

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

DAVID SAMUEL, individually and on behalf
of all others similarly situated,

Plaintiff,

v.

JOHN DOES,

Defendants.

CLASS ACTION COMPLAINT

JURY TRIAL DEMANDED

Plaintiff David Samuel (“Plaintiff”) brings this action on behalf of himself and all others similarly situated against the John Doe Defendants (“Defendants”). Plaintiff’s allegations are based upon personal knowledge as to his own acts and upon information and belief as to all other matters alleged herein, including the investigation of counsel from publicly-available sources of information.

INTRODUCTION

1. Since its creation in 1993, the Cboe Volatility Index (“VIX”) has emerged as an important financial indicator of market sentiment and volatility. Frequently referred to as the “fear gauge,” VIX purports to measure expected thirty-day market volatility based on the real-time pricing of S&P 500 Index option contracts (“SPX Options”) listed for trading on the Cboe Options Exchange (“Cboe”).

2. Given that investors cannot invest directly in VIX, interest in financial instruments related to expected market volatility spawned the creation of VIX-linked futures (“VIX Futures”) in 2004 and VIX-linked options (“VIX Options”) in 2006. While VIX Options trade on the Cboe, VIX Futures trade on the Cboe Futures Exchange (“CFE”).

3. More recently, billions of dollars in exchange-traded funds and exchange-traded notes linked to the pricing of VIX Futures (“VIX-Linked ETFs & ETNs”) have been introduced to the market. These VIX-Linked ETFs & ETNs—which provide investors with easier access to financial instruments related to expected market volatility and allow investors to bet that the prices of VIX Futures will either increase or decrease—include, *inter alia*: VelocityShares Daily Inverse VIX Short-Term ETN (“XIV”); VelocityShares Daily 2x VIX Short-Term ETN (“TVIX”); ProShares Short VIX Short-Term Futures ETF (“SVXY”); ProShares Ultra VIX Short-Term Futures ETF (“UVXY”); and iPath S&P 500 VIX Short-Term Futures ETN (“VXX”).

4. VIX Futures, VIX Options, and VIX-Linked ETFs & ETNs are collectively referred to herein as “VIX-Linked Instruments.”

5. Given that the VIX price is calculated based on the movement of real-time bid/ask quotes for SPX Options, and in some instances the actual prices of SPX Options, the pricing of VIX-Linked Instruments is subject to market manipulation by investors targeting the SPX Option market and the calculation of VIX. For example, in a recent research paper, Professor John M. Griffin of the McCombs School of Business at The University of Texas at Austin observed “highly statistically and economically significant trading volume spikes” in SPX Options during the monthly trading window in which the VIX price used to settle expiring VIX Futures and VIX Options is calculated. As explained by Prof. Griffin, “[t]he most natural explanation for these patterns appears to be attempted manipulation.”¹

6. Similarly, an anonymous whistleblower submitted a letter on February 12, 2018, to the Securities and Exchange Commission (“SEC”) and the Commodity Futures Trading

¹ See generally John M. Griffin & Amin Shams, *Manipulation in the VIX?*, THE REVIEW OF FINANCIAL STUDIES, Aug. 2, 2017, http://www.jgriffin.info/wp-content/uploads/2017/12/vix_pub.pdf (the “Griffin Paper”).

Commission (“CFTC”) alleging that a “flaw [in the calculation of VIX] allows trading firms with sophisticated algorithms to move the VIX up or down by simply posting quotes on [SPX Options] and without needing to physically engage in any trading or deploying any capital.”² According to the Whistleblower Letter, this manipulative activity “has led to multiple billions in profits effectively [being] taken away from institutional and retail investors.”

7. According to a report from *The Financial Times* on February 13, 2018, Defendants’ manipulative conduct has attracted the attention of the Financial Industry Regulatory Authority (“FINRA”), which is investigating whether Defendants “influence[d] prices of derivatives based on the [VIX] benchmark.”³

8. Upon information and belief, Defendants colluded with each other to manipulate the prices of VIX-Linked Instruments. No one Defendant was capable of unilaterally manipulating the prices of VIX-Linked Instruments without fearing that ordinary market forces would counteract its efforts or that the other Defendants would manipulate the prices of VIX-Linked Instruments in an opposite direction—thereby causing harm to the Defendant’s investment positions.

