National Securities Clearing Corporation

Financial Statements as of and for the Years Ended December 31, 2017 and 2016, and Report of Independent Registered Public Accounting Firm

NATIONAL SECURITIES CLEARING CORPORATION

TABLE OF CONTENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholder of the
National Securities Clearing Corporation
New York, NY

Opinion on the Financial Statements

We have audited the accompanying statements of financial condition of the National Securities Clearing Corporation (the "Company") as of December 31, 2017 and 2016, the related statements of income, changes in shareholder's equity, and cash flows, and the related footnotes (the "notes") for each of the two years in the period ended December 31, 2017 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2017, in conformity with the accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Deloitte & Touche LLP

February 27, 2018

We have served as the Company's auditor since 2009.

NATIONAL SECURITIES CLEARING CORPORATION

STATEMENTS OF FINANCIAL CONDITION

(In thousands, except share data)	As of December 31, 2017	2016
ASSETS:		
CURRENT ASSETS:		
Cash and cash equivalents	$ 3,623,482	$ 2,767,668
Reverse repurchase agreements	—	100,000
Participants' segregated cash	20,120	15,886
Accounts receivable	28,689	32,284
Clearing Fund	3,991,770	4,399,956
Other Participants' assets	1,196	665
Other current assets	18,004	12,091
Total current assets	7,683,261	7,328,550
NON-CURRENT ASSETS:		
Premises and equipment - net of accumulated depreciation of $4,352 and $53,631 as of December 31, 2017 and 2016, respectively	3,366	19,722
Intangible assets - net of accumulated amortization of $96,035 and $138,274 as of December 31, 2017 and 2016, respectively	27,606	32,907
Total non-current assets	30,972	52,629
TOTAL ASSETS	$ 7,714,233	$ 7,381,179
LIABILITIES AND SHAREHOLDER'S EQUITY:		
CURRENT LIABILITIES:		
Commercial paper - net of unamortized discount of $3,371 and $1,669 as of December 31, 2017 and 2016, respectively	$ 3,222,571	$ 2,554,020
Accounts payable and accrued expenses	1,868	2,578
Clearing Fund	3,991,770	4,399,956
Payable to Participants	21,316	16,551
Total current liabilities	7,237,525	6,973,105
OTHER NON-CURRENT LIABILITIES:		
Other non-current liabilities	18,459	10,117
Total liabilities	7,255,984	6,983,222
COMMITMENTS AND CONTINGENCIES (Note 14)		
SHAREHOLDER'S EQUITY:		
Common stock, $0.50 par value - 30,000 shares authorized; 20,000 shares issued and outstanding	10	10
Paid-in capital	69,442	69,442
Retained earnings	388,797	328,505
Total shareholder's equity	458,249	397,957
TOTAL LIABILITIES AND SHAREHOLDER'S EQUITY	$ 7,714,233	$ 7,381,179

The Notes to Financial Statements are an integral part of these statements.

NATIONAL SECURITIES CLEARING CORPORATION

STATEMENTS OF INCOME

(In thousands)	For the years ended December 31, 2017	2016
REVENUES:		
Clearing services	$ 282,740	$ 270,512
Wealth management services	108,625	104,954
Other revenue	3,439	3,477
Total revenues	394,804	378,943
EXPENSES:		
Employee compensation and related benefits	120,745	122,860
Information technology	37,014	34,298
Professional and other services	99,426	104,367
Occupancy	8,288	9,340
Depreciation and amortization	19,144	24,010
General and administrative	6,623	7,031
Total expenses	291,240	301,906
Total operating income	103,564	77,037
NON-OPERATING INCOME (EXPENSE):		
Interest income	35,635	11,325
Interest expense	(32,171)	(12,671)
Total non-operating income (expense)	3,464	(1,346)
Income before taxes	107,028	75,691
Provision for income taxes	46,736	30,984
Net income	$ 60,292	$ 44,707

The Notes to Financial Statements are an integral part of these statements.

NATIONAL SECURITIES CLEARING CORPORATION

STATEMENTS OF CHANGES IN SHAREHOLDER'S EQUITY

(In thousands)	Common Stock	Paid-In Capital	Retained Earnings	Total Shareholder's Equity
BALANCE - January 1, 2016	$ 10	$ 69,442	$ 283,798	$ 353,250
Net income	—	—	44,707	44,707
BALANCE - December 31, 2016	10	69,442	328,505	397,957
Net income	—	—	60,292	60,292
BALANCE - December 31, 2017	$ 10	$ 69,442	$ 388,797	$ 458,249

The Notes to Financial Statements are an integral part of these statements.

NATIONAL SECURITIES CLEARING CORPORATION

STATEMENTS OF CASH FLOWS

(In thousands)	For the years ended December 31, 2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 60,292	$ 44,707
Adjustments to reconcile net income to net cash provided by/(used in) operating activities:		
Depreciation and amortization	19,144	24,010
Deferred income taxes	(31)	2,884
Net change in:		
Accounts receivable	3,595	47,395
Other assets	(5,913)	(10,769)
Other Participants' assets	(531)	(400)
Accounts payable and accrued expenses	(710)	2,408
Other liabilities	8,373	358
Payable to Participants	4,765	(10,295)
Net cash provided by/(used in) operating activities	88,984	100,298
CASH FLOWS FROM INVESTING ACTIVITIES:		
Sale/(Purchase) of securities under Reverse repurchase agreements	100,000	(100,000)
Maturities of investments in marketable securities	—	7,400
Change in Participants' segregated cash	(4,234)	10,695
Sale/(Purchase) of Premises and equipment	13,078	(366)
Purchases of Intangible assets	(10,565)	(18,634)
Net cash provided by/(used in) investing activities	98,279	(100,905)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Change in Commercial paper, net	668,551	1,546,896
Repayments on loan payable to DTCC	—	(99,000)
Net cash provided by/(used in) financing activities	668,551	1,447,896
Net increase/(decrease) in Cash and cash equivalents	855,814	1,447,289
Cash and cash equivalents - Beginning of year	2,767,668	1,320,379
Cash and cash equivalents - End of year	$ 3,623,482	$ 2,767,668
SUPPLEMENTAL DISCLOSURES:		
Cash interest paid	$ 30,673	$ 10,441
Cash income taxes paid to DTCC - net of refunds	$ 39,488	$ 28,440

The Notes to Financial Statements are an integral part of these statements.

