

STANDARD V—INVESTMENT ANALYSIS, RECOMMENDATIONS, AND ACTIONS

A. DILIGENCE AND REASONABLE BASIS

Members and Candidates must:

- 1. Exercise diligence, independence, and thoroughness in analyzing investments, making investment recommendations, and taking investment actions.**
- 2. Have a reasonable and adequate basis, supported by appropriate research and investigation, for any investment analysis, recommendation, and action.**

GUIDANCE

The application of Standard V(A) is dependent on the investment philosophy followed, the role of the member or candidate in the investment decision-making process, and the support and resources provided by the member's or candidate's employer. These factors will dictate the nature of the diligence, thoroughness of the research, and investigation required by Standard V(A).

The requirements for issuing conclusions on research will vary based on the member's or candidate's role in the investment decision-making process, but the member or candidate must make reasonable efforts to cover all pertinent issues when arriving at the recommendation. Members and candidates enhance transparency by providing or offering to provide supporting information to clients when recommending a purchase or sale or when changing a recommendation.

Using Secondary or Third-Party Research

If members and candidates rely on secondary or third-party research, they must make reasonable and diligent efforts to determine that such research is soundly based. Secondary research is defined as research conducted by someone else in the member's or candidate's firm. Third-party research is research conducted by entities outside the member's or candidate's firm, such as a brokerage firm or bank. If a member or candidate has reason to suspect that either secondary or third-party research or information from a source is not soundly based, the member or candidate must refrain from relying on that information. This requirement also applies in situations involving quantitatively oriented research, such as computer-generated screening or ranking of universes of equity securities based on various sets of prescribed criteria. Examples of criteria that a member or candidate can use in forming his or her opinion that research is sound include:

- review of the assumptions used,
- rigor of analysis performed,

- date/timeliness of the research, and
- evaluation of the objectivity and independence of recommendations.

In the case that a member or candidate relies on others within his or her firm to determine whether secondary or third-party research is soundly based, the information can be used in good faith unless the member or candidate has reason to question its validity or the processes and procedures used by those responsible for the investigation. An example of this situation would be a portfolio manager who does not have a choice over a data source because the firm's senior management conducted due diligence to determine which vendor would provide services.

With respect to an individual investment transaction, a member or candidate may rely on secondary or third-party research that is soundly based, but the member or candidate must always consider the transaction within the context of a client's entire portfolio and must factor in client needs and preferences.

Group Research and Decision Making

Commonly, members and candidates may be part of a group or team that is collectively responsible for producing investment analysis or research. The conclusions or recommendations of the report represent the consensus of the group and are not necessarily the views of the member or candidate, even though the name of the member or candidate is included on the report. There may be many instances when the member or candidate does not agree with the independent and objective view of the group. If the member or candidate believes that consensus opinion is reasonably and adequately based, then the member or candidate does not necessarily have to decline to be identified with the report. There should be a presumption that the group members are independent and objective and have a reasonable basis for the opinions. If the member or candidate is confident in the process, the member or candidate does not have to dissociate from the report as required by Standard I(A) if it does not reflect his or her opinion. The member or candidate should, however, document his or her difference of opinion with the team.

RECOMMENDED PROCEDURES FOR COMPLIANCE

Members and candidates should encourage their firms to consider the following policies and procedures to support the principles of Standard V(A):

- Establish a policy requiring that research reports and recommendations have a basis that can be substantiated as reasonable and adequate. An individual employee (supervisory analyst) or a group of employees (review committee) should be appointed to review and approve all research reports and recommendations to determine whether they meet the criteria as established in the policy.
- Develop detailed, written guidance for research analysts, supervisory analysts, and review committees that establishes due diligence procedures for judging whether or not there is a reasonable and adequate basis for a particular recommendation.
- Develop measurable criteria for assessing the quality of research, including the reasonableness and adequacy of the basis for any recommendation and the accuracy of

recommendations over time, and implement compensation arrangements that depend on these measurable criteria and that are applied consistently to all research analysts.

APPLICATION OF THE STANDARD

Example 1: Olga Jenner is the automobile analyst with an investment bank. On a quarterly conference call, one of the firms Jenner follows reports earnings per share that are significantly below Jenner's expectations. Jenner reduces the rating from "buy" to "hold" as a result of a re-evaluation of the company's fundamentals. Jacob Randall, a senior partner within the investment-banking department of the firm, is trying to secure the auto company as a client. He becomes angry when he discovers that Jenner has made the change in recommendation without his knowledge. He tells Jenner she should never again issue research on one of "his" companies without his consent.

