

Financial planning just got harder

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How Quantitative Easing transformed financial decision making and what that implies now markets are back in control of pricing risk

Decision making in a QE world

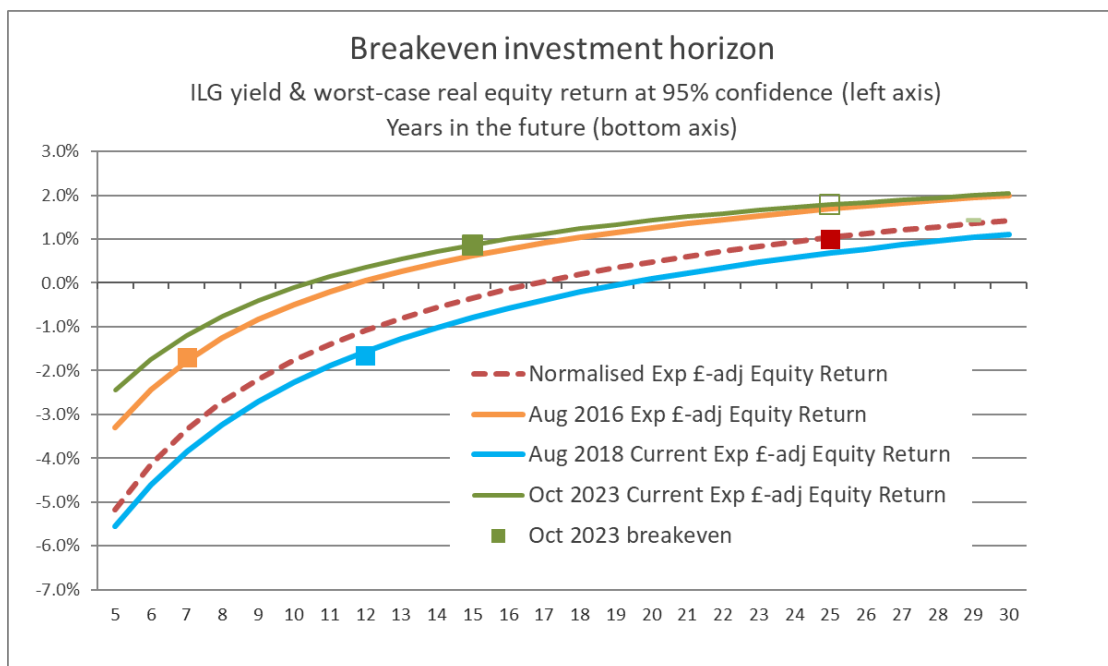
Quantitative Easing (QE) never quite created the 'free lunches' that financial markets abhor, but it came very close. So, for new Fowler Drew clients planning spending goals since the Global Financial Crisis (GFC), and particularly more recently when real risk-free rates were negative, there was virtually no constraint on how much risk to take, other than how much volatility they could tolerate. They would have had no experience of planning with us at a time when volatility, which most of our clients can readily bear, was not the effective limit.

The QE world was easy because most of the modelled probability distribution for equity-based real returns lay above the real risk-free rate.

Normally, satisfying the desire for higher spending by taking more risk increases the chance of falling short of some tolerance limits. That requires either acceptance of shortfall against required outcomes or the assignment of more resources to the spending goal.

Finding the 'right' balance between risk, resources and outcomes used to be hard, with the information feedback from the model pushing clients to compromise where they did not want to. Without the option to assign more resources, they might have to retire later, take less risk, lower the minimum spending they thought they needed or accept a lower confidence level for the sustainability of the plan. They might be able to assign more resources but implicitly at the expense of helping others with lifetime gifting, or by accepting a contingency plan of 'trading down' later. The need for such compromises virtually disappeared with QE.

We illustrated this capital-market aberration graphically in two articles, in 2016 and again in 2018. We are reproducing the chart we used, with the addition of the most recent data after the normalisation of risk-free rates. It is not an exhibit we regularly show so it needs a little explanation.



