Asset Allocation yesterday

On market (in)efficiency

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Regular readers might have spotted that I often refer to the same few pieces of research. I don’t apologise for this: there are only a limited number of things that are both true and useful. As many of you will have time on your hands over Christmas, and might want an escape from the family, you might want to follow up on this reading so I thought I’d gather much of it together – because it tells an important story.

Let’s start with Ben Jacobsen’s and Cherry Zhang’s paper, The Halloween Indicator. They show that, in almost all national stock markets since they began trading, share prices have done significantly better from Halloween to May Day than from May Day to Halloween. 'Sell on May Day; buy on Halloween' has worked. Stock market seasonality is a not a cranky view. It has more abundant empirical evidence behind it than most investment strategies.

There’s an important reason for this. Share prices are driven in part by sentiment. As Mark Kamstra and colleagues have shown, prices tend to fall in the autumn because we become more anxious and depressed as the nights draw in, but they rise in the spring as lighter evenings cheer us up.

There’s plenty of other evidence that sentiment matters, much of it gathered by Malcolm Baker and Jeffrey Wurgler.

One important feature of sentiment is that it is contagious: if others are in a good mood, we cheer up, while miseryguts drag us down. Christopher Carroll has shown that economic expectations spread in the same way that diseases do – a point corroborated by Robert Shiller in his recent book, Narrative Economics.

This helps explain an important fact – first noted by Narasimhan Jegadeesh and Sheridan Titman in 1999 and since corroborated by many others – that there has often been momentum in asset prices. As optimism spreads from investor to investor, so price rises can lead to more rises.
It’s for this reason that a simple rule proposed by Meb Faber works. He has proposed selling a market when the index falls below its 10-month moving average, and buying when it rises above it. He’s shown that this has worked well for the S&P 500, but it’s also true for the All-Share index, emerging markets, tech and mining stocks. Of course, the rule isn’t infallible. It never gets us into markets at the very bottom (although nothing else does either apart from dumb luck), and it can lose us money if there are short-lived dips. But it does protect us from long bear markets. And this saving outweighs these costs.

Sentiment also matters in another way, because it affects what gets discounted. When sentiment is high, good news is more likely to be in the price than bad. For this reason high sentiment leads to falling prices. This is why shares often fall after the spring, and why the dividend yield or foreign buying of US equities predict equity returns.

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**Momentum and defensives beat the market**

![Graph showing momentum and defensives compared to FTSE 350 index from 2005 to 2015.]

Sources: Datastream, Investors Chronicle
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But why don’t investors anticipate this fact? One reason has been pointed out by Harvard University’s Matthew Rabin and colleagues. They show that we project our current mood into the future, so when we are cheerful we expect to remain so and when we are depressed we expect to stay depressed.
The smart money cannot correct this error. As Andrei Shleifer and Robert Vishny pointed out back in 1997, investors cannot short-sell overpriced shares as much as they’d like. Sometimes, this is because they cannot find enough stock to borrow. But it’s also because short-selling is risky. Even if you are right and the price falls eventually, short-term blips in the price will force you to put up more cash. You need deep pockets, therefore, to short-sell.

It’s not just short-selling that is constrained, however. Many other investors cannot borrow as much as they’d like. This fact, say economists at AQR Capital Management, systematically distorts share prices.

Textbook theory says that bullish investors should simply borrow more than others to buy shares generally. But what if they cannot borrow? Such investors will then gear up by buying high-beta stocks in the hope that these will outperform a rising market. This causes such shares to be overpriced. And if they are overpriced, others must be underpriced. These tend to be defensive stocks. It follows, say the AQR economists, that “betting against beta” works: buying defensive stocks and avoiding high-beta ones pays off over time.

This fact was first pointed out back in 1972 by Michael Jensen, Fischer Black and Myron Scholes. But it has since been corroborated many times, most recently by economists at Robeco.

All this suggests that stock markets are inefficient. They do not quickly discount all information, are driven by sentiment, and some types of stock – such as momentum and defensives – have systematically outperformed others.

But, but, but. There are massive caveats here. One has been pointed out by Campbell Harvey. Many apparent deviations from efficiency, he shows, are not replicated by subsequent research. And even when such deviations exist, they often don’t persist. John Cotter and Niall McGeever have shown that many of them disappear as investors wise up. The same is true in the US, as Jeffrey Pontiff and David McLean have shown.

Such findings are consistent with research by David Blake and colleagues. They show that active fund managers do not beat the market after fees. “The vast majority of fund managers in our dataset were not simply unlucky, they were genuinely unskilled,” they conclude. Yes, there are a few exceptions to this, but these managers “extract the whole of this superior performance for themselves via their fees, leaving nothing for investors”.

Yes, stock markets are inefficient. But actually profiting from this fact is fiendishly difficult and rare. As I said, there are few things in investing that are both true and useful.