Comment: Jenner has a responsibility to ensure that her opinion is both independent and objective. It is likely that the investment-banking department has a vested interest in appeasing potential corporate issuer clients of the bank. Jenner should notify her supervisor immediately that pressure is being exerted on her to change her opinion. This pressure has the potential to compromise her ability to maintain independence and objectivity under Standard I(B). Jenner must not submit to pressure from the covered company and must give her true opinion under Standard IV(A).

Example 2: Laurel Hastings is the airline industry analyst at a major investment bank. On a quarterly earnings announcement, one of the companies she follows declares earnings per share that are significantly below her expectations, and she reduces the rating from "buy" to "hold." The firm's policy requires that all research reports be approved by the director of research prior to being issued. Isaac Mallard, the director of research, is very angry when he discovers that Hastings has made the change in recommendation without his approval. Mallard tells Hastings that she should never again issue research without his consent.

Comment: Hastings has a responsibility to exercise diligence and thoroughness in forming her independent and objective judgment, but she must operate according to the firm's compliance procedures [see Standard III(C)]. If the firm established that Hastings or any other analyst must not issue research or recommendations without the approval of the director of research, she must not issue research prior to receiving approval and must follow the appropriate firm-mandated procedures.

Example 3: Helen Hawke manages the corporate finance department of Sarkozi Securities, Ltd. The firm is anticipating that the government will soon close a tax loophole that currently allows oil and gas exploration companies to pass on drilling expenses to holders of a certain class of shares. Because market demand for the tax-advantaged class of stock is currently high, Sarkozi convinces several companies to undertake new equity financings at once before the loophole closes. Time is of the essence, but Sarkozi lacks sufficient resources to conduct adequate research on all the prospective issuing companies. Hawke decides to estimate the IPO prices based on the relative size of each company and to justify the pricing later when her staff has time.

Comment: Sarkozy should have taken on only the work that it could adequately handle. By categorizing the issuers as to general size, Hawke has bypassed researching all the other relevant aspects that should be considered when pricing new issues and has thus not performed sufficient due diligence. Such an omission can result in investors purchasing shares at prices that have no actual basis. Hawke has violated Standard V(A).

Example 4: Babu Dhaliwal works for Cloudy Days Brokerage in the corporate finance group. He has just persuaded Feggans Resources, Ltd., to allow his firm to do a secondary equity financing at Feggans Resources' current stock price. Because the stock has been trading at higher multiples than similar companies with equivalent production, Dhaliwal presses the Feggans Resources managers to project what would be the maximum production they could achieve in an optimal scenario. Based on these numbers, he is able to justify the price his firm will be asking for the secondary issue. During a sales pitch to the brokers, Dhaliwal then uses these numbers as the base case production levels that Feggans Resources will achieve.

Comment: When presenting information to the brokers, Dhaliwal should have given a range of production scenarios and the probability of Feggans Resources achieving each level. By giving the maximum production level as the likely level of production, he has misrepresented the chances of achieving that production level and seriously misled the brokers.

Example 5: Brendan Witt creates an Internet site with a chat room area to publish his stock recommendations. He views the site as a chance to attract new clients. In the chat room, he almost always writes positively about technology stocks and recommends purchasing what the conventional wisdom of the markets has deemed the "hot" securities of the day.

Comment: Witt's exuberance about technology and conventional wisdom of the markets, without more information, does not constitute a reasonable and adequate basis, supported by appropriate research and investigation, on which to base a recommendation. Therefore, Witt has violated Standard V(A).

Example 6: Wolfgang Schmid is the technology analyst for an investment bank. For the third consecutive year, Schmid is ranked the "number 1" analyst according to a leading institutional survey of buy-side clients. The investment bank has secured the majority of technology underwritings in the past year. In an e-mail dialogue with his colleagues at the bank, Schmid discloses that he does not think the senior management of XYZ Dot Com has a realistic revenue growth plan in place to support the market multiples being paid for the stock. Meanwhile, Schmid's rating on XYZ Dot Com has remained unchanged as a "strong buy" for 14 straight months.

Comment: Schmid has violated Standard V(A) because his recommendation on XYZ Dot Com does not reflect his true opinion of the company.

