United States of America
Before the
Securities and Exchange Commission

Investment Advisers Act of 1940
Release No. 3988 / December 22, 2014

Investment Company Act of 1940
Release No. 31393 / December 22, 2014

Administrative Proceeding
File No. 3-16325

In the Matter of

F-Squared Investments, Inc.,
Respondent.

Order Instituting Administrative and Cease-and-Desist Proceedings Pursuant to Sections 203(e) and 203(k) of the Investment Advisers Act of 1940, and Sections 9(b) and 9(f) of the Investment Company Act of 1940, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order

I.

The Securities and Exchange Commission (“Commission”) deems it appropriate and in the public interest that public administrative and cease-and-desist proceedings be, and hereby are, instituted pursuant to Sections 203(e) and 203(k) of the Investment Advisers Act of 1940 (“Advisers Act”), and Sections 9(b) and 9(f) of the Investment Company Act of 1940 (“Investment Company Act”) against F-Squared Investments, Inc. (“Respondent” or “F-Squared”).

II.

In anticipation of the institution of these proceedings, Respondent has submitted an Offer of Settlement (the “Offer”) which the Commission has determined to accept. Respondent admits the facts set forth in Appendix A attached hereto, and acknowledges that its conduct as set forth in Appendix A violated the federal securities laws, admits the Commission’s jurisdiction over it and the subject matter of these proceedings, and consents to the entry of this Order Instituting Administrative and Cease-and-Desist Proceedings Pursuant to Sections 203(e) and 203(k) of the Investment Advisers Act of 1940, and Sections 9(b) and 9(f) of the Investment Company Act of 1940, Making Findings, and Imposing Remedial Sanctions and a Cease-and-Desist Order (“Order”), as set forth below.
III.

On the basis of this Order and Respondent’s Offer, the Commission finds\(^1\) that:

A. Summary

1. This matter arises from a registered investment adviser’s advertising of a materially inflated, and hypothetical and back-tested, performance track record for the period of April 2001 to September 2008 in connection with an exchange-traded fund (“ETF”) sector rotation strategy. In September 2008, F-Squared and its co-founder and former CEO Howard Present created an investment strategy they called “AlphaSector” and used data they were at least reckless in not knowing was back-tested to create hypothetical performance of AlphaSector. From September 2008 to September 2013, F-Squared advertised the hypothetical historical performance as “not backtested” and based on an actual strategy that had been used to manage live assets from April 2001 to September 2008.

2. In addition, F-Squared incorrectly applied ETF trend data – which were detecting price momentum – that dictated whether an ETF was in or out of the AlphaSector portfolio (the “in/out signals”). In creating its back-tested track record, F-Squared systematically applied the in/out signals one week before the ETF price changes that caused changes in signals (i.e., a change from invested in the ETF to out of the ETF or vice-versa). As a result, the advertised historical performance of the AlphaSector strategy from April 2001 to September 2008 was based on implementing signals to sell before price drops and to buy before price increases that had occurred a week earlier. F-Squared at least recklessly compiled the historical data to implement a hypothetical trade (that F-Squared advertised as an actual trade) one week before the trade could have occurred.

3. The inaccurate compilation of historical data substantially improved the AlphaSector strategy’s advertised hypothetical and back-tested historical performance. If an investor made a hypothetical investment of $100,000 on April 1, 2001 (assuming a reinvestment of dividends and no further contributions or withdrawals), the investment would have been worth approximately $128,000 on August 24, 2008 if invested in the S&P 500 Index. With accurately timed (but still hypothetical and back-tested) signal implementation, the same investment in F-Squared’s hypothetical ETF sector rotation strategy would have been worth $138,000. However, by implementing the hypothetical and back-tested signals one week early, F-Squared advertised the investment as worth $235,000 – an increase of approximately 350% more than if F-Squared had applied the signals accurately.

\(^1\) The findings herein are made pursuant to Respondent’s Offer and are not binding on any other person or entity in this or any other proceeding.
4. As described below, virtually all of F-Squared’s claimed outperformance relative to the S&P 500 Index for the period before October 2008 is attributable to its data compilation error. By 2014, F-Squared’s ETF strategy was the largest in the market, with approximately $28.5 billion in assets following the strategy.

B. Respondent

5. **F-Squared Investments, Inc.** (SEC File No. 801-69937) is an investment adviser registered with the Commission since March 2009 and is headquartered in Wellesley, Massachusetts. In October 2008, F-Squared launched its first AlphaSector index. Today, F-Squared sub-licenses its approximately 75 AlphaSector indexes to unaffiliated third parties who manage assets pursuant to these indexes. As of June 30, 2014, there were approximately $28.5 billion invested pursuant to AlphaSector indexes including $13 billion in mutual fund assets sub-advised by F-Squared. Since June 2010, F-Squared Investments, Inc. has been a wholly-owned subsidiary of F-Squared Investment Management, LLC.

C. Other Relevant Person

6. **Howard Brian Present** (“Present”), age 53, resides in Wellesley, Massachusetts. In 2006, Present co-founded F-Squared. Present was the President and CEO of F-Squared until his separation in 2014. Present owns approximately 22% of F-Squared Investment Management, LLC.

D. Facts

AlphaSector Background

7. From October 2008 to September 2013, F-Squared marketed an ETF sector rotation strategy called AlphaSector that was based on an algorithm that yields a “signal” indicating whether to buy or sell nine industry ETFs. As of June 30, 2014, there was approximately $28.5 billion

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2 In August 2010, F-Squared Institutional Advisors, LLC (SEC File No. 801-71753), a registered investment adviser and an affiliate of F-Squared Investments, Inc., was created and became the sub-adviser of the registered mutual funds.

3 F-Squared has created several AlphaSector strategies and sub-licenses approximately 75 AlphaSector indexes. The AlphaSector indexes that are the subject of this matter, including the AlphaSector Premium Index and the AlphaSector Rotation Index, are based on investments in U.S. Equity ETFs. As with all indexes, the performance of the AlphaSector Premium and AlphaSector Rotation indexes are inherently hypothetical in the sense that the index does not purport to reflect the performance of any particular client or account. However, as described below, F-Squared advertised that the AlphaSector Premium Index and AlphaSector Rotation Index were based on a strategy that had been in place since 2001 and therefore the performance of these indexes was “not backtested” when in fact the performance was backtested.
invested pursuant to the AlphaSector indexes. The bulk of these assets are invested through registered mutual funds or other funds or through separately managed accounts managed by advisers or brokers who implement the strategy based on information they receive periodically from F-Squared. Today, AlphaSector is the largest active ETF strategy in the market.

8. F-Squared and Present began advertising the AlphaSector strategy via an index in September 2008. From inception, F-Squared stated in advertisements that AlphaSector is an ETF sector rotation strategy that (i) invests in as many as nine U.S. equities industry ETFs, with an algorithm or quantitative engine determining whether, based on ETF sector trends and volatility, the portfolio would invest in none, some, or all of the nine ETFs; (ii) holds equal ownership of any of the nine ETFs with a positive trend and no ownership of any of the nine ETFs with a negative or neutral trend; (iii) rebalances periodically, either weekly or monthly, and only when at least one of the nine ETFs show a change in trend; and (iv) applies a 25% cap per ETF (i.e., no ETF would hold more than 25% of the total assets in the strategy) at the time of rebalancing, with the remainder of the portfolio invested in a short-term treasury ETF (representing cash).

9. Present created and was responsible for all of F-Squared’s AlphaSector advertisements, which included PowerPoint presentations describing the strategy and its past performance, including for the period April 2001 to September 2008. The relevant slides from F-Squared’s August 2013 standard presentation for the AlphaSector Premium Index, which was available on F-Squared’s public website until the end of September 2013, are attached as Exhibit 1. F-Squared posted the presentations and other AlphaSector performance advertisements and marketing materials on its public website and sent them to numerous prospective and current clients from September 2008 to September 2013.

10. From AlphaSector’s inception in October 2008 through September 2013, F-Squared advertised AlphaSector’s past performance as index performance. Even though F-Squared did not create AlphaSector until late 2008, F-Squared made two materially false claims in its AlphaSector advertisements and Forms ADV, namely that:

- the in/out ETF signals that formed the basis of the AlphaSector index returns had been used to manage client assets from April 2001 to September 2008; and

- the in/out ETF signals resulted in a track record that significantly outperformed the S&P 500 Index from April 2001 to September 2008.

F-Squared was at least reckless in advertising both of these statements.

F-Squared and Present Used Back-Tested Data to Create a Seven-Year Track Record

11. According to Present, in early 2008, Present and a proprietor of a private wealth advisory firm (hereinafter, “Private Wealth Advisor”) discussed a sector rotation investment strategy using ETFs. According to Present, in the context of these discussions, the Private Wealth Advisor
claimed to have used a sector rotation strategy to manage client assets. Present never saw records showing that the Private Wealth Advisor had invested advisory clients in a sector rotation strategy. Present was encouraged to get such documentation – for instance, in mid-2008, F-Squared’s co-founder and former Vice Chairman reports that he told Present to get account records to confirm the historical performance of the Private Wealth Advisor’s sector rotation strategy.

12. Present also understood that the Private Wealth Advisor had a college intern who was developing an algorithm to use in conjunction with the sector rotation strategy. The algorithm could generate a momentum-based signal that could be used to determine whether to invest or not invest in a particular sector ETF. As discussions between Present and the Private Wealth Advisor moved forward in summer 2008, the Private Wealth Advisor decided to co-found a signal provider company (the “Data Provider”) with his intern. The Data Provider would send data with in/out signals to F-Squared that F-Squared would then use to determine whether AlphaSector would own or not own an ETF.

13. In late August and early September 2008, as F-Squared and the Data Provider were finalizing a contract for signal delivery to F-Squared, the Private Wealth Advisor’s intern sent Present three sets of hypothetical, back-tested weekly trends for each of the ETFs. A positive trend was a signal to be “in” (buy or own) the ETF, and a negative trend was a signal to be “out” (sell or do not own) of the ETF. The first two data sets of trends were based on whether the simple moving average of each ETF had increased or decreased from the previous week. One of the two sets of trends was based on a 41-week simple moving average and the other set was based on a 61-week simple moving average. The intern’s third set of signals were from his own algorithm.

14. After he received the three sets of signals from the Private Wealth Advisor’s intern, Present instructed an F-Squared employee to divide the three sets of weekly ETF trend or signal data among three different time periods, which, according to Present, corresponded to the periods the Private Wealth Advisor had claimed each set of signals had been used to manage his clients’ assets, and then calculate AlphaSector’s back-tested and hypothetical historical performance for the period April 2001 to September 2008. The 61-week simple moving average trends were used for the period April 2001 to June 2006, the 41-week simple moving average trends were used for the period July 2006 to June 2008, and the signals from the intern’s algorithm were used for the period July 2008 to September 2008.

15. To convert the in/out ETF signals into an index “track record,” F-Squared and Present tested the performance of various portfolio construction methodologies – which convert the ETF

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4 In this instance, the simple moving average is the sum of the weekly closing prices of an ETF for either 41 or 61 weeks divided by either 41 or 61. The trends the intern sent Present showed each ETF’s simple moving average at the end of each week for the period 2001-2008. A positive ETF trend, for example, meant that week’s simple moving average for the particular ETF was higher than the prior week’s simple moving average.
signals into performance – and ultimately Present created the rules, described in paragraph 8, that are central to the AlphaSector strategy.

16. F-Squared’s AlphaSector advertisements emphasized algorithmic-based models that purportedly supported both the hypothetical and actual track record beginning in July 2008, but in reality the AlphaSector track record for the period April 2001 to June 2008 was based on changes in 41-week and 61-week simple moving averages. An example of the model description underlying AlphaSector is at page 14 of Exhibit 1.

17. The Private Wealth Advisor never used a sector rotation strategy. His client and customer trades were ad hoc, client-by-client, non-discretionary, and were not uniform across clients. Before mid-2008, the Private Wealth Advisor and his business partner traded the ETFs that form the basis of AlphaSector only infrequently, and they did not trade some of the ETFs at all. To the extent that the Private Wealth Advisor ever attempted to use moving average data to make trades, the trades were not consistent with the trend data F-Squared and Present used to create AlphaSector’s performance.

F-Squared and Present Ignored a Material Performance Calculation Error

18. F-Squared created the pre-October 2008 “historical track record” incorrectly by implementing all the purchases and sales dictated by the ETF trend signals one week before they should have been implemented. Because the signals were detecting price momentum, F-Squared’s incorrectly implementing the signals one week early meant that AlphaSector’s “historical track record” was based on its selling before price drops that had already occurred and buying before price increases that had already occurred. As described below, virtually all of AlphaSector’s claimed outperformance relative to the S&P 500 Index for the pre-October 2008 period is attributable to this erroneous calculation.

19. The now former F-Squared employee who constructed the AlphaSector track record realized the error by late September 2008, shortly after F-Squared started advertising the strategy, and alerted Present. Nevertheless, F-Squared and Present continued to advertise the inflated track record until September 2013.

