ARTORIUS WEALTH

INVESTMENT OUTLOOK

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Untune that string…

Their trend – whose friend?

Movements in the prices of many financial assets exhibit trends. On one level this is behavioural; driven by fear and greed, with market participants having a tendency to move in herds, creating price momentum through their activity. This can, however, be amplified by incentives. Holding managers to account by measuring their short-term performance against benchmarks and against their competitors heightens awareness of the activity of others, intensifying their natural proclivity to mimic others' behaviour.

But sometimes the natural tendency for prices to trend is exaggerated further, creating feedback loops. Think about the 'TMT stock market strategy video' episode in global stock markets that straddled the turn of the new century. Many 'sensible' investors who stayed on the side-lines were ultimately forced to capitulate, not least by the fact that these three sectors grew to about a third of many benchmark equity indices. Weighted by market capitalisation, this was largely a mechanical function of index construction, which is inherently pro-cyclical. Many fund managers 'neutralised' their exposure with a 'market-weighting', leaving their clients with a third of their portfolio exposed to the subsequent, ugly consequences.

Loopy…

Feedback loops have characterised all of the most traumatic episodes in financial markets over the last thirty years. The 1987 stock-market crash is now widely believed to have been magnified by the then newly trendy 'portfolio insurance' – a form of dynamic hedging that required investors to sell increasing amounts of index futures as markets fell. The collapse of Long Term Capital Management a very large Hedge Fund in 1998 involved similar mechanics, largely as a function of the amount of leverage that the fund had deployed, probably not helped by the fact that the market became aware of their positioning, compounding their pain.

Leverage and feedback loops tend to go hand in hand: the mechanism by which banks collateralise assets (based on loan-to-value) itself tends to re-inforce prices. In the US housing market in the years before the financial crisis, rising house prices facilitated the growth in debt that further fuelled their appreciation. Fractional reserve banking is itself vulnerable to feedback: we can't all withdraw our deposits at once, as these have been transformed into loans to other customers several times over. As a former Governor of the Bank of England commented recently, it may not be rational to start a bank run, but it makes perfect sense to join one once it's started… A bank run is the very definition of a feedback loop.

Tight coupling

Even systems that are designed to manage financial risk can be dangerously pro-cyclical. Richard Bookstaber, a former risk manager at Morgan Stanley, wrote a prescient book in early 2007 with the title 'A Demon of Our Own Design'. He made the comparison with 'tight-coupling' in engineering systems, where a small mishap can lead inexorably to a chain of negative consequences, as in a nuclear reactor melting down. 'Optimisation' in financial systems, using leverage by way of complex derivatives, could he warned lead to a similarly malign conclusion, as we were to discover only too soon.

We can't remember if Richard Bookstaber looked at 'Value at Risk' (VaR) in his 2007 book (although he's been deeply critical of it more recently) but this almost ubiquitous risk-management tool is deeply pro-cyclical in practice. If historical volatility halves (over whatever window of measurement) the model proposes that you double the amount of capital at risk, in order to maintain a constant VaR. The problem with this is that volatility is not stable, or rather that it is until it isn't. Sustained episodes of low volatility can be equated with complacency; in this respect it's not unlike piling more debt onto assets that are rising in price, and common sense – as opposed to fancy mathematical formulae – suggests that it's asking for trouble.

Innovation

So if feedback loops and leverage have accompanied many, if not all historical episodes of financial folly, where might we observe them in combination in 2016? We might also look for financial innovation: many of the episodes above – portfolio insurance, the 'new economy', securitised housing debt – were rationalised by claims of innovation, new rules that apparently rescinded common sense. Could it be that we've failed to learn the lessons of history, combining leverage and innovation in a feed-back loop that will work positively, until it turns malign?

My worry is that there may be both feedback loops and leverage – and yes, sanitised by claims of financial innovation – at work in the world's largest and most liquid asset class, sovereign bonds. In Classical architecture, all proportions of a building were related to a single 'module'. In modern finance, the government bond yield plays a similarly important, anchoring role. Unlike policy rates bond yields have historically been set by the market, and the relationship between the two (reflected in the yield curve) has traditionally embedded vital signals. The long bond yield effectively establishes the hurdle rate (the minimum required rate of return) for investment, both in portfolios and in corporate capital investment: 'Untune that string…and hark, what discord follows…'

Good intentions…

The first example of a feedback loop in bond markets is an entirely intended consequence of unconventional monetary policy. Namely, central banks have publically announced large purchase programmes of long-duration assets – and such signalling tends to increase the price of these assets. A rational buyer of a scarce asset tends to deploy stealth: noisy buying seems intended to move prices, presumably as one objective of policy. Lowering long-term yields seems designed to encourage investment – in riskier assets, in terms of portfolios, and lowering the hurdle or cost of capital in corporate capex projects

…pave the road to hell

But there seem to be unintended consequences too. Falling long-term bond yields create problems for the managers of life and pension funds, who aim to match, as far as possible, their long-term assets with their projected liabilities. The present value of their future liabilities rises as long-term interest rates fall, simply as a function of the lower discount rate applied in the calculation. This will naturally lead them to increase their allocation to long duration bonds, the more expensive they get.