Example 7: Carsten Dunlop is an investment consultant in the London office of EFG, a major global investment consultant firm. One of her U.K. pension funds has decided to appoint a

specialist U.S. equity manager. EFG's global manager research relies on local consultants to cover managers within their region and, after conducting thorough due diligence, post their views and ratings on EFG's manager database. Dunlop accesses EFG's global manager research database and conducts a screen of all U.S. equity managers based on the client's desired match for philosophy/style, performance, and tracking error targets and those that are rated "buy". She selects the five managers meeting these criteria and puts them in a briefing report that is delivered to the client 10 days later. In between the time of Dunlop's database search and delivery of the report to the client, one of the firms that Dunlop has recommended for consideration lost its Chief Investment Officer, Head of U.S. Equity Research, and the majority of portfolio managers on the U.S. equity product—all of whom have left to establish their own firm. Although EFG has updated its database, Dunlop's report to the client does not reflect this new information.

Comment: Dunlop has failed to satisfy the requirement of Standard V(A) by not checking the database in a timely manner and updating her report to the client. Although EFG updated the manager ratings to reflect the personnel turnover at the firm, Dunlop did not update her report to reflect the new information.

Example 8: Evelyn Mastakis is a junior analyst asked by her firm to write a research report predicting the expected interest rate for residential mortgages over the next six months. Mastakis submits her report to the fixed-income investment committee of her firm for review, as required by firm procedures. Although some committee members support Mastakis's conclusion, the majority of the committee disagrees with her conclusion and changes the report significantly to indicate that interest rates are likely to increase more than originally predicted by Mastakis.

Comment: The results of research are not always clear, and different people may have different opinions based on the same factual evidence. In this case, the majority of the committee may have valid reasons for issuing a report that differs from the analyst's original research. The firm can issue a report different from the original report of the analyst as long as there is a reasonable or adequate basis for its conclusions. Generally, analysts must write research reports that reflect their own opinion and can ask the firm not to put their name on reports that ultimately differ from that opinion. However, when the work is a group effort, not all members of the team may agree with all aspects of the report. Ultimately, members and candidates can ask to have their names removed from the report, but if they are satisfied that the process has produced results or conclusions that have a reasonable or adequate basis, members or candidates do not have to dissociate from the report even when they do not agree with its contents. The member or candidate should document the difference of opinion and any request to remove his or her name from the report.

Example 9: Gary Ostrowski runs a small, two person investment management firm. Ostrowski's firm subscribes to a service from a large investment research firm that provides research reports. Ostrowski's firm makes investment recommendations based on these reports.

Comment: Members and candidates can rely on third-party research but must make reasonable and diligent efforts to determine that such research is soundly based. If

Ostrowski undertakes due diligence efforts on a regular basis to ensure that the research produced by the large firm is objective and reasonably based, Ostrowski can rely on that research when making investment recommendations to clients.

STANDARD V—INVESTMENT ANALYSIS, RECOMMENDATIONS, AND ACTIONS

B. COMMUNICATION WITH CLIENTS AND PROSPECTIVE CLIENTS

Members and Candidates must:

- 1. Disclose to clients and prospective clients the basic format and general principles of the investment processes used to analyze investments, select securities, and construct portfolios and must promptly disclose any changes that might materially affect those processes.**
- 2. Use reasonable judgment in identifying which factors are important to their investment analyses, recommendations, or actions and include those factors in communications with clients and prospective clients.**
- 3. Distinguish between fact and opinion in the presentation of investment analysis and recommendations.**
- 4. Not copy or represent as their own original ideas or material without permission and must acknowledge and identify the source of ideas or material that is not their own.**

GUIDANCE

Standard V(B) addresses members' and candidates' conduct with respect to communicating with clients. Developing and maintaining clear, frequent, and thorough communication practices is critical to providing high-quality financial services to clients. Understanding the information communicated to them allows clients to know exactly how members and candidates are acting on their behalf and gives clients the opportunity to make well-informed decisions regarding their investments. Such understanding can be accomplished only through clear communication.

Standard V(B) states the responsibility of members and candidates to include in their communications those key factors that are instrumental to the investment recommendation presented. A critical part of this requirement is to distinguish clearly between opinions and facts. In preparing a research report, the member or candidate must present the basic characteristics of the security being analyzed, which will allow the reader to evaluate the report and incorporate information the reader deems relevant into his or her investment decision-making process.

Members and candidates must adequately illustrate to clients and prospective clients the manner in which the member or candidate conducts the investment decision-making process. The member or candidate must keep existing clients and other interested parties informed with respect to changes to the chosen investment process on an ongoing basis. Only by thoroughly understanding the nature of the investment product or service can a client determine whether changes to that product or service could materially affect the client's investment objectives.

