Article:
Squandering home field advantage? Financial institutions’ investing in their own industries
Squandering home field advantage? Financial institutions’ investing in their own industries

Aneel Keswani
Reader in Finance and Director of the Centre for Asset Management Research, Cass Business School, City University

David Stolin
Professor of Finance, Toulouse Business School, University of Toulouse

Abstract
In the extensive debate about investment professionals’ ability to add value, there has been scant evidence on the role played by industry expertise. To shed light on this issue, we study own-industry investing. Specifically, we analyze how well individual mutual funds as well as mutual fund companies, banks and insurance companies invest in the shares of listed companies in the mutual fund, banking and insurance industries, respectively. We find little evidence that such inherent industry knowledge enhances these institutions’ ability either to time the investment in their industry as a whole or to select individual stocks within it.

1. We thank Harjoat Bhamra, Chris Brooks, Giovanni Cespa, Giacinta Cestone, Pasquale Della Corte, Stefan Jacewitz, Robert Kosowski, Art Kraft, Ian Marsh, Kjell Nyborg, Marco Pagano, Grzegorz Pawlina, Richard Payne, Ken Peasnell, Alan Pendleton, Tarun Ramadorai, Christel Rendu de Lint, Diego Ronchetti, Stefano Rossi, Sergey Sanzhar, Lucio Sarno, Henri Servaes, Clemens Sialm, Raman Uppal, Steven Young, participants at the Leading Lights in Fund Management Research II Conference, Midwest and Southwestern Finance Association annual meetings in New Orleans, and seminar participants at the Universities of Lancaster, Munich, Reading, Imperial College and at Cass Business School. All errors are ours.
1. Introduction

Do investment professionals add value? This question has been the subject of intense debate since the seminal paper of Jensen (1968), who found no evidence that mutual funds beat passive benchmarks. More recently, Barras et al. (2010), Busse et al. (2010) and Fama and French (2010) all report that, on average, active mutual funds do not justify their fees, while Lewellen (2011) finds little evidence of stock-picking skill for the entire institutional investor universe, including banks and insurance companies.

In spite of the above, academics have been able to identify a variety of circumstances that are correlated with better stock selection decisions by managers [see Cuthbertson et al. (2010) for a survey]. Notably, these include having an informational advantage over other investors as expressed by geographic proximity to one’s investments [Coval and Moskowitz (2001), Baik et al. (2010)], having greater industry focus [Kacperczyk et al. (2005)] and being part of the same social networks [Cohen et al. (2008)]. These papers, therefore, suggest that managerial ability is present by demonstrating that better information leads to higher investment returns. However, these are vague on how this occurs and the exact nature of the information concerned.

In this paper, we examine fund managers’ ability to generate abnormal returns by leveraging a concrete informational advantage they have, namely industry expertise. A recent book by two leading mutual fund industry practitioners defines obtaining “insights from industry sources” as one category of fundamental research used by financial analysts and emphasizes the value added in being an industry insider: “To get information that is not available to the public at large, analysts must turn to other sources within the industry. They’ll read the trade publications, and they’ll consult with industry experts. In fact, some analysts have once worked in the industry they now cover, so that they have an insider’s view of its trends and prospects.” [Pozen and Hamacher (2011, p. 108)]
Several academic papers document intra-industry transfer of value-relevant information,² while industry specialization by financial analysts suggests that industry insight is perceived to be of crucial importance by the investing world. We expect industry insiders to be better informed because they are more adept at processing public information about their industry (e.g., by reading specialized publications), and because they have greater access to information about the industry that may not be readily available to industry outsiders, whether it is inferred from their own firms’ operations or absorbed through formal and informal professional networks.³ Projected sales growth, cost structures and trends in product development, as well as “soft” information, for example, about different firms’ human capital are all value-relevant and more readily available to industry insiders. One may, therefore, expect investors with firsthand experience in the same industry as their investments to reap the rewards from being well informed about their own industry’s future profitability and the specific firms that are likely to outperform going forward. Indeed, investment managers’ faith in the value of industry expertise is demonstrated by the popularity of so-called expert networks, which are meant to provide superior interpretation of non-privileged information while circumventing legal pitfalls.⁴ This faith is particularly striking given that agency problems inherent in dealing with outside experts, as well as the treacherous legal terrain on which such dealings take place (as highlighted recently by the Galleon insider trading scandal) add considerably to the costs of relying on external expertise of this sort. Seen from this perspective, investing in one’s own industry brings the advantages of an expert network without any of the costs.

² See Koo et al. (2010) for recent evidence and references to earlier work.
³ We use 2012 dollars as the baseline. We pull the “All urban consumers, all items, not seasonally adjusted” series from Federal Reserve Economic Data.
⁴ According to BusinessWeek, “Gerson, Vista, and Nitron [three prominent expert network firms] say they would never set up an investor interested in a company with someone who worked at that company – the discussions are supposed to focus only on industry trends or technical questions. [...] Vista Managing Director Stanton Green points out that stock analysts have always called on industry experts, usually without any signed agreements, adding that he believes ‘it is much safer to be having these conversations within our service than not.’” Amey Stone, A., and A. Borrus, 2005, “Have experts, will hire out,” BusinessWeek, August 1, available at: http://www.bloomberg.com/bw/stories/2005-07-31/have-experts-will-hire-out
Berk and Green (2004) present a theoretical model where managerial skill does not manifest itself in the form of positive abnormal returns due to a combination of decreasing returns to scale in investment management and inflows to the best performing portfolios. Their work suggests that to reveal managerial skill one needs to move away from fund-level performance tests. Alexander et al. (2007) do this and use trade-based data instead to test for skill. They find evidence of managerial skill but only when trades are information-motivated rather than being just a passive response to fund flows. Their paper highlights the importance of controlling for contemporaneous fund-level flows when measuring trade performance.

