# **Portfolio Risk Management – A Strategic Overview**

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## Abstract

Everyone wants high returns on investments in stocks, but it is also imperative that direction or volatility of stock prices cannot be controlled. In this paper we present our view that to maximize our returns, one must focus on risk management. This in turn would bring in more returns. We present a strategic overview of portfolio risk management. The good returns will come if one manages the risk properly, which happens when the risk management is aligned with the company or individual strategy.

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### I. INTRODUCTION

The investor's aim is to maximize returns, however, our suggestion in this article is to focus more on risks, and moreover, to go for prudent risks. These are those risks which offer probabilities which are in our favor. In this research article, we first touch upon portfolio management in general, that is, in context of projects. Then we converge down to the special area of focus which is portfolio risk management for stocks. Our priority is to elaborate on portfolio risk management strategies that avoid large drawdowns of the investment capital. Portfolio management (PM) started almost six decades ago with the financial sector, however, it gained momentum only after 1990. With the aim of minimizing risks, companies use portfolio management models aligned with the company strategy. In the PM process, projects are evaluated, then selected or canceled. In simple terms, a project portfolio is a collection of projects that are managed in a coordinated way to achieve an organization's strategic objectives [1–3]. However, there is risk involved in portfolio success and achieving those objectives. Therefore, it is pertinent that portfolio risk management be necessarily included in a portfolio's alignment with strategic objectives. Furthermore, portfolio risk management can be used in enhancing organizational learning and to prevent a risk of one project from occurring in other projects. Thus, negative effects in a project can have positive implications for a portfolio in the distant future [4]. Moreover, for sustainability, which nowadays is of growing importance, risk management is recognized as one of the 'impact areas' [5-6]. Before risk analysis, risk identification needs to be done [7]. And for this, the effect of interdependencies on portfolio risk also needs to be considered [8].

The rest of the paper is organized as follows. In Section 2 is presented the motivation behind this work, Section 3 presents the risk handling strategies and Section 4 sums up our findings.

## II. MOTIVATION

The intuition behind this proposal is as follows. Stock market has varying dynamics and an investor has to decide his priority in terms of the amount of capital to be invested, in terms of the loss he is ready to incur and the types of stocks he is ready to invest in. We are also of the view that portfolio risk management plan would provide him with a feasible and acceptable solution. In our proposal we give simple recommendations, elaborating upon essential points relevant to the topic, without making it a complicated discourse with finance related jargons. This makes the paper an easy and understandable read.

## III. RISK HANDLING STRATEGIES

Risk identification refers to a series of actions with the ultimate goal of sustainably detecting uncertain events or conditions that, if they occur, have positive or negative effects on one or more objectives [9-10]. The strategies identified in this paper are:

- Controlling the losses
- Strategic Asset allocation
- Maintain a margin of safety

#### 3.1 Controlling the losses

The first strategy to make money in the long term is not losing it in the short term. A large drawdown is the biggest risk in investing. Drawdowns lead to loss of investment capital and often the investor's confidence

is lost. They may even be demotivated to continue investing. Often it is difficult to realize how devastating a large portfolio drawdown is to their long-term returns. It is essential to fix the risk parameters. In general, investors become too greedy when prices are high. Our emotions cause us to want to be part of the crowd. We compare our returns to the indices and become influenced by friends and colleagues who only boast when they are doing well. A word of caution needs to be sounded here - when valuations are high, the probability of a large drawdown is high, yet people invest in such stocks. It would be better that, as valuations become excessive, we should be increasingly concerned about preserving capital for the time when valuations offer probabilities for success that are heavily in our favor. The key point is portfolio management is as much about controlling losses as it is making money.

Determining your probable maximum loss and choosing an equity asset allocation that is consistent with your decision will allow you to control your maximum drawdown. How much of your investment portfolio you can afford to lose is one of the most critical questions you can ask yourself. Risk management analysis is an important part of any investing plan. Volatility doesn't seem to bother most investors during bull markets. One should not fall in trap of taking on additional risk as markets rise. Investors seeking higher rates of return gravitate toward high-risk stocks. These more speculative stocks may lead the market up during rallies, but are susceptible to collapse in down markets.

Bear markets are a part of investing. Over the last 200 years it has been seen that a financial crisis occurs every 4-5 years on average. Periodically we experience bear markets that last as long as 20 years. It is advisable to preserve the majority of your capital in bear markets to be a successful investor. Intelligent investors will determine the probable loss limit for a one-year period. Let's say for example, Sharan, who is intelligent, decides that anything over 25% loss would be harmful for his portfolio. Further, on reviewing the past he sees that the probable maximum loss in the stock market is 45% in a year. So, he calculates that 0.25/0.45 = 0.55 (approximately), that is, 55% is the target equity allocation for him, when market valuations are average.

To summarize, decide what your probable maximum loss is and choose an equity asset allocation that is consistent with your decision. This planning in asset allocation allows one to be more aggressive when prices are low and more conservative when bargains are unavailable.

#### **3.2 Strategic Asset Allocation**

Finding individual investments with a margin of safety is an important aspect of value investing. However, choosing your asset allocation is more important and therefore deserves your serious attention. Simply stated, investment allocation is how you divide your assets between different investment classes or groups. A strategic asset allocation provides the investor a dynamic strategy that adjusts to favourable and unfavourable valuations. Instead of a strict fixed percentage you have greater flexibility because you can choose from a range based on valuation levels.

Different valuation levels should require a different investment allocation of your capital. One of the most important concepts in investing is to be careful or prudent about the price you pay. It's not possible to do this without changing your allocation to asset categories after they make large price swings. Effective asset allocation is an effective means to portfolio risk management. During time periods when investment assets are overvalued an adaptive allocation allows an investor to increase cash positions. Cash can help protect your portfolio in bear markets.

At the same time, having cash available when market valuations are low provides investors the ability to take advantage of favourable opportunities. Think about how much better Sharan would do if he bought more when prices are low and less when prices were unfavourable. Many investors do just the opposite and wonder why long term returns suffer.

#### 3.3 Maintain a margin of safety

There should be a margin of safety for each individual investment. Margin of safety is the difference between the fundamental or intrinsic value and the price of the investment. Price is what one pays, value is what one gets. The larger the margin of safety the less risk you assume, the greater the potential capital gains, and the higher the income percentage (i.e., dividend yield). A margin of safety leaves room for judgement errors, mistakes, or unforeseen adverse conditions.

When a company is deficient in quality we have to analyze the probability of the deficiency being rectified and adjust the price we are willing to pay by increasing the required margin of safety.

One should look out for companies with sustainable competitive advantages, otherwise the bargain may be a value trap. Competitive advantages can be key company assets, attributes, or abilities that are difficult to duplicate. These could include being a low-cost provider like Jio, pricing power like Apple, powerful brands like Mercedes, or outstanding management/employees like Reliance.

## IV. FINDINGS

In this paper, we presented a simple walk through the various types of portfolio risk management strategies. We advise to adopt the strategy of controlling losses, by fixing the maximum probable loss that you are ready to incur. This should be the basis of target equity asset allocation. Secondly, the asset allocation should be intelligently divided into different investment classes. Lastly, there should be a margin of safety. Companies with Sustainable competitive advantages are to be looked out for. Companies with one sustainable competitive advantages will greatly improve the chances one has found a real value stock.

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