20. The inaccurate compilation of historical data substantially improved the AlphaSector’s strategy’s advertised back-tested and hypothetical historical performance for the pre-October 2008 period. If an investor made a hypothetical investment of $100,000 on April 1, 2001 (assuming a reinvestment of dividends and no further contributions or withdrawals), the investment would have been worth approximately $128,000 on August 24, 2008 if invested in the S&P 500 Index. With accurately timed (but still hypothetical and back-tested) signal implementation, the same investment in F-Squared’s hypothetical ETF sector rotation strategy would have been worth $138,000. However, by implementing the hypothetical and back-tested signals one week early, F-Squared advertised the investment as worth $235,000.
21. On multiple occasions after September 2008, Present requested back-up documentation from the Private Wealth Advisor to support AlphaSector’s track record. Present never received back-up from the Private Wealth Advisor. Despite the lack of documentation of live assets supporting AlphaSector’s performance for the period prior to September 2008, F-Squared and Present continued to advertise the false track record until September 2013.

22. In January 2009, Present contacted the Private Wealth Advisor and his business partner to obtain an audited track record for the Private Wealth Advisor’s accounts that had supposedly tracked the AlphaSector methodology. Present did not receive one. During these discussions, the Private Wealth Advisor told Present that the Private Wealth Advisor did not have a specific track record because he considered the sector rotation strategy to be a client-by-client trading strategy and not a specific product.

23. In October 2009, F-Squared began sub-advising mutual funds using the AlphaSector strategies. In connection with that effort, Present assured the mutual fund adviser that AlphaSector’s performance was constructed based on “actual investment philosophy, trading patterns and portfolio strategy that was employed for the client assets.” Present stated that the portfolio construction rules used to create AlphaSector were all “consistent elements of the AlphaSector Strategy during its entire existence, and critical to its performance returns.” Present also stated that the AlphaSector Index was “based on investment decisions that were generated on a live basis since 2001” and “the Index therefore explicitly does not reflect backtested data, but instead represents live, historical data.” The mutual fund adviser, working with Present, amended the funds’ prospectus to include the inflated historical performance of the AlphaSector indexes from April 2001 to September 2008.

24. In June 2012, F-Squared retained an outside attorney to perform a mock audit. One of the recommendations from the mock audit was that F-Squared “should ensure that it has books and records to support its performance disclosed for years prior to the year 2006.” Present sent several communications in June and July 2012 to the Private Wealth Advisor and officers of the Data Provider co-founded by the Private Wealth Advisor in 2008, seeking the required records. F-Squared’s then-CCO also prepared a document by which the Data Provider and/or the Private Wealth Advisor would certify that they had records to support the advertised historical performance. These efforts proved unsuccessful. Present’s effort to elicit information from the Data Provider also prompted the Data Provider’s CEO and COO to tell Present that: (i) the Private Wealth Advisor’s former intern (now the Chief Technology Officer (CTO) of the Data Provider) was only 14 years old in 2001; and (ii) the data the former intern sent Present would have been back-tested for the period before either 2007 or 2008, when the former intern started working on the algorithm.

25. In October 2012, Present received a copy of a September 2008 email from a then F-Squared employee to a then employee of the Private Wealth Advisor concerning the implementation of historical signals. That email concerned the dating convention associated with the Data Provider’s
signals and should have called into question whether F-Squared implemented the signals one week early in creating AlphaSector’s pre-October 2008 track record. Nonetheless, Present and F-Squared continued to advertise that inflated track record.

26. By May 2013, F-Squared had decided to replace the Data Provider’s ETF signals with signals generated by its own proprietary model. During this process, the Data Provider’s CEO and CTO told Present that the Private Wealth Advisor was not responsible for F-Squared’s pre-October 2008 track record. In addition, on July 1, 2013, the Data Provider’s CEO and CTO told Present that they could not replicate AlphaSector’s pre-October 2008 advertised performance when they used the signals they understood were the basis of the AlphaSector track record. In September 2013, F-Squared removed all performance track records and advertising materials for the time period April 2001 to September 2008 from its website.

F-Squared’s Inaccurate Advertisements

27. F-Squared’s advertisements stated that the inception date of the AlphaSector indices “is based on an active strategy with an inception date of April 2001. Inception date is defined as the date as of which investor assets began tracking the strategy.” This disclosure is located in Exhibit 1 at page 18.

28. Starting in late 2009, F-Squared’s AlphaSector advertisements also explicitly claimed that the track record for the period April 2001 to September 2008 was not back-tested. For example, even as of September 2013, F-Squared’s advertisements stated: “The process of converting the active strategy to an index implies that the returns presented, while not backtested, reflect theoretical performance an investor would have obtained had it invested in the manner shown and does not represent returns that an investor actually attained, as investors cannot invest directly in an index.” This disclosure is located in Exhibit 1 at page 18.

29. From September 2008 to September 2013, F-Squared advertised that AlphaSector indices had outperformed the S&P 500 Index, particularly for the period from April 2001 to September 2008. Attached at pages 10 and 11 of Exhibit 1 are examples of AlphaSector performance advertisements.

30. F-Squared also claimed that it was responsible for AlphaSector’s buy and sell decisions for the pre-October 2008 period. For example, in September 2013, F-Squared’s public website featured news articles with statements such as:

- “Back in mid-2007, well before the financial debacle that began with the collapse of the investment bank Bear Stearns, Howard Present, co-founder, president and CEO of F-Squared Investments in Boston, had a strategy that determined that financial stocks were becoming too risky. But they didn’t just sell down the financial holdings, which at the time represented one-ninth of his strategy’s investments. He sold all his financial holdings.”
• “We eventually dropped the tech sector in 2001,” says Present.

• “Financials in 2006, [Present] notes, had moved from a historic average of about 15% of the S&P to 28%, or nearly double, which was another sign of a bubble that F-Squared was able to avoid. . . And when [Financials] started to show signs of decline, F-Squared dropped its entire financials allocation like a hot potato.”

F-Squared’s Inaccurate Forms ADV

31. F-Squared’s various Forms ADV filed during the period October 2008 to September 2013 inaccurately claimed that the investment models underlying the index had been used to manage actual client assets between April 2001 and September 2008.

F-Squared’s Policies and Procedures Were Inadequately Designed and Implemented

32. During the October 2008 to October 2013 time period, F-Squared failed to adopt and implement policies reasonably designed to prevent violations of the Advisers Act and its rules. For example, F-Squared did not have policies reasonably designed to prevent the use of performance advertising materials that were false or misleading. Furthermore, F-Squared published performance advertisements without back-up for the performance, even after the issue was identified in a mock audit in 2012.

E. Violations

33. Based on the conduct described above, Respondent willfully violated Section 206(1) of the Advisers Act, which prohibits any investment adviser from employing any device, scheme, or artifice to defraud any client or prospective client.

34. Based on the conduct described above, Respondent willfully violated Section 206(2) of the Advisers Act, which prohibits any investment adviser from engaging in any transaction, practice, or course of business which operates as a fraud or deceit upon any client or prospective client.