9. Defendants’ manipulative conduct—which violates Section 1 of the Sherman Act, 15 U.S.C. § 1—has caused, and continues to cause, injury to investors in VIX-Linked Instruments. Plaintiff, on behalf of himself and all other members of the proposed class defined below (the

² Letter from Jason Zuckerman & Matt Stock to James McDonald, Esq., Director of Division of Enforcement, Commodity Futures Trading Commission & Stephanie Akavian, Esq. & Steven Peikin, Esq., Co-Directors, Division of Enforcement, Securities and Exchange Commission (Feb. 12, 2018), <https://assets.bwbx.io/documents/users/iqjWHBFdfxIU/r8LCxXQ4CfqU/v0> (the “Whistleblower Letter”).

³ Robbin Wigglesworth & Nicole Bullock, *US watchdog probes possible manipulation of volatility index*, THE FINANCIAL TIMES, Feb.13, 2018.

“Class”), seeks damages arising from Defendants’ misconduct, including such trebled damages as provided by law, and injunctive relief enjoining the continuation of the alleged manipulation.

THE PARTIES

Plaintiff

10. Plaintiff David Samuel transacted in VIX-Linked Instruments including TVIX, UVXY, VXX, and XIV. As a direct and proximate result of Defendants’ collusive and manipulative conduct, Plaintiff was injured in his business or property.

Defendants

11. As detailed herein, Defendants engaged in a conspiracy to manipulate the prices of VIX-Linked Instruments by, *inter alia*, manipulating the prices or bid/ask quotes of SPX Options traded on the Cboe and the prices of VIX. Plaintiff does not know the specific identities of the Defendants because trading of SPX Options on the Cboe is anonymous. For that reason, Plaintiff does not know the precise number of Defendants but, based on the nature of the manipulative conduct alleged herein, believes that Defendants are a group of financial institutions and/or traders on the Cboe. As a result, non-party Cboe Global Markets, Inc. (“Cboe Global Markets”)—the publisher of VIX and operator of the Cboe and CFE exchanges—is in possession of information capable of specifically identifying Defendants and, thus, Plaintiff will be able to identify Defendants through discovery. Plaintiff will request leave to amend this complaint upon learning the identity of Defendants.

JURISDICTION AND VENUE

12. The Court has jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1337(a), and Section 16 of the Clayton Act, 15 U.S.C. § 26, to recover equitable and injunctive relief for violations of Section 1 of the Sherman Act, 15 U.S.C. § 1. The Court also has jurisdiction pursuant to 28 U.S.C.

§§ 1331 and 1337(a), to recover damages for violation of Section 1 of the Sherman Act, 15 U.S.C. § 1.

13. Venue is proper in this District pursuant to Sections 4(a) and 12 of the Clayton Act, 15 U.S.C. §§ 15(a) and 22, and 28 U.S.C. § 1391(b),(c), and (d) because Defendants are believed to have resided, transacted business, were found, or had agents in this District, a substantial part of the events giving rise to the claims occurred within this District, and a substantial portion of the affected interstate trade and commerce discussed herein has been carried out in this District.

14. This Court has personal jurisdiction over each Defendant, because each Defendant is believed to have transacted business throughout the United States, including in this District; had substantial contacts with the United States, including in this District; and/or committed overt acts in furtherance of their illegal scheme and conspiracy in the United States, including the manipulation of the prices of VIX-Linked Instruments traded in this District on the NASDAQ and the New York Stock Exchange (“NYSE”). In addition, Defendants’ conspiracy was directed at, and had the intended effect of, causing injury to persons residing in, located in, or doing business in the United States, including in this District, and Plaintiff’s claims arise out of Defendants’ conduct.

15. The activities of Defendants were within the flow of, were intended to, and did have a substantial effect on the interstate commerce of the United States.

FACTUAL ALLEGATIONS

I. BACKGROUND ALLEGATIONS

A. Operation of VIX and VIX-Linked Instruments

16. VIX—often referred to as the “fear gauge”—was originally created in 1993 and was redesigned in 2003 by Cboe, in conjunction with Goldman Sachs, as a real-time estimate of

market volatility based on the midpoint of various SPX Option bid/ask quotes and is intended to be a real-time indicator of market expectations for volatility in the S&P 500 Index in the thirty-day period following measurement.

17. Generally speaking, Cboe Global Markets calculates VIX by using the pricing for SPX Options with Friday expiration dates that are more than twenty-three days, but less than thirty-seven days, from the current date. The resulting VIX price is published every fifteen seconds during regular trading hours (8:30 a.m. to 3:15 p.m. Central time) and extended trading hours (2:00 a.m. to 8:15 a.m. Central time) for SPX Options on the Cboe.

