

## It's all about Volatility ...

**In daily life, the term risk is often perceived negatively, as associated with the likelihood of losses. – In finance, however, risk is viewed from a balanced, a neutral perspective: Accordingly, risk is about the unknown, the uncertainty of both, potential gains as well as losses. Hence, from a Corporate Finance point of view, risk is about volatility: The spread of events over a more or less wide range of possible outcomes.**

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

In essence, human beings are conservative, risk-averse, and tend to associate risk with the potential of losses. Prospect Theory supports this: Developed by Kahneman, a Nobel Prize laureate, and Tversky, it suggests that most people feel relatively more pain in losing a certain amount than pleasure in gaining or earning the exact same amount. – This is also why people buy insurance coverage: To avoid loss.

There are instances, though, when risk is intentionally assumed: In hoping to make a gain, some individuals participate in lotteries, make bets, even visit casinos, despite well aware to lose out on the long run (else, casinos wouldn't make money).

Investing in stocks comes along with risks, too: Dividends may be paid or not, a share price could be up today, then down tomorrow. – If one invested in an established, sizable, reputable food producer with a track record over decades, then risk assumed may be comparably modest: Operating globally, this firm will probably run a well-diversified portfolio of products, finding itself in a comfortable position to compensate temporary weaknesses in a product or a region. – Most relevant, though: People do eat every day. And this adds predictability to the firm's business model. Therefore, one may expect this company to pay regular dividends and its share price – reflecting the firm's stability - not fluctuating much on a day-by-day basis, especially over longer periods.

When clustering this firm's daily share price changes (relative percentages up or down) in buckets of smaller and larger ones and then adding up the number of observations in each bucket, one would almost certainly observe significantly more smaller

changes than larger ones. Sorting these buckets along relative share price changes and plotting the number of observations in each cluster results in a curve looking like a bell with steep slopes on both sides. And the area enclosed by that curve will foremost concentrate around its center (and peak): the average daily share price change.

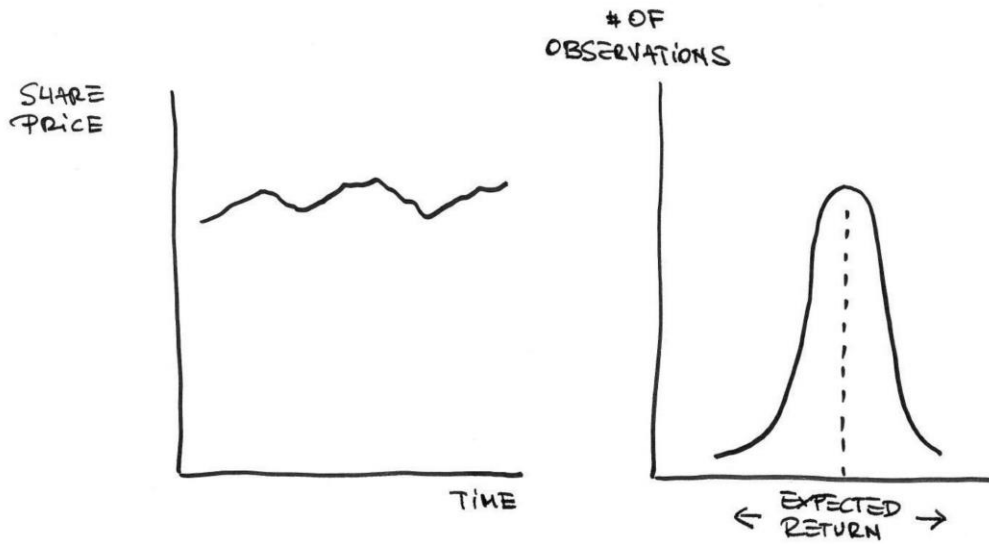
Such curve will look different, though, if one invested in shares of a manufacturer of high-end, luxury handbags, reflecting the (almost certainly) higher degree of risk assumed: This company – along its share price - will probably do well as long as the overall economy is booming, with plenty of income available and also spent. With the economy cooling and slowing down, however, this firm's performance is expected to suffer significantly: Because consumers may conclude that ordinary handbags are also just fine. – Hence, larger relative daily share price changes - up or down - will almost certainly be more frequent in this case, especially when compared to the previous one, the food producer. In the case of a luxury good manufacturer, the number of observed daily share price changes across clusters will be spread (i.e. fluctuate) significantly wider around an average, and the shape of the resulting curve will be much flatter.

