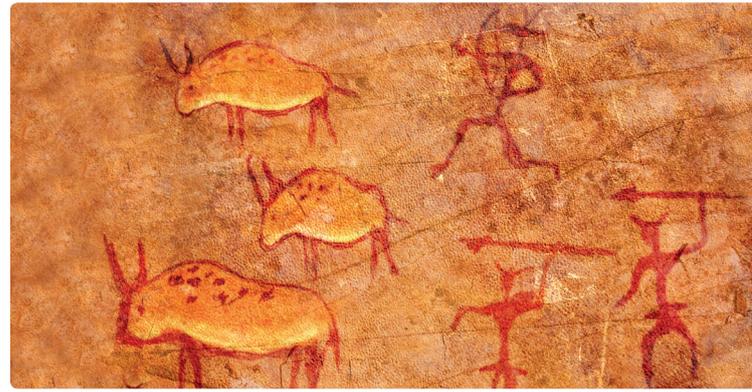


# What the Stone Age can teach investors

A brief discussion of some of the behavioural biases that can explain factor premia.



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Evolutionary psychology, which attempts to explain mental traits as the products of natural selection, highlights a Stone Age-era mentality that is hardwired into our brains and reflected in our behaviour and habits.

This involves people's tendency to communicate and organise in groups in order to adapt more easily to different environments, on the rationale that it is far less dangerous to be wrong in a group than to be right on one's own. We can imagine such an approach being taken towards a marauding mammoth thousands of

years ago; we believe that individual investors act on similar impulses to follow crowds today.

Research has shown that investment characteristics common to groups of securities, also known as 'factors', have historically delivered excess returns over market-cap weighted indices (demonstrating a 'factor premium') over the longer term. A dissection of this premium suggests the excess returns are actually the result of the reward for risk, market structures and behavioural drivers, which we outline below.

<b>Reward for risk</b>	The premium that reflects the higher-risk nature of an asset, which is explained by neither behavioural biases nor market structure reasons.
<b>Market Structure</b>	Powerful forces that shape investors' preferences or actions, such as taxes, long-only constraints, among others. These issues are not always addressed in academic research.
<b>Behavioural</b>	Investors' cognitive biases, which can lead to irrational investment decisions.

These drivers can be cyclical – reward for risk is high during volatile markets, which can make investors behave irrationally in reaction to market fluctuations. A stampede out of an asset class by individual investors, for example, can trigger stop-losses in the portfolios of larger, institutional asset managers .

Different kinds of behaviour and biases prevail at different times, which explains why certain behaviours can be attributed to more than one factor. As a result, the list of behavioural biases we discuss below is far from exhaustive.

For momentum, this bias is the belief that what went up is likely to go up again – and vice versa – as investors could place too much emphasis on recent events while ignoring long-term performance. For value, it occurs when people recall and react to recent events and observations to a greater degree than to those in the more distant past.

Recency bias tends to exacerbate equity downturns in volatile market environments, creating a value premium. Recency bias is a short-term behavioural bias that applies both on the way down and way up (recency bias fades away) for the value factor.

### MEDIA ATTENTION

A lack of interesting stories, meanwhile, can partly explain the quality factor premium. The more information on an investment theme, the more compelling it may appear. Availability bias happens when investors judge the likelihood of an event, or frequency of its occurrence, by the ease with which examples come easily to mind –

demonstrated by popular stocks in the media tending to get most attention.

By contrast, a lack of attention-grabbing headlines on companies that grow their assets more conservatively – with low investment being one of our preferred quality proxies – can make investors shun quality stocks.

A person's subjective confidence in his or her judgements is often greater than the objective accuracy of those judgements, especially when the subjective confidence is relatively high. This bias towards overconfidence could lead investors to overweight high risk/high volatility stocks in portfolios if they miscalibrate their subjective probabilities of prospective returns.

While all of these behaviours tend to occur in cycles, not all investors are alike: their behaviour can vary depending on individual investment strategies, personal experience and risk profile. Still, from the perspective of the overall market, it does certainly appear to be the case that you can take man out of the Stone Age, but you can't take the Stone Age out of man. And because behavioural biases can distort markets, by understanding how they take effect and by adapting factor-based investments appropriately, we believe investors can achieve better risk-adjusted returns versus market-cap indices over the long term.

In our next piece we will look more closely at how market structure prevents some of the well-documented elements of equity risk premia from being arbitrated away.

#### Common factors:

**Momentum** – securities that have performed well in the recent past

**Value** – securities with low prices versus their fundamental values

**Quality** – securities of companies with strong profitability, balance sheets and earnings

**Low volatility** – Securities with lower volatility over time

**Size** – Securities with small or middle market capitalisation

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