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**Via E-mail**

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Dear Mr. Stevenson:

A cost-benefit analysis of the Fair Dealing Model first requires the specification of information that is relevant to effective decision-making. This paper presents comments on: suitable risk measures at the individual-security and portfolio levels; reporting issues in the proposed Transaction Summary and Enhanced Accounting Statement, and finally on the topic of investor education.

**Comments RE: Risk Measurement and Consistency**

**General**

If using the same standard proposed for assessing client risk-tolerance in the “Fair Dealing Document” then the client and advisor could agree on one of several possible industry-accepted frameworks for assessing and reporting securities risk.

Risk assessment should be undertaken at both the individual security and portfolio level. Those who may argue that individual security risk is immaterial because of portfolio diversification should keep in mind the following: 1) Many investors hold far less than the minimum 25 to 30 equal-weighted securities required for effective diversification, and 2) Most quantitative portfolio-optimization methods require that the volatilities of individual securities be specified in order to construct efficient portfolios.

**Risk at the Individual Security Level**

*Quantitative*

Regarding individual security risk, there are both quantitative and subjective methods for risk assessment. Common quantitative methods would include standard deviation of returns over a period of time, comparison of returns to a benchmark (market or specific index) yielding a regression coefficient or beta, and downside-risk measures like VaR which would give the probability of a specified monetary loss occurring with stated confidence interval. VaR can be quickly and easily calculated for individual securities, and has the advantage over other statistical measures by being easy to explain to clients. The historical volatilities of any competing investment-opportunities should be calculated over similar time periods in order to preserve both the comparability and consistency of these measures.

## *Subjective*

Subjective risk methods, though a source of inconsistency among practitioners, are nevertheless an important decision-making tool and should not be discounted in favour of purely quantitative metrics when assessing the risk profile of a security. A common method includes: identifying security-specific risk drivers (economic, sector, financial, product, market, strategic) classifying the risks as short, medium or long term; performing trends analysis on the risks identified and finally rating each on a Likert or similar weighting scale. Subjective assessment may account for factors that may not be easily modeled numerically, yet be significant sources of risk.

## *Efficacy of Industry-Accepted Risk Measures*

How effective are quantitative and subjective risk measures at forecasting actual risk? Is there a relation between quantitative risk metrics and the actual performance of investment returns? Empirical research has focused on quantitative metrics including: beta, book-to-market, firm size effects, and risk premiums. Beta has been shown to explain virtually none of the cross-sectional investment returns according to Fama & French [1992]. Still, other studies by Amihud & Christensen [1993] have argued that beta may indeed relate to the cross section of returns; others Chan, Lakinishok [1995] have shown mixed findings depending on the time period of returns studied. The proposal of using beta as a proxy to security risk, as suggested in the FDM, could be tenuous if adopted as the sole risk metric on which investors will base investment decisions. The importance of promoting a framework for risk assessment (so long as it meets industry standards and is agreed upon by client and advisor) would be preferable to the adoption of any one risk measure.

## **Risk at the Portfolio Level**

### *Simplified Correlation and VaR Calculations at Low Cost*

For portfolio-level risks, an advisor should assess the impact of including a specific security in the client's portfolio. This requires that the individual securities' volatilities (typically standard deviations) be known in addition to the correlations among the securities included in the portfolio. Portfolio optimization programs are freely available that allow one to estimate correlations (using free historical price data sets) and then to construct efficient portfolios given risk and return estimates. One can easily calculate portfolio volatility and portfolio VaR for fewer than 30 securities (assuming no exotic options and other securities that require simulation to forecast volatilities) using spreadsheet models or online services available at minimal cost.

How good are the cheap, computationally-simple techniques for calculating correlations and covariance VaR models compared to costly simulation-based techniques? Elton & Gruber [1998], Parvez [2001] and Best [1998] have compared the quality of VaR and correlation-estimation models – concluding that constant correlation assumptions yielded models of a generally higher quality than simulation-based models – and simple models of VaR using exponential weighted moving average with either constant correlation or weighted correlations from historical data also yielded high-quality models. The criterion used in VaR models to assess quality centered on the performance of the 95% confidence interval of expected losses in relation to the number of

expected occurrences of the loss in a time series of portfolio-return data. Known as “back-testing”, this approach allows quantitative ranking to determine model quality. Similarly, the portfolios arising from correlation estimates were back-tested against actual portfolio gains/losses to determine model ranking.