Together, these insights set up a new experiment to shed light on investment professionals’ skill. Mutual fund companies, banks and insurance companies all manage pools of assets and have to make security selection decisions. We examine whether they do so better in their own industry (respectively, mutual fund management and distribution, banking and insurance). If investment professionals are unable to leverage their informational advantage over other investors by performing better in the industry they know most intimately, this would give novel and powerful ammunition to those who are skeptical about traditional money managers’ stock-picking skills. If, conversely, industry-insider investments do outperform outsider ones, this would raise interesting questions as to what specific features of industry information allow them to do so.

Our analysis below is conducted using the following steps. We first focus on the mutual fund industry. We do so because most of the analysis of institutional investors’ skill to date has been done in the mutual fund context. We begin by constructing a sample of trades that are likely to be information-based. To filter out trades that are made in response to investor flows, we focus on trades where the percentage change in the number of shares held is 20% greater in absolute terms than the contemporaneous percentage fund-level money flow. We also impose a minimum size of trade of U.S.$200,000 to focus on trades that are material in absolute terms. Thus, our sample consists of trades that are substantial both in relative and absolute terms.
Using these information-based trades, we then examine whether mutual fund managers anticipate their industry's market performance better than they are able to anticipate the market performance of other industries. While we find some evidence of industry timing ability as a whole, we do not find that fund managers are able to time their own industry significantly better. Furthermore, when we perform our timing tests industry by industry, we find that fund managers are able to predict the performance of the majority of control industries better than their own.

Second, we examine whether mutual fund managers can pick individual stocks in their own industry better than in other industries. To do this, we measure each period where a fund manager increases or decreases their position in a given stock and then test whether this correlates more strongly with subsequent stock-level performance for own-industry stocks or not. As variations in the information environment across industries might explain trade performance differences, we include variables to control for these differences in our regressions. In addition, as nearby and smaller companies are arguably easier to value, we control for these aspects as well. Still, our stock selection tests by mutual fund managers reveal no evidence of superior stock selection ability in their own industry.

We then conduct similar tests at the mutual fund company level, as well as for banks and insurance companies. Overall, we find little evidence of superior industry timing or stock selection ability when financial institutions invest in their own backyard. Seen against the backdrop of existing trade-based studies that have shown evidence of managerial ability, a lack of evidence of skill in own-industry trading is a surprising and thought-provoking result.

The rest of the paper is organized as follows: section 2 describes our data and sample formation, section 3 presents and discusses the results, and section 4 concludes.
2. Data
Our data on mutual fund and financial institution stockholdings originate from U.S. Securities and Exchange Commission (SEC) filings. U.S. institutional investment managers who exercise investment discretion over U.S.$100 million or more must report their holdings on Form 13F with the SEC each quarter. We obtain our data from Thomson-Reuters S12 and S34 datasets. The S12 data contain 13F holdings for individual mutual funds, while S34 data contain 13F holdings for institutions, including banks, insurers and mutual fund companies (in the latter case, aggregated across all individual funds). Since there are no data on mutual fund holdings on Thomson-Reuters prior to 1980, this is the year our sample period starts, and it runs through December 2009.

We begin by identifying U.S. exchange-listed ordinary shares issued by banks, insurers and mutual fund companies (henceforth MFCs, to distinguish fund complexes from individual mutual funds). Determining whether the target security is a bank or an insurer is easy as banks have a North American Industry Classification System (NAICS) code beginning with 5221 and insurers have a NAICS code beginning with 5241. In the average quarter during our sample period, there existed 346 different listed banks and 106 different listed insurers.

Defining whether a company is in the mutual fund business is more difficult, as MFCs do not map cleanly into NAICS codes. We begin our MFC sample construction by examining company earnings on Compustat by business segment, and retaining only companies where asset management (excluding hedge funds) averages over 70% of net sales for the two preceding years.

5 Specifically, some come from code 5231 (“securities and commodity contracts intermediation and brokerage”), some from code 5239 (“other financial investment activities”) and some from code 5259 (“other investment pools & funds”). Further, these codes also contain companies that are not primarily involved in mutual fund management and distribution.

6 Details as well as the resulting sample of 38 companies representing 378 company years are available from authors.
A number of large financial conglomerates that undertake a wide range of financial services also sell mutual funds. By focusing on companies whose main line of business is mutual funds, we exclude these firms from our MFC sample. This is consistent with the purpose of our study: unless firms have the majority of their business stemming from mutual funds, we would not expect mutual fund managers to have an industry-insider advantage in valuing such companies.

Our paper is concerned with investments by mutual funds, banks and insurers in their own industry. Panel A, in Table 1, presents statistics compiled from the S34 database on the extent to which these financial institutions’ shares are held by their own industry. These statistics largely reflect the prominence of the investing industry. On average, during our study period, banks held 16.36% of listed banks' shares, as contrasted with the 15.47% they held in listed insurers and only 10.04% in MFCs. Likewise, insurance companies held a greater percentage of shares in their own industry (5.62%) than they did either in banks (4.24%) or in MFCs (4.02%). MFCs, however, held only 3.47% of shares in their own industry, more than their holdings of banks (2.22%) but less than their holdings of insurers (4.55%), controverting the notion that institutional investors are biased toward their own industry.