18. Given that VIX is an index based on an ever-changing group of SPX Options, investors cannot directly invest in VIX. However, Cboe Global Markets has designed several derivative investments linked to VIX—including VIX Futures and VIX Options that trade on the CFE and Cboe, respectively—to enable investors to transact in investment instruments tethered to market volatility. For example, the price of a VIX Future will increase if market expectations for volatility increase above current expectations (as reflected by the current VIX price) and will decrease if market expectations for volatility decrease below current levels (as reflected by the current VIX price). As explained by Cboe Global Markets:

Assume, for example that today is August 10 and the VIX index is 20. If market expectations are for 30-day implied volatility to be higher than 20 in October and lower than 20 in December, then October VIX futures will be trading at a level above 20 and December VIX futures will be trading below 20.

19. Expiring VIX Futures and VIX Options typically settle on the third or fourth Wednesday of each month and the final settlement values for VIX Futures and VIX Options are determined on the morning of their expiration date. Rather than using the ordinary VIX calculation, the final settlement value is calculated using a modified VIX calculation (the “VIX Settlement Price”) that consists of an auction of SPX Options (known as the Special Opening

Quotation or SOQ) that closes at 8:30 a.m. Central on the expiration date and only takes into consideration out-of-the-money (“OTM”) SPX Options, unlike the ordinary VIX calculation which includes both OTM and in-the-money (“ITM”) SPX Options.⁴

20. Recognizing investor interest in VIX Futures and VIX Options, financial institutions such as Credit Suisse AG (in conjunction with VelocityShares), Barclays Bank PLC (under the iPath brand name), and ProShares have issued various exchange-traded funds and exchange-traded notes linked to the pricing of VIX Futures. These VIX-Linked ETFs & ETNs allow investors to take long and short (or inverse) positions based on the pricing of short-term or medium-term VIX Futures.

21. For example, XIV—an inverse VIX-Linked ETN offered by Credit Suisse AG and traded on the NASDAQ—allows investors to wager that the prices of VIX Futures will decline (*i.e.*, a wager that the market will increasingly expect subsiding volatility). On the other hand, UVXY—a VIX-Linked ETF offered by ProShares and traded on the NYSE—allows investors to wager that the prices of VIX Futures will increase (*i.e.*, a wager that the market will increasingly expect intensifying volatility). Trading activity in these investments has substantially increased in recent years, with billions of dollars in VIX-Linked ETFs & ETNs changing hands daily.

B. VIX-Linked Instruments Are Susceptible to Market Manipulation

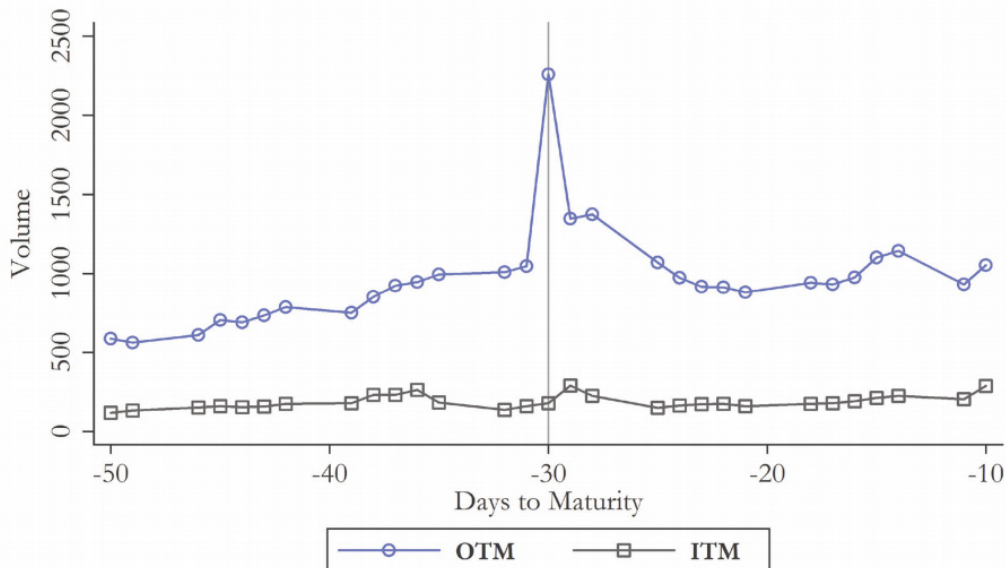
22. In 2017, Prof. Griffin of the McCombs School of Business at The University of Texas at Austin published research suggesting that the relationship between VIX and VIX-Linked Instruments presents an opportunity for manipulators to move the prices of certain SPX Options,

