

SEC Action Brings Lessons For Quantitative Fund Managers

By **Brian T. Daly and Anna Maleva-Otto, Schulte Roth & Zabel** (September 6, 2018, 3:11 PM EDT)

On Aug. 27, 2018, the U.S. Securities and Exchange Commission announced settlements with a U.S.-based registered investment adviser, several of its affiliates and two of its executives for alleged misconduct involving quantitative investment models that contained numerous errors.

These settlements, especially when placed in the context of other recent enforcement efforts related to quantitative and systematic trading strategies, make it clear that the SEC staff will utilize its anti-fraud powers to sanction investment advisers employing systematic or quantitative investment strategies that do not design and administer supervisory programs specifically designed to effectively address the risks inherent in algorithmic and similar investment techniques or that do not have accurate, current disclosures on those investment programs. Last week's settlements also reinforce a broader trend in holding senior personnel of investment advisers personally liable for their roles in causing an adviser's violations.

Background

Last week, the SEC reached a settlement with Aegon USA Investment Management LLC ("AUIM," collectively with the affiliates mentioned below, "Transamerica"), two affiliated investment advisers (Transamerica Asset Management Inc. and Transamerica Financial Advisors Inc.) and an affiliated broker-dealer (Transamerica Capital Inc.).[1] It also announced separate settlements with AUIM's chief investment officer[2] and its director of new initiatives.[3]

In the Aug. 27 order, the SEC alleged that, between July 2011 and June 2015, Transamerica offered, sold and/or managed mutual funds, variable life insurance investment portfolios, variable annuity investment portfolios and separately managed accounts, all of which were to have been "managed using a proprietary quant model." Transamerica purportedly promised that these quantitative techniques were "emotionless," "model-driven" and "model-supported" and provided descriptions of how the quantitative models were to have operated.

Alleged Activities

The Aug. 27 order asserted that Transamerica had numerous failures in its quantitative investment management programs. Among other issues, the order asserts that Transamerica did not:

- Confirm that the models worked as intended;

- Provide sufficient oversight of the development or operation of these models;
- Disclose that a relatively junior and inexperienced research analyst was the day-to-day manager of certain of the quantitative products (and, in fact, at times Transamerica incorrectly stated that a more senior and experienced investment professional was the sole portfolio manager of certain quantitative products); and
- Disclose the recognized risks, shortcomings and issues associated with these models.[4]

The SEC order noted that Transamerica had ample notice of the deficiencies in this strategy. The Aug. 27 order notes, for example, that AUIM itself, due to the extent of the embedded errors, categorized at least one of the models as “not [being] fit for [the intended] purpose.” In particular, however, AUIM commissioned an internal audit in 2011 that highlighted material deficiencies that, apparently, remained unaddressed for some time. The audit report, among other things, concluded that the adviser:

- “[D]oes not have formal controls or policies and procedures to ensure quantitative model development is controlled and models function as expected”;
- “[D]oes not periodically perform independent validation of modeling results to ensure the integrity of [the investment portfolios’] models remains intact,” which could “potentially impair” the adviser’s ability to identify modeling errors or allow them to be concealed; and
- “[H]as not formally defined the discretion Portfolio Managers have in managing [the investment portfolios] regarding trade orders not aligned with modeling results.”

Ultimately, according to the SEC order, more than 50 errors were discovered in AUIM’s quantitative models, including incorrect calculations, inconsistent formulas and scaling errors (e.g., the use of whole numbers where percentages were intended).

Following the internal audit, two senior employees of AUIM agreed to resolve the various issues, but failed to institute written policies and procedures regarding the model verification process until July 2013. Transamerica itself allegedly failed to disclose the existence of the errors or the decision to stop using certain of the quantitative models.

Violations

While the description of Transamerica’s allegedly deficient or wrongful acts touches on a number of areas, the specific violations found by the SEC staff include:

- Violations of Section 206(2) of the Investment Advisers Act of 1940 (which prohibits an investment adviser from engaging in a fraud or deceit upon any client or prospective client);
- Violations of Section 206(4) of the Advisers Act and Rule 206(4)-1(a)(5) thereunder (which make publishing an advertisement that contains an untrue statement of material fact, or that is otherwise false or misleading, a fraudulent act);
- Violations of Section 206(4) of the Advisers Act and Rule 206(4)-8 thereunder (which make it unlawful for any investment adviser to a pooled investment vehicle to make any untrue statement of material fact, 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, or to otherwise engage in any fraudulent or misleading act with respect to any fund investor or prospective investor); and

- Violations of Section 206(4) of the Advisers Act and Rule 206(4)-7 thereunder by failing to adopt and implement written policies and procedures reasonably designed to prevent violations of the Advisers Act and the rules thereunder.[5]

Without admitting or denying the SEC's findings, the various Transamerica entities agreed to a variety of "cease and desist" orders and agreed to pay over \$53 million in disgorgement (with approximately \$8 million in interest) and \$36.3 million in penalties.

