower yield resulted from changes in our product mix. The average effective revenue yield (total annualized management fees as a percentage of our average month-end AUM) for our equity strategies was 61 basis points for the third quarter of 2017, compared with 70 basis points for the prior-year period. Management fees from our master limited partnership ("MLP") strategies decreased 4.3 percent in the third quarter of 2017 to \$6.8 million, compared with \$7.2 million in the third quarter of 2016 as lower average AUM was partially offset by a higher average effective revenue yield. Our average effective revenue yield for our MLP strategies was 66 basis points for the third quarter of 2017, compared with 64 basis points for the prior-year period.

Investment income includes gains and losses from our investments in registered funds and private funds or partnerships that we manage. For the three months ended September 30, 2017, investment income was \$0.4 million, compared with \$0.5 million for the prior-year period.

The negative segment pre-tax operating margin for the three months ended September 30, 2017 was due to the \$114.4 million non-cash goodwill impairment charge. Excluding investment income on firm capital invested in our strategies, adjusted segment operating margin declined from 19.0 percent in the third quarter of 2016 to 11.4 percent in the third quarter of 2017 due to lower management fees.

The following table summarizes the changes in our AUM for the periods presented:

	Three Months Ended		Twelve
	September 30,		Months Ended
<i>(Dollars in millions)</i>	2017	2016	September 30, 2017
Equity			
Beginning of period	\$ 4,276	\$ 3,681	\$ 3,878
Net outflows	(862)	(103)	(784)
Net market appreciation	171	300	491
End of period	<u>\$ 3,585</u>	<u>\$ 3,878</u>	<u>\$ 3,585</u>
MLP			
Beginning of period	\$ 4,304	\$ 4,410	\$ 4,551
Net outflows	(210)	(122)	(333)
Net market appreciation/(depreciation)	(51)	263	(175)
End of period	<u>\$ 4,043</u>	<u>\$ 4,551</u>	<u>\$ 4,043</u>
Total			
Beginning of period	\$ 8,580	\$ 8,091	\$ 8,429
Net outflows	(1,072)	(225)	(1,117)
Net market appreciation	120	563	316
End of period	<u>\$ 7,628</u>	<u>\$ 8,429</u>	<u>\$ 7,628</u>

Total AUM was \$7.6 billion at September 30, 2017. Equity AUM decreased to \$3.6 billion at September 30, 2017 as net client outflows of \$0.9 billion during the quarter were partially offset by net market appreciation of \$0.2 billion. In the third quarter of 2017, we exited our Japan value product, which reduced our AUM by approximately \$0.8 billion. The reduction from client outflows was partially offset by client inflows into our new global dividend strategy during the quarter. This product, which we added in the first quarter of 2017, is part of our strategy to remix our product offerings. MLP AUM decreased to \$4.0 billion at September 30, 2017 as we experienced net client outflows of \$0.2 billion during the quarter.

Financial Summary for the nine months ended September 30, 2017 and September 30, 2016

The following table provides a summary of the results of our operations on a U.S. GAAP basis and the results of our operations as a percentage of net revenues for the periods indicated.

	Nine Months Ended September 30,			As a Percentage of Net Revenues for the Nine Months Ended September 30,	
	2017	2016	2017 v2016	2017	2016
<i>(Dollars in thousands)</i>					
Revenues:					
Investment banking	\$ 461,260	\$ 338,034	36.5%	72.2 %	64.4%
Institutional brokerage	111,083	122,423	(9.3)	17.4	23.3
Asset management	44,011	43,699	0.7	6.9	8.3
Interest	22,649	24,094	(6.0)	3.5	4.6
Investment income	15,406	14,019	9.9	2.4	2.7
Total revenues	654,409	542,269	20.7	102.4	103.3
Interest expense	15,568	17,383	(10.4)	2.4	3.3
Net revenues	638,841	524,886	21.7	100.0	100.0
Non-interest expenses:					
Compensation and benefits	438,161	356,770	22.8	68.6	68.0
Outside services	27,612	28,923	(4.5)	4.3	5.5
Occupancy and equipment	24,846	25,311	(1.8)	3.9	4.8
Communications	22,025	22,469	(2.0)	3.4	4.3
Marketing and business development	22,512	23,804	(5.4)	3.5	4.5
Trade execution and clearance	5,864	5,686	3.1	0.9	1.1
Restructuring and integration costs	—	10,206	(100.0)	—	1.9
Goodwill impairment	114,363	—	N/M	17.9	—
Intangible asset amortization	11,466	15,400	(25.5)	1.8	2.9
Back office conversion costs	3,027	—	N/M	0.5	—
Other operating expenses	8,525	7,915	7.7	1.3	1.5
Total non-interest expenses	678,401	496,484	36.6	106.2	94.6
Income/(loss) before income tax expense/ (benefit)	(39,560)	28,402	N/M	(6.2)	5.4
Income tax expense/(benefit)	(26,912)	8,767	N/M	(4.2)	1.7
Net income/(loss)	(12,648)	19,635	N/M	(2.0)	3.7
Net income applicable to noncontrolling interests	3,217	4,602	(30.1)	0.5	0.9
Net income/(loss) applicable to Piper Jaffray Companies	\$ (15,865)	\$ 15,033	N/M	(2.5)%	2.9%

N/M – Not meaningful

Except as discussed below, the description of non-interest expense and net revenues as well as the underlying reasons for variances to prior year are substantially the same as the comparative quarterly discussion.

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For the nine months ended September 30, 2017, we recorded a net loss applicable to Piper Jaffray Companies of \$15.9 million due to a \$70.2 million, net of tax, goodwill impairment charge. Net revenues for the nine months ended September 30, 2017 were \$638.8 million, compared to \$524.9 million in the year-ago period. In the first nine months of 2017, investment banking revenues were \$461.3 million, up 36.5 percent compared with \$338.0 million in the prior-year period as higher advisory services and equity financing revenues were partially offset by lower debt financing revenues. For the nine months ended September 30, 2017, institutional brokerage revenues decreased 9.3 percent to \$111.1 million, compared with \$122.4 million in the first nine months of 2016, due to lower fixed income and equity institutional brokerage revenues. In the first nine months of 2017, asset management fees were \$44.0 million, up slightly compared with \$43.7 million in the first nine months of 2016, as higher management fees from our MLP product offerings were offset by lower management fees from our equity product offerings. In the first nine months of 2017, net interest income increased to \$7.1 million, compared with \$6.7 million in the prior-year period. For the nine months ended September 30, 2017, investment income was \$15.4 million, compared with \$14.0 million in the prior-year period, due to higher gains on our investment and the noncontrolling interests in the merchant banking fund that we manage, as well as higher gains on our firm investments. Non-interest expenses were \$678.4 million for the nine months ended September 30, 2017, up 36.6 percent compared with \$496.5 million in the year-ago period. The increase was driven by a \$114.4 million goodwill impairment charge. The increase was also due to higher compensation expense resulting from increased revenues, as well as incremental costs related to our back office conversion. These increases were partially offset by lower restructuring costs.

Consolidated Non-Interest Expenses

Restructuring and Integration Costs – For the nine months ended September 30, 2016, we recorded restructuring and acquisition integration costs of \$10.2 million primarily related to the acquisition of Simmons. The expenses consisted of \$6.6 million of severance, benefits and outplacement costs, \$1.3 million of vacated redundant leased office space, \$1.3 million of transaction costs, and \$1.0 million of contract termination costs.

Other Operating Expenses – Other operating expenses increased 7.7 percent to \$8.5 million for the nine months ended September 30, 2017, compared with \$7.9 million for the nine months ended September 30, 2016. The increase was primarily due to higher expense related to our charitable giving program driven by increased profitability, which was partially offset by decreased insurance costs. Additionally, in the first nine months of 2017 we recorded foreign currency losses from our foreign cash accounts versus gains in the first nine months of 2016.

Income Taxes – For the nine months ended September 30, 2017, our benefit from income taxes was \$26.9 million equating to an effective tax rate, excluding noncontrolling interests, of 62.9 percent, compared with a provision for income taxes of \$8.8 million in the prior-year period equating to an effective tax rate, excluding noncontrolling interests, of 36.8 percent. The effective tax rate for the nine months ended September 30, 2017 was due to the impact of a \$9.1 million tax benefit related to stock-based compensation awards vesting at values greater than the grant price in a period of pre-tax losses. As discussed in Note 2, "Accounting Policies and Pronouncements" in the notes to our unaudited consolidated financial statements included in this Quarterly Report on Form 10-Q, effective as of January 1, 2017, new accounting guidance requires us to recognize the income tax effects of stock-based compensation awards in the income statement when the awards vest, rather than as additional paid-in capital. The amount recognized in the income statement in future periods may vary depending upon, among other things, the number of restricted shares vesting and their change in value since the grant date. We would expect that the impact of this guidance will be more meaningful in the first half of each year as the majority of our restricted stock vestings related to our employees' incentive compensation occurs in February.