1. BUSINESS AND OWNERSHIP

National Securities Clearing Corporation (NSCC or the Company) is organized as a business corporation under New York law, and is a clearing agency registered with the U.S. Securities and Exchange Commission (SEC). NSCC provides clearing, settlement, risk management, and central counterparty (CCP) services to its members (collectively referred to as Participants) for broker-to-broker trades involving equities, corporate and municipal debt, exchange-traded funds, and unit investment trusts.

NSCC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (DTCC). Other subsidiaries of DTCC include The Depository Trust Company (DTC), Fixed Income Clearing Corporation (FICC), DTCC ITP LLC (formerly known as Omgeo LLC), DTCC Deriv/SERV LLC, Business Entity Data, B.V. and DTCC Solutions LLC.

NSCC is designated as a Systemically Important Financial Market Utility (SIFMU) by the U.S. Financial Stability Oversight Council pursuant to Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which subjects the Company to the SEC's standards for covered clearing agencies.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation. The accompanying Financial Statements are prepared in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP). The Company reclassified prior period amounts related to Clearing Fund balances to conform to the current year presentation.

Use of estimates. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the Financial Statements. Management makes estimates regarding, among other things, the collectability of receivables, the outcome of litigation, the realization of deferred taxes, unrecognized tax benefits, fair value measurements and other matters that affect the reported amounts. Estimates are based on judgment and available information; therefore, actual results could differ materially from those estimates.

Cash and cash equivalents. All highly liquid investments purchased with an original maturity of three months or less at the date of acquisition are classified as Cash and cash equivalents. Cash equivalents consist primarily of highly liquid investments in deposits held in banks.

Reverse repurchase agreements. Reverse repurchase agreements provide for delivery of cash in exchange for securities having a fair value that is at least 102% of the amount of the agreements. Securities purchased under reverse repurchase agreements are typically U.S. Treasury and agency securities. The Company receives collateral in connection with reverse repurchase agreement transactions. Reverse repurchase agreements are recorded at the contract amounts. Interest earned on these investments is included within Interest income in the accompanying Statements of Income.

Participants' segregated cash. NSCC receives cash from Participants for the exclusive benefit of the Participants' customers in compliance with SEC rule 15c3-3 (customer protection), which requires broker-dealers to segregate a certain amount of cash and securities in specially protected accounts on behalf of their clients.

Fair value measurements. The Company may be required or permitted to measure and disclose certain assets and liabilities using fair value measurements. Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. The Company uses a three-level classification hierarchy of fair value measurements that establishes the quality of inputs used to measure fair value. The fair value of financial instruments is determined using various techniques that involve some level of estimation and judgment, the degree of which is dependent on the price transparency and the complexity of the instruments.

Accounts receivable. Accounts receivable are stated at cost, net of an allowance for doubtful accounts. The Company establishes an allowance for estimated losses resulting from uncollectibility. The Company determines the need for an allowance based on a variety of factors, including the length of time receivables are past due, macroeconomic conditions, historical experience and the financial condition of customers and other debtors.

Clearing Fund. The rules of NSCC require Participants to maintain deposits related to their respective activities based on calculated requirements. The deposits are available to secure Participants' obligations and certain liabilities of the Company. Margin deposits and Participant contributions are maintained within the Clearing Fund on the accompanying Statements of Financial Condition due to the benefits and risks of ownership incurred by the Company. Deposits and contributions may be in the form of cash and cash equivalents and securities. These deposits may be applied to satisfy obligations of the depositing Participant, other Participants, or the Company as provided in NSCC's rules.

Cash deposits. Deposits and contributions received in the form of cash may be invested in bank deposits, reverse repurchase agreements, money market funds and direct obligations of the U.S. Government. Reverse repurchase agreements provide for NSCC's delivery of cash in exchange for securities having a fair value that is at least 102% of the amount of the agreements. Securities purchased under reverse repurchase agreements are typically U.S. Treasury and agency securities. Reverse repurchase agreements are recorded at the contract amounts. All interest earned on these investments is accrued and refunded to Participants within Interest income in the accompanying Statements of Income.

Securities on deposit - at fair value. Securities may include U.S. Treasury securities, U.S. agency debt securities and U.S. agency residential mortgage-backed securities. All interest earned on these investments is accrued and refunded to Participants within Interest income in the accompanying Statements of Income.

Premises and equipment. Premises and equipment are stated at cost, net of accumulated depreciation. Routine maintenance, repairs and replacement costs are expensed as incurred, and improvements that extend the useful life of the assets are capitalized. When equipment is sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in the accompanying Statements of Income. Premises and equipment are reviewed for impairment whenever events or changes in circumstances indicate the related carrying amount may not be recoverable. The following table summarizes how the Company depreciates Premises and equipment:

Premises and equipment	Amortization Period	Amortization Method
Leasehold improvements	Shorter of useful life or remaining term of the lease	Straight-line
Furniture and equipment	5 to 7 years	Straight-line
Building and improvements	39 years	Straight-line

Depreciation expense for leasehold improvements, furniture and equipment, and buildings and improvements is included in Depreciation and amortization in the accompanying Statements of Income.