In a paper published by the Bank for International Settlements (BIS) ('The hunt for duration: not waving but drowning?', October 2015) this is how the mechanism is described: 'If a sufficiently large segment of the market is engaged in such portfolio rebalancing, the market mechanism itself may generate a feedback loop whereby prices of longer-dated bonds are driven higher, serving to further lower long-term interest rates and eliciting yet additional purchases.'

Upward sloping

The Bank of England recently resumed the purchase of gilts, after a few years' hiatus. On the second day of their purchase programme (9 August) they were unable to find sufficient supply at maturities of 15 years, theoretically at any price, in the reverse auction. This was largely technical – perhaps the institutions hadn't envisaged the level to which prices might rise and had failed to submit offers at sufficiently elevated levels – but a market without an offer is unusual, to say the least.

The BIS paper quoted above describes how 'the demand response of the long-term investor becomes upward sloping, in that a higher price elicits further purchases'. Hardly surprising then that a reverse auction fails to succeed. And being hard-wired to buy more of something the more expensive it gets defies common sense and thus seems likely to end in tears.

Leverage

So having established prima facie evidence of feedback loops in the pricing of long-term government bonds do we also see leverage and innovation? Worryingly, both are apparent – in spades. Two major innovations in institutional investment have emerged and become dominant in the last decade. Each claims to be a better way of managing assets and liabilities than a traditional multi-asset approach. Both deploy substantial amounts of leverage, the quantum of which will increase by design as bonds become ever more expensive.

Liability Driven Investment (LDI) and Risk Parity have seen enormous growth as investment strategies for institutional asset owners over the last fifteen years. LDI was pioneered in the pensions industry: rather than focussing on the pension fund's assets, LDI aims to hedge risks associated with the fund's liabilities, typically interest rates, inflation and longevity. Without going into LDI in great detail, the consequence of its adoption has been that pension funds have typically increased their allocation to government bonds (especially to Index-Linked) and have used increasing amounts of derivatives and associated leverage to increase returns from this asset class.

Risk Parity is still more explicit in using leverage: the starting point is that most of the risk (defined by volatility) in a traditional balanced portfolio is derived from its allocation to equities. Gearing up the bond portion of the portfolio to the level of equity volatility will increase the overall returns, but more pertinently will improve risk-adjusted returns for the portfolio. The lower the volatility – however defined – in the bond allocation, the greater the leverage that can theoretically be deployed.

One of the pioneers of Risk Parity (Bridgewater Associates, now managing around USD 150bn) has this to say about their Risk Parity based All Weather solution: 'There is no limit to how the All Weather principles of balance can be applied and over time could perhaps contribute to a more stable financial system.' This smacks of hubris.

Jim Grant, Founder of Grant's Interest Rate Observer and one of the soberer commentators on bond markets, is more sceptical. In his May 2015 issue Grant wrote: "Dalio [founder of Bridgewater] and Asness [founder of AQR Capital Management] are, of course, formidable Wall Street thinkers and doers. Formidable, too, are the critics, who include Paul Singer maître d'hotel of Elliott Management and Ben Inker, co-head of GMO's asset allocation department. We stand with the critics."

Procyclicality

In 2013 the Bank of England established the Procyclicality Working Group, chaired by Andrew Haldane, to investigate 'whether, and if so why, insurance companies and pension funds invest procyclically'. They defined procyclicality as (among other things) 'the tendency to invest in a way that exacerbates market movements and contributes to asset price volatility, which can in turn contribute to asset price feedback loops.' Commenting on their subsequent discussion paper, the Deputy Chair of the working party Ashok Gupta had this to say, in 'The Actuary' magazine, March 2015:

'Significant industry herding by DB pension funds is also identified in the report. The rush by funds into index-linked gilts has resulted in market distortion, suppressing yields on 20-year index-linked gilts by as much as 165 basis points (bps). This in turn inflates pension deficits. This herding most likely derives from industry practices regarding the use of investment consultants and asset managers.'

He concludes: 'As we struggle to emerge from the economic crisis, the potential of pension and life funds to mobilise long-term capital and smooth the economic cycle has been undermined by industry practices, regulation and mark-to-market accounting. Pension and life funds are behaving like banks, compounding instability. The Bank of England study highlights the need for fresh thinking to promote long-term savings and investment.'

Tipping Point

Of course since the comments above index-linked yields have fallen still further – the longest duration issue is up over 60% in price in 2016 alone. And herding into long-duration fixed income also looks to have been heroically smart – still better of course with plenty of leverage. Another characteristic of financial excess is that sensible people are made to look foolish, having warned of folly at substantially lower levels. In the last stages of the mania there's almost no one with credibility left to question it – something I remember vividly at the peak of the dotcom mania. Andrew Garthwaite – Global Strategist at Credit Suisse – recently commented that he could find no bear of bond markets, having known no bulls at the end of last year. This anecdote suggests that we may be close to a tipping point.

