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Identifying and Attracting the “Right” Investors: Evidence on the Behavior of Institutional Investors

by Brian Bushee, University of Pennsylvania’s Wharton School

In our opinion, outside pressures too often tempt companies to sacrifice long-term opportunities to meet quarterly market expectations... If opportunities arise that might cause us to sacrifice short-term results but are in the best long-term interests of our shareholders, we will take these opportunities... We would request that our shareholders take the long-term view.

—Larry Page and Sergey Brin, Google’s founders

After the IPO, they [Google’s management] are going to have to think in terms of predictable quarterly results and momentum.

—Gordon Eubanks, who took Symantec Corp. public in 1989

The entry of Google Inc. into the public equity market has rekindled the debate over the extent to which U.S. capital markets encourage shortsighted decisions by corporate managers. In the above statement from their “Owner’s Manual” for Google’s Shareholders,” the company’s founders declared their intent to avoid the “numbers game” in which companies guide and then try to meet Wall Street’s quarterly earnings projections, in many cases by “managing” earnings. The second statement reflects the widespread skepticism that Google can simply opt out of the numbers game. But there are several recent examples of companies trying to do just that. Coca-Cola has stopped issuing quarterly earnings forecasts because management felt that the practice was drawing attention away from its emphasis on long-term strategy. Gillette, AT&T, and PepsiCo have done much the same. In such cases, managers say they are trying to attract investors whose primary concern is long-run value creation and not the next quarter’s earnings.

But how do companies find the “right” investors? And having identified them, how do they persuade them to buy the firm’s shares without attracting the “wrong” investors?

In an ideal world, managers would have farsighted investors that insulate the firm’s operations from undue pressure for short-term performance and from excess stock price volatility. With such investors, corporate managers might be better able to avoid market overreactions to earnings surprises, especially the negative price responses that often lead to lawsuits and can limit companies’ ability to raise capital for promising investment opportunities.

While many observers believe that at least some U.S. companies would benefit from less pressure for short-term performance, there is no clear consensus about which kinds of investors provide more “patient” capital. Some investor relations consultants recommend the targeting of individual investors. Others urge the recruiting of foreign institutional investors, and still others advise corporate IR departments to

focus their efforts on investors holding the shares of comparable firms. Thus, it is not obvious which set of investors would provide managers more leeway in avoiding pressure for short-term performance.

Researchers have produced persuasive evidence that institutional investors as a group are more sophisticated than retail investors in the sense that they are more likely to see through obvious earnings management. They are also easier to target. But if institutions as a group are better able to understand value drivers beyond reported earnings, there is also evidence that institutions react more aggressively to short-term events, thereby creating excess price volatility. Moreover, institutional investors are not a homogeneous group—they differ greatly in terms of investment styles (such as preferences for value or growth stocks), trading frequency, competitive pressures, and legal restrictions, all of which affect their sensitivity to the short-term performance of their portfolio companies.

For the past seven years, I have been conducting research that aims to answer a number of questions about institutional investors. First, what are the significant differences among institutional investors in time horizon and other trading practices, and can such investors be classified into types on the basis of their behavior? Second, do corporate managers respond differently to the pressures created by different types of investors—and, by implication, are certain kinds of investors more desirable from corporate management's point of view? Third, what kinds of companies tend to attract each type of investor, and how does a company’s disclosure policy affect that process?

In this article, I summarize my main findings and discuss their implications for managing a company’s investor base through strategic disclosure. I begin by presenting my method of classifying institutional investors based on their trading behavior. My approach identifies three categories of institutional investors: (1) “transient” institutions, which exhibit high portfolio turnover and own small stakes in portfolio companies; (2) “dedicated” institutions, which provide stable ownership and take large positions in individual firms; and (3) “quasi-indexers,” which also trade infrequently but own small stakes (similar to an index strategy).

Next, I discuss research findings on the influence of each category of institution on corporate management’s decision-making. The disproportionate presence of transient institutions in a company’s investor base appears to intensify pressure for short-term performance while also resulting in excess volatility in the stock price. My research also suggests that transient investors are attracted to companies with investor relations activities geared toward forward-looking information and “news events,” like management forecasts, that constitute trading opportunities for such investors. By contrast, quasi-indexers and dedicated institutions are largely insensitive to short-term performance and their presence is associated with lower stock price volatility. Quasi-indexers are attracted to companies with “high-quality” annual and quarterly report disclosure, whereas dedicated institutions appear to be insensitive to the quality of disclosure.

My research suggests that managers who focus their disclosure activities on historical information that helps investors to monitor corporate performance (as opposed to earnings forecasts, which seem to invite speculative trading) will attract quasi-indexers instead of transient investors, thereby reducing the sensitivity of their stock price to short-term developments. Such a change in investor base should encourage managers to make the best decisions for long-run value with less concern about short-term consequences.

**Classifying Institutional Investors**

A common approach to classifying institutions is by their legal type. For example, bank trusts may invest differently than insurance companies, and the investment practices of both may differ significantly from those of investment companies and advisers (including mutual funds) and pension funds. Each of these types is governed by different fiduciary responsibility laws. Bank trusts and pensions are subject to more stringent fiduciary standards than investment advisers and so tilt their portfolios toward safer stocks. In addition, the competitive pressures faced by each type differ. Investment advisers encounter much more “churn” in their sources of funds than pensions and endowments, which results in trading that is more sensitive to the current performance of portfolio companies. The advantage of this classification scheme is that legal type is readily available in most databases of institutional investor holdings. The key disadvantage is that there is tremendous variation within these groups in terms of investment horizons and sensitivity to short-term news.

My approach is to classify institutional investors based on their observed investment and trading behavior. This approach was inspired by Michael Porter’s comparison of the behavior of U.S. investors with that of German and

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Japanese investors.\textsuperscript{12} Porter observed that U.S. institutional investors tend to make small investments in a large number of companies, which they either turn over frequently or passively ignore (e.g., indexers). By contrast, German and Japanese markets are dominated by investors that own large, long-term equity stakes, which provide companies with patient capital as well as effective governance. While this argument tends to overlook the presence of U.S. “value” investors like Berkshire Hathaway (as well as major shortcomings of the German and Japanese governance systems), it does provide the insight that important differences among investors can be represented by two key variables: (1) ownership stability and (2) the size of the ownership stake. I use these two factors to classify U.S. institutional investors.

Here is how the method works. First, I calculated various measures of both ownership stability and stake size using publicly available information on institutional investor portfolio holdings. To measure stability, I computed quarterly portfolio turnover (measured as the total market value of sales during the quarter divided by the total market value of the portfolio at the beginning of the quarter) and the percentage of the institution's portfolio stocks that have been held continuously for the past two years. To measure stake size, I calculated the average percentage ownership in portfolio companies, the percentage of the portfolio stocks in large block holdings (that is, greater than a 5\% stake), and the average dollar investment in portfolio firms.\textsuperscript{13} I then used factor analysis to combine these portfolio characteristics into the two “common factors,” ownership stability and stake size.

Next I used a grouping technique called cluster analysis to form three groups of institutions based on where they rank on both factors. As mentioned earlier, I have labeled the groups “transient,” “dedicated,” and “quasi-indexer.” Transient institutions, which accounted for 31\% of all institutions during the period 1983–2002, are characterized by low ownership stability and small stakes. Table 1 provides a representative example of a transient investor, Numeric Investors L.P., which describes itself as “an active quantitative manager of U.S. and international equity portfolios offering investment strategies with aggressive investment objectives.”

Table 1 Portfolio Characteristics for a Representative Institution in Each Category of Institutional Investors (Using 2001 Averages)

<table>
<thead>
<tr>
<th>Ownership stability</th>
<th>Numeric Investors (Transient)</th>
<th>Berkshire Hathaway (Dedicated)</th>
<th>CaIPERS (Quasi-Indexer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly portfolio turnover (market value of sales/beginning total portfolio market value)</td>
<td>73.7%</td>
<td>0.6%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Percent of portfolio stocks held continuously for past two years</td>
<td>25.1%</td>
<td>75.0%</td>
<td>98.1%</td>
</tr>
<tr>
<td>Ownership stake size</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average percentage ownership in portfolio firms</td>
<td>0.4%</td>
<td>10.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Percent of portfolio stocks that are large block holdings (greater than 5%)</td>
<td>0.0%</td>
<td>52.5%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Average investment size in portfolio firms (millions)</td>
<td>$6.0</td>
<td>$1,065.5</td>
<td>$21.6</td>
</tr>
<tr>
<td>Number of stocks in portfolio</td>
<td>501.1</td>
<td>26.2</td>
<td>1,988.3</td>
</tr>
</tbody>
</table>

\textsuperscript{12} Michael Porter, “Capital Choices: Changing the Way America Invests in Industry,” Journal of Applied Corporate Finance (Summer 1992), pp. 4-16.

\textsuperscript{13} In practice, I used multiple measures of each of these variables to reduce the error in the methodology. For more details on the exact variables used, interested readers should consult my article, “Do Institutional Investors Prefer Near-Term Earnings Over Long-Run Value?,” Contemporary Accounting Research, Vol. 18 (2001), pp. 207-46.

\textsuperscript{14} Source: Numeric Investors L.P. Web site (www.numeric.com).
ized by stable ownership and large stakes. Table 1 provides a representative example of a dedicated investor, Berkshire Hathaway, the insurance/holding company managed by Warren Buffett. The table shows that, in 2001, Berkshire Hathaway sold less than 1% of its portfolio market value each quarter and had held 75% of its portfolio holdings continuously for at least two years. Its average ownership in its portfolio companies was over 10%, and it owned greater than a 5% block in over half (52.5%) of its portfolio firms. As these numbers suggest, dedicated investors like Berkshire Hathaway follow a “relationship investing” strategy of buying and holding large stakes in a small number of companies.

Quasi-indexer institutions, a category that encompassed 61% of all institutions for the period 1983-2002, are identified by their high ownership stability and small ownership stakes. The representative example in Table 1 is the California Public Employees’ Retirement System (CalPERS). In 2001, CalPERS sold about 8% of its portfolio market value each quarter while having held 98% of its portfolio companies for at least two years. Its average ownership of portfolio companies was over 10%, and it owned greater than a 5% block in over half (52.5%) of its portfolio firms. As these numbers suggest, dedicated investors like Berkshire Hathaway follow a “relationship investing” strategy of buying and holding large stakes in a small number of companies.

Figure 1 shows what happens when my classification scheme is imposed on each of the different legal types of institutions. Apart from the somewhat lower-than-average representation of transient investors among banks, the three types of investment styles appear to be distributed fairly evenly across legal types. Thus, grouping institutions by whether they are banks or investment advisers would be only a weak proxy for whether the institutions create pressures for managers to focus on short-term results. In the next section, I provide evidence on how these different categories of institutions are associated with a key aspect of managerial decision making—earnings management.

Does Investor Behavior Influence Managers?

My classification method allowed me to come up with a direct test of Michael Porter’s assertion that transient ownership creates incentives for managers to sacrifice long-term investment to avoid a decline in current earnings. As described in a study published in the Accounting Review in 1998, I began by identifying all the companies that, during the period 1983–1994, were in a position to reverse an expected decline in earnings (relative to the prior year’s) by cutting research and development (R&D) expenditures. I found that managers with higher total institutional ownership were less likely to cut R&D to meet their earnings targets. My interpretation of this finding is that institutional investors, because of their greater sophistication, are more likely than individual investors to understand that an increase in earnings achieved by cutting productive R&D would be bad news, deterring managers from taking this step.

It was in the second part of this study that my classification scheme for institutional investors came into play. Here I found that, in cases where a company's investor base was dominated by transient institutions, managers were significantly more likely to cut R&D to avoid an earnings drop than if the investor base was dominated by quasi-indexers or dedicated institutions. Thus, managers faced with a high proportion of transient institutional ownership appear to cut investment in order to avoid an earnings decline that could trigger large-scale selling by such institutions.

In later work, researchers Bin Ke and Kathy Petroni used my classification method to examine what happens to companies whose earnings fall relative to their expected trend. Their own previous study (with Steve Huddart) had reported negative price reactions to breaks in strings of positive earnings growth, both at the announcement of the break and during the 30 days leading up to it. When they then examined the patterns of institutional trading around the earnings breaks using my classification method, they found it was primarily the transient institutions that bought heavily during strings of earnings increases—and that when a break in the string became imminent, transient investors began dumping the stock, often up to a quarter before the break was announced. In contrast, quasi-indexers and dedicated institutions tended to hold the stock during the quarters before, during, and after the break in the earnings sequence.

These studies have two implications. First, they provide additional evidence that my institutional investor classification approach can help companies identify the institutions that are more likely to create pressure on managers to manipulate earnings. More important, and contrary to the conventional wisdom, they imply that a corporate policy that aims to create continuous earnings growth is likely to be a double-edged sword. Such earnings “momentum” will attract transients who may drive up the stock price for a time; but their tendency to sell at the first sign of a downturn will make for a bumpy ride down, and management may be better off avoiding the artificial creation of such earnings strings in the first place.

This brings us to the question of how managers can avoid attracting transient institutional investors to their stock, which I address in the next section.

**What Attracts Institutional Investors?**

In a study published in 2001, I attempted to determine what kinds of companies are more likely to attract each of the different categories of institutional investors. More specifically, the study began by testing whether some groups of institutional investors focus more on expected near-term earnings than on long-run value in making their investment decisions. After putting together all companies followed by Value Line between 1980 and 1992, I used a valuation model that decomposed each firm's year-end market value into three components: (1) its accounting book value, (2) its expected earnings over the next one-to-four years, and (3) expected long-term earnings (beyond four years out). The second and third components were estimated using Value Line forecasts of future earnings, dividends, and book values.

I found that transient institutions invest more heavily in companies with larger proportions of their value in near-term earnings and a lower proportion in long-run value. Such companies typically have relatively high earnings and persistent earnings growth, in contrast to firms with low and volatile earnings whose market value stems primarily from expected long-run performance. Companies with more persistent earnings growth also tend to have larger price reactions to earnings surprises, providing greater potential trading profits for transient investors speculating on upcoming earnings news. In contrast, quasi-indexers and dedicated institutions are fairly insensitive to earnings volatility and the amount of firm value that will be realized in future earnings.

Transient institutions also prefer companies with greater liquidity (generally larger firms with high share turnover), low dividend yields, and good past performance in terms of both stock returns and earnings. Liquidity is important to transient investors because it allows them to move in and out of stocks without having their trading profits eroded by round-trip transaction costs. Since dividends are theoretically a substitute for higher capital gains, high dividend yields tend to mean lower potential profit from short-term capital appreciation. The preference for good past performance reflects the momentum strategies employed by many transient investors. In contrast, quasi-indexers tend to prefer large, mature firms that are part of the S&P 500 index and have higher dividend yields and lower risk. Dedicated institutions show similar preferences for mature, low-risk, dividend-paying firms. But the fact that my regression model explained very little of the variation in dedicated investor ownership suggests that dedicated investors pay less attention to financial variables per se than to intangible factors such as the quality of management.

These results suggest that managers might be able to influence the composition of their company's investor base by changing some corporate characteristics. Perhaps the
most important step that managers could take would be to discourage transient ownership by refusing to manage (that is, smooth) reported earnings (see the Progressive Insurance case that precedes this article). Such a step, when combined with changes in disclosure policy discussed below, could also conceivably affect the investor base by reducing the liquidity of its stock.

In the next section, I discuss some recent research that examines the link between disclosure policy and institutional ownership.

How Does Disclosure Policy Affect Institutional Investors?

Many studies have found important benefits from better disclosure, including a lower cost of capital, increased liquidity, a stronger analyst following, and greater institutional ownership. In a study I co-authored with Christopher Noe, we investigated whether different categories of institutional investors are more or less sensitive to a company’s disclosure practices. We were particularly concerned about the possibility that certain kinds of disclosure—more specifically, what tends to be viewed in the business and analyst communities as “higher-quality” disclosure—could lead to greater liquidity and hence more transient ownership. If this were the case, there could be an important unintended consequence from more disclosure: greater stock price volatility.

We measured disclosure “quality” using security analysts’ ratings from the Association for Investment Management and Research (AIMR). From 1979 to 1996, the AIMR produced annual assessments of disclosure quality based on consideration of annual reports, interim reports, and investor relations activities (using criteria such as the accessibility and cooperativeness of company contacts, the timeliness of presentations to analysts, and the frequency of meetings with management). We found that higher disclosure quality was associated with higher ownership by both transient institutions and quasi-indexers. We attributed these results to transient institutions’ preference for the liquidity that tends to accompany a high level of disclosure. For quasi-indexers, we suggested that greater disclosure reduces their costs of monitoring a large portfolio of stocks. Dedicated investors appeared to be largely insensitive to disclosure quality, at least as rated by the AIMR. The most likely explanation of this finding is that, because of the size of their ownership stakes, such investors will typically supplement required disclosure with their own research—and in many cases their ownership block may entitle them to an insider role, including a seat on the board of directors.

Our study also found that transient institutions focus specifically on investor relations activities and interim reports, which help companies maintain continuously high liquidity. In addition, IR activities such as conference calls and management forecasts provide transient investors with “information events” that present opportunities for speculative trading. In contrast, quasi-indexers tend to be most concerned with the quality of interim and annual reports, which reduce the cost of their ongoing monitoring activity. Since such investors are generally not looking to trade in the short term, management forecasts of quarterly earnings and other timely investor relations activities are relatively unimportant to them.

In sum, companies that provide more forthcoming and detailed disclosures of historical information in their annual reports are likely to attract more stable, quasi-indexer ownership. Companies with extensive investor relations activities, especially forward-looking information centered on near-term forecasts and news events, tend to attract transient investors. And as suggested earlier, the presence of transient investors could increase the volatility of the stock price, a possibility I take up in the next section.