Intangible assets. Intangible assets represent capitalized software. The Company capitalizes eligible costs associated with the acquisition or development of internal-use software projects that provide new or significantly improved functionality. The Company capitalizes software costs expected to result in long-term operational benefits, such as replacement systems or new applications that result in significantly increased operational efficiencies or functionality. All other costs incurred in connection with an internal-use software project are expensed as incurred.

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate the related carrying amount may not be recoverable. Intangible assets are amortized over estimated useful lives ranging from three to five years using the straight-line method.

Commercial paper. NSCC issues unsecured short-term promissory notes (Commercial paper) pursuant to a $5 billion Commercial paper program, with maturities generally less than nine months. In February 2018, the SEC approved NSCC's proposal to increase the program to $10 billion. The proceeds from the issuance of the Commercial paper constitute liquid resources of NSCC that, together with other liquid resources of the Company, will enable NSCC to effect the settlement of its payment obligations in the event of the default of any of its Participants in accordance with NSCC's rules and procedures. Pending use by NSCC of the proceeds of the Commercial paper issuance for this purpose, the funds raised are invested in highly liquid short-term instruments in accordance with NSCC's investment policy.

Revenue recognition. The Company's revenue primarily consists of fees generated from clearing services and wealth management services. Revenue is generally recognized as services are rendered and is billed on a monthly basis.

Income taxes. The Provision for income taxes is computed using the asset and liability method. The Company records a deferred income tax (benefit) provision when there are differences between assets and liabilities measured for financial reporting and for income tax return purposes. These temporary differences result in taxable or deductible amounts in future years and are measured using the tax rates and laws that will be in effect when such differences are expected to reverse. Valuation allowances are recognized if, based on the weight of available evidence, it is more likely than not that some portion of the deferred tax asset will not be realized. Deferred tax assets and liabilities are reported net in non-current assets or liabilities on the accompanying Statements of Financial Condition. It is the Company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by the tax authorities.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (Tax Reform Act) was signed into law making significant changes to the Internal Revenue Code. Changes include a Federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017. Concurrently, the SEC staff issued guidance on accounting for the tax effects of the Tax Reform Act, which provides a measurement period that should not extend beyond one year from the Tax Reform Act enactment date for companies to complete the accounting under U.S. GAAP tax accounting guidance. The SEC guidance requires companies to reflect the income tax effects of those aspects of the Tax Reform Act for which the accounting under U.S. GAAP tax accounting guidance is complete. To the extent that a company's accounting for certain income tax effects of the Tax Reform Act is incomplete, but it is able to determine a reasonable estimate, it must record and provisionally estimate the impact in its financial statements. The Company re-measured certain deferred tax assets and liabilities based on management's best estimates using information available at the financial statements date. The impact of the Tax Reform Act may differ from these provisional estimates due to, among other items, the issuance of additional regulatory guidance, further interpretations of the provisions of the Tax Reform Act, the state tax effect of adjustments made to federal temporary differences, and the filing of tax returns.

Expense allocations. Substantially all expenses are recorded at DTCC and are allocated to its subsidiaries, including NSCC, based upon their estimated use of such goods or services as determined by various allocation factors including direct expenses, level of support provided and utilization of technology resources. Accordingly, the expenses in the accompanying Statements of Income represent allocated costs including Employee compensation and related benefits, Information technology, Professional and other services, Occupancy, Depreciation and amortization and General and administrative.

3. ACCOUNTING AND REPORTING DEVELOPMENTS

Standard	Description	Impact on the financial statements or other significant matters
Recently Issued Accounting Standards		
Financial Instruments - Credit Losses *Issued June 2016*	• Replaces the current incurred loss approach for credit losses with an "expected loss" model for instruments measured at amortized cost. • Requires all lifetime credit losses for financial assets held at the reporting date to be estimated based on factors such as historical experience, current conditions and forecasts. • Requires entities to record allowances for available-for-sale debt securities.	• The required effective date is January 1, 2020. • The Company is evaluating the effect on its Financial Statements and related disclosures.
Revenue Recognition - Revenue from Contracts with Customers *Issued May 2014*	• Requires revenue from contracts with customers to be recognized upon transfer of control of a good or service in the amount of consideration expected to be received. • Changes the accounting for certain contract costs, including whether they may be offset against revenue in the accompanying Statements of Income, and requires additional disclosures about revenue and contract costs. • May be adopted using a full retrospective approach or a modified, cumulative effect approach wherein the guidance is applied only to existing contracts as of the day of initial application, and to new contracts transacted after that date.	• The required effective date is January 1, 2018. • The Company plans to adopt the revenue recognition guidance under the full retrospective transition approach in 2018. The Company's implementation efforts include the identification of revenue within the scope of the guidance and the evaluation of revenue contracts and related accounting policies. The Company does not anticipate material changes to the recognition and timing of its revenues. The Company also assessed the indicators of control for principal versus agent relationship, which will result in a change in the accompanying Income Statement presentation of Interest Income from a net basis to a gross basis in Interest Income and Refunds to Participants.

4. PARTICIPANTS' SEGREGATED CASH, OTHER PARTICIPANTS' ASSETS AND PAYABLE TO PARTICIPANTS

Details for Participants' segregated cash, Other Participants' assets and Payable to Participants as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Assets:		
Participants' segregated cash	$ 20,120	$ 15,886
Other Participants' assets	1,196	665
Total	$ 21,316	$ 16,551
Liabilities:		
Payable to Participants	$ 21,316	$ 16,551

Participants' segregated cash represents cash received from Participants to facilitate their compliance with SEC customer protection rules. Unclaimed balances are remitted to the appropriate authority when required by abandoned property laws.

