

**FINANCIAL INDUSTRY REGULATORY AUTHORITY  
LETTER OF ACCEPTANCE, WAIVER AND CONSENT  
NO. 20130354629-06**

**TO:** Department of Market Regulation  
Financial Industry Regulatory Authority ("FINRA")

**RE:** Citigroup Global Markets Inc., Respondent  
Broker-Dealer  
CRD No. 7059

Pursuant to FINRA Rule 9216 of FINRA's Code of Procedure, Citigroup Global Markets Inc. ("CGMI", the "Firm" or "Respondent") submits this Letter of Acceptance, Waiver and Consent ("AWC") for the purpose of proposing a settlement of the alleged rule violations described below. This AWC is submitted on the condition that, if accepted, FINRA will not bring any future actions against Respondent alleging violations based on the same factual findings described herein.

**I.**

**ACCEPTANCE AND CONSENT**

- A.** Respondent hereby accepts and consents, without admitting or denying the findings, and solely for the purposes of this proceeding and any other proceeding brought by or on behalf of FINRA, or to which FINRA is a party, prior to a hearing and without an adjudication of any issue of law or fact, to the entry of the following findings by FINRA:

**Background**

1. CGMI, a wholly-owned subsidiary of Citigroup Inc., is headquartered in New York, New York. The Firm provides investment banking and financial advisory services. The Firm offers equity and debt financing, asset transaction, private equity, underwriting, institutional sales and trading, and mergers and acquisitions advisory services, and provides market access and execution services to the Firm's institutional market participants (the "CGMI Clients" or "Firm Clients") for a wide variety of products.
2. The Firm has been registered with FINRA since October 16, 1936, and its registration remains in effect. The Firm does not have a relevant disciplinary history.

**Summary**

3. In Matter No. 20130354629, the Trading Examinations Unit of FINRA's Department of Market Regulation ("Market Regulation") reviewed several Clearly Erroneous Execution ("CEE") petitions that were filed and Erroneous Order events between July 27, 2012 and July 31, 2013; the Firm's pre-trade capital thresholds in connection with the trading desk involved in one of the Erroneous Order events; and the Firm's

compliance with Rule 15c3-5 of the Securities Exchange Act of 1934 (“SEA”) (the “Market Access Rule”).<sup>1</sup>

4. The above matter was part of investigations conducted by Market Regulation on behalf of FINRA and other self-regulatory organizations, including The NASDAQ Stock Market LLC, Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., the New York Stock Exchange LLC, and NYSE Arca Equities, Inc. (collectively, the “SROs”), to review the Firm’s compliance with the Market Access Rule and the supervisory rules of the relevant SROs, including NASD Rule 3010 (prior to 12/1/14), FINRA Rule 3110 (on or after 12/1/14) and FINRA Rule 2010, during the period of at least July 27, 2012 through at least December 2016 (the “Review Period”).
5. As a result of these investigations, it was determined that during the Review Period, CGMI failed to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business.
6. Specifically, from the beginning of the Review Period until March 2014, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceeded appropriate pre-set capital thresholds, in violation of SEA Rules 15c3-5(b) and (c)(1)(i), and NASD Rule 3010 (prior to 12/1/14), FINRA Rule 3110 (on or after 12/1/14) and FINRA Rule 2010.
7. Additionally, during different portions of the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, in violation of SEA Rules 15c3-5(b) and (c)(1)(ii), and NASD Rule 3010 (prior to 12/1/14), FINRA Rule 3110 (on or after 12/1/14) and FINRA Rule 2010.
8. Furthermore, during the Review Period, the Firm failed to establish document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of SEA Rule 15c3-5, to assure the overall effectiveness of the Firm’s risk management controls and supervisory procedures, in violation of SEA Rule 15c3-5(b) and (e)(1), and NASD Rule 3010 (prior to 12/1/14), FINRA Rule 3110 (on or after 12/1/14) and FINRA Rule 2010.

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<sup>1</sup> The SEC adopted Rule 15c3-5 effective July 14, 2011. See 17 C.F.R. § 240.15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010) (Final Rule Release).

## Violative Conduct

### Applicable Rules

9. During the Review Period, SEA Rule 15c3-5(b) required broker-dealers that provide market access to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of their market access business.<sup>2</sup>
10. During the Review Period, SEA Rule 15c3-5(c)(1)(i) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceed appropriate pre-set credit or capital thresholds in the aggregate for each customer and the broker or dealer and, where appropriate, more finely-tuned by sector, security, or otherwise by rejecting orders if such orders would exceed the applicable credit or capital thresholds.
11. During the Review Period, SEA Rule 15c3-5(c)(1)(ii) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.
12. During the Review Period, SEA Rule 15c3-5(e) required a broker or dealer with market access to establish, document and maintain a system for regularly reviewing the effectiveness of its risk management controls and for promptly addressing any issues. SEA Rule 15c3-5(e)(1) required the broker or dealer to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of its risk management controls and supervisory procedures. Moreover, this rule required, among other things, that the review be conducted in accordance with written procedures and be documented. These provisions were intended to ensure that a broker or dealer “implements supervisory review mechanisms to support the effectiveness of its risk management controls and supervisory procedures on an ongoing basis.”<sup>3</sup> Moreover, brokers or dealers with market access are required to adjust their controls and procedures “to help assure their continued effectiveness in light of any changes in the broker-dealer’s business or weaknesses that have been revealed.”<sup>4</sup>
13. Rule 15c3-5 requires, among other things, that a broker-dealer with market access document its system of risk management controls and supervisory procedures that are

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<sup>2</sup> Rule 15c3-5 requires that, as gatekeepers to the financial markets, broker-dealers providing market access must “appropriately control the risks associated with market access so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system.” 17 C.F.R. § 240.15c3-5, 75 Fed. Reg. 69792 (Nov. 15, 2010).

<sup>3</sup> 75 Fed. Reg. at 69811.

<sup>4</sup> *Id.*

designed to manage the financial, regulatory, and other risks of market access. The broker-dealer must preserve a copy of its supervisory procedures and “a written description of its risk management controls” as part of its books and records for the time period required by SEC Rule 17a-4(e)(7) (emphasis added).<sup>5</sup> The required written description is intended, among other things, to assist SEC and SRO staff to assess the broker-dealer’s compliance with the rule. Exchange Act Release No. 34-63241, 75 Fed. Reg. 69792, 69812 (Nov. 15, 2010).

14. During the Review Period, NASD Rule 3010(a) (for conduct prior to 12/1/14) and FINRA Rule 3110(a) (for conduct on and after 12/1/14) required, among other things, each member to establish and maintain a supervisory system that is reasonably designed to achieve compliance with applicable securities laws and regulations, NASD rules, and FINRA rules, and NASD Rule 3010(b) and FINRA Rule 3010(b) required each member to establish written supervisory procedures that were reasonably designed to ensure compliance with applicable securities laws and regulations, NASD rules and FINRA rules.
15. During the Review Period, FINRA Rule 2010 provided that a member, in the conduct of its business, shall observe high standards of commercial honor and just and equitable principles of trade.

#### Overview of CGMI’s Market Access Systems

16. During the Review Period, CGMI provided and maintained market access, and executed more than 175 million trades for the Firm Clients.
17. During the Review Period, CGMI sales traders used several different order management systems (“OMS”) and execution management systems (“EMS”) to facilitate orders. Some examples of the OMSs used by the Firm to enter orders are NetX360, GSS, COMET Sales and C4, certain of which contain certain pre-trade controls associated with them that were developed by the Firm. Customer orders are generally routed through one of three different Firm EMSs, which are known as COMET, PTE, and ARES, which are used to manage orders. These OMSs or EMSs route the orders to an internal Alternative Trading System (“ATS”) such as Citicross, directly to the market, through various Firm trading algorithms, or to the Firm’s smart-order-router (“SOR”), that sends the order to various market centers. These OMSs and EMSs contained pre-trade controls and filters that are applied to orders. In addition, CGMI assigned and applied various credit limits and capital thresholds controls to the Firm Clients and trading desks.
18. Depending on the OMS or EMS, during the Review Period, CGMI generally implemented one or more of the following pre-trade controls: a single order notional control (*i.e.*, the value of an order, which is generally calculated by multiplying the

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<sup>5</sup> See 17 C.F.R. § 240.15c3-5(b). Rule 17a-4(e)(7) requires a broker-dealer to maintain and preserve such description “until three years after the termination of the use of” the document. See 17 C.F.R. § 240.17a-4(e)(7).

share price by the amount of shares); a single order quantity control; and an average daily volume ("ADV") control. Orders that triggered these controls are interrupted and held pending clearance of either soft-blocks, a combination of both soft-blocks and hard-blocks, or hard-blocks. The combination of controls and the limits at which these controls were set varied depending upon the OMS/EMS utilized or the trading desk.

### **Inadequate Pre-Trade Erroneous Order Controls**

19. Despite the various pre-trade controls designed to prevent the entry of erroneous orders that the Firm had in place during the Review Period, as described below, the Firm failed to implement reasonable pre-trade risk management controls as applied to certain orders submitted by certain CGMI Clients or trading desks. Further the Firm failed to establish and implement reasonable supervisory procedures designed to prevent the entry of erroneous orders during the Review Period, as set forth below.
20. Because at times CGMI's pre-trade controls were unreasonable as applied to certain Firm Clients or trading desks, CGMI failed to prevent the transmission of certain erroneous equity orders to the SROs, which caused 12 clearly erroneous events, resulting in the filing of eight CEE petitions for six of the events (four events did not result in CEE petitions). These events caused one trading halt and several large price change alerts/price movements, including a price movement in one security of approximately 34%.
21. Deficiencies in CGMI's pre-trade price and size controls resulted in the submission of the orders that caused the Erroneous Events. For example, the majority of the Firm's controls during the Review Period employed soft-blocks that could easily be overridden by the Firm's traders, thus causing the control to be ineffective without additional reasonable controls or review. Moreover, until June 2013, the Firm failed to capture (*i.e.*, retain) when soft-blocks for erroneous orders were triggered or overridden, and during the entire Review Period, the Firm failed to regularly review when these types of soft-blocks were triggered or overridden.
22. For example, on October 31, 2012, the Firm's Principal Program Trading ("PPT") desk<sup>6</sup> entered a series of 56 orders on behalf of a Firm Client in an attempt to create a basket of stocks ("Erroneous Basket"). The PPT desk attempted to hedge the position and entered its hedge order via the Firm's ARES EMS. Immediately after placing the orders, a Firm trader on the floor of the Exchange realized that the Firm's algorithm had significantly miscalculated the basket and the Firm cancelled the basket before the orders were executed. The miscalculation of the basket was due to the EMS defaulting to a fallback logic that contained a coding error. The orders were on average about 328% over the 30-day ADV of the symbols in the Erroneous Basket and had an approximately total value of \$13 billion dollars. While not executed and cancelled less than a minute after entry, the Erroneous Basket order information

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<sup>6</sup> The PPT desk executes program orders by providing liquidity guarantees to the customer-facing US Agency Programs desk on a principal basis.

was disseminated by the New York Stock Exchange LLC via its Order Imbalance Information data feed and caused a significant imbalance near the close. The large imbalances had the effect of exerting artificial downward pricing pressure on all 56 symbols. While on this date there were three soft-blocks (quantity, notional value and price movement) in place that would have been triggered as a result of the Erroneous Basket, because no hard-block existed, the soft-blocks were overridden and the basket was sent electronically for execution without being subjected to any further review or controls.<sup>7</sup> Additionally, the Firm failed to retain and review the soft-blocks that were triggered for this Erroneous Basket.

23. At times during the Review Period, the Firm failed in respect to some of its systems to implement reasonable controls that took into account the individual characteristics of a security. When it did implement an ADV control, it was set too high to be effective, or employed an excessive minimal share quantity threshold, and was therefore unreasonable without additional controls. For example, the ADV control for the COMET EMS was initially set at a level too high to be effective. Further, while the ADV control level was significantly reduced in March 2014, it was still unreasonable. In addition, an ADV control for at least one OMS contained a minimum share quantity threshold which was also exceedingly high. Similarly, when the Firm implemented single order notional and quantity controls, they were also set at thresholds that were unreasonable without additional controls.
24. For example, on July 27, 2012, the Firm received a CGMI Client's request to liquidate all positions in an account, which consisted of 20,000 shares of "DEF"<sup>8</sup> security. The 30-day ADV in DEF was approximately 2,000 shares. The Firm placed a held market order to sell 20,000 shares of DEF in one of the Firm's front-end order entry systems. The order was blocked by this system because the order quantity exceeded the applicable hard-block that applied to orders with a minimum share quantity that exceed 10% of the 30-day ADV. A Firm sales trader then broke up the order and submitted four individual 5,000 share market orders to sell, which were accepted for execution within a two minute period. The entry of these orders, each of which were two and one-half times larger than the 30-day ADV in DEF, were not blocked because they did not meet the minimum share threshold of the Firm's control, and thus were not subject to any ADV control. As a result of the entry of these orders, the price of DEF traded down approximately 34%, caused a trading halt, and set a 52-week low.
25. In at least two separate areas during the Review Period, the Firm's pre-trade erroneous order controls wholly failed to apply. First, prior to September 20, 2013, if a Firm Client or trading desk entered an order outside of normal trading hours, the order was not exposed to any controls. Second, during the Review Period, while orders that were received by the Firm from a CGMI Client and routed through the Firm's smart-order-router (*i.e.*, a "parent order") were subject to the Firm's pre-trade

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<sup>7</sup> In July 2013, the Firm implemented hard blocks in ARES and in March 2014, implemented hard blocks in PTE and COMET.

<sup>8</sup> A generic identifier has been used in place of the name of this security.

erroneous order controls, if the parent order was thereafter broken into more than one smaller orders (*i.e.*, “child orders”), the child orders were not subject to a pre-trade price control.

26. Prior to the implementation of hard-blocks on May 17, 2013 in PTE and on December 16, 2013 in COMET, the Firm only employed soft-block controls for market orders entered by Firm Clients or trading desks, either intentionally or by mistake, which could be overridden without being subjected to either additional pre-trade controls or review. Further, prior to these dates, the Firm did not have an effective share quantity control in place that would block market orders from being sent directly to the market. Following the implementation of the market order hard-block, if a Firm Client or trading desk entered a market order in COMET, the Firm’s systems would automatically convert the market order into a limit order priced 5% away from the previous sale, which was lowered to 3% in July 2015. However, the Firm’s pre-trade share quantity control that applied to these converted limit orders was not effective to prevent the entry of erroneous orders.
27. Additionally, during the Review Period, the Firm’s Convertible desk utilized a “Pairs Algorithm,” that was designed to allow the desk to place orders that simultaneously buy one security while selling another security to minimize market impact on both legs of the trade. The quantities of each security to be bought or sold are entered manually by the trader and then executed to maintain a hedged position. However, prior to August 12, 2013, the Pairs Algorithm did not possess a pre-trade control to prevent the entry of an erroneous order where a Firm trader erroneously entered an incorrect value for one side of the pairing, which could result in the entering of an erroneous order with an incorrect number of shares. On August 12, 2013, the Firm implemented a hard block that was triggered if the different legs in the Pairs Algorithm did not maintain a minimum ratio.
28. The acts, practices, and conduct described above in paragraphs 19 through 27 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(ii), and NASD Rule 3010 (for conduct prior to 12/1/14) and FINRA Rule 3110 (for conduct on and after 12/1/14) and FINRA Rule 2010.

**Inadequate Pre-Set Capital Thresholds**

29. During the Review Period prior to March 2014, for at least one of the Firm’s trading desks, the Firm failed to establish and implement risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceeded appropriate pre-set capital thresholds by rejecting orders if such orders would exceed the applicable capital thresholds set by the broker-dealer.
30. During the Review Period, the Firm maintained and monitored capital/credit thresholds for both its internal trading desks and for Firm Clients within its “Lighthouse” system. Alerts generated by Lighthouse were sent to appropriate compliance and trading supervisors via email, and also generated pop-up notices

within certain systems that subscribed to the Lighthouse alerts. When either a Firm trading desk or a Firm Client exceeded 80% of the set threshold (which includes executed and open orders), an alert was generated, and additional alerts were generated at 90%, 100%, and 110% of the threshold. When a desk or Firm Client reached 100% or greater of their credit/capital limit, any new order required a Firm trader, or a sales trader in the case of a Firm Client, to verify additional orders by selecting one of three pre-set reasons (*i.e.*, (1) limit increase pending, e-mail approval obtained; (2) user override, will discuss with supervisor; or (3) system issue).

31. The Firm established an internal pre-set capital threshold of \$10 billion for the PPT desk during the Review Period. Prior to March 2014 in PTE and COMET, and prior to July 2013 in ARES, the capital thresholds applicable to PPT would not prevent the entry of an order that breached PPT's \$10 billion dollar limit, or a series of orders that were placed simultaneously even if the orders breached PPT's \$10 billion dollar limit. Due to a coding error, an alert would only be generated after the entry of an order or orders that exceeded the \$10 billion limit.
32. Because of the Firm's failure to configure its controls to prevent the entry of orders that would cause a pre-set capital threshold to be breached, the Firm's pre-trade risk management controls and supervisory procedures in ARES failed to prevent the entry of the \$13 billion Erroneous Basket on October 31, 2012, which was \$3 billion greater than the maximum \$10 billion capital threshold set for the PPT desk. As is set forth above, these orders caused the Exchange to disseminate a significant imbalance near the close before the orders were cancelled.
33. The acts, practices, and conduct described above in paragraphs 29 through 32 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(i), and NASD Rule 3010 (for conduct prior to 12/1/14) and FINRA Rule 3110 (for conduct on and after 12/1/14) and FINRA Rule 2010.

#### **Inadequate Periodic Review of Override Activity**

34. During the Review Period, the majority of the Firm's pre-trade equities controls for erroneous orders, credit limits and capital thresholds involved the use of soft-blocks. Prior to June 2013, however, the Firm failed to capture or retain any instance in which a soft-block was triggered or overridden. In June 2013, the Firm began capturing/retaining data regarding the occurrence and overrides of soft-blocks for erroneous orders and credit limits/capital thresholds.
35. Beginning in June 2013, the Firm began to review any instance in which a soft-block for credit limits/capital thresholds were triggered or overridden. However, during the entire Review Period, the Firm failed to regularly review instances in which soft-blocks for potential erroneous orders were triggered or overridden.



