COST OF CAPITAL

Beta

The Beta describes whether the return of an investment is more or less volatile – or: risky - than that of the market as a whole – or: than that of a well-diversified market portfolio. Whilst there are betas for basically any financial instrument, such as, for example, bonds, in most cases the beta concept refers to an investment in shares, therefore the equity capital markets.

The two components driving the beta of a stock are the returns of the stock itself and those of the overall market. Now, the return of a stock is simple to determine: It includes the increase or decrease in the share price as well as dividends paid. To determine the return of the market is somehow trickier, as – among others – the question arises: Which market do we actually refer to when talking about the "overall" market?

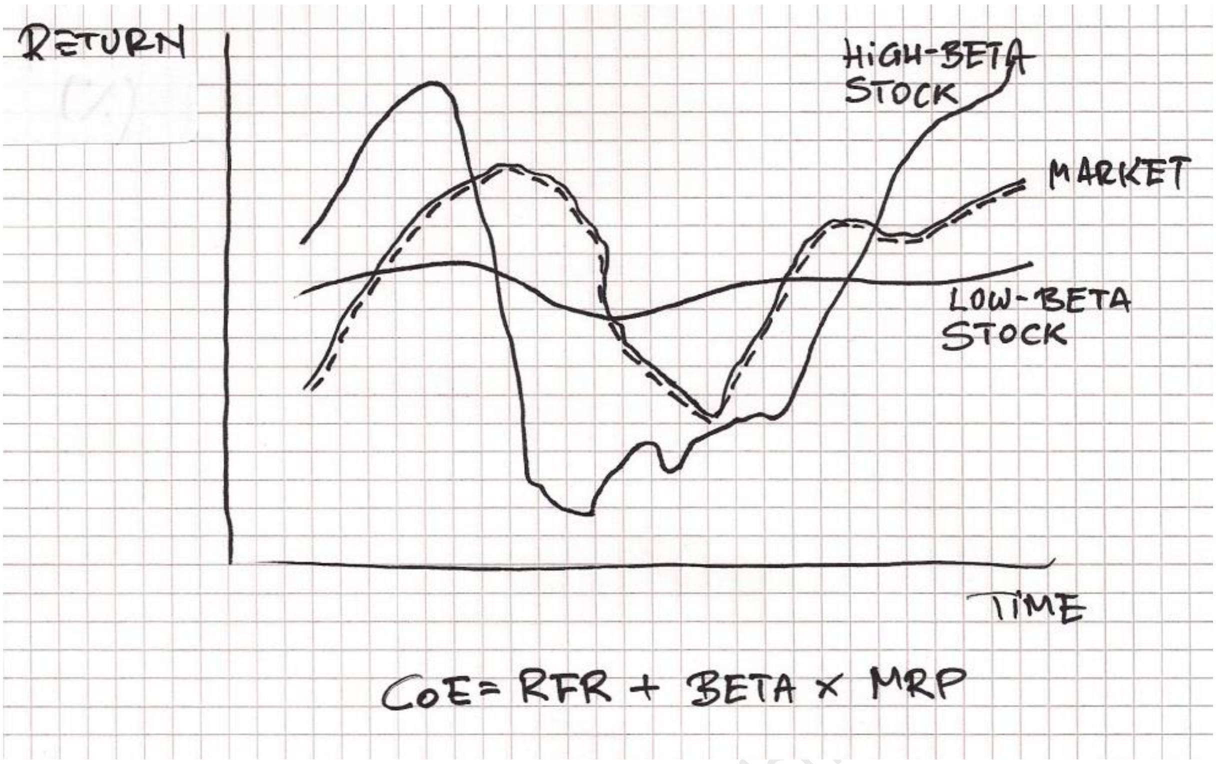
Even if we agree that we will only take into consideration the stock market and its combined returns based on the universe of shares and their prices as well as all dividends paid, then we probably have to ask: Which parameter may best illustrate a market return? – Commonly, indices are used for this purpose. But there are thousands of them: Several providers, such as Standard & Poor´s, the Financial Times or Morgan Stanley´s MSCI, have actually specialized in composing stock indices. Some of those indices reflect the combined performance of the global markets overall. Others have a regional or an industrial focus or specialize on a specific investment theme.

One of the oldest, most prominent, still widely used, but apparently worst-composed, as most restricted and limited, index is the Dow Jones Industrial Index.

The guidelines for composition and principles of a stock index vary widely, and whilst most stocks actually never make it into any index, the selection of those who do - and their respective weightings - may depend on numerous parameters, such as: A firm´s stock capitalization, the liquidity of its shares, the firm´s uniqueness or characteristics and importance for a certain industry or geographic region, or else. – Needless to say, as each index provides a somehow different view of the return of the overall market, so do the betas calculated on the basis of each of them.

Another question is, over which time period a Beta should be calculated: The Financial Times, for example, publishes Betas which are based on calculating the slope of the 60-month regression line of the percentage price change of the stock relative to the percentage price change of the S&P 500. Latter is a major global stock index, also used by numerous big investment and pension funds as a benchmark for their respective investment policy.

The Beta is utmost relevant to the Corporate Finance framework as we know it. It is essential in determining the Cost of Equity (CoE): There, the beta is applied as a multiplier to the market risk premium to account for the relative risk profile of an individual stock. And, therefore, the CoE benchmark for a highly volatile stock will be substantially higher than that of a mature, stable utility or a well-diversified food manufacturer.


RETURN
(%)
HIGH-BETA STOCK
MARKET
LOW-BETA STOCK
TIME
CoE= RFR + BETA x MRP