### *The Use of Other Risk Measures*

In regards to the use of  $R^2$  measures, there are two issues: first, as the square of the historical correlation of two securities within the same portfolio, the measure is of little practical use in predicting actual correlations (constant correlation models are generally superior to historical correlations, and require similar data-processing time). However,  $R^2$  can be useful in showing (along with index Betas) how closely a portfolio tracks the return of a specific index. Investors and advisors alike may more effectively monitor risk-return tradeoffs, particularly if better disclosure of fees is forthcoming.

Risk-adjusted expected returns (whether using beta or standard deviation in the denominator), allow investors to rank several potential securities for inclusion in the portfolio. Still, the expected correlations between securities must also be specified in addition to expected return and volatility.

If one goal of the FDM is to improve the decision-making process of investors, then a serious appraisal of security risk at both the individual and portfolio level is warranted. Equally important is the specification of expected returns for individual securities, be they stocks or funds. Requiring the reporting of risk measures without the corresponding return expectation is not conducive to good investment decision-making. Whether the estimate of expected returns appears as a stand-alone item or within the Reasons for Recommendation in the Transaction Summary is not important, so long as it does appear.

### *Level of Precision for Risk Measures*

Risk measurement may be quantitative or subjective. It should be undertaken at both the individual-security and portfolio level. The level of precision will vary depending of these factors, and also on the client-advisor selection of a suitable risk-reward framework (preferably one that allows intuitive matching to the client risk-reward profile as specified in the FDM). If both advisor and investor understand the risk measures presented and the measures themselves are based on accepted practices in the industry, and if the methodology chosen to assess risk at the individual and portfolio levels also enables fair monitoring of client-defined risk tolerance, then the absolute level of precision is not the issue.

## **Comments RE: Reporting in the Transaction Summary and Enhanced Account Statement**

### *The Transaction Summary*

The Transaction Summary (TS) is akin to a written presentation to the client of the costs, merits and risks of a proposed investment. Clients need to reflect on the suitability of investment; paying heed to their goals, risk tolerance and other comparable investment opportunities, before deciding. Omitting the TS may diminish the time and effort clients commit to assessing both the suitability and comparability of investments.

As stated in the FDM, the primary reason for the TS is to ensure that investors “know what they are buying.” This is commendable if the client and advisor have already discussed the risks and merits of recommended securities and also have assessed, in light of client’s risk tolerance, that one or more securities are appropriate investments. Then a simple summary of security type, risk and a brief reason for recommendation may suffice. If however the TS is the sole and primary interface between the advisor and the client - in essence their decision-making document - then by nature it should address the issues in the following paragraphs.

The reporting of risk-related information in the Transaction Summary introduces several issues. It should enable easy comparison of investments’ expected risk and returns. The sample TS templates shown do not seem to facilitate comparison of multiple investment recommendations. Further, advisors are not compelled to disclose the expected return of their recommendations. If the Summary is presented over the telephone, investors may face even more difficulty in coming to a decision. The decision to invest in a specific security requires an understanding of its relative risk-return and its impact on broader portfolio risk-return, so it is prudent to require disclosure of expected portfolio impact, if material. Currently there is no provision for the disclosure of expected changes in portfolio-risk as a consequence of investing in a proposed security.

If the purpose of the TS is one of making explicit the interface between advisor recommendations and the client-advisor decision-making-process, then it needs to be flexible enough to accommodate a range of decision-making styles and sophistication-levels of investors. Perhaps an intermediate step – an agreement that defines the risk and return frameworks (the client-specific risk-return profile as proposed in the FDM plus an agreed-on framework for assessing securities & portfolios) – would facilitate this task. Just as the FDM allows for considerable flexibility in an advisor’s assessment of client risk tolerance, so too should it accommodate the risk-return assessment for securities, so long as the framework follows some industry-accepted metrics and is agreed to by broker and client. Isn’t it more important that both frameworks be specified, without necessitating the disclosure of the complete decision-making process in each instance? The TS in the form proposed could then be reported for the preferred investment candidate(s), as agreed by both parties. This could reduce the complexity and costs of reporting the TS, without compromising service to the client.