36. Although the Firm periodically reviewed the effectiveness of its pre-trade risk management controls and supervisory procedures, because the Firm was neither capturing nor reviewing the occurrence or the bypassing of its soft-blocks prior to June 2013, and because the Firm also failed to conduct a regular review of instances in which a soft-block was triggered or overridden for potentially erroneous orders during the Review Period, it was not possible for the Firm to assure the overall effectiveness of its risk management controls and supervisory procedures for the prevention of erroneous orders during the Review Period. Moreover, CGMI's failures in this regard also prevented the Firm from being able to adequately adjust their controls and procedures to help assure their continued effectiveness or to determine whether there were any weaknesses in their controls or procedures.
37. Additionally, notwithstanding that there were erroneous order events beginning in 2012 that triggered soft-blocks, and although there were regulatory inquiries into the erroneous events that began in 2013, the Firm failed to conduct regular reviews of when soft-blocks for potential erroneous orders were triggered or overridden during the Review Period. Accordingly, during the Review Period, the Firm failed to establish, document and maintain a reasonable system for regularly reviewing the effectiveness of its risk management controls and supervisory procedures.
38. The acts, practices, and conduct described above in paragraphs 34 through 37 constitute violations of SEA Rules 15c3-5(b) and (e)(1), and NASD Rule 3010 (for conduct prior to 12/1/14) and FINRA Rule 3110 (for conduct on and after 12/1/14) and FINRA Rule 2010.

**B. The Firm also consents to the imposition of the following sanctions:**

1. A censure;
2. A fine in the amount of \$1,000,000, of which \$145,000 is payable to FINRA;<sup>9</sup> and
3. An undertaking requiring the Firm to address the Market Access Rule deficiencies described in this AWC and to ensure that it has implemented controls and procedures that are reasonably designed to achieve compliance with the rules and regulations cited herein.
  - a. Within 120 days of the date of the issuance of the Notice of Acceptance of this AWC, CGMI shall submit to the COMPLIANCE ASSISTANT, LEGAL SECTION, MARKET REGULATION DEPARTMENT, 9509 KEY WEST AVENUE, ROCKVILLE, MD 20850, a written report (the "written report"), certified by a senior management Firm executive, to [MarketRegulationComp@finra.org](mailto:MarketRegulationComp@finra.org) that provides the following information:

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<sup>9</sup> The balance of the sanction will be paid to SROs listed in Paragraph B.4.

- i. A reference to this matter;
  - ii. A representation that the Firm has addressed each of the deficiencies described above; and
  - iii. The date(s) this was completed.
- b. Between 90 and 120 days after the submission of the written report, the Firm shall submit a supplemental written report to FINRA to provide an update on the effectiveness of the enhancements and changes made by the Firm to its risk management controls and supervisory procedures as described in paragraph a(ii) above.
- c. The Department of Market Regulation may, upon a showing of good cause and in its sole discretion, extend the time for compliance with these provisions.
4. Acceptance of this AWC is conditioned upon acceptance of similar settlement agreements in related matters between CGMI and each of the following self-regulatory organizations: The NASDAQ Stock Market LLC, Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., New York Stock Exchange LLC, and NYSE Arca Equities, Inc.

Respondent agrees to pay the monetary sanction(s) upon notice that this AWC has been accepted and that such payment(s) are due and payable. It has submitted an Election of Payment form showing the method by which it proposes to pay the fine imposed.

Respondent specifically and voluntarily waives any right to claim that it is unable to pay, now or at any time hereafter, the monetary sanction(s) imposed in this matter.

The sanctions imposed herein shall be effective on a date set by FINRA staff.

## II.

### WAIVER OF PROCEDURAL RIGHTS

Respondent specifically and voluntarily waives the following rights granted under FINRA's Code of Procedure:

- A. To have a Complaint issued specifying the allegations against the Firm;
- B. To be notified of the Complaint and have the opportunity to answer the allegations in writing;
- C. To defend against the allegations in a disciplinary hearing before a hearing panel, to have a written record of the hearing made and to have a written decision issued; and

- D. To appeal any such decision to the National Adjudicatory Council ("NAC") and then to the U.S. Securities and Exchange Commission and a U.S. Court of Appeals.

Further, Respondent specifically and voluntarily waives any right to claim bias or prejudgment of the Chief Legal Officer, the NAC, or any member of the NAC, in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including acceptance or rejection of this AWC.

Respondent further specifically and voluntarily waives any right to claim that a person violated the ex parte prohibitions of FINRA Rule 9143 or the separation of functions prohibitions of FINRA Rule 9144, in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including its acceptance or rejection.

### III.

#### OTHER MATTERS

Respondent understands that:

- A. Submission of this AWC is voluntary and will not resolve this matter unless and until it has been reviewed and accepted by the NAC, a Review Subcommittee of the NAC, or the Office of Disciplinary Affairs ("ODA"), pursuant to FINRA Rule 9216;
- B. If this AWC is not accepted, its submission will not be used as evidence to prove any of the allegations against Respondent; and
- C. If accepted:
1. this AWC will become part of the Firm's permanent disciplinary record and may be considered in any future actions brought by FINRA or any other regulator against the Firm;
  2. this AWC will be made available through FINRA's public disclosure program in accordance with FINRA Rule 8313;
  3. FINRA may make a public announcement concerning this agreement and the subject matter thereof in accordance with FINRA Rule 8313; and
  4. Respondent may not take any action or make or permit to be made any public statement, including in regulatory filings or otherwise, denying, directly or indirectly, any finding in this AWC or create the impression that the AWC is without factual basis. Respondent may not take any position in any proceeding brought by or on behalf of FINRA, or to which FINRA is a party, that is inconsistent with any part of this AWC. Nothing in this provision affects the Firm's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which FINRA is not a party.

- D. Respondent may attach a Corrective Action Statement to this AWC that is a statement of demonstrable corrective steps taken to prevent future misconduct. The Firm understands that it may not deny the charges or make any statement that is inconsistent with the AWC in this Statement. This Statement does not constitute factual or legal findings by FINRA, nor does it reflect the views of FINRA or its staff.

The undersigned, on behalf of the Firm, certifies that a person duly authorized to act on its behalf has read and understands all of the provisions of this AWC and has been given a full opportunity to ask questions about it; that it has agreed to the AWC's provisions voluntarily; and that no offer, threat, inducement, or promise of any kind, other than the terms set forth herein and the prospect of avoiding the issuance of a Complaint, has been made to induce the Firm to submit it.

Date 5/19/17

Respondent

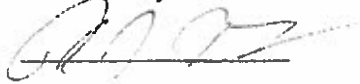
Citigroup Global Markets Inc.

By: 

Name: Joshua E. Levine

Title: Managing Director

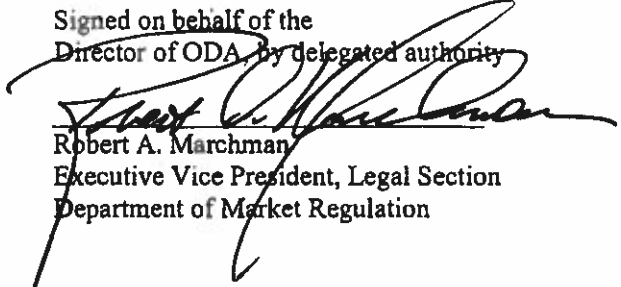
Reviewed by:



Michael D. Wolk, Esq.  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, DC 20005  
Accepted by FINRA:

Date 6/9/17

Signed on behalf of the  
Director of ODA, by delegated authority

  
Robert A. Marchman  
Executive Vice President, Legal Section  
Department of Market Regulation

**BATS BYX EXCHANGE, INC.**  
**LETTER OF ACCEPTANCE, WAIVER AND CONSENT**  
**NO. 20130354629-03**

TO: Bats BYX Exchange, Inc.  
c/o Department of Market Regulation  
Financial Industry Regulatory Authority (“FINRA”)

RE: Citigroup Global Markets Inc., Respondent  
Broker-Dealer  
CRD No. 7059

Pursuant to Rule 8.3 of the Rules of Bats BYX Exchange, Inc. (“BYX” or the “Exchange”), Citigroup Global Markets Inc. (“CGMI” or the “Firm”) submits this Letter of Acceptance, Waiver and Consent (“AWC”) for the purpose of proposing a settlement of the alleged rule violations described below. This AWC is submitted on the condition that, if accepted, BYX will not bring any future actions against the Firm alleging violations based on the same factual findings described herein.

**I.**

**ACCEPTANCE AND CONSENT**

- A. The Firm hereby accepts and consents, without admitting or denying the findings, and solely for the purposes of this proceeding and any other proceeding brought by or on behalf of BYX, or to which BYX is a party, prior to a hearing and without an adjudication of any issue of law or fact, to the entry of the following findings by BYX:

**Background**

1. CGMI, a wholly-owned subsidiary of Citigroup Inc., is headquartered in New York, New York. The Firm provides investment banking and financial advisory services. The Firm offers equity and debt financing, asset transaction, private equity, underwriting, institutional sales and trading, and mergers and acquisitions advisory services, and provides market access and execution services to the Firm’s institutional market participants (the “CGMI Clients” or “Firm Clients”) for a wide variety of products.
2. The Firm has been registered with BYX as an equities member since December 15, 2010, and with FINRA since October 16, 1936. Its registrations remain in effect. The Firm does not have a relevant disciplinary history.
3. Several letters were sent to the Firm beginning on April 17, 2015, and continuing through March 1, 2016, notifying the Firm of Market Regulation’s investigations into the matters referenced herein.

## Summary

4. In Matter No. 20140438051, the Chicago Equities Section of FINRA's Department of Market Regulation ("Market Regulation") reviewed, among other things, significant price movements that that occurred in a particular security on the Exchange on August 12, 2013; and the Firm's compliance with Rule 15c3-5 of the Securities Exchange Act of 1934 ("SEA") (the "Market Access Rule").<sup>1</sup>
5. In Matter No. 20140411564, the Trading Analysis Section of Market Regulation reviewed an Erroneous Order event that occurred on the Exchange on April 30, 2013; potentially violative or manipulative trading activity that occurred on the Exchange between December 15, 2010 and July 10, 2013; and the Firm's compliance with the Market Access Rule.
6. The above matters, as well as Matter No. 20130354629, were part of investigations conducted by Market Regulation on behalf of the Exchange, FINRA and other self-regulatory organizations, including Bats BZX Exchange, Inc., The NASDAQ Stock Market LLC, New York Stock Exchange LLC, and NYSE Arca Equities, Inc. (collectively, the "SROs"), to review the Firm's compliance with the Market Access Rule and the supervisory rules of the relevant SROs, including BYX Rules 5.1, 5.2, 5.3, and 3.1, during the period of at least July 27, 2012 through at least December 2016 (collectively the "Review Period").<sup>2</sup>
7. As a result of these investigations, it was determined that during the Review Period, CGMI failed to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business.
8. Specifically, during different portions of the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, in violation of SEA Rules 15c3-5(b) and (c)(1)(ii), and BYX Rules 5.1, 5.2, 5.3, and 3.1.
9. Furthermore, during the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to ensure compliance with all regulatory requirements, including supervising customer trading to detect and prevent potentially violative and manipulative activity, in violation of SEA Rules 15c3-5(b) and (c)(2), and BYX Rules 5.1, 5.2, 5.3, and 3.1.

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<sup>1</sup> The SEC adopted Rule 15c3-5 effective July 14, 2011. See 17 C.F.R. § 240.15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010) (Final Rule Release).

<sup>2</sup> As discussed *infra*, certain supervisory violations for the Exchange began on December 15, 2010.

10. Additionally, during the Review Period, the Firm failed to establish document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of SEA Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures, in violation of SEA Rule 15c3-5(b) and (e)(1), and BYX Rules 5.1, 5.2, 5.3, and 3.1.

### Violative Conduct

#### Applicable Rules

11. During the Review Period, SEA Rule 15c3-5(b) required broker-dealers that provide market access to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of their market access business.<sup>3</sup>
12. During the Review Period, SEA Rule 15c3-5(c)(1)(ii) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.
13. During the Review Period, SEA Rule 15c3-5(c)(2) specifically required market access broker-dealers to have regulatory risk management controls and supervisory procedures reasonably designed to ensure compliance with all regulatory requirements.
14. During the Review Period, SEA Rule 15c3-5(e) required a broker or dealer with market access to establish, document and maintain a system for regularly reviewing the effectiveness of its risk management controls and for promptly addressing any issues. SEA Rule 15c3-5(e)(1) required the broker or dealer to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of its risk management controls and supervisory procedures. Moreover, this rule required, among other things, that the review be conducted in accordance with written procedures and be documented. These provisions were intended to ensure that a broker or dealer "implements supervisory review mechanisms to support the effectiveness of its risk management controls and supervisory procedures on an ongoing basis."<sup>4</sup> Moreover, brokers or dealers with market access are required to adjust their controls and procedures "to

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<sup>3</sup> Rule 15c3-5 requires that, as gatekeepers to the financial markets, broker-dealers providing market access must "appropriately control the risks associated with market access so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system." 17 C.F.R. § 240.15c3-5, 75 Fed. Reg. 69792 (Nov. 15, 2010).

<sup>4</sup> 75 Fed. Reg. at 69811.

help assure their continued effectiveness in light of any changes in the broker-dealer's business or weaknesses that have been revealed.”<sup>5</sup>

15. Rule 15c3-5 requires, among other things, that a broker-dealer with market access document its system of risk management controls and supervisory procedures that are designed to manage the financial, regulatory, and other risks of market access. The broker-dealer must preserve a copy of its supervisory procedures and “*a written description of its risk management controls*” as part of its books and records for the time period required by SEC Rule 17a-4(e)(7) (emphasis added).<sup>6</sup> The required written description is intended, among other things, to assist SEC and SRO staff to assess the broker-dealer's compliance with the rule. Exchange Act Release No. 34-63241, 75 Fed. Reg. 69792, 69812 (Nov. 15, 2010).
16. During the Review Period, BYX Rules 5.1, 5.2 and 5.3 required, among other things that each member firm establish, maintain and enforce written procedures to enable it to properly supervise the activities of associated persons to ensure compliance with applicable securities laws and regulations and BYX Rules.
17. During the Review Period, BYX Rule 3.1 provided that member firms, in the conduct of their business, shall observe high standards of commercial honor and just and equitable principles of trade.

#### **Overview of CGMI's Market Access Systems**

18. During the Review Period, CGMI provided and maintained market access, and executed more than 175 million trades for the Firm Clients.
19. During the Review Period, CGMI sales traders used several different order management systems (“OMS”) and execution management systems (“EMS”) to facilitate orders. Some examples of the OMSs used by the Firm to enter orders are NetX360, GSS, COMET Sales and C4, certain of which contain certain pre-trade controls associated with them that were developed by the Firm. Customer orders are generally routed through one of three different Firm EMSs, which are known as COMET, PTE, and ARES, which are used to manage orders. These OMSs or EMSs route the orders to an internal Alternative Trading System (“ATS”) such as Citicross, directly to the market, through various Firm trading algorithms, or to the Firm's smart-order-router (“SOR”), that sends the order to various market centers. These OMSs and EMSs contained pre-trade controls and filters that are applied to orders. In addition, CGMI assigned and applied various credit limits and capital thresholds controls to the Firm Clients and trading desks.

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<sup>5</sup> *Id.*

<sup>6</sup> See 17 C.F.R. § 240.15c3-5(b). Rule 17a-4(e)(7) requires a broker-dealer to maintain and preserve such description “until three years after the termination of the use of” the document. See 17 C.F.R. § 240.17a-4(e)(7).



20. Depending on the OMS or EMS, during the Review Period, CGMI generally implemented one or more of the following pre-trade controls: a single order notional control (*i.e.*, the value of an order, which is generally calculated by multiplying the share price by the amount of shares); a single order quantity control; and an average daily volume (“ADV”) control. Orders that triggered these controls are interrupted and held pending clearance of either soft-blocks, a combination of both soft-blocks and hard-blocks, or hard-blocks. The combination of controls and the limits at which these controls were set varied depending upon the OMS/EMS utilized or the trading desk.

#### **Inadequate Pre-Trade Erroneous Order Controls**

21. Despite the various pre-trade controls designed to prevent the entry of erroneous orders that the Firm had in place during the Review Period, as described below, the Firm failed to implement reasonable pre-trade risk management controls as applied to certain orders submitted by certain CGMI Clients or trading desks. Further the Firm failed to establish and implement reasonable supervisory procedures designed to prevent the entry of erroneous orders during the Review Period, as set forth below.
22. Because at times CGMI’s pre-trade controls were unreasonable as applied to certain Firm Clients or trading desks, CGMI failed to prevent the transmission of certain erroneous equity orders to the SROs, which caused 12 clearly erroneous events, resulting in the filing of eight Clearly Erroneous Event (“CEE”) petitions for six of the events (four events did not result in CEE petitions). These events caused one trading halt and several large price change alerts/price movements, including a price movement in one security of approximately 34%.
23. Deficiencies in CGMI’s pre-trade price and size controls resulted in the submission of the orders that caused the Erroneous Events. For example, the majority of the Firm’s controls during the Review Period employed soft-blocks that could easily be overridden by the Firm’s traders, thus causing the control to be ineffective without additional reasonable controls or review. Moreover, until June 2013, the Firm failed to capture (*i.e.*, retain) when soft-blocks for erroneous orders were triggered or overridden, and during the entire Review Period, the Firm failed to regularly review when these types of soft-blocks were triggered or overridden.
24. For example, on April 30, 2013, the Firm’s Equities Portfolio Trading Desk (“Equities Desk”) routed a 500,000 share sell order in “ABC” security with no limit price directly to the market. The order was entered to facilitate a large transfer on behalf of a Firm customer. The order was intended to have a Destination of “BLOCK,” which would route the order internally to the Firm’s Block Desk that would work the order into the market at competitive pricing. However, a Destination of “<E-Default>” was accidentally selected, which was located just below “BLOCK” in the scroll-down list of Destination options, and caused the order to be routed

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<sup>7</sup> A generic identifier has been used in place of the name of this security.

directly to the market. As a result of the order, the Firm sold 391,753 shares for a volume-weighted average price (“VWAP”) of \$23.7657 (for total value of approx. \$9.2 million). This caused the market price of ABC to drop from \$24.405 to a low of \$21.9301, an approximately a 10.14% decrease, and triggered a five minute single-stock circuit breaker, as well as price alerts on the Exchange. Although the order triggered the Firm’s notional value soft-block set at \$5 million, it was easily bypassed by selecting a “Yes” button without confirming the details of the order. Because no hard-block existed, the Firm’s pre-trade controls permitted the override and bypass of the soft-blocks and allowed the order to be executed without being subjected to additional Firm controls. Additionally, the Firm failed to retain and review the soft-blocks that were triggered for this erroneous order.