Segment Performance

Capital Markets

The following table sets forth the Capital Markets adjusted segment financial results and adjustments necessary to reconcile to our consolidated U.S. GAAP pre-tax operating income and pre-tax operating margin for the periods presented:

(Dollars in thousands)	Nine Months Ended September 30,							
	2017				2016			
	Total Adjusted	Adjustments ⁽¹⁾		U.S. GAAP	Total Adjusted	Adjustments ⁽¹⁾		U.S. GAAP
Noncontrolling Interests		Other Adjustments	Noncontrolling Interests			Other Adjustments		
Investment banking								
Financing								
Equities	\$ 70,229	\$ —	\$ —	\$ 70,229	\$ 53,831	\$ —	\$ —	\$ 53,831
Debt	60,066	—	—	60,066	80,195	—	—	80,195
Advisory services	332,205	—	—	332,205	204,971	—	—	204,971
Total investment banking	462,500	—	—	462,500	338,997	—	—	338,997
Institutional sales and trading								
Equities	59,085	—	—	59,085	62,773	—	—	62,773
Fixed income	63,137	—	—	63,137	70,665	1,153	—	71,818
Total institutional sales and trading	122,222	—	—	122,222	133,438	1,153	—	134,591
Management and performance fees	4,172	—	—	4,172	4,112	—	—	4,112
Investment income	10,275	4,880	—	15,155	8,672	5,337	—	14,009
Long-term financing expenses	(6,003)	—	—	(6,003)	(6,838)	—	—	(6,838)
Net revenues	593,166	4,880	—	598,046	478,381	6,490	—	484,871
Operating expenses	484,677	1,663	38,362	524,702	415,760	1,888	42,980	460,628
Segment pre-tax operating income	\$ 108,489	\$ 3,217	\$ (38,362)	\$ 73,344	\$ 62,621	\$ 4,602	\$ (42,980)	\$ 24,243
Segment pre-tax operating margin	18.3%			12.3%	13.1%			5.0%

(1) The following is a summary of the adjustments needed to reconcile our consolidated U.S. GAAP segment pre-tax operating income and segment pre-tax operating margin to the adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin:

Noncontrolling interests – The impacts of consolidating noncontrolling interests in our alternative asset management funds are not included in adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin.

Other adjustments – The following table sets forth the items not included in adjusted segment pre-tax operating income and adjusted segment pre-tax operating margin for the periods presented:

(Dollars in thousands)	Nine Months Ended September 30,	
	2017	2016
Compensation from acquisition-related agreements	\$ 30,301	\$ 21,544
Restructuring and integration costs	—	10,197
Amortization of intangible assets related to acquisitions	7,633	11,239
Non-compensation expenses from acquisition-related agreements	428	—
	\$ 38,362	\$ 42,980

Capital Markets net revenues on a U.S. GAAP basis were \$598.0 million for the nine months ended September 30, 2017, compared with \$484.9 million in the prior-year period. In the first nine months of 2017, Capital Markets adjusted net revenues were \$593.2 million, compared with \$478.4 million in the first nine months of 2016. The variance explanations for net revenues and adjusted net revenues are consistent on both a U.S. GAAP and non-GAAP basis.

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In the first nine months of 2017, investment banking revenues increased 36.4 percent to \$462.5 million, compared with \$339.0 million in the corresponding period of the prior year. For the nine months ended September 30, 2017, advisory services revenues increased 62.1 percent to \$332.2 million, compared with \$205.0 million in the first nine months of 2016. The increase reflects our long-term efforts to grow the advisory services business and the diversity in our business. These factors have led to market share gains. We completed 118 transactions with an aggregate enterprise value of \$27.8 billion in the first nine months of 2017, compared with 104 transactions with an aggregate enterprise value of \$14.1 billion in the first nine months of 2016. For the nine months ended September 30, 2017, equity financing revenues were \$70.2 million, up 30.5 percent compared with \$53.8 million in the prior-year period, due to more completed transactions and higher revenue per transaction. On a year-to-date basis, the overall fee pool in our target market was up approximately 75 percent compared to the corresponding period of the prior year. During the first nine months of 2017, we completed 60 equity financings, raising \$12.0 billion for our clients, compared with 48 equity financings, raising \$9.7 billion for our clients in the year-ago period. Debt financing revenues for the nine months ended September 30, 2017 were \$60.1 million, down 25.1 percent compared with \$80.2 million in the year-ago period, due to lower public finance revenues as refunding activity has declined compared to the prior-year period and new money issuance volumes have remained essentially flat. During the first nine months of 2017, we completed 421 negotiated municipal issues with a total par value of \$10.5 billion, compared with 512 negotiated municipal issues with a total par value of \$11.6 billion during the prior-year period.

For the nine months ended September 30, 2017, institutional brokerage revenues decreased 9.2 percent to \$122.2 million, compared with \$134.6 million in the prior-year period, due to lower equity and fixed income institutional brokerage revenues. Equity institutional brokerage revenues decreased 5.9 percent to \$59.1 million in the first nine months of 2017, compared with \$62.8 million in the corresponding period of 2016, due to lower client trading volumes. For the nine months ended September 30, 2017, fixed income institutional brokerage revenues were \$63.1 million, down 12.1 percent compared with \$71.8 million in the prior-year period, due to a decline in customer flow activity and fewer opportunities for trading gains.

For the nine months ended September 30, 2017, management and performance fees were \$4.2 million, compared with \$4.1 million in the prior-year period.

For the nine months ended September 30, 2017, investment income was \$15.2 million, compared to \$14.0 million in the corresponding period of 2016. In the first nine months of 2017, we recorded higher gains in our merchant banking fund and on our other firm investments, which were partially offset by lower gains in our senior living fund. Excluding the impact of noncontrolling interests, adjusted investment income was \$10.3 million for the nine months ended September 30, 2017.

For the nine months ended September 30, 2017, long-term financing expenses decreased to \$6.0 million, compared with \$6.8 million in the prior-year period. We repaid the \$50 million of Class A senior notes upon maturity on May 31, 2017.

Capital Markets segment pre-tax operating margin for the nine months ended September 30, 2017 was 12.3 percent, compared with 5.0 percent for the corresponding period of 2016. The increased pre-tax operating margin was primarily due to a lower non-compensation ratio driven by higher revenues and lower levels of restructuring costs. In the year-ago period, we recorded \$10.2 million of restructuring and integration costs primarily related to the acquisition of Simmons. Adjusted segment pre-tax operating margin for the nine months ended September 30, 2017 was 18.3 percent, compared with 13.1 percent for the corresponding period of 2016, primarily due to operating leverage as a result of higher revenues.

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Asset Management

The following table sets forth the Asset Management segment financial results and adjustments necessary to reconcile to our consolidated U.S. GAAP pre-tax operating income and pre-tax operating margin for the periods presented:

	Nine Months Ended September 30,							
	2017				2016			
	Total Adjusted	Adjustments ⁽¹⁾		U.S. GAAP	Total Adjusted	Adjustments ⁽¹⁾		U.S. GAAP
Noncontrolling Interests		Other Adjustments	Noncontrolling Interests			Other Adjustments		
<i>(Dollars in thousands)</i>								
Management fees								
Equity	\$ 18,478	\$ —	\$ —	\$ 18,478	\$ 21,051	\$ —	\$ —	\$ 21,051
MLP	21,361	—	—	21,361	18,536	—	—	18,536
<i>Total management fees</i>	<u>39,839</u>	<u>—</u>	<u>—</u>	<u>39,839</u>	<u>39,587</u>	<u>—</u>	<u>—</u>	<u>39,587</u>
Performance fees								
Equity	—	—	—	—	—	—	—	—
MLP	—	—	—	—	—	—	—	—
<i>Total performance fees</i>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
<i>Total management and performance fees</i>	<u>39,839</u>	<u>—</u>	<u>—</u>	<u>39,839</u>	<u>39,587</u>	<u>—</u>	<u>—</u>	<u>39,587</u>
<i>Investment income</i>	<u>956</u>	<u>—</u>	<u>—</u>	<u>956</u>	<u>428</u>	<u>—</u>	<u>—</u>	<u>428</u>
<i>Total net revenues</i>	<u>40,795</u>	<u>—</u>	<u>—</u>	<u>40,795</u>	<u>40,015</u>	<u>—</u>	<u>—</u>	<u>40,015</u>
<i>Operating expenses</i>	<u>35,503</u>	<u>—</u>	<u>118,196</u>	<u>153,699</u>	<u>31,686</u>	<u>—</u>	<u>4,170</u>	<u>35,856</u>
<i>Segment pre-tax operating income/(loss)</i>	<u>\$ 5,292</u>	<u>\$ —</u>	<u>\$ (118,196)</u>	<u>\$ (112,904)</u>	<u>\$ 8,329</u>	<u>\$ —</u>	<u>\$ (4,170)</u>	<u>\$ 4,159</u>
<i>Segment pre-tax operating margin</i>	13.0%			(276.8)%	20.8%			10.4%
<i>Adjusted segment pre-tax operating margin excluding investment income (2)</i>	10.9%				20.0%			

(1) *Other Adjustments* – The following table sets forth the items not included in adjusted segment pre-tax operating income/(loss) and adjusted segment pre-tax operating margin for the periods presented:

	Nine Months Ended September 30,	
	2017	2016
<i>(Dollars in thousands)</i>		
<i>Restructuring and integration costs</i>	\$ —	\$ 9
<i>Goodwill impairment</i>	114,363	—
<i>Amortization of intangible assets related to acquisitions</i>	3,833	4,161
	<u>\$ 118,196</u>	<u>\$ 4,170</u>

(2) *Management believes that presenting adjusted segment pre-tax operating margin excluding investment income, a non-GAAP measure, provides the most meaningful basis for comparison of Asset Management operating results across periods.*

For the nine months ended September 30, 2017, management fees were \$39.8 million, essentially flat compared with \$39.6 million in the prior-year period as higher management fees from our MLP product offerings were offset by lower management fees from our equity product offerings. In the first nine months of 2017, management fees related to our equity strategies were \$18.5 million, down 12.2 percent compared to \$21.1 million in the corresponding period of 2016, due to a lower average effective revenue yield. The average effective revenue yield for our equity strategies was 63 basis points for the nine months ended September 30, 2017, down from 71 basis points for the nine months ended September 30, 2016. Management fees from our MLP strategies increased 15.2 percent in the first nine months of 2017 to \$21.4 million, compared with \$18.5 million in the first nine months of 2016, due to higher average AUM.

The negative segment pre-tax operating margin for the nine months ended September 30, 2017 was driven by the \$114.4 million non-cash goodwill impairment charge. Excluding investment income on firm capital invested in our strategies, adjusted segment operating margin declined from 20.0 percent in the first nine months of 2016 to 10.9 percent in the first nine months of 2017, due to higher compensation and non-compensation ratios.