⁴ Generally speaking, OTM options have no intrinsic value because they have a strike or exercise price that would cause the holder of the option to suffer a loss when exercising the option. On the other hand, ITM options have intrinsic value because they have a strike or exercise price that would cause the holder of the option to experience a gain when exercising the option. ATM options have a strike or exercise price that is equal to the underlying asset and would in result in no loss or gain when exercising the option.

which determine the price of VIX, in order to influence the prices of VIX-Linked Instruments. Specifically, the Griffin Paper concludes that “a manipulator can push the prices of illiquid SPX options, but reap the payoffs in the liquid VIX derivatives market” and “that the aggregate evidence aligns itself with what one would expect to see in the case of market manipulation”⁵

23. As explained by Prof. Griffin, “if traders sought to manipulate the VIX [S]ettlement [Price], they would want to move the prices by . . . increasing the number of trades in the deep OTM [SPX] put options consistent with the VIX formula.”⁶

24. This trading pattern is borne out by data analyzed in the Griffin Paper demonstrating that “at the exact time of monthly VIX settlement [for VIX Futures and VIX Options], highly statistically and economically significant trading volume spikes occur in the underlying SPX options” and that the “spikes occur only in the OTM SPX options included in the VIX [S]ettlement [Price] calculation and not in the excluded in-the-money (ITM) SPX options”:⁷

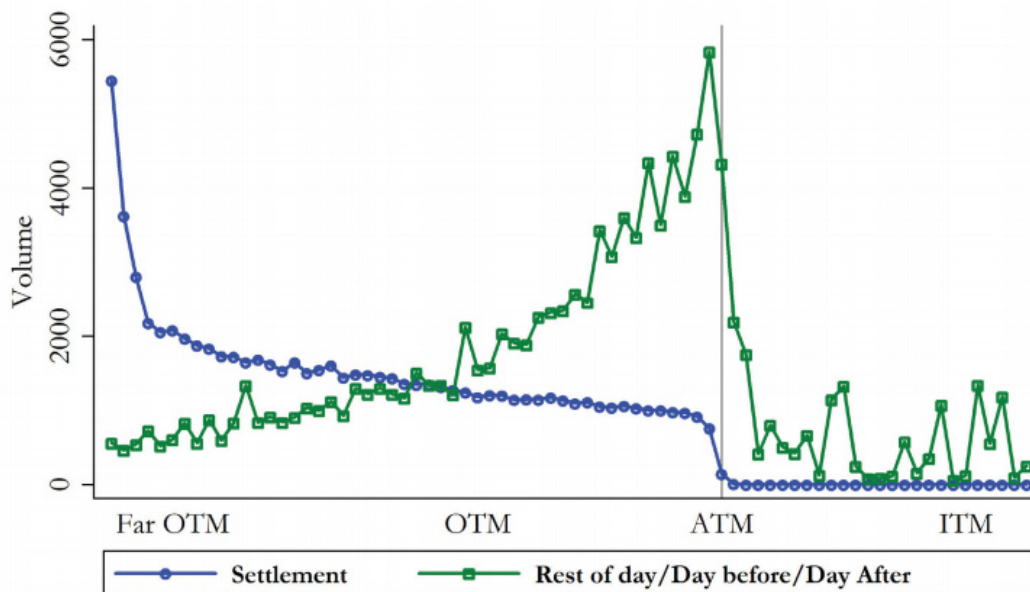


⁵ Griffin Paper at 35, 40.

⁶ *Id.* at 3.

⁷ *Id.* at 3, 11.

25. Tellingly, the spike in OTM SPX Options during the settlement window occurs principally in (otherwise) rarely traded SPX Options that are priced the furthest OTM, and thus, have the greatest manipulative impact on the VIX Settlement Price:⁸



26. Moreover, Prof. Griffin found that “there is no spike in volume for the similar S&P 100 Index (OEX) or SPDR S&P 500 ETF (SPY) options [that are] unconnected to volatility index derivatives,” and thus, do not present a strong opportunity for market manipulation.⁹ The absence of a similar trading pattern in these related options—which are impacted by similar fundamentals—further suggests that the unusual trading pattern in SPX Options is evidence of market manipulation.

