

Simplex Trading, LLC

Statement of Financial Condition
December 31, 2016

Filed as PUBLIC information pursuant to Rule 17a-5(d) under the
Securities Exchange Act of 1934.

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

OMB APPROVAL	
OMB Number:	3235-0123
Expires:	May 31, 2017
Estimated average burden hours per response.....	12.00

ANNUAL AUDITED REPORT
FORM X-17A-5
PART III

SEC FILE NUMBER
8- 68556

FACING PAGE

Information Required of Brokers and Dealers Pursuant to Section 17 of the
Securities Exchange Act of 1934 and Rule 17a-5 Thereunder

REPORT FOR THE PERIOD BEGINNING 01/01/2016 AND ENDING 12/31/2016
MM/DD/YY MM/DD/YY

A. REGISTRANT IDENTIFICATION

NAME OF BROKER-DEALER: SIMPLEX TRADING, LLC

OFFICIAL USE ONLY

ADDRESS OF PRINCIPAL PLACE OF BUSINESS: (Do not use P.O. Box No.)

FIRM I.D. NO.

230 SOUTH LASALLE STREET, SUITE 4-100

(No. and Street)

CHICAGO

IL

60604

(City)

(State)

(Zip Code)

NAME AND TELEPHONE NUMBER OF PERSON TO CONTACT IN REGARD TO THIS REPORT

MOHAMMAD MANNAN

312-360-2466

(Area Code - Telephone Number)

B. ACCOUNTANT IDENTIFICATION

INDEPENDENT PUBLIC ACCOUNTANT whose opinion is contained in this Report*

RSM US LLP

(Name - if individual, state last, first, middle name)

1 S WACKER DR, STE 800

CHICAGO

IL

60606

(Address)

(City)

(State)

(Zip Code)

CHECK ONE:

Certified Public Accountant

Public Accountant

Accountant not resident in United States or any of its possessions.

FOR OFFICIAL USE ONLY

*Claims for exemption from the requirement that the annual report be covered by the opinion of an independent public accountant must be supported by a statement of facts and circumstances relied on as the basis for the exemption. See Section 240.17a-5(e)(2)

OATH OR AFFIRMATION

I, MOHAMMAD MANNAN, swear (or affirm) that, to the best of my knowledge and belief the accompanying financial statement and supporting schedules pertaining to the firm of SIMPLEX TRADING, LLC, as of DECEMBER 31, 2016, are true and correct. I further swear (or affirm) that neither the company nor any partner, proprietor, principal officer or director has any proprietary interest in any account classified solely as that of a customer, except as follows:



[Signature]
Signature
FINOP
Title

[Signature]

Notary Public

This report ** contains (check all applicable boxes):

- (a) Facing Page.
- (b) Statement of Financial Condition.
- (c) Statement of Income (Loss).
- (d) Statement of Changes in Financial Condition.
- (e) Statement of Changes in Stockholders' Equity or Partners' or Sole Proprietors' Capital.
- (f) Statement of Changes in Liabilities Subordinated to Claims of Creditors.
- (g) Computation of Net Capital.
- (h) Computation for Determination of Reserve Requirements Pursuant to Rule 15c3-3.
- (i) Information Relating to the Possession or Control Requirements Under Rule 15c3-3.
- (j) A Reconciliation, including appropriate explanation of the Computation of Net Capital Under Rule 15c3-1 and the Computation for Determination of the Reserve Requirements Under Exhibit A of Rule 15c3-3.
- (k) A Reconciliation between the audited and unaudited Statements of Financial Condition with respect to methods of consolidation.
- (l) An Oath or Affirmation.
- (m) A copy of the SIPC Supplemental Report.
- (n) A report describing any material inadequacies found to exist or found to have existed since the date of the previous audit.

**For conditions of confidential treatment of certain portions of this filing, see section 240.17a-5(e)(3).

Contents

Report of Independent Registered Public Accounting Firm	1
---	---

Financial Statement:

Statement of Financial Condition	2
----------------------------------	---

Notes to Statement of Financial Condition	3 – 9
---	-------



RSM US LLP

Report of Independent Registered Public Accounting Firm

To the Managing Member
Simplex Trading, LLC

We have audited the accompanying statement of financial condition of Simplex Trading, LLC (the Company) as of December 31, 2016, and the related notes (the financial statement). This financial statement is the responsibility of the Company's management. Our responsibility is to express an opinion on this financial statement based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statement is free of material misstatement. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, 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. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statement referred to above presents fairly, in all material respects, the financial position of Simplex Trading, LLC as of December 31, 2016, in conformity with accounting principles generally accepted in the United States.