Understanding the basic characteristics of the investment is of great importance in judging the suitability of each investment on a stand-alone basis, but it is especially important in determining the impact each investment will have on the characteristics of the portfolio. For instance, although the risk and return characteristics of shares of a common stock seem to be the same for any investor when the stock is viewed in isolation, the implications of such an investment vary greatly depending on the other investments held. If the particular stock represents 90 percent of an individual's investments, the stock's importance in the portfolio is vastly different from that of an investor who holds the same amount of the stock in a highly diversified portfolio in which the stock represents only 2 percent of the holdings.

For purposes of Standard V(B), communication is not confined to a written report of the type traditionally generated by an analyst researching a particular security, company, or industry. A presentation of information can be made via any means of communication, including in-person recommendation, telephone conversation, media broadcast, or transmission by computer (e.g., on the Internet). Furthermore, the nature of these communications is highly diverse—from one word (“buy” or “sell”) to in-depth reports of more than 100 pages. Brief communications must be supported by background reports or data that can be made available to interested parties on request.

A communication may contain a general recommendation about the market, asset allocation, or classes of investments (e.g., stocks, bonds, real estate) or relate to a specific security. If recommendations are contained in capsule form (such as a recommended stock list), members and candidates should notify clients that additional information and analyses are available from the producer of the report. Investment advice based on quantitative research and analysis must be supported by readily available reference material and should be applied in a manner consistent with previously applied methodology or with changes in methodology highlighted. Members and candidates should outline known limitations of the analysis and conclusions contained in their investment analysis. In evaluating the basic characteristics of the investment being recommended, members and candidates should consider in the report the principal risks inherent in the expected cash returns, which may include credit risk, financial risk (specifically the use of leverage or financial derivatives), and overall market risk.

Once the process has been completed, the member or candidate who prepares the report must include those elements important to the analysis and conclusions of the report so that the user can follow and challenge the report's reasoning. So long as the writer has done adequate investigation, the report writer may emphasize certain areas, touch briefly on others, and omit certain aspects deemed unimportant. For instance, a report may dwell on a quarterly earnings release or new-product introduction at the sacrifice of examining other fundamental matters in depth so long as the analyst stipulates clearly the limits to the scope of the report.

Standard V(B) requires that opinion be separated from fact. Violations are most likely to occur when reports fail to separate the past from the future by not indicating that earnings estimates, changes in the outlook for dividends, and/or future market price information are opinions subject to future circumstances. In the case of complex quantitative analysis, analysts must clearly separate fact from statistical conjecture and should identify the known limitations of the analysis.

Standard V(B) also requires that members and candidates in the CFA Program not plagiarize in the preparation of material for distribution to employers, associates, clients, prospects, or the general public. Plagiarism is defined as copying or using in substantially the same form materials prepared by others without acknowledging the source of the material or identifying the author and publisher of such material.

The investment profession uses a myriad of financial, economic, and statistical data in the investment decision-making process. Through various publications and presentations, the investment professional is constantly exposed to the work of others and to the temptation to use it without proper acknowledgment.

Plagiarism in investment management can take various forms. The simplest and most flagrant example is to take a research report or study done by another firm or person, change the names, and release the material as one's own original analysis. This action is a clear violation of Standard V(B). Other practices include (1) using excerpts from articles or reports prepared by others either verbatim or with only a slight change in wording without acknowledgment, (2) citing specific quotations supposedly attributable to "leading analysts" and "investment experts" without specific reference, (3) presenting statistical estimates of forecasts prepared by others with the source identified but without qualifying statements or caveats that may have been used, (4) using charts and graphs without stating their sources, and (5) copying proprietary computerized spreadsheets or algorithms without seeking the cooperation or authorization of their creators.

In the case of distributing third-party, outsourced research, members and candidates can use and distribute these reports so long as they do not represent themselves as the author of the report. The member or candidate may add value to the client by sifting through research and repackaging it for clients. The client may fully understand that he or she is paying for the ability of the member or candidate to find the best research from a wide variety of sources. However, members and candidates must not misrepresent their abilities, the extent of their expertise, or the extent of their work in a way that would mislead their clients or prospective clients. Members and candidates must disclose that the research being presented to clients comes from an outside source, from either within or outside the member's or candidate's firm. Clients should know who has the expertise behind the report or if the work is being done by the analyst, other members of the firm, or an outside party.