25. At times during the Review Period, the Firm failed in respect to some of its systems to implement reasonable controls that took into account the individual characteristics of a security. When it did implement an ADV control, it was set too high to be effective, or employed an excessive minimal share quantity threshold, and was therefore unreasonable without additional controls. For example, the ADV control for the COMET EMS was initially set at a level too high to be effective. Further, while the ADV control level was significantly reduced in March 2014, it was still unreasonable. In addition, an ADV control for at least one OMS contained a minimum share quantity threshold which was also exceedingly high. Similarly, when the Firm implemented single order notional and quantity controls, they were also set at thresholds that were unreasonable without additional controls.
26. In at least two separate areas during the Review Period, the Firm’s pre-trade erroneous order controls wholly failed to apply. First, prior to September 20, 2013, if a Firm Client or trading desk entered an order outside of normal trading hours, the order was not exposed to any controls. Second, during the Review Period, while orders that were received by the Firm from a CGMI Client and routed through the Firm’s smart-order-router (*i.e.*, a “parent order”) were subject to the Firm’s pre-trade erroneous order controls, if the parent order was thereafter broken into more than one smaller orders (*i.e.*, “child orders”), the child orders were not subject to a pre-trade price control.
27. Prior to the implementation of hard-blocks on May 17, 2013 in PTE and on December 16, 2013 in COMET, the Firm only employed soft-block controls for market orders entered by Firm Clients or trading desks, either intentionally or by mistake, which could be overridden without being subjected to either additional pre-trade controls or review. Further, prior to these dates, the Firm did not have an effective share quantity control in place that would block market orders from being sent directly to the market. Following the implementation of the market order hard-block, if a Firm Client or trading desk entered a market order in COMET, the Firm’s systems would automatically convert the market order into a limit order priced 5% away from the previous sale, which was lowered to 3% in July 2015. However, the Firm’s pre-trade share quantity control that applied to these converted limit orders was not effective to prevent the entry of erroneous orders.

28. Additionally, during the Review Period, the Firm's Convertible desk utilized a "Pairs Algorithm," that was designed to allow the desk to place orders that simultaneously buy one security while selling another security to minimize market impact on both legs of the trade. The quantities of each security to be bought or sold are entered manually by the trader and then executed to maintain a hedged position. However, prior to August 12, 2013, the Pairs Algorithm did not possess a pre-trade control to prevent the entry of an erroneous order where a Firm trader erroneously entered an incorrect value for one side of the pairing, which could result in the entering of an erroneous order with an incorrect number of shares. On August 12, 2013, the Firm implemented a hard block that was triggered if the different legs in the Pairs Algorithm did not maintain a minimum ratio.
29. The acts, practices, and conduct described above in paragraphs 21 through 28 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(ii), and BYX Rules 5.1, 5.2, 5.3, and 3.1.

#### **Inadequate Periodic Review of Override Activity**

30. During the Review Period, the majority of the Firm's pre-trade equities controls for erroneous orders, credit limits and capital thresholds involved the use of soft-blocks. Prior to June 2013, however, the Firm failed to capture or retain any instance in which a soft-block was triggered or overridden. In June 2013, the Firm began capturing/retaining data regarding the occurrence and overrides of soft-blocks for erroneous orders and credit limits/capital thresholds.
31. Beginning in June 2013, the Firm began to review any instance in which a soft-block for credit limits/capital thresholds were triggered or overridden. However, during the entire Review Period, the Firm failed to regularly review instances in which soft-blocks for potential erroneous orders were triggered or overridden.
32. Although the Firm periodically reviewed the effectiveness of its pre-trade risk management controls and supervisory procedures, because the Firm was neither capturing nor reviewing the occurrence or the bypassing of its soft-blocks prior to June 2013, and because the Firm also failed to conduct a regular review of instances in which a soft-block was triggered or overridden for potentially erroneous orders during the Review Period, it was not possible for the Firm to assure the overall effectiveness of its risk management controls and supervisory procedures for the prevention of erroneous orders during the Review Period. Moreover, CGMI's failures in this regard also prevented the Firm from being able to adequately adjust their controls and procedures to help assure their continued effectiveness or to determine whether there were any weaknesses in their controls or procedures.
33. Additionally, notwithstanding that there were erroneous order events beginning in 2012 that triggered soft-blocks, and although there were regulatory inquiries into the erroneous events that began in 2013, the Firm failed to conduct regular reviews of when soft-blocks for potential erroneous orders were triggered or overridden during the Review Period. Accordingly, during the Review Period, the Firm failed to

establish, document and maintain a reasonable system for regularly reviewing the effectiveness of its risk management controls and supervisory procedures.

34. The acts, practices, and conduct described above in paragraphs 30 through 33 constitute violations of SEA Rules 15c3-5(b) and (e)(1) and BYX Rules 5.1, 5.2, 5.3, and 3.1.

#### **Inadequate Supervision of Customer Trading**

35. Although at various points during the Review Period CGMI implemented a series of post-trade surveillances and reviews to detect and prevent potentially violative or manipulative trading activity, including wash sales, CGMI failed to adequately supervise its Market Access Clients' trading to detect and prevent potentially violative activity during the Review Period.
36. During the period of November 4, 2010 through May 1, 2013, the Firm failed to implement any supervisory procedures or controls specifically designed to detect and prevent potentially violative wash sales. For example, the Firm failed to detect and investigate executions that occurred on the Exchange on several dates between November 2010 and May 2013 that appeared to have been potentially violative wash sales.
37. On May 1, 2013 the Firm implemented a Cross Trade Surveillance Report that generated an alert when a single account executed a buy and sell trade pair at the exact same millisecond, with an aggregate volume of 1,000 shares or more and only when the individual executions were for at least 100 shares. Accordingly, the parameters of this report were not reasonably designed to detect potentially violative wash sales, and thus the Firm also failed to detect and investigate executions that occurred on the Exchange on several dates after May 2013 that appeared to have been potentially violative wash sales.
38. On October 24, 2014, the Firm implemented an Equity Wash Trade Review ("Wash Trade Review") that generates alerts if the buy and sell-side executions are on behalf of the same account. Further, this review generates alerts if the buy and sell-side executions are on behalf of institutional accounts using a master account-subaccount structure as it aggregates every subaccount managed by a particular institutional investor. However, the review was not capable of detecting wash trades executed by retail traders using multiple accounts or accounts that would be required to be aggregated. Accordingly, the Wash Trade Review is not reasonably designed to detect and prevent potentially violative wash sales.
39. The acts, practices, and conduct described above in paragraphs 35 through 38, constitute violations of BYX Rules 5.1, 5.2, 5.3 and 3.1 between November 2010 and July 13, 2011, and SEA Rule 15c3-5(b) and (c)(2) and BYX Rules 5.1, 5.2, 5.3 and 3.1 between July 14, 2011 through at least December 2016.

- B. The Firm also consents to the imposition of the following sanctions:
1. A censure;
  2. A fine in the amount of \$1,000,000, of which \$115,000 is payable to BYX;<sup>8</sup> and
  3. An undertaking requiring the Firm to address the Market Access Rule deficiencies described in this AWC and to ensure that it has implemented controls and procedures that are reasonably designed to achieve compliance with the rules and regulations cited herein.
    - a. Within 120 days of the date of the issuance of the Notice of Acceptance of this AWC, CGMI shall submit to the COMPLIANCE ASSISTANT, LEGAL SECTION, MARKET REGULATION DEPARTMENT, 9509 KEY WEST AVENUE, ROCKVILLE, MD 20850, a written report, certified by a senior management Firm executive, to [MarketRegulationComp@finra.org](mailto:MarketRegulationComp@finra.org) that provides the following information:
      - i. A reference to this matter;
      - ii. A representation that the Firm has addressed each of the deficiencies described above; and
      - iii. The date(s) this was completed.
    - b. Between 90 and 120 days after the submission of the written report, the Firm shall submit a supplemental written report to FINRA to provide an update on the effectiveness of the enhancements and changes made by the Firm to its risk management controls and supervisory procedures as described in paragraph a(ii) above.
    - c. The Department of Market Regulation may, upon a showing of good cause and in its sole discretion, extend the time for compliance with these provisions.
  4. Acceptance of this AWC is conditioned upon acceptance of similar settlement agreements in related matters between CGMI and each of the following self-regulatory organizations: Bats BZX Exchange, Inc., The NASDAQ Stock Market LLC, the New York Stock Exchange LLC., NYSE Arca Equities, Inc., and FINRA.

The Firm agrees to pay the monetary sanction(s) upon notice that this AWC has been accepted and that such payment(s) are due and payable. It has submitted an Election of Payment form showing the method by which it proposes to pay the fine imposed.

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<sup>8</sup> The balance of the sanction will be paid to the SROs listed in Paragraph B.4.

The Firm specifically and voluntarily waives any right to claim that it is unable to pay, now or at any time hereafter, the monetary sanction(s) imposed in this matter.

The sanctions imposed herein shall be effective on a date set by BYX.

## II.

### WAIVER OF PROCEDURAL RIGHTS

The Firm specifically and voluntarily waives the following rights granted under BYX Rules:

- A. To have a Statement of Charges issued specifying the allegations against it;
- B. To be notified of the Statement of Charges and have the opportunity to answer the allegations in writing;
- C. To defend against the allegations in a disciplinary hearing before a Hearing Panel, to have a written record of the hearing made and to have a written decision issued; and
- D. To appeal any such decision to the Appeals Committee of the BYX's Board of Directors and then to the U.S. Securities and Exchange Commission and a U.S. Court of Appeals.

Further, the Firm specifically and voluntarily waives any right to claim bias or prejudgment of the Chief Regulatory Officer ("CRO"), in connection with his or her participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including acceptance or rejection of this AWC.

The Firm further specifically and voluntarily waives any right to claim that a person violated the ex parte prohibitions of BYX Rule 8.16, in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including its acceptance or rejection.

### III.

#### OTHER MATTERS

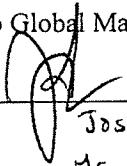
The Firm understands that:

- A. Submission of this AWC is voluntary and will not resolve this matter unless and until it has been reviewed and accepted by the CRO, pursuant to BYX Rule 8.3;
- B. If this AWC is not accepted, its submission will not be used as evidence to prove any of the allegations against the Firm; and
- C. If accepted:
  - 1. This AWC will become part of the Firm's permanent disciplinary record and may be considered in any future actions brought by BYX or any other regulator against the Firm;
  - 2. This AWC will be published on a website maintained by BYX in accordance with BYX Rule 8.18. In addition, this AWC will be made available through FINRA's public disclosure program in response to public inquiries about the Firm's disciplinary record; and
  - 3. The Firm may not take any action or make or permit to be made any public statement, including in regulatory filings or otherwise, denying, directly or indirectly, any finding in this AWC or create the impression that the AWC is without factual basis. The Firm may not take any position in any proceeding brought by or on behalf of BYX, or to which BYX is a party, that is inconsistent with any part of this AWC. Nothing in this provision affects the Firm's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which BYX is not a party.
- D. The Firm may attach a Corrective Action Statement to this AWC that is a statement of demonstrable corrective steps taken to prevent future misconduct. The Firm understands that it may not deny the charges or make any statement that is inconsistent with the AWC in this Statement. This Statement does not constitute factual or legal findings by BYX, nor does it reflect the views of BYX or its staff.

The undersigned, on behalf of the Firm, certifies that a person duly authorized to act on its behalf has read and understands all of the provisions of this AWC and has been given a full opportunity to ask questions about it; that it has agreed to the AWC's provisions voluntarily; and that no offer, threat, inducement, or promise of any kind, other than the terms set forth herein and the prospect of avoiding the issuance of a Complaint, has been made to induce the Firm to submit it.

5/19/17  
Date

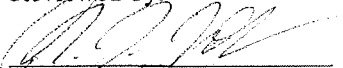
Citigroup Global Markets Inc., Respondent

By: 

Name: Joshua E. Levine

Title: Managing Director

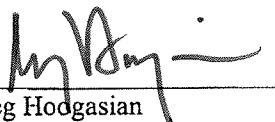
Reviewed by:



Michael D. Wolk, Esq.  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, DC 20005

Counsel for Respondent

5/30/2017  
Date



Greg Hodgasian  
Senior Vice President & Chief Regulatory Officer  
Bats BYX Exchange, Inc.



**BATS BZX EXCHANGE, INC.**  
**LETTER OF ACCEPTANCE, WAIVER AND CONSENT**  
**NO. 20130354629-02**

TO: Bats BZX Exchange, Inc.  
c/o Department of Market Regulation  
Financial Industry Regulatory Authority ("FINRA")

RE: Citigroup Global Markets Inc., Respondent  
Broker-Dealer  
CRD No. 7059

Pursuant to Rule 8.3 of the Rules of Bats BZX Exchange, Inc. ("BZX" or the "Exchange"), Citigroup Global Markets Inc. ("CGMI" or the "Firm") submits this Letter of Acceptance, Waiver and Consent ("AWC") for the purpose of proposing a settlement of the alleged rule violations described below. This AWC is submitted on the condition that, if accepted, BZX will not bring any future actions against the Firm alleging violations based on the same factual findings described herein.

**I.**

**ACCEPTANCE AND CONSENT**

- A. The Firm hereby accepts and consents, without admitting or denying the findings, and solely for the purposes of this proceeding and any other proceeding brought by or on behalf of BZX, or to which BZX is a party, prior to a hearing and without an adjudication of any issue of law or fact, to the entry of the following findings by BZX:

**Background**

1. CGMI, a wholly-owned subsidiary of Citigroup Inc., is headquartered in New York, New York. The Firm provides investment banking and financial advisory services. The Firm offers equity and debt financing, asset transaction, private equity, underwriting, institutional sales and trading, and mergers and acquisitions advisory services, and provides market access and execution services to the Firm's institutional market participants (the "CGMI Clients" or "Firm Clients") for a wide variety of products.
2. The Firm has been registered with BZX as an equities member since September 24, 2008 and with FINRA since October 16, 1936. Its registrations remain in effect. The Firm does not have a relevant disciplinary history.
3. Several letters were sent to the Firm beginning on April 17, 2015, and continuing through March 1, 2016, notifying the Firm of Market Regulation's investigations into the matters referenced herein.

### Summary

4. In Matter No. 20130354629, the Trading Examinations Unit of FINRA's Department of Market Regulation ("Market Regulation") reviewed, among other things, several Clearly Erroneous Execution ("CEE") petitions filed between July 27, 2012 and July 31, 2013; an Erroneous Order event that occurred on the Exchange on October 3, 2012; and the Firm's compliance with Rule 15c3-5 of the Securities Exchange Act of 1934 ("SEA") (the "Market Access Rule").<sup>1</sup>
5. In Matter No. 20140411564, the Trading Analysis Section of Market Regulation reviewed an Erroneous Order event that occurred on the Exchange on April 30, 2013; potentially violative or manipulative trading activity that occurred on the Exchange between November 4, 2010 and July 10, 2013; and the Firm's compliance with the Market Access Rule.
6. In Matter No. 20150480526, the Market Analysis Section of Market Regulation reviewed a CEE petition filed with the Exchange on November 7, 2013, and the Firm's compliance with the Market Access Rule.
7. The above matters, were part of investigations conducted by Market Regulation on behalf of the Exchange, FINRA and other self-regulatory organizations, including Bats BYX Exchange, Inc., The NASDAQ Stock Market LLC, New York Stock Exchange LLC, and NYSE Arca Equities, Inc. (collectively, the "SROs"), to review the Firm's compliance with the Market Access Rule and the supervisory rules of the relevant SROs, including BZX Rules 5.1, 5.2, 5.3, and 3.1, during the period of at least July 27, 2012 through at least December 2016 (collectively the "Review Period").<sup>2</sup>
8. As a result of these investigations, it was determined that during the Review Period, CGMI failed to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business.
9. Specifically, during different portions of the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, in violation of SEA Rules 15c3-5(b) and (c)(1)(ii), and BZX Rules 5.1, 5.2, 5.3, and 3.1.
10. Furthermore, during the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to ensure compliance with all regulatory requirements, including supervising

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<sup>1</sup> The SEC adopted Rule 15c3-5 effective July 14, 2011. See 17 C.F.R. § 240.15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010) (Final Rule Release).

<sup>2</sup> As discussed *infra*, certain supervisory violations for the Exchange began in November 2010.

customer trading to detect and prevent potentially violative and manipulative activity, in violation of SEA Rules 15c3-5(b) and (c)(2), and BZX Rules 5.1, 5.2, 5.3, and 3.1.

11. Additionally, during the Review Period, the Firm failed to establish, document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of SEA Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures, in violation of SEA Rule 15c3-5(b) and (e)(1), and BZX Rules 5.1, 5.2, 5.3, and 3.1.

### **Violative Conduct**

#### **Applicable Rules**

12. During the Review Period, SEA Rule 15c3-5(b) required broker-dealers that provide market access to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of their market access business.<sup>3</sup>
13. During the Review Period, SEA Rule 15c3-5(c)(1)(ii) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.
14. During the Review Period, SEA Rule 15c3-5(c)(2) specifically required market access broker-dealers to have regulatory risk management controls and supervisory procedures reasonably designed to ensure compliance with all regulatory requirements.
15. During the Review Period, SEA Rule 15c3-5(e) required a broker or dealer with market access to establish, document and maintain a system for regularly reviewing the effectiveness of its risk management controls and for promptly addressing any issues. SEA Rule 15c3-5(e)(1) required the broker or dealer to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of its risk management controls and supervisory procedures. Moreover, this rule required, among other things, that the review be conducted in accordance with written procedures and be documented. These provisions were intended to ensure that a broker or dealer "implements supervisory review mechanisms to support the effectiveness of its risk management controls and supervisory procedures on an ongoing basis."<sup>4</sup> Moreover, brokers or dealers with market access are required to adjust their controls and procedures "to

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<sup>3</sup> Rule 15c3-5 requires that, as gatekeepers to the financial markets, broker-dealers providing market access must "appropriately control the risks associated with market access so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system." 17 C.F.R. § 240.15c3-5, 75 Fed. Reg. 69792 (Nov. 15, 2010).

<sup>4</sup> 75 Fed. Reg. at 69811.

help assure their continued effectiveness in light of any changes in the broker-dealer's business or weaknesses that have been revealed."<sup>5</sup>

16. Rule 15c3-5 requires, among other things, that a broker-dealer with market access document its system of risk management controls and supervisory procedures that are designed to manage the financial, regulatory, and other risks of market access. The broker-dealer must preserve a copy of its supervisory procedures and "*a written description of its risk management controls*" as part of its books and records for the time period required by SEC Rule 17a-4(e)(7) (emphasis added).<sup>6</sup> The required written description is intended, among other things, to assist SEC and SRO staff to assess the broker-dealer's compliance with the rule. Exchange Act Release No. 34-63241, 75 Fed. Reg. 69792, 69812 (Nov. 15, 2010).
17. During the Review Period, BZX Rules 5.1, 5.2 and 5.3 required, among other things that each member firm establish, maintain and enforce written procedures to enable it to properly supervise the activities of associated persons to ensure compliance with applicable securities laws and regulations and BZX Rules.
18. During the Review Period, BZX Rule 3.1 provided that member firms, in the conduct of their business, shall observe high standards of commercial honor and just and equitable principles of trade.