The idea was to demonstrate how much of the modelled probability distribution for equity real returns lay above the real risk-free rate by showing the year at which the 95th percentile expected return (close to a worse-case equity outcome) equalled the real risk-free rate, based on the ILG yield curve. We referred to it as the 'breakeven year'.

- The dashed red line is the lowest annualised expected real return at each horizon, at the 95% percentile, on the basis all markets and currencies are normally valued. The breakeven is the red square at 25 years out. If you were planning at 95% confidence, only the cash-flow liabilities longer than 25 years (the bottom axis) would avoid risk of a shortfall against the 1% (assumed) normal ILG yield (real returns being the left axis). It is that shortfall risk, or opportunity cost, that normally makes high-level investment policy decisions awkward, by calling for tradeoffs or compromises. It is also why any absolute tolerance limits 'bite'. Put a floor under your spending with a high level of required confidence and the model will force you to take equity bets off the table even if your time horizon is long.
- In 2016 (orange) and 2018 (blue), this breakeven point had dropped to 7 and 12 years respectively. In other words, most of your future cash flows could be 'matched' by equities without a significant risk of loss relative to the current ILG yield for the same duration. More equity bets, for longer. Few, if any, compromises.
- The green line, using data as at end October, shows that expected equity returns are higher than normal, and higher than at those earlier points. But this is more than offset, in risk-premium terms, by the breakeven year moving back out to 15 years (filled green square), where the two cross over at just below 1%.
- In fact, the ILG yield curve is unusually steep at present (itself something that needs an explanation) so the yield at the normalised breakeven year of 25 is even higher, at 1.45% (open green square). This is consistent with our thinking that our normalised assumption is too low in a post-QE context, with a much higher debt to GDP ratio, and that 1.5% is more realistic.

Other examples of exceptional welfare gain

It was not only the planning of spending goals that became abnormally easy with QE. The following are examples of welfare gain that were applicable to some of our clients.

DB Pension transfers

Clients with Defined Benefit (DB) pension rights were normally better off retaining that income as underpinning for their drawdown plan. But when the cash values offered by schemes, as a way of laying off the scheme sponsor's liability onto the members, started to reflect very low discount rates (mostly priced off long-duration ILGs), we realised that total spending could be increased with virtually no risk of shortfall by taking the cash value offered and reinvesting as part of the drawdown plan. This was not a feature of all schemes, as the discount rates that had to be used were a function of the investments the schemes held and so the scale of the opportunity also reflected whether the scheme had moved from equity bets to liability hedges, using bonds and swap contracts. Most had.

Cash management

Low nominal interest rates, equivalent to a market forecast of very low inflation, also invited inflation bets we would normally avoid. We chose to take on some inflation risk with cash flows up to 7 years or so out, to avoid locking in very low ILG rates. That typically meant holding more cash instead of a combination of cash and ILGs – returning large cash balances to clients to hold at NS&I (with the benefit of a £1m government guarantee). With the return of positive ILG yields, there was no longer any excuse for not matching the nature and duration of all but immediate cash flows.

Borrowing

Mortgage debt is nominal, not real, and what may look like a good deal may simply disguise inflation risk. The Ukraine war, and the signal it gave of a change in the inflation environment, was enough for

many households to want to take that risk by locking in low mortgage rates that implied the persistence of very low inflation. Unfortunately, the scope for UK households to benefit was less than in countries where borrowers can fix for longer periods or even the life of the mortgage. We never applied for FCA permission to act as a mortgage intermediary so this was limited to generic suggestions.

Equity release

The economics of equity release, or lifetime mortgages, which are a well-developed product in the UK and where inflation can be a lesser consideration, were transformed by very low nominal bond yields. Wherever capital tied up in a freehold was frustrating lifetime spending or earlier gifting, the welfare gain was potentially greater than any of the other opportunities, even if less common. These opportunities also needed referral to specialist brokers.

Equity valuation in the QE world

QE was an exceptional monetary response to exceptional economic threats – initially the GFC and then Covid. Risk premia can be boosted by negative real interest rates but that could be offset by very low future equity returns. In practice, that is probably how many investors, both professionals and self-directed individuals, chose to interpret market conditions. They reduced their expectations for equity returns or they increased their risk aversion – or both. They thought the very high price of avoiding equity risk was worth paying – even though most, unlike DB pension schemes, were not compelled by any externalities (legal, regulatory or accounting) to avoid risk.

