

## It's all about Volatility ...

**In daily life, the term risk is often negatively perceived, as associated with potential losses. – In finance, however, risk is viewed from a balanced, neutral perspective: Accordingly, risk is about the unknown, the uncertainty of both, potential gains and losses. From a Corporate Finance perspective, risk is about volatility, the spread of events over a range of possible outcomes.**

Human beings give clear preference to predictability and certainty. This is also the reason why people are reluctant to change, especially if the expected change is significant and its outcome an unknown.

Besides, human beings are conservative, risk-averse, most of times associate risk with potential losses. Prospect Theory, developed by Kahneman, a Nobel Prize laureate, and Tversky, suggests that most people feel relatively more pain in losing a certain amount than pleasure in earning the exactly same amount. – This is also why people frequently buy insurance coverage: Simply, to avoid loss.

There are instances, though, when risk is intentionally assumed: For example, in hoping to win, some may participate in a lottery, make a bet, even visit a casino, despite well aware losing out long run (else, casinos would not make money).

Investing in stocks is also associated with risk: Dividends may be paid or not, a share price could be up today and again down tomorrow. - Such risk assumed may be relatively modest, though, if, for example, one invested in stocks of an established, sizable and reputable food producer with a decades-long track record. Operating globally, this firm may run a well-diversified product portfolio and find itself in a comfortable position to compensate temporary weaknesses in a product or a region. - Most important, though: People actually eat every day, which adds further predictability to the firm's business model. Therefore, one may expect this company paying regular dividends and its share price – reflecting the firm's overall stable performance - not fluctuating much on a day-by-day basis, especially over longer periods.

If one clustered this firm's relative daily share price changes (in percentage points) in buckets of smaller and larger changes and then added up the number of

observations in each cluster, one would almost certainly observe many more smaller daily changes than larger ones. If, in a next step, one plotted these observations of relative share price changes, then the resulting curve would look like a bell with steep slopes on both sides. Whereby, most of the area enclosed below the curve would narrowly concentrate around its center (and peak), the average daily share price change.

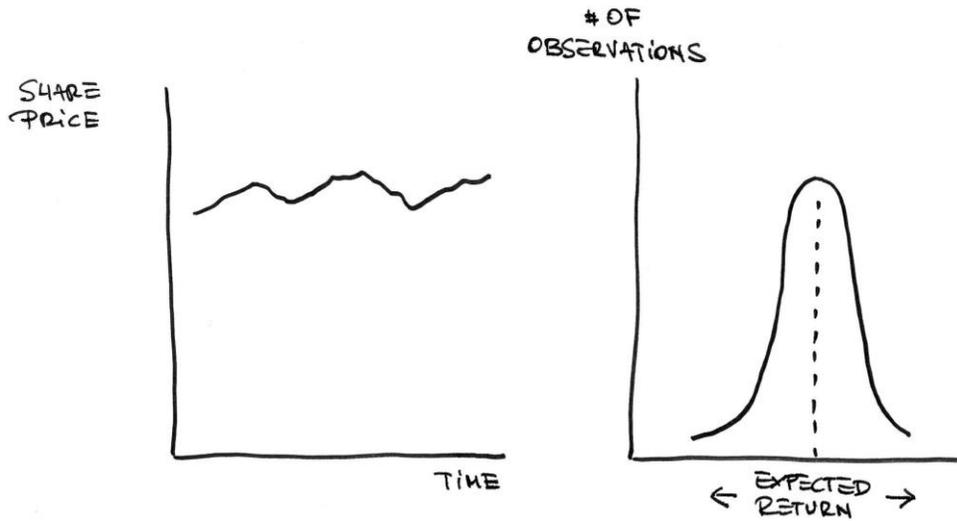
However, if, for instance, one invested in shares of a manufacturer of high-end, luxury handbags, the degree of risk assumed will almost certainly be higher: This company as well as its share price will probably only do well during periods of a booming economy (with plenty of income available and also being spent). With the economy slowing down, this firm's performance is likely to suffer significantly, though: Consumers may conclude that an ordinary handbag is also just fine. – Hence, larger relative daily share price changes - up or down - will certainly be more frequent in this case compared to the previous one, the food producer. The plot of daily share price changes will therefore fluctuate significantly wider around an average with the shape of the resulting curve being much flatter.

Therefore, in essence the following holds true: In a Corporate Finance context, risk equals the volatility of an asset's performance (i.e. its return or yield). In regards to stocks, risk therefore refers to the predictability of a firm's relative share price momentum as well as its dividend payout ratio.

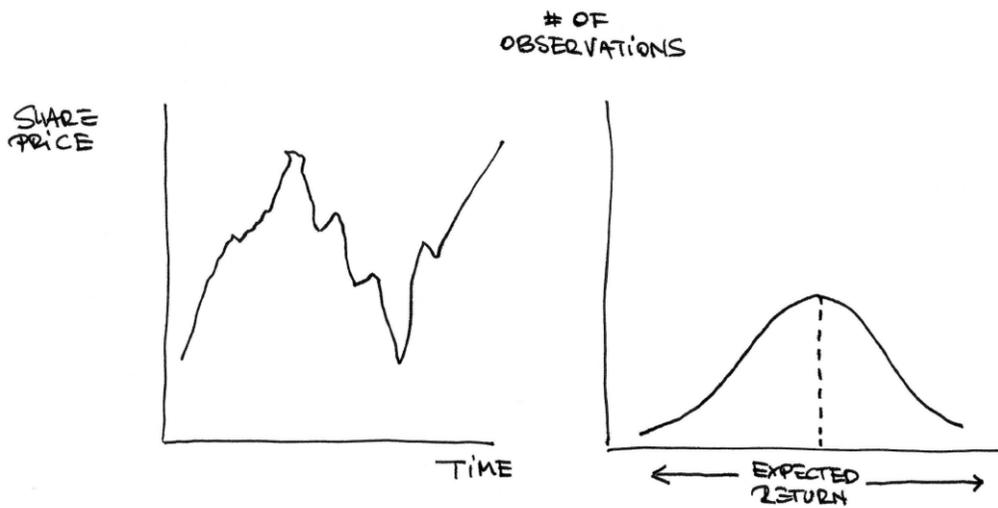
In finance, standard deviation is commonly used to measure and assess the dispersion of a data set around an asset's expected return. The more data points are farther away from the mean (the asset's expected return), the higher the deviation within the data set. And a higher volatility (i.e. higher standard deviation) indicates a lower degree of predictability of outcomes: Steep gains as well as losses are expected to occur more often, also relatively wider and more frequent swings measured against a chosen benchmark (e.g. a stock market index) or the asset's average return.

Whereby, the eventual decision of engaging in a more or less volatile stock or other types of securities is entirely an investor's choice, who aligns opportunities according to individual preferences and one's risk profile (i.e. risk appetite or aversion).

LOW VOLATILITY = LOW STANDARD DEVIATION = LOW RISK



HIGH VOLATILITY = HIGH STANDARD DEVIATION = HIGH RISK



For more concepts click on:



## Corporate Finance Concepts

Christian Schopper



[www.christianschopper.com](http://www.christianschopper.com)