5. CLEARING FUND

Details for the Clearing Fund deposits as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Required deposits	$ 3,360,160	$ 3,580,823
Excess deposits	631,610	819,133
Total	$ 3,991,770	$ 4,399,956

Details for the Clearing Fund deposits as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Cash deposits	$ 3,725,574	$ 4,157,717
Securities on deposit - at fair value	266,196	242,239
Total	$ 3,991,770	$ 4,399,956

Details for the Clearing Fund Cash deposits as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Bank deposits	$ 2,820,574	$ 3,170,717
Money market fund investments	595,000	737,000
Reverse repurchase agreements	310,000	250,000
Total	$ 3,725,574	$ 4,157,717

Clearing Fund Cash deposits. Participant Cash deposits of the Clearing Fund may be applied to satisfy obligations of the depositing Participants, as provided in NSCC's rules.

Refunds to Participants. Interest income earned from the investment of Clearing Fund deposits is refunded to Participants and totaled $54,522,000 and $26,715,000 for the years ended December 31, 2017 and 2016, respectively. The amounts refunded are netted within Interest income in the accompanying Statements of Income.

6. PREMISES AND EQUIPMENT

The cost, accumulated depreciation and net book value of Premises and equipment for the years ended December 31, 2017 and 2016 follow (in thousands):

	Furniture and equipment	Leasehold improvements	Capital leases	Buildings and improvements	Land	Total
Cost:						
As of January 1, 2016	$ 53,605	$ 1,829	$ 5,556	$ 16,323	$ 1,540	$ 78,853
Additions	366	—	—	—	—	366
Disposals	(310)	—	(5,556)	—	—	(5,866)
As of December 31, 2016	53,661	1,829	—	16,323	1,540	73,353
Disposals	(732)	—	—	—	—	(732)
Sales [1]	(50,441)	(1,829)	—	(11,933)	(700)	(64,903)
As of December 31, 2017	$ 2,488	$ —	$ —	$ 4,390	$ 840	$ 7,718
Accumulated Depreciation:						
As of January 1, 2016	$ 43,396	$ 1,829	$ 5,556	$ 3,851	$ —	$ 54,632
Depreciation expense	4,672	—	—	193	—	4,865
Disposals	(310)	—	(5,556)	—	—	(5,866)
As of December 31, 2016	47,758	1,829	—	4,044	—	53,631
Depreciation expense	3,107	—	—	171	—	3,278
Disposals	(732)	—	—	—	—	(732)
Sales [1]	(47,645)	(1,829)	—	(2,351)	—	(51,825)
As of December 31, 2017	$ 2,488	$ —	$ —	$ 1,864	$ —	$ 4,352
Net book value:						
As of January 1, 2016	$ 10,209	$ —	$ —	$ 12,472	$ 1,540	$ 24,221
As of December 31, 2016	$ 5,903	$ —	$ —	$ 12,279	$ 1,540	$ 19,722
As of December 31, 2017	$ —	$ —	$ —	$ 2,526	$ 840	$ 3,366

(1) During the third quarter of 2017, NSCC sold its Dallas premises and equipment to DTCC for the net book value of $13,078,000. There was no gain or loss recognized on the sale.

7. INTANGIBLE ASSETS

The gross carrying value, accumulated amortization, and net carrying value of capitalized software for the years ended December 31, 2017 and 2016 follow (in thousands):

	Capitalized Software
Gross carrying value:	
As of January 1, 2016	$ 152,547
Additions	18,634
As of December 31, 2016	171,181
Additions	10,565
Disposals	(55,635)
As of December 31, 2017 (1)	$ 126,111
Accumulated amortization:	
As of January 1, 2016	$ 119,129
Amortization expense	19,145
As of December 31, 2016	138,274
Amortization expense	15,866
Disposals	(55,635)
As of December 31, 2017 (1)	$ 98,505
Net carrying value:	
As of January 1, 2016	$ 33,418
As of December 31, 2016	$ 32,907
As of December 31, 2017	$ 27,606

Details for estimated amortization expense for each of the next four years follow (in thousands):

2018	$ 12,707
2019	8,589
2020	4,791
2021	1,519
Total future estimated amortization	$ 27,606

(1) Excludes purchased software with a gross and net carrying value of $2,470,000 and $0, respectively, which was included in the aforementioned Dallas premises and equipment sale. See Note 6 for additional information.

8. COMMERCIAL PAPER

Details for Commercial paper as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Commercial paper - net of unamortized discount of $3,371 and $1,669 as of December 31, 2017 and 2016, respectively	$ 3,222,571	$ 2,554,020
Weighted-average interest rate	1.43%	0.75%

Interest expense on Commercial paper included in the accompanying Statements of Income was $32,171,000 and $11,433,000 for the years ended December 31, 2017 and 2016, respectively.

Details for the cash flows associated with the issuance and maturities of Commercial paper for the years ended December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Maturities less than 90 days:		
Proceeds from/(Repayments of) Commercial paper less than 90 days, net	$ 880,352	$ 830,061
Maturities greater than 90 days:		
Proceeds from Commercial paper	2,217,232	1,681,596
Repayments of Commercial paper	(2,429,033)	(964,761)
Proceeds from/(Repayments of) Commercial paper greater than 90 days, net	(211,801)	716,835
Change in Commercial paper, net	$ 668,551	$ 1,546,896

9. DEBT

During 2016, the Company repaid a loan from its parent, DTCC. Interest on the loan from parent was $0 and $1,238,000 for the years ended December 31, 2017 and 2016, respectively. These amounts were included in Interest expense in the accompanying Statements of Income.

Line of credit. The Company maintains a line of credit to support settlement. Details for the terms of the outstanding line of credit as of December 31, 2017 and 2016 follow:

	2017	2016
Committed Amount	$12.2 billion	$10.9 billion
Number of Participants/Lenders	32/41	31/37

There were no borrowings under the line of credit as of December 31, 2017 and 2016.