Table 1: Investment by banks, insurers and MFCs in their sectors

<table>
<thead>
<tr>
<th>Panel A: Percent of listed financial firms' equity held by 13F institutions</th>
<th>Listed banks</th>
<th>Listed insurance companies</th>
<th>Listed MFCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent held by banks</td>
<td>16.36%</td>
<td>15.47%</td>
<td>10.04%</td>
</tr>
<tr>
<td>Percent held by insurance companies</td>
<td>4.24%</td>
<td>5.62%</td>
<td>4.02%</td>
</tr>
<tr>
<td>Percent held by MFCs</td>
<td>2.22%</td>
<td>4.55%</td>
<td>3.47%</td>
</tr>
<tr>
<td>Average number of listed firms</td>
<td>346</td>
<td>106</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Listed financial firms as percent of 13F institutions' equity portfolios</th>
<th>Listed banks</th>
<th>Listed insurance companies</th>
<th>Listed MFCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of banks' portfolios represented by</td>
<td>4.01%</td>
<td>2.28%</td>
<td>0.14%</td>
</tr>
<tr>
<td>Percent of insurance company portfolios represented by</td>
<td>3.85%</td>
<td>3.07%</td>
<td>0.19%</td>
</tr>
<tr>
<td>Percent of MFC portfolios represented by</td>
<td>2.69%</td>
<td>3.30%</td>
<td>0.21%</td>
</tr>
<tr>
<td>Percent of U.S. stocks' market value represented by</td>
<td>5.66%</td>
<td>3.61%</td>
<td>0.19%</td>
</tr>
</tbody>
</table>
Panel B shows what proportion of the institutions’ equity portfolios are invested in the three industries. These statistics largely reflect the weight of these industries in the U.S. stock market. While the banking industry accounts for a greater share (4.01%) of banks’ equity portfolios than does either the insurance industry (3.85%) or the mutual fund industry (2.69%), insurers do not display an analogous “home bias”: insurance companies represent only 3.07% of insurers’ equity portfolios, less than they do of banks’ (3.30%).

Lastly, as the market capitalization of the mutual fund industry is much smaller, it represents only a fraction of a percentage point of institutional investors’ portfolios. This fraction is greater, however, for portfolios of MFCs (0.21%) than those of banks or insurers.

Panel B also contains U.S. market cap weights for listed banks, insurers and MFCs. By comparing these market cap weights with the actual portfolio fractions held in banks, insurers and MFCs it is possible to understand whether these institutions overweight or underweight their own industry. Only MFCs appear to be (slightly) overweight their own industry.

In order to evaluate institutions’ ability to exploit their industry knowledge, we will compare the performance of their buys and sells in their own industry with the performance of their buys and sells in other industries. Accordingly, Table 2 presents data on trades by mutual funds of MFC shares, as derived from the S12 dataset.

**Table 2: Mutual fund buys and sells of MFC shares**

<table>
<thead>
<tr>
<th>Trade type</th>
<th>Number of trades</th>
<th>Trade size (in U.S.$000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Sells</td>
<td>2,439</td>
<td>3,043</td>
</tr>
<tr>
<td>Buys</td>
<td>2,580</td>
<td>2,600</td>
</tr>
<tr>
<td><strong>Using a 10% cutoff</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sells</td>
<td>1,835</td>
<td>3,924</td>
</tr>
<tr>
<td>Buys</td>
<td>2,061</td>
<td>3,356</td>
</tr>
</tbody>
</table>

**Using a 20% cutoff**
Squandering home field advantage?
Financial institutions’ investing in their own industries

To ensure that the trades in our sample are not due to the need to (dis)invest money due to investor (out)flows [Alexander et al. (2007)], we adjust each position change for the contemporaneous money flow to the equity portfolio to which the position belongs. That is, our quarterly flow-adjusted position change for stock $i$, portfolio $j$ and quarter $t$ is calculated as

$$\text{Change}_{i,j,t} = \frac{\text{Shares}_{i,j,t} - \text{Shares}_{i,j,t-1}}{\text{Value}_{j,t}} - \frac{\text{Value}_{j,t} - \text{Value}_{j,t-1}(1 + r_{t})}{\text{Value}_{j,t-1}}$$

where $\text{Shares}_{i,j,t}$ is the number of shares (adjusted for splits) held in the portfolio, $\text{Value}_{j,t}$ is the market value of the portfolio and $r_{j,t}$ is the portfolio’s investment return during the quarter.

We impose several constraints to ensure we capture only meaningful and substantive position changes. First, we only consider portfolios-quarters for which the change in portfolio size is not explained by investment returns,

$$\frac{\text{Value}_{j,t} - \text{Value}_{j,t-1}(1 + r_{t})}{\text{Value}_{j,t-1}}$$

does not exceed 20% in absolute value. This filters out cases where a change in the portfolio size from one quarter to the next is so large as to be likely the result of data errors or unusual events such as mergers or extreme money flows. Further, in order to ensure that we capture only substantive changes in shareholdings, we only retain those trades for which $\text{Change}_{i,j,t}$ is greater than 20% in absolute value.

In other words, for a portfolio that did not experience any money flows in a given quarter, we focus on changes in stockholdings that are below -20% or above 20% of the original position. If a portfolio experienced an inflow of 10% during a quarter, we focus on changes in stockholdings that are below -10% or above 30%. Our method ensures that, say, a 15% increase in the holding of a stock would not be considered as an informative trade if it is merely the result of allocating a 15% money inflow to existing positions.
At the same time, by choosing the same 20% cutoff value for both portfolio inflow and for the change in stockholdings, we avoid the possibility of considering unchanged positions as trades even if the portfolio experienced a substantial money flow. Lastly, we require the position change to reflect an (unadjusted) trade size of at least U.S.$200,000 to focus on trades that are significant in absolute terms, as well. While the 20% / U.S.$200,000 cutoff is arbitrary, we also rerun our results with a 10% / U.S.$100,000 cutoff, and our conclusions remain qualitatively unchanged.

Table 2 presents these trades for two levels of cutoff size. In the first case, the cutoff is set at 10% and both the upper bound on absolute flow and the lower bound on change are set at this level (with a minimum trade size of at least U.S.$100,000). In the second case, this cutoff is set at 20% (and the minimum trade size in this case is at least U.S.$200,000). With a 10% cutoff, there are around 2,500 eligible buys and sells each and the average (median) trade size is around U.S.$3 million (U.S.$0.75 million). With a 20% cutoff, the number of eligible trades is lowered by about a fifth while the average (median) trade size is around a third (a half) higher, at over U.S.$3 million (U.S.$1 million). In either case, the trades we focus on are large both in relative and absolute terms, and are, therefore, presumably the result of careful decision-making.