27. Ultimately, Prof. Griffin concludes that “[t]he most natural explanation for these patterns appears to be attempted manipulation” and that although he and his team “thoroughly

⁸ *Id.* at 14.

⁹ *Id.* at 3; *see also id.* at 10-12.

investigated alternative explanations of coordinated liquidity and two forms of hedging but f[oun]d that these explanations do not fit the data as well as the manipulation hypothesis.”¹⁰

28. Separately, in a February 12, 2018 letter to the SEC and CFTC, “an anonymous whistleblower who has held senior positions at some of the largest investment firms in the world” has alleged that “a pervasive flaw in the [calculation of VIX] allows trading firms with sophisticated algorithms to move the VIX up or down by simply posting quotes on [SPX Options] and without needing to physically engage in any trading or deploying any capital.” This conduct, according to the Whistleblower Letter, “has led to multiple billions in profits effectively [being] taken away from institutional and retail investors.”¹¹

29. As explained in the Whistleblower Letter, “VIX is highly subject to manipulation by market participants with the ability to rapidly post quotes in the market for [SPX Options]” and “because the VIX is a theoretical index, which does not rely on trading activity but mid-prices, [it] can be moved up or down by posting quotes without any physical trading taking place.”¹²

30. Among other things, the Whistleblower Letter suggests that the collapse of certain inverse VIX-Linked ETFs & ETNs on February 5, 2018, including XIV and UVXY, was partially the result of market manipulation that helped double the price of VIX and, as a result, doubled the price of VIX Futures.¹³ The unprecedented movement of VIX and First VIX Futures prices on

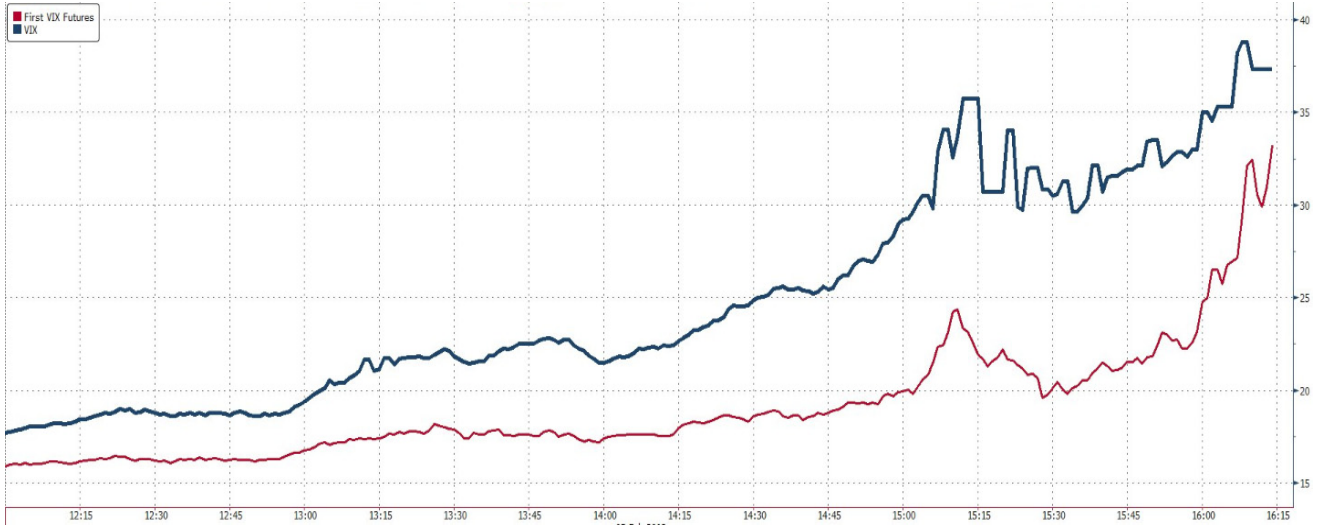
¹⁰ *Id.* at 5, 39.

¹¹ Whistleblower Letter at 1-2.

¹² *Id.* at 2.

¹³ *See id.* at 2-3 (explaining that “the VIX index led the way higher, bringing with it the price of VIX futures” and “[u]ltimately the VIX reached 50 and futures surged above 30 as the [VIX-Linked ETFs & ETNs] settled” around the close of trading at 4:15 p.m. Eastern).

