Is There a Neglected-Firm Effect?

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The "neglected-firm effect" suggests that securities that analysts ignore offer higher returns (a "neglect premium") than securities that analysts follow and scrutinize heavily. Using a large and recent sample of securities, we reinvestigated the neglected-firm effect. Controlling for capitalization, we found no evidence of a neglect premium. Investors attempting to exploit the neglected-firm effect during the past 14 years are likely to have been disappointed.

Do neglected firms earn higher returns than well-followed firms? A number of studies published in the early 1980s suggest investors earn a "neglect premium" if they focus their holdings on stocks that analysts and institutional investors overlook.[1] These early studies, however, were not independent—all of them focused on the 1970s and a sample limited to the largest 500 or 1,000 firms. Although evidence supporting the neglected-firm effect is limited to a relatively small sample (both cross-sectionaly and in time series), the effect appears to be a well-accepted empirical regularity.[2] One likely reason for the acceptance of the neglected-firm effect is that a reasonable story is associated with it: Neglected firms are riskier and thