Exploration of Investor Decisions Using Yahoo Finance Data – Summary

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Better understanding the decisions of individual investors is a key target for financial research on at least two grounds. First, individual investors may be the marginal investors and hence set asset prices. Second, even when they do not set asset prices, their decisions and patterns of holdings are important because of the welfare effects. Yet, we have limited information about investor decisions.

The data sets with information on individual investors are generally of two types. The first type, a comprehensive record of trading decisions for some brokerage house, is very hard to obtain. The second type consists of proxies about the investor decision-making. An example is the pattern of searches in Google Insights, where the frequency of searches for a company ticker is used as a proxy of investor attention towards a stock. Yet, the existing data sets of this type are sparse enough that they do not allow to construct patterns of searches for small stocks.

In this grant, I propose to investigate patterns of investor decision-making using a novel data set of the second type, stock look-ups in Yahoo Finance. I argue that the Yahoo Finance data is better than the existing data sets on several grounds: (i) its extensive coverage of stocks; (ii) the ability to infer patterns of look-ups for combinations of stocks; (iii) the ability to infer patterns of look-up for different types of users (for example, shallow versus in-detail look-ups); (iv) the ability to plausibly distinguish individual investors from automated look-ups from institutions. Therefore, this data set offers a valuable window into the decision-making of individual investors. Having negotiated exclusive access for one year to the Yahoo Finance data in collaboration with Justin Rao, who is a research scientist at Yahoo Research, I propose to pursue three main projects.

In the first project, I propose to construct daily stock-by-stock measures of look-ups as a measure of attention to individual stocks. The idea is that investor focus on a stock is likely to be higher on days in which the number of look-ups for that stock is higher than predicted. I test if, as predicted by theories of limited attention, on these days there is more immediate response to earnings news and less delayed response, that is, less drift. Further, I propose to separate look-ups into in-depth versus superficial, and predict that the in-depth look-ups will be more predictive of immediate response to earnings news.

In the second project, I propose to use the pattern of co-look-ups of stocks to identify pairs of stocks which investors associate in the same style. That is, if most investors who look up stock A also look up stock B, I am going to assume a link between the stocks in either their fundamentals or the perceived style. I then predict that this association will lead to cross-stock return predictability in the presence of limited attention. The investigation of patterns of co-look-up of stocks is important because we know very little about how investors categorize companies into groups of stocks.

In the third project, I propose to document the pattern of investor attention during the financial crisis using the stock look-ups. For example, on Sep. 15, 2008, the day of the Lehman Brothers bankruptcy, which financial and which non-financial companies were investors searching? Documenting these patterns will give an indication of the expectation of individual investors on how the financial crisis was likely to spread to other financial institutions and to non-financial firms. This information can be used to better understand the role individual investors played in the spread of the financial crisis.