Price momentum in the grip of a feedback loop feeds – by definition – on itself. Having defied fundamentals in its creation, it doesn't require a change in fundamentals to unravel. A reversal in prices, accompanied by the need to de-leverage, becomes similarly self-fulfilling. Afterwards of course it seems obvious…

Asset Allocation Views

Equities	⊖
US	⊖
UK	⊜
Europe ex UK	⊜
Japan	⊜
Pacific ex Japan	⊖
Emerging Markets	⊜

Fixed Income	⊜
Government	⊖
Investment Grade	⊕
High Yield	⊜
Emerging Market	⊜
Cash	⊕

Alternatives	⊜
UK Real Estate	⊜
Infrastructure	⊜
Private Equity	⊜

⊕ = Positive view
⊖ = Negative view
⊜ = Neutral

Source: Artorius Wealth

Our Tactical Asset Allocation (TAA) tilt verses the Strategic Asset Allocation (SAA) reflect our shorter-term views. Actual client portfolios will vary according to mandate, benchmark, risk profile and the availability of individual asset classes in different regions.

ASSET CLASS OVERVIEW

Equity	SAA	Commentary	TAA
US -3 **-2** -1 0 1 2 3	22%	We increased our negative stance on US equities from 'slight' to 'moderate' in early December 2015. The risk of tighter credit conditions, threaten the subdued economy, especially the Small Cap sector which accounts for most of the underweight view.	-7%
UK -3 -2 -1 **0** 1 2 3	7%	Post the BREXIT referendum we have switched from our long standing exposure to domestic FTSE 250 to FTSE 100 which is likely to benefit from the fall in sterling, as the larger companies have most of their profits derived from overseas.	-
Europe ex UK -3 -2 -1 **0** 1 2 3	7%	We believe that the ECB's commitment to its asset-purchase programme will remain supportive of the region's recovery.	-
Japan -3 -2 -1 **0** 1 2 3	0%	Following the Yen's depreciation, the earnings growth of Japan has been robust but challenges remain longer term (i.e. demographics).	-
Pacific ex Japan -3 **-2** -1 0 1 2 3	5%	We remain concerned over the Asian equity universe. An economic slowdown in China and collapse in commodity prices weighs heavily. Growth risks and monetary conditions in the US cause us to reduce exposure in clients' portfolios.	-2.5%
Emerging Markets -3 -2 -1 **0** 1 2 3	5%	Whilst China weighs on the universe the use of an active fund manager gives clients' portfolios access to relatively undervalued asset class.	-
Global -3 -2 -1 **0** 1 2 3	3%	In contrast to our regional asset allocation we have a global equity theme of water. As the global population grows, water resources are stretched and companies in water industry should benefit from increased expenditure.	-

Fixed Income	SAA	Commentary	TAA
Cash -3 -2 -1 0 1 **2** 3	0%	We opt for cash in the face of unattractive opportunities in other asset classes. Long term we look to deploy cash holdings in higher return generating assets, but in times of turbulence cash offers a safe haven.	+9.5%
Government -3 **-2** -1 0 1 2 3	14%	The fall in bond yields in 2016 has benefitted portfolios. with a change in dynamic as the Bank of Japan look to support the economy via Helicopter Money and a concentration of risk in the financial markets we have re-risk the bond exposure by moving to a shorter duration fund	-7%
Investment Grade -3 -2 -1 0 1 **2** 3	9%	In the UK and Euro bond markets a new buyer of last resort (the respective Central Banks) will keep yields lower for longer. The yield pick-up and slight reduction in volatility makes it a compelling place to invest proceeds in comparison with the underlying government bond market.	+7%
High Yield -3 -2 -1 **0** 1 2 3	4%	High yield markets in the UK and Euro area are shielded to date from the US high yield bond market.	-
Emerging Market -3 -2 -1 **0** 1 2 3	3%	We believe that valuations are attractive and sufficient to outweigh the potential volatility caused by the Fed's rate rises.	-

Alternatives	SAA	Commentary	TAA
UK Real Estate -3 -2 -1 **0** 1 2 3	10%	UK real estate may struggle in the face of BREXIT. It is a sector that offers both long-term opportunities, but near term risk depending on policy and investor response. However, for longer term investors, the income generation should prove resilient.	-
Infrastructure -3 -2 -1 **0** 1 2 3	5%	Valuations remain full, with limited scope for disappointment, but cash flow generation is drawing fund flows.	-
Private Equity -3 -2 -1 **0** 1 2 3	6%	The asset class most correlated to the economy, in terms of risk. PE houses are expected to deliver positive returns until the economy slows markedly or credit costs rise to curtail private market activity.	-

Source: Artorius Wealth

Key: The numbers reflect a quantitative description of our tactical positions relative to the strategic benchmarks. Our Strategic Asset Allocation (SAA) solutions offer a blend of assets that over a medium term (5-7 years) will, in our view, provided the optimal mix of returns and risk at a given level of risk tolerance. Our Tactical Asset Allocation (TAA) tilt verses the Strategic Asset Allocation (SAA) reflect our shorter-term views. Actual client portfolios will vary according to mandate, benchmark, risk profile and the availability of individual asset classes in different regions. The SAA and TAA positions reflect a medium risk sterling on-shore based client portfolio. Views are subject to change and implementation in portfolios will reflect specific client requirements.

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