



Karen Luprypa  
Director, Product Management, Investment Analytics, RBC Global Services

2002 GLOBAL INVESTMENT CONFERENCE ■ BANFF, ALBERTA

# Short-Term Volatility Does Matter

**Recent events have shown the effects of volatility on investment returns and the shortfalls of some traditional approaches.**

Investing in volatile markets is having a profound effect on the behaviour of market participants with respect to portfolio risk. In fact, market volatility over the past couple of years has forced many investors and pension plan sponsors to focus on short-term

events—in some cases, for the first time.

In a pension plan context, the fundamental goal of risk management is to improve the quality of decision-making at all levels of the plan, thereby increasing plan surplus. Generally, pension plans rely on their long-term time horizon, mean reversion, and actuarial smoothing to mitigate the effects of short-term volatility.

However, recent market events have highlighted both the effects of volatility on investment returns and the shortfalls of traditional approaches to risk measurement and risk management. In volatile markets, plan sponsors and investment managers need a robust, real-time risk management methodology that will monitor portfolio exposures and provide informative and actionable results.

A good risk management tool must be comprehensive, in that it covers all financial instruments and asset classes, and it must have the ability to aggregate all risks. It should permit reasonable measurement, both before and after the fact, and it must be understandable and informative at all levels of an organization.

Downside risk measures such as Value-at-Risk, referred to simply as VaR, meet these requirements and offer a powerful addition to the traditional risk management approach. VaR is a statistic that summarizes the exposure of an asset or portfolio to market risk. It is defined as “the predicted worst-case loss, at a specific confidence level, over a specific period of time.”

So, why is VaR such a great addition to traditional measures?

Aside from the fact that VaR measures are forward-looking estimates of market risk, VaR's most powerful attribute is its ability to aggregate risk by taking into account the correlation structures between risk factors, across different financial instruments and asset classes.

VaR facilitates consistent and regular monitoring of market risk, allowing plan sponsors to track the dynamics of changes to their risk profile over time or to identify risk concentrations or diversification benefits in their portfolio. It permits an attribution of those risk factors to asset allocation changes versus market changes versus manager behaviour changes. It allows for standardized and meaningful industry and peer comparisons of risk profiles between managers or plans. And, finally, VaR can be used diagnostically or prescriptively to help determine whether a plan's risk level is appropriate to its circumstances.

Overall, VaR is a useful tool by which plan sponsors

**“...plan sponsors and investment managers can better ascertain whether the risks they are taking are risks they want to be taking, need to be taking, or even think they are taking.”**

and investment managers can better ascertain whether the risks they are taking are risks they want to be taking, need to be taking, or even think they are taking. With the help of this new metric, risk management can evolve from a risk-limiting, defensive role to an offensive, risk-optimizing role. Plan sponsors and investment managers will have the ability to manage short-term market volatility in order to make better investment decisions, thus having a direct and positive impact on the plan's bottom line. ■