35. Based on the conduct described above, Respondent willfully violated Section 206(4) of the Advisers Act and Rule 206(4)-1(a)(5) thereunder, which makes it a fraudulent, deceptive, or

5A willful violation of the securities laws means merely “‘that the person charged with the duty knows what he is doing.’” Wonsover v. SEC, 205 F.3d 408, 414 (D.C. Cir. 2000) (quoting Hughes v. SEC, 174 F.2d 969, 977 (D.C. Cir. 1949)). There is no requirement that the actor “‘also be aware that he is violating one of the Rules or Acts.’” Id. (quoting Gearhart & Otis, Inc. v. SEC, 348 F.2d 798, 803 (D.C. Cir. 1965)).
manipulative act, practice, or course of business within the meaning of Section 206(4) of the Advisers Act to, among other things, directly or indirectly publish, circulate, or distribute an advertisement which contains any untrue statement of material fact, or which is otherwise false or misleading.

36. Based on the conduct described above, Respondent willfully violated Section 206(4) of the Advisers Act and Rule 206(4)-7 thereunder, which, among other things, makes it a fraudulent, deceptive, or manipulative act, practice, or course of business within the meaning of Section 206(4) of the Advisers Act to fail to adopt and implement such written policies or procedures reasonably designed to prevent violation of the Advisers Act and the rules promulgated thereunder.

37. Based on the conduct described above, Respondent willfully violated Section 206(4) of the Advisers Act and Rule 206(4)-8 thereunder, which makes it a fraudulent, deceptive, or manipulative act, practice, or course of business within the meaning of Section 206(4) of the Advisers Act for any investment adviser to a pooled vehicle to make any untrue statement of a material fact or to omit to state a material fact necessary to make the statements made, in light of the circumstances under which they were made, not misleading, to any investor or prospective investor in the pooled investment vehicle, or to otherwise engage in any act, practice, or course of business that is fraudulent, deceptive or manipulative with respect to any investor or prospective investor in the pooled investment vehicle.

38. Based on the conduct described above, Respondent willfully violated Section 207 of the Advisers Act which makes it unlawful for any person willfully to make any untrue statement of a material fact in any registration application or report filed with the Commission, or willfully to omit to state in any such application or report any material fact which is required to be stated therein.

39. Based on the conduct described above, Respondent willfully violated Section 204 of the Advisers Act and Rule 204-2(a)(16) thereunder. Section 204 of the Advisers Act requires investment advisers to make and keep certain records as the Commission, by rule, may prescribe as necessary or appropriate in the public interest or for the protection of investors. Rule 204-2 under the Advisers Act requires investment advisers registered or required to be registered to make and keep true, accurate and current various books and records relating to their investment advisory business, including all accounts, books, internal working papers, and any other records or documents that are necessary to form the basis for or demonstrate the calculation of the performance or rate of return of any or all managed accounts or securities recommendations in any notice, circular, advertisement, newspaper article, investment letter, bulletin or other communication that the investment adviser circulates or distributes, directly or indirectly, to 10 or more persons.

40. Based on the conduct described above, Respondent willfully aided and abetted and caused certain mutual funds sub-advised by F-Squared to violate Section 34(b) of the Investment Company Act which, among other things, makes it unlawful for any person to make any untrue or misleading statement of material fact in any registration statement, application, report, account, record, or other document filed with the Commission under the Investment Company Act.
F. Respondent’s Remedial Efforts and Cooperation

41. In determining to accept Respondent’s Offer, the Commission considered the remedial acts undertaken by Respondent and Respondent’s cooperation with the Commission staff in its investigation of this matter. Among other things, F-Squared hired an Independent Compliance Consultant in January 2014, and separated its Chief Executive Officer (Howard Present) in 2014. The Independent Compliance Consultant has already undertaken and completed a review of F-Squared’s compliance policies and procedures and submitted a report (the “Initial Report”) to F-Squared and the Commission staff.

G. Undertakings

42. Independent Compliance Consultant. F-Squared retained the services of an Independent Compliance Consultant in January 2014, and the Independent Compliance Consultant submitted an Initial Report to the Commission staff in September 2014. F-Squared undertakes to maintain the engagement of the Independent Compliance Consultant as follows:

   a. Within 30 days of the date of the issuance of this Order, F-Squared shall retain the services of the Independent Compliance Consultant who submitted the Initial Report. The Independent Compliance Consultant’s compensation and expenses shall be borne exclusively by F-Squared. F-Squared shall require the Independent Compliance Consultant to conduct a second review of the F-Squared compliance policies and procedures that the Independent Compliance Consultant deems relevant with respect to the creation, publication, circulation, or distribution of performance advertisements or other marketing material;

   b. At the end of the review, which in no event shall be more than three months after the date of the issuance of this Order, F-Squared shall require the Independent Compliance Consultant to submit a Second Report to F-Squared and to the Commission staff. The Second Report shall describe the review performed, the conclusions reached, and shall include any recommendations deemed necessary to make the policies and procedures adequate. F-Squared may suggest an alternative procedure designed to achieve the same objective or purpose as that of the recommendation of the Independent Compliance Consultant. The Independent Compliance Consultant shall evaluate any alternative procedure proposed by F-Squared. However, F-Squared shall abide by the Independent Compliance Consultant’s final recommendation;

   c. Within six months after the date of issuance of this Order, F-Squared shall, in writing, advise the Independent Compliance Consultant and the Commission staff of the recommendations it is adopting;

   d. Within nine months after the date of issuance of this Order, F-Squared shall require the Independent Compliance Consultant to complete its review and submit a written final report to Commission staff. The Final Report shall describe the review made of F-Squared’s compliance policies and procedures relating to the publication, circulation, or distribution of
performance advertisements or other marketing material containing historical (hypothetical or actual) performance information; set forth the conclusions reached and the recommendations made by the Independent Compliance Consultant, as well as any proposals made by F-Squared; and describe how F-Squared is implementing the Independent Compliance Consultant’s final recommendations;

e. F-Squared shall take all necessary and appropriate steps to adopt and implement all recommendations contained in the Independent Compliance Consultant’s Final Report;

f. For good cause shown and upon timely application by the Independent Compliance Consultant or F-Squared, the Commission’s staff may extend any of the deadlines set forth in these undertakings;

g. F-Squared shall require the Independent Compliance Consultant to enter into an agreement providing that for the period of the engagement and for a period of two years from completion of the engagement, the Independent Compliance Consultant shall not enter into any employment, consultant, attorney-client, auditing or other professional relationship with F-Squared, or any of its present or former affiliates, directors, officers, employees, or agents acting in their capacity as such. The agreement will also provide that the Independent Compliance Consultant will require that any firm with which he/she is affiliated or of which he/she is a member, and any person engaged to assist the Independent Compliance Consultant in the performance of his or her duties under this Order shall not, without prior written consent of the Commission staff, enter into any employment, consultant, attorney-client, auditing or other professional relationship with F-Squared, or any of its present or former affiliates, directors, officers, employees, or agents acting in their capacity as such for the period of the engagement and for a period of two years after the engagement.

