Volume 18 //

Acuity

The greatest wealth is **your peace of mind...**

Sensible investing.tv

Inflation: the elephant in the room

> Inflation is taxation without legislation.
>
> Milton Friedman

> By a continuing process of inflation, government can confiscate, secretly and unobserved, an important part of the wealth of their citizens.
>
> John Maynard Keynes

It's not enough for long-term investors to focus on strategies and returns. Ignoring the effects of inflation – the 'elephant in the room' – could be a considerable risk to their goals and dreams. In what ways can an investor mitigate this risk effectively using the portfolio building blocks available to them? This volume of Acuity provides a broad look at this issue and reviews some of the 'inflation protection' candidates including gold, inflation-linked bonds, commodities, commercial property and equities.

Inflation eats away at your wealth

You do not need telling that inflation eats away at your wealth; the bill at the check-out in the supermarket always seems preposterous for the small trolley of goods that you have picked up. The so-called 'cost of living crisis' is having a very real impact on people's lives today as wages have risen more slowly than inflation since the start of the Credit Crisis in 2007.

The fact that inflation eats away at your spending (purchasing) power makes it a dangerous foe over time. What tends to be forgotten – or even misunderstood - is the cumulative effect that it has year in, year out. Two or three percent does not sound much, but it is.

Inflation in the UK – better, but still a formidable foe

The figure below provides an insight into the UK's inflation history since 1948. Although inflation is certainly better than during the peaks of the 1970s and early 1990s, it is still a very substantial risk to those who – perhaps in retirement or approaching retirement – are most vulnerable to it.

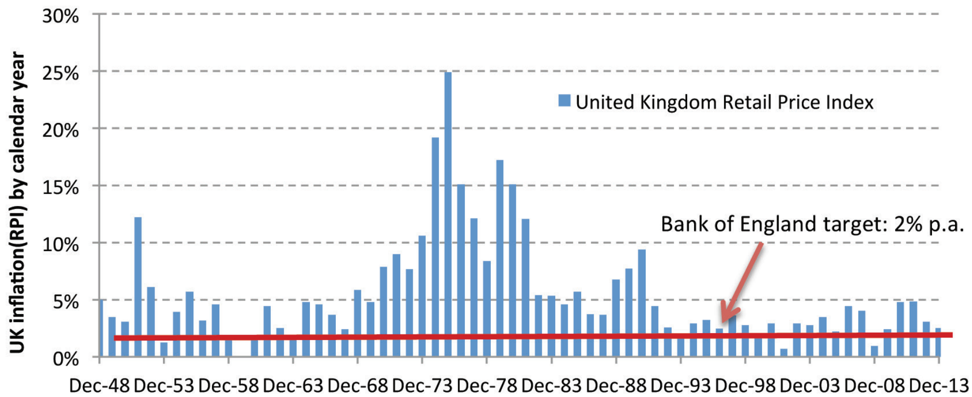

Figure 1: UK Inflation (Retail Price Index) 1948-2013[1]

Data source: Bank of England

Money illusion doesn't help

We are all prone to the affliction of 'money illusion' which is thinking that today's money still harbours the same value as yesterday's money. The US economist Irving Fisher referred to money illusion as 'the failure to perceive that the dollar, or any other unit of money, expands or shrinks in value'. A classic example of money illusion is provided by the holders of bank deposits over the past four years (ignoring tax), sheltering from the risks in the bond and equity markets. While their money has grown marginally in nominal terms, after inflation they have lost around 13% of their purchasing power. Money illusion is a dangerous state of mind. Cash is hardly a safe investment!