The following table summarizes the changes in our AUM for the periods presented:

<i>(Dollars in millions)</i>	Nine Months Ended September 30,		Twelve Months Ended September 30,
	2017	2016	2017
Equity			
Beginning of period	\$ 4,115	\$ 4,954	\$ 3,878
Net outflows	(832)	(1,379)	(784)
Net market appreciation	302	303	491
End of period	\$ 3,585	\$ 3,878	\$ 3,585
MLP			
Beginning of period	\$ 4,616	\$ 3,924	\$ 4,551
Net outflows	(240)	(193)	(333)
Net market appreciation/(depreciation)	(333)	820	(175)
End of period	\$ 4,043	\$ 4,551	\$ 4,043
Total			
Beginning of period	\$ 8,731	\$ 8,878	\$ 8,429
Net outflows	(1,072)	(1,572)	(1,117)
Net market appreciation/(depreciation)	(31)	1,123	316
End of period	\$ 7,628	\$ 8,429	\$ 7,628

Recent Accounting Pronouncements

Recent accounting pronouncements are set forth in Note 2 to our unaudited consolidated financial statements, and are incorporated herein by reference.

Critical Accounting Policies

Our accounting and reporting policies comply with GAAP and conform to practices within the securities industry. The preparation of financial statements in compliance with GAAP and industry practices requires us to make estimates and assumptions that could materially affect amounts reported in our consolidated financial statements. Critical accounting policies are those policies that we believe to be the most important to the portrayal of our financial condition and results of operations and that require us to make estimates that are difficult, subjective or complex. Most accounting policies are not considered by us to be critical accounting policies. Several factors are considered in determining whether or not a policy is critical, including whether the estimates are significant to the consolidated financial statements taken as a whole, the nature of the estimates, the ability to readily validate the estimates with other information (e.g., third party or independent sources), the sensitivity of the estimates to changes in economic conditions and whether alternative accounting methods may be used under GAAP.

We believe that of our significant accounting policies, the following are our critical accounting policies:

- Valuation of Financial Instruments
- Goodwill and Intangible Assets
- Compensation Plans
- Income Taxes

Our accounting policies related to goodwill and intangible assets are described below. See the "Critical Accounting Policies" section and Note 2, "Summary of Significant Accounting Policies" to our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016 for further information on our other critical accounting policies. See also Note 2, "Accounting Policies and Pronouncements" in the notes to our unaudited consolidated financial statements included in this Quarterly Report on Form 10-Q for changes to our significant accounting policies, as well as the impact from the adoption of new accounting standards.

Goodwill and Intangible Assets

We record all assets and liabilities acquired in purchase acquisitions, including goodwill and other intangible assets, at fair value. Determining the fair value of assets and liabilities acquired requires certain management estimates. At September 30, 2017, we had goodwill of \$81.9 million, all of which relates to our capital markets segment. At September 30, 2017, we had intangible assets of \$25.8 million, of which \$11.7 million relates to our capital markets segment and \$14.1 million relates to our asset management segment.

We are required to perform impairment tests of our goodwill and indefinite-life intangible assets annually and on an interim basis when circumstances exist that could indicate possible impairment. We have elected to test for goodwill impairment in the fourth quarter of each calendar year. We have the option to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after making an assessment, we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. However, if we conclude otherwise, then we are required to perform the two-step impairment test, which requires management to make judgments in determining what assumptions to use in the calculation. As discussed in Note 2, "Accounting Policies and Pronouncements" in the notes to our unaudited consolidated financial statements included in this Quarterly Report on Form 10-Q, we adopted new accounting guidance effective July 1, 2017 which eliminates the second step from the goodwill impairment test. Accordingly, we evaluate impairment charges based on the excess of a reporting unit's carrying amount over its fair value. See Note 11 to our unaudited consolidated financial statements for additional information on our goodwill impairment testing.

The initial recognition of goodwill and other intangible assets and the subsequent quantitative impairment analysis involves significant judgment in determining the estimates of future cash flows, discount rates, economic forecast and other assumptions which are then used in acceptable valuation techniques, such as the market approach (earnings and/or transaction multiples) and/or the income approach (discounted cash flow method). Changes in these estimates and assumptions could have a significant impact on the fair value and any resulting impairment of goodwill. Our estimated cash flows, by their nature, are difficult to determine over an extended time period. Events and factors that may significantly affect the estimates include, among others, competitive forces and changes in revenue growth trends, cost structures, technology, and market conditions. To assess the reasonableness of cash flow estimates and validate assumptions used in our estimates, we review historical performance of the underlying assets or similar assets. In assessing the fair value of our reporting units, the volatile nature of the securities markets and our industry requires us to consider the business and market cycle and assess the stage of the cycle in estimating the timing and extent of future cash flows. In addition to discounted cash flows, we consider earnings multiples of comparable public companies and multiples of recent mergers and acquisitions transactions of similar businesses in our subsequent impairment analysis.

We identified impairment indicators in the third quarter of 2017 related to our asset management reporting unit and performed an interim goodwill impairment test as of July 31, 2017, which resulted in a non-cash goodwill impairment charge of \$114.4 million. The impairment charge resulted from declining profitability in 2017 as decreases in revenues relating to higher fee product offerings have not been fully offset by new revenues on assets gained in lower fee product offerings. We believe the shift in revenue mix is attributable, in part, to the extended cycle of investors favoring passive investment vehicles over active management. The fair value of the asset management reporting unit was calculated using the income approach (discounted cash flow method based on revenue and EBITDA forecasts) and market approach (earnings multiples of comparable public companies), which are valuation techniques we believe market participants would use for the reporting unit.

We also evaluated the intangible assets (indefinite and definite-lived) related to the asset management reporting unit and concluded there was no impairment in the third quarter of 2017.

We anticipate completing our 2017 annual goodwill and intangible asset impairment testing for the capital markets reporting unit in the fourth quarter of 2017.

Liquidity, Funding and Capital Resources

Liquidity is of critical importance to us given the nature of our business. Insufficient liquidity resulting from adverse circumstances contributes to, and may be the cause of, financial institution failure. Accordingly, we regularly monitor our liquidity position and maintain a liquidity strategy designed to enable our business to continue to operate even under adverse circumstances, although there can be no assurance that our strategy will be successful under all circumstances.

The majority of our tangible assets consist of assets readily convertible into cash. Financial instruments and other inventory positions owned are stated at fair value and are generally readily marketable in most market conditions. Receivables and payables with brokers, dealers and clearing organizations usually settle within a few days. As part of our liquidity strategy, we emphasize diversification of funding sources to the extent possible while considering tenor and cost. Our assets are financed by our cash flows from operations, equity capital, and our funding arrangements. The fluctuations in cash flows from financing activities are directly related to daily operating activities from our various businesses. One of our most important risk management disciplines is our ability to manage the size and composition of our balance sheet. While our asset base changes due to client activity, market fluctuations and business opportunities, the size and composition of our balance sheet reflect our overall risk tolerance, our ability to access stable funding sources and the amount of equity capital we hold.

Certain market conditions can impact the liquidity of our inventory positions, requiring us to hold larger inventory positions for longer than expected or requiring us to take other actions that may adversely impact our results.

A significant component of our employees' compensation is paid in annual discretionary incentive compensation. The timing of these incentive compensation payments, which generally are made in February, has a significant impact on our cash position and liquidity.

Beginning in 2017, we initiated the payment of a quarterly cash dividend to holders of our common stock. Our board of directors determines the declaration and payment of dividends on a quarterly basis, and is free to change our dividend policy at any time.

Our board of directors declared the following dividends:

Declaration Date	Dividend Per Share	Record Date	Payment Date
February 2, 2017	\$ 0.3125	February 20, 2017	March 13, 2017
April 27, 2017	\$ 0.3125	May 26, 2017	June 15, 2017
July 27, 2017	\$ 0.3125	August 28, 2017	September 15, 2017
October 26, 2017	\$ 0.3125	November 29, 2017	December 15, 2017

Effective August 14, 2015, our board of directors authorized the repurchase of up to \$150.0 million in common shares through September 30, 2017. During the nine months ended September 30, 2017, we repurchased 36,936 shares of our common stock at an average price of \$67.62 per share for an aggregate purchase price of \$2.5 million related to this authorization. This authorization expired on September 30, 2017.

On August 10, 2017, our board of directors authorized the repurchase of up to \$150.0 million in common shares through September 30, 2019. The authorization became effective on September 30, 2017.

We also purchase shares of common stock from restricted stock award recipients upon the award vesting as recipients sell shares to meet their employment tax obligations. During the first nine months of 2017, we purchased 308,801 shares or \$22.6 million of our common stock for this purpose.

Leverage

The following table presents total assets, adjusted assets, total shareholders' equity and tangible shareholders' equity with the resulting leverage ratios as of:

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Total assets	\$ 1,739,836	\$ 2,125,503
Deduct: Goodwill and intangible assets	(107,623)	(233,452)
Deduct: Assets from noncontrolling interests	(52,271)	(109,179)
Adjusted assets	<u>\$ 1,579,942</u>	<u>\$ 1,782,872</u>
Total shareholders' equity	\$ 786,785	\$ 816,266
Deduct: Goodwill and intangible assets	(107,623)	(233,452)
Deduct: Noncontrolling interests	(48,519)	(57,016)
Tangible common shareholders' equity	<u>\$ 630,643</u>	<u>\$ 525,798</u>
Leverage ratio (1)	2.2	2.6
Adjusted leverage ratio (2)	2.5	3.4

(1) Leverage ratio equals total assets divided by total shareholders' equity.

(2) Adjusted leverage ratio equals adjusted assets divided by tangible common shareholders' equity.

Adjusted assets and tangible common shareholders' equity are non-GAAP financial measures. Goodwill and intangible assets are subtracted from total assets and total shareholders' equity in determining adjusted assets and tangible common shareholders' equity, respectively, as we believe that goodwill and intangible assets do not constitute operating assets which can be deployed in a liquid manner. Amounts attributed to noncontrolling interests are subtracted from total assets and total shareholders' equity in determining adjusted assets and tangible common shareholders' equity, respectively, as they represent assets and equity interests in consolidated entities that are not attributable, either directly or indirectly, to Piper Jaffray Companies. We view the resulting measure of adjusted leverage, also a non-GAAP financial measure, as a more relevant measure of financial risk when comparing financial services companies. Our adjusted leverage ratio decreased from December 31, 2016, due to the \$114.4 million non-cash goodwill impairment charge recorded for the asset management reporting unit, as well as reduced asset levels resulting from our migration to a fully disclosed clearing model.