43. F-Squared shall certify, in writing, compliance with the undertakings set forth above. The certification shall identify the undertakings, provide written evidence of compliance in the form of a narrative, and be supported by exhibits sufficient to demonstrate compliance. The Commission’s staff may make reasonable requests for further evidence of compliance, and F-Squared agrees to provide such evidence. The certification and supporting material shall be submitted to Kevin M. Kelcourse, Boston Regional Office, Securities and Exchange Commission, 33 Arch Street, Suite 2300, Boston, MA 02110, with a copy to the Office of the Chief Counsel of the Enforcement Division, no later than sixty days from the date of completion of the undertakings.

44. Respondent shall cooperate fully with the Commission in any and all investigations, litigations or other proceedings relating to or arising from the matters described in the Order. In connection with such cooperation, Respondent shall: (i) produce, without service of a notice or subpoena, any and all non-privileged documents and other information requested by the Commission staff subject to any restrictions under the law of any foreign jurisdiction; (ii) use its best efforts to cause their officers, employees, and directors to be interviewed by the Commission staff at such time as the staff reasonably may direct; and (iii) use its best efforts to cause their officers, employees, and directors to appear and testify without service of a notice or subpoena in such investigations, depositions, hearings or trials as may be requested by the Commission staff.
IV.

In view of the foregoing, the Commission deems it appropriate and in the public interest to impose the sanctions agreed to in Respondent’s Offer.

Accordingly, pursuant to Sections 203(e) and 203(k) of the Advisers Act and Sections 9(b) and 9(f) of the Investment Company Act, it is hereby ORDERED that:

A. Respondent shall cease and desist from committing or causing any violations and any future violations of Sections 204(a), 206(1), 206(2), 206(4), 207 of the Advisers Act and Rules 204-2(a)(16), 206(4)-1, 206(4)-7, and 206(4)-8 thereunder and Section 34(b) of the Investment Company Act.

B. F-Squared Investments, Inc. is censured.

C. F-Squared Investments, Inc. shall, within 10 days of the entry of this Order, pay disgorgement of $30 million ($30,000,000.00) to the United States Treasury. If timely payment is not made, additional interest shall accrue pursuant to SEC Rule of Practice 600. Payment must be made in one of the following ways:

(1) F-Squared Investments, Inc. may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;

(2) F-Squared Investments, Inc. may make direct payment from a bank account via Pay.gov through the SEC website at http://www.sec.gov/about/offices/ofm.htm; or

(3) F-Squared Investments, Inc. may pay by certified check, bank cashier’s check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center
Accounts Receivable Branch
HQ Bldg., Room 181, AMZ-341
6500 South MacArthur Boulevard
Oklahoma City, OK 73169 17

Payments by check or money order must be accompanied by a cover letter identifying F-Squared Investments, Inc. as the Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Kevin M. Kelcourse, Boston Regional Office, Securities and Exchange Commission, 33 Arch Street, Suite 2300, Boston, MA 02110.
D. F-Squared Investments, Inc. shall, within 10 days of the entry of this Order, pay a civil money penalty in the amount of $5 million ($5,000,000.00) to the United States Treasury. If timely payment is not made, additional interest shall accrue pursuant to 31 U.S.C. 3717. Payment must be made in one of the following ways:

(1) F-Squared Investments, Inc. may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;

(2) F-Squared Investments, Inc. may make direct payment from a bank account via Pay.gov through the SEC website at http://www.sec.gov/about/offices/ofm.htm; or

(3) F-Squared Investments, Inc. may pay by certified check, bank cashier’s check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center
Accounts Receivable Branch
HQ Bldg., Room 181, AMZ-341
6500 South MacArthur Boulevard
Oklahoma City, OK 73169 17

Payments by check or money order must be accompanied by a cover letter identifying F-Squared Investments, Inc. as the Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Kevin M. Kelcourse, Boston Regional Office, Securities and Exchange Commission, 33 Arch Street, Suite 2300, Boston, MA 02110.

E. Respondent F-Squared Investments, Inc. shall comply with the undertakings enumerated in Section III.G. above.

By the Commission.

Brent J. Fields
Secretary
APPENDIX A TO ORDER INSTITUTING ADMINISTRATIVE AND CEASE-AND-DESIST PROCEEDINGS PURSUANT TO SECTIONS 203(e) AND 203(k) OF THE INVESTMENT ADVISERS ACT OF 1940, AND SECTIONS 9(b) AND 9(f) OF THE INVESTMENT COMPANY ACT OF 1940, MAKING FINDINGS, AND IMPOSING REMEDIAL SANCTIONS AND A CEASE-AND-DESIST ORDER

APPENDIX A

Respondent F-Squared Investments, Inc., admits the facts set forth below (the “Admissions”) and acknowledges that its conduct violated the federal securities laws:

AlphaSector Background

1. From October 2008 to September 2013, F-Squared marketed an ETF sector rotation strategy called AlphaSector that was based on an algorithm that yields a “signal” indicating whether to buy or sell nine industry ETFs. As of June 30, 2014, there was approximately $28.5 billion invested pursuant to the AlphaSector indexes. The bulk of these assets are invested through registered mutual funds or other funds or through separately managed accounts managed by advisers or brokers who implement the strategy based on information they receive periodically from F-Squared. Today, AlphaSector is the largest active ETF strategy in the market.

2. F-Squared and Present began advertising the AlphaSector strategy via an index in September 2008. From inception, F-Squared stated in advertisements that AlphaSector is an ETF sector rotation strategy that (i) invests in as many as nine U.S. equities industry ETFs, with an algorithm or quantitative engine determining whether, based on ETF sector trends and volatility, the portfolio would invest in none, some, or all of the nine ETFs; (ii) holds equal ownership of any of the nine ETFs with a positive trend and no ownership of any of the nine ETFs with a negative or neutral trend; (iii) rebalances periodically, either weekly or monthly, and only when at least one of the nine ETFs show a change in trend; and (iv) applies a 25% cap per ETF (i.e., no ETF would hold more than 25% of the total assets in the strategy) at the time of rebalancing, with the remainder of the portfolio...
invested in a short-term treasury ETF (representing cash).

3. Present created and was responsible for all of F-Squared’s AlphaSector advertisements, which included PowerPoint presentations describing the strategy and its past performance, including for the period April 2001 to September 2008. The relevant slides from F-Squared’s August 2013 standard presentation for the AlphaSector Premium Index, which was available on F-Squared’s public website until the end of September 2013, are attached as Exhibit 1. F-Squared posted the presentations and other AlphaSector performance advertisements and marketing materials on its public website and sent them to numerous prospective and current clients from September 2008 to September 2013.