Details for debt covenants related to the line of credit as of December 31, 2017 and 2016 follow:

	2017	2016
Minimum Net Worth	$125 million	$125 million
Minimum Clearing Fund deposits	$1 billion	$1 billion

As of December 31, 2017 and 2016, the Company was in compliance with its debt covenants.

Credit Ratings. The Company is rated by Moody's Investors Service, Inc. (Moody's) and S&P Global Inc. (S&P). Details for senior debt ratings and ratings outlooks for the Company as of December 31, 2017 follow:

Moody's (1)			S&P		
Long-term	**Short-term**	**Outlook**	**Long-term**	**Short-term**	**Outlook**
Aaa	P-1	Stable	AA+	A-1+	Stable

(1) Moody's categorizes the long-term issuer ratings of the Company as a clearing counterparty rating (CCR) under the agency's Clearing Houses Rating Methodology.

10. FAIR VALUE MEASUREMENTS

Valuation hierarchy
U.S. GAAP provides for a three-level valuation hierarchy based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. Details for the descriptions of the three levels follow:

- Level 1 — Inputs to the valuation methodology are unadjusted quoted market prices for identical assets or liabilities in active markets as of the valuation date.
- Level 2 — Inputs to the valuation methodology are quoted market prices for similar assets and liabilities in active markets; quoted market prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability; and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3 — Inputs to the valuation methodology are unobservable and reflect the Company's own assumptions about the estimates market participants would use pricing the asset or liability based on the best information available in the circumstances (e.g., internally derived assumptions surrounding timing and amount of expected cash flows).

A financial asset or liability's categorization within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Financial assets and liabilities measured at fair value on a recurring basis. For financial assets and liabilities measured at fair value on a recurring basis the Company applies the following valuation techniques to measure fair value:

Product/Instrument	Valuation Methodology	Classification in the valuation hierarchy
Assets - Clearing Fund - Securities on deposit		
U.S. Treasury Securities U. S. Agency Issued Debt Securities (Non-Callable)	Obtained from pricing services engaged by the Company, and the Company receives one price for each security.	Level 1
Liabilities - Clearing Fund - Securities on deposit		
U.S. Treasury Securities U. S. Agency Issued Debt Securities (Non-Callable)	Obtained from pricing services engaged by the Company, and the Company receives one price for each security.	Level 1

Fair value measurements for those items measured on a recurring basis are summarized below as of December 31, 2017 and 2016 (in thousands):

	2017			
	Level 1	Level 2	Level 3	Total
Assets - Clearing Fund				
Securities on deposit	$ 266,196	$ —	$ —	$ 266,196
Liabilities - Clearing Fund				
Securities on deposit	$ 266,196	$ —	$ —	$ 266,196

	2016			
	Level 1	Level 2	Level 3	Total
Assets - Clearing Fund				
Securities on deposit	$ 242,239	$ —	$ —	$ 242,239
Liabilities - Clearing Fund				
Securities on deposit	$ 242,239	$ —	$ —	$ 242,239

There were no transfers between levels within the fair value hierarchy, nor were any amounts classified as Level 3 during the years ended December 31, 2017 and 2016.

Financial assets and liabilities measured at other than fair value. For financial assets and liabilities that are not required to be carried at fair value on a recurring basis the Company applies the following valuation techniques to measure fair value:

Product/Instrument	Valuation Methodology	Classification in the valuation hierarchy
Assets - Current Assets		
Investments in marketable securities		
U.S. Treasury bills	Obtained from pricing services engaged by the Company, and the Company receives one price for each security.	Level 1

Financial assets and liabilities whose carrying value approximates fair value. The carrying values of certain assets and liabilities approximate their fair values because they are short-term in duration, have no defined maturity, or have market-based interest rates. These instruments include Cash and cash equivalents, Reverse repurchase agreements, Participants' segregated cash, Accounts receivable, Clearing Fund - Cash deposits, Commercial paper, Other Participants' assets, Accounts payable and Payable to Participants.

The tables below present the carrying values, fair values and fair value hierarchy levels of all financial instruments measured at other than fair value on the accompanying Statements of Financial Condition as of December 31, 2017 and 2016 (in thousands):

	2017				
	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 3,623,482	$ 3,623,482	$ 3,623,482	$ —	$ —
Participants' segregated cash	20,120	20,120	20,120	—	—
Accounts receivable	28,689	28,689	—	28,689	—
Clearing Fund:					
Cash deposits	3,725,574	3,725,574	3,415,574	310,000	—
Other Participants' assets	1,196	1,196	231	965	—
Total	$ 7,399,061	$ 7,399,061	$ 7,059,407	$ 339,654	$ —
Liabilities:					
Commercial paper	$ 3,222,571	$ 3,222,571	$ —	$ 3,222,571	$ —
Accounts payable and accrued expenses	1,868	1,868	—	1,868	—
Clearing Fund:					
Cash deposits	3,725,574	3,725,574	3,725,574	—	—
Payable to Participants	21,316	21,316	21,316	—	—
Total	$ 6,971,329	$ 6,971,329	$ 3,746,890	$ 3,224,439	$ —

	2016				
	Carrying Amount	Total Fair Value	Level 1	Level 2	Level 3
Assets:					
Cash and cash equivalents	$ 2,767,668	$ 2,767,668	$ 2,767,668	$ —	$ —
Reverse repurchase agreements (1)	100,000	100,000	—	100,000	—
Participants' segregated cash	15,886	15,886	15,886	—	—
Accounts receivable	32,284	32,284	—	32,284	—
Clearing Fund:					
Cash deposits	4,157,717	4,157,717	3,907,717	250,000	—
Other Participants' assets	665	665	231	434	—
Total	$ 7,074,220	$ 7,074,220	$ 6,691,502	$ 382,718	$ —
Liabilities:					
Commercial paper	$ 2,554,020	$ 2,554,020	$ —	$ 2,554,020	$ —
Accounts payable and accrued expenses	2,578	2,578	—	2,578	—
Clearing Fund:					
Cash deposits	4,157,717	4,157,717	4,157,717	—	—
Payable to Participants	16,551	16,551	16,551	—	—
Total	$ 6,730,866	$ 6,730,866	$ 4,174,268	$ 2,556,598	$ —

(1) The fair value of securities received as collateral under reverse repurchase agreements was $102 million as of December 31, 2016.