Funding and Capital Resources

The primary goal of our funding activities is to ensure adequate funding over a wide range of market conditions. Given the mix of our business activities, funding requirements are fulfilled through a diversified range of short-term and long-term financing. We attempt to ensure that the tenor of our borrowing liabilities equals or exceeds the expected holding period of the assets being financed. Our ability to support increases in total assets is largely a function of our ability to obtain funding from external sources. Access to these external sources, as well as the cost of that financing, is dependent upon various factors, including market conditions, the general availability of credit and credit ratings. We currently do not have a credit rating, which could adversely affect our liquidity and competitive position by increasing our financing costs and limiting access to sources of liquidity that require a credit rating as a condition to providing the funds.

In the third quarter of 2017, we migrated to a fully disclosed clearing model and are no longer self clearing. Pershing LLC ("Pershing") is our clearing broker dealer. The conversion provided us with a new funding source through Pershing and, as a result, changed our mix of funding sources.

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Our day-to-day funding and liquidity is obtained primarily through the use of our clearing arrangement with Pershing, commercial paper issuance, prime broker agreements, and bank lines of credit, and is typically collateralized by our securities inventory. These funding sources are critical to our ability to finance and hold inventory, which is a necessary part of our institutional brokerage business. The majority of our inventory is liquid and is therefore funded by short-term facilities. Certain of these short-term facilities (i.e., committed line and commercial paper) have been established to mitigate changes in the liquidity of our inventory based on changing market conditions. In the case of our committed line, it is available to us regardless of changes in market liquidity conditions through the end of its term, although there may be limitations on the type of securities available to pledge. Our commercial paper program helps mitigate changes in market liquidity conditions given it is not an overnight facility, but provides funding with a term of 27 to 270 days. Our funding sources are also dependent on the types of inventory that our counterparties are willing to accept as collateral and the number of counterparties available. Funding is generally obtained at rates based upon the federal funds rate or the London Interbank Offer Rate.

Pershing Clearing Arrangement – We have established an arrangement to obtain financing from Pershing related to the majority of our trading activities. Under our fully disclosed clearing agreement, the majority of our securities inventories and all of our customer activities are held by or cleared through Pershing. Financing under this arrangement is secured primarily by securities, and collateral limitations could reduce the amount of funding available under this arrangement. Our clearing arrangement activities are recorded net from trading activity and reported within receivables from brokers, dealers and clearing organizations. The funding is at the discretion of Pershing and could be denied. Our fully disclosed clearing agreement includes a covenant requiring Piper Jaffray & Co. to maintain excess net capital of \$120 million. At September 30, 2017, we had \$75.1 million of financing outstanding under this arrangement.

Commercial Paper Program – Our U.S. broker dealer subsidiary, Piper Jaffray & Co., issues secured commercial paper to fund a portion of its securities inventory. This commercial paper is currently issued under two separate programs, CP Series A and CP Series II A, and is secured by different inventory classes, which is reflected in the interest rate paid on the respective program. The programs can issue commercial paper with maturities of 27 to 270 days. CP Series II A includes a revised covenant that requires Piper Jaffray & Co. to maintain excess net capital of \$100 million. During the third quarter of 2017, we retired the CP Series III A program, and increased the maximum amount that may be issued under CP Series II A from \$150 million to \$200 million. The following table provides information about our commercial paper programs at September 30, 2017:

(Dollars in millions)

	CP Series A	CP Series II A
Maximum amount that may be issued	\$ 300.0	\$ 200.0
Amount outstanding	—	—

We resumed issuing commercial paper in the fourth quarter of 2017.

Prime Broker Arrangements – We have established an arrangement to obtain overnight financing by a single prime broker related to certain strategic trading activities in municipal securities. Additionally, we have established a second overnight financing arrangement with another broker dealer related to our convertible securities inventories. Financing under these arrangements is secured primarily by securities, and collateral limitations could reduce the amount of funding available under these arrangements. Our prime broker financing activities are recorded net of receivables from trading activity. The funding is at the discretion of the prime brokers and could be denied subject to a notice period. At September 30, 2017, we had \$76.8 million of financing outstanding under these prime broker arrangements.

Committed Lines – We elected to decrease our committed line from \$250 million to a one-year \$200 million revolving secured credit facility in 2016 based on our liquidity needs and our back office conversion, completed in the third quarter of 2017, which provided us with an additional funding source from our clearing broker Pershing. We use our committed credit facility in the ordinary course of business to fund a portion of our daily operations, and the amount borrowed under the facility varies daily based on our funding needs. Advances under this facility are secured by certain marketable securities. The facility includes a covenant that requires Piper Jaffray & Co. to maintain minimum net capital of \$120 million, and the unpaid principal amount of all advances under the facility will be due on December 16, 2017. This credit facility has been in place since 2008 and we anticipate being able to renew the facility for another one-year term in the fourth quarter of 2017. At September 30, 2017, we had no advances against this line of credit.

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Uncommitted Line – We use this uncommitted line in the ordinary course of business to fund a portion of our daily operations, and the amount borrowed under our uncommitted line varies daily based on our funding needs. Our \$85 million uncommitted secured line is dependent on having appropriate collateral, as determined by the bank agreement, to secure an advance under the line. Collateral limitations could reduce the amount of funding available under this secured line. Our uncommitted line is discretionary and is not a commitment by the bank to provide an advance under the line. More specifically, the line is subject to approval by the bank each time an advance is requested and advances may be denied, which may be particularly true during times of market stress or market perceptions of our exposures. We manage our relationship with the bank that provides this uncommitted facility in order to have appropriate levels of funding for our business. At September 30, 2017, we had no advances against this line of credit.

The following tables present the average balances outstanding for our various funding sources by quarter for 2017 and 2016, respectively.

<i>(Dollars in millions)</i>	Average Balance for the Three Months Ended		
	Sept. 30, 2017	June 30, 2017	Mar. 31, 2017
Funding source:			
Pershing clearing arrangement	\$ 42.5	\$ —	\$ —
Commercial paper	30.3	117.1	137.7
Prime broker arrangements	87.7	103.7	127.2
Short-term bank loans	6.0	67.1	2.5
Total	\$ 166.5	\$ 287.9	\$ 267.4

<i>(Dollars in millions)</i>	Average Balance for the Three Months Ended			
	Dec. 31, 2016	Sept. 30, 2016	June 30, 2016	Mar. 31, 2016
Funding source:				
Repurchase agreements	\$ 3.5	\$ 14.8	\$ 28.9	\$ 30.5
Commercial paper	165.8	235.8	279.7	279.2
Prime broker arrangements	225.6	200.6	169.2	159.0
Short-term bank loans	5.3	—	6.4	0.8
Total	\$ 400.2	\$ 451.2	\$ 484.2	\$ 469.5

The average funding in the third quarter of 2017 decreased to \$166.5 million, compared with \$287.9 million during the second quarter of 2017, due to a decrease in average inventory balances and the accumulation of cash from operations. Average funding decreased compared to the corresponding period of 2016 as we used cash from operations to reduce funding.

The following table presents the maximum daily funding amount by quarter for 2017 and 2016, respectively.

<i>(Dollars in millions)</i>	2017	2016
First Quarter	\$ 543.4	\$ 576.4
Second Quarter	\$ 538.3	\$ 669.7
Third Quarter	\$ 418.7	\$ 525.6
Fourth Quarter		\$ 445.9

Senior Notes

We have entered into variable and fixed rate senior notes with certain entities advised by Pacific Investment Management Company ("PIMCO"). The following table presents the outstanding balance by note class:

<i>(Dollars in thousands)</i>	Outstanding Balance	
	September 30, 2017	December 31, 2016
Class A Notes	\$ —	\$ 50,000
Class C Notes	125,000	125,000
Total senior notes	\$ 125,000	\$ 175,000

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On October 8, 2015, we entered into a second amended and restated note purchase agreement ("Second Amended and Restated Note Purchase Agreement") under which we issued \$125 million of fixed rate Class C Notes. The Class C Notes bear interest at an annual fixed rate of 5.06 percent, are payable semi-annually and mature on October 9, 2018. The unpaid principal amount is due in full on the maturity date and may not be prepaid. The \$50 million of variable rate Class A Notes issued in 2014 were repaid in full on the May 31, 2017 maturity date.

The Second Amended and Restated Note Purchase Agreement includes customary events of default and covenants that, among other things, require us to maintain a minimum consolidated tangible net worth and minimum regulatory net capital, limit our leverage ratio and require maintenance of a minimum ratio of operating cash flow to fixed charges. At September 30, 2017, we were in compliance with all covenants.

Contractual Obligations

Our contractual obligations have not materially changed from those reported in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2016, except for our purchase commitments. On June 30, 2017, we entered into an agreement to move all of our self clearing broker dealer operations to a fully disclosed clearing model with Pershing.

<i>(Dollars in millions)</i>	Remainder of 2017	2018 - 2019	2020 - 2021	2022 and thereafter	Total
Purchase commitments	\$ 8.4	\$ 21.5	\$ 6.7	\$ 18.7	\$ 55.3

Purchase commitments include agreements to purchase goods or services that are enforceable and legally binding and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions, and the approximate timing of the transaction. Purchase commitments with variable pricing provisions are included in the table based on the minimum contractual amounts. Certain purchase commitments contain termination or renewal provisions. The table reflects the minimum contractual amounts likely to be paid under these agreements assuming the contracts are not terminated.

