

Portfolio Management and Risk

A discussion of risk is the starting point in discussing various investment management theories. Therefore, a solid understanding of investment risk serves as a prerequisite to a discussion of various management investment concepts and theories.

Investments are made for the purpose of achieving returns on the invested principal. However, for most investments, any expected realized returns can only be projected as they are uncertain. This uncertainty is what investment risk is all about.

Systematic Risk

In the portfolio management context, risk may be categorized in two ways: systematic and unsystematic. Systematic risks (sometimes referred to as *nondiversifiable risks*), such as market, interest rate, purchasing power, or foreign currency risks, affect the entire market. As such, they cannot be eliminated through portfolio diversification.

Subcategories of Unsystematic Risk

Market risk refers to the tendency of stocks to move in the same direction as the market. If the market is going up, most stocks have a tendency to increase in value as the result of the market movement. Of course, the opposite also holds true. A declining market will affect the value of most stocks in the market. It is estimated that about 85–90% of all stocks are directly correlated to various degrees with the market.

Interest rate risk refers to various changes in interest rate levels that affect the value of securities, especially debt instruments. An inverse relationship exists between the value of debt instruments, such as T-bills or various corporate bonds, and changes in the general levels of interest rates; so as interest rates go up, bonds decline in value (sell at a discount). Higher interest rates have the most pronounced effect on debt securities and equity-based securities. Reasons for this effect include an increased cost of borrowing for companies, which translates to higher financing costs and lesser profits as well as the necessity to use an increased discount rate for valuation and projection of cash flows.

Purchasing power risk refers to the eroding effects of inflation on the invested

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principal in a portfolio. Inflation is the primary cause of purchasing power risk. Bonds held to maturity are especially prone to purchasing power risk as their maturity (face) value remains constant, irrespective of price changes.

Finally, foreign currency risk depicts the change between the value of the U.S. dollar and the value of the foreign currency where the investment is held as the result of currency fluctuations. For example, an investment made in the debt securities of a Mexican company entails not only an interest rate (and a purchasing power risk), but also, if the value of the Mexican peso falls in relation to the U.S. dollar, the resulting investment results will be negatively affected. For example, assume Jefferson Inc. (a U.S. firm) invests \$1 million in Aztec Inc., based in Mexico. If the exchange rate is 10 pesos to 1 dollar, this translates to an investment of 10 million pesos by Jefferson Inc. Now assume that the total investment value in Aztec securities increases to \$12 million. As a result, Jefferson decides to sell its position at a time where the exchange rate has gone up to 12 pesos for every one U.S. dollar. If Jefferson does liquidate its position, it will still receive \$1 million (12 million pesos divided by 12) as its sales proceeds. In other words, the 2 million pesos gain was offset (lost) by the unfavorable exchange rate of 12 to 1.

Ethics & Portfolio Management

One of the primary objectives of portfolio management is to strive to generate returns to preserve the real value of the underlying assets in the portfolio. Ethics is an essential element in guiding the making of ethical decisions and resolving ethically based problems associated with portfolio management.