Does Disclosure Affect Stock Price Volatility?

To provide evidence on the link between disclosure quality and stock price volatility, the study I co-authored with Christopher Noe examined the volatility consequences of attracting different categories of institutional investors. We began by arguing that differences in disclosure could have both direct and indirect effects on volatility. The expected direct effect of more disclosure is to lower volatility by reducing what academics refer to as information “asymmetries”—loosely speaking, gaps in information about a company’s prospects between managers and outside investors, as well as among different groups of outside investors. At the same time, however, more disclosure could also have the opposite (“indirect”) effect of raising volatility by attracting transient investors.

We defined stock price volatility three ways: (1) the standard deviation of daily stock returns over a year; (2) the standard deviation of daily stock returns in the five days surrounding each earnings announcement; and (3) the number of days in a year with stock price drops larger than 1%. The first measure is relevant because it affects the market’s perception of the firm’s normal level of risk, which in turn should be incorporated into investors’ required returns and the firm’s cost of capital. The last two measures matter because large stock price drops in response to information events could trigger lawsuits or at least temporarily limit the firm’s ability to raise capital (possibly foreclosing a time-sensitive investment opportunity).

As expected, we found that the direct effect of disclosure on volatility is negative; that is, more disclosure is generally associated with lower return volatility. At the same time, we found that a higher percentage ownership by transient institutions was associated with incrementally higher stock price volatility using all three measures, and that higher percentage ownership by quasi-indexers and dedicated institutions was associated with lower volatility. As shown in Figure 2, we found that the volatility-increasing effect of greater disclosure resulting from transient investors was largely offset by its volatility-dampening effect of attracting quasi-indexers. But we also discovered that when a company made a major “improvement” in disclosure (as measured by the AIMR), transient investors reacted more quickly than quasi-indexers, leading to a temporary increase in volatility (lasting generally until quasi-indexers responded to the change, typically over the next year or two).

These results also differed in predictable fashion across the different aspects of disclosure rated by the AIMR. For example, we found that the increased volatility associated with the attraction of transient owners was most pronounced in the case of improvements in investor relations activities. In other words, more timely investor relations activities can actually increase volatility by attracting short-term-focused institutional investors with a preference for aggressive trading. At the same time, the reduction in volatility resulting from an increase in ownership by quasi-indexers was most evident in the case of improvements in the annual report.

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23. This result is consistent with Progressive’s experience after introducing monthly disclosures (see the article in this issue).
Implications For Corporate Disclosure

One potentially troubling implication of these findings is that certain kinds of disclosure activities—while generally serving to reduce the cost of capital and increase the liquidity of the firm’s stock—can create a series of short-term “news” events that facilitate the numbers game, attract transient investors, and destabilize the stock price. Without careful consideration of their company’s potential to attract transient investors and the format and type of its investor relations activities, managers may be exposing the firm to significant costs stemming from excess price volatility.

The first step for managers is to examine their investor base and determine whether their company is likely to attract transient investors. Large companies with persistent earnings, high liquidity, low dividend yields, and strong past performance tend to fall into this category. Such companies may want to redesign their investor relations activities to downplay the significance of quarterly earnings reports and avoid creating additional news events. For example, managers might want to consider dropping quarterly forecasts and bundling conference calls or analyst presentations with earnings announcements.

As part of their effort to shift investor focus from quarterly earnings to questions of longer-run value, managers should be sensitive to the information demands of their longer-term investors, both quasi-indexers and dedicated institutional investors. Improving the quality of annual report disclosure will attract more quasi-indexers, whose low propensity to trade will dampen return volatility around news events. By orienting more of their disclosure activities toward historical information that helps investors in monitoring performance (as opposed to forecasts, which tend to invite speculation), managers may be able to attract quasi-indexers to take the place of transients. Also, because transient investors react more quickly than quasi-indexers to changes in disclosure practices, most companies should be cautious about making major changes in many disclosure practices all at once—since the likely effect is a spike in transient ownership. Finally, managers should consider the possibility of cultivating dedicated investors with the aim of turning them into blockholders. But to be confident enough to entrust investors with what amounts to an insider role, management must have a credible strategy, an effective means of communicating it, and a sufficiently sophisticated and well-capitalized investor group to take the long view.

In sum, my research suggests that changes in disclosure practices have the potential to shift the composition of a firm’s investor base away from transient investors and toward more patient capital. This shift will remove some of the external pressures for short-term results and encourage managers to return their focus to establishing a culture based on long-run value maximization.

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