Analogous to Table 2, Table 3 shows bank, insurer and MFC trades of shares of companies in their own respective industries, as derived from the S34 dataset. Focusing on trades selected with the 20% cutoff (which is the basis for results reported in the remainder of the paper), the number of MFC trades (803 buys and 719 sells) is a fraction of the number of individual fund trades reported in the previous table. This reflects both aggregation of individual fund trades at the fund company level and the fact that the earlier table included all mutual funds, not just those run by listed companies with little or no activity outside the mutual fund business. This is also reflected in the much larger average (median) trade size – U.S.$16.6 (U.S.$4.3) million for buys and U.S.$16.7 (U.S.$4.1) million for sells.
Squandering home field advantage?
Financial institutions’ investing in their own industries

Table 3: Bank, insurer and MFC trades of shares in the same sector

<table>
<thead>
<tr>
<th>Trade type</th>
<th>Banks trading bank company shares</th>
<th>Insurance companies trading insurance company shares</th>
<th>MFCs trading MFC shares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of trades</td>
<td>Trade size (U.S.$000s)</td>
<td>Number of trades</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Mean</td>
</tr>
<tr>
<td>Using a 10% cutoff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sells</td>
<td>44,207</td>
<td>6,019</td>
<td>735</td>
</tr>
<tr>
<td>Buys</td>
<td>55,670</td>
<td>6,445</td>
<td>735</td>
</tr>
<tr>
<td>Using a 20% cutoff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sells</td>
<td>28,411</td>
<td>8,263</td>
<td>1,233</td>
</tr>
<tr>
<td>Buys</td>
<td>37,294</td>
<td>8,517</td>
<td>1,183</td>
</tr>
</tbody>
</table>

The number of trades by insurers (banks) in their own industry is more than 10 (40) times greater than the corresponding number of MFC trades: this reflects their greater number both as investors and as investments. The average trade size, however, is substantially smaller when looking at own-industry trading by banks and insurers as compared to that of MFCs, likely reflecting the fact that the average bank or insurer in our sample is smaller than the average MFC, both as investor and as investment.
Squandering home field advantage?
Financial institutions’ investing in their own industries

Even in the absence of transaction costs, not all tradeworthy information would lead to changes in quarterly stockholdings that we use to identify trades. Some round-trip trades may take place within a single quarter. Actual trading may not materialize due to regulatory constraints on short selling, or on the maximum amount of stock that can be held. However, this caveat applies to all research using 13F holdings data, and we have no reason to believe that our study is particularly sensitive to this issue.

3. Results
We begin by analyzing the trades of mutual fund managers using the S12 dataset and then examining the performance of financial institutions’ trades using the S34 data. We consider in each case whether industry timing and stock selection ability are stronger when trades are in own-industry securities.

We measure security level quarterly abnormal returns using a two-step approach. We first calculate the Daniel et al. (1997) characteristic-adjusted returns for each stock, where stocks are matched to 1 of 125 benchmark portfolios on the basis of their market capitalization, book-to-market ratio and their returns over the previous year. Then we four-factor adjust these characteristic-adjusted returns using the Carhart (1997) model. Using both characteristic adjustment and then four-factor adjustment is the approach taken by Cohen et al. (2010), and we follow it to ensure that we control as fully as possible for market, size, value and momentum factors.

7 The Investment Company Act of 1940 Rule 12d-3 specifies certain investment constraints for diversified and non-diversified mutual funds. U.S. mutual funds are prohibited from owning more than 5% of other investment companies, defined as firms that derive more than 15% of revenue from securities-related activity. In addition, there are restrictions on the asset concentration of diversified funds as they may hold no more than 5% of their assets in any one particular company. Limits for banks are set by The Bank Holding Companies Act of 1956, which states that a bank cannot acquire more than 5% of the outstanding voting shares of any company or bank. As U.S. insurer asset-holding regulation is at the state level, rules vary according to locality. Babbel and Fabozzi (1999) present cross-state asset allocation guidelines, which state that generally “an insurer may not purchase common stock which would result in more than 5% of the value of the common stock portfolio being invested in the securities of one issuer.” In practice, hardly any of the holdings we observe are close to the limits discussed above.
Further, in order to control for industry effects, our stock-level analyses examine deviations of the Daniel- and Carhart-adjusted measure from the corresponding industry members' equal-weighted or market value-weighted average.  

In order to compare the performance of MFC trades in their own industry with the performance of their trades in other industries, we form a control sample of industries using NAICS industry definitions. We wish to select industries of comparable size to the mutual fund industry, so that fund managers have a comparable incentive to acquire industry-specific information, and so that industry-level performance measures for the control industries have similar statistical properties. Since we have close to 400 firm-year observations for the mutual fund industry, we select as our controls 6-digit NAICS industries that have between 200 and 600 firm-year observations on Compustat between 1979 and 2009. This results in 167 NAICS codes, from which we exclude those not on the official 2007 list of NAICS codes, and those which include any of the stocks in our MFC sample. If a company had a NAICS code on the eligible list for the preceding fiscal year, we include it in the control sample. (We use the preceding year as opposed to the concurrent year in order to avoid the survivorship bias of including only company years where the company existed as a listed entity until fiscal year-end.)

We start our performance analysis by comparing mutual fund managers' ability to time their aggregate own-industry investments to their ability to time other industries. To this end, for each industry in each quarter we calculate the proportion of all substantive mutual fund trades (i.e., those that clear the 20% hurdle defined in the preceding section) that are represented by buys. This gives us a measure of mutual funds' bullishness about the industry's prospects. We then regress the value-weighted or equally weighted characteristic and four-factor-adjusted monthly abnormal performance of stocks in each industry over a quarter on the proportion of buys in that industry in the prior quarter (PROP_BUY) as well as a dummy variable (BUY_OWN), which is the product of PROP_BUY and a dummy variable equal to 1 if the industry is the mutual fund industry, and 0 otherwise.