Financial assets measured at fair value on a non-recurring basis. Certain assets are subject to measurement at fair value on a non-recurring basis. For these assets, measurement at fair value in periods subsequent to their initial recognition is applicable if determined to be impaired. Fair value is based on discounted cash flow analyses or comparing values of similar instruments. Discounted cash flow analyses are dependent upon various factors including estimated future cash flows, interest rate yield curves and volatility of inputs.

There were no assets or liabilities measured at fair value on a non - recurring basis during the years ended December 31, 2017 and 2016.

11. PENSION AND POSTRETIREMENT BENEFITS

Eligible DTCC employees participate in DTCC's trusteed non-contributory defined benefit pension plan, supplemental executive retirement plan and benefit restoration plan, which provide for certain benefits upon retirement. Eligible DTCC employees also participate in DTCC's life insurance program, which provides for the payment of death benefits to beneficiaries of eligible retired employees, and DTCC's health care program, which provides benefits to eligible retired employees.

Cost allocation. DTCC allocates the cost of these plans to its subsidiaries based primarily upon the proportion of each subsidiary's salary cost relative to DTCC's total salary cost. The benefit plan costs allocated to NSCC were $2,653,000 and $2,793,000 for the years ended December 31, 2017 and 2016, respectively. These costs are included in Employee compensation and related benefits in the accompanying Statements of Income.

12. INCOME TAXES

NSCC is included in DTCC's consolidated Federal and various state tax returns. NSCC also files other state tax returns on a separate company basis.

Details for the components of the Company's Provision (Benefit) for income taxes calculated on a separate company basis for the years ended December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Current income tax/(benefit):		
Federal	$ 31,670	$ 21,860
State and local	6,726	5,763
Total current income tax/(benefit)	38,396	27,623
Deferred income tax/(benefit):		
Federal	(813)	2,210
State and local	9,153	1,151
Total deferred income tax/(benefit)	8,340	3,361
Provision for income taxes	$ 46,736	$ 30,984

Pursuant to a tax sharing agreement between DTCC and NSCC, the Company is liable for its allocable share of Federal, state and local tax liabilities that are paid by DTCC. For the years ended December 31, 2017 and 2016, the Company paid income taxes to DTCC, net of refunds, of $39,488,000 and $28,440,000, respectively.

The Company re-measured certain deferred tax assets and liabilities in accordance with the Tax Reform Act based on management's best estimates using information available at the financial statements date. The re-measurement resulted in a tax benefit of $2,201,000, based on the reduced corporate tax rate per the Tax Reform Act and is subject to adjustment in 2018, based on further interpretations of the provisions of the Tax Reform Act.

The 2017 and 2016 effective tax rates differ from the 35% Federal statutory rate primarily due to state and local taxes, changes in unrecognized tax benefits, and the enactment of the Tax Reform Act. Details for the reconciliation of the U.S. Federal statutory tax rate to the Company's effective tax rate on Income before taxes for the years ended December 31, 2017 and 2016 follow:

	2017	2016
U.S. statutory tax rate	35.0%	35.0%
State and local income taxes, net of Federal tax benefit	5.4	5.9
Change in unrecognized tax benefits	6.2	0.4
Enactment of the Tax Reform Act	(2.1)	—
Other	(0.8)	(0.4)
Effective tax rate	43.7%	40.9%

Details for the components of deferred tax assets and liabilities as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Deferred tax assets:		
Accrued compensation and benefits	$ 1,386	$ 7,740
Deferred rent	1,717	2,679
Other	3,097	2,231
Total deferred tax assets	6,200	12,650
Deferred tax liabilities:		
Depreciation	(1,672)	(2,089)
Capitalized software	(8,232)	(14,296)
Total deferred tax liabilities	(9,904)	(16,385)
Net deferred tax liabilities	$ (3,704)	$ (3,735)

The deferred tax assets are expected to be fully realized and, accordingly, no valuation allowance was established.

Details for unrecognized tax benefits as of December 31, 2017 and 2016 follow (in thousands):

	2017	2016
Beginning balance at January 1,	$ 4,100	$ 4,100
Increases based on prior period tax positions	4,739	—
Decreases based on prior period tax positions	(107)	—
Decreases related to settlements with taxing authorities	(45)	—
Ending balance as of December 31,	$ 8,687	$ 4,100

The Company classifies interest and penalties related to unrecognized tax benefits, if incurred, in Provision for income taxes in its accompanying Statements of Income. As of December 31, 2017 and 2016, accrued interest related to unrecognized tax benefits recorded on the accompanying Statements of Financial Condition totaled $6,060,000 and $2,276,000, respectively.

The Company is subject to U.S. Federal income tax as well as income tax in various state and local jurisdictions.

Details for the periods currently under examination and remaining subject to examination by jurisdiction as of December 31, 2017 follow:

	Tax Years	
Jurisdiction	**Under Examination**	**Subject to Examination**
U.S. Federal - Internal Revenue Service	-	2014 - 2016
New York State	2007 - 2014	2015 - 2016
New York City	2010 - 2014	2015 - 2016
State of Illinois	2012 - 2013	2014 - 2016

For the current ongoing audits related to open tax years, the Company estimates it is possible the balance of unrecognized tax benefits could decrease in the next twelve months as a result of the effective settlement of these audits, which might involve the payment of additional taxes, the adjustment of certain deferred taxes and/or the recognition of tax benefits. It is also possible new issues might be raised by tax authorities, which might necessitate increases to the balance of unrecognized tax benefits. As the Company is unable to predict the timing of conclusion of these audits, the Company is unable to estimate the amount of changes to the balance of unrecognized tax benefits at this time. However, the Company believes it has adequately provided for its financial exposure for all open tax years by tax jurisdiction.