#### **Overview of CGMI's Market Access Systems**

19. During the Review Period, CGMI provided and maintained market access, and executed more than 175 million trades for the Firm Clients.
20. During the Review Period, CGMI sales traders used several different order management systems ("OMS") and execution management systems ("EMS") to facilitate orders. Some examples of the OMSs used by the Firm to enter orders are NetX360, GSS, COMET Sales and C4, certain of which contain certain pre-trade controls associated with them that were developed by the Firm. Customer orders are generally routed through one of three different Firm EMSs, which are known as COMET, PTE, and ARES, which are used to manage orders. These OMSs or EMSs route the orders to an internal Alternative Trading System ("ATS") such as Citicross, directly to the market, through various Firm trading algorithms, or to the Firm's smart-order-router ("SOR"), that sends the order to various market centers. These OMSs and EMSs contained pre-trade controls and filters that are applied to orders. In addition, CGMI assigned and applied various credit limits and capital thresholds controls to the Firm Clients and trading desks.
21. Depending on the OMS or EMS, during the Review Period, CGMI generally implemented one or more of the following pre-trade controls: a single order notional

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<sup>5</sup> *Id.*

<sup>6</sup> See 17 C.F.R. § 240.15c3-5(b). Rule 17a-4(e)(7) requires a broker-dealer to maintain and preserve such description "until three years after the termination of the use of" the document. See 17 C.F.R. § 240.17a-4(e)(7).

control (*i.e.*, the value of an order, which is generally calculated by multiplying the share price by the amount of shares); a single order quantity control; and an average daily volume (“ADV”) control. Orders that triggered these controls are interrupted and held pending clearance of either soft-blocks, a combination of both soft-blocks and hard-blocks, or hard-blocks. The combination of controls and the limits at which these controls were set varied depending upon the OMS/EMS utilized or the trading desk.

### **Inadequate Pre-Trade Erroneous Order Controls**

22. Despite the various pre-trade controls designed to prevent the entry of erroneous orders that the Firm had in place during the Review Period, as described below, the Firm failed to implement reasonable pre-trade risk management controls as applied to certain orders submitted by certain CGMI Clients or trading desks. Further the Firm failed to establish and implement reasonable supervisory procedures designed to prevent the entry of erroneous orders during the Review Period, as set forth below.
23. Because at times CGMI’s pre-trade controls were unreasonable as applied to certain Firm Clients or trading desks, CGMI failed to prevent the transmission of certain erroneous equity orders to the SROs, which caused 12 clearly erroneous events, resulting in the filing of eight CEE petitions for six of the events (four events did not result in CEE petitions). These events caused one trading halt and several large price change alerts/price movements, including a price movement in one security of approximately 34%.
24. Deficiencies in CGMI’s pre-trade price and size controls resulted in the submission of the orders that caused the Erroneous Events. For example, the majority of the Firm’s controls during the Review Period employed soft-blocks that could easily be overridden by the Firm’s traders, thus causing the control to be ineffective without additional reasonable controls or review. Moreover, until June 2013, the Firm failed to capture (*i.e.*, retain) when soft-blocks for erroneous orders were triggered or overridden, and during the entire Review Period, the Firm failed to regularly review when these types of soft-blocks were triggered or overridden.
25. For example, on April 30, 2013, the Firm’s Equities Portfolio Trading Desk (“Equities Desk”) routed a 500,000 share sell order in “ABC” security with no limit price directly to the market. The order was entered to facilitate a large transfer on behalf of a Firm customer. The order was intended to have a Destination of “BLOCK,” which would route the order internally to the Firm’s Block Desk that would work the order into the market at competitive pricing. However, a Destination of “<E-Default>” was accidentally selected, which was located just below “BLOCK” in the scroll-down list of Destination options, and caused the order to be routed directly to the market. As a result of the order, the Firm sold 391,753 shares for a volume-weighted average price (“VWAP”) of \$23.7657 (for total value of approx. \$9.2 million). This caused the market price of ABC to drop from \$24.405 to a low of

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<sup>7</sup> A generic identifier has been used in place of the name of this security.

\$21.9301, an approximately a 10.14% decrease, and triggered a five minute single-stock circuit breaker, as well as price alerts on the Exchange. Although the order triggered the Firm's notional value soft-block set at \$5 million, it was easily bypassed by selecting a "Yes" button without confirming the details of the order. Because no hard-block existed, the Firm's pre-trade controls permitted the override and bypass of the soft-blocks and allowed the order to be executed without being subjected to additional Firm controls. Additionally, the Firm failed to retain and review the soft-blocks that were triggered for this erroneous order.

26. At times during the Review Period, the Firm failed in respect to some of its systems to implement reasonable controls that took into account the individual characteristics of a security. When it did implement an ADV control, it was set too high to be effective, or employed an excessive minimal share quantity threshold, and was therefore unreasonable without additional controls. For example, the ADV control for the COMET EMS was initially set at a level too high to be effective. Further, while the ADV control level was significantly reduced in March 2014, it was still unreasonable. In addition, an ADV control for at least one OMS contained a minimum share quantity threshold which was also exceedingly high. Similarly, when the Firm implemented single order notional and quantity controls, they were also set at thresholds that were unreasonable without additional controls.
27. In at least two separate areas during the Review Period, the Firm's pre-trade erroneous order controls wholly failed to apply. First, prior to September 20, 2013, if a Firm Client or trading desk entered an order outside of normal trading hours, the order was not exposed to any controls. Second, during the Review Period, while orders that were received by the Firm from a CGMI Client and routed through the Firm's smart-order-router (*i.e.*, a "parent order") were subject to the Firm's pre-trade erroneous order controls, if the parent order was thereafter broken into more than one smaller orders (*i.e.*, "child orders"), the child orders were not subject to a pre-trade price control.
28. Prior to the implementation of hard-blocks on May 17, 2013 in PTE and on December 16, 2013 in COMET, the Firm only employed soft-block controls for market orders entered by Firm Clients or trading desks, either intentionally or by mistake, which could be overridden without being subjected to either additional pre-trade controls or review. Further, prior to these dates, the Firm did not have an effective share quantity control in place that would block market orders from being sent directly to the market. Following the implementation of the market order hard-block, if a Firm Client or trading desk entered a market order in COMET, the Firm's systems would automatically convert the market order into a limit order priced 5% away from the previous sale, which was lowered to 3% in July 2015. However, the Firm's pre-trade share quantity control that applied to these converted limit orders was not effective to prevent the entry of erroneous orders.
29. Additionally, during the Review Period, the Firm's Convertible desk utilized a "Pairs Algorithm," that was designed to allow the desk to place orders that simultaneously buy one security while selling another security to minimize market impact on both legs of the trade. The quantities of each security to be bought or sold are entered manually

by the trader and then executed to maintain a hedged position. However, prior to August 12, 2013, the Pairs Algorithm did not possess a pre-trade control to prevent the entry of an erroneous order where a Firm trader erroneously entered an incorrect value for one side of the pairing, which could result in the entering of an erroneous order with an incorrect number of shares. On August 12, 2013, the Firm implemented a hard block that was triggered if the different legs in the Pairs Algorithm did not maintain a minimum ratio.

30. The acts, practices, and conduct described above in paragraphs 22 through 29 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(ii), and BZX Rules 5.1, 5.2, 5.3, and 3.1.

#### **Inadequate Periodic Review of Override Activity**

31. During the Review Period, the majority of the Firm's pre-trade equities controls for erroneous orders, credit limits and capital thresholds involved the use of soft-blocks. Prior to June 2013, however, the Firm failed to capture or retain any instance in which a soft-block was triggered or overridden. In June 2013, the Firm began capturing/retaining data regarding the occurrence and overrides of soft-blocks for erroneous orders and credit limits/capital thresholds.
32. Beginning in June 2013, the Firm began to review any instance in which a soft-block for credit limits/capital thresholds were triggered or overridden. However, during the entire Review Period, the Firm failed to regularly review instances in which soft-blocks for potential erroneous orders were triggered or overridden.
33. Although the Firm periodically reviewed the effectiveness of its pre-trade risk management controls and supervisory procedures, because the Firm was neither capturing nor reviewing the occurrence or the bypassing of its soft-blocks prior to June 2013, and because the Firm also failed to conduct a regular review of instances in which a soft-block was triggered or overridden for potentially erroneous orders during the Review Period, it was not possible for the Firm to assure the overall effectiveness of its risk management controls and supervisory procedures for the prevention of erroneous orders during the Review Period. Moreover, CGMI's failures in this regard also prevented the Firm from being able to adequately adjust their controls and procedures to help assure their continued effectiveness or to determine whether there were any weaknesses in their controls or procedures.
34. Additionally, notwithstanding that there were erroneous order events beginning in 2012 that triggered soft-blocks, and although there were regulatory inquiries into the erroneous events that began in 2013, the Firm failed to conduct regular reviews of when soft-blocks for potential erroneous orders were triggered or overridden during the Review Period. Accordingly, during the Review Period, the Firm failed to establish, document and maintain a reasonable system for regularly reviewing the effectiveness of its risk management controls and supervisory procedures.
35. The acts, practices, and conduct described above in paragraphs 31 through 34 constitute violations of SEA Rules 15c3-5(b) and (e)(1) and BZX Rules 5.1, 5.2, 5.3, and 3.1.

### **Inadequate Supervision of Customer Trading**

36. Although at various points during the Review Period CGMI implemented a series of post-trade surveillances and reviews to detect and prevent potentially violative or manipulative trading activity, including wash sales, CGMI failed to adequately supervise its Market Access Clients' trading to detect and prevent potentially violative activity during the Review Period.
37. During the period of November 4, 2010 through May 1, 2013, the Firm failed to implement any supervisory procedures or controls specifically designed to detect and prevent potentially violative wash sales. For example, the Firm failed to detect and investigate executions that occurred on the Exchange on several dates between November 2010 and May 2013 that appeared to have been potentially violative wash sales.
38. On May 1, 2013 the Firm implemented a Cross Trade Surveillance Report that generated an alert when a single account executed a buy and sell trade pair at the exact same millisecond, with an aggregate volume of 1,000 shares or more and only when the individual executions were for at least 100 shares. Accordingly, the parameters of this report were not reasonably designed to detect potentially violative wash sales, and thus the Firm also failed to detect and investigate executions that occurred on the Exchange on several dates after May 2013 that appeared to have been potentially violative wash sales.
39. On October 24, 2014, the Firm implemented an Equity Wash Trade Review ("Wash Trade Review") that generates alerts if the buy and sell-side executions are on behalf of the same account. Further, this review generates alerts if the buy and sell-side executions are on behalf of institutional accounts using a master account-subaccount structure as it aggregates every subaccount managed by a particular institutional investor. However, the review was not capable of detecting wash trades executed by retail traders using multiple accounts or accounts that would be required to be aggregated. Accordingly, the Wash Trade Review is not reasonably designed to detect and prevent potentially violative wash sales.
40. The acts, practices, and conduct described above in paragraphs 36 through 39, constitute violations of BZX Rules 5.1, 5.2, 5.3 and 3.1 between November 2010 and July 13, 2011, and SEA Rule 15c3-5(b) and (c)(2) and BZX Rules 5.1, 5.2, 5.3 and 3.1 between July 14, 2011 through at least December 2016.



B. The Firm also consents to the imposition of the following sanctions:

1. A censure;
2. A fine in the amount of \$1,000,000, of which \$160,000 is payable to BZX;<sup>8</sup> and
3. An undertaking requiring the Firm to address the Market Access Rule deficiencies described in this AWC and to ensure that it has implemented controls and procedures that are reasonably designed to achieve compliance with the rules and regulations cited herein.
  - a. Within 120 days of the date of the issuance of the Notice of Acceptance of this AWC, CGMI shall submit to the COMPLIANCE ASSISTANT, LEGAL SECTION, MARKET REGULATION DEPARTMENT, 9509 KEY WEST AVENUE, ROCKVILLE, MD 20850, a written report, certified by a senior management Firm executive, to [MarketRegulationComp@finra.org](mailto:MarketRegulationComp@finra.org) that provides the following information:
    - i. A reference to this matter;
    - ii. A representation that the Firm has addressed each of the deficiencies described above; and
    - iii. The date(s) this was completed.
  - b. Between 90 and 120 days after the submission of the written report, the Firm shall submit a supplemental written report to FINRA to provide an update on the effectiveness of the enhancements and changes made by the Firm to its risk management controls and supervisory procedures as described in paragraph a(ii) above.
  - c. The Department of Market Regulation may, upon a showing of good cause and in its sole discretion, extend the time for compliance with these provisions.
4. Acceptance of this AWC is conditioned upon acceptance of similar settlement agreements in related matters between CGMI and each of the following self-regulatory organizations: Bats BYX Exchange, Inc., The NASDAQ Stock Market LLC, the New York Stock Exchange LLC., NYSE Arca Equities, Inc., and FINRA.

The Firm agrees to pay the monetary sanction(s) upon notice that this AWC has been accepted and that such payment(s) are due and payable. It has submitted an Election of Payment form showing the method by which it proposes to pay the fine imposed.

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<sup>8</sup> The balance of the sanction will be paid to the SROs listed in Paragraph B.4.

The Firm specifically and voluntarily waives any right to claim that it is unable to pay, now or at any time hereafter, the monetary sanction(s) imposed in this matter.

The sanctions imposed herein shall be effective on a date set by BZX.

## II.

### WAIVER OF PROCEDURAL RIGHTS

The Firm specifically and voluntarily waives the following rights granted under BZX Rules:

- A. To have a Statement of Charges issued specifying the allegations against it;
- B. To be notified of the Statement of Charges and have the opportunity to answer the allegations in writing;
- C. To defend against the allegations in a disciplinary hearing before a Hearing Panel, to have a written record of the hearing made and to have a written decision issued; and
- D. To appeal any such decision to the Appeals Committee of the BZX's Board of Directors and then to the U.S. Securities and Exchange Commission and a U.S. Court of Appeals.

Further, the Firm specifically and voluntarily waives any right to claim bias or prejudgment of the Chief Regulatory Officer ("CRO"), in connection with his or her participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including acceptance or rejection of this AWC.

The Firm further specifically and voluntarily waives any right to claim that a person violated the ex parte prohibitions of BZX Rule 8.16, in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including its acceptance or rejection.

## III.

### OTHER MATTERS

The Firm understands that:

- A. Submission of this AWC is voluntary and will not resolve this matter unless and until it has been reviewed and accepted by the CRO, pursuant to BZX Rule 8.3;
- B. If this AWC is not accepted, its submission will not be used as evidence to prove any of the allegations against the Firm; and
- C. If accepted:
  - 1. This AWC will become part of the Firm's permanent disciplinary record and may be considered in any future actions brought by BZX or any other regulator against the Firm;

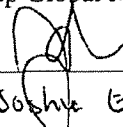
2. This AWC will be published on a website maintained by BZX in accordance with BZX Rule 8.18. In addition, this AWC will be made available through FINRA's public disclosure program in response to public inquiries about the Firm's disciplinary record; and
3. The Firm may not take any action or make or permit to be made any public statement, including in regulatory filings or otherwise, denying, directly or indirectly, any finding in this AWC or create the impression that the AWC is without factual basis. The Firm may not take any position in any proceeding brought by or on behalf of BZX, or to which BZX is a party, that is inconsistent with any part of this AWC. Nothing in this provision affects the Firm's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which BZX is not a party.

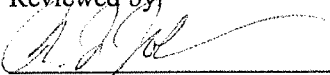
D. The Firm may attach a Corrective Action Statement to this AWC that is a statement of demonstrable corrective steps taken to prevent future misconduct. The Firm understands that it may not deny the charges or make any statement that is inconsistent with the AWC in this Statement. This Statement does not constitute factual or legal findings by BZX, nor does it reflect the views of BZX or its staff.

The undersigned, on behalf of the Firm, certifies that a person duly authorized to act on its behalf has read and understands all of the provisions of this AWC and has been given a full opportunity to ask questions about it; that it has agreed to the AWC's provisions voluntarily; and that no offer, threat, inducement, or promise of any kind, other than the terms set forth herein and the prospect of avoiding the issuance of a Complaint, has been made to induce the Firm to submit it.

5/19/17  
Date

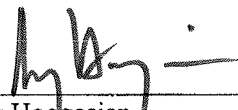
Citigroup Global Markets Inc., Respondent

By:   
Name: Joshua E. Levine  
Title: Managing Director

Reviewed by:  
  
Michael D. Wolk, Esq.  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, DC 20005

Counsel for Respondent

5/30/2017  
Date

  
Greg Hoogasian  
Senior Vice President & Chief Regulatory Officer  
Bats BZX Exchange, Inc.

**THE NASDAQ STOCK MARKET LLC**  
**LETTER OF ACCEPTANCE, WAIVER AND CONSENT**  
**NO. 20130354629-04**

**TO:** The NASDAQ Stock Market LLC  
c/o Department of Market Regulation  
Financial Industry Regulatory Authority ("FINRA")

**RE:** Citigroup Global Markets Inc., Respondent  
Broker-Dealer  
CRD No. 7059

Pursuant to Rule 9216 of The NASDAQ Stock Market LLC ("Nasdaq") Code of Procedure, Citigroup Global Markets Inc. ("CGMI" or the "Firm") submits this Letter of Acceptance, Waiver and Consent ("AWC") for the purpose of proposing a settlement of the alleged rule violations described below. This AWC is submitted on the condition that, if accepted, Nasdaq will not bring any future actions against the Firm alleging violations based on the same factual findings described herein.

**I.**

**ACCEPTANCE AND CONSENT**

- A.** The Firm hereby accepts and consents, without admitting or denying the findings, and solely for the purposes of this proceeding and any other proceeding brought by or on behalf of Nasdaq, or to which Nasdaq is a party, prior to a hearing and without an adjudication of any issue of law or fact, to the entry of the following findings by Nasdaq:

**Background**

1. CGMI, a wholly-owned subsidiary of Citigroup Inc., is headquartered in New York, New York. The Firm provides investment banking and financial advisory services. The Firm offers equity and debt financing, asset transaction, private equity, underwriting, institutional sales and trading, and mergers and acquisitions advisory services, and provides market access and execution services to the Firm's institutional market participants (the "CGMI Clients" or "Firm Clients") for a wide variety of products.
2. The Firm has been registered with Nasdaq since July 12, 2006, and with FINRA since October 16, 1936. Its registrations remain in effect. The Firm does not have a relevant disciplinary history.
3. Several letters were sent to the Firm beginning on April 17, 2015, and continuing through March 1, 2016, notifying the Firm of Market Regulation's investigations into the matters referenced herein.

