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Industry information and the 52-week high effect ☆

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ABSTRACT

We find that the 52-week high effect (George and Hwang, 2004) cannot be explained by standard risk factors. Instead, it is more consistent with investor underreaction caused by anchoring bias: the presumably more sophisticated institutional investors suffer less from this bias and buy (sell) stocks close to (far from) their 52-week highs. Further, the effect is mainly driven by investor underreaction to industry instead of firm-specific information. The extent of underreaction is more for positive than for negative industry information. The 52-week high strategy works best among stocks with high factor model R-squares and high industry betas (i.e., stocks whose values are more affected by industry factors and less affected by firm-specific information). An industry 52-week high strategy to buy (sell) industries whose total capitalizations are close to (far from) their 52-week highs outperforms an idiosyncratic 52-week high strategy to buy stocks with prices close to their 52-week highs and short stocks in the same industry with prices far from their 52-week highs.

1. Introduction

The "52-week high effect" was first documented by George and Hwang (2004), who find that stocks with prices close to their 52-week highs have better subsequent returns than stocks with prices far from their 52-

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week highs. George and Hwang (2004) argue that investors use the 52-week high as an "anchor" against which they value stocks. When stock prices are near the 52-week highs, investors are unwilling to bid the price all the way to the fundamental value. As a result, investors underreact when stock prices approach their 52-week highs, and this creates the 52-week high effect. Li and Yu (2012) find that there is also a 52-week high effect on the market index: the nearness to the Dow 52-week high positively predicts future aggregate market returns.

In this paper, we show that the 52-week high effect is mainly driven by investor underreaction to industry instead of firm-specific information. Specifically, we design an idiosyncratic 52-week high strategy and an industry 52-week high strategy based on the original 52-week high trading strategy proposed by George and Hwang (2004), which we call the individual 52-week high strategy. The idiosyncratic 52-week high trading strategy involves buying stocks whose prices are close to their 52-week highs and shorting the same dollar amount of stocks in the same industry whose prices are far away from their 52-week highs. This strategy is thus industry-neutral, and the profit associated with it is mainly driven by firm-specific information. In contrast, the industry 52-week high strategy involves buying industries whose total market capitalizations are close to their 52-week highs and shorting industries whose total market capitalizations are far from their 52-week highs. Because we buy and short whole industries in this strategy, the profit associated with it is mainly driven by industry information. We find that the industry 52-week high strategy is more profitable than the idiosyncratic 52-week high strategy, suggesting that the 52-week high effect may be mainly driven by investor underreaction to industry instead of firm-specific information. We also find that the industry 52-week high strategy is slightly more profitable than the individual 52-week high trading strategy proposed by George and Hwang (2004). Using all stocks listed on NYSE, AMEX, and NASDAQ from 1963 to 2009, the industry 52-week high strategy generates a monthly return of 0.46%, higher than the 0.32% from the idiosyncratic 52-week high strategy, and is also slightly higher than the 0.43% from the individual 52-week high strategy in the same period.

While anchoring bias could be the reason behind the 52-week high effect, an alternative explanation is that stocks with prices close to 52-week highs are riskier than other stocks. In fact, the recent literature has made some progress on the rational explanation for profits from the momentum strategy by linking it to macroeconomic variables (e.g., Liu and Zhang, 2008; Li, 2012; Li and Zhang, 2013; Liu and Zhang, 2013). If firms are ex ante identical but ex post different with firm-specific shocks, and they have time-varying betas to some risk factors, we can potentially observe a 52-week high effect.[1]

If the 52-week high effect is indeed caused by anchoring bias, then we would expect more sophisticated investors to suffer less from this bias and buy (sell) stocks whose prices are close to (far from) the 52-week highs. In contrast, less sophisticated investors should suffer more from this bias and trade in the opposite direction. On the other hand, if the 52-week high effect is driven by risk factors, then the trading strategy is no longer profitable after we properly control for different risks. Further, sophisticated investors should not buy (sell) stocks whose prices are close to (far from) the 52-week highs because the higher return is simply the compensation for higher risks associated with the trading strategy, and there is no risk-adjusted abnormal return.

Many previous studies find that institutional investors are more sophisticated than individual investors (Gompers and Metrick, 2001; Cohen et al., 2002; Sias et al., 2006; Amihud and Li, 2006). Therefore, we use institutional investors to proxy for sophisticated investors. We find that institutional investors buy (sell) stocks whose prices are close to (far from) the 52-week highs. We control for standard risk factors and find that the 52-week high effect still exists. Thus, the evidence seems to be consistent with the underreaction explanation rather than the risk-based explanation.[2]

We then go one step further in trying to understand what type of information investors underreact to. Is it true that investors underreact mainly to industry instead of firm-specific information? Do investors underreact to positive or negative information? How can one design a better investment strategy based

[1] For example, Li (2012) proposes a rational risk-based model in which firms have time-varying exposures to the price of investment goods and neutral productivity shocks. The model can simultaneously explain momentum profits and the value premium.

[2] However, it is possible that the 52-week high effect is driven by risk factors that we have not controlled for. We thank an anonymous referee for pointing this out.