4. From AlphaSector’s inception in October 2008 through September 2013, F-Squared advertised AlphaSector’s past performance as index performance. Even though F-Squared did not create AlphaSector until late 2008, F-Squared made two materially false claims in its AlphaSector advertisements and Forms ADV, namely that:

   - the in/out ETF signals that formed the basis of the AlphaSector index returns had been used to manage client assets from April 2001 to September 2008; and
   
   - the in/out ETF signals resulted in a track record that significantly outperformed the S&P 500 Index from April 2001 to September 2008.

F-Squared was at least reckless in advertising both of these statements.

**F-Squared and Present Used Back-Tested Data to Create a Seven-Year Track Record**

5. According to Present, in early 2008, Present and a proprietor of a private wealth advisory firm (hereinafter, “Private Wealth Advisor”) discussed a sector rotation investment strategy using ETFs. According to Present, in the context of these discussions, the Private Wealth Advisor claimed to have used a sector rotation strategy to manage client assets. Present never saw records showing that the Private Wealth Advisor had invested advisory clients in a sector rotation strategy.

6. Present also understood that the Private Wealth Advisor had a college intern who was developing an algorithm to use in conjunction with the sector rotation strategy. The algorithm could generate a momentum-based signal that could be used to determine whether to invest or not invest in a particular sector ETF. As discussions between Present and the Private Wealth Advisor moved forward in summer 2008, the Private Wealth Advisor decided to co-found a signal provider company (the “Data Provider”) with his intern. The Data Provider would send data with in/out signals to F-Squared that F-Squared would then use to determine whether AlphaSector would own or not own an ETF.
7. In late August and early September 2008, as F-Squared and the Data Provider were finalizing a contract for signal delivery to F-Squared, the Private Wealth Advisor’s intern sent Present three sets of hypothetical, back-tested weekly trends for each of the ETFs. A positive trend was a signal to be “in” (buy or own) the ETF, and a negative trend was a signal to be “out” (sell or do not own) of the ETF. The first two data sets of trends were based on whether the simple moving average of each ETF had increased or decreased from the previous week. One of the two sets of trends was based on a 41-week simple moving average and the other set was based on a 61-week simple moving average. The intern’s third set of signals were from his own algorithm.

8. After he received the three sets of signals from the Private Wealth Advisor’s intern, Present instructed an F-Squared employee to divide the three sets of weekly ETF trend or signal data among three different time periods, which, according to Present, corresponded to the periods the Private Wealth Advisor had claimed each set of signals had been used to manage his clients’ assets, and then calculate AlphaSector’s back-tested and hypothetical historical performance for the period April 2001 to September 2008. The 61-week simple moving average trends were used for the period April 2001 to June 2006, the 41-week simple moving average trends were used for the period July 2006 to June 2008, and the signals from the intern’s algorithm were used for the period July 2008 to September 2008.

9. To convert the in/out ETF signals into an index “track record,” F-Squared and Present tested the performance of various portfolio construction methodologies – which convert the ETF signals into performance – and ultimately Present created the rules, described in paragraph 2, that are central to the AlphaSector strategy.

10. F-Squared’s AlphaSector advertisements emphasized algorithmic-based models that purportedly supported both the hypothetical and actual track record beginning in July 2008, but in reality the AlphaSector track record for the period April 2001 to June 2008 was based only on changes in 41-week and 61-week simple moving averages. An example of the model description underlying AlphaSector is at page 14 of Exhibit 1.

11. The Private Wealth Advisor never used a sector rotation strategy. His client and customer trades were ad hoc, client-by-client, non-discretionary, and were not uniform across clients. Before mid-2008, the Private Wealth Advisor and his business partner traded the ETFs that form the basis of AlphaSector only infrequently, and they did not trade some of the ETFs at all. To the extent that the Private Wealth Advisor ever attempted to use moving average data to make trades, the trades were not consistent with the trend data F-Squared and Present used to create AlphaSector’s performance.

1 In this instance, the simple moving average is the sum of the weekly closing prices of an ETF for either 41 or 61 weeks divided by either 41 or 61. The trends the intern sent Present showed each ETF’s simple moving average at the end of each week for the period 2001-2008. A positive ETF trend, for example, meant that week’s simple moving average for the particular ETF was higher than the prior week’s simple moving average.
The Track Record Contained a Substantial Performance Calculation Error

12. F-Squared created the pre-October 2008 “historical track record” incorrectly by implementing all the purchases and sales dictated by the ETF trend signals one week before they should have been implemented. Because the signals were detecting price momentum, F-Squared’s incorrectly implementing the signals one week early meant that AlphaSector’s “historical track record” was based on its selling before price drops that had already occurred and buying before price increases that had already occurred. As described below, virtually all of AlphaSector’s claimed outperformance relative to the S&P 500 Index for the pre-October 2008 period is attributable to this erroneous calculation.

13. The inaccurate compilation of historical data substantially improved the AlphaSector’s strategy’s advertised back-tested and hypothetical historical performance for the pre-October 2008 period. If an investor made a hypothetical investment of $100,000 on April 1, 2001 (assuming a reinvestment of dividends and no further contributions or withdrawals), the investment would have been worth approximately $128,000 on August 24, 2008 if invested in the S&P 500 Index. With accurately timed (but still hypothetical and back-tested) signal implementation, the same investment in F-Squared’s hypothetical ETF sector rotation strategy would have been worth $138,000. However, by implementing the hypothetical and back-tested signals one week early, F-Squared advertised the investment as worth $235,000.

After 2008, Present and F-Squared Continued to Advertise AlphaSector’s Hypothetical and Back-Tested and Substantially Improved Track Record

14. On multiple occasions after September 2008, Present requested back-up documentation from the Private Wealth Advisor to support AlphaSector’s track record. Present never received back-up from the Private Wealth Advisor. Despite the lack of documentation of live assets supporting AlphaSector’s performance for the period prior to September 2008, F-Squared and Present continued to advertise the false track record until September 2013.

15. In January 2009, Present contacted the Private Wealth Advisor and his business partner to obtain an audited track record for the Private Wealth Advisor’s accounts that had supposedly tracked the AlphaSector methodology. Present did not receive one. During these discussions, the Private Wealth Advisor told Present that the Private Wealth Advisor did not have a specific track record because he considered the sector rotation strategy to be a client-by-client trading strategy and not a specific product.

16. In October 2009, F-Squared began sub-advising mutual funds using the AlphaSector strategies. In connection with that effort, Present assured the mutual fund adviser that AlphaSector’s performance was constructed based on “actual investment philosophy, trading patterns and portfolio strategy that was employed for the client assets.” Present stated that the portfolio construction rules used to create AlphaSector were all “consistent elements of the AlphaSector Strategy during its entire existence, and critical to its performance returns.” Present also stated that the AlphaSector Index was
“based on investment decisions that were generated on a live basis since 2001” and “the Index therefore explicitly does not reflect backtested data, but instead represents live, historical data.” The mutual fund adviser, working with Present, amended the funds’ prospectus to include the inflated historical performance of the AlphaSector indexes from April 2001 to September 2008.