### Summary

4. In Matter No. 20130354629, the Trading Examinations Unit of FINRA's Department of Market Regulation ("Market Regulation") reviewed several Clearly Erroneous Execution ("CEE") petitions that were filed and Erroneous Order events between July 27, 2012 and July 31, 2013; and the Firm's compliance with Rule 15c3-5 of the Securities Exchange Act of 1934 ("SEA") (the "Market Access Rule").<sup>1</sup>
5. In Matter No. 20130386863, the New York Equities Section of Market Regulation reviewed CEE petitions filed on November 21, 2013 and September 15, 2014 on Nasdaq; the Firm's pre-trade credit limit controls; and the Firm's compliance with the Market Access Rule.
6. In Matter No. 20140438051, the Chicago Equities Section of FINRA's Department of Market Regulation ("Market Regulation") reviewed, among other things, significant price movements that that occurred in a particular security on the Exchange on August 12, 2013; and the Firm's compliance with the Market Access Rule.
7. In Matter No. 20140411564, the Trading Analysis Section of Market Regulation reviewed, among other things, an Erroneous Order event that occurred on the Exchange on April 30, 2013; and the Firm's compliance with the Market Access Rule.
8. The above matters were part of investigations conducted by Market Regulation on behalf of the Exchange, FINRA and other self-regulatory organizations, including Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., New York Stock Exchange LLC, and NYSE Arca Equities, Inc. (collectively, the "SROs"), to review the Firm's compliance with the Market Access Rule and the supervisory rules of the relevant SROs, including Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12), during the period of least July 27, 2012 through at least December 2016 (the "Review Period").
9. As a result of these investigations, it was determined that during the Review Period, CGMI failed to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business.
10. Specifically, from the beginning of the Review Period until March 2014, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceeded appropriate pre-set credit thresholds, in violation of SEA Rules 15c3-5(b)

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<sup>1</sup> The SEC adopted Rule 15c3-5 effective July 14, 2011. See 17 C.F.R. § 240.15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010) (Final Rule Release).

and (c)(1)(i), and Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12).

11. Additionally, during different portions of the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, in violation of SEA Rules 15c3-5(b) and (c)(1)(ii), and Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12).
12. Furthermore, during the Review Period, the Firm failed to establish document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of SEA Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures, in violation of SEA Rule 15c3-5(b) and (e)(1), and Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12).

#### Violative Conduct

13. During the Review Period, SEA Rule 15c3-5(b) required broker-dealers that provide market access to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of their market access business.<sup>2</sup>
14. During the Review Period, SEA Rule 15c3-5(c)(1)(i) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceed appropriate pre-set credit or capital thresholds in the aggregate for each customer and the broker or dealer and, where appropriate, more finely-tuned by sector, security, or otherwise by rejecting orders if such orders would exceed the applicable credit or capital thresholds.
15. During the Review Period, SEA Rule 15c3-5(c)(1)(ii) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.
16. During the Review Period, SEA Rule 15c3-5(e) required a broker or dealer with market access to establish, document and maintain a system for regularly reviewing the effectiveness of its risk management controls and for promptly addressing any

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<sup>2</sup> Rule 15c3-5 requires that, as gatekeepers to the financial markets, broker-dealers providing market access must "appropriately control the risks associated with market access so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system." 17 C.F.R. § 240.15c3-5, 75 Fed. Reg. 69792 (Nov. 15, 2010).

issues. SEA Rule 15c3-5(e)(1) required the broker or dealer to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of its risk management controls and supervisory procedures. Moreover, this rule required, among other things, that the review be conducted in accordance with written procedures and be documented. These provisions were intended to ensure that a broker or dealer “implements supervisory review mechanisms to support the effectiveness of its risk management controls and supervisory procedures on an ongoing basis.”<sup>3</sup> Moreover, brokers or dealers with market access are required to adjust their controls and procedures “to help assure their continued effectiveness in light of any changes in the broker-dealer’s business or weaknesses that have been revealed.”<sup>4</sup>

17. Rule 15c3-5 requires, among other things, that a broker-dealer with market access document its system of risk management controls and supervisory procedures that are designed to manage the financial, regulatory, and other risks of market access. The broker-dealer must preserve a copy of its supervisory procedures and “a written description of its risk management controls” as part of its books and records for the time period required by SEC Rule 17a-4(e)(7) (emphasis added).<sup>5</sup> The required written description is intended, among other things, to assist SEC and SRO staff to assess the broker-dealer’s compliance with the rule. Exchange Act Release No. 34-63241, 75 Fed. Reg. 69792, 69812 (Nov. 15, 2010).
18. During the Review Period, Nasdaq Rule 3010(a) required, among other things, that each member firm “establish and maintain a system to supervise the activities of each . . . associated person[,]” and that such system must be “reasonably designed to achieve compliance with applicable securities laws and regulations and with applicable Nasdaq Rules.”
19. During the Review Period, Nasdaq Rules 2110 and 2010A provided that member firms, in the conduct of their business, shall observe high standards of commercial honor and just and equitable principles of trade.

#### Overview of CGMI’s Market Access Systems

20. During the Review Period, CGMI provided and maintained market access, and executed more than 175 million trades for the Firm Clients.
21. During the Review Period, CGMI sales traders used several different order management systems (“OMS”) and execution management systems (“EMS”) to facilitate orders. Some examples of the OMSs used by the Firm to enter orders are NetX360, GSS, COMET Sales and C4, certain of which contain certain pre-trade controls associated with them that were developed by the Firm. Customer orders are

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<sup>3</sup> 75 Fed. Reg. at 69811.

<sup>4</sup> *Id.*

<sup>5</sup> See 17 C.F.R. § 240.15c3-5(b). Rule 17a-4(e)(7) requires a broker-dealer to maintain and preserve such description “until three years after the termination of the use of” the document. See 17 C.F.R. § 240.17a-4(e)(7).

generally routed through one of three different Firm EMSs, which are known as COMET, PTE, and ARES, which are used to manage orders. These OMSs or EMSs route the orders to an internal Alternative Trading System (“ATS”) such as Citicross, directly to the market, through various Firm trading algorithms, or to the Firm’s smart-order-router (“SOR”), that sends the order to various market centers. These OMSs and EMSs contained pre-trade controls and filters that are applied to orders. In addition, CGMI assigned and applied various credit limits and capital thresholds controls to the Firm Clients and trading desks.

22. Depending on the OMS or EMS, during the Review Period, CGMI generally implemented one or more of the following pre-trade controls: a single order notional control (*i.e.*, the value of an order, which is generally calculated by multiplying the share price by the amount of shares); a single order quantity control; and an average daily volume (“ADV”) control. Orders that triggered these controls are interrupted and held pending clearance of either soft-blocks, a combination of both soft-blocks and hard-blocks, or hard-blocks. The combination of controls and the limits at which these controls were set varied depending upon the OMS/EMS utilized or the trading desk.

#### **Inadequate Pre-Trade Erroneous Order Controls**

23. Despite the various pre-trade controls designed to prevent the entry of erroneous orders that the Firm had in place during the Review Period, as described below, the Firm failed to implement reasonable pre-trade risk management controls as applied to certain orders submitted by certain CGMI Clients or trading desks. Further the Firm failed to establish and implement reasonable supervisory procedures designed to prevent the entry of erroneous orders during the Review Period, as set forth below.
24. Because at times CGMI’s pre-trade controls were unreasonable as applied to certain Firm Clients or trading desks, CGMI failed to prevent the transmission of certain erroneous equity orders to the SROs, which caused 12 clearly erroneous events, resulting in the filing of eight CEE petitions for six of the events (four events did not result in CEE petitions). These events caused one trading halt and several large price change alerts/price movements, including a price movement in one security of approximately 34%.
25. Deficiencies in CGMI’s pre-trade price and size controls resulted in the submission of the orders that caused the Erroneous Events. For example, the majority of the Firm’s controls during the Review Period employed soft-blocks that could easily be overridden by the Firm’s traders, thus causing the control to be ineffective without additional reasonable controls or review. Moreover, until June 2013, the Firm failed to capture (*i.e.*, retain) when soft-blocks for erroneous orders were triggered or overridden, and during the entire Review Period, the Firm failed to regularly review when these types of soft-blocks were triggered or overridden.



26. For example, on April 30, 2013, the Firm's Equities Portfolio Trading Desk ("Equities Desk") routed a 500,000 share sell order in "ABC"<sup>6</sup> security with no limit price directly to the market. The order was entered to facilitate a large transfer on behalf of a Firm customer. The order was intended to have a Destination of "BLOCK," which would route the order internally to the Firm's Block Desk that would work the order into the market at competitive pricing. However, a Destination of "<E-Default>" was accidentally selected, which was located just below "BLOCK" in the scroll-down list of Destination options, and caused the order to be routed directly to the market. As a result of the order, the Firm sold 391,753 shares for a volume-weighted average price ("VWAP") of \$23.7657 (for total value of approx. \$9.2 million). This caused the market price of ABC to drop from \$24.405 to a low of \$21.9301, an approximately a 10.14% decrease, and triggered a five minute single-stock circuit breaker, as well as price alerts on the Exchange. Although the order triggered the Firm's notional value soft-block set at \$5 million, it was easily bypassed by selecting a "Yes" button without confirming the details of the order. Because no hard-block existed, the Firm's pre-trade controls permitted the override and bypass of the soft-blocks and allowed the order to be executed without being subjected to additional Firm controls. Additionally, the Firm failed to retain and review the soft-blocks that were triggered for this erroneous order.
27. At times during the Review Period, the Firm failed in respect to some of its systems to implement reasonable controls that took into account the individual characteristics of a security. When it did implement an ADV control, it was set too high to be effective, or employed an excessive minimal share quantity threshold, and was therefore unreasonable without additional controls. For example, the ADV control for the COMET EMS was initially set at a level too high to be effective. Further, while the ADV control level was significantly reduced in March 2014, it was still unreasonable. In addition, an ADV control for at least one OMS contained a minimum share quantity threshold which was also exceedingly high. Similarly, when the Firm implemented single order notional and quantity controls, they were also set at thresholds that were unreasonable without additional controls.
28. For example, on July 27, 2012, the Firm received a CGMI Client's request to liquidate all positions in an account, which consisted of 20,000 shares of "DEF"<sup>7</sup> security. The 30-day ADV in DEF was approximately 2,000 shares. The Firm placed a held market order to sell 20,000 shares of DEF in one of the Firm's front-end order entry systems. The order was blocked by this system because the order quantity exceeded the applicable hard-block that applied to orders with a minimum share quantity that exceed 10% of the 30-day ADV. A Firm sales trader then broke up the order and submitted four individual 5,000 share market orders to sell, which were accepted for execution within a two minute period. The entry of these orders, each of which were two and one-half times larger than the 30-day ADV in DEF, were not blocked because they did not meet the minimum share threshold of the Firm's control, and thus were not subject to any ADV control. As a result of the entry of

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<sup>6</sup> A generic identifier has been used in place of the name of this security

<sup>7</sup> A generic identifier has been used in place of the name of this security.

these orders, the price of DEF traded down approximately 34%, caused a trading halt, and set a 52-week low.

29. In at least two separate areas during the Review Period, the Firm's pre-trade erroneous order controls wholly failed to apply. First, prior to September 20, 2013, if a Firm Client or trading desk entered an order outside of normal trading hours, the order was not exposed to any controls. Second, during the Review Period, while orders that were received by the Firm from a CGMI Client and routed through the Firm's smart-order-router (*i.e.*, a "parent order") were subject to the Firm's pre-trade erroneous order controls, if the parent order was thereafter broken into more than one smaller orders (*i.e.*, "child orders"), the child orders were not subject to a pre-trade price control.
30. Prior to the implementation of hard-blocks on May 17, 2013 in PTE and on December 16, 2013 in COMET, the Firm only employed soft-block controls for market orders entered by Firm Clients or trading desks, either intentionally or by mistake, which could be overridden without being subjected to either additional pre-trade controls or review. Further, prior to these dates, the Firm did not have an effective share quantity control in place that would block market orders from being sent directly to the market. Following the implementation of the market order hard-block, if a Firm Client or trading desk entered a market order in COMET, the Firm's systems would automatically convert the market order into a limit order priced 5% away from the previous sale, which was lowered to 3% in July 2015. However, the Firm's pre-trade share quantity control that applied to these converted limit orders was not effective to prevent the entry of erroneous orders.
31. Additionally, during the Review Period, the Firm's Convertible desk utilized a "Pairs Algorithm," that was designed to allow the desk to place orders that simultaneously buy one security while selling another security to minimize market impact on both legs of the trade. The quantities of each security to be bought or sold are entered manually by the trader and then executed to maintain a hedged position. However, prior to August 12, 2013, the Pairs Algorithm did not possess a pre-trade control to prevent the entry of an erroneous order where a Firm trader erroneously entered an incorrect value for one side of the pairing, which could result in the entering of an erroneous order with an incorrect number of shares. On August 12, 2013, the Firm implemented a hard block that was triggered if the different legs in the Pairs Algorithm did not maintain a minimum ratio.
32. The acts, practices, and conduct described above in paragraphs 23 through 31 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(ii), and Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12).

### **Inadequate Procedures to Ensure Compliance with Pre-Set Credit Limits**

33. During the Review Period, the Firm failed to establish and maintain a reasonable system to ensure that the CGMI Clients complied with pre-set credit limits. Once the Firm assigned a client to a given credit limit tier, the information was entered into its "Lighthouse system," which is a CGMI application that monitors total orders at the client "Grand Parent level" and keeps an ongoing tally of the daily aggregate credit limit utilized by each client. Lighthouse generated a soft-block alert whenever a client breached a preconfigured set of percentages, including early warnings, of that client's pre-set credit limit. Credit limit breach soft-block alerts were triggered at 85, 90, 100, and 110% of a given client's credit limit. Although some additional minor steps were required to bypass a soft-block triggered at 100 or 110%, the soft-blocks were able to be overridden and bypassed when triggered for a client's credit limit without being subjected to additional Firm controls or any supervisory review or oversight. Further, until June of 2013, the Firm was neither retaining nor reviewing when credit limit soft-blocks occurred or were bypassed, making these systems and controls unreasonable.
34. The acts, practices, and conduct described above in paragraph 33 constitutes violations of SEA Rules 15c3-5(b) and (c)(1)(i), and Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12).

### **Inadequate Periodic Review of Override Activity**

35. During the Review Period, the majority of the Firm's pre-trade equities controls for erroneous orders, credit limits and capital thresholds involved the use of soft-blocks. Prior to June 2013, however, the Firm failed to capture or retain any instance in which a soft-block was triggered or overridden. In June 2013, the Firm began capturing/retaining data regarding the occurrence and overrides of soft-blocks for erroneous orders and credit limits/capital thresholds.
36. Beginning in June 2013, the Firm began to review any instance in which a soft-block for credit limits/capital thresholds were triggered or overridden. However, during the entire Review Period, the Firm failed to regularly review instances in which soft-blocks for potential erroneous orders were triggered or overridden.
37. Although the Firm periodically reviewed the effectiveness of its pre-trade risk management controls and supervisory procedures, because the Firm was neither capturing nor reviewing the occurrence or the bypassing of its soft-blocks prior to June 2013, and because the Firm also failed to conduct a regular review of instances in which a soft-block was triggered or overridden for potentially erroneous orders during the Review Period, it was not possible for the Firm to assure the overall effectiveness of its risk management controls and supervisory procedures for the prevention of erroneous orders during the Review Period. Moreover, CGMI's failures in this regard also prevented the Firm from being able to adequately adjust

their controls and procedures to help assure their continued effectiveness or to determine whether there were any weaknesses in their controls or procedures.

38. Additionally, notwithstanding that there were erroneous order events beginning in 2012 that triggered soft-blocks, and although there were regulatory inquiries into the erroneous events that began in 2013, the Firm failed to conduct regular reviews of when soft-blocks for potential erroneous orders were triggered or overridden during the Review Period. Accordingly, during the Review Period, the Firm failed to establish, document and maintain a reasonable system for regularly reviewing the effectiveness of its risk management controls and supervisory procedures.
39. The acts, practices, and conduct described above in paragraphs 35 through 38 constitute violations of SEA Rules 15c3-5(b) and (e)(1) and Nasdaq Rules 3010 and 2110 (prior to 11/21/12) and Nasdaq Rule 2010A (on and after 11/21/12).

**B. The Firm also consents to the imposition of the following sanctions:**

1. A censure;
2. A fine in the amount of \$1,000,000, of which \$230,000 is payable to Nasdaq,<sup>8</sup> and
3. An undertaking requiring the Firm to address the Market Access Rule deficiencies described in this AWC and to ensure that it has implemented controls and procedures that are reasonably designed to achieve compliance with the rules and regulations cited herein.
  - a. Within 120 days of the date of the issuance of the Notice of Acceptance of this AWC, CGMI shall submit to the COMPLIANCE ASSISTANT, LEGAL SECTION, MARKET REGULATION DEPARTMENT, 9509 KEY WEST AVENUE, ROCKVILLE, MD 20850, a written report (the "written report"), certified by a senior management Firm executive, to [MarketRegulationComp@finra.org](mailto:MarketRegulationComp@finra.org) that provides the following information:
    - i. A reference to this matter;
    - ii. A representation that the Firm has addressed each of the deficiencies described above; and
    - iii. The date(s) this was completed.
  - b. Between 90 and 120 days after the submission of the written report, the Firm shall submit a supplemental written report to FINRA to provide an update on the effectiveness of the enhancements and changes made by the Firm to its risk

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<sup>8</sup> The balance of the sanction will be paid to the SROs listed in Paragraph B.4.

management controls and supervisory procedures as described in paragraph a(ii) above.

- c. The Department of Market Regulation may, upon a showing of good cause and in its sole discretion, extend the time for compliance with these provisions.
4. Acceptance of this AWC is conditioned upon acceptance of similar settlement agreements in related matters between CGMI and each of the following self-regulatory organizations: FINRA, Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., New York Stock Exchange LLC, and NYSE Arca Equities, Inc.

The Firm agrees to pay the monetary sanction(s) in accordance with its executed Election of Payment Form.

The Firm specifically and voluntarily waives any right to claim that it is unable to pay, now or at any time hereafter, the monetary sanction(s) imposed in this matter.

The sanctions imposed herein shall be effective on a date set by FINRA staff.

## II.

### WAIVER OF PROCEDURAL RIGHTS

The Firm specifically and voluntarily waives the following rights granted under Nasdaq's Code of Procedure:

- A. To have a Formal Complaint issued specifying the allegations against the Firm;
- B. To be notified of the Formal Complaint and have the opportunity to answer the allegations in writing;
- C. To defend against the allegations in a disciplinary hearing before a hearing panel, to have a written record of the hearing made and to have a written decision issued; and
- D. To appeal any such decision to the Nasdaq Review Council and then to the U.S. Securities and Exchange Commission and a U.S. Court of Appeals.

Further, the Firm specifically and voluntarily waives any right to claim bias or prejudgment of the Chief Regulatory Officer, the Nasdaq Review Council, or any member of the Nasdaq Review Council, in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including acceptance or rejection of this AWC.

The Firm further specifically and voluntarily waives any right to claim that a person violated the ex parte prohibitions of Rule 9143 or the separation of functions prohibitions of Rule 9144, in

connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including its acceptance or rejection.

