

All you need to know about: **Risk**

“You have to speculate to accumulate” – one of the problems of investing money is the risk associated with it. Within the investment world a whole industry has emerged focused on risk but it is a subject that causes a lot of confusion.

What is risk?

Risk is really all about two things – the chance of losing some or all of your money and the chance that, over the short-term, the value of your investment might change dramatically – this is referred to as **volatility**.

Risk linked to potential reward

Naturally, people want to be compensated for taking on extra risk and so, on average, the greater the risk associated with an investment, the more the investor hopes to earn out of it.

Most risk measures are measures of volatility

The risk of losing money is hard to quantify so most measures of risk you see are talking about volatility.

Volatility by itself isn't a problem unless there's a chance that you might have to sell your investment while the value is low. That means that volatility can be more of a problem when it's associated with short-term investments than long-term investments.

Investment managers' concept of risk can be different

When investment managers talk about risk they are often talking about how big their bets are relative to their benchmark or their peer group – this is the risk of them getting sacked for performing badly which is not the same thing at all.

Avoiding losing some or all of your money:

The chance of losing some or all of your money depends on a number of factors. The easiest way to think about this is to use some real world examples.

Some assets are riskier than others

Most people might think that cash is the safest thing to own but what happens if it gets stolen? If I keep it in a bank it will be safer – unless the bank goes bust that is. Having a bank account is like the bank owing you money. In normal circumstances there would be a low risk attached to the bank going bust so a bank deposit is low risk.

In normal circumstances having say the UK or US government owe you money would be even lower risk – debt issued by these governments (“gilts” in the UK and “treasuries” in the US) is often considered to be amongst the lowest risk investments you could make.

Having a company owe you money is riskier but some companies will be less risky than others and some are considered as low risk as some governments.

Owning shares in a company is riskier than them owing you money – if the company goes bust the people that lent the company money get paid out before the shareholders.

Risk increases over time

The longer you have to wait for your investment to pay off, the more chance there is that something will go wrong with it – all things being equal, longer-term investments are riskier than short-term investments.

Companies have “business risk”

If you are investing in the debt or shares of a company you should think about its **business risk**.

- Is the company backed by real assets (such as property and cash) or does its value come from the hope of cash flow in the future (like a biotech company developing a drug)?
- Could the company suddenly lose all its business to a competitor or is its position made more secure because it owns patents?
- Does the company control the prices it sells its product for and the prices it pays for the raw materials and the labour that goes into making its product?
- Is the delivery of the product dependent on the availability of a few key people? – What would happen if they weren't there?

These are some of the things investment managers worry about when they are investing in companies.

Risk associated with investing abroad

Where is this asset you are investing in? If it is overseas you might have to think about **currency risk** – the chance that your investment will become more or less valuable as the investment's currency moves against your home currency.

Is there **political risk** associated with investing in this place? How easy / likely is it that the actions of the local politicians will alter the attraction of your investment? – even places like the UK have a habit of making sweeping policy changes that change the investment landscape.

How good is the legal system and local standards of corporate governance? Fraud and corruption are endemic in some countries. Some have very low protection for small investors. Also, some economies are more susceptible to external shocks, such as rising oil prices, than others.

Leverage (borrowing money) is risky

Generally, the more indebted your investment is, the riskier it is. It is not just a question of can they pay the interest. Often loans come with conditions attached (called covenants) and if these are breached there can be serious consequences. For example, some property companies that borrowed money in the boom times of the mid 2000s suddenly found that their loan to value covenants were breached and the lenders were demanding their money back even though they were paying interest on time.

You should also think about this issue if you are thinking of investing in derivatives, including warrants and subscription shares, or if you are thinking about borrowing money to invest.

Don't put all your eggs in one basket

Concentration risk – having all your eggs in one basket is never a good idea. To reduce the chance of losing some or all of your money, it is best to diversify your portfolio (invest in lots of different things). Don't overdo this though – if you have too many investments they will be harder to keep track of, your dealing charges will be higher and there's more of a chance your bad investments will cancel out your good investments.

Measuring Volatility:

Standard deviation

Volatility is measured in a number of ways but the most common measurement is **standard deviation**. This is worked out using a formula: the square root of the average difference from the average value. A big standard deviation means lots of volatility and vice versa.

Investment manager's measures of risk:

Active return

As we said above, investment managers often think about the risk of their investments compared to the risk of an index or the average of their competitors' investments (the benchmark). They try to generate **active returns** (outperformance of the benchmark).

Tracking error

Tracking error is a measure of how closely a portfolio follows an index – worked out using the standard deviation of the portfolio's returns relative to the benchmark. They are used as one measure of **active risk**. A high tracking error suggests the portfolio is more volatile than the index and a low tracking error suggests the portfolio is less volatile.

Active risk

Active risk relates to how big a bet the investment manager is making relative to the benchmark. A perfect index-tracking fund will hold all the same stocks in all the same proportions as the benchmark – its active risk is zero. Every time the investment manager decides to not hold, underweight or overweight a stock relative to the benchmark, the active risk increases. BUT remember that doesn't mean the fund is riskier in the real world. If the manager chose to not invest in any company that borrowed money or wasn't backed by real assets, their active risk would be large and the risk of them underperforming the benchmark would be higher but the risk of you losing money would be far less.

Information / Sharpe ratio

Dividing the active return by the tracking error gives you the **information ratio**. This is supposed to be a measure of how good the manager is at outperforming without taking too much risk. This is also called the **Sharpe ratio**.

Beta

Beta is a measure of how volatile a company's share price is relative to an index. A beta of one means that the share price moves in-line the index. A beta greater than one means the share price outperforms a rising market and

underperforms a falling market. A beta less than one means that the share price doesn't rise as fast as the rising market and doesn't fall as fast as a falling one. Betas are worked out using historical data and, in our opinion, this means they don't work well in the real world as companies' circumstances change over time.

Keep it simple

There are plenty of other measures of risk out there that are even more convoluted. We think that generally, the more complicated these things are, the less use they are in the real world. Remember your primary concern should be not losing more money than you can afford to.