---

8 While the value-weighted average is the more meaningful economically, representing the industry’s aggregate market performance, this can be overly influenced by a single firm. Consequently, as an alternative, we also use equally weighted averages.


10 The list of the resulting 148 control industries is available from the authors.
Squandering home field advantage?
Financial institutions’ investing in their own industries

Our results are presented in Table 4 Panel A (where t-statistics are adjusted for time clustering). The positive loading on the proportion of buys suggests that fund managers buy more heavily in industries that do well in the subsequent quarter, however, the t-statistics of 0.74 (in the case of equally weighted industry portfolios) and 1.79 (for value-weighted portfolios) do not reach statistical significance. Most importantly for our purposes, the insignificant coefficient on BUY_OWN (t-statistics of 1.42 and 0.61) mean that that there is no significant evidence that fund managers time their own industry better than they do other industries.

Table 4: Mutual fund trades and subsequent industry-level performance

<table>
<thead>
<tr>
<th>Panel A: Pooled regression across industries</th>
<th>Risk-adjusted industry portfolio performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equally weighted</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.00043</td>
</tr>
<tr>
<td>PROP_BUY</td>
<td>0.00447</td>
</tr>
<tr>
<td>BUY_OWN</td>
<td>0.00972</td>
</tr>
<tr>
<td>Number of observations</td>
<td>4,120</td>
</tr>
<tr>
<td>Clustering by time</td>
<td>yes</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.00037</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Summary of regressions by industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of PROP_BUY coefficient</td>
</tr>
<tr>
<td>Mutual fund industry</td>
</tr>
<tr>
<td>Mean for control industries</td>
</tr>
<tr>
<td>Median for control industries</td>
</tr>
<tr>
<td>Proportion of control industries with higher value of PROP_BUY coefficient than the mutual fund industry</td>
</tr>
<tr>
<td>Number of control industries with enough observations to estimate the regression</td>
</tr>
</tbody>
</table>

Panel B of Table 4 presents results for the same type of timing analysis performed at the individual industry level. Specifically, for each industry, we regress the value-weighted or equally weighted quarterly abnormal performance on the proportion of mutual fund buys in that industry in the prior quarter.
Squandering home field advantage?
Financial institutions’ investing in their own industries

If managers have the ability to predict the performance of a given industry, the coefficient on PROP_BUY should be positive, and if they have a greater ability to predict returns in their own industry then the coefficient on PROP_BUY should be greater in the case of the mutual fund industry. Table 4 shows that the coefficient on PROP_BUY is on average positive across industries, consistent with our pooled industry analysis. However, the coefficient on PROP_BUY is below the corresponding average performance of control industries. Further, mutual fund managers are able to predict the future performance of 62% (52%) of control industries (if performance is measured on a value-weighted basis) better than of their own industry when performance is measured on a value-weighted (equally weighted) basis.

We next turn to mutual fund managers’ ability to select individual stocks, comparing it to other-industry stock selection. To do so, we start by regressing the monthly abnormal performance of individual fund trades over the subsequent quarter on a buy dummy (BUY, equal to 1 for buys, and to 0 for sells) together with a BUY_OWN dummy that is equal to one if the transaction is a buy, and if the company whose stock is being traded belongs to the mutual fund industry. If stocks that are purchased subsequently outperform those that are sold, then the coefficient on BUY should be positive and significant. When we look at our results in Table 5 Panel A, regression (1), we find that the coefficient on our BUY dummy variable is a statistically significant 0.00123 per month, which translates into a spread of more than 1% per year between mutual fund buys and sells. These results echo the findings of previous studies that look at the performance of fund manager trades, such as Chen et al. (2000), who also find significant evidence of stock selection ability by mutual funds. Regression (3), where the industry adjustment is value-weighted, also has a significant coefficient on BUY, though smaller in magnitude. Most importantly for our purposes, however, the coefficient on BUY_OWN in both regression (1) and regression (3), which captures whether managers are able to trade stocks better in their own industry than they do those in other industries, is not statistically distinguishable from zero. This suggests that mutual fund managers do not enjoy an informational advantage when selecting stocks in their own industry.
In the same table, we also show results of regressions that follow the setup described above, but additionally include a number of control variables suggested by the literature. As geographic distance has been shown to aid manager stock selection ability [Coval and Moskowitz (2001)], we measure the distance between the investing party's zip code and the target company's zip code. If this distance is less than 100 miles, we set the dummy variable CLOSE to one, and interact it with the BUY dummy to form BUY_CLOSE, which tells us how much mutual fund buys outperform their sells when the headquarters of the company whose stock is being traded are close to the headquarters of the trading institution. In addition, we also include proxies of the extent to which there is stock-level private information. Differences in private information might explain why the alpha available from trading varies in the cross-section of securities. Aslan et al. (2011) show that analyst following correlates negatively with private information. We obtain monthly data on the number of analysts providing a one-fiscal-year-ahead forecast of earnings for each stock in our sample where available from the I/B/E/S database. Our FOLLOWING variable equals the logarithm of one plus the number of different one-year forecasts, and we interact it with the BUY dummy to form BUY_FOLLOWING, a control variable that captures the effect of analyst following on the spread between the performance of buys and sells. Ang et al. (2009) suggest that idiosyncratic volatility may also proxy for private information. We, therefore, note the residual risk estimated from our Carhart (1997) four-factor regressions and interact it with the BUY dummy to form BUY_RESRISK as a further measure of private information in our regressions. Lastly, as larger firms may be more difficult to value due to their greater complexity or number of business lines, we interact the logarithm of the market value of the company being traded with BUY to form BUY_SIZE. Equations (2) and (4) in Table 5 show that the addition of these control variables does not change our key finding that own-industry buys do not outperform.