Personal Liability

In a companion order, AUIM's global chief investment officer was personally named as being "a cause of these [i.e., Transamerica's] violations." [6] The SEC staff asserted that the CIO,

despite being aware of the risks that the models would not work as intended, did not take sufficient steps to have [the adviser] confirm the accuracy of the models ...He also did not identify the Analyst as the portfolio manager of certain of the Products despite being aware of his role in developing and managing the models. Beman agreed to be responsible for addressing the risks identified in the 2011 audit report, but failed to do so.

As a result of his "negligent conduct," the CIO was held by the SEC staff to be a "cause" of AUIM's violations of Section 206(4) of the Advisers Act and of Rule 206(4)-8 and Rule 206(4)-7. He agreed to be subject to a "cease and desist" order and to pay a \$65,000 fine.

Lessons for Private Fund Advisers

While the deficiencies in the Transamerica order effectively fall into two technical legal categories (i.e., (1) disclosure failures and similar anti-fraud breaches and (2) a failure to have instituted reasonable policies and procedures designed to prevent violations of the Advisers Act), the most notable aspect of the Transamerica order may be how substantive the failures were. Taking all of the facts alleged in the SEC order as being true and correct, the Transamerica matter could be categorized as a case of an ambitious investment program being implemented poorly, with insufficient oversight by individuals who additionally failed to take steps to correct errors (even after being presented with incontrovertible findings of severe deficiencies and agreeing to have them remedied). While poor choices are not necessarily actionable under the Advisers Act, failures to disclose them (and the situations surrounding them) may be.

With ever-advancing technology permeating every sector of the financial industry, many investment advisers to private funds are utilizing quantitative and systematic modeling; this can range from launching products that are "pure-play" quant strategies utilizing autonomous trading engines to more modest steps to insert a layer of quantitative modeling into a fundamental investment decision-making process. While quantitative modeling and systematic investment strategies can be valuable tools, the Transamerica order stands as a warning to advisers (and their key personnel) that effective — and effective substantive — oversight of the design, implementation and continued operation of algorithmic models is a required element of any compliance program.

While the Transamerica order involves, in part, the actions of an adviser to mutual funds, private fund

advisers should note that most of the violations asserted were under general provisions of the Advisers Act, which apply equally to advisers to private funds and managed accounts. It is reasonable, therefore, to expect that the SEC staff would expect the same level of compliance in the supervision of quantitative strategies from private fund managers as from advisers to registered, retail funds.

The Transamerica enforcement action makes it clear that the SEC expects investment advisers utilizing quantitative modeling to have policies and procedures in place to ensure that these models operate as intended and to ensure that the use and functions of the models are adequately disclosed. Advisers operating quantitative or systematic strategies should consider steps such as the following:

- Establishing written policies and procedures providing for robust testing and challenge procedures for new or amended quantitative modeling;
- Requiring confirmation of a “proof of concept” for each such model before and after it is put into production;
- Ensuring that personnel with sufficient technical knowledge and expertise are charged with carrying out verification procedures, and that those personnel are independent of the investment function; and
- Arranging for reviews of all disclosures on the quantitative and systematic investment programs, with a specific focus on whether and how problems in the process are addressed.

Given that many legal and compliance personnel may determine that their departments do not have enough technical expertise or market knowledge to carry out an effective assessment of their processes, an “independent” assessment may be useful (although it is important, as the Transamerica response to the internal audit report shows, that any such assessment be responded to with concrete actions), both in general and as an adjunct to the existing requirement for a registered investment adviser to conduct an annual compliance review.

In addition, in Transamerica, the SEC staff has set forth an expectation that quantitative and systematic managers have real-time backup capabilities. In the order against Transamerica’s chief investment officer, it was noted that the 2011 internal audit report stated that:

“In the event [the Analyst] is unavailable and model enhancements are required or models are not functioning as designed, AUIM backup personnel do not have sufficient knowledge to enhance, validate, or troubleshoot the models. In the event [the Analyst] is unavailable, models may be inadequately administered, potentially exposing client’s [sic] to excessive or unnecessary risk, negatively affecting fund performance, and potentially impairing AUIM’s ability to meet its investment objectives.” The interim report then assigned “key person risk” to the Analyst.

Legal and compliance staff, therefore, should also consider reviewing whether there is key-person risk embedded in a quant or systematic strategy, and whether there is enough sharing of code, models, or economic or statistical support for a particular strategy to allow continued operation in the event of unavailability of the primary researcher or portfolio manager for a given model.