In a Corporate Finance context, risk is driven and defined by the volatility of an asset's performance (i.e. its return or its yield). In regards to stocks, for instance, risk refers to the predictability of a firm's relative share price momentum, as well as its dividend payout ratio.

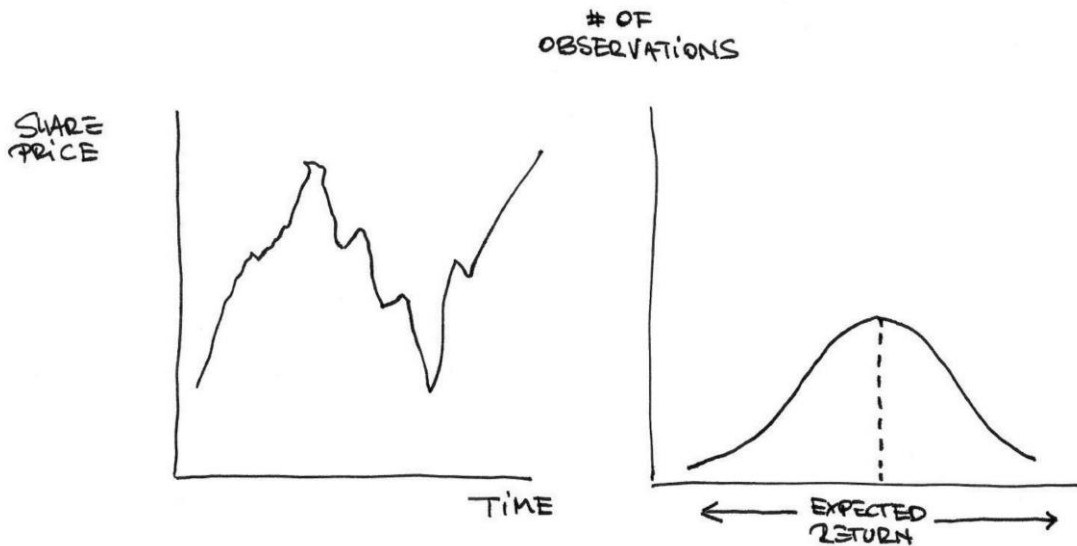
In finance, the standard deviation is commonly used to measure and assess the dispersion of a data set around an asset's expected return. The more data points are farther away from the mean (the asset's expected return), the higher the deviation within the data set. And a higher volatility (i.e. higher 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.

The eventual decision of engaging in more or less volatile stocks or other types of securities is entirely an investor's choice, though, who uniquely aligns opportunities according to individual preferences and one's risk appetite or aversion).

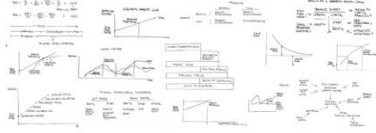
LOW VOLATILITY = LOW STANDARD DEVIATION = LOW RISK



HIGH VOLATILITY = HIGH STANDARD DEVIATION = HIGH RISK

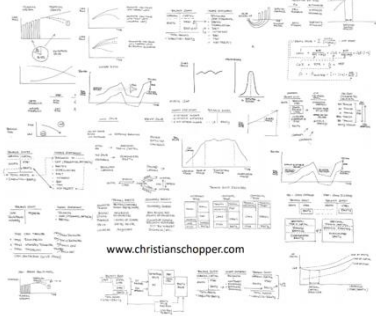


For more concepts click on:



### Corporate Finance Concepts

Christian Schopper



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

COPYRIGHT [www.christianschopper.com](http://www.christianschopper.com) - NOT COPY OR PASTE