17. In June 2012, F-Squared retained an outside attorney to perform a mock audit. One of the recommendations from the mock audit was that F-Squared “should ensure that it has books and records to support its performance disclosed for years prior to the year 2006.” Present sent several communications in June and July 2012 to the Private Wealth Advisor and officers of the Data Provider co-founded by the Private Wealth Advisor in 2008, seeking the required records. F-Squared’s then-CCO also prepared a document by which the Data Provider and/or the Private Wealth Advisor would certify that they had records to support the advertised historical performance. These efforts proved unsuccessful. Present’s effort to elicit information from the Data Provider also prompted the Data Provider’s CEO and COO to tell Present that: (i) the Private Wealth Advisor’s former intern (now the Chief Technology Officer (CTO) of the Data Provider) was only 14 years old in 2001; and (ii) the data the former intern sent Present would have been back-tested for the period before either 2007 or 2008, when the former intern started working on the algorithm.

18. In October 2012, Present received a copy of a September 2008 email from a then F-Squared employee to a then employee of the Private Wealth Advisor concerning the implementation of historical signals. That email concerned the dating convention associated with the Data Provider’s signals and should have called into question whether F-Squared implemented the signals one week early in creating AlphaSector’s pre-October 2008 track record. Nonetheless, Present and F-Squared continued to advertise that inflated track record.

19. By May 2013, F-Squared had decided to replace the signal provider company’s ETF signals with signals generated by its own proprietary model. On July 1, 2013, Data Provider’s CEO and CTO told Present that they could not replicate AlphaSector’s pre-October 2008 advertised performance when they used the signals they understood were the basis of the AlphaSector track record. In September 2013, F-Squared removed all performance track records and advertising materials for the time period April 2001 to September 2008 from its website.

F-Squared’s Inaccurate Advertisements

20. F-Squared’s advertisements stated that the inception date of the AlphaSector indices “is based on an active strategy with an inception date of April 2001. Inception date is defined as the date as of which investor assets began tracking the strategy.” This disclosure is located in Exhibit 1 at page 18.

21. Starting in late 2009, F-Squared’s AlphaSector advertisements also explicitly claimed that the track record for the period April 2001 to September 2008 was not back-tested. For example, even as of September 2013, F-Squared’s advertisements stated: “The process of converting the active strategy to an index implies that the returns presented, while not backtested, reflect theoretical performance an investor would have obtained had it invested in the manner shown and does not
represent returns that an investor actually attained, as investors cannot invest directly in an index.”
This disclosure is located in Exhibit 1 at page 18.

22. From September 2008 to September 2013, F-Squared advertised that AlphaSector indices had outperformed the S&P 500 Index, particularly for the period from April 2001 to September 2008. Attached at pages 10 and 11 of Exhibit 1 are examples of AlphaSector performance advertisements.

23. F-Squared also claimed that it was responsible for AlphaSector’s buy and sell decisions for the pre-October 2008 period. For example, in September 2013, F-Squared’s public website featured news articles with statements such as:

- “Back in mid-2007, well before the financial debacle that began with the collapse of the investment bank Bear Stearns, Howard Present, co-founder, president and CEO of F-Squared Investments in Boston, had a strategy that determined that financial stocks were becoming too risky. But they didn’t just sell down the financial holdings, which at the time represented one-ninth of his strategy’s investments. He sold all his financial holdings.”

- “We eventually dropped the tech sector in 2001,” says Present.

- “Financials in 2006, [Present] notes, had moved from a historic average of about 15% of the S&P to 28%, or nearly double, which was another sign of a bubble that F-Squared was able to avoid. . . And when [Financials] started to show signs of decline, F-Squared dropped its entire financials allocation like a hot potato.”

F-Squared’s Inaccurate Forms ADV

24. F-Squared’s various Forms ADV filed during the period October 2008 to September 2013 inaccurately claimed that the investment models underlying the index had been used to manage actual client assets between April 2001 and September 2008.

F-Squared’s Policies and Procedures Were Inadequately Designed and Implemented

25. During the October 2008 to October 2013 time period, F-Squared failed to adopt and implement policies reasonably designed to prevent violations of the Advisers Act and its rules. For example, F-Squared did not have policies reasonably designed to prevent the use of performance advertising materials that were false or misleading. Furthermore, F-Squared published performance advertisements without back-up for the performance, even after the issue was identified in a mock audit in 2012.
Conclusion

26. In connection with the violations described in the foregoing Admissions, F-Squared Investment, Inc.’s actions were, at a minimum, reckless.
EXHIBIT 1
Strategies Tracking the AlphaSector® Series of Indices:

AlphaSector Premium Index
AlphaSector was designed to meet the real needs of investors: risk controls for down markets, participation in up markets\(^1\)

- Powerful but simple story, and uses NO derivatives, leverage, or shorting

### Growth of $100k: Comparison vs. S&P 500 TR

<table>
<thead>
<tr>
<th>Month</th>
<th>AlphaSector Premium Index</th>
<th>S&amp;P 500 TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-01</td>
<td>$100k</td>
<td>$100k</td>
</tr>
<tr>
<td>Apr-01</td>
<td>$136k</td>
<td>$130k</td>
</tr>
<tr>
<td>May-01</td>
<td>$176k</td>
<td>$166k</td>
</tr>
<tr>
<td>Jun-01</td>
<td>$211k</td>
<td>$205k</td>
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<tr>
<td>Jul-01</td>
<td>$246k</td>
<td>$235k</td>
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<tr>
<td>Aug-01</td>
<td>$276k</td>
<td>$265k</td>
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<tr>
<td>Sep-01</td>
<td>$306k</td>
<td>$296k</td>
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<tr>
<td>Oct-01</td>
<td>$333k</td>
<td>$323k</td>
</tr>
<tr>
<td>Nov-01</td>
<td>$358k</td>
<td>$348k</td>
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<tr>
<td>Dec-01</td>
<td>$384k</td>
<td>$374k</td>
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<tr>
<td>Jan-02</td>
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</tr>
<tr>
<td>Feb-02</td>
<td>$424k</td>
<td>$424k</td>
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<tr>
<td>Mar-02</td>
<td>$444k</td>
<td>$444k</td>
</tr>
<tr>
<td>Apr-02</td>
<td>$468k</td>
<td>$468k</td>
</tr>
</tbody>
</table>