By adopting the ideas and words of others without acknowledgment, members and candidates risk violating Standard V(A) by making recommendations that may not have a reasonable basis and may include material misrepresentations in violation of Standard I(C).

The standard also applies to plagiarism in oral communications, such as through group meetings; visits with associates, clients, and customers; use of audio/video media (which is rapidly increasing); and telecommunications, such as through electronic data transfer and the outright copying of electronic media.

One of the most egregious practices in violation of this standard is the preparation of research reports based on multiple sources of information without acknowledging the sources. Such

information would include, for example, ideas, statistical compilations, and forecasts combined to give the appearance of original work. Although there is no monopoly on ideas, members and candidates must give credit when it is clearly due. Analysts must not use undocumented forecasts, earnings projections, asset values, and so on. Sources must be revealed or the research must state “Research indicates [or shows] that...” to bring the responsibility directly back to the author of the report or the firm involved.

RECOMMENDED PROCEDURES FOR COMPLIANCE

Because the selection of relevant factors is an analytical skill, determination of whether a member or candidate has used reasonable judgment in excluding and including information in research reports depends heavily on case-by-case review rather than a specific checklist. To assist in the after-the-fact review of a report, the member or candidate must maintain records indicating the nature of the research and should, if asked, be able to supply additional information to the client (or any user of the report) covering factors not included. To avoid plagiarism in preparing research reports or conclusions of analysis, members and candidates should take the following steps:

- **Maintain copies.** Keep copies of all research reports, articles containing research ideas, material with new statistical methodology, and other materials that were relied on in preparing the research report.
- **Attribute quotations.** Attribute to their sources any direct quotations, including projections, tables, statistics, model/product ideas, and new methodologies prepared by persons other than recognized financial and statistical reporting services or similar sources.
- **Attribute summaries.** Attribute to their sources paraphrases or summaries of material prepared by others. For example, to support his analysis of Brown’s competitive position, the author of a research report on Brown Company may summarize another analyst’s report of Brown’s chief competitor, but the author of the Brown report must acknowledge in his own report his reliance on the other analyst’s report.

APPLICATION OF THE STANDARD

Example 1: Serena Williamson, director of marketing for Country Technicians, Inc., is convinced that she has found the perfect formula for increasing Country Technician’s income and diversifying its product base. Williamson plans to build on Country Technician’s reputation as a leading money manager by marketing an exclusive and expensive investment advice letter to high-net-worth individuals. One hitch in the plan is the complexity of Country Technician’s investment system—a combination of technical trading rules (based on historical price and volume fluctuations) and portfolio construction rules designed to minimize risk. To simplify the newsletter, she decides to include only each week’s top five buy and sell recommendations and to leave out details of the valuation models and the portfolio structuring scheme.

Comment: Williamson’s plans for the newsletter violate Standard V(B) because she does not intend to include all the relevant factors behind the investment advice. Although Williamson need not describe the investment system in detail but to implement the advice

effectively, clients must be informed of Country Technician's basic process and logic. Without understanding the basis for a recommendation, clients cannot possibly understand its limitations or its inherent risks.

Example 2: Richard Dox is a mining analyst for East Bank Securities. He has just finished his report on Boisy Bay Minerals. Included in his report is his own assessment of the geological extent of mineral reserves likely to be found on the company's land. Dox completed this calculation based on the core samples from the company's latest drilling. According to Dox's calculations, the company has in excess of 500,000 ounces of gold on the property. Dox concludes his research report as follows: "Based on the fact that the company has 500,000 ounces of gold to be mined, I recommend a strong BUY."

Comment: If Dox issues the report as written, he will violate Standard V(B.3). His calculation of the total gold reserves for the property is an opinion, not a fact. Opinion must be distinguished from fact in research reports.

Example 3: Olivia Orange, an analyst at Government Brokers, Inc., which is a brokerage firm specializing in government bond trading, has produced a report that describes an investment strategy designed to benefit from an expected decline in U.S. interest rates. The firm's derivative products group has designed a structured product that will allow the firm's clients to benefit from this strategy. Orange's report describing the strategy indicates that high returns are possible if various scenarios for declining interest rates are assumed. Citing the proprietary nature of the structured product underlying the strategy, the report does not describe in detail how the firm is able to offer such returns in the scenarios, nor does the report address the likely returns of the strategy if, contrary to expectations, interest rates rise.

