

“COMOVEMENT” (Authors: N. Barberis, A. Shleifer, J. Wurgler)

The point of this note is to explain the ideas in the above research paper without using any mathematics or technical jargon (the original paper contains a little of both). The intended reader is someone who is interested in economics and finance but who is not an academic researcher. I welcome your comments on the ideas below, whether you agree with them or not; and also on the write-up itself -- for example, please let me know if it is confusing, so that I can rework it.¹

I'll start with a short summary, and then give the longer version.

SHORT SUMMARY

We show that, after a stock is added to the S&P 500 index, its price starts moving more with the prices of other stocks already in the index. We argue that, while it is hard to explain this increased comovement based on economic fundamentals alone, it *is* consistent with “category-based” investing, i.e. with the idea that many investors allocate funds at the level of asset *categories*, such as the S&P 500 index.

LONGER SUMMARY

In 2003, Andrei Shleifer and I published a paper called “Style Investing”. In that paper, we argued that, when allocating money across stocks, investors often first group them into *categories* – small-cap stocks, large-cap stocks, value stocks, growth stocks, and so on – and then invest their funds across these various categories. (Categories are also known as “styles” – hence the title of the paper).

Perhaps the most interesting implication of such style investing is a new theory of why stocks move together. The traditional explanation for why a group of stocks move in tandem is that they have correlated *earnings news* (e.g. automobile stocks move together because their earnings are correlated). Our model leads to an alternative theory: a group of stocks may move in tandem because the stocks in the group are a salient *category* for many investors, and as these investors move money in and out of the category, the demand pressure makes the stocks in the category move together *over and above* what would be expected based on earnings correlation alone.

In the current paper, Shleifer, Jeffrey Wurgler, and I test a natural prediction of this framework, namely that immediately after a stock is added to the S&P 500 index, it should start moving more with other stocks in the index. The idea is that the S&P 500 index is a salient category for many investors. So as soon as a stock is added to the S&P 500, it is buffeted by investors’ flows in and out of the index. This demand pressure makes the stock move more in tandem with other stocks in the index.

¹ This is a preliminary draft. Please do not quote or cite.

We find that the data support our prediction: immediately after their inclusion, stocks added to the S&P 500 *do* start moving more with other stocks in the index. Note that it is not easy to explain this finding using the traditional view of comovement – Standard and Poors do not add stocks to the S&P 500 index because they think that their earnings are about to start moving more with those of other stocks already in the index. Nor is there any obvious reason why inclusion in the index would *cause* a firm’s earnings to suddenly start moving more with those of other stocks in the index.

Postscript

As of the time of writing (July 2010), a number of articles in the financial press have noted that the returns of stocks in the S&P 500 are becoming increasingly highly correlated. I suspect that this phenomenon is closely related to the empirical finding in “Comovement,” and that it may *also* be the result of style investing. The past few years have seen the introduction of several exchange traded funds (ETFs) that track the S&P 500. These ETFs make it very easy for investors to treat the S&P 500 as a style, and to move money in and out of the index whenever they please. The demand pressure from these constant inflows and outflows may be the source of the rising correlation of S&P 500 stocks.