### III.

#### OTHER MATTERS

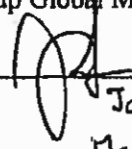
The Firm understands that:

- A. Submission of this AWC is voluntary and will not resolve this matter unless and until it has been reviewed and accepted by FINRA's Department of Market Regulation and the Nasdaq Review Council, the Review Subcommittee, or the Office of Disciplinary Affairs ("ODA"), pursuant to Nasdaq Rule 9216;
- B. If this AWC is not accepted, its submission will not be used as evidence to prove any of the allegations against the Firm; and
- C. If accepted:
  1. this AWC will become part of the Firm's permanent disciplinary record and may be considered in any future actions brought by Nasdaq or any other regulator against the Firm;
  2. Nasdaq may release this AWC or make a public announcement concerning this agreement and the subject matter thereof in accordance with Nasdaq Rule 8310 and IM-8310-3; and
  3. The Firm may not take any action or make or permit to be made any public statement, including in regulatory filings or otherwise, denying, directly or indirectly, any finding in this AWC or create the impression that the AWC is without factual basis. The Firm may not take any position in any proceeding brought by or on behalf of Nasdaq, or to which Nasdaq is a party, that is inconsistent with any part of this AWC. Nothing in this provision affects the Firm's right to take legal or factual positions in litigation or other legal proceedings in which Nasdaq is not a party.
- D. The Firm may attach a Corrective Action Statement to this AWC that is a statement of demonstrable corrective steps taken to prevent future misconduct. The Firm understands that it may not deny the charges or make any statement that is inconsistent with the AWC in this Statement. This Statement does not constitute factual or legal findings by Nasdaq, nor does it reflect the views of Nasdaq or its staff.

The undersigned, on behalf of the Firm, certifies that a person duly authorized to act on its behalf has read and understands all of the provisions of this AWC and has been given a full opportunity to ask questions about it; that it has agreed to the AWC's provisions voluntarily; and that no offer, threat, inducement, or promise of any kind, other than the terms set forth herein and the prospect of avoiding the issuance of a Complaint, has been made to induce the firm to submit it.

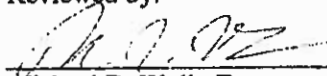
5/11/17  
Date

Citigroup Global Markets, Inc., Respondent

By:   
Name: Joshua E. Lemie

Title: Managing Director

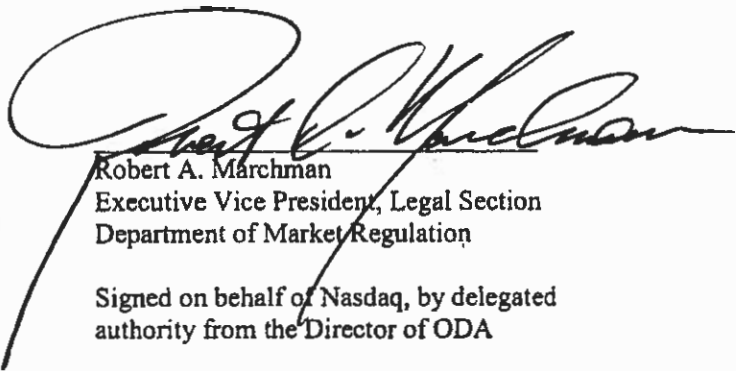
Reviewed by:

  
Michael D. Wolk, Esq.  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, DC 20005

Counsel for Respondent

Accepted by Nasdaq:

6/9/17  
Date

  
Robert A. Marchman  
Executive Vice President, Legal Section  
Department of Market Regulation

Signed on behalf of Nasdaq, by delegated  
authority from the Director of ODA

## NYSE ARCA, INC.

NYSE REGULATION,

Complainant,

v.

CITIGROUP GLOBAL MARKETS INC.,

Respondent.

FINRA Proceeding No. 20130354629-01<sup>1</sup>

June 9, 2017

### **Respondent violated:**

**(1) Exchange Act Rules 15c3-5(b) and (c)(1)(ii), and NYSE Arca Equities Rules 6.18 and 2010, by failing to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business, including pre-trade controls to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, or that indicate duplicative orders;**

**(2) Exchange Act Rules 15c3-5(b) and (e)(1), and NYSE Arca Equities Rules 6.18 and 2010, by failing to establish, document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of Exchange Act Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures; and,**

**(3) Exchange Act Rules 15c3-5(b) and (c)(2), and NYSE Arca Equities Rules 6.18 and 2010, by failing to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business to ensure compliance with all regulatory requirements, including supervising customer trading to detect and prevent potentially violative activity.**

**Consent to a censure, \$125,000 fine, and an undertaking.**

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<sup>1</sup> Includes FINRA Proceeding Nos. 20150447932, 20150467443, 20170532423, and 20140405791.



## **Appearances**

For the Complainant: Shawn R. Mallon, Esq., Kenneth R. Bozza, Esq., and Robert A. Marchman, Esq., FINRA Department of Market Regulation.

For the Respondent: Michael D. Wolk, Esq., Sidley & Austin LLP.

## **DECISION**

Citigroup Global Markets Inc. (“Citigroup Global” or “Firm”) and NYSE Arca, Inc. entered into an Offer of Settlement and Consent for the sole purpose of settling this disciplinary proceeding, without adjudication of any issues of law or fact, and without admitting or denying any allegations or findings referred to in the Offer of Settlement.<sup>2</sup> The Hearing Officer accepts the Offer of Settlement and Consent and issues this Decision in accordance with NYSE Arca Equities Rules.<sup>3</sup>

## **FINDINGS OF FACTS AND VIOLATIONS**

### **Background and Jurisdiction**

1. Citigroup Global, a wholly-owned subsidiary of Citigroup Inc., is headquartered in New York, New York. The Firm provides investment banking and financial advisory services. The Firm offers equity and debt financing, asset transaction, private equity, underwriting, institutional sales and trading, and mergers and acquisitions advisory services, and provides market access and execution services to the Firm’s institutional market participants (“Citigroup Global Clients”) for a wide variety of products.
2. The Firm has been registered as an Equities Trading Permit (“ETP”) Holder with NYSE Arca, Inc. (“NYSE Arca Equities” or the “Exchange”) since January 27, 2010, and with FINRA since December 17, 1936. Its registrations remain in effect. The Firm does not have a relevant disciplinary history.
3. Several Jurisdiction Letters were sent to the Firm beginning on April 17, 2015, and continuing through March 1, 2016, notifying the Firm of investigations by FINRA’s Department of Market Regulation (“Market Regulation”) into the matters referenced herein.

### **Overview**

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<sup>2</sup> FINRA’s Office of Hearing Officers reviewed the Offer of Settlement and Consent under the terms of a Regulatory Services Agreement (as amended) among NYSE Group, Inc., New York Stock Exchange LLC, NYSE Arca, Inc., NYSE MKT LLC, and FINRA.

<sup>3</sup> The facts, allegations, and conclusions contained in this Decision were taken from the executed Offer of Settlement and Consent.

4. In Matter No. 20150447932, the Chicago Equities Section of Market Regulation reviewed a Clearly Erroneous Execution (“CEE”) petition filed on the Exchange on September 15, 2014, and the Firm’s risk management controls and supervisory procedures for compliance with Rule 15c3-5 (the “Market Access Rule”) of the Securities Exchange Act of 1934 (“Exchange Act”).<sup>4</sup>
5. In Matter No. 20150467443, the Auction Marking and Manipulation Section of Market Regulation reviewed an Erroneous Order event that occurred on the Exchange on August 1, 2014, and the Firm’s compliance with the Market Access Rule.
6. In Matter No. 20170532423, the Chicago Equities Section of Market Regulation reviewed an Erroneous Order event that occurred on the Exchange on December 29, 2014, and the Firm’s compliance with the Market Access Rule.
7. In Matter No. 20140405791, the Chicago Equities Section of Market Regulation reviewed potentially violative or manipulative trading activity that occurred on the Exchange between January 1, 2011, and at least December 2016, and the Firm’s compliance with the Market Access Rule.
8. The above matters, as well as Matter No. 20130354629, were part of investigations conducted by Market Regulation on behalf of the Exchange, FINRA and other self-regulatory organizations, including The NASDAQ Stock Market LLC, Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., and the New York Stock Exchange LLC (collectively, the “SROs”), to review the Firm’s compliance with the Market Access Rule and the supervisory rules of the relevant SROs, including NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on or after 12/1/14), and NYSE Rule 2010 during the period of at least July 27, 2012, through at least December 2016 (the “Review Period”).<sup>5</sup>
9. As a result of these investigations, it was determined that during the Review Period, Citigroup Global failed to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business.
10. Specifically, during different portions of the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, in violation of Exchange Act Rules 15c3-5(b) and (c)(1)(ii), and NYSE Arca Equities Rules 6.18 and 2010.

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<sup>4</sup> The SEC adopted Rule 15c3-5 effective July 14, 2011. *See* 17 C.F.R. § 240.15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, 75 Fed. Reg. 69792 (Nov. 15, 2010) (Final Rule Release).

<sup>5</sup> As discussed *infra*, certain supervisory violations for the Exchange began in January 2011.

11. Furthermore, from the beginning of the Review Period until August 2012, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to ensure compliance with all regulatory requirements, including supervising customer trading to detect and prevent potentially violative and manipulative activity, in violation of Exchange Act Rules 15c3-5(b) and (c)(2), and NYSE Arca Equities Rules 6.18 and 2010.
12. Additionally, during the Review Period, the Firm failed to establish, document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of Exchange Act Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures, in violation of Exchange Act Rules 15c3-5(b) and (e)(1), and NYSE Arca Equities Rules 6.18 and 2010.

### **Violations**

13. During the Review Period, Exchange Act Rule 15c3-5(b) required broker-dealers that provide market access to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of their market access business.<sup>6</sup>
14. During the Review Period, Exchange Act Rule 15c3-5(c)(1)(ii) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.
15. During the Review Period, Exchange Act Rule 15c3-5(c)(2) specifically required market access broker-dealers to have regulatory risk management controls and supervisory procedures reasonably designed to ensure compliance with all regulatory requirements.
16. During the Review Period, Exchange Act Rule 15c3-5(e) required a broker or dealer with market access to establish, document, and maintain a system for regularly reviewing the effectiveness of its risk management controls and for promptly addressing any issues. Exchange Act Rule 15c3-5(e)(1) required the broker or dealer to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of its risk management controls and supervisory procedures. Moreover, this Rule required, among other things, that the review be conducted in accordance with written procedures and be documented. These provisions were intended to ensure that a broker or dealer "implements supervisory

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<sup>6</sup> Rule 15c3-5 requires that, as gatekeepers to the financial markets, broker-dealers providing market access must "appropriately control the risks associated with market access so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system." 17 C.F.R. § 240.15c3-5, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010).

review mechanisms to support the effectiveness of its risk management controls and supervisory procedures on an ongoing basis.”<sup>7</sup> In addition, brokers or dealers with market access are required to adjust their controls and procedures “to help assure their continued effectiveness in light of any changes in the broker-dealer’s business or weaknesses that have been revealed.”<sup>8</sup>

17. Exchange Act Rule 15c3-5 requires, among other things, that a broker-dealer with market access document its system of risk management controls and supervisory procedures that are designed to manage the financial, regulatory, and other risks of market access. The broker-dealer must preserve a copy of its supervisory procedures and “*a written description of its risk management controls*” as part of its books and records for the time period required by Exchange Act Rule 17a-4(e)(7) (emphasis added).<sup>9</sup> The required written description is intended, among other things, to assist SEC and SRO staff to assess the broker-dealer’s compliance with the rule.<sup>10</sup>
18. During the Review Period, NYSE Arca Equities Rule 6.18(a) required, among other things, that every ETP Holder supervise persons associated with it to ensure compliance with federal securities laws and the Constitution or the Rules of the Exchange. NYSE Arca Equities Rule 6.18(b) required each ETP Holder to “establish and maintain a system to supervise the activities of its associated persons and the operation of its business[,]” and that such system “must be reasonably designed to ensure compliance with applicable federal securities laws and regulations and NYSE Arca Equities Rules.” Moreover, NYSE Arca Equities Rule 6.18(c) required each ETP Holder to “establish, maintain, and enforce written procedures to supervise the business in which it engages and to supervise the activities of its associated persons that are reasonably designed to achieve compliance with applicable federal securities laws and regulations, and with the NYSE Arca Equities Rules.”
19. During the Review Period, NYSE Arca Equities Rule 2010 provided that ETP Holders, in the conduct of their business, shall observe high standards of commercial honor and just and equitable principles of trade.

### **Overview of Citigroup Global’s Market Access Systems**

20. During the Review Period, Citigroup Global provided and maintained market access, and executed more than 175 million trades for the Firm Clients.

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<sup>7</sup> 75 Fed. Reg. at 69811.

<sup>8</sup> *Id.*

<sup>9</sup> See 17 C.F.R. § 240.15c3-5(b). Rule 17a-4(e)(7) requires a broker-dealer to maintain and preserve such description “until three years after the termination of the use of” the document. See 17 C.F.R. § 240.17a-4(e)(7).

<sup>10</sup> Exchange Act Release No. 34-63241, 75 Fed. Reg. 69792, 69812 (Nov. 15, 2010).

21. During the Review Period, Citigroup Global sales traders used several different order management systems (“OMS”) and execution management systems (“EMS”) to facilitate orders. Some examples of the OMSs used by the Firm to enter orders are NetX360, GSS, COMET Sales and C4, certain of which contain certain pre-trade controls associated with them that were developed by the Firm. Customer orders are generally routed through one of three different Firm EMSs, which are known as COMET, PTE, and ARES, which are used to manage orders. These OMSs or EMSs route the orders to an internal Alternative Trading System (“ATS”) such as Citicross, directly to the market, through various Firm trading algorithms, or to the Firm’s smart-order-router (“SOR”), that sends the order to various market centers. These OMSs and EMSs contained pre-trade controls and filters that are applied to orders. In addition, Citigroup Global assigned and applied various credit limits and capital threshold controls to the Firm Clients and trading desks.
22. Depending on the OMS or EMS, during the Review Period, Citigroup Global generally implemented one or more of the following pre-trade controls: a single order notional control (*i.e.*, the value of an order, which is generally calculated by multiplying the share price by the amount of shares); a single order quantity control; and an average daily volume (“ADV”) control. Orders that triggered these controls are interrupted and held pending clearance of either soft-blocks, a combination of both soft-blocks and hard-blocks, or hard-blocks. The combination of controls and the limits at which these controls were set varied depending upon the OMS/EMS utilized or the trading desk.

#### **Inadequate Pre-Trade Erroneous Order Controls**

23. Despite the various pre-trade controls designed to prevent the entry of erroneous orders that the Firm had in place during the Review Period, as described below, the Firm failed to implement reasonable pre-trade risk management controls as applied to certain orders submitted by certain Citigroup Global Clients or trading desks. Further, the Firm failed to establish and implement reasonable supervisory procedures designed to prevent the entry of erroneous orders during the Review Period, as set forth below.
24. Because at times Citigroup Global’s pre-trade controls were unreasonable as applied to certain Firm Clients or trading desks, Citigroup Global failed to prevent the transmission of certain erroneous equity orders to the SROs, which caused 12 clearly erroneous events, resulting in the filing of eight CEE petitions for six of the events (four events did not result in CEE petitions). These events caused one trading halt and several large price change alerts/price movements, including a price movement in one security of approximately 34%.
25. Deficiencies in Citigroup Global’s pre-trade price and size controls resulted in the submission of the orders that caused the Erroneous Events. For example, the majority of the Firm’s controls during the Review Period employed soft-blocks that could easily be overridden by the Firm’s traders, thus causing the control to be ineffective without additional reasonable controls or review. Moreover, until June 2013, the Firm failed to

capture (*i.e.*, retain) when soft-blocks for erroneous orders were triggered or overridden, and during the entire Review Period, the Firm failed to regularly review when these types of soft-blocks were triggered or overridden.

26. For example on September 15, 2014, a Firm Client sent a SWAP buy order of 380,912 shares of “ABC”<sup>11</sup> security electronically to the Firm. The order was intended to include instructions that directed the use of a specially configured algorithm restricting the tradable quantity of the order to 10% of the ADV; however the Client failed to enter those instructions on the order. Consequently, the order was routed to the Firm’s Implementation Shortfall (“IS”) algorithm, which is designed to complete a client’s order by the close of the market, without regard to market volume for the security. Thereafter, the order was routed to the Exchange for execution, and a total of 336,400 shares of the order were executed. The execution of these shares, which represented more than 200% of the ADV in ABC, caused the price of ABC to move by more than 9% (the Firm thereafter filed a CEE petition with the Exchange). While on this date there were four separate Firm soft-blocks (*i.e.*, two for ADV and two for price movement) in place that were triggered as a result of the order, because no hard-block existed, the Firm’s pre-trade controls were simply overridden and bypassed thus allowing the order to be executed without being subjected to additional Firm controls. Additionally, the Firm failed to review the four soft-blocks that were triggered for this erroneous order.
27. At times during the Review Period, the Firm failed in respect to some of its systems to implement reasonable controls that took into account the individual characteristics of a security. When it did implement an ADV control, it was set too high to be effective, or employed an excessive minimal share quantity threshold, and was therefore unreasonable without additional controls. For example, the ADV control for the COMET EMS was initially set at a level too high to be effective. Further, while the ADV control level was significantly reduced in March 2014, it was still unreasonable. In addition, an ADV control for at least one OMS contained a minimum share quantity threshold which was also exceedingly high. Similarly, when the Firm implemented single order notional and quantity controls, they were also set at thresholds that were unreasonable without additional controls.
28. In at least two separate areas during the Review Period, the Firm’s pre-trade erroneous order controls wholly failed to apply. First, prior to September 20, 2013, if a Firm Client or trading desk entered an order outside of normal trading hours, the order was not exposed to any controls. Second, during the Review Period, while orders that were received by the Firm from a Citigroup Global Client and routed through the Firm’s smart-order-router (*i.e.*, a “parent order”) were subject to the Firm’s pre-trade erroneous order controls, if the parent order was thereafter broken into more than one smaller orders (*i.e.*, “child orders”), the child orders were not subject to a pre-trade price control.

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<sup>11</sup> A generic identifier has been used in place of the name of this security.

29. Prior to the implementation of hard-blocks on May 17, 2013 in PTE and on December 16, 2013 in COMET, the Firm only employed soft-block controls for market orders entered by Citigroup Global Clients or trading desks, either intentionally or by mistake, which could be overridden without being subjected to either additional pre-trade controls or review. Further, prior to these dates, the Firm did not have an effective share quantity control in place that would block market orders from being sent directly to the market. Following the implementation of the market order hard-block, if a Firm Client or trading desk entered a market order in COMET, the Firm's systems would automatically convert the market order into a limit order priced 5% away from the previous sale, which was lowered to 3% in July 2015. However, the Firm's pre-trade share quantity control that applied to these converted limit orders was not effective to prevent the entry of erroneous orders.
30. Additionally, during the Review Period, the Firm's Convertible desk utilized a "Pairs Algorithm," that was designed to allow the desk to place orders that simultaneously buy one security while selling another security to minimize market impact on both legs of the trade. The quantities of each security to be bought or sold are entered manually by the trader and then executed to maintain a hedged position. However, prior to August 12, 2013, the Pairs Algorithm did not possess a pre-trade control to prevent the entry of an erroneous order where a Firm trader erroneously entered an incorrect value for one side of the pairing, which could result in the entering of an erroneous order with an incorrect number of shares. On August 12, 2013, the Firm implemented a hard block that was triggered if the different legs in the Pairs Algorithm did not maintain a minimum ratio.
31. The acts, practices, and conduct described above in paragraphs 23 through 30 constitute violations of Exchange Act Rules 15c3-5(b) and (c)(1)(ii), and NYSE Arca Equities Rules 6.18 and 2010.