RSM US LLP

Chicago, Illinois
February 23, 2017

Simplex Trading, LLC

Statement of Financial Condition

December 31, 2016

Assets	
Cash	\$ 282,260
Financial instruments owned, at fair value, pledged	1,678,338,929
Dividends receivable from broker-dealer	627,084
Other assets	<u>22,173</u>
Total assets	<u>\$ 1,679,270,446</u>
 Liabilities and Member's Equity	
Liabilities:	
Due to broker-dealer	\$ 81,744,320
Financial instruments sold, not yet purchased, at fair value	1,470,951,175
Payable to affiliates	22,170,045
Accounts payable and accrued expenses	<u>4,449,588</u>
Total liabilities	1,579,315,128
 Member's equity	 <u>99,955,318</u>
Total liabilities and member's equity	<u>\$ 1,679,270,446</u>

See Notes to Statement of Financial Condition.

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 1. Nature of Business and Significant Accounting Policies

Nature of business: Simplex Trading, LLC (the Company), was organized on March 8, 2010 under the Limited Liability Company Act of Illinois. The primary business of the Company is specializing in electronic, proprietary trading of U.S. exchange-traded securities as a market maker or as a specialist. The Company is a broker-dealer registered with the Securities and Exchange Commission (SEC) under the Securities Exchange Act of 1934. The Company is a registered market maker on various options and stock exchanges.

The Company's Class A interests are wholly-owned by Mishkin, Anderson & Gray Securities, LLC (MAGS) (see Note 5).

Although the Company is not exempt from Rule 15c3-3, it does not transact business in securities with, or for, customers other than members of a national securities exchange and does not carry margin account, credit balances or securities for any person defined as a "customer" pursuant to Rule 17a-5(c)(4). Accordingly, there are no amounts reportable under this section.

A summary of the Company's significant accounting policies follows:

The Company follows Generally Accepted Accounting Principles (GAAP), as established by the Financial Accounting Standards Board (the FASB), to ensure consistent reporting of financial condition, results of operations, and cash flows.

Use of estimates: The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Financial instruments owned and financial instruments sold, not yet purchased: Financial instruments owned and financial instruments sold, not yet purchased, including equities and equity options, are recorded on the trade-date basis and are valued at fair value with the resulting realized gains and losses and the change in unrealized gains and losses reported in trading gains, net in the statement of operations.

The Company recognizes contractual interest on securities on an accrual basis, and dividend income and expense is recognized on the ex-dividend date. Commission and related clearing expenses are recorded on a trade-date basis as securities transaction occur.

Financial instruments sold, not yet purchased represent obligations to deliver a specified quantity of securities. The Company is obligated to purchase securities at a future date at the prevailing prices that may differ from the fair values reflected in the statement of financial condition.

Due to broker-dealer: Due to broker-dealer includes trades pending settlement, option premium, stock premium, cash, interest, dividends, exchange fees, commissions, membership dues and clearing fees. The Company may obtain short-term financing from the clearing broker from whom it can borrow against its proprietary inventory positions, subject to collateral maintenance requirements.

Income taxes: The Company is organized as a limited liability company and is a disregarded entity for federal and state income tax purposes and is included in the tax return of MAGS. MAGS is taxed as a partnership under the provisions of the Internal Revenue Code and, accordingly, the members of MAGS are liable for Federal and State income taxes on their respective share of the taxable income. Accordingly, no provision or benefit for federal income taxes has been made in the Company's financial statements.

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 1. Nature of Business and Significant Accounting Policies (Continued)

The FASB provides guidance for how uncertain income tax positions should be recognized, measured, disclosed and presented in the financial statements. The guidance requires the evaluation of tax positions taken or expected to be taken in the course of preparing the Company's tax returns to determine whether the tax positions are "more-likely-than-not" of being sustained "when challenged" or "when examined" by the applicable tax authority. Tax positions not deemed to meet the more-likely-than-not threshold would be recorded as a tax benefit or expense and liability in the current year.