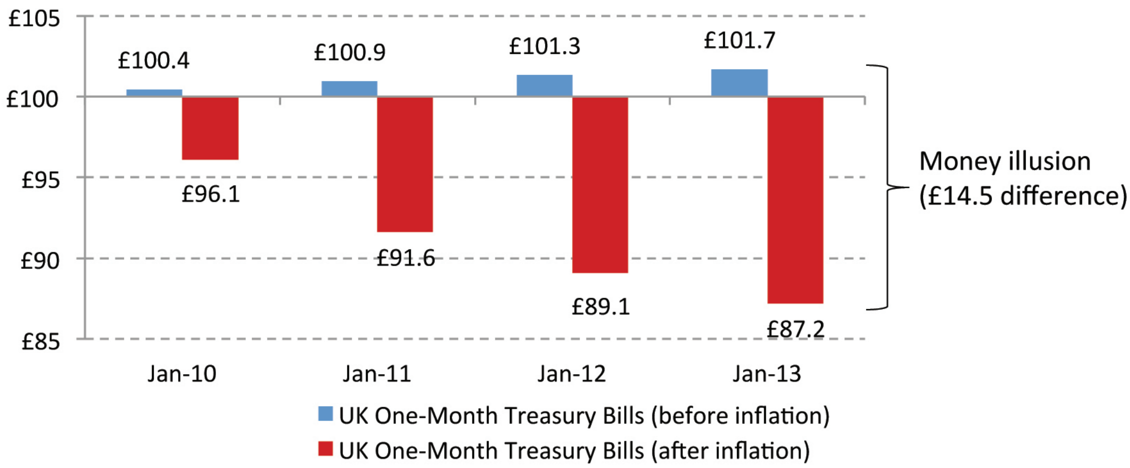

Figure 2: Money illusion – cumulative returns on £100 cash from 10/2009 to 10/2013

Data source: UK 1 month T-Bill – Bank of England

Its impact on your spending

Perhaps a more useful way to view inflation is to look at how quickly the value of your purchasing power is cut in half. To provide a useful insight, the annualised 10-year inflation rate has been calculated along with the number of years that, at this rate, it would take for £1 to only buy 50p worth of goods[2].

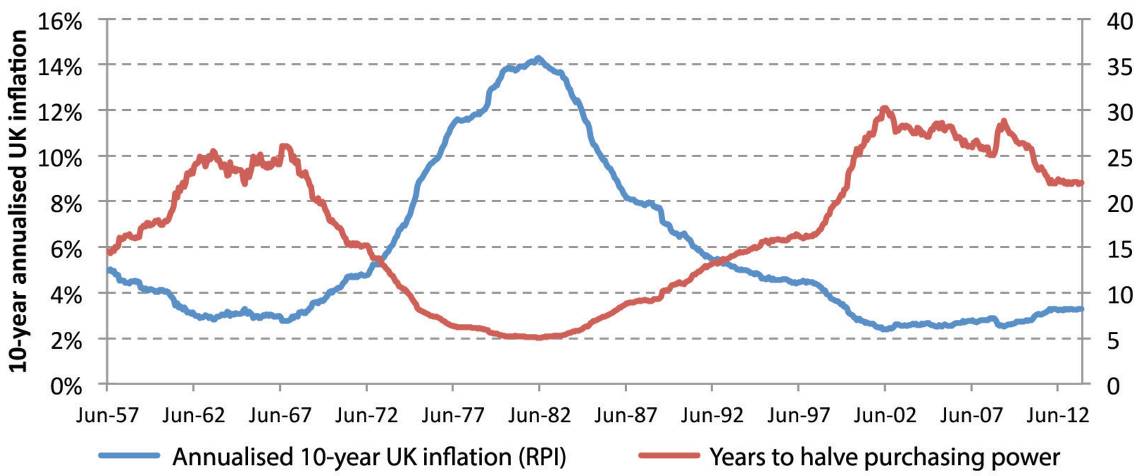

Figure 3: Years to halve the value of £1

Data source: Bank of England

You can see that with the average rate of inflation at around 14% in the 10 years leading up to the early 1980s, the value of £1 would have halved every 5 years or so. The figure below approximates the debasement of £1 of purchasing power to 50p, in years, dependent on the rate of inflation using the Rule of 72.