13. TRANSACTIONS WITH RELATED PARTIES

In the ordinary course of the business, the Company enters into significant related party transactions with DTCC and its other subsidiaries.

Transactions with DTCC. NSCC has an agreement with DTCC whereby DTCC pays for substantially all of the operational expenses of NSCC. The related expenses are allocated to NSCC based upon its estimated use of such goods or services. Further, the agreement provides that DTCC performs credit and quantitative risk services, and certain other services for NSCC including administrative, internal audit, finance and legal services. In 2017 and 2016, the billing for these services was 108% of total allocated expenses, excluding charges passed through to Participants and capitalized software costs. The fee, representing the amount over actual cost, is included in Professional and other services in the accompanying Statements of Income. From time-to-time, the Company funds purchases of long-term assets acquired by DTCC on its behalf.

Transactions with DTCC Solutions LLC. DTCC Solutions LLC perform announcement creation and validation services on behalf of NSCC in connection with NSCC's corporate action data information and are billed at cost. Expenses under this agreement are included in Professional and other services in the accompanying Statements of Income.

Details for related party transactions for 2017 and 2016 follow (in thousands):

	Expenses For the years ended December 31,		Payables/(Receivables)[2] As of December 31,	
Related parties	**2017**	**2016**	**2017**	**2016**
DTCC [1]	$ 19,873	$ 20,647	$ 1,983	$ 1,969
DTCC Solutions LLC	2,041	1,697	(29)	148
Total	$ 21,914	$ 22,344	$ 1,954	$ 2,117

(1) DTCC expenses relate to the 8% mark-up fee for services described above.
(2) Included in Accounts payable and accrued expenses and Accounts receivable, respectively, on the accompanying Statements of Financial Condition.

14. COMMITMENTS AND CONTINGENCIES

Litigation. The Company is involved in legal proceedings and litigation arising in the ordinary course of business. In the opinion of management, the outcome of such proceedings and litigation is not expected to have a material effect on the accompanying Statements of Financial Condition, Income or Cash Flows.

15. GUARANTEES

NSCC provides CCP services, including clearing, settlement and risk management services. Acting as a CCP, NSCC guarantees the settlement of trades in the event one or more of its Participants defaults. A Participant default is defined in NSCC's rules. In its guarantor role, NSCC has equal claims to and from Participants on opposite sides of netted transactions. To cover its guarantee risk, NSCC uses risk-based margining to collect cash and securities collateral through its Clearing Fund.

NSCC is the leading provider of clearance, netting, risk management and settlement for virtually all U.S. broker-to-broker trades involving equities, corporate and municipal debt, exchange traded funds and unit investment trusts. Through its Continuous Net Settlement (CNS) system, NSCC is interposed between Participants in securities clearance and settlement. CNS transactions are generally guaranteed at the point of trade comparison and validation for bilateral submissions or the point of trade validation for locked-in submissions. Since NSCC stands between the Participants delivering and receiving CNS trades, the failure of Participants to deliver securities to NSCC on settlement date, and the corresponding failure of NSCC to redeliver the securities, results in open positions. Open CNS positions are marked-to-market daily. Such marks are debited from or credited to the involved Participants through the settlement process.

Details for certain NSCC's open positions for which a trade guarantee applied as of December 31, 2017 and 2016 follow (in billions):

	2017(1)	**2016**(1)
NSCC	$ 135	$ 168

(1) During 2017, the standard settlement cycle was reduced from three business days after the trade date (T+3) to two business days after the trade date (T+2) due to the industry-wide move to a shorter standard settlement.

There were no defaults by Participants to these obligations.

If a Participant defaults, such Participant's deposits to the Clearing Fund is the first source of funds and collateral that NSCC would use to cover any losses that may result from the close-out and liquidation of the defaulting Participant's positions. This includes any amounts that may be available to NSCC under applicable agreements with other registered clearing agencies that relate to the guaranty by one or more clearing agency parties of certain obligations of a defaulting Participant to other clearing agency parties. This may include (1) the netting contract and limited cross-guaranty between NSCC and DTC relating to collateralization across the NSCC-DTC interface, and (2) the accord between Options Clearing Corporation (OCC) and NSCC. NSCC has also entered into a multilateral netting contract and limited cross-guaranty agreement with DTC, FICC and OCC.

If there is still a deficit, NSCC will apply at least 25% of its retained earnings to cover the loss. NSCC would satisfy any remaining deficiency by utilizing the Clearing Fund and assessing its non-defaulting Members as provided for in its Rules. The process, in general, allocates any remaining liabilities pro rata among the Members of NSCC who were non-defaulting Members on the date of default, based upon the Member's usage of the service to which the loss relates.

16. OFF BALANCE SHEET AND CONCENTRATION OF CREDIT RISKS

As a CCP, NSCC is exposed to significant credit risk to third-parties including its customer base, which extends to companies within the global financial services industry. Credit risk represents the potential for loss due to the default or deterioration in credit quality of a Participant. The Company's exposure to credit risk primarily derived from clearing and settlement service operations. Customers are based in the United States and overseas and include participating brokers, dealers, banks, mutual fund companies, insurance carriers and other financial intermediaries. Credit risk also comes from financial assets, which consist principally of cash and cash equivalents, investments, accounts receivable and the Clearing Fund.