Through December 31, 2016, management has determined that there are no material uncertain income tax positions.

The Company is generally not subject to examination by U.S. federal or state taxing authorities for tax years before 2013.

Recent accounting pronouncement: In February 2016, the FASB issued Accounting Standard Update (ASU) No. 2016-02, *Leases*. The core principle of the guidance is that an entity should report transparent and economically neutral information about the assets and liabilities that arise from leases. The new guidance is effective for fiscal years beginning after December 2018. The Company is evaluating the effect of adopting this new accounting guidance but does not expect adoption will have a material impact on its results of operations, cash flows or financial position.

Note 2. Fair Value of Financial Instruments

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between the market participants at the measurement date. Financial assets and liabilities recorded at fair value are categorized based upon the level of judgment associated with the inputs used to measure their value. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). Inputs are broadly defined as assumptions market participants would use in pricing an asset or a liability.

The three levels of the fair value hierarchy are described below:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

Level 2: Inputs other than quoted prices within Level 1 that are observable for the asset or liability, either directly or indirectly; and fair value is generally determined through the use of models or other valuation methodologies. A significant adjustment to a Level 2 input could result in the Level 2 measurement becoming a Level 3 measurement.

Level 3: Inputs are unobservable for the asset or liability and include situations where there is little, if any, market activity for the asset or liability. The inputs into the determination of fair value are based upon the best information in the circumstances and may require significant management judgment or estimation.

The availability of observable inputs can vary from instrument to instrument and is affected by a wide variety of factors, including, for example, the type of instrument, whether the instrument is new and not yet established in the marketplace, the liquidity of markets, and other characteristics particular to the instrument. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3.

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 2. Fair Value of Financial Instruments (Continued)

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, a financial instrument's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument. The following section describes the valuation techniques used by the Company to measure different financial instruments at fair value and includes the level within the fair value hierarchy in which the financial instrument is categorized.

Financial instruments owned and financial instruments sold, not yet purchased that are actively trading and traded on a national securities exchange, or reported on the NASDAQ national market, are valued using the last reported sales price on the day of valuation. These financial instruments are classified as Level 1 in the fair value hierarchy.

The Company assesses the level of the financial instruments at each measurement date, and transfers between levels are recognized on the actual date of the event or change in circumstances that caused the transfer in accordance with the Company's accounting policy regarding the recognition of transfers between levels of the fair value hierarchy. There were no transfers among levels during the year.

The following table presents the Company's fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of December 31, 2016:

Description	Total	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets and Liabilities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Financial instruments owned:				
Equities	\$ 972,834,872	\$ 972,834,872	\$ -	\$ -
Equity options	705,504,057	705,504,057	-	-
	<u>\$ 1,678,338,929</u>	<u>\$ 1,678,338,929</u>	<u>\$ -</u>	<u>\$ -</u>
Liabilities				
Financial instruments sold, not yet purchased:				
Equities	\$ 796,343,156	\$ 796,343,156	\$ -	\$ -
Equity options	674,608,019	674,608,019	-	-
	<u>\$ 1,470,951,175</u>	<u>\$ 1,470,951,175</u>	<u>\$ -</u>	<u>\$ -</u>

The Company's derivative activities consist of the trading of exchange-traded equity option contracts. The Company employs arbitrage strategies between exchange-traded securities and option contracts.

Substantially all of the Company's other assets and liabilities are considered financial instruments and are either already at fair value, or at carrying amounts that approximate fair value because of the short maturity of the instruments.