Capital Requirements

As a registered broker dealer and member firm of the Financial Industry Regulatory Authority, Inc. ("FINRA"), Piper Jaffray & Co., our U.S. broker dealer subsidiary, is subject to the uniform net capital rule of the SEC and the net capital rule of FINRA. We have elected to use the alternative method permitted by the uniform net capital rule which requires that we maintain minimum net capital of \$1.0 million. Advances to affiliates, repayment of subordinated liabilities, dividend payments and other equity withdrawals are subject to certain approvals, notifications and other provisions of the uniform net capital rules. We expect that these provisions will not impact our ability to meet current and future obligations. At September 30, 2017, our net capital under the SEC's uniform net capital rule was \$215.5 million, and exceeded the minimum net capital required under the SEC rule by \$214.5 million.

Although we operate with a level of net capital substantially greater than the minimum thresholds established by FINRA and the SEC, a substantial reduction of our capital would curtail many of our Capital Markets revenue producing activities.

Our committed short-term credit facility and our senior notes with PIMCO include covenants requiring Piper Jaffray & Co. to maintain minimum net capital of \$120 million. Secured commercial paper issued under CP Series II A includes a covenant that requires Piper Jaffray & Co. to maintain excess net capital of \$100 million. Our fully disclosed clearing agreement with Pershing also includes a covenant requiring Piper Jaffray & Co. to maintain excess net capital of \$120 million.

At September 30, 2017, Piper Jaffray Ltd., our broker dealer subsidiary registered in the United Kingdom, was subject to, and was in compliance with, the capital requirements of the Prudential Regulation Authority and the Financial Conduct Authority pursuant to the Financial Services Act of 2012.

Piper Jaffray Hong Kong Limited is licensed by the Hong Kong Securities and Futures Commission, which is subject to the liquid capital requirements of the Securities and Futures (Financial Resources) Rule promulgated under the Securities and Futures Ordinance. At September 30, 2017, Piper Jaffray Hong Kong Limited was in compliance with the liquid capital requirements of the Hong Kong Securities and Trade Commission.

Off-Balance Sheet Arrangements

In the ordinary course of business we enter into various types of off-balance sheet arrangements. The following table summarizes the notional contract value of our off-balance sheet arrangements for the periods presented:

	Expiration Per Period at December 31,						Total Contractual Amount	
	2017	2018	2019	2020 - 2021	2022 - 2023	Later	September 30, 2017	December 31, 2016
<i>(Dollars in thousands)</i>								
Customer matched-book derivative contracts (1) (2)	\$ 22,100	\$ —	\$ 32,850	\$ 42,360	\$ 143,460	\$ 2,937,955	\$ 3,178,725	\$ 3,330,207
Trading securities derivative contracts (2)	301,100	26,000	—	—	—	18,750	345,850	423,550
Credit default swap index contracts (2)	—	—	—	—	—	—	—	7,470
Investment commitments (3)	—	—	—	—	—	—	40,905	22,776

- (1) Consists of interest rate swaps. We have minimal market risk related to these matched-book derivative contracts; however, we do have counterparty risk with one major financial institution, which is mitigated by collateral deposits. In addition, we have a limited number of counterparties (contractual amount of \$181.8 million at September 30, 2017) who are not required to post collateral. The uncollateralized amounts, representing the fair value of the derivative contracts, expose us to the credit risk of these counterparties. At September 30, 2017, we had \$20.8 million of credit exposure with these counterparties, including \$15.4 million of credit exposure with one counterparty.
- (2) We believe the fair value of these derivative contracts is a more relevant measure of the obligations because we believe the notional or contract amount overstates the expected payout. At September 30, 2017 and December 31, 2016, the net fair value of these derivative contracts approximated \$16.9 million and \$24.0 million, respectively.
- (3) The investment commitments have no specified call dates. The timing of capital calls is based on market conditions and investment opportunities.

Derivatives

Derivatives' notional or contract amounts are not reflected as assets or liabilities on our consolidated statements of financial condition. Rather, the fair value of the derivative transactions are reported on the consolidated statements of financial condition as assets or liabilities in financial instruments and other inventory positions owned and financial instruments and other inventory positions sold, but not yet purchased, as applicable. For a complete discussion of our activities related to derivative products, see Note 4, "Financial Instruments and Other Inventory Positions Owned and Financial Instruments and Other Inventory Positions Sold, but Not Yet Purchased," in the notes to our unaudited consolidated financial statements.

Investment Commitments

We have investments, including those made as part of our merchant banking activities, in various limited partnerships that provide financing or make investments in private equity companies. We commit capital and/or act as the managing partner of these entities.

We have committed capital to certain entities and these commitments generally have no specified call dates. We had \$40.9 million of commitments outstanding at September 30, 2017, of which \$33.3 million relate to affiliated merchant banking funds and \$2.0 million relate to an affiliated fund, which provides financing for senior living facilities.

Risk Management

Risk is an inherent part of our business. The principal risks we face in operating our business include: strategic risk, market risk, liquidity risk, credit risk, operational risk, human capital risk, and legal and regulatory risks. The extent to which we properly identify and effectively manage each of these risks is critical to our financial condition and profitability. We have a formal risk management process to identify, assess and monitor each risk and mitigating controls in accordance with defined policies and procedures. The risk management functions are independent of our business lines. Our management takes an active role in the risk management process, and the results are reported to senior management and the Board of Directors.

The audit committee of the Board of Directors oversees management's processes for identifying and evaluating our major risks, and the policies, procedures and practices employed by management to govern its risk assessment and risk management processes. The nominating and governance committee of the Board of Directors oversees the Board of Directors' committee structures and functions as they relate to the various committees' responsibilities with respect to oversight of our major risk exposures. With respect to these major risk exposures, the audit committee is responsible for overseeing management's monitoring and control of our major risk exposures relating to market risk, credit risk, liquidity risk, legal and regulatory risk, operational risk, and human capital risk relating to misconduct, fraud, and legal and compliance matters. Our compensation committee is responsible for overseeing management's monitoring and control of our major risk exposures relating to compensation, organizational structure, and succession. Our Board of Directors is responsible for overseeing management's monitoring and control of our major risk exposures related to our corporate strategy. Our Chief Executive Officer, Chief Financial Officer and Senior Vice President of Finance meet with the audit committee on a quarterly basis to discuss our market, liquidity, and legal and regulatory risks, and provide updates to the Board of Directors, audit committee, and compensation committee concerning the other major risk exposures on a regular basis.

We use internal committees to assist in governing risk and ensure that our business activities are properly assessed, monitored and managed. Our financial risk committees manage our market, liquidity and credit risks, and oversee risk management practices related to these risks, including defining acceptable risk tolerances and approving risk management policies. Membership is comprised of senior leadership, including but not limited to, our Chief Executive Officer, Chief Financial Officer, Senior Vice President of Finance, General Counsel, Treasurer, Head of Market and Credit Risk, Head of Public Finance, Head of Fixed Income Services and Firm Investments and Trading, and Head of Equities. Other committees that help evaluate and monitor risk include underwriting, leadership team and operating committees. These committees help manage risk by ensuring that business activities are properly managed and within a defined scope of activity. Our valuation committee, comprised of members of senior management and risk management, provide oversight and overall responsibility for the internal control processes and procedures related to fair value measurements. Additionally, our operational risk committees address and monitor risk related to information systems and security, legal, regulatory and compliance matters, and third parties such as vendors and service providers.

With respect to market risk and credit risk, the cornerstone of our risk management process is daily communication among traders, trading department management and senior management concerning our inventory positions, including those associated with our strategic trading activities, and overall risk profile. Our risk management functions supplement this communication process by providing their independent perspectives on our market and credit risk profile on a daily basis. The broader objectives of our risk management functions are to understand the risk profile of each trading area, to consolidate risk monitoring company-wide, to assist in implementing effective hedging strategies, to articulate large trading or position risks to senior management, and to ensure accurate fair values of our financial instruments.

Risk management techniques, processes and strategies may not be fully effective in mitigating our risk exposure in all market environments or against all types of risk, and any risk management failures could expose us to material unanticipated losses.

Strategic Risk

Strategic risk represents the risk associated with executive management failing to develop and execute on the appropriate strategic vision which demonstrates a commitment to our culture, leverages our core competencies, appropriately responds to external factors in the marketplace, and is in the best interests of our clients, employees and shareholders.

Our leadership team is responsible for managing our strategic risks. The Board of Directors oversees the leadership team in setting and executing our strategic plan.

Market Risk

Market risk represents the risk of losses, or financial volatility that may result from the change in value of a financial instrument due to fluctuations in its market price. Our exposure to market risk is directly related to our role as a financial intermediary for our clients, to our market-making activities and our strategic trading activities. Market risks are inherent to both cash and derivative financial instruments. The scope of our market risk management policies and procedures includes all market-sensitive financial instruments.

Our different types of market risk include:

Interest Rate Risk — Interest rate risk represents the potential volatility from changes in market interest rates. We are exposed to interest rate risk arising from changes in the level and volatility of interest rates, changes in the slope of the yield curve, changes in credit spreads, and the rate of prepayments on our interest-earning assets (e.g., inventories) and our funding sources (e.g., short-term financing) which finance these assets. Interest rate risk is managed by selling short U.S. government securities, agency securities, corporate debt securities and derivative contracts. See Note 4 of our accompanying unaudited consolidated financial statements for additional information on our derivative contracts. Our interest rate hedging strategies may not work in all market environments and as a result may not be effective in mitigating interest rate risk. Also, we establish limits on the notional level of our fixed income securities inventory and manage net positions within those limits.

Equity Price Risk — Equity price risk represents the potential loss in value due to adverse changes in the level or volatility of equity prices. We are exposed to equity price risk through our trading activities in the U.S. market. We attempt to reduce the risk of loss inherent in our market-making and in our inventory of equity securities by establishing limits on the notional level of our inventory and by managing net position levels within those limits.