Comment: Orange has violated Standard V(B) because her report fails to describe properly the basic characteristics of the investment strategy, including how the structure was created and the degree to which leverage was embedded in the structure. The report should include a balanced discussion of how the strategy would perform in the case of rising as well as falling interest rates.

Example 4: Patricia Bell, a telecom equipment analyst for CTO Securities, issued a memo to be included in CTO's morning fax to the firm's clients:

Descend Communications pre-announced its first quarter results, stating that earnings would be as much as 3 cents better than consensus analyst projections of 44 cents per diluted share because of strong domestic orders and good expense control. We have upgraded our rating to "buy" from "outperform" and have raised our 12-month price target to \$70 from \$65, using a P/E reflecting the company's 40 percent growth rate applied to our new 2004 earnings estimate of \$1.75, up from \$1.65, per share.

Later the same morning, Bell justified her rating upgrade to her sales force by saying that the "whisper number" for the first quarter had approached 47 cents some time ago but that she had heard from a client that Descend might unexpectedly benefit by a couple extra cents from lower tax rates at its plant in Ireland. She stated that she had also read a message in an Internet chat

room that the company was close to booking a huge order from a major European telephone service provider. She said that she raised her published first quarter projection to just match Descend's guidance but was willing to take a chance that the company had a good shot at beating even those revised numbers judging from the strong rumors on the "Street."

Comment: Bell violated Standard V(B) by failing to distinguish between the facts offered in Descend's pre-announcement and the pure conjecture and/or rumors gathered from sources whose authenticity might be highly questionable and whose accuracy she had apparently not bothered to verify. In addition, Bell did not include in her memo any reference to the additional information, no matter how spurious it may have been, so that her clients could evaluate for themselves how relevant those factors might be in rendering their own respective investment decisions.

Example 5: May & Associates is an aggressive growth manager that has represented itself since its inception as a specialist at investing in small-capitalization domestic stocks. One of May's selection criteria is a maximum capitalization of \$250 million for any given company. After a string of successful years of superior relative performance, May expanded its client base significantly, to the point at which assets under management now exceed \$3 billion. For liquidity purposes, May's chief investment officer (CIO) decides to lift the maximum permissible market-cap ceiling to \$500 million and change the firm's sales and marketing literature accordingly to inform prospective clients and third-party consultants.

Comment: Although May's CIO is correct about informing potentially interested parties as to the change in investment process, he must also notify May's existing clients. Among the latter group might be a number of clients who have retained May as a small-cap manager and also retained mid-cap and large-cap specialists in a multiple manager approach. Such clients could regard May's change of criteria as a style change that could distort their overall asset allocations.

Example 6: Rather than lifting the ceiling for its universe from \$250 million to \$500 million, May & Associates extends its small-cap universe to include a number of non-U.S. companies.

Comment: Standard V(B.2) requires that May's CIO advise May's clients of this change because the firm may have been retained by some clients specifically for its prowess at investing in domestic small-cap stocks. Other variations requiring client notification include introducing derivatives to emulate a certain market sector or relaxing various other constraints, such as portfolio beta. In all such cases, members and candidates must disclose changes to all interested parties.

Example 7: RJZ Capital Management is a value-style active equity manager that selects stocks using a combination of four multifactor models. Because of favorable results gained from back testing the most recent 10 years of available market data, the president of RJZ decides to replace its simple model of price to trailing 12-months earnings with a new dividend discount model designed by the firm that is a function of projected inflation rates, earnings growth rates, and interest rates.

Comment: Because the introduction of a new and different valuation model represents a material change in the investment process, RJZ's president must communicate the change to the firm's clients. RJZ is moving away from a model based on hard data toward a new model that is at least partly dependent on the firm's forecasting skills. Clients would likely view such a model as a significant change rather than a mere refinement of RJZ's process.

Example 8: RJZ Capital Management loses the chief architect of its multifactor valuation system. Without informing its clients, the president of RJZ decides to redirect the firm's talents and resources toward developing a product for passive equity management—a product that will emulate the performance of a major market index.

Comment: The president of RJZ failed to disclose to clients a substantial change to its investment process, which is a violation of Standard V(B).

Example 9: At Fundamental Asset Management, Inc., the responsibility for selecting stocks for addition to the firm's "approved" list has just shifted from individual security analysts to a committee consisting of the research director and three senior portfolio managers. Eleanor Digby, a portfolio manager with Fundamental Asset Management, fails to notify her clients of the change.

