April 12, 2014

Summary of "Economic Links and Predictable Returns"[1]

News travels slowly across assets as investors with limited attention overlook the impact of specific information on economically related firms. In this paper, the authors focus on the customer-supplier links between firms, and find the stock prices of supplier firms have a predictable lag in reacting to the new information about their customers.

News about firms' customers is proxied by the monthly return to the "customer portfolio" (called "customer return"). A firm's principal customers can be well identified, because firms are required to disclose the identity of any customer representing more than 10% of the total reported sales. Then, an equally weighted portfolio of the corresponding customers, the customer portfolio, is constructed using the last available supplier-customer link.[2] Stocks are sorted in to portfolios on the one-month lagged customer returns. From 1981 to 2004, the proposed strategy, called "customer momentum portfolio", that longs the top quintile portfolio and shorts the bottom quintile portfolio generates statistically significant, monthly average value-weighted return of 1.58%, with a monthly five-factor alpha equal to 1.24% (approximately 16% per year).[3] The results are robust to concerns of nonsynchronous trading, illiquidity, industry momentum, cross-industry momentum, and intra-industry lead-lag effect.[4]

Since firms' customer returns are uncorrelated with their market capitalization, book-to-market ratio, and their own stock returns over the previous year, understandably none of the five-factor loadings are significant for the long–short customer momentum portfolio. Although both legs of the long-short strategy contribute to the average return, its alpha is largely driven by the short leg. This pattern is consistent with market frictions (such as short-sale constraints) exacerbating the delayed response of stock prices to new information when bad and firm-specific news arrives.

If limited investor attention is driving the return predictability, varying inattention should vary the magnitude of the results. For every customer-supplier link, the authors use data on mutual fund holdings to compute "common ownership" as the number of funds holding both the customer and the supplier divided by the number of funds holding the supplier. Stocks are sorted into high- and low-common-ownership groups, and then the customer momentum strategy is performed separately for each group. They show that fund managers holding customers and suppliers together adjust their positions in the suppliers more promptly in response to the news of customers. Thus, inattention is expected to be more severe among stocks in the low-common-ownership group. Indeed, the customer momentum strategy on low-common-ownership group outperformed the one on high-common-ownership group by 1.58% per month.

Finally, the investor inattention hypothesis is based on the assumption that investors *should* pay attention to customer-supplier links. To support this assumption, the authors show that the lagged customer returns significantly predict future economic performance of the suppliers, such as operating income and sales.

[1] Cohen, Lauren, and Andrea Frazzini, 2013, *Journal of Finance* 63, 1977–2011.

[2] The customer-supplier relationship is updated annually, with a six-month lag imposed to ensure the information being publicly available.

[3] For details of the factors, please refer to: Fama, Eugene F., and Kenneth R. French, 1993, Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* 33, 3-56; Carhart, Mark M., 1997, On persistence in mutual fund performance, *Journal of Finance* 52, 57-82.; Pástor, Luboš, and Robert F. Stambaugh, 2003, Liquidity risk and expected stock returns, *Journal of Political Economy* 111, 642-685.

[4] For more details, please refer to the section 5 of the paper.