Foreign Exchange Risk — Foreign exchange risk represents the potential volatility to earnings or capital arising from movement in foreign exchange rates. A modest portion of our business is conducted in currencies other than the U.S. dollar, and changes in foreign exchange rates relative to the U.S. dollar can therefore affect the value of non-U.S. dollar net assets, revenues and expenses. A change in the foreign currency rates could create either a foreign currency transaction gain/loss (recorded in our consolidated statements of operations) or a foreign currency translation adjustment (recorded to accumulated other comprehensive income/(loss) within the shareholders' equity section of our consolidated statements of financial condition and other comprehensive income/(loss) within the consolidated statements of comprehensive income).

Value-at-Risk ("VaR")

We use the statistical technique known as VaR to measure, monitor and review the market risk exposures in our trading portfolios. VaR is the potential loss in value of our trading positions, excluding noncontrolling interests, due to adverse market movements over a defined time horizon with a specified confidence level. We perform a daily VaR analysis on substantially all of our trading positions, including fixed income, equities, convertible bonds, mortgage-backed securities and all associated economic hedges. These positions encompass both customer-related and strategic trading activities. A VaR model provides a common metric for assessing market risk across business lines and products. Changes in VaR between reporting periods are generally due to changes in levels of risk exposure, volatilities and/or correlations among asset classes and individual securities.

We use a Monte Carlo simulation methodology for VaR calculations. We believe this methodology provides VaR results that properly reflect the risk profile of all our instruments, including those that contain optionality, and also accurately models correlation movements among all of our asset classes. In addition, it provides improved tail results as there are no assumptions of distribution, and can provide additional insight for scenario shock analysis.

Model-based VaR derived from simulation has inherent limitations including: reliance on historical data to predict future market risk; VaR calculated using a one-day time horizon does not fully capture the market risk of positions that cannot be liquidated or offset with hedges within one day; and published VaR results reflect past trading positions while future risk depends on future positions.

The modeling of the market risk characteristics of our trading positions involves a number of assumptions and approximations. While we believe that these assumptions and approximations are reasonable, different assumptions and approximations could produce materially different VaR estimates. When comparing our VaR numbers to those of other firms, it is important to remember that different methodologies, assumptions and approximations could produce significantly different results.

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The following table quantifies the model-based VaR simulated for each component of market risk for the periods presented, which are computed using the past 250 days of historical data. When calculating VaR we use a 95 percent confidence level and a one-day time horizon. This means that, over time, there is a one in 20 chance that daily trading net revenues will fall below the expected daily trading net revenues by an amount at least as large as the reported VaR. Shortfalls on a single day can exceed reported VaR by significant amounts. Shortfalls can also accumulate over a longer time horizon, such as a number of consecutive trading days. Therefore, there can be no assurance that actual losses occurring on any given day arising from changes in market conditions will not exceed the VaR amounts shown below or that such losses will not occur more than once in a 20-day trading period.

<i>(Dollars in thousands)</i>	September 30, 2017	December 31, 2016
Interest Rate Risk	\$ 740	\$ 696
Equity Price Risk	82	41
Diversification Effect (1)	(57)	(26)
Total Value-at-Risk	<u>\$ 765</u>	<u>\$ 711</u>

(1) Equals the difference between total VaR and the sum of the VaRs for the two risk categories. This effect arises because the two market risk categories are not perfectly correlated.

We view average VaR over a period of time as more representative of trends in the business than VaR at any single point in time. The table below illustrates the daily high, low and average VaR calculated for each component of market risk during the nine months ended September 30, 2017 and the year ended December 31, 2016, respectively.

<i>(Dollars in thousands)</i>	High	Low	Average
For the Nine Months Ended September 30, 2017			
Interest Rate Risk	\$ 1,235	\$ 480	\$ 769
Equity Price Risk	178	32	87
Diversification Effect (1)			(62)
Total Value-at-Risk	\$ 1,244	\$ 506	\$ 794

<i>(Dollars in thousands)</i>	High	Low	Average
For the Year Ended December 31, 2016			
Interest Rate Risk	\$ 990	\$ 251	\$ 533
Equity Price Risk	412	6	150
Diversification Effect (1)			(72)
Total Value-at-Risk	\$ 1,049	\$ 362	\$ 611

(1) Equals the difference between total VaR and the sum of the VaRs for the two risk categories. This effect arises because the two market risk categories are not perfectly correlated. Because high and low VaR numbers for these risk categories may have occurred on different days, high and low numbers for diversification benefit would not be meaningful.

Trading losses exceeded our one-day VaR on one occasion during the first nine months of 2017.

The aggregate VaR as of September 30, 2017 was higher than the reported VaR on December 31, 2016. The increase in VaR was due to increased average inventory levels in asset classes that are accretive to VaR in the first nine months of 2017, compared to the end of 2016.

In addition to VaR, we also employ additional measures to monitor and manage market risk exposure including net market position, duration exposure, option sensitivities, and inventory turnover. All metrics are aggregated by asset concentration and are used for monitoring limits and exception approvals. In times of market volatility, we also perform ad hoc stress tests and scenario analysis as market conditions dictate. Unlike our VaR, which measures potential losses within a given confidence level, stress scenarios do not have an associated implied probability. Rather, stress testing is used to estimate the potential loss from market moves outside our VaR confidence levels.

Liquidity Risk

Liquidity risk is the risk that we are unable to timely access necessary funding sources in order to operate our business, as well as the risk that we are unable to timely divest securities that we hold in connection with our market-making, sales and trading, and strategic trading activities. We are exposed to liquidity risk in our day-to-day funding activities, by holding potentially illiquid inventory positions and in our role as a remarketing agent for variable rate demand notes.

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See the section entitled "Liquidity, Funding and Capital Resources" in Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations," in this Quarterly Report on Form 10-Q for information regarding our liquidity and how we manage liquidity risk.

Our inventory positions, including those associated with strategic trading activities, subject us to potential financial losses from the reduction in value of illiquid positions. Market risk can be exacerbated in times of trading illiquidity when market participants refrain from transacting in normal quantities and/or at normal bid-offer spreads. Depending on the specific security, the structure of the financial product, and/or overall market conditions, we may be forced to hold a security for substantially longer than we had planned or forced to liquidate into a challenging market if funding becomes unavailable.

Credit Risk

Credit risk refers to the potential for loss due to the default or deterioration in credit quality of a counterparty, customer, borrower or issuer of securities we hold in our trading inventory. The nature and amount of credit risk depends on the type of transaction, the structure and duration of that transaction and the parties involved. Credit risk also results from an obligor's failure to meet the terms of any contract with us or otherwise fail to perform as agreed. This may be reflected through issues such as settlement obligations or payment collections.

Our different types of credit risk include:

Credit Spread Risk — Credit spread risk arises from the possibility that changes in credit spreads will affect the value of financial instruments. Credit spreads represent the credit risk premiums required by market participants for a given credit quality (e.g., the additional yield that a debt instrument issued by a AA-rated entity must produce over a risk-free alternative). Changes in credit spreads result from potential changes in an issuer's credit rating or the market's perception of the issuer's credit worthiness. We are exposed to credit spread risk with the debt instruments held in our trading inventory, including those held for strategic trading activities. We enter into transactions to hedge our exposure to credit spread risk through the use of derivatives and certain other financial instruments. These hedging strategies may not work in all market environments and as a result may not be effective in mitigating credit spread risk.

Deterioration/Default Risk — Deterioration/default risk represents the risk due to an issuer, counterparty or borrower failing to fulfill its obligations. We are exposed to deterioration/default risk in our role as a trading counterparty to dealers and customers, as a holder of securities, and as a member of exchanges. The risk of default depends on the creditworthiness of the counterparty and/or issuer of the security. We mitigate this risk by establishing and monitoring individual and aggregate position limits for each counterparty relative to potential levels of activity, holding and marking to market collateral on certain transactions. Our risk management functions also evaluate the potential risk associated with institutional counterparties with whom we hold derivatives, TBAs and other documented institutional counterparty agreements that may give rise to credit exposure.

Collections Risk — Collections risk arises from ineffective management and monitoring of collecting outstanding debts and obligations, including those related to our customer trading activities and margin lending. Our client activities involve the execution, settlement and financing of various transactions. Client activities are transacted on a delivery versus payment, cash or margin basis. Our credit exposure to institutional client business is mitigated by the use of industry-standard delivery versus payment through depositories and clearing banks. Credit exposure associated with our customer margin accounts in the U.S. is monitored daily. Our risk management functions have credit risk policies establishing appropriate credit limits and collateralization thresholds for our customers utilizing margin lending.

Concentration Risk — Concentration risk is the risk due to concentrated exposure to a particular product; individual issuer, borrower or counterparty; financial instrument; or geographic area. We are subject to concentration risk if we hold large individual securities positions, execute large transactions with individual counterparties or groups of related counterparties, or make substantial underwriting commitments. Concentration risk can occur by industry, geographic area or type of client. Securities purchased under agreements to resell consist primarily of securities issued by the U.S. government or its agencies. The counterparties to these agreements typically are primary dealers of U.S. government securities and major financial institutions. Inventory and investment positions taken and commitments made, including underwritings, may result in exposure to individual issuers and businesses. Potential concentration risk is carefully monitored through review of counterparties and borrowers and is managed through the use of policies and limits established by senior management.

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We have concentrated counterparty credit exposure with five non-publicly rated entities totaling \$20.8 million at September 30, 2017. This counterparty credit exposure is part of our matched-book derivative program related to our public finance business, consisting primarily of interest rate swaps. One derivative counterparty represents 74.3 percent, or \$15.4 million, of this exposure. Credit exposure associated with our derivative counterparties is driven by uncollateralized market movements in the fair value of the interest rate swap contracts and is monitored regularly by our financial risk committee. We attempt to minimize the credit (or repayment) risk in derivative instruments by entering into transactions with high-quality counterparties that are reviewed periodically by senior management.