Data as of June 30, 2013

<table>
<thead>
<tr>
<th></th>
<th>AlphaSector Premium Index</th>
<th>S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cumulative Return</strong></td>
<td>368.2%</td>
<td>76.0%</td>
</tr>
<tr>
<td><strong>1 Year Return</strong></td>
<td>21.3%</td>
<td>20.6%</td>
</tr>
<tr>
<td><strong>3 Yr Return (Annualized)</strong></td>
<td>19.3%</td>
<td>18.5%</td>
</tr>
<tr>
<td><strong>5 Yr Return (Annualized)</strong></td>
<td>13.8%</td>
<td>7.0%</td>
</tr>
<tr>
<td><strong>10 Yr Return (Annualized)</strong></td>
<td>14.8%</td>
<td>7.3%</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>10.4%</td>
<td>15.5%</td>
</tr>
<tr>
<td><strong>Annual Excess Return</strong></td>
<td>8.7%</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>R-Squared</strong></td>
<td>53.0%</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Maximum Drawdown</strong></td>
<td>-13.4%</td>
<td>-51.0%</td>
</tr>
</tbody>
</table>

**ASYMMETRY RATIO**

<table>
<thead>
<tr>
<th></th>
<th>AlphaSector Premium Index</th>
<th>S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Up Capture Ratio (Bull)</strong></td>
<td>85%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Down Capture Ratio (Bear)</strong></td>
<td>15%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Morningstar, F-Squared Investments. \(^1\)April 2001–June 2013

* See final pages for definition of Asymmetry Ratio

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Copyright 2013. Please see "Important Information" on final pages for disclosures that are an integral part of this presentation.

Page 10
AlphaSector Premium Index has historically delivered consistent returns across multiple market cycles.\(^1\)

**Annual Returns by Calendar Year**

<table>
<thead>
<tr>
<th>Year</th>
<th>S&amp;P 500 TR</th>
<th>AlphaSector Premium Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>-22.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>2003</td>
<td>24.8%</td>
<td>28.7%</td>
</tr>
<tr>
<td>2004</td>
<td>14.9%</td>
<td>10.9%</td>
</tr>
<tr>
<td>2005</td>
<td>6.9%</td>
<td>4.9%</td>
</tr>
<tr>
<td>2006</td>
<td>15.8%</td>
<td>15.0%</td>
</tr>
<tr>
<td>2007</td>
<td>16.7%</td>
<td>5.5%</td>
</tr>
<tr>
<td>2008</td>
<td>-37.0%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>2009</td>
<td>32.3%</td>
<td>15.1%</td>
</tr>
<tr>
<td>2010</td>
<td>17.7%</td>
<td>15.5%</td>
</tr>
<tr>
<td>2011</td>
<td>2.1%</td>
<td>16.0%</td>
</tr>
<tr>
<td>2012</td>
<td>1.7%</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

**Relative Volatility (Green = API Standard Deviation versus S&P 500 Standard Deviation)**

Source: Morningstar, F-Squared Investments. \(^1\)April 2001–December 2012
AlphaSector Premium: Construction methodology

- **Investments include:**
  - Nine exchange traded funds (ETFs) reflecting the primary sectors of the U.S. economy
  - Short-term Treasuries ETF, used for downside protection

- **Index is re-evaluated weekly**

- **Sector ETFs are traded using a binary model – either IN or OUT of the portfolio**
  - Sectors forecasted for positive return are left in; sectors forecasted to lose money are removed entirely
  - Decisions are based on a proprietary quantitative model in operation and development since 2001

- **All sectors remaining IN the index are equal weighted at the time of rebalancing**
  - There is a maximum cap of 25% for any sector ETF at time of rebalance

- **When 6 or more sectors are OUT, the model reduces exposure to equities**
  - Begin to build “cash” position using Short-term Treasury ETF:
    - 3 sectors IN = 25% cash; 2 sectors IN = 50% cash; 1 sector IN = 75% cash
  - Can go to 100% in S-T Treasuries if all 9 sectors are eliminated
AlphaSector Indices periodically decide to either eliminate or include a sector from the Index (binary option)\(^1\)

Historical Monthly Model Allocations with Cumulative Return of AlphaSector Premium Index and S&P 500

AlphaSector Premium: Model description

- Model objective
  - Makes a probabilistic determination of the risk of loss for each component ETF

- Primary factors
  - Volatility
    - Volatility trends
    - Rate of change
  - Price momentum

- Key aspects
  - Price momentum modified by volatility through use of a “Dynamic Volatility Window”
  - Utilizes intra-day volatility
  - Proprietary volatility measure featuring “True Volatility”
    - Volatility transformed into step function versus traditional rolling measure
**Important Information**

Past performance is no guarantee of future results.

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Investment products that may be based on AlphaSector Indexes may not be sponsored by F-Squared, and F-Squared does not make any representation regarding the advisability of investing in them. F-Squared serves as the model provider to various investment advisers. There is no guarantee that an investor’s account will achieve its objectives or avoid losses. Inclusion of a mutual fund or an exchange traded fund in an index does not in any way reflect an opinion of F-Squared regarding the investment merits of such a fund, nor should it be interpreted as an offer of such a fund’s securities. None of the mutual funds or exchange traded funds included in an index has given any real or implied endorsement or support to F-Squared or to this index. One cannot invest directly in an index.

All AlphaSector Indexes represented in this material do not reflect the actual trading of any client account. No representation is being made that any client will or is likely to achieve results similar to those presented herein.

Most AlphaSector Indexes are evaluated for rebalancing on both a monthly basis (“Rotation”) or evaluated for rebalancing on a weekly basis (“Premium”). The following is a summary of the core AlphaSector strategies:

The **AlphaSector U.S. Equity Index** is based on an active strategy with an inception date of April 2001. Inception date is defined as the date as of which investor assets began tracking the strategy. Returns provided prior to 2008 were generated from data received under a third party licensing agreement and are provided on an as is basis. The process of converting the active strategy to an index implies that the returns presented, while not backtested, reflect theoretical performance an investor would have obtained had it invested in the manner shown and does not represent returns that an investor actually attained, as investors cannot invest directly in an index.

The **AlphaSector International Index** returns provided herein were restated in August 2013 and therefore returns presented may differ from previously published returns.

The **AlphaSector Global Index** is a blend of two indexes, AlphaSector U.S. Equity Index and AlphaSector International Index. Both are based on active strategies, with the AlphaSector U.S. Equity Index having an inception date of April 2001 and the AlphaSector International Index having an inception date of May 2009. Any returns shown in the AlphaSector Global Index prior to May 2009 reflect partially backtested, simulated data.

The **AlphaSector Allocator Index** is a blend of four indexes: AlphaSector U.S. Equity Index (“U.S. Equity”), AlphaSector International Index (“International”), AlphaSector INFINiIndex (“Fixed Income”), and AlphaSector Alternatives Index (“Alternatives”). All are based on active strategies, with the U.S. Equity Index having an inception date of April 2001, the International Index having an inception date of May 2009, and the Fixed Income and Alternative Indexes having an inception date of December 2009. Any returns in the AlphaSector Allocator Index shown prior to December 2009 reflect partially backtested, simulated data.