

## Understanding Risk



### Risk – Why do we do it

Every human activity involves risk. We rarely think about it, but crossing the road, cooking on a hot stove or getting in or out of a bath can put us at risk. In each case we make intuitive judgements about what makes the risk worthwhile – are the benefits we seek worth the associated risk?

It is misleading to think that taking more risk will automatically lead to greater benefit. Higher risk is only worth considering if the potential benefit is of greater value – and even then, that ‘reward’ is not certain. Evolution has shaped our approach to assessing risk; our earliest ancestors often took great personal risks hunting wild animals, but obtaining food was critical. The domestication of animals and the advent of agriculture, on the other hand, reduced the risks of obtaining food; the benefits of hunting became less worthwhile relative to the risk.

The art of managing risk lies in calculating the likelihood of a ‘bad’ thing happening, and considering its impact on us if it does happen. This approach allows you to assess whether the risk is worth taking. For example, the probability of your house burning down is low, but its impact would be catastrophic. As a result it makes sense to buy fire insurance. Alternatively, the risk of it raining in April is high, but the impact is low – it is not very nice to get wet, but it is hardly a catastrophe. You might do your best to remember your umbrella, or take care to dress appropriately, but you would not spend money on insurance.

As this illustrates, we tend to think through the probability and impact of any particular course of action and in the same process take account of possible alternatives. Financial risk is no different. If you take care to understand what it is you are trying to achieve with your investments, you can take informed decisions to ensure that the risks involved are appropriate for the returns you hope to achieve.

Time is a critical factor in any risk assessment process. It is vital you make decisions about when you will need the returns on your investment. A person with a long time before they retire may choose to take on higher risk investments, at least in the early years, because the impact of any loss will be less given the longer time horizon, which potentially allows those falls in value time to recover. Someone close to retirement and looking for current income is more likely to keep risk as low as possible, because there will be less time available for recovery.

The past should not be relied upon as an accurate guide to the future. The characteristics and therefore value of markets and assets can change, due to unpredictable events. This is the essence of risk. But just as when we cross a road we first look right and left, so when we make an investment we can manage risk by taking care to understand the assets we are buying.

One of the key ways to assess risk is by measuring by how much your investment rises and falls in value over time. The result is known as its volatility. Investments that are more volatile will rise and fall to a greater degree than those that are less volatile. But volatility is not the only indicator of the risk in an investment. There is a wide range of financial assets available and each has its own characteristic risk factors.

You can find more detail about those risks later in this guide.

Before we consider the risks and characteristics of different assets, we can manage risk by first taking a look at ourselves – what does risk mean to us?

## What does risk mean to you?

When you seek investment advice, one of the first things Cooper Johnston will do is ask questions to determine the extent to which you are prepared to take risks with your money.

This 'risk profiling' is an essential part of the advice process because the more accurate the understanding of your attitude to risk, the greater the chance of building an investment that will behave as you might expect it to. Following your discussions with your adviser and to confirm your attitude to investment risk, you can fill out a risk profiling questionnaire. The e-value risk profiling questionnaire has been developed in association with a leading actuarial consultancy, Towers Watson, in line with the best industry practice and the guidelines laid down by our regulatory body, the Financial Services Authority.

Cooper Johnston will take your answers to the series of questions and input them onto the e-value Financial Express system. Each answer you provide produces a score, and these are then aggregated to calculate a 'risk profile', from 1 (low) to 5 (high) or from Cautious to Adventurous. Your risk profile score is an indication of the extent to which you are prepared to accept a temporary fall in the value of your investments. These fluctuations in the value of investments are also known as volatility. If your score is 1, then a greater exposure to low volatility investments such as cash or bank deposits could be the resulting investment recommendation. If your score is 5, then a portfolio focussed more on shares in companies from around the world (whose expected volatility is matched by greater growth potential) might be suitable. Before making recommendations based on your score, Cooper Johnston will ensure that you understand what that score number means, and what its implications are. Your adviser will discuss the extent of likely gains and losses at different risk levels, giving you a better idea of the outcome you could expect at each level. In this way you can agree whether your risk score accurately matches your true attitude to risk.