Operational Risk

Operational risk is the risk of loss, or damage to our reputation, resulting from inadequate or failed processes, people and systems or from external events. We rely on the ability of our employees and our systems, both internal and at computer centers operated by third parties, to process a large number of transactions. Our systems may fail to operate properly or become disabled as a result of events that are wholly or partially beyond our control. In the event of a breakdown or improper operation of our systems or improper action by our employees or third party vendors, we could suffer financial loss, a disruption of our businesses, regulatory sanctions and damage to our reputation. We also face the risk of operational failure or termination of any of the exchanges, clearing houses, fully disclosed clearing firms, or other financial intermediaries we use to facilitate our securities transactions. Any such failure or termination could adversely affect our ability to effect transactions and manage our exposure to risk.

Our operations rely on secure processing, storage and transmission of confidential and other information in our internal and outsourced computer systems and networks. Our computer systems, software and networks may be vulnerable to unauthorized access, computer viruses or other malicious code, and other events that could have an information security impact. The occurrence of one or more of these events could jeopardize our or our clients' or counterparties' confidential and other information processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our, our clients', our counterparties' or third parties' operations. We take protective measures and endeavor to modify them as circumstances warrant.

In order to mitigate and control operational risk, we have developed and continue to enhance policies and procedures that are designed to identify and manage operational risk at appropriate levels throughout the organization. We also have business continuity plans in place that we believe will cover critical processes on a company-wide basis, and redundancies are built into our systems as we have deemed appropriate. These control mechanisms attempt to ensure that operational policies and procedures are being followed and that our various businesses are operating within established corporate policies and limits.

In the third quarter of 2017, we migrated to a fully disclosed clearing model for all of our self clearing operations. The migration process introduced unique risks that could have caused disruptions in our business or created other unexpected capital charges or losses. We had preventative measures in place, including a project governance committee comprised of members of senior management, as well as senior management at our third party partner. In order to mitigate and control operational risk inherent in the migration, we had developed procedures specific to the project implementation process, including parallel system operations, mock conversion testing, and ongoing monitoring and reporting to members of the project governance committee. We also had the ability to obtain additional methods of financing from existing creditors in the event unknown capital charges arose.

Human Capital Risk

Our business is a human capital business and our success is dependent upon the skills, expertise and performance of our employees. Human capital risks represent the risks posed if we fail to attract and retain qualified individuals who are motivated to serve the best interests of our clients, thereby serving the best interests of our company. Attracting and retaining employees depends, among other things, on our company's culture, management, work environment, geographic locations and compensation. There are risks associated with the proper recruitment, development and rewards of our employees to ensure quality performance and retention.

Legal and Regulatory Risk

Legal and regulatory risk includes the risk of non-compliance with applicable legal and regulatory requirements and loss to our reputation we may suffer as a result of failure to comply with laws, regulations, rules, related self-regulatory organization standards and codes of conduct applicable to our business activities. We are generally subject to extensive regulation in the various jurisdictions in which we conduct our business. We have established procedures that are designed to ensure compliance with applicable statutory and regulatory requirements, such as public company reporting obligations, regulatory net capital requirements, sales and trading practices, potential conflicts of interest, use and safekeeping of customer funds and securities, anti-money laundering, privacy and

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recordkeeping. We have also established procedures that are designed to require that our policies relating to ethics and business conduct are followed. The legal and regulatory focus on the financial services industry presents a continuing business challenge for us.

Our business also subjects us to the complex income tax laws of the jurisdictions in which we have business operations, and these tax laws may be subject to different interpretations by the taxpayer and the relevant governmental taxing authorities. We must make judgments and interpretations about the application of these inherently complex tax laws when determining the provision for income taxes.

Effects of Inflation

Because our assets are liquid and generally short-term in nature, they are not significantly affected by inflation. However, the rate of inflation affects our expenses, such as employee compensation, office space leasing costs and communications charges, which may not be readily recoverable in the price of services we offer to our clients. To the extent inflation results in rising interest rates and has adverse effects upon the securities markets, it may adversely affect our financial position and results of operations.

ITEM 3. *QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.*

The information under the caption "Risk Management" in Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations," in this Quarterly Report on Form 10-Q is incorporated herein by reference.

ITEM 4. *CONTROLS AND PROCEDURES.*

As of the end of the period covered by this report, we conducted an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934). Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934 is (a) recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and (b) accumulated and communicated to our management, including our principal executive officer and principal financial officer to allow timely decisions regarding disclosure.

During the third quarter of our fiscal year ending December 31, 2017, we migrated to a fully disclosed clearing model for all of our self clearing broker dealer operations. Management believes this conversion may constitute a change in our system of internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Other than as described above, there were no other changes in our system of internal control over financial reporting during the third quarter of our fiscal year ending December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. *LEGAL PROCEEDINGS.*

The discussion of our business and operations should be read together with the legal proceedings contained in Part I, Item 3 "Legal Proceedings" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

ITEM 1A. RISK FACTORS.

The discussion of our business and operations should be read together with the risk factors contained in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, as updated in our subsequent reports on Form 10-Q filed with the SEC. These risk factors describe various risks and uncertainties to which we are or may become subject. These risks and uncertainties have the potential to affect our business, financial condition, results of operations, cash flows, strategies or prospects in a material and adverse manner. The following information updates risk factors from our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

The use of estimates and valuations in measuring fair value involve significant estimation and judgment by management.

We make various estimates that affect reported amounts and disclosures. Broadly, those estimates are used in measuring fair value of certain financial instruments, investments in private companies, accounting for goodwill and intangible assets, establishing provisions for potential losses that may arise from litigation, and regulatory proceedings and tax examinations. Estimates are based on available information and judgment. Therefore, actual results could differ from our estimates and that difference could have a material effect on our consolidated financial statements. With respect to accounting for goodwill, we complete our annual goodwill and intangible asset impairment testing in the fourth quarter of each year or earlier if goodwill impairment indicators are present. Impairment charges resulting from this valuation analysis could materially adversely affect our results of operations. In 2016, we recorded an \$82.9 million non-cash impairment charge to reduce the carrying value of the goodwill associated with our Asset Management segment following significant net client outflows of AUM in 2016, primarily from our value equity strategies, due to investment performance below benchmarks and an extended cycle of investors favoring passive investment vehicles over active management. Throughout 2017, our Asset Management segment has experienced a further decline in profitability as revenues have decreased in product offerings with higher management fees, which has not been fully offset with earnings from new product offerings. As a result, we identified impairment indicators in the third quarter of 2017 related to our Asset Management segment, and performed an interim goodwill impairment test as of July 31, 2017, which resulted in a non-cash goodwill impairment charge of \$114.4 million.

Financial instruments and other inventory positions owned, and financial instruments and other inventory positions sold but not yet purchased, are recorded at fair value, and unrealized gains and losses related to these financial instruments are reflected on our consolidated statements of operations. The fair value of a financial instrument is the amount at which the instrument could be exchanged in a transaction between market participants at the measurement date. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity. Difficult market environments, such as those experienced in 2008, may cause financial instruments to become substantially more illiquid and difficult to value, increasing the use of valuation models. Our future results of operations and financial condition may be adversely affected by the valuation adjustments that we apply to these financial instruments.

Investments in private companies are valued based on an assessment of each underlying security, considering rounds of financing, third party transactions and market-based information, including comparable company transactions, trading multiples (e.g., multiples of revenue and EBITDA) and changes in market outlook, among other factors. These valuation techniques require significant management estimation and judgment.

A failure to protect our computer systems, networks and information, and our clients' information, against cyber attacks, data breaches, and similar threats could impair our ability to conduct our businesses, result in the disclosure, theft or destruction of confidential information, damage our reputation and cause significant financial and legal exposure.

Our operations rely on the secure processing, storage and transmission of confidential and other information in our computer systems and networks. There have been several highly publicized cases involving financial services companies, consumer-based companies and other companies, as well as governmental and political organizations, reporting breaches in the security of their websites, networks or other systems. Some of the publicized breaches have involved sophisticated and targeted attacks intended to obtain unauthorized access to confidential information, destroy data, disrupt or degrade service, sabotage systems or cause other damage, including through the introduction of computer viruses or malware, cyberattacks and other means. There have also been several highly publicized cases where hackers have requested "ransom" payments in exchange for not disclosing customer information.

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A successful penetration or circumvention of the security of our systems could cause serious negative consequences for us, including significant disruption of our operations and those of our clients, customers and counterparties; misappropriation of our confidential information or that of our clients, customers, counterparties or employees; or damage to our computers or systems and those of our clients, customers and counterparties; and could result in violations of applicable privacy and other laws, financial loss to us or to our customers, loss of confidence in our security measures, customer dissatisfaction, significant litigation exposure and reputational harm, all of which could have a material adverse effect on us.

We must continuously monitor and develop our systems to protect our technology infrastructure and data from misappropriation or corruption. Despite our efforts to ensure the integrity of our systems and information, we have not been and may not be able to anticipate, detect or implement effective preventive measures against all cyber threats, especially because the techniques used are increasingly sophisticated, change frequently, and are often not recognized until months after the attack. Cyber attacks can originate from a variety of sources, including third parties who are affiliated with foreign governments or employees acting negligently or in a manner adverse to our interests. Third parties may seek to gain access to our systems either directly or using equipment or security passwords belonging to employees, customers, third-party service providers or other users of our systems. In addition, due to our interconnectivity with third-party vendors, central agents, exchanges, clearing houses and other financial institutions, we could be adversely impacted if any of them is subject to a successful cyber attack or other information security event.

Although we take protective measures and endeavor to modify them as circumstances warrant, our computer systems, software and networks have been and may be vulnerable to unauthorized access, misuse, computer viruses or other malicious code and other events that could have a security impact. We may be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities, exposures, or information security events. Due to the complexity and interconnectedness of our systems, the process of enhancing our protective measures can itself create a risk of systems disruptions and security issues.

The increased use of cloud technologies can heighten these and other operational risks. Certain aspects of the security of such technologies are unpredictable or beyond our control, and this lack of transparency may inhibit our ability to discover a failure by cloud service providers to adequately safeguard their systems and prevent cyber attacks that could disrupt our operations and result in misappropriation, corruption or loss of confidential and other information. In addition, there is a risk that encryption and other protective measures, despite their sophistication, may be defeated, particularly to the extent that new computing technologies vastly increase the speed and computing power available.