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 3. Due to Broker-Dealer

Due to broker-dealer, net at December 31, 2016, consists of the following:

	Asset	Liability	Net
Due to broker-dealer consists of option/stock premium, cash, interest, dividends, exchange fees, commissions, membership dues and clearing fees	\$ -	\$ (71,409,830)	\$ (71,409,830)
Unsettled securities transactions	5,793,460	(16,127,950)	(10,334,490)
	<u>\$ 5,793,460</u>	<u>\$ (87,537,780)</u>	<u>\$ (81,744,320)</u>

The Company has a credit facility with its clearing firm, ABN AMRO Clearing Chicago, LLC. The purpose of the credit facility is to finance transactions of the Company. As of December 31, 2016, the Company has a maximum trading credit line of \$1,280,000,000 and a maximum cash limit of \$1,280,000,000 with interest rate negotiated at Feds Funds Target Rate plus 40.0 basis points. At December 31, 2016, the Company has an outstanding trading credit balance of \$877,649,000.

Per the agreement, the Company must keep minimum net liquidating balances of \$35,000,000 as defined, with the clearing firm. The securities held at the clearing firms that are pledged to secure the credit line total \$1,678,338,929 in market value at December 31, 2016.

Note 4. Derivative Financial Instruments

Derivative financial instruments are based upon an underlying asset, index, or reference rate or a combination of these factors. The Company uses derivative financial instruments as part of its trading activities. These financial instruments, which generally include exchange-traded equity options expose the Company to varying degrees of market and credit risk that may be in excess of the amounts recorded in the statement of financial condition.

The Company's trading activities involve the use of risk management strategies to reduce directional and non-directional risks based on models, and there is no guarantee that the hedging strategies will achieve their desired effect.

These derivative contracts are recorded on the statement of financial condition as assets and liabilities measured at fair value. The Company does not consider any derivative instruments to be hedging instruments, as those terms are generally understood under GAAP.

As of December 31, 2016, the Company's derivative activities had the following impact on the statement of financial condition:

Underlying Risk	Statement of Financial Condition Location	Assets at Fair Value	Liabilities at Fair Value	Net
Equities	Financial instruments owned	\$ 705,504,057	\$ -	\$ 705,504,057
	Financial instruments sold, not yet purchased	-	(674,608,019)	(674,608,019)
				<u>\$ 30,896,038</u>

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 4. Derivative Financial Instruments (Continued)

For the year ended December 31, 2016, the Company has elected the alternative disclosure for gains and losses on derivative instruments included in its trading activities. This alternative disclosure permits the Company to disclose on a combined basis the gains and losses related to all derivative and non-derivative (or cash) instruments classified as trading instruments disaggregated by the type of underlying risk. The Company traded approximately 129,000,000 option contracts and approximately 3,870,000,000 shares in 2016.

Note 5. Member's Equity

The Company's Operating Agreement provides for three classes of members: Class A, Class B and Class C, as defined. The Company's Class A Membership Units are wholly-owned by MAGS. The owner of the Class A Membership Units controls all voting rights and is responsible for appointing members to the management committee. Class B and Class C members have no voting interests in the Company. As of December 31, 2016, there are no Class B and Class C membership interests in the Company.

Under the terms of the amended operating agreements, management and control of the Company, including overall authority on all trading activities of the Company, is vested exclusively in the Manager. The Manager is comprised of a three person management committee that is appointed by the Class A member.

Class B and C members are admitted at the sole discretion of the Manager, have no voting rights and do not participate in the management of the Company. The Manager may restrict, suspend or terminate the trading activities of a Class B or C member at any time for any reason

Note 6. Related-Party Transactions

The Company operates under an expense sharing agreement with Simplex Investments, LLC. Simplex Investments, LLC, a servicing company and an affiliate of the Company by common ownership provides the Company with employees (leased employees), supplies, equipment and use of space. Under this agreement, \$17,170,737 is payable to Simplex Investments, LLC as of December 31, 2016. The Company settles balances with Simplex Investments, LCC on a monthly basis.

The Company operates under a software license agreement with Simplex Technologies, LLC, a technology services company and an affiliate of the Company by common ownership. Based on the terms of the software license agreement, Simplex Technologies, LLC provides the Company its software, related materials, related documentation and services related to supporting, maintaining and improving the software. Under this agreement \$4,999,308 is payable as of December 31, 2016. The Company settles balances with Simplex Technologies, LLC on a monthly basis.