Panel B of Table 5 reports results from running regressions analogous to those reported in Panel A, but on an industry-by-industry basis, and hence without the BUY_OWN control variable.
Squandering home field advantage?
Financial institutions’ investing in their own industries

Table 5: Mutual fund buys and subsequent stock performance

Panel A: Pooled regression across industries

<table>
<thead>
<tr>
<th>Industry adjustment</th>
<th>Equally weighted</th>
<th>Value weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.00176 -1.66</td>
<td>-0.00188 -1.79</td>
</tr>
<tr>
<td>BUY</td>
<td>0.00123 2.03</td>
<td>-0.00093 -0.21</td>
</tr>
<tr>
<td>BUY_OWN</td>
<td>-0.00408 -1.73</td>
<td>-0.00487 -2.21</td>
</tr>
<tr>
<td>BUY_CLOSE</td>
<td></td>
<td>0.00147 1.15</td>
</tr>
<tr>
<td>BUY_FOLLOWING</td>
<td></td>
<td>0.00148 1.12</td>
</tr>
<tr>
<td>BUY_RESRISK</td>
<td>-0.01639 -0.69</td>
<td>-0.00102 -0.35</td>
</tr>
<tr>
<td>BUY_SIZE</td>
<td>0.00000 0.46</td>
<td>-0.00013 -0.05</td>
</tr>
<tr>
<td>Number of observations</td>
<td>126,144</td>
<td>89,322</td>
</tr>
<tr>
<td>Clustering by time</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.00017</td>
<td>0.00662</td>
</tr>
</tbody>
</table>

Panel B: Summary of regressions by industry

<table>
<thead>
<tr>
<th>Risk-adjusted industry portfolio performance</th>
<th>Equally weighted</th>
<th>Value weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of BUY coefficient</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Mutual fund industry</td>
<td>0.00171</td>
<td>0.02318</td>
</tr>
<tr>
<td>Mean for control industries</td>
<td>0.00271</td>
<td>-0.00386</td>
</tr>
<tr>
<td>Median for control industries</td>
<td>0.00135</td>
<td>0.00319</td>
</tr>
<tr>
<td>Proportion of control industries with higher value of BUY than for mutual fund industry</td>
<td>0.450</td>
<td>0.360</td>
</tr>
<tr>
<td>Number of control industries with enough observations to estimate the regression</td>
<td>140</td>
<td>139</td>
</tr>
</tbody>
</table>

Column (1) of the table shows that mutual fund buys of stocks within their own industry perform 0.171% per month better than corresponding sells over the subsequent quarter, on a risk- and industry-adjusted basis. By contrast, the average of the corresponding quantity across the 140 control industries with enough data to estimate the regressions is 0.271% per month, and it is greater than for the mutual fund industry for 45% of the control industries. For models (2) through (4), mutual fund trades have a higher estimated value of the BUY coefficient for trades in their own industry than either the average or the median of their estimated BUY coefficient for trades in control industries.
However, none of these estimated values are statistically significant at conventional levels. Further, mutual fund trading of shares in their own industry is worse than their trading of shares in 14% to 40% of control industries. Thus, there is no significant evidence that mutual funds have superior stock-picking ability in their own backyard than they do elsewhere. This complements our earlier finding that mutual funds do not time the performance of their own industry better than they do that of other industries.

Next, we present the results of own-industry timing and stock selection tests conducted for insurers, banks and MFCs using the S34 dataset. In lieu of a control sample, we examine banks, insurer and MFC trades in the two industries other than their own.

Table 6 examines the industry timing ability of financial institutions' trades in the three financial industries they represent.

**Table 6: Financial institution trades and subsequent industry-level performance**
Squandering home field advantage?
Financial institutions' investing in their own industries

Specifically, we pool industry-quarter observations and relate the abnormal performance of a given industry's stocks (equally weighted or value weighted) in a given quarter to the proportion of buy trades in the previous quarter (PROP_BUY) made by all three types of investing institutions, as well as by each type separately. We also include in the same regression a dummy variable equal to the product of PROP_BUY and a dummy variable equal to one when the industry being invested in is the same as the industry doing the investing. Panel A reports results for equally weighted industry portfolios, and Panel B, for value-weighted ones. As the panels show, the coefficient on BUY_OWN is never significant, with the exception of MFCs investing in their own industry, when the t-statistic for the case where the industry adjustment is equally weighted reaches 2.00, so that the coefficient estimate is significant at the 5% level. However, this result is not robust to value-weighting, for which case the t-statistic drops to a very low 0.24. For banks and insurers, as well as for all three financial institution types together, the coefficient on BUY_OWN is negative. In short, there is no strong evidence of financial institutions being able to predict subsequent industry performance better for their own industry than for other financial industries.

Lastly, Panels A and B of Table 7, similarly to Panel A of Table 5, examine whether financial institutions have stock selection ability by regressing the returns of the securities they trade on a BUY dummy and a BUY_OWN dummy, as well as (in even-numbered regression) on the four control variables, BUY_CLOSE, BUY_FOLLOWING, BUY_RESRISK, and BUY_SIZE. The insignificant coefficient on the BUY dummy across specifications tells us that whether we look at bank, insurance company or MFC trades or at the trades of all three institutions together, there is little evidence of stock selection ability (but recall that we restrict ourselves here to the financial services sector). Most crucially, BUY_OWN never reaches significance in any of the 16 regressions in the two panels. Thus, there is no evidence that being an industry insider results in better stock picking.