## The risk you are willing and able to take

If you are not willing to take any risks with your money then you should not be filling out the questionnaire. The types of investment this is designed for all carry some risk.

What the risk score will not tell you is your capacity for risk. You might be very happy to take greater risks at first sight. However, if the nature of your investment goals requires greater certainty of the result (e.g. school fees, or settling a particular debt by a particular date), then it may be more prudent to take less risk than is being indicated to achieve your desired outcome.

There are also other risk factors you need to consider before investing, from inflation to the particular

characteristics of the individual assets in your portfolio. Many of these are discussed in more detail later in this guide, and these should form part of the discussion you have with Cooper Johnston about risk.

## Diversification

A key way to offset investment risk is to avoid putting all your eggs in one basket. This is otherwise known as diversification.

Different investors will have different investment objectives, and this will affect the way they diversify their portfolio. Someone with a long time horizon, willing to wait out market volatility, is likely to select a portfolio of assets higher on the risk scale. Diversification for this person might mean a mix of emerging market and UK smaller company equities. Someone looking for immediate returns, for example a retirement income, may wish to have little or nothing in higher risk assets. Diversification might include corporate bonds and equity income, which tends to focus on large, steady UK businesses. In each case, getting the diversification right is as important as getting the right underlying assets.

## Investment types

### Cash and Money Market Funds

In the UK, the Financial Services Compensation Scheme guarantees the capital value of cash on deposit with UK regulated banks up to a maximum of £85,000. This is probably done less from goodwill than to ensure that the British banking system as a whole remains stable. But while the total sum may be guaranteed, there are still risks to leaving cash on deposit. One is inflation, which erodes the purchasing power of money. Interest rates may eventually rise to account for inflation, but only after some delay. The other is known as 'opportunity cost'. Interest rates on cash are set at the lowest level of return. In holding cash, investors give up the opportunity of achieving a higher return for what may be only a moderate amount of additional risk.

### Fixed Interest

Also known as 'Bonds', fixed interest investments are generally thought of as the lowest risk among 'real' financial assets. Neither the income from a fixed interest investment, nor the capital value, is necessarily guaranteed. Interest rates are often variable and can be altered as circumstances evolve, usually in reference to the Bank of England base rate. Where the rate of interest cannot be varied, the capital value will rise or fall to make up the difference. The following are examples of different types of Bonds, and their risks.

#### Government bonds

Bonds issued by the UK government – commonly referred to as 'gilts' – are often described as 'risk free'. This is not strictly true, as gilt prices rise and fall daily, but since it is the government that guarantees sterling deposits (or cash), the risk of holding a government bond is clearly not much different. Their risk-free status reflects the low probability that the UK government would ever default. It never has in the past. And it is different to a business in that if it needs money it has only to pass a law to raise taxes, or print more money. There are still some risks to consider however. Like cash, the value of government bonds can be eroded through inflation. And like cash, they tend to pay a small return. They will tend to be preferred by investors whose priority is preservation of capital.

Bonds issued by other G5 governments – the US, Germany, France and Japan – are also considered to be risk free. Again, this is not strictly true, as we have seen in the successive sovereign debt crises of recent years. However, these are powerful economies and their government bonds are used as benchmarks to

measure financial risk.

### Index-linked

Index-linked gilts were first issued by the UK government in 1981. The value of the capital you invest and the level of interest are adjusted in line with the Retail Price Index (RPI). Index-linked gilts reduce the effect of inflation, but they are not without risks of their own. The basic interest rate tends to be less than it is for 'conventional' gilts, which means that overall returns are lower than conventional gilts if there is little or no inflation.