### *Risk Reporting and the Enhanced Account Statement*

In the Enhanced Account Statement (EAS) there is a requirement for presenting portfolio-level risk and comparing same to the client’s desired risk level. Relative return-to-risk measures such as the Treynor or Sharpe ratios may be helpful in presenting to clients the performance of their portfolio. The correct use of these ratios depends on the level of diversification of the underlying portfolio: Treynor’s measure is a useful ranking criterion for diversified portfolios, since it compares portfolio excess return to the market risk benchmark, and assumes that any un-systematic risk is diversified away; the Sharpe ratio compares excess return to total risk and so is more appropriate for holdings that are not fully diversified. That brings up several issues: 1) Risk-adjusted-return ratios as described are not intuitively comparable with the subjective measures used to describe client risk. This makes comparisons between client and portfolio risk difficult. 2) Even if absolute measures of risk were computed at the portfolio level, there should be documented agreement between advisor and client on the conventions to be used to compare subjective risk tolerance and quantitative risk estimates; 3) EAS risk reporting at the aggregate but not the individual security level may allow material errors to be introduced if an inappropriate risk-adjusted-return ratio is

selected. If the role of the EAS is to inform the client about the risk and return performance, then requiring at a minimum the re-calculation of risk-adjusted returns for individual securities would help the investor decide if a security is performing as hoped. This is especially relevant in a poorly-diversified portfolio, where the exposure to individual security risk is significant.

### *The Frequency of Reporting*

At the Transaction Summary level, the natural reporting frequency would be whenever the advisor made a buy or sell recommendation. Consistent, brief and meaningful TS would be dependent on the up-front specification of both client and security risk-return frameworks.

Most brokerage clients receive a monthly Account Statement presently, and this seems to be a good compromise between the costs to the issuer and the information-value to the clients. The more costly yet comprehensive EAS should also aim for a monthly distribution target, though there could be clients who favour online reporting or less frequent reporting schedules, depending on their investment goals and time horizon. Brokerage firms may leverage new technologies to minimize the costs of reporting – examples include online delivery of the EAS, or third-party outsourcing of the reporting function. Clients who desire more frequent than monthly reporting may subscribe to a wide array of either free or minimal-cost portfolio tracking services, or a new range of enhanced portfolio services entering the marketplace.

## **Comments RE: Investor Education**

### *Understanding Risk Measures*

Will average investors be able to understand the risk measures proposed? Measures like VaR are cheap to calculate for portfolios of less than ~ 30 securities (leaving options aside), and as long as it is explained that they hold for normal price behaviour and not for extreme fluctuations, they are intuitive, include a precision level (confidence interval) and focus on downside rather than upside volatility. Quantitative risk measures ( $R^2$ , Beta) are less intuitive but have their own merits in guiding investor beliefs about risk - primarily the need for diversification and whether diversification has been achieved. Subjective risk metrics are probably most useful for individual securities, with gradations of high, mid or low risk sufficing for descriptive purposes. Subjective scoring of economic, sector, financial and marketing-related risks could be useful in forecasting whether historical, quantitative risk relationships will prevail over the investment period.

### *A Framework Approach to Learning*

Making clients aware of the meaning and use of risk measures should be only part of a comprehensive education plan. Investors already play a primary role in specifying their own risk tolerance and required returns; now they need to explore the menu of choices that specify security risk and return. The proposed changes to the TS and EAS will compel more detailed disclosure of risks and fee-adjusted returns, further highlighting the need for client education. By negotiating at least part of the framework by which their advisors will collect and present data on security and portfolio-level returns and risks, investors could play an active learning role.

How can client learning be facilitated? While there is a need for the sort of templates proposed in the FDM that convey information about fees, risks and terminology, the average investor will be

better served by tools that place the information in the context of decision-making. Since in an advisory relationship clients are ultimately responsible for the final decision, they need to be armed with information that allows them to assess advisor recommendations. To do so, clients need at a minimum the expected return of the security (net of fees), a security-risk profile, an estimate of the impact on portfolio-level risk and return, and a tolerable match with personal risk-return goals. These few items, comprising a framework on which to understand the recommendation, would help investors reap the most from an advisory relationship.

Yours sincerely,

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