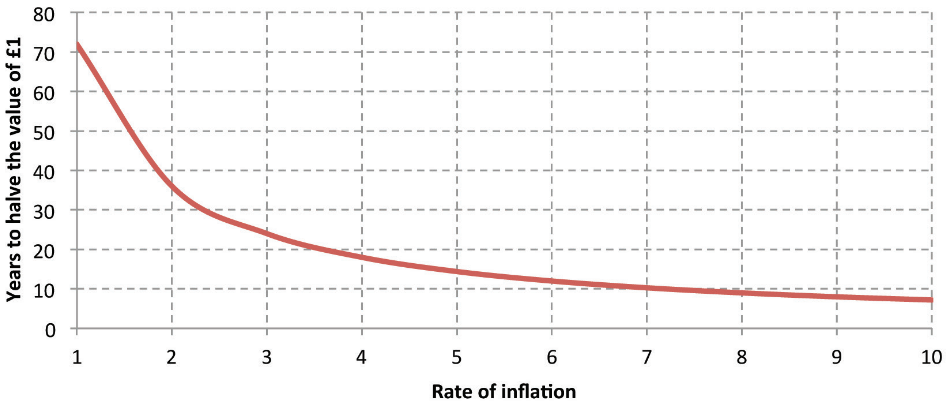

Figure 4: Years to halve the purchasing power of £1

Data source: Rule of 72

Wily governments and inflation

Whilst we tend to think of the impact of inflation as being the rise in prices, government uses its impact stealthfully to manage its tax take – a process known as fiscal drag – by failing to raise thresholds in line with inflation for taxes such as capital gains, inheritance and income tax. Each year more people are drawn into the tax net and those already there pay more in tax.

The other wily trick is to use low rates of inflation to whittle away at the national debt i.e. the cumulative balance over the years that the government and its predecessors have overspent their income. Today that debt stands at about £1.2 trillion in the UK, with an interest bill of £47bn a year. Inflating it away is a big temptation, rather than the more austere process of building budget surpluses to repay outstanding debt. The latter approach poses immediate and unpopular outcomes for voters and politicians which are unappealing.

Inflation is, in effect, a subsidy given by those prudent enough to save to those who borrow.

From an investor's perspective - its impact on bonds and cash

If we turn now to the impact of inflation on investors' wealth over the past half century, it is evident that bond investments are particularly vulnerable to high, unanticipated rates of inflation, both in the short-term and over the longer-term, with UK gilts losing over 70% of their value and cash losing around 30% of its value by the end of the 1970s.

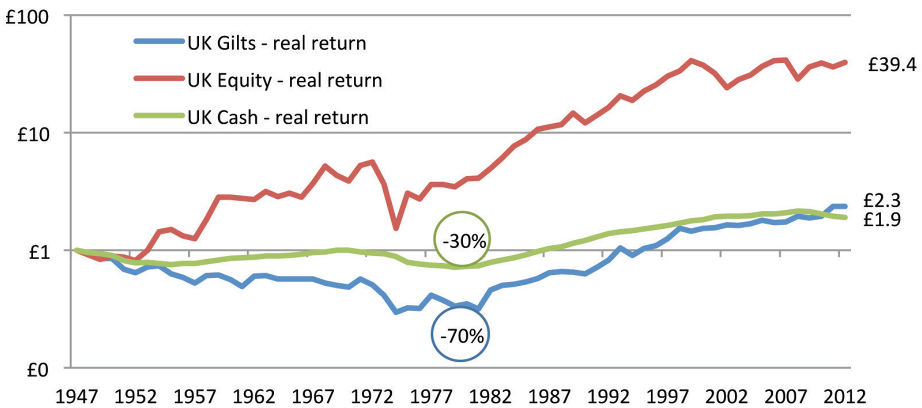

Figure 5: Growth of £1 of asset class purchasing power 1947-2012

Data source: Barclays Equity Gilt Study 2013

As you can see, UK gilts performed particularly poorly because actual inflation ended up being far higher than the gilt market had anticipated. Yields rose to reflect the higher inflation expectations and as a consequence gilt prices fell. Long-term investors who held material amounts of their wealth in gilts suffered heavily. The unanticipated inflation levels of the 1970s and early 1990s are a salutary reminder of the dangers and consequences of inflation to investors.

Who is vulnerable?

It is perhaps evident from Figure 5 above that more cautious investors – particularly those in a 'decumulation' phase of their investing (spending capital) - are most vulnerable to inflation, because they have a shortening horizon, are unable to add to their portfolios and may suffer price rises in essential goods and services which cannot be avoided. As such, cautious investors should consider whether they need to buy 'inflation protection insurance' by owning an allocation to inflation-linked bonds that will aim to maintain purchasing power over the mid- to longer-term. The price they pay is that assets that are low risk are likely to deliver low returns.

For more risk tolerant investors with longer-term investment horizons, the allocation that they make to equities has the potential to deliver longer-term, inflation-plus returns. The differing needs of each investor – in terms of their bond allocations - is summarised in Figure 6 below.