### Corporate bonds

Companies have been issuing bonds in Britain for over 200 years. The sterling corporate bond market is very active, with a great range of opportunity. Companies, however, are not like the government. Every one of them is to some extent unique, and if they are short of money they can't just vote in a tax rise! Every company, in other words, carries a different risk. The degree of risk attributable to any corporate bond is reflected in its 'credit rating'. This is assigned, for a fee, by rating agencies, the best known of which are Fitch, Moody's and Standard & Poor's.

Because companies are higher risk than the government, they pay higher interest rates. Many companies, commonly known as 'investment grade', are relatively low risk. Companies in this category form the mainstream of the traditional corporate bond market. Typically, they are large companies with secure long-term profits. Examples are utilities or businesses in such core sectors as banking, insurance, telecoms, pharmaceuticals, commercial property or resources.

### High yield bonds

As the name suggests, high yield bonds pay more than investment grade bonds. Again, it is a further step up the risk ladder. They are offered by companies with a less certain financial base. This can be for many reasons. It might be a start-up. It might be a company that already has substantial debt. Companies with high investment needs often turn to high yield. AN example of this would be a cable television company needing to invest in laying cable in order to deliver its product. High yield bonds are mainly issued in US dollars or euros and therefore may carry an additional currency risk for UK based investors (see 'currency risk')

### Emerging market debt

Emerging market debt is a variation on high yield bonds. The core of the market consists of US dollar-denominated bonds issued by governments in emerging markets like India. These tend to be less stable than developed economies and, sometimes, dependent on a narrow range of commodities. In recent years, as emerging markets have become a more important part of the global economy, the market has expanded to include bonds issued in local currencies as well as in dollars, and bonds issued by companies as well as governments.

## Equities

Equity means ownership. Equity in companies is often referred to as 'shares' because it represents a share of the ownership. An equity investor carries the same risk as someone who owns other types of property. If you own your house and you sell it, once you have paid off any charges, such as a mortgage, the proceeds are yours. On the other hand, if it burns down, the loss is yours too, or your insurer's.

Equities are capable of delivering substantial rewards. At the extreme, there are businesses that start small, but whose technologies lead to positions of global domination. More usually, a well-managed company

with a strong range of products will be able to sustain profit growth at a higher rate than other companies, giving investors a superior return over time. In practice it is rare for a UK listed company to approach insolvency, but there are still real risks to investing in equities.

There are two types of return from equities; the share price and the income companies pay to shareholders, otherwise known as dividends. Both are products of the company's profitability and are closely inter-related, but each has slightly different risks. The share price is essentially an estimate of the company's future profits – and therefore its ability to pay dividends. A company with considerable potential to grow its profits may see its share price rise significantly, despite the fact that its current dividends are low. Another company may pay high dividends, but with little prospect of future increases to its profits, with the result that its share price remains static. The risk to the former – sometimes called a 'growth' share – is that it will be unable to fulfil its promise to increase profits. The risk to the latter – sometimes called a 'value' share – is that it will be unable to sustain its current profits.

In stock market terms, a medium-sized company is quite large, covering companies valued from around £500 million to £5 billion. It is a higher risk investment than a large company because it will be less extensively followed, fewer people will be looking at it and its affairs are unlikely to attract media interest. Potential upsets are less likely to be seen and publicised. A medium-sized company will also typically have less recourse to loans and other forms of fresh capital. However, just as the risks are greater, so are the potential rewards.

#### Large companies

Large companies tend to be the lowest risk relative to the equity market as a whole. Because they have a lot of shareholders, they are extensively followed and researched, among brokers and investors, in the media, by competitors, regulators, politicians and private shareholders. If anything is going to go wrong, it is likely to be seen well in advance. They are likely to have significant financial resources otherwise they wouldn't be large! This allows them to sit out difficult periods. It also gives them the wherewithal to afford the best advice and attract the best management. Large companies are also by definition more diversified. Even where a large company operates within a particular sector, such as energy or retail, it is likely to have significant built-in diversity, such as operations across different markets, geographies, product-lines or intellectual properties. As significant purchasers, they are also likely to have more influence over costs and prices.