Concentrations of credit risk may arise due to large connected individual exposures and significant exposures to groups of Participants whose likelihood of default is driven by common underlying factors including economic conditions affecting the securities industry and debt-issuing countries.

Cash and cash equivalents. The Company maintains cash and cash equivalents with various financial institutions. These financial institutions are located in various geographical regions, and the Company's policy is designed to limit exposure with any one financial institution. As part of its credit and risk management processes, the Company performs periodic evaluations of the relative credit standing of the financial institutions with whom it places funds. The Company generally makes deposits with financial institutions having a credit rating of at least BBB+/Baa1 or better from recognized rating agencies and that are approved via its internal credit review process. The Company also monitors the condition of the financial institutions with whom it places funds on an ongoing basis to identify any significant change in a financial institution's condition. If such a change takes place, the amounts deposited in such financial institutions may be adjusted.

Marketable securities. In addition to making investments in reverse repurchase agreements, money market funds and bank deposits, the Company also makes direct investments in U.S. Treasury securities. Credit risk related to marketable securities involves the risk of nonperformance by the counterparty, which could result in a material loss. To mitigate the risk of credit loss, the Company only makes investments in debt obligations of the U.S. government or those U.S. government agencies guaranteed by the U.S. government.

Accounts receivable. Credit risk related to accounts receivable involves the risk of non-payment by the counterparty. Credit risk is diversified due to the large number of Participants comprising the Company's customer base. The Company also performs ongoing credit evaluations of the financial conditions of its customers and evaluates the delinquency status of the receivables.

Clearing Fund. In addition to risk management policies described above for cash and cash equivalents, when Participants provide cash deposits to the Clearing Fund, the Company may invest the cash in reverse repurchase agreements (reverse repos). The Company bears credit risk related to reverse repurchase agreements only to the extent cash advanced to the counterparty exceeds the value of collateral received. Securities purchased under reverse repos are generally U.S. Treasury and Agency securities having minimal credit risk due to low probability of U.S. government default, coupled with the highly liquid nature of these securities. Reverse repos are collateralized and the collateral must have a market value greater than or equal to 102% of the cash invested. Additionally, reverse repos are typically placed with financial institutions with a credit rating of BBB+/Baa1 or better from recognized rating agencies and that are approved via the Company's credit review process. To avoid concentration of credit risk exposures, the Company sets credit limits for each counterparty.

Clearing Fund cash deposits may also be invested in money market mutual funds under Rule 2a-7 of the Investment Company Act of 1940 having a credit rating of AAA/Aaa from recognized rating agencies. Since the Company invests in highly rated money market mutual funds and cash is returned daily, NSCC has minimal credit risk related to these investments.

The Company is exposed to credit risk on a daily basis. This risk arises at NSCC as it guarantees certain obligations of its Participants under specified circumstances. The Company manages and mitigates this risk by identifying, measuring and responding to these risks in order to protect the safety and soundness of the NSCC clearing and settlement system. Various tools are utilized to mitigate these risks including, but not limited to: setting capital adequacy standards; assessing new applicants; performing continuous monitoring of Participants' financial condition; reviewing Participants' daily trading activity and determining appropriate collateral requirements; maintaining the Clearing Fund; netting trades continuously; marking unsettled trades to market; and utilizing a variety of advanced quantitative analytical methodologies, such as back and stress testing.

To become a Participant, an applicant must meet minimum eligibility criteria that are specified in the Company's rules. All applicants to be a NSCC Participant must provide the Company with certain financial and operational information. This information is reviewed to ensure the applicant has sufficient financial resources to make anticipated contributions to the Clearing Fund and to meet its obligations to the Company. The credit quality of the Participant is evaluated at the time of application and monitored on an ongoing basis to determine if the Participant continues to be financially stable and able to meet the financial requirements of membership. As part of its review, the Company utilizes an internal credit risk-rating matrix to risk rate its Participants. The resulting rating determines the level of financial review to be performed on each Participant and may impact their Clearing Fund requirements.

The Company collects Clearing Fund deposits from its Participants using a risk-based margin methodology. The risk-based methodology enables the Company to identify the risks posed by a Participant’s unsettled portfolio and to quickly adjust and collect additional deposits as needed to cover those risks. At multiple times during the day, Clearing Fund requirements are calculated for each Participant based on their then-current unsettled and pending transactions. Security pricing is updated on an intraday basis and additional charges may be collected to cover significant price movements from those Participants with a significant exposure in the identified security. The Company monitors Participants’ overall trading activities throughout the trading day to determine whether exposures exist that would require special actions to increase their Clearing Fund deposits.

The Company regularly performs back and stress testing of the quality and accuracy of its risk management systems to ensure the adequacy of Clearing Fund requirements and to respond to other risk factors that the tests may reveal.

NSCC maintains a committed, secured line of credit to support potential liquidity needs in the event of a Participant default.

The Company also limits its exposure to potential losses from default by Participants through its multilateral netting contract and limited cross-guaranty agreements with DTC, FICC and OCC. These arrangements are designed to provide a mechanism for the sharing of excess net resources of a common defaulting Participant held at one clearing agency to cover losses incurred at another clearing agency. NSCC and OCC also have an agreement providing for payments to each other relating to the settlement of certain option exercises and assignments in the event of a mutual Participant’s failure. Further, NSCC has a netting contract and limited cross-guaranty agreement with DTC, which includes certain arrangements. Securities delivered by DTC to NSCC to cover CNS system allocations are fully collateralized.

17. SUBSEQUENT EVENTS

The Company evaluated events and transactions occurring after December 31, 2017 through February 27, 2018, for potential recognition or disclosure in these accompanying Financial Statements. Other than previously disclosed in Note 2, Commercial paper, no other events or transactions occurred during such period that would require recognition or disclosure in these accompanying Financial Statements.