The Fowler Drew model did not ‘see’ any reason to change assumptions for normalised equity real returns because of the exceptional economic conditions. It simply adjusted in a predictable way to the changes in prices as the GFC and Covid influences played out. It likewise adjusted to UK-specific prices as Brexit played out. This is consistent with viewing the long historical data for real equity returns as evidence of an ‘adaptive system’, hard-wired to try to survive economic stress.

By way of reminder, it is not that we actually believe there will be no change but rather that that assumption allows resulting large changes in relative valuation to act as an implied forecast of a large change in underlying business performance. That is what would validate the relative valuation change. Observed mean reversion, with bounded deviations, tells us that investors regularly overestimate change and underestimate the ability of business to adapt. It therefore pays to bet systematically against implied changes.

Also by way of reminder, some of the observed adaptability of business is a function of the dynamic construction of representative market indices – the ‘passive misnomer’. They are by design Darwinian, dropping old (and failing) companies and picking up the new. An active manager seeking to exploit the persistence of a system would need to change their holdings.

Markets ‘teach’ humility and a further aspect of that is assuming that low or negative real risk-free rates will do their job of encouraging risk taking and keep equity valuations if not high, at least far above bear market levels. After the GFC, they did. The monetary policy responses to the economic crisis may have been unorthodox but the market responses to these policy responses were perfectly rational and consistent with the text-book theories the modelling was based on.

In fact, both our exposures between risk free and risky assets (the high-level mix) and the exposures within risky assets (the country weights) have outperformed the benchmarks we created based on ‘normalised’ pre-GFC market conditions. Far from breaking down ‘in a different world’, the model assumption of an essentially unchanging world has held up.

After the event, we can see that there is no evidence that the GFC, or the policy responses to it, have altered the fundamental behaviour of equity markets as the Fowler Drew model ‘sees’ it.

Whilst we have no plans to alter the way we model sterling-adjusted equity real returns, there is always research going on into how to refine the construction of optimal portfolios that use that information. Some of this research will materialise as small changes in the exposure limits, minimum

levels for some and maximum levels for all. Limits help to enforce diversification. That has two aspects: stabilising returns most of the time and reducing the impact of errors in our assumptions at extremes. This will affect the simulations and therefore (in a small way) resources, so it makes sense to do this at the same time as the other changes affecting resources.

Those changes include the upward revision to the normalised ILG yield and building our fees into returns (as we do for product costs) instead of including them in clients' spending targets as if another budget item.

Implications for planning

Now that QE appears to have reached its limits and lenders have the upper hand in pricing risk, via their influence on bond yields, it is surely sensible to consider the implications *as if the model will still be broadly the right one*. Hence our focus on the planning implications of the much lower risk premium; the lower price for avoiding both equity and inflation risk; and the need for tradeoffs and compromises.

We expect the model to be *more, not less, useful* as there is greater need when making tradeoff decisions to use more of the variables the client effectively controls:

- resources assigned to the goal (though these may be a given)
- minimum tolerable outcomes
- required confidence
- time horizons (to the extent there is flexibility)
- time preferences (such as the profile of planned retirement spending)
- even the risk aversion 'score' that ensures all the plan variables 'balance' or are internally consistent.

We will still need a 'reality check' against the projected nominal volatility associated with the adopted plan but how clients choose to trade off the real outcome risk of the plan and its nominal path risk may alter. This is because tolerance of short-term volatility is not a fixed quantity dependent on, say, personality. Experience of clients working with the model shows it is partly dependent on the benefits gained or lost by accepting volatility. This is not a constant. We can see that clients' composure typically grows with time when regularly informed about the benefits; and when projections focused on outcomes are available to help counter emotions triggered by market volatility.

The model is what puts numbers on the variables in all possible tradeoffs and should therefore inform better and 'truer' decisions, at every point in the life of the plan.