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#### Small companies

Electronic trading has so enhanced the efficiency of financial markets that it is now possible for very small companies to list on the stock exchange. However, while the smallest public companies may have a value of as little as £5 to £10 million, it is unusual for a professional fund manager to invest in companies valued at less than £50 million. The risks of investing in small and 'micro' companies is the same as for medium-sized companies, but more so as you go down the scale. Small companies are likely to be less diversified and many will be niche businesses, some with a single product. They are more likely to face actual insolvency, while the lack of extensive external research makes it more likely that mishaps will not be properly forecast or communicated. The relative lack of research also means that their shares are likely to be more vulnerable to mispricing. Smaller companies are also likely to have a smaller number of shareholders, which

can sometimes make it more difficult to buy and sell shares and making the market in their shares potentially more volatile.

### Overseas equities

The risks in investing in overseas equities are different from those associated with UK equities and usually greater. The first is that listed companies in markets other than the UK keep their accounts, denominate their shares and pay their dividends in foreign currencies. A second is that their accounting customs, despite the trend for international standards, along with legal and regulatory frameworks and cultural values, are in various degrees different to ours. It is not necessarily the case that standards will be lower, but misunderstandings – and therefore mistakes – are more likely to arise in circumstances which are unfamiliar to us.

### Emerging markets

A good number of emerging markets seem to have emerged so much in recent years that they are now world-leading economies. China is the prime example, as it is now the world's second economy. Brazil, India and Russia are gaining in importance, as are Turkey, Mexico and South Africa. Emerging markets carry similar risks to all overseas markets, in terms of currency, accounting, law and culture, but more so. They tend to be less transparent societies, more vulnerable to political and regulatory risk, including corruption. Emerging market economies also tend to be particularly narrow, with only a handful of companies meriting equity investment. While this may be increasingly less true of China and even India, it remains the case with even relatively large markets such as Russia and Brazil.

A further factor with emerging markets is the sheer range of countries in the category. At the one end are economies such as the Czech Republic or Slovenia, which are close to fully developed members of the European Union, with highly educated workforces and industrial economies. Korea is another example of a near-developed economy which remains classed as emerging. Others, such as Taiwan or Mexico, combine highly developed industrial sectors with less developed regions. Many, such as Peru or Chile or Indonesia, depend on one or two commodities. Others again, such as Egypt or Pakistan, or a number of African countries, are only just beginning their integration into the modern world economy.

## Alternative Investments

Professional investment managers have for many years focused on 'financial assets'; in particular shares and bonds. This was not always the case. In earlier times direct investment in property was an important component of professionally managed portfolios. Increasingly, it is not the case anymore. Property is coming back into favour, while modern trading techniques have led to growth in areas such as 'hedge funds', private equity and commodities. Taken together, these are often referred to as 'alternative investments'. They tend to be higher risk than traditionally managed financial assets and access by the general public is limited.

### Property

Many people may be surprised to see property categorised as an alternative investment. It is seen, quite rightly, as one of the earliest and most popular forms of investment. However, property is an inflexible asset. Residential property tends to be owned by individuals or families, or by local authorities or housing associations, and it is rarely suited to professional investment. Commercial property requires large minimum investments and it is cumbersome and expensive to buy and sell. Properties do not change hands frequently and are not easily bought and sold. This makes physical property less liquid than, say, equities and because they don't change hands very often, fund managers will rely on professional valuers to determine a property asset's value - or at least their opinion of its value. The development of REITs – Real Estate Investment Trusts – has allowed greater access to the international property market. For the

most part, however, professional investment managers will prefer the flexibility of investing in property through shares in companies managing significant estates.

## Derivatives

A wide and varied range of financial instruments come under the term 'derivative'. They are traded by professional investors using jargon that is as colourful as it is impenetrable – puts, calls, contango, backwardation.