Transamerica in Context

F-Squared

Last week's order can also be seen as an extension of the numerous actions, beginning in 2014, involving F-Squared Investments Inc. F-Squared began to market a product called "AlphaSector" in 2008, based largely on incorrectly compiled backtested information. The SEC alleged F-Squared falsely advertised a successful seven-year track record for the AlphaSector investment strategy that was, in actuality, based on a backtest (and not on actual performance); even worse, the underlying computations contained a "substantial performance calculation error" that inflated the results by approximately 350 percent. F-Squared settled with the SEC in 2014;^[7] under the settlement order, F-Squared was censured for numerous violations of the Advisers Act and the Investment Company Act, agreed to accept a cease-and-desist order and was assessed a penalty of \$30 million.^[8]

U.K. Guidance

The focus on controls around quantitative trading and investment is not a new concept and it is not restricted to the SEC. In February 2018, the U.K. Financial Conduct Authority published a report titled "Algorithmic Trading Compliance in Wholesale Markets."^[9] In that paper, the FCA set forth nearly 30 pages of suggested compliance controls around algorithmic and quantitative trading, and highlighted areas such as development and testing, risk controls, and governance and oversight. This follows from the extensive governance, organizational and systems resilience requirements for EU managers using algorithmic trading techniques introduced by the revised Market in Financial Instruments Directive^[10] (MiFID II) earlier this year. The FCA report also noted a need for "suitable market abuse training for staff involved in the development and implementation processes[,]" and warned that the FCA "will continue to assess whether firms have taken sufficient steps to reduce risks arising from algorithmic trading." Also, in June 2018, the U.K. Prudential Regulation Authority published a policy statement^[11] that was intended to accord U.K. regulatory expectations with broader EU banking and securities industry guidance and sets out supervisory expectations that echo those in the FCA report.

FINRA Guidance

While few private fund managers are members of the Financial Industry Regulatory Authority, that self-regulatory organization has circulated several items of guidance focused on effective supervision of algorithmic and quantitative trading. The most notable of these is Regulatory Notice 15-09,^[12] which offers guidance on effective supervision and control systems for market participants that utilize algorithmic trading engines or strategies. FINRA's guidance breaks supervision into five general areas: (1) general risk assessment and response; (2) software/code development and implementation; (3) software testing and system validation; (4) trading systems; and (5) compliance.

Last week's Transamerica order should serve as a reminder to private fund managers that the SEC staff continues to view quantitative and systematic managers as being subject to the same obligations of oversight, supervision and disclosure as advisers specializing in more traditional investment programs. This SEC focus, however, should be seen as more of a continuation of its examination and enforcement themes, rather than as a new initiative. The Aug. 27 settlements also reinforce a broader trend in holding senior personnel of investment advisers personally liable for their roles in causing an adviser's violations, which only serves to reinforce the need for a thoughtful review of these policies and practices.

Brian T. Daly and Anna Maleva-Otto are partners in the Investment Management Regulatory & Compliance Group at Schulte Roth & Zabel LLP. Mr. Daly is based in the New York office and Ms. Maleva-Otto is based in the London office.

The opinions expressed are those of the author(s) and do not necessarily reflect the views of the firm, its clients, or Portfolio Media Inc., or any of its or their respective affiliates. This article is for general information purposes and is not intended to be and should not be taken as legal advice.

[1] See *In the Matter of Aegon USA Investment Management LLC, et al.*, Admin. Proc. File No. 3-18681 (Aug. 27, 2018).

[2] See *In the Matter of Bradley J. Beman*, Admin. Proc. File No. 3-18682 (Aug. 27, 2018).

[3] See *In the Matter of Kevin A. Giles*, Admin. Proc. File No. 3-18683 (Aug. 27, 2018).

[4] Other deficiencies were also asserted, such as failures to correctly attribute certain performance results to factors other than the operation of the models themselves and to disclose that Transamerica imposed trading constraints (i.e., “overlays”) on certain client accounts that subsequently developed issues.

[5] Violations under other federal securities laws were found as well, such as: (1) violations of Section 17(a)(2) of the Securities Act of 1933 (which prohibits, in connection with the offer or sale of securities, the use of any untrue statement of material fact or any omission to state a material fact necessary in order to make statements made not misleading) and (2) violations of Section 15(c) of the Investment Company Act of 1940 (which requires an investment adviser to a registered investment company “to furnish, such information as may reasonably be necessary to evaluate the terms of any contract whereby [it] undertakes regularly to serve or act as investment adviser.”).

[6] As noted above, AUIM’s “director of new initiatives” was also the subject of an SEC settlement for failing to cause the adviser to adopt and enforce appropriate policies and procedures.

[7] Release No. IA-3988, *In the Matter of F-Squared Investments Inc.* (Dec. 22, 2014).

[8] The F-Squared settlement then gave rise to numerous other actions against mutual fund managers that had licensed the AlphaSector algorithms and were deemed deficient in marketing, without sufficient diligence and without a reasonable basis for reliance, the performance provided by F-Squared. See, e.g., *Investment Advisers Paying Penalties for Advertising False Performance Claims* (SEC press release 2016-167) (Aug. 25, 2016), available here. The Transamerica order also contains a charge against an AUIM affiliate for this violation.

[9] Financial Conduct Authority, *Algorithmic Trading Compliance in Wholesale Markets* (Feb. 2018), available here.

[10] Directive 2014/65/EU of the European Parliament and of the Council of May 15, 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast).

[11] Bank of England (Prudential Regulation Authority), *Algorithmic Trading, Supervisory Statement 5/18* (June 2018), available here.

[12] FINRA, *Regulatory Notice 15-09, Guidance on Effective Supervision and Control Practices for Firms Engaging in Algorithmic Trading Strategies* (2015), available here.