Our interpretation of the overall results is as follows. We find that the average fund trade – here, across control industries – is not profitable, nor is there significant evidence of successful industry timing by mutual funds in aggregate. Most important for our purposes, though, there is no evidence at all that mutual fund managers are able to make better investment decisions in the industry they know most intimately – their own.
Squandering home field advantage?  
Financial institutions’ investing in their own industries

Table 7: Financial institution trades and subsequent stock performance

<table>
<thead>
<tr>
<th>Panel A: Industry adjustment factor is equally weighted</th>
<th>Investing institution type</th>
<th>All institutions (1)</th>
<th>Banks (2)</th>
<th>Insurance companies (3)</th>
<th>MFCs (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>0.00006</td>
<td>0.0035</td>
<td>-0.00017</td>
<td>0.0022</td>
</tr>
<tr>
<td>BUY</td>
<td></td>
<td>-0.00062</td>
<td>0.00228</td>
<td>-0.00107</td>
<td>-0.00049</td>
</tr>
<tr>
<td>BUY_OWN</td>
<td></td>
<td>0.00055</td>
<td>0.0060</td>
<td>0.0164</td>
<td>0.0184</td>
</tr>
<tr>
<td>BUY_CLOSE</td>
<td></td>
<td>-0.00074</td>
<td>-0.0125</td>
<td>-0.00115</td>
<td>-0.00107</td>
</tr>
<tr>
<td>BUY_FOLLOWING</td>
<td></td>
<td>-0.00080</td>
<td>-0.0057</td>
<td>-0.00022</td>
<td>-0.00093</td>
</tr>
<tr>
<td>BUY_RESRISK</td>
<td></td>
<td>-0.01890</td>
<td>-0.00890</td>
<td>-0.00115</td>
<td>-0.00477</td>
</tr>
<tr>
<td>BUY_SIZE</td>
<td></td>
<td>0.00000</td>
<td>0.00000</td>
<td>0.00025</td>
<td>0.00000</td>
</tr>
<tr>
<td>Number of observations</td>
<td></td>
<td>148,039</td>
<td>112,727</td>
<td>92,138</td>
<td>64,465</td>
</tr>
<tr>
<td>Clustering by time</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td>0.00003</td>
<td>0.0019</td>
<td>0.00014</td>
<td>0.00029</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Industry adjustment factor is value weighted</th>
<th>Investing institution type</th>
<th>All institutions (1)</th>
<th>Banks (2)</th>
<th>Insurance companies (3)</th>
<th>MFCs (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>0.00061</td>
<td>0.0072</td>
<td>0.00033</td>
<td>0.00082</td>
</tr>
<tr>
<td>BUY</td>
<td></td>
<td>-0.00007</td>
<td>0.00071</td>
<td>0.00024</td>
<td>0.00036</td>
</tr>
<tr>
<td>BUY_OWN</td>
<td></td>
<td>-0.00057</td>
<td>-0.00110</td>
<td>-0.00104</td>
<td>0.00066</td>
</tr>
<tr>
<td>BUY_CLOSE</td>
<td></td>
<td>-0.00047</td>
<td>-0.00124</td>
<td>-0.00078</td>
<td>0.00161</td>
</tr>
<tr>
<td>BUY_FOLLOWING</td>
<td></td>
<td>-0.00081</td>
<td>-0.00053</td>
<td>-0.00025</td>
<td>-0.00044</td>
</tr>
<tr>
<td>BUY_RESRISK</td>
<td></td>
<td>-0.03469</td>
<td>-0.03588</td>
<td>-0.0086</td>
<td>-0.05742</td>
</tr>
<tr>
<td>BUY_SIZE</td>
<td></td>
<td>0.00000</td>
<td>0.00000</td>
<td>0.00027</td>
<td>0.00000</td>
</tr>
<tr>
<td>Number of observations</td>
<td></td>
<td>148,039</td>
<td>112,727</td>
<td>92,138</td>
<td>64,465</td>
</tr>
<tr>
<td>Clustering by time</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>R-squared</td>
<td></td>
<td>0.00003</td>
<td>0.00031</td>
<td>0.00006</td>
<td>0.00055</td>
</tr>
</tbody>
</table>

| Table 7: Financial institution trades and subsequent stock performance | | | | |
Squandering home field advantage?
Financial institutions’ investing in their own industries

When we look at entire financial institutions investing in shares of other financial institutions, there is likewise no evidence of investment ability either at the individual stock, or at the industry level. Most damningly, however, we find that each type of financial institution is unable to convert its “home field advantage” — buying and selling shares in its own industry — into actual investment returns.

In unreported analyses, we have also examined the possibility that own-industry trades generate superior returns at longer horizons, by studying two-, three-, and four-quarter abnormal returns following the trading quarter and using the Newey-West method to allow for the overlap in observations that the longer return horizon induces. We find no evidence of any longer-horizon superior performance. We stress that none of our analyses take into consideration the effect of trading costs. The fact that we do not find robust evidence of outperformance by three major types of institutional investor in their own backyard, despite studying the world’s largest stock market over a three decade span and despite ignoring trading costs, is striking.

The lack of evidence of own-industry timing or stock selection ability could come about if these industries (mutual funds, banking or insurance) are inherently more difficult to time or select stocks in than other industries. As a result, it would be difficult to ascertain whether it is lack of ability or the information environment that is to blame for the weak own-industry investment performance we observe.

One way to separate out these two aspects and appraise the value of being an industry insider is to hold the trading environment constant and examine how variation in own-industry ability impact investment performance. Our “all institutions” tests in Tables 6 and 7 do just this, as the trade performance of the institutions with own-industry knowledge is benchmarked against the performance of the institutions that do not when trading the same security. In this case, the BUY_OWN dummy in these “all institutions” tests informs us whether there is any significant difference in trading ability between institutions that have own-industry knowledge and those that do not. The fact that this dummy is not significant in Tables 6 and 7 suggests that differences in the inherent predictability of security returns across industries do not explain the lack of an own-industry effect.
Squandering home field advantage?
Financial institutions’ investing in their own industries

Kacperczyk et al. (2005) find greater investment ability among funds whose portfolios are more concentrated at the industry level. They attribute this finding to the value of industry-level information. In contrast, our paper finds the reverse. How can we reconcile the two sets of results?