February 5, 2018, are set forth in the chart below:¹⁴



31. Ultimately, the rapidly escalating price of VIX Futures on February 5, 2018, caused the prices of XIV and SVXY to crater and, in XIV’s case, triggered a liquidation event that has left XIV investors holding the bag for hundreds of millions of dollars in losses:¹⁵



¹⁴ Data from Bloomberg.

¹⁵ Data from Bloomberg; see also Credit Suisse AG, *Credit Suisse AG Announces Event Acceleration of its XIV ETNs*, Feb. 6, 2018, <https://www.credit-suisse.com/corporate/en/articles/media-releases/credit->

II. DEFENDANTS CONSPIRED TO MANIPULATE THE PRICES OF VIX-LINKED INSTRUMENTS

32. Defendants are unknown persons, firms, and/or corporations that are, upon information and belief, horizontal competitors in the market for VIX-Linked Instruments in the United States. Defendants have participated as co-conspirators and have performed acts in furtherance of the conspiracy alleged herein.

33. Upon information and belief, Defendants combined, conspired, and/or colluded to manipulate the prices of VIX-Linked Instruments.

34. Defendants' anticompetitive combination, conspiracy, and/or agreement is a *per se* violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. Alternatively, Defendants' collusion resulted in substantial anticompetitive effects in the market for VIX-Linked Instruments in the United States.

35. Defendants intended to restrain trade and actually restrained trade in violation of Section 1 of the Sherman Act. Defendants shared a conscious commitment to the common scheme designed to achieve the unlawful objective of manipulating the prices of VIX-Linked Instruments.

36. There is no legitimate business justification for, or procompetitive benefits of, Defendants' unreasonable restraint of trade.

37. No one Defendant was capable of unilaterally manipulating the prices of VIX-Linked Instruments without fearing that ordinary market forces would counteract its efforts or that the other Defendants would manipulate the prices of VIX-Linked Instruments in an opposite direction—thereby causing harm to the Defendant's investment positions.

suisse-announces-event-acceleration-xiv-etn-201802.html (“Since the intraday indicative value of XIV on February 5, 2018 was equal to or less than 20% of the prior day’s closing indicative value, an acceleration event has occurred. . . . On the acceleration date, investors will receive a cash payment per ETN in an amount equal to the closing indicative value of XIV on the accelerated valuation date. The last day of trading for XIV is expected to be February 20, 2018.”).

38. Defendants are jointly and severally liable for the acts of their co-conspirators.

III. ANTITRUST INJURY TO PLAINTIFF AND THE CLASS

39. Defendants injured Plaintiff and Class members by manipulating the prices of VIX-Linked Instruments.

40. Pricing of VIX-Linked Instruments, like goods, is based on fundamental market forces of supply and demand. Specifically, the prices of VIX-Linked Instruments are inherently based on the price of VIX. Defendants understood that they could directly manipulate the prices of VIX-Linked Instruments through the manipulation of the pricing of VIX.

41. Defendants' combination, conspiracy, and/or agreement to manipulate the prices of VIX-Linked Instruments injures competition in the market for VIX-Linked Instruments in the United States.

42. Absent Defendants' collusion, those transacting in VIX-Linked Instruments would have transacted at competitive prices and reaped the benefits of competition. However, Defendants' collusion has the effect of causing VIX-Linked Instruments to trade at artificial prices.

43. Defendant's unlawful conduct deprives Plaintiff and Class members who transact in VIX-Linked Instruments of a competitive marketplace and exposes them to artificial volatility.

44. As a direct, intended, foreseeable, and proximate result of Defendants' unlawful conspiracy and acts in furtherance of their conspiracy, Plaintiff and Class members have been injured in their business and property, in violation of the federal antitrust laws.

45. The injury to Plaintiff and Class members is the type the antitrust laws were designed to prevent and directly flows from Defendants' unlawful anticompetitive conduct.

IV. EFFECT ON INTERSTATE COMMERCE

46. VIX-Linked Instruments are traded in interstate commerce. Indeed, many billions of dollars of transactions in VIX-Linked Instruments are entered into each year in interstate commerce in the United States.

47. Defendants' manipulation of the pricing of VIX-Linked Instruments had a direct, substantial, and foreseeable impact on interstate commerce in the United States.

48. Defendants intentionally targeted their unlawful conduct to affect commerce, including interstate commerce within the United States, by combining, conspiring, and/or agreeing to manipulate the prices of VIX-Linked Instruments.