#### **Inadequate Periodic Review of Override Activity**

32. During the Review Period, the majority of the Firm's pre-trade equities controls for erroneous orders, credit limits and capital thresholds involved the use of soft-blocks. Prior to June 2013, however, the Firm failed to capture or retain any instance in which a soft-block was triggered or overridden. In June 2013, the Firm began capturing/retaining data regarding the occurrence and overrides of soft-blocks for erroneous orders and credit limits/capital thresholds.
33. Beginning in June 2013, the Firm began to review any instance in which a soft-block for credit limits/capital thresholds were triggered or overridden. However, during the entire Review Period, the Firm failed to regularly review instances in which soft-blocks for potential erroneous orders were triggered or overridden.
34. Although the Firm periodically reviewed the effectiveness of its pre-trade risk management controls and supervisory procedures, because the Firm was neither

capturing nor reviewing the occurrence or the bypassing of its soft-blocks prior to June 2013, and because the Firm also failed to conduct a regular review of instances in which a soft-block was triggered or overridden for potentially erroneous orders during the Review Period, it was not possible for the Firm to assure the overall effectiveness of its risk management controls and supervisory procedures for the prevention of erroneous orders during the Review Period. Moreover, Citigroup Global's failures in this regard also prevented the Firm from being able to adequately adjust their controls and procedures to help assure their continued effectiveness or to determine whether there were any weaknesses in their controls or procedures.

35. Additionally, notwithstanding that there were erroneous order events beginning in 2012 that triggered soft-blocks, and although there were regulatory inquiries into the erroneous events that began in 2013, the Firm failed to conduct regular reviews of when soft-blocks for potential erroneous orders were triggered or overridden during the Review Period. Accordingly, during the Review Period, the Citigroup Global failed to establish, document and maintain a reasonable system for regularly reviewing the effectiveness of its risk management controls and supervisory procedures.
36. The acts, practices, and conduct described above in paragraphs 32 through 35 constitute violations of Exchange Act Rules 15c3-5(b) and (e)(1) and NYSE Arca Equities Rules 6.18 and 2010.

### **Inadequate Supervision of Customer Trading**

37. Although at various points during the Review Period Citigroup Global implemented a series of post-trade surveillances and reviews to detect and prevent potentially violative or manipulative trading activity, including Marking-the-Close activity, the Firm failed to adequately supervise Citigroup Global Clients' trading to detect and prevent potentially violative activity during the period between January 1, 2011 and August 2012.
38. Specifically, while the Firm did have a Marking-the-Close surveillance during the period of January 2011 through August 2012, the surveillance only captured executions that occurred on a security's primary listed exchange, and did not review executions that occurred on alternative trading venues and other exchanges, or that occurred on NYSE Arca but were routed first through another exchange or through an alternative venue such as LAVA. In addition, even where there were executions on the primary listing exchange, the report contained a programming error that prevented it from functioning correctly.<sup>12</sup> As a result, the Firm's Marking-the-Close surveillance was not reasonably designed to detect potential instances of Marking-the-Close activity.<sup>13</sup>

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<sup>12</sup> The Firm adjusted its surveillance report in August 2012 to correctly capture all executions.

<sup>13</sup> For example, the Firm failed to detect and investigate executions that occurred on the Exchange on several dates in May and June 2011 that initially appeared to have been potential Marking-the-Close activity, but which were later determined not to be violative.



39. The acts, practices, and conduct described above in paragraphs 37 and 38, constitute violations of NYSE Arca Equities Rules 6.18 and 2010 from January 1, 2011, through July 13, 2011, and violated Exchange Act Rule 15c3-5(b) and (c)(2) and NYSE Arca Equities Rules 6.18 and 2010 from July 14, 2011, through August 2012.

### **ORDER**

Citigroup Global Markets Inc. violated:

(1) Exchange Act Rules 15c3-5(b) and (c)(1)(ii), and NYSE Arca Equities Rules 6.18 and 2010, by failing to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business, including pre-trade controls to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, or that indicate duplicative orders;

(2) Exchange Act Rules 15c3-5(b) and (e)(1), and NYSE Arca Equities Rules 6.18 and 2010, by failing to establish, document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of Exchange Act Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures; and,

(3) Exchange Act Rules 15c3-5(b) and (c)(2), and NYSE Arca Equities Rules 6.18 and 2010, by failing to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business to ensure compliance with all regulatory requirements, including supervising customer trading to detect and prevent potentially violative activity.

### **SANCTIONS**

Citigroup Global Markets Inc. is censured and fined \$125,000.<sup>14</sup>

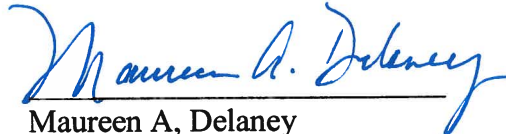
Citigroup Global Markets Inc. also is ordered to address the Market Access Rule deficiencies described in this Decision and to ensure that it has implemented controls and procedures that are reasonably designed to achieve compliance with the rules and regulations cited herein.

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<sup>14</sup> Under the Offer of Settlement and Consent, Citigroup Global Markets Inc. agreed to pay a total fine of \$1,000,000, of which \$125,000 shall be paid to NYSE Arca and the remaining amount shall be paid to Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., The NASDAQ Stock Market LLC, New York Stock Exchange, Inc., and FINRA, in accordance with the terms of parallel settlement agreements in related matters between the Firm and each of these SROs.

- a. Within 120 days this Decision, Citigroup Global Markets, Inc. shall submit to the COMPLIANCE ASSISTANT, Legal Section, Market Regulation Department, 9509 Key West Avenue, Rockville, MD 20850, a written report, certified by a senior management Firm executive, to [MarketRegulationComp@finra.org](mailto:MarketRegulationComp@finra.org), providing the following information:
- (i) A reference to this matter;
  - (ii) A representation that the Firm has addressed each of the deficiencies described in connection with this Decision; and
  - (iii) The date(s) this was completed.
- b. Between 90 and 120 days after the submission of the written report, the Firm shall submit a supplemental written report to FINRA to provide an update on the effectiveness of the enhancements and changes made by the Firm to its risk management controls and supervisory procedures as described in the paragraph a (ii) above.<sup>15</sup>

These sanctions are effective immediately.

  
Maureen A, Delaney  
Hearing Officer

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<sup>15</sup> The Department of Market Regulation may, upon a showing of good cause and in its sole discretion, extend the time for compliance with these provisions.

**THE NEW YORK STOCK EXCHANGE LLC  
LETTER OF ACCEPTANCE, WAIVER AND CONSENT  
NO. 20130354629-05**

**TO:** New York Stock Exchange LLC  
c/o Department of Market Regulation  
Financial Industry Regulatory Authority ("FINRA")

**RE:** Citigroup Global Markets Inc., Respondent  
Broker-Dealer  
CRD No. 7059

Pursuant to Rule 9216 of the New York Stock Exchange LLC ("NYSE" or the "Exchange") Code of Procedure, Citigroup Global Markets Inc. ("CGMI" or the "Firm") submits this Letter of Acceptance, Waiver and Consent ("AWC") for the purpose of proposing a settlement of the alleged rule violations described below. This AWC is submitted on the condition that, if accepted, NYSE will not bring any future actions against the Firm alleging violations based on the same factual findings described herein.

**I.**

**ACCEPTANCE AND CONSENT**

A. The Firm hereby accepts and consents, without admitting or denying the findings, and solely for the purposes of this proceeding and any other proceeding brought by or on behalf of NYSE, or to which NYSE is a party, prior to a hearing and without an adjudication of any issue of law or fact, to the entry of the following findings by NYSE:

**Background**

1. CGMI, a wholly-owned subsidiary of Citigroup Inc., is headquartered in New York, New York. The Firm provides investment banking and financial advisory services. The Firm offers equity and debt financing, asset transaction, private equity, underwriting, institutional sales and trading, and mergers and acquisitions advisory services, and provides market access and execution services to the Firm's institutional market participants (the "CGMI Clients" or "Firm Clients") for a wide variety of products.
2. The Firm has been registered with NYSE since November 17, 1982, and with FINRA since October 16, 1936. Its registrations remain in effect. The Firm does not have a relevant disciplinary history.
3. Several letters were sent to the Firm beginning on April 17, 2015, and continuing through March 1, 2016, notifying the Firm of Market Regulation's investigations into the matters referenced herein.

### Summary

4. In Matter No. 20130354629, the Trading Examinations Unit of FINRA's Department of Market Regulation ("Market Regulation") reviewed several Clearly Erroneous Execution ("CEE") petitions that were filed between July 27, 2012 and July 31, 2013; an Erroneous Order event that occurred on the Exchange on October 31, 2012; the Firm's pre-trade capital thresholds in connection with the trading desk involved in the Erroneous Order event on the Exchange; and the Firm's compliance with Rule 15c3-5 of the Securities Exchange Act of 1934 ("SEA") (the "Market Access Rule").<sup>1</sup>
5. In Matter No. 20130386863, the New York Equities Section of Market Regulation reviewed CEE petitions filed between November 21, 2013 and September 15, 2014; an Erroneous Order Event that occurred on the Exchange on March 15, 2013; the credit limit the Firm assigned to the Market Access Client in connection with the Erroneous Order event on the Exchange; the Firm's pre-trade credit limit controls; and the Firm's compliance with the Market Access Rule.
6. The above matters were part of investigations conducted by Market Regulation on behalf of the Exchange, FINRA and other self-regulatory organizations, including The NASDAQ Stock Market LLC, Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., and NYSE Arca Equities, Inc. (collectively, the "SROs"), to review the Firm's compliance with the Market Access Rule and the supervisory rules of the relevant SROs, including NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on or after 12/1/14), and NYSE Rule 2010 during the period of least July 27, 2012 through at least December 2016 (the "Review Period").
7. As a result of these investigations, it was determined that during the Review Period, CGMI failed to establish, document, and maintain a system of risk management controls and supervisory procedures, including written supervisory procedures and an adequate system of follow-up and review, reasonably designed to manage the financial, regulatory, and other risks of its market access business.
8. Specifically, from the beginning of the Review Period until July 2014, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceeded appropriate pre-set credit and capital thresholds, in violation of SEA Rules 15c3-5(b) and (c)(1)(i), and NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on and after 12/1/14), and NYSE Rule 2010.
9. Additionally, during different portions of the Review Period, the Firm failed to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders by rejecting orders that exceed appropriate price or size parameters, in violation of

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<sup>1</sup> The SEC adopted Rule 15c3-5 effective July 14, 2011. See 17 C.F.R. § 240 15c3-5, *Risk Management Controls for Brokers or Dealers with Market Access*, 75 Fed. Reg. 69792, 69792 (Nov. 15, 2010) (Final Rule Release).

SEA Rules 15c3-5(b) and (c)(1)(ii), and NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on and after 12/1/14), and NYSE Rule 2010.

10. Furthermore, during the Review Period, the Firm failed to establish document, and maintain a reasonably designed system for regularly reviewing the effectiveness of the risk management controls and supervisory procedures required by paragraphs (b) and (c) of SEA Rule 15c3-5, to assure the overall effectiveness of the Firm's risk management controls and supervisory procedures, in violation of SEA Rule 15c3-5(b) and (e)(1), and NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on and after 12/1/14), and NYSE Rule 2010.

### Violative Conduct

#### Applicable Rules

11. During the Review Period, SEA Rule 15c3-5(b) required broker-dealers that provide market access to establish, document, and maintain a system of risk management controls and supervisory procedures reasonably designed to manage the financial, regulatory, and other risks of their market access business.<sup>2</sup>
12. During the Review Period, SEA Rule 15c3-5(c)(1)(i) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that exceed appropriate pre-set credit or capital thresholds in the aggregate for each customer and the broker or dealer and, where appropriate, more finely-tuned by sector, security, or otherwise by rejecting orders if such orders would exceed the applicable credit or capital thresholds.
13. During the Review Period, SEA Rule 15c3-5(c)(1)(ii) specifically required market access broker-dealers to have financial risk management controls and supervisory procedures reasonably designed to prevent the entry of erroneous orders, by rejecting orders that exceed appropriate price or size parameters, on an order-by-order basis or over a short period of time, or that indicate duplicative orders.
14. During the Review Period, SEA Rule 15c3-5(e) required a broker or dealer with market access to establish, document and maintain a system for regularly reviewing the effectiveness of its risk management controls and for promptly addressing any issues. SEA Rule 15c3-5(e)(1) required the broker or dealer to review, no less frequently than annually, the business activity of the broker or dealer in connection with market access to assure the overall effectiveness of its risk management controls and supervisory procedures. Moreover, this rule required, among other things, that the review be conducted in accordance with written procedures and be documented. These provisions were intended to ensure that a broker or dealer "implements

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<sup>2</sup> Rule 15c3-5 requires that, as gatekeepers to the financial markets, broker-dealers providing market access must "appropriately control the risks associated with market access so as not to jeopardize their own financial condition, that of other market participants, the integrity of trading on the securities markets, and the stability of the financial system." 17 C.F.R. § 240.15c3-5, 75 Fed. Reg. 69792 (Nov. 15, 2010).

supervisory review mechanisms to support the effectiveness of its risk management controls and supervisory procedures on an ongoing basis.”<sup>3</sup> Moreover, brokers or dealers with market access are required to adjust their controls and procedures “to help assure their continued effectiveness in light of any changes in the broker-dealer’s business or weaknesses that have been revealed.”<sup>4</sup>

15. Rule 15c3-5 requires, among other things, that a broker-dealer with market access document its system of risk management controls and supervisory procedures that are designed to manage the financial, regulatory, and other risks of market access. The broker-dealer must preserve a copy of its supervisory procedures and “a written description of its risk management controls” as part of its books and records for the time period required by SEC Rule 17a-4(e)(7) (emphasis added).<sup>5</sup> The required written description is intended, among other things, to assist SEC and SRO staff to assess the broker-dealer’s compliance with the rule. Exchange Act Release No. 34-63241, 75 Fed. Reg. 69792, 69812 (Nov. 15, 2010).
16. During the Review Period, NYSE Rule 342 (for conduct prior to 12/1/14) and NYSE Rule 3110 (for conduct on and after 12/1/14) required, among other things, each member organization shall establish and maintain a system to supervise the activities of each associated person, including written supervisory procedures, that were reasonably designed to achieve compliance with applicable securities laws and regulations, and with applicable Exchange rules.
17. During the Review Period, NYSE Rule 2010 provided that a member organization, in the conduct of its business, shall observe high standards of commercial honor and just and equitable principles.

#### Overview of CGMI’s Market Access Systems

18. During the Review Period, CGMI provided and maintained market access, and executed more than 175 million trades for the Firm Clients.
19. During the Review Period, CGMI sales traders used several different order management systems (“OMS”) and execution management systems (“EMS”) to facilitate orders. Some examples of the OMSs used by the Firm to enter orders are NetX360, GSS, COMET Sales and C4, certain of which contain certain pre-trade controls associated with them that were developed by the Firm. Customer orders are generally routed through one of three different Firm EMSs, which are known as COMET, PTE, and ARES, which are used to manage orders. These OMSs or EMSs route the orders to an internal Alternative Trading System (“ATS”) such as Citicross, directly to the market, through various Firm trading algorithms, or to the Firm’s smart-order-router (“SOR”), that sends the order to various market centers. These

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<sup>3</sup> 75 Fed. Reg. at 69811.

<sup>4</sup> *Id.*

<sup>5</sup> See 17 C.F.R. § 240.15c3-5(b). Rule 17a-4(e)(7) requires a broker-dealer to maintain and preserve such description “until three years after the termination of the use of” the document. See 17 C.F.R. § 240.17a-4(e)(7).

OMSs and EMSs contained pre-trade controls and filters that are applied to orders. In addition, CGMI assigned and applied various credit limits and capital thresholds controls to the Firm Clients and trading desks.

20. Depending on the EMS, during the Review Period, CGMI generally implemented one or more of the following pre-trade controls: a single order notional control (*i.e.*, the value of an order, which is generally calculated by multiplying the share price by the amount of shares); a single order quantity control; an average daily volume (“ADV”) control; soft-blocks; a combination of both soft-blocks and hard-blocks; and a market order hard-block. The combination of controls and the limits at which these controls were set varied depending upon the EMS utilized or the trading desk.

#### **Inadequate Pre-Trade Erroneous Order Controls**

21. Despite the various pre-trade controls designed to prevent the entry of erroneous orders that the Firm had in place during the Review Period, as described below, the Firm failed to implement reasonable pre-trade risk management controls as applied to certain orders submitted by certain CGMI Clients or trading desks. Further the Firm failed to establish and implement reasonable supervisory procedures designed to prevent the entry of erroneous orders during the Review Period, as set forth below.
22. Because at times CGMI’s pre-trade controls were unreasonable as applied to certain Firm Clients or trading desks, CGMI failed to prevent the transmission of certain erroneous equity orders to the SROs, which caused 12 clearly erroneous events, resulting in the filing of eight CEE petitions for six of the events (four events did not result in CEE petitions). These events caused one trading halt and several large price change alerts/price movements, including a price movement in one security of approximately 34%.
23. Deficiencies in CGMI’s pre-trade price and size controls resulted in the submission of the orders that caused the Erroneous Events. For example, the majority of the Firm’s controls during the Review Period employed soft-blocks that could easily be overridden by the Firm’s traders, thus causing the control to be ineffective without additional reasonable controls or review. Moreover, until June 2013, the Firm failed to capture (*i.e.*, retain) when soft-blocks for erroneous orders were triggered or overridden, and during the entire Review Period, the Firm failed to regularly review when these types of soft-blocks were triggered or overridden.
24. For example, on October 31, 2012, the Firm’s Principal Program Trading (“PPT”) desk<sup>6</sup> entered a series of 56 orders on behalf of a Firm Client in an attempt to create a basket of stocks (“Erroneous Basket”). The PPT desk attempted to hedge the position and entered its hedge order via the Firm’s ARES EMS. Immediately after placing the orders, a Firm trader on the floor of the Exchange realized that the Firm’s algorithm had significantly miscalculated the basket and the Firm cancelled the basket before

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<sup>6</sup> The PPT desk executes program orders by providing liquidity guarantees to the customer-facing US Agency Programs desk on a principal basis.

the orders were executed. The miscalculation of the basket was due to the EMS defaulting to a fallback logic that contained a coding error. The orders were on average about 328% over the 30-day ADV of the symbols in the Erroneous Basket and had an approximately total value of \$13 billion dollars. While not executed and cancelled less than a minute after entry, the Erroneous Basket order information was disseminated by the New York Stock Exchange LLC via its Order Imbalance Information data feed and caused a significant imbalance near the close. The large imbalances had the effect of exerting artificial downward pricing pressure on all 56 symbols. While on this date there were three soft-blocks (quantity, notional value and price movement) in place that would have been triggered as a result of the Erroneous Basket, because no hard-block existed, the soft-blocks were overridden and the basket was sent electronically for execution without being subjected to any further review or controls.<sup>7</sup> Additionally, the Firm failed to retain and review the soft-blocks that were triggered for this Erroneous Basket.