While the Kacperczyk et al. argument is plausible, their evidence on the value of industry information is indirect. In particular, it is possible that although funds specialize based on their informational advantage, this information is concentrated across industries, but is not industry information as such. For example, funds may have better information about more proximal investments [Coval and Moskowitz (2001)], and geographic and industrial distribution may be correlated. While Kacperczyk et al. check that investment styles and company size do not subsume their result, there may be other industry-correlated variables that do. Second, it is possible that more industry-concentrated funds have better stock picking not because they have better industry information, but because being industry concentrated correlates to other fund characteristics that are liable to produce better performance. For example, funds that are disciplined enough to stay focused on a small number of industries may also have a more disciplined approach to investment analysis in general, and such discipline may allow them to reap greater returns regardless of any industry-level informational advantage. Third, even if one interprets the Kacperczyk et al. analysis as saying that industry information helps one make better investment decisions, our paper shows that having industry information is not a sufficient condition for outperforming the market in that industry.

Indeed, in line with our findings, a recent paper examining the performance of individual investors in Norway [Døskeland and Hvide (2011)] finds that they get neutral or negative abnormal returns when investing in the same industry as the one they work in.
4. Conclusion

If financial institutions exhibit any investment skill at all, one could expect it to be particularly evident when they invest in stocks of companies that are involved in the same business as themselves. Yet we find that institutions do not display any superior investing ability in their own industry, either at the individual stock or at the aggregate industry level. This is in spite of our focus on trades that are large in absolute and relative terms.

Our paper also offers a novel perspective on stock market efficiency. The idea that in expert hands public information can be used to beat the market is intuitively appealing, and is indeed the reason behind the proliferation of expert network firms. On the other hand, unless the industry expertise furnished is truly unique, one can expect the rewards to such expertise to be competed away in a market setting. While the secretive nature of the expert network business makes it difficult to examine this issue across a wide range of industries, we show that for several important industries in the financial services domain, industry expertise does not translate into greater investment returns.

In an important recent study of institutional trading, Dasgupta et al. (2011) discuss the possibility that “the negative association between institutional trading and stock returns arises because institutions trade against insiders with superior knowledge of future cash flows. While it is difficult to rule out this possibility given the available data, acceptance of this theory would amount to a profoundly negative indictment of the fund management industry: for our findings to be explained in this manner, it must be the case that professional money managers trade, on average, against better informed insiders, and are systematically unaware of this fact.” Although we do not observe systematically negative returns to asset managers’ trades, their failure to beat the competition on their home turf amounts to an indictment of some gravity.
Squandering home field advantage?
Financial institutions’ investing in their own industries

References
Pozen, R., and T. Hamacher, 2011, The fund industry: how your money is managed, Wiley Finance
Trond, M. D., and H. K. Hvide, 2011, “Do individual investors have asymmetric information based on work experience,” Journal of Finance 66, 1011-1031
Editorial

Editor
Shahin Shojai
EY UAE

Advisory Editors
Dai Bedford
EY U.K.
Shaun Crawford
EY U.K.
David Gittleson
EY U.K.

Michael Inserra
EY U.S.
Michael Lee
EY U.S.
Bill Schlich
EY U.S.

Special Advisory Editors
Ben Golub
BlackRock
Anthony Neoh
Bank of China
Steve Perry
Visa Europe

Antony M. Santomero
The Wharton School
Nick Silitch
Prudential Financial

Editorial Board
Viral V. Acharya
New York University
John Armour
University of Oxford
Philip Booth
Cass Business School and IEA
José Manuel Campa
IESE Business School
Kalok Chan
Hong Kong University of Science and Technology
J. David Cummins
Temple University
Allen Ferrell
Harvard Law School
Thierry Foucault
HEC Paris
Roland Füss
University of St. Gallen
Giampaolo Gabbi
SDA Bocconi
Boris Groyssberg
Harvard Business School
Scott E. Harrington
The Wharton School
Jun-Koo Kang
Nanyang Business School

Takao Kobayashi
Aoyama Gakuin University
Deborah J. Lucas
Massachusetts Institute of Technology
Massimo Massa
INSEAD
Tim Morris
University of Oxford
Patrice Poncet
ESSEC Business School
Michael R. Powers
Tsinghua University
Philip Rawlings
Queen Mary, University of London
Roberta Romano
Yale Law School
Hato Schmeiser
Erasmus University
Bernard Yeung
National University of Singapore
The EY Global Financial Services Institute brings together world-renowned thought leaders and practitioners from top-tier academic institutions, global financial services firms, public policy organizations and regulators to develop solutions to the most pertinent issues facing the financial services industry.

The Journal of Financial Perspectives aims to become the medium of choice for senior financial services executives from banking and capital markets, wealth and asset management and insurance, as well as academics and policymakers who wish to keep abreast of the latest ideas from some of the world’s foremost thought leaders in financial services. To achieve this objective, a board comprising leading academic scholars and respected financial executives has been established to solicit articles that not only make genuine contributions to the most important topics, but are also practical in their focus. The Journal will be published three times a year.

gfsi.ey.com
About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

© 2015 EYGM Limited.
All Rights Reserved.
EYG No. CQ0244

ey.com

The articles, information and reports (the articles) contained within The Journal are generic and represent the views and opinions of their authors. The articles produced by authors external to EY do not necessarily represent the views or opinions of EYGM Limited nor any other member of the global EY organization. The articles produced by EY contain general commentary and do not contain tailored specific advice and should not be regarded as comprehensive or sufficient for making decisions, nor should be used in place of professional advice. Accordingly, neither EYGM Limited nor any other member of the global EY organization accepts responsibility for loss arising from any action taken or not taken by those receiving The Journal. The views of third parties set out in this publication are not necessarily the views of the global EY organization or its member firms. Moreover, they should be seen in the context of the time they were made.

Accredited by the American Economic Association
ISSN 2049-8640