49. Defendants' unlawful conduct has a direct and adverse impact on competition in the United States. Absent Defendant's combination, conspiracy, and/or agreement to manipulate the prices of VIX-Linked Instruments, the pricing of VIX-Linked Instruments would be determined by a competitive, efficient market.

TOLLING OF THE STATUTES OF LIMITATIONS

50. Any applicable statute of limitations has been tolled by Defendants' knowing and active concealment of their manipulation of the prices of VIX-Linked Instruments. Through no fault or lack of diligence, Plaintiff and Class members were deceived regarding Defendants' manipulation of the prices of VIX-Linked Instruments and could not reasonably discover the manipulation.

51. As alleged herein, Defendants' manipulation of the prices of VIX-Linked Instruments was material to Plaintiff and Class members at all relevant times. Within the time period of any applicable statutes of limitations, Plaintiff and Class members could not have

discovered through the exercise of reasonable diligence that Defendants were manipulating the prices of VIX-Linked Instruments, which Defendants fraudulently concealed.

52. Plaintiff and Class members did not discover and did not know of any facts that would have caused a reasonable person to suspect that Defendants were manipulating the prices of VIX-Linked Instruments.

53. Defendants knowingly, actively, and affirmatively concealed the facts alleged herein, including their manipulation of the prices of VIX-Linked Instruments. Plaintiff and Class members reasonably relied on Defendants' knowing, active, and affirmative concealment.

54. For these reasons, all applicable statutes of limitation have been tolled based on the discovery rule and Defendants' fraudulent concealment and Defendants are estopped from relying on any statutes of limitations in defense of this action.

CLASS ACTION ALLEGATIONS

55. Plaintiff brings this proposed action pursuant to Federal Rules of Civil Procedure ("Rules") 23(a) and 23(b)(1), (b)(2), and/or (b)(3) on behalf of himself and all members of the proposed Class defined as follows:

All persons, corporations and other legal entities that transacted in VIX-Linked Instruments.

56. Excluded from the Class are Defendants and their parents, subsidiaries and corporate affiliates, officers, directors, employees, assigns, successors, and co-conspirators, the court, court staff, Defendants' counsel, and all respective immediate family members of the excluded entities described above. Plaintiff reserves the right to revise the definition of the Class based upon subsequently discovered information and reserves the right to establish Sub-Classes where appropriate.

57. The Class is so numerous that individual joinder of all potential members is impracticable. Plaintiff believes that there are at least thousands of proposed members of the Class throughout the United States.

58. Common questions of law and fact exist as to all members of the Class and predominate over any issues solely affecting individual members of the Class. The common and predominating questions of law and fact include, but are not limited to:

- a) Whether Defendants unreasonably restrained trade in violation of Section 1 of the Sherman Act, 15 U.S.C. § 1;
- b) Whether Defendants' conduct is a *per se* violation of Section 1 of the Sherman Act;
- c) Whether Defendants engaged in a combination, conspiracy, and/or agreement to manipulate the prices of VIX-Linked Instruments;
- d) The identity of the participants in the conspiracy;
- e) The duration of the conspiracy;
- f) The nature and character of the acts performed by Defendants in furtherance of the conspiracy;
- g) Whether the conduct of Defendants, as alleged herein, caused injury to the business or property of Plaintiff and Class members;
- h) Whether injunctive and/or equitable relief should be awarded; and
- i) Whether actual damages, costs, restitution, disgorgement, statutory, and/or treble damages should be awarded.

59. Plaintiff's claims are typical of the claims of the Class Plaintiff seeks to represent. As alleged herein, Plaintiff and the Class sustained damages arising out of the same illegal actions and conduct by Defendants.

60. Plaintiff is willing and prepared to serve the Class in a representative capacity with all of the obligations and duties material thereto. Plaintiff will fairly and adequately protect the interests of the Class and has no interests adverse to or in conflict with the interests of the other members of the Class.

61. Plaintiff's interests are co-extensive with and are not antagonistic to those of absent Class members. Plaintiff will undertake to represent and protect the interests of absent Class members and will vigorously prosecute this action.

62. Plaintiff has engaged the services of the undersigned counsel. Counsel is experienced in complex litigation, will adequately prosecute this action, and will assert and protect the rights of, and otherwise represent, Plaintiff and absent Class members.

63. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy. Plaintiff knows of no difficulty to be encountered in the management of this litigation that would preclude its maintenance as a class action.

