

COVID-19

CAPITAL MARKET AND ECONOMIC ASSUMPTIONS: THE POTENTIAL EFFECT OF THE PANDEMIC

COVID-19 has led directly to changes which will not be reversed entirely or not for a long time. Examples are working from home and very large government budget deficits. The epidemic has also triggered and accelerated changes which may have seemed inevitable, for instance reduced business travel and cuts to unsustainably high UK company dividends. This note considers such issues and the implications for actuaries in setting capital market and economic assumptions.

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Increased uncertainty

The current situation is unprecedented in modern times. While some scenario testing has involved potential pandemics, mainstream risk analysis has very much focussed on dealing with recessions, financial market bubbles, very high inflation, banking crises and so forth. Therefore, the nature of this crisis means that the uncertainties are very much greater than actuaries are used to modelling and the funnel of doubt is a lot wider. For example, do we need to price in pandemics as a regular occurrence in future?

Actuaries should consider the following points when setting assumptions:

- Financial market risk premia can be expected to rise and in particular we should see higher credit risk premia. Were it not for government support, certain sectors such as the commercial air industry would (at least temporarily) have collapsed.
- Illiquidity is likely to become more of an issue. Turning points in markets usually expose the excesses of the previous cycle and the strong trend for pension funds to buy all types of private assets may well come under greater scrutiny. This is particularly relevant to the cashflow needs of maturing DB pension schemes and the rapidly changing collateral requirements in fast moving markets.
- Collateral requirements on hedging programmes – particularly those with high levels of leverage – could be subject to more volatility and greater funnels of doubt emphasising the need for robust fallback provisions.

Secular change

A lot is being written about the 'new normal', for example reduced business travel and a lower requirement for city centre office space. At a macro level, companies are considering shortening their supply chains in order to be able to cope better with COVID-19 style disruptions. There is also discussion of moves to greater national self sufficiency, not least when it comes to medical supplies.

At the same time, some long lived trends look set to come to an end: corporate taxation will almost certainly rise rather than continue to fall, rising wages (compared to the cost of capital) are liable to put pressure on profit margins and there is now little scope for interest rates to fall year after year.

There are a number of important implications relating to capital market assumptions. Actuaries should consider:

- The derivation of asset class return assumptions should become more fundamental, based on in-depth forward looking research and analysis. Using 10-year historical average returns is unlikely to be successful in producing equity return assumptions if profit margins are in secular decline (as distinct from a cyclical fall in margins), in contrast to the high and fairly stable profit margins experienced for many years now.
- The relationship between the returns of different asset classes may well be quite different in future. Ever looser central bank policy has led to the tendency of all asset classes to rise in tandem but there is now limited scope for this to continue. Consequently, correlation assumptions will need to be reconsidered.
- Volatility assumptions should be reassessed as long term trends are liable to come to an end and monetary policy is likely to be a less calming influence on financial markets.

Monetary policy and bond yields

Having cut short term interest rates to effectively zero (or below) in virtually all developed economies, central banks are now focussed on keeping government bond yields down. Initially, this was implemented through straightforward quantitative easing (central bank purchases of government debt) and was aimed at encouraging investors into riskier asset classes. This has developed into 'yield curve control' where the desired relationship between cash rates and bond yields is publicised and to some extent managed. As yet, this constitutes formal policy only in Japan and to a lesser extent in Australia but it is informal policy elsewhere.

The result is that bond yields are likely to be kept artificially low and unnaturally stable for some time which has the following potential implications for actuaries when setting assumptions:

- Government bond market volatilities are likely to be artificially low in the shorter term. This could provide challenges for stochastic modelling.
- At least in the near term, there could be more reason to hedge inflation than interest rates. Hedging *both* interest rate and inflation risk may no longer be obviously less risky than hedging only interest rate or inflation risk.
- Valuing equities by discounting future cashflows using government bond yields is liable to overvalue equities.
- In the UK, when deriving the discount rate as "gilts + x%", it should be recognised that gilt yields will be only partially driven by market forces and historical relationships are unlikely to hold.

Inflation

There is considerable debate taking place at present as to whether we face much higher inflation going forwards than that to which we have become accustomed. The argument for higher inflation is based on the vast sums of money put into the economy by policymakers, notably the enormous fiscal packages which have or are about to be implemented and the apparent willingness of central banks to finance these packages (printing money).

Issues for actuaries to consider include:

- There may be more justification to hedge Inflation than to hedge interest rates, especially as bond yields are likely to be stable at artificially low levels (see previous section).
- If inflation hedging gains in prominence, then the cost of hedging inflation (the inflation risk premium) can be expected to rise.

- If, as raised in the 'Secular change' section above, wages / salaries rise relative to the cost of capital, then the relationship between wage / salary inflation and consumer price indices could become quite unstable.

It should be noted that deriving expected inflation by taking the difference between index-linked and fixed interest gilts could be misleading, given the somewhat artificial level of nominal but not (at least to the same extent) index-linked gilt yields.

This note was written by Colin Robertson.