Comment: Digby must disclose the process change to all her clients. Some of Fundamental's clients might be concerned about the morale and motivation among the firm's best research analysts following the change. Moreover, clients might challenge the stock-picking track record of the portfolio managers and might even want to monitor the situation closely.

Example 10: Amy Grant, a research analyst for a Canadian brokerage firm, has specialized in the Canadian mining industry for the past 10 years. She recently read an extensive research report on Deep Shaft Mining, Ltd., by Jeremy Barton, another analyst. Barton provided extensive statistics on the mineral reserves, production capacity, selling rates, and marketing factors affecting Deep Shaft's operations. He also noted that initial drilling results on a new ore body, which had not been made public, might show the existence of mineral zones that could increase the life of Deep Shaft's main mines, but Barton cited no specific data as to the initial drilling results. Grant called an officer of Deep Shaft, who gave her the initial drilling results over the telephone. The data indicated that the expected life of the main mines would be tripled. Grant added these statistics to Barton's report and circulated it as her own report within her firm.

Comment: Grant plagiarized Barton's report by reproducing large parts of it in her own report without acknowledgment. Moreover, if the Barton report was copyrighted, Grant very likely violated that copyright.

Example 11: Steve Swanson is a senior analyst in the investment research department of Ballard and Company. Apex Corporation has asked Ballard to assist in acquiring the majority ownership in stock of Campbell Company, a financial consulting firm, and to prepare a report recommending that stockholders of Campbell agree to the acquisition. Another investment firm,

Davis and Company, had already prepared a report for Apex analyzing both Apex and Campbell and recommending an exchange ratio. Apex has given the Davis report to Ballard officers, who have passed it on to Swanson, who then reviewed the Davis report along with other available material on Apex and Campbell companies. From his analysis, he concludes that the common stocks of Campbell and of Apex represent good value at their current prices; he believes, however, that the Davis report does not consider all the factors a Campbell stockholder would need to know to make a decision. Swanson reports his conclusions to the partner in charge, who tells him to “use the Davis report, change a few words, sign your name, and get it out.”

Comment: If Swanson does as requested, he will violate Standard V(B). He could refer to those portions of the Davis report that he agrees with if he identifies Davis as the source; he could then add his own analysis and conclusions to the report before signing and distributing it.

Example 12: Claude Chippendale, a quantitative analyst for Double Alpha, Inc., returns in great excitement from a seminar. In that seminar, Jack Jorrely, a well-publicized quantitative analyst at a national brokerage firm, discussed one of his new models in great detail, and Chippendale is intrigued by the new concepts. He proceeds to test this model, making some minor mechanical changes but retaining the concept, until he produces some very positive results. Chippendale quickly announces to his supervisors at Double Alpha that he has discovered a new model and that clients and prospective clients alike should be informed of this positive finding as ongoing proof of Double Alpha’s continuing innovation and ability to add value.

Comment: Although Chippendale tested Jorrely’s model on his own and even slightly modified it, he must still acknowledge the original source of the idea. Chippendale can certainly take credit for the final, practical results; he can also support his conclusions with his own test. The credit for the innovative thinking, however, must be awarded to Jorrely.

Example 13: Fernando Zubia would like to include in his firm’s marketing materials plain language descriptions of various concepts, such as the price-to-earnings multiple and why standard deviation is used as a measure of risk, that are taken from other sources without reference to the original author. Is this a violation of Standard V(B)?

Comment: Copying verbatim any material without acknowledgement, including plain language descriptions of the price-to-earnings multiple and standard deviation, violates Standard V(B.4). Even though these are general concepts, best practice would be for Zubia to describe them in his own words or cite the source from which the descriptions are quoted. Members and candidates responsible for creating marketing materials and those who knowingly use materials that include plagiarized materials could potentially be sanctioned if the matter was brought to the attention of AIMR’s Professional Conduct Program.

Example 14: Through a mainstream media outlet, Erika Schneider learns about a study that she would like to cite in her research. Should she cite both the mainstream intermediary source as well as the author of the study itself when using that information?