64. Class action status is warranted under Rule 23(b)(3) because questions of law or fact common to Class members predominate over any questions affecting only individual Class members, and a class action is superior to other available methods for the fair and efficient adjudication of this controversy.

65. The Class may also be certified under Rule 23(b)(1)(A) and (B) because the prosecution of separate actions by individual Class members would create a risk of inconsistent or varying adjudications with respect to individual Class members, which would establish incompatible standards of conduct for Defendants, would be dispositive of the interests of nonparties to the individual adjudications, and would substantially impair the ability of such nonparties to protect their interests.

66. The Class may also be certified under Rule 23(b)(2) because Defendants have acted on grounds generally applicable to the Classes, thereby making it appropriate to award final injunctive relief or corresponding declaratory relief with respect to the Classes.

67. The interest of Class members in individually controlling the prosecution of separate actions is theoretical and not practical. The Class has a high degree of similarity and is cohesive, and Plaintiff anticipates no difficulty in the management of this matter as a class action.

CLAIM FOR RELIEF

VIOLATIONS OF SECTION 1 OF THE SHERMAN ACT
(15 U.S.C. § 1)

68. Plaintiff incorporates by reference and re-alleges each preceding paragraph as though fully set forth herein.

69. As alleged herein, Defendants combined, conspired, and agreed to manipulate the prices of VIX-Linked Instruments. This combination, conspiracy, and/or agreement unreasonably restrained trade in violation of the federal antitrust laws.

70. Specifically, the anticompetitive combination, conspiracy, and/or agreement alleged herein is a *per se* violation of Section 1 of the Sherman Act, 15 U.S.C. § 1 (“Section 1”). Alternatively, the anticompetitive combination, conspiracy, and/or agreement alleged herein resulted in substantial anticompetitive effects in the market for VIX-Linked Instruments in the United States in violation of Section 1.

71. Defendants intended to restrain trade and actually restrained trade in violation of Section 1. Defendants shared a conscious commitment to the common scheme designed to achieve the unlawful objective of manipulating the prices of VIX-Linked Instruments.

72. The anticompetitive combination, conspiracy, and/or agreement alleged herein unreasonably restrained trade, and there is no legitimate business justification for, or

procompetitive benefits of, Defendants' unreasonable restraint of trade. Any alleged procompetitive benefit or business justification is pretextual and/or could have been achieved through less restrictive means.

73. The anticompetitive combination, conspiracy, and/or agreement alleged herein occurred within the flow of and substantially affected interstate commerce.

74. As a direct and proximate result of Defendants' anticompetitive scheme and concrete acts in furtherance of that scheme, Plaintiff and members of the Class have been injured in their business and property by reason of Defendants' violation of Section 1, within the meaning of Section 4 of the Clayton Antitrust Act, 15 U.S.C. § 15.

75. Unless enjoined, Defendants' anticompetitive combination, conspiracy, and/or agreement will continue.

76. Plaintiff's and the Class's injuries are of the type the antitrust laws were designed to prevent and are a direct result of Defendants' unlawful anticompetitive conduct.

77. Plaintiff and the Class are entitled to treble damages for the violations of the Sherman Act alleged herein.

78. Plaintiff and the Class are also entitled to injunctive relief, costs, attorneys' fees, and equitable relief, pursuant to 15 U.S.C. § 26.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff, on behalf of himself and all others similarly situated, respectfully requests that this Court enter judgment against Defendants and in favor of Plaintiff and the Class, and award the following relief:

- A. An order certifying this action as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure, declaring Plaintiff as the representative of the Class, and Plaintiff's counsel as counsel for the Class;
- B. An order finding Defendants jointly and severally liable for the damages incurred by Plaintiff and the Class;
- C. An order declaring the unlawful conduct alleged herein violates Section 1 of the Sherman Act;
- D. An order enjoining Defendants from continuing their unlawful conduct;
- E. An award of actual damages, costs, restitution, disgorgement, statutory, and/or treble damages under applicable law;
- F. An award of monetary damages in favor of Plaintiff and the Class and against Defendants for their violation of federal antitrust laws, in amount trebled plus interest in accordance with those laws;
- G. An order requiring Defendants to pay both pre- and post-judgment interest on any amounts awarded;
- H. An award of costs, expenses, and attorneys' fees as permitted by law; and
- I. Such other or further relief as the Court may deem appropriate, just, and equitable.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff hereby demand a trial by jury on all issues so triable.

Dated: February 21, 2018

**KESSLER TOPAZ
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