25. Additionally, on March 15, 2013, a CGMI Client placed an order to buy 1.8 million shares of "ABC" security that was listed on the Toronto Stock Exchange. The Firm's Agency Programs Desk inadvertently entered a Market on Close ("MOC") order for "DEF", which was a security with a similar name that was listed on the Exchange, rather than ABC. The order, which was valued at approximately \$36 million, was routed through the Firm's PTE EMS to the Exchange. During this time period, the 20-day ADV for DEF was approximately 80,780 shares, thus CGMI's order was over 22 times the ADV. As a result of the order, the Exchange systems published a buy-side order imbalance of 1.8 million shares based upon the price of the order placed in DEF. Given the significant size of the MOC/LOC buy-side imbalance, the market responded accordingly with upward pressure on the stock of approximately 6%. While on this date there were two soft-blocks (quantity and notional value) in place that would have been triggered as a result of these orders, because no hard-block existed, the Firm's soft-block controls were simply overridden and bypassed without being subjected to additional Firm controls. Additionally, the Firm failed to retain and review the soft-blocks that were triggered for this erroneous order.

26. At times during the Review Period, the Firm failed in respect to some of its systems to implement reasonable controls that took into account the individual characteristics of a security. When it did implement an ADV control, it was set too high to be effective, or employed an excessive minimal share quantity threshold, and was therefore unreasonable without additional controls. For example, the ADV control for the COMET EMS was initially set at a level too high to be effective. Further, while the ADV control level was significantly reduced in March 2014, it was still unreasonable. In addition, an ADV control for at least one OMS contained a minimum share quantity threshold which was also exceedingly high. Similarly, when

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<sup>7</sup> In July 2013, the Firm implemented hard blocks in ARES and in March 2014, implemented hard blocks in PTE and COMET.

<sup>8</sup> A generic identifier has been used in place of the name of this security.

<sup>9</sup> A generic identifier has been used in place of the name of this security.



the Firm implemented single order notional and quantity controls, they were also set at thresholds that were unreasonable without additional controls.

27. In at least two separate areas during the Review Period, the Firm's pre-trade erroneous order controls wholly failed to apply. First, prior to September 20, 2013, if a Firm Client or trading desk entered an order outside of normal trading hours, the order was not exposed to any controls. Second, during the Review Period, while orders that were received by the Firm from a CGMI Client and routed through the Firm's smart-order-router (*i.e.*, a "parent order") were subject to the Firm's pre-trade erroneous order controls, if the parent order was thereafter broken into more than one smaller orders (*i.e.*, "child orders"), the child orders were not subject to a pre-trade price control.
28. Prior to the implementation of hard-blocks on May 17, 2013 in PTE and on December 16, 2013 in COMET, the Firm only employed soft-block controls for market orders entered by Firm Clients or trading desks, either intentionally or by mistake, which could be overridden without being subjected to either additional pre-trade controls or review. Further, prior to these dates, the Firm did not have an effective share quantity control in place that would block market orders from being sent directly to the market. Following the implementation of the market order hard-block, if a Firm Client or trading desk entered a market order in COMET, the Firm's systems would automatically convert the market order into a limit order priced 5% away from the previous sale, which was lowered to 3% in July 2015. However, the Firm's pre-trade share quantity control that applied to these converted limit orders was not effective to prevent the entry of erroneous orders.
29. Additionally, during the Review Period, the Firm's Convertible desk utilized a "Pairs Algorithm," that was designed to allow the desk to place orders that simultaneously buy one security while selling another security to minimize market impact on both legs of the trade. The quantities of each security to be bought or sold are entered manually by the trader and then executed to maintain a hedged position. However, prior to August 12, 2013, the Pairs Algorithm did not possess a pre-trade control to prevent the entry of an erroneous order where a Firm trader erroneously entered an incorrect value for one side of the pairing, which could result in the entering of an erroneous order with an incorrect number of shares. On August 12, 2013, the Firm implemented a hard block that was triggered if the different legs in the Pairs Algorithm did not maintain a minimum ratio..
30. The acts, practices, and conduct described above in paragraphs 21 through 29 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(ii), and NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on and after 12/1/14), and NYSE Rule 2010.

#### **Inadequate Pre-Set Capital Thresholds**

31. During the Review Period prior to March 2014, for at least one of the Firm's trading desks, the Firm failed to establish and implement risk management controls and supervisory procedures reasonably designed to prevent the entry of orders that

exceeded appropriate pre-set capital thresholds by rejecting orders if such orders would exceed the applicable capital thresholds set by the broker-dealer.

32. During the Review Period, the Firm maintained and monitored capital/credit thresholds for both its internal trading desks and for Firm Clients within its "Lighthouse" system. Alerts generated by Lighthouse were sent to appropriate compliance and trading supervisors via email, and also generated pop-up notices within certain systems that subscribed to the Lighthouse alerts. When either a Firm trading desk or a Firm Client exceeded 80% of the set threshold (which includes executed and open orders), an alert was generated, and additional alerts were generated at 90%, 100%, and 110% of the threshold. When a desk or Firm Client reached 100% or greater of their credit/capital limit, any new order required a Firm trader, or a sales trader in the case of a Firm Client, to verify additional orders by selecting one of three pre-set reasons (*i.e.*, (1) limit increase pending, e-mail approval obtained; (2) user override, will discuss with supervisor; or (3) system issue).
33. The Firm established an internal pre-set capital threshold of \$10 billion for the PPT desk during the Review Period. Prior to March 2014 in PTE and COMET, and prior to July 2013 in ARES, the capital thresholds applicable to PPT would not prevent the entry of an order that breached PPT's \$10 billion dollar limit, or a series of orders that were placed simultaneously even if the orders breached PPT's \$10 billion dollar limit. Due to a coding error, an alert would only be generated after the entry of an order or orders that exceeded the \$10 billion limit.
34. Because of the Firm's failure to configure its controls to prevent the entry of orders that would cause a pre-set capital threshold to be breached, the Firm's pre-trade risk management controls and supervisory procedures in ARES failed to prevent the entry of the \$13 billion Erroneous Basket on October 31, 2012, which was \$3 billion greater than the maximum \$10 billion capital threshold set for the PPT desk.<sup>10</sup> As set forth above, these orders caused the Exchange to disseminate a significant imbalance near the close before the orders were cancelled.
35. The acts, practices, and conduct described above in paragraphs 31 through 34 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(i), and NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on and after 12/1/14), and NYSE Rule 2010.

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<sup>10</sup> By March 2014, the Firm had implemented hard-blocks for all its execution management systems that would prevent the entry of orders that would exceed a pre-set capital threshold on desks such as the PPT desk.

**Inadequate Pre-Set Credit Limits and Procedures to Ensure Compliance with Pre-Set Credit Limits**

36. During the Review Period, the Firm failed to conduct the required due diligence to establish reasonable credit limits for certain of its Clients.
37. For example, the Firm failed to conduct the required due diligence to establish the appropriate credit limit for a certain Client whose order was responsible for the erroneous order event in DEF on March 15, 2013. On March 15, 2013, the Firm primarily used the following three factors to establish appropriate credit limits for CGMI Clients: (1) the client's research rating; (2) the client's street-wide equity volume; and (3) equity commissions paid by the client to the Firm. Using these factors, CGMI's Clients were generally placed into one of three credit limit tiers (*i.e.*, "Silver" - \$500 million; "Gold" - \$1 Billion; and "Platinum" - \$2 Billion), but the Firm also maintained a lower fourth credit limit tier of \$250 million. Any new CGMI Clients, absent a specific instruction from management, was initially to be given the lowest credit limit of \$250 million at the start of trading.<sup>11</sup> The CGMI Client that placed the 1.8 million share buy order in ABC on March 15, 2013, which was subsequently erroneously entered by the Firm in DEF, had been placed in the Silver Tier with a \$500 million dollar credit limit. However, this client was a broker-dealer subsidiary that was owned by a foreign bank that had been recently nationalized. Further, the client had no previous trading history with the Firm. Given these facts, the setting of the \$500 million credit limit for this client was not reasonable. Further, the Firm failed to establish it conducted the required due diligence to establish the credit limit for this CGMI Client. Moreover, the Firm's failure to have any credit limit tier below \$250 million for its clients was also not reasonable.
38. In addition, during the Review Period the Firm failed to establish and maintain a reasonable system to ensure that the CGMI Clients complied with pre-set credit limits. Once the Firm assigned a client to a given credit limit tier, the information was entered into its "Lighthouse system," which is a CGMI application that monitors total orders at the client "Grand Parent level" and keeps an ongoing tally of the daily aggregate credit limit utilized by each client. Lighthouse generated a soft-block alert whenever a client breached a preconfigured set of percentages, including early warnings, of that client's pre-set credit limit. Credit limit breach soft-block alerts were triggered at 85, 90, 100, and 110% of a given client's credit limit. Although some additional minor steps were required to bypass a soft-block triggered at 100% or 110%, the soft-blocks were able to be overridden and bypassed when triggered for a client's credit limit without being subjected to additional Firm controls or any supervisory review or oversight. Further, until June of 2013, the Firm was neither retaining nor reviewing when credit limit soft-blocks occurred or were bypassed, making these systems and controls unreasonable.

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<sup>11</sup> Beginning in 3Q14, the Firm discontinued assigning all its clients an initial \$250 million credit limit, and instead set the initial limit at \$0 pending further review and approval of a specific limit, which could thereafter be set substantially less than \$250 million.

39. The acts, practices, and conduct described above in paragraphs 36 through 38 constitute violations of SEA Rules 15c3-5(b) and (c)(1)(i), and NYSE Rule 342 and 2010.

**Inadequate Periodic Review of Override Activity**

40. During the Review Period, the majority of the Firm's pre-trade equities controls for erroneous orders, credit limits and capital thresholds involved the use of soft-blocks. Prior to June 2013, however, the Firm failed to capture or retain any instance in which a soft-block was triggered or overridden. In June 2013, the Firm began capturing/retaining data regarding the occurrence and overrides of soft-blocks for erroneous orders and credit limits/capital thresholds.
41. Beginning in June 2013, the Firm began to review any instance in which a soft-block for credit limits/capital thresholds were triggered or overridden. However, during the entire Review Period, the Firm failed to regularly review instances in which soft-blocks for potential erroneous orders were triggered or overridden.
42. Although the Firm periodically reviewed the effectiveness of its pre-trade risk management controls and supervisory procedures, because the Firm was neither capturing nor reviewing the occurrence or the bypassing of its soft-blocks prior to June 2013, and because the Firm also failed to conduct a regular review of instances in which a soft-block was triggered or overridden for potentially erroneous orders during the Review Period, it was not possible for the Firm to assure the overall effectiveness of its risk management controls and supervisory procedures for the prevention of erroneous orders during the Review Period. Moreover, CGMI's failures in this regard also prevented the Firm from being able to adequately adjust their controls and procedures to help assure their continued effectiveness or to determine whether there were any weaknesses in their controls or procedures.
43. Additionally, notwithstanding that there were erroneous order events beginning in 2012 that triggered soft-blocks, and although there were regulatory inquiries into the erroneous events that began in 2013, the Firm failed to conduct regular reviews of when soft-blocks for potential erroneous orders were triggered or overridden during the Review Period. Accordingly, during the Review Period, the Firm failed to establish, document and maintain a reasonable system for regularly reviewing the effectiveness of its risk management controls and supervisory procedures.
44. The acts, practices, and conduct described above in paragraphs 40 through 43 constitute violations of SEA Rules 15c3-5(b) and (e)(1) and NYSE Rule 342 (prior to 12/1/14) and NYSE Rule 3110 (on and after 12/1/14), and NYSE Rule 2010.

**B. The Firm also consents to the imposition of the following sanctions:**

1. A censure;
2. A fine in the amount of \$1,000,000, of which \$225,000 is payable to NYSE;<sup>12</sup> and
3. An undertaking requiring the Firm to address the Market Access Rule deficiencies described in this AWC and to ensure that it has implemented controls and procedures that are reasonably designed to achieve compliance with the rules and regulations cited herein.
  - a. Within 120 days of the date of the issuance of the Notice of Acceptance of this AWC, CGMI shall submit to the COMPLIANCE ASSISTANT, LEGAL SECTION, MARKET REGULATION DEPARTMENT, 9509 KEY WEST AVENUE, ROCKVILLE, MD 20850, a written report (the "written report"), certified by a senior management Firm executive, to [MarketRegulationComp@finra.org](mailto:MarketRegulationComp@finra.org) that provides the following information:
    - i. A reference to this matter;
    - ii. A representation that the Firm has addressed each of the deficiencies described above; and
    - iii. The date(s) this was completed.
  - b. Between 90 and 120 days after the submission of the written report, the Firm shall submit a supplemental written report to FINRA to provide an update on the effectiveness of the enhancements and changes made by the Firm to its risk management controls and supervisory procedures as described in paragraph a(ii) above.
  - c. The Department of Market Regulation may, upon a showing of good cause and in its sole discretion, extend the time for compliance with these provisions.
4. Acceptance of this AWC is conditioned upon acceptance of similar settlement agreements in related matters between CGMI and each of the following self-regulatory organizations: FINRA and other self-regulatory organizations, including The NASDAQ Stock Market LLC, Bats BZX Exchange, Inc., Bats BYX Exchange, Inc., and NYSE Arca Equities, Inc.

The Firm agrees to pay the monetary sanction(s) in accordance with its executed Election of Payment Form.

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<sup>12</sup> The balance of the sanction will be paid to the SROs listed in Paragraph B.4.

The Firm specifically and voluntarily waives any right to claim that it is unable to pay, now or at any time hereafter, the monetary sanction(s) imposed in this matter.

The sanctions imposed herein shall be effective on a date set by NYSE Regulation staff.

## II.

### WAIVER OF PROCEDURAL RIGHTS

The Firm specifically and voluntarily waives the following rights granted under NYSE's Code of Procedure:

- A. To have a Formal Complaint issued specifying the allegations against the Firm;
- B. To be notified of the Formal Complaint and have the opportunity to answer the allegations in writing;
- C. To defend against the allegations in a disciplinary hearing before a hearing panel, to have a written record of the hearing made and to have a written decision issued; and
- D. To appeal any such decision to the Exchange's Board of Directors and then to the U.S. Securities and Exchange Commission and a U.S. Court of Appeals.

Further, the Firm specifically and voluntarily waives any right to claim bias or prejudgment of the Chief Regulatory Officer of the NYSE; the Exchange's Board of Directors, Disciplinary Action Committee ("DAC") and Committee for Review ("CFR"); any Director, DAC member or CFR member; Counsel to the Exchange Board of Directors or CFR; any other NYSE employee; or any Regulatory Staff as defined in Rule 9120 in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including acceptance or rejection of this AWC.

The Firm further specifically and voluntarily waives any right to claim that a person violated the ex parte prohibitions of Rule 9143 or the separation of functions prohibitions of Rule 9144, in connection with such person's or body's participation in discussions regarding the terms and conditions of this AWC, or other consideration of this AWC, including its acceptance or rejection.

### III.

#### OTHER MATTERS

The Firm understands that:

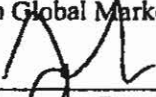
- A. Submission of this AWC is voluntary and will not resolve this matter unless and until it has been reviewed and accepted by FINRA's Department of Market Regulation and the Chief Regulatory Officer of the NYSE, pursuant to NYSE Rule 9216;
- B. If this AWC is not accepted, its submission will not be used as evidence to prove any of the allegations against the Firm; and
- C. If accepted:
  - 1. the AWC shall be sent to each Director and each member of the Committee for Review via courier, express delivery or electronic means, and shall be deemed final and shall constitute the complaint, answer, and decision in the matter, 25 days after it is sent to each Director and each member of the Committee for Review, unless review by the Exchange Board of Directors is requested pursuant to NYSE Rule 9310(a)(1)(B).
  - 2. this AWC will become part of the Firm's permanent disciplinary record and may be considered in any future actions brought by the NYSE, or any other regulator against the Firm;
  - 3. the NYSE shall publish a copy of the AWC on its website in accordance with NYSE Rule 8313;
  - 4. the NYSE may make a public announcement concerning this agreement and the subject matter thereof in accordance with NYSE Rule 8313; and
  - 5. The Firm may not take any action or make or permit to be made any public statement, including in regulatory filings or otherwise, denying, directly or indirectly, any finding in this AWC or create the impression that the AWC is without factual basis. The Firm may not take any position in any proceeding brought by or on behalf of the NYSE, or to which the NYSE is a party, that is inconsistent with any part of this AWC. Nothing in this provision affects the Firm's (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which the NYSE is not a party.
- D. A signed copy of this AWC and the accompanying Method of Payment Confirmation form delivered by email, facsimile or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy.
- E. The Firm may attach a Corrective Action Statement to this AWC that is a statement of demonstrable corrective steps taken to prevent future misconduct. The Firm understands that it may not deny the charges or make any statement

that is inconsistent with the AWC in this Statement. This Statement does not constitute factual or legal findings by the NYSE, nor does it reflect the views of NYSE Regulation or its staff.

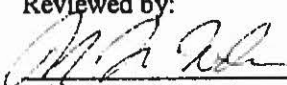
The undersigned, on behalf of the Firm, certifies that a person duly authorized to act on its behalf has read and understands all of the provisions of this AWC and has been given a full opportunity to ask questions about it; that it has agreed to the AWC's provisions voluntarily; and that no offer, threat, inducement, or promise of any kind, other than the terms set forth herein and the prospect of avoiding the issuance of a Complaint, has been made to induce the Firm to submit it.

5/14/17  
Date

Citigroup Global Markets, Inc., Respondent

By:   
Name: Joshua E. Levine  
Title: Managing Director

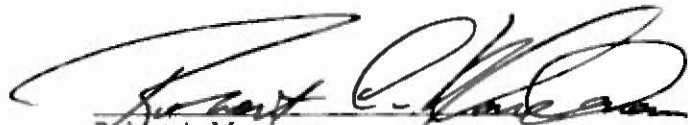
Reviewed by:

  
Michael D. Wolk, Esq.  
Sidley Austin LLP  
1501 K Street, N.W.  
Washington, DC 20005

Counsel for Respondent

Accepted by FINRA:

6/9/17  
Date

  
Robert A. Marchman  
Executive Vice President, Legal Section  
Department of Market Regulation

Signed on behalf of the NYSE, by delegated authority from the Chief Regulatory Officer of the NYSE.