But whatever the terminology, the underlying concepts are not complicated. Derivatives originated in the American Midwest in the 19th century when farmers began selling their crops ahead of harvest in order to guarantee a price and avoid the risks of adverse weather. In modern mainstream investing they are still used in much the same way and for a similar purpose – to manage risk in an efficient and low-cost manner. A simple parallel is household insurance. This is a derivative in the basic sense as the insurance has no value in itself: its worth is derived from the value of the insured assets and the premium paid. As with a financial derivative, your insurance is a way of managing the risk of owning goods you wish to maintain.

### Futures

The simplest financial derivative is a future. An investor agrees to buy or sell a given financial instrument for a set price at some point in the future. This saves the need to buy or sell the actual instrument. However, the investor may wish to avoid the expense of the future and choose to pay instead for an option to buy or sell a future. In precisely the way household insurance balances out the risk of owning personal goods, a future – or an option on a future – can be used to balance the risk of owning a financial asset. This is sometimes called hedging.

### Counterparty

Investors often buy and sell derivatives directly from each other. The advantage of this is that they can be tailored to manage a precise form of risk. The disadvantage is that the value of the contract – essentially, the derivative – is dependent on the ability of both parties to honour the agreement. This is counterparty risk.

Most derivatives used in modern mainstream investment are traded through exchanges. This means they can be easily traded in a liquid market, ultimately underwritten by the exchange. Counterparty risk in this context becomes negligible for the investor as it sits with the exchange.

### Leverage

In its simplest form, leverage is borrowing. If you borrow money to invest in the stock market, you have leveraged your investments. This is not allowed in mainstream UK-registered investment funds as, clearly, it adds a significant layer of additional risk. However, leverage can take less obvious forms that do not involve borrowing money and that smooth out risk rather than adding it on. This happens where an investor buys an asset but at the same time, through a futures contract, agrees to sell it. This is using leverage to reduce risk. The outcome is that returns will be lower but are more likely to be positive.

## Other risk factors

### Inflation risk

When we speak of inflation, we mean a broad rise in the cost of goods and services. Different investment assets will cope with this in different ways, some better than others. Cash tends to be the most vulnerable

to loss of value, as rising interest rates will often come only after inflation has bitten. Bonds are also sensitive to inflation, as their value rests on a series of fixed cash payments. Some governments issue index-linked bonds to counter the effects of inflation. Equities, which represent ownership in businesses, can often do better than cash or bonds, as businesses can raise their prices, sometimes at a quicker rate than inflation generally. Real estate also has some resilience to inflation, as inflation lowers the cost of borrowing (by reducing the value of the money with which loans are repaid), while rents and sale values can rise.

## Insolvency

Insolvency means being unable to pay debts when they become due. It can be absolute, or it can be partial or temporary. Any insolvency is likely to be bad for investors, but the effects will be different. Bondholders are the first in line with rights to any surviving assets, holders of 'senior' debt coming first and those of 'subordinated' debt following in order. The rights of equity investors follow those of bondholders. The likelihood of an enterprise having solvency problems is sometimes called its 'credit risk'. But as in crossing the road, insolvency risk is high in impact but low in likelihood, so the practical, day-to-day risk is fairly low. Few companies issuing publicly traded securities – that is, bonds or equities – have a capital value under £50 million, and for most it is considerably more. Where a company does issue securities, it becomes subject to significant ongoing scrutiny from regulators, exchange authorities, investors, the media and the public. Nothing is foolproof, but for the most part, problems should be seen in advance.

## Currency

Another form of risk is one that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk. Foreign exchange markets are large, complex and actively traded, with the result that they tend to be highly volatile. It is rare that individuals invest in them directly. Investment funds sometimes simply ignore exchange risk. This is more likely where the risk is confined to a single exchange rate, for example if all of the investment is in Euros and the fund is denominated in Sterling. Where the exchange risk is more significant, it is more likely to be insured - or 'hedged' – through futures (see above), which is relatively low cost due to the size and liquidity of the markets.

There are major risks involved in investments and this is not an exhaustive list. Specific investments may come with other risks not mentioned above. Cooper Johnston will be able to explain them to you.