Comment: In all instances, it is necessary to cite the actual source of the information. Best practice would be to obtain the information directly from the author and review it before citing it in a report. In that instance, Schneider would not need to report how she found out about the information. For example, suppose Schneider reads in the *Financial Times* about a study issued by AIMR; best practice for Schneider would be to obtain a copy of the study from AIMR, review it, and then cite it in her report. If she does not use any interpretation from the *Financial Times* and it is not adding value to the report itself, the newspaper is a mere conduit to the original information she wants to use in the report and it need not be cited. If she does not obtain the report and review the information, Schneider runs the risk of relying on second-hand information that may misstate the source. If the *Financial Times* mistakenly reports the information on the graph originally drafted by AIMR, for example, and she copies that erroneous information without acknowledging AIMR, Schneider opens herself up to complaint. Best practice is either to obtain the study, report, graph, and so on from its original author and cite only that author or to use the information provided by the intermediary and cite both sources.

Example 15: Gary Ostrowski runs a small, two person investment management firm. Ostrowski's firm subscribes to a service from a large investment research firm that provides research reports that can be repackaged as in-house research from smaller firms. Ostrowski's firm distributes these reports to clients as its own work.

Comment: Ostrowski can rely on third-party research that has a reasonable and adequate basis, but he cannot imply that he is the author of the report. Otherwise, Ostrowski would misrepresent the extent of his work in a way that would mislead the firm's clients or perspective clients.

STANDARD V—INVESTMENT ANALYSIS, RECOMMENDATIONS, AND ACTIONS

C. RECORD RETENTION

Members and Candidates must develop and maintain appropriate records to support their investment analysis, recommendations, actions, and other investment-related communications with clients and prospective clients.

GUIDANCE

Members and candidates must retain records that substantiate the scope of their research and reasons for their actions or conclusions. The records required to support recommendations and/or investment actions are dependent on the role of the member or candidate in the investment decision-making process. Records can be maintained either in hard copy or electronic form.

As a general matter, records created as part of a member's or candidate's professional activity on behalf of his or her employer are the property of the member's or candidate's firm. When a member or candidate leaves a firm to seek other employment, the member or candidate cannot take the property of the firm, including originals or copies of supporting records of the member's or candidate's work, to the new employer without the express consent of the previous employer [see Standard III(A)]. Without recreating the records at the new firm, the member or candidate cannot use historical recommendations or research reports created at the previous firm because the supporting documentation is unavailable.

Local regulators often impose requirements on members, candidates, and their firms related to record retention that must be followed. Fulfilling such regulatory requirements also may satisfy the requirements of Standard IV(C), but members and candidates must explicitly determine whether it does. In the absence of regulatory guidance, AIMR recommends maintaining records for at least seven years.

RECOMMENDED PROCEDURES FOR COMPLIANCE

The responsibility to maintain records that support investment action generally falls with the firm rather than individuals. However, members and candidates must retain research notes and other documents supporting current investment-related communications to assist their firms in complying with internal or external record preservation requirements.

APPLICATION OF THE STANDARD

Example 1: One of Nikolas Lindstrom's clients is upset by the negative investment returns in his equity portfolio. The investment policy statement for the client requires that the portfolio manager follow a benchmark-oriented approach. The benchmark for the client included a 35 percent investment allocation in the technology sector, which the client acknowledged was

appropriate. Over the past three years, the portion put into the segment of technology stocks suffered severe losses. The client complains to the investment manager that so much money was allocated to this sector.

Comment: For Lindstrom, it is important to have appropriate records to show that over the past three years the percentage of technology stocks in the benchmark index was 35 percent. Therefore, that amount of money invested in the technology sector was appropriate according to the investment policy statement. Lindstrom should also have the investment policy statement for the client stating that the benchmark was appropriate for the client's investment objectives. He should also have records indicating that the investment had been explained appropriately to the client and that the investment policy statement was updated on a regular basis.

Example 2: Malcolm Young is a research analyst who writes numerous reports rating companies in the luxury retail industry. His reports are based on a variety of sources, including interviews with company management, manufacturers, and economists; onsite company visits; customer surveys; and secondary research from analysts covering related industries.

Comment: Young must carefully document and keep copies of all the information that goes into his report, including the secondary or third-party research of other analysts.

Example 3: Martin Blank develops an analytical model while employed by Grosse Point Investment Management, LLP (GPIM). While at the firm, he systematically documents the assumptions that make up the model as well as his reasoning for the assumptions. As the result of the success of his model, Blank is hired to be the head of the research department of one of GPIM's competitors. Blank takes copies of the records supporting his model to his new firm.

Comment: The records created by Blank supporting the research model he developed at GPIM are the records of GPIM. He cannot take the documents with him to his new employer without GPIM's permission [see Standard III(A)]. Blank must recreate the records supporting his model at the new firm.