Legislative and regulatory proposals could significantly curtail the revenue from certain products that we currently provide or otherwise have a material adverse effect on our results of operations.

Proposed changes in laws or regulations relating to our business could decrease, perhaps significantly, the revenue that we receive from certain products or services that we provide, or otherwise have a material adverse effect on our results of operations. For example, proposed legislation brought under consideration by the U.S. House of Representatives in November 2017 would reduce the income tax rates paid by U.S. corporations, as well as limit certain other deductions that U.S. corporations can take. Although a reduction in overall corporate tax rates would generally be positive for our results of operations, it would cause us to incur a one-time non-cash write-off of our existing deferred tax assets based on the proposed lower rate. This write-off could be significant (i.e., \$50 to \$55 million) based on the tax rates currently proposed.

In addition, the U.S. House of Representatives' proposed tax reform legislation contains provisions that would eliminate advance refunding bonds and the tax exemption currently available for certain private activity bonds. Advance refunding bonds are those issued by a local or state government to refinance outstanding bonds before the original bonds mature or are callable in order to take advantage of lower borrowing costs. Tax-exempt private activity bonds are bonds issued by or on behalf of a local or state government for the purpose of financing facilities owned or used by private entities or 501(c)(3) organizations, including non-profit hospitals, universities, and multifamily and senior living housing developers. Our public finance investment banking business receives significant revenues as a result of underwriting activity in connection with debt issuances by government and non-profit clients, primarily on a tax-exempt basis. If advance refunding bonds and the tax exemption for certain private activity bonds are eliminated, our public finance business would be adversely effected to the extent that the elimination reduces the number of bond offerings, or those bond offerings are instead completed on a taxable basis and we are not able to compete effectively to serve as underwriter for those bonds. Also, federal law currently allows investors in debt issuances by government and non-profit entities to exclude the bond interest for federal income tax purposes, resulting in lower interest expense for the issuer as compared to a taxable financing. As the U.S. House of Representatives and U.S. Senate considers tax reform legislation, any other changes to, or a reduction or elimination of tax-exempt bond interest, or a reduction in individual income tax rates, could negatively impact the value of the municipal securities we hold in our securities inventory as well as our public finance investment banking business.

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more generally, which would negatively impact the results of operations for these businesses. At this time, however, it is not possible to ascertain which provisions will be included in a final legislative package or whether the legislation will pass at all and, therefore, we cannot estimate the total effect that these changes, if enacted, may have on our financial condition or results of operations.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

The table below sets forth the information with respect to purchases made by or on behalf of Piper Jaffray Companies or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934), of our common stock during the quarter ended September 30, 2017.

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 Yet to be Purchased Under the Plans or Programs (1)
Month #1 (July 1, 2017 to July 31, 2017)	12,619	\$ 64.00	—	\$ 70 million
Month #2 (August 1, 2017 to August 31, 2017)	2,825	\$ 57.75	—	\$ 70 million
Month #3 (September 1, 2017 to September 30, 2017)	9,406	\$ 52.96	9,406	\$ 150 million
Total	24,850	\$ 59.11	9,406	\$ 150 million

(1) Effective August 14, 2015, our board of directors authorized the repurchase of up to \$150.0 million of common stock through September 30, 2017. On August 10, 2017, our board of directors authorized the repurchase of up to \$150.0 million of common stock, effective from September 30, 2017 through September 30, 2019. There were no share repurchases under the authorization that became effective on September 30, 2017.

ITEM 6. EXHIBITS.

Exhibit Number	Description	Method of Filing
4.1	First Amendment to Second Amended and Restated Indenture (Secured Commercial Paper Notes - Series I), dated September 29, 2017, between Piper Jaffray & Co. and the Bank of New York Mellon.	Filed herewith
4.2	Amended and Restated Indenture (Secured Commercial Paper Notes - Series II), dated as of April 30, 2015, between Piper Jaffray & Co. and the Bank of New York Mellon.	(1)
4.3	First Amendment to Amended and Restated Indenture (Secured Commercial Paper Notes - Series II), dated as of September 29, 2017, between Piper Jaffray & Co. and the Bank of New York Mellon.	(2)
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chairman and Chief Executive Officer.	Filed herewith
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.	Filed herewith
32.1	Section 1350 Certifications.	Filed herewith
101	Interactive data files pursuant to Rule 405 Registration S-T: (i) the Consolidated Statements of Financial Condition as of September 30, 2017 and December 31, 2016, (ii) the Consolidated Statements of Operations for the three and nine months ended September 30, 2017 and 2016, (iii) the Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2017 and 2016, (iv) the Consolidated Statements of Cash Flows for the nine months ended September 30, 2017 and 2016 and (v) the notes to the Consolidated Financial Statements.	Filed herewith

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- (1) Filed as Exhibit 4.1 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 2, 2017, and incorporated by reference herein.
- (2) Filed as Exhibit 4.2 to the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 2, 2017, and incorporated by reference herein.

SIGNATURES

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 indicated on November 8, 2017.

PIPER JAFFRAY COMPANIES

By /s/ Andrew S. Duff
Its Chairman and Chief Executive Officer

By /s/ Debra L. Schoneman
Its Chief Financial Officer

**FIRST AMENDMENT TO
SECOND AMENDED AND RESTATED INDENTURE**

THIS FIRST AMENDMENT TO SECOND AMENDED AND RESTATED INDENTURE (this “Amendment”), is made as of September 29, 2017 (the “Effective Date”) by Piper Jaffray & Co., a corporation organized under the laws of the State of Delaware (the “Issuer”), and The Bank of New York Mellon, a New York banking corporation (the “Trustee”). Capitalized terms used herein but not defined herein shall have the meanings ascribed thereto in the Second Amended and Restated Indenture, dated as of June 11, 2012, by and between the Issuer and the Trustee (the “A&R Indenture”).

RECITALS

WHEREAS, the Issuer and the Trustee previously entered into the A&R Indenture governing the Issuer’s Series A CP Notes; and

WHEREAS, the Issuer desires to amend the A&R Indenture.

AGREEMENT

NOW, THEREFORE, in consideration of the agreements made herein, and for such other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. **Amendments to the A&R Indenture.**
 - (a) Amendment to Section 2.02. The first sentence of Section 2.02 of the A&R Indenture is hereby amended in its entirety to read as follows:

“The Series A CP Notes shall be issued in minimum purchase amounts of \$100,000, deliverable denominations of \$100,000, and integral multiples of \$5,000 in excess thereof.”
 - (b) Amendment to Section 5.18. Section 5.18 of the A&R Indenture is hereby amended in its entirety to read as follows:

“Neither the Issuer or any Affiliate thereof as Holders of any Series A CP Notes issued pursuant to this Indenture related thereto shall have any rights to direct the Trustee to take any action in respect of the Series A CP Notes pursuant to this Indenture, unless the Issuer or Affiliate owns 100% of the outstanding Series A CP Notes or no Series A CP Notes are then outstanding.”
 - (c) Amendment to Section 6.01(g). Section 6.01(g) of the A&R Indenture is hereby amended in its entirety to read as follows:

“The Trustee shall have no power to vary the Collateral, including (i) accepting any substitute Collateral, (ii) adding any other investment, obligation, or security to the Collateral or (iii) withdrawing investments from the Collateral. Notwithstanding the foregoing or any other provision to the contrary in this Indenture, if the Trustee shall receive a direction from (i) 100% of the Series A CP Noteholders (including the Issuer or an Affiliate to vary the Collateral

in accordance with Section 5.18) or (ii) from the Issuer if no Series A CP Notes are then outstanding, the Trustee shall be authorized to vary the Collateral in accordance with such direction.”

2. **No Further Amendments.** Except as set forth above, the terms and conditions of the A&R Indenture shall remain in full force and effect without amendment thereto. In the event of a conflict between the A&R Indenture and this Amendment, the terms and conditions of this Amendment shall control.

3. **Governing Law.** This Amendment shall be construed in accordance with and governed by the laws of the State of New York, without regard to the conflicts-of-law principles thereof, other than Sections 5-1401 and 5-1402 of the General Obligations Law, applicable to agreements made and to be performed therein.

4. **Counterparts.** This Amendment may be executed in any number of counterparts, each of which will be enforceable against the parties executing such counterparts, and all of which together will constitute one instrument.

5. **Facsimile or PDF Execution and Delivery.** A facsimile, portable document format, or other reproduction of this Amendment may be executed by one or more parties, and an executed copy of this Amendment may be delivered by one or more parties by facsimile or portable document format, and such execution and delivery will be considered valid, binding and effective for all purposes.

6. **Effectiveness of Amendment; Binding on all Series A CP Noteholders.** Upon execution of this Amendment by the Issuer and the Trustee (as provided in Section 9.01 of the A&R Indenture), this Amendment shall amend the A&R Indenture and shall be deemed binding on all Series A CP Noteholders.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first written above.

ISSUER:

PIPER JAFFRAY & CO.

By: /s/ Timothy L. Carter

Name: Timothy L. Carter

Title: Treasurer

TRUSTEE:

THE BANK OF NEW YORK MELLON

By: /s/ Ignazio Tamburello

Name: Ignazio Tamburello

Title: Vice President

CERTIFICATIONS

I, Andrew S. Duff, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Piper Jaffray Companies;
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: November 8, 2017

/s/ Andrew S. Duff

Andrew S. Duff

Chairman and Chief Executive Officer

CERTIFICATIONS

I, Debra L. Schoneman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Piper Jaffray Companies;
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: November 8, 2017

/s/ Debra L. Schoneman

Debra L. Schoneman

Chief Financial Officer

Certification Under Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned certifies that this periodic report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in this periodic report fairly presents, in all material respects, the financial condition and results of operations of Piper Jaffray Companies.

Dated: November 8, 2017

/s/ Andrew S. Duff

Andrew S. Duff

Chairman and Chief Executive Officer

/s/ Debra L. Schoneman

Debra L. Schoneman

Chief Financial Officer