Note 7. Net Capital Requirements

The Company is subject to the SEC Uniform Net Capital Rule (Rule 15c3-1) which requires the maintenance of "minimum net capital" under the "alternative method". Under this rule, the Company is required to maintain minimum net capital equal to the greater of \$250,000 or 2% of combined aggregate debit items. The rules also provide that equity capital may not be withdrawn or cash distributions paid if the resulting minimum net capital requirement at 120% falls below \$300,000. At December 31, 2016, the Company had net capital of \$56,611,660, which was \$56,361,660 in excess of its required capital of \$250,000.

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 8. Off-Balance-Sheet Risk and Concentration of Credit Risk

Market risk is the potential change in an instrument's value caused by fluctuations in interest rates, equity prices, credit spreads, or other risks. Exposure to market risk is influenced by a number of factors, including the relationships between financial instruments and the volatility and liquidity in the markets in which the financial instruments are traded. In many cases, the use of derivative financial instruments serves to modify or offset market risk associated with other transactions and, accordingly, serves to decrease the Company's overall exposure to market risk. The Company attempts to control its exposure to market risk arising from the use of these financial instruments through various analytical monitoring techniques.

Credit risk arises from the possible inability of counterparties to meet the terms of their contracts. The Company's exposure to credit risk associated with counterparty nonperformance is limited to the current cost to replace all contracts in which the Company has a gain. The Company limits credit risk by executing options transactions through regulated exchanges that are subject to the exchanges' counterparty approval procedures and margin requirements.

The Company conducts business with a broker-dealer for its trading activities. The clearing and depository operations of the Company's trading activities are performed by this broker pursuant to agreements. The Company monitors the credit standing of this broker on an ongoing basis. In the event the broker is unable to fulfill its obligations, the Company would be subject to credit risk.

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash. The Company maintains its cash accounts at financial institutions located in the United States. At times, the Company may have cash that exceeds the balance insured by the Federal Deposit Insurance Corporation. The Company monitors such credit risks and has not experienced any losses related to such risks.

Note 9. Guarantees and Indemnifications

In the normal course of the business, the Company enters into contracts that contain a variety of representations and warranties that provide indemnifications under certain circumstances. The Company's maximum exposure under these arrangements is unknown and the risk of loss is remote, as it would require future claims that may be made against the Company that have not occurred. Such contracts include written option contracts that are not settled in cash. These written option contracts obligate the Company to deliver or take delivery of specified financial instruments at a contracted price in the event the holder exercises the options.

The Company is required to disclose information about its obligations under certain guarantee arrangements. Guarantees are defined as contracts and indemnification agreements that contingently require a guarantor to make payments to the guaranteed party based on changes in an underlying interest or foreign exchange rate, security or commodity price, an index or the occurrence or nonoccurrence of a specified event related to an asset, liability or equity security of a guaranteed party. Guarantees are also defined as contracts that contingently require the guarantor to make payments to the guaranteed party based on another entity's failure to perform under an agreement, as well as indirect guarantees of the indebtedness of others.

The Company trades and holds certain fair-valued derivative contracts, which may constitute guarantees. Such contracts include written option contracts. Written options obligate the Company to deliver or take delivery of specified financial instruments at a contracted price in the event the holder exercises the option. Since the Company does not track the counterparties' purpose for entering into a derivative contract, it has disclosed derivative contracts that are likely to be used to protect against a change in an underlying financial instrument, regardless of their actual use.

Simplex Trading, LLC

Notes to Statement of Financial Condition

Note 9. Guarantees and Indemnifications (Continued)

As of December 31, 2016, the maximum payouts for these contracts are limited to the notional amounts of each contract. Maximum payouts do not represent the expected future cash requirements as the Company's written option positions may be liquidated or expire without being exercised by the holder. In addition, maximum payout amounts are frequently decreased by offsetting positions taken by the Company as part of its trading activities. The fair values of all written option contracts as of December 31, 2016, are included as liabilities in financial instruments sold, not yet purchased on the statement of financial condition.

Note 10. Subsequent Events

The Company has evaluated subsequent events for potential recognition and/or disclosure through the date these financial statements were issued. The Company made a profit distribution of \$7,129,000 and \$21,100,000 to its Class A Member, MAGS, on January 12, 2017 and January 25, 2017, respectively.

The Company added a Class B member, Grace Hall Trading, LLC (Grace Hall). Grace Hall became a Class B member on January 25, 2017.