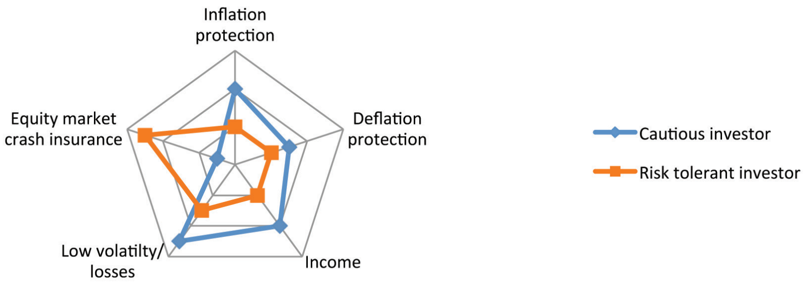

Figure 6: Bonds play different roles in client portfolios

Source: Albion Strategic Consulting

Inflation-proofing portfolios

Here we take a brief look at a number of portfolio building blocks that investors sometimes use to try to protect their wealth against inflation. Some make more sense than others. It is important to note that the most appropriate choice will depend on the investor's tolerance for losses, their time horizon and their need to be certain about the shorter-term purchasing power of their assets.

Conventional bonds – not bad

Conventional shorter-dated bonds, such as gilts and high quality corporate bonds can do a reasonable job of protecting portfolios from inflation, provided that actual inflation levels are in line with the bond market's expectation. That is because the future expected level of inflation forms part of the yield on the bond. In the event that inflation is higher than anticipated, bonds that mature or are sold can be reinvested at the new, higher yield. However, this is not an infallible inflation mitigant as unanticipated inflation can be sharply higher than the level expected, leading to material bond price falls. At times of unforeseen high inflation, such as the 1970s, ordinary bonds risk losses to purchasing power, as evidenced in Figure 5.

Inflation-linked bonds - better

On the other hand, inflation-linked bonds provide a structural link to inflation indices, such as the UK's Retail Price Index, providing better protection from unanticipated inflation. The principal amount of index-linked gilts is scaled up by the rate of inflation, as are the coupons paid on these bonds. This provides a good, but still imperfect hedge against inflation. It is an imperfect hedge because a) inflation-linked bond prices are driven by changes in the after-inflation (real) yields and these could potentially rise at times of increased inflation, and b) the UK RPI to which they are linked may not be the same inflation rate that an individual investor may be suffering e.g. school fee, university tuition fee and long-term care cost inflation.

For more cautious investors, inflation-linked bonds should be shorter-dated to reduce unwanted volatility although, in practice, well-structured products in this space remain limited. Few inflation-linked corporate bonds exist at present, but this could grow over time.

The price that is paid for this insurance can be high, in terms of lower longer-term returns than other asset classes. Low yields on index linked gilts make the insurance premium quite high at present. Like all insurance, you are only happy if you need to make a claim!

Non-UK inflation-linked bonds

Non-UK, inflation-linked bonds may offer useful but less direct mitigation of UK inflation. Given that the basket used to calculate UK inflation is made up of many items driven either directly or indirectly by commodity prices and overseas costs of production, global inflation rates may be quite similar. Owning inflation-linked bonds issued by non-UK governments helps to diversify the risk of a sharp rise in UK real yields. On the other hand, if inflation in the UK rises independently of global inflation – perhaps due to a wage-price spiral as we suffered in the 1970s – then the protection provided by non-UK inflation-linked bonds would be diminished. As with conventional bonds all non-base currency should be hedged. Shorter-dated bonds, which are less volatile than longer-dated bonds, are preferred.

Commodities – imperfect and not without issues

Given that the inflation basket is, to a material extent, comprised of commodities (energy, precious and industrial metals and agricultural goods, such as wheat) it would seem logical that commodities should provide a reasonable inflation hedge. The issue is a little more complex than that. First, it is impossible for individual investors to capture commodity price movements directly; one cannot anchor an oil tanker in the River Exe estuary, keep a warehouse full of grain, or store pork bellies or orange juice in the back yard. We have to use the futures markets as an imperfect – sometimes very imperfect - proxy for prices. Even if we own a basket of commodity futures, the volatility it comes with is similar to that of equities. For cautious, inflation-sensitive and loss-sensitive investors, adding equity-like risk to the portfolio makes little sense. Over the longer-term a basket of commodity futures could potentially deliver protection of purchasing power, but there is no certainty that it will. Products offering access to commodity futures carry a range of structural issues that make them unappealing to many investors[3].

Gold – not compelling

Investing is full of one-line tips like 'gold is a good inflation hedge' that need a little more thought than it is often given. In a recent research paper[4], the inability of gold to hedge against unexpected inflation (from 1975 to 2011) was tested by comparing its price movement to changes in inflation. Its conclusion was that there was effectively no correlation. Even over periods as long as ten years, gold has proved to be a poor inflation hedge. Inflation did not predict higher gold returns and vice versa. The real price of gold in 1980 - in today's price terms - was around $2,400. It is around $1,200 today, down from its recent 2011 peak of $1,900, which represents a material fall in purchasing power over this 33 year period. The price of gold is volatile and it would not be an appropriate asset class for cautious investors, who are sensitive to losses. The case is far from compelling as an inflation hedge or even as a generator of strong positive real returns as part of a more risk tolerant investor's portfolio.

Equities – solid long-term real returns

Equities are generally expected to provide reasonable protection from inflation over the longer term, although the protection proves somewhat unreliable in the shorter term[5]. This protection is perhaps not too surprising given that a company can increase its prices to customers and the value of its assets, such as real estate, will rise too. In other words, longer term inflation protection reflects the likelihood of an equilibrium existing between a company's market value and the replacement costs of its assets. As inflation increases the replacement value of the assets, the market value should increase too. If it did not, publicly traded companies would become undervalued with a rise in inflation.

Since 1955 the UK equity market has always delivered a positive real return over any twenty year period, and on average delivered over 5% per annum after inflation.

Commercial property - ditto

Global commercial property represents investment in industrial units, office blocks and retail shopping malls around the globe, where returns are derived predominantly from rental income and changes in the capital values of the underlying properties. Investment in publically listed property securities (equities) – Real Estate Investment Trusts or REITs, as they are known – provides long-term property return characteristics with a high level of liquidity, in what is otherwise an illiquid asset class. Given the ability of landlords to raise rents in line with inflation and the fact that replacement costs of the properties rise too, it should theoretically provide long-term inflation protection. Real returns have been solid over the past 30 years or so, standing at over 5% per annum (but not without some significant falls in the interim). Again, a better inflation protection tool for longer-term, more risk tolerant investors.

Conclusion

There is little doubt that inflation is a scourge on the wealth of long-term investors and even short-term deposit placers. The UK has a history of bouts of high unanticipated inflation and periods of sustained insidious lower inflation. The impact of quantitative easing, combined with the temptation to inflate away some of the burden of the national debt, make the risk of future inflation very real.

How then, to protect a portfolio from inflation? Unfortunately for investors, there is no one simple panacea for how best to protect purchasing power. Longer-term, more risk tolerant investors owning a globally diversified portfolio of asset classes including shorter-dated bonds (conventional and inflation-linked), alongside equities and commercial properties, provide themselves with a fair chance of doing so. More cautious investors with material allocations to bonds should consider hard the value of including some inflation-linked bonds, weighed against the heavy premium that they will pay for this insurance. No easy answer, but a question worth considering carefully.

End notes

1. The official inflation number – the UK's Retail Price Index - is calculated by the Office for National Statistics using price changes to a basket of about 700 areas of consumer goods and services.
2. We have used the 'Rule of 72' to estimate this – simply divide 72 by the rate of inflation to see how many years it takes to halve the value of £1.
3. Most notably, the introduction of counter party risk – as the exposure is gained via a swap transaction between the product and an investment bank – combined with potential conflicts of interests that exist in many structures makes them unappealing to many.
4. Erb, Claude B. and Harvey, Campbell R., The Golden Dilemma (May 4, 2013).
   Available at SSRN: http://ssrn.com/abstract=2078535 or http://dx.doi.org/10.2139/ssrn.2078535
5. Swensen, D., (2005) Unconventional Success, Free Press: New York, p. 37.

Other notes and risk warnings

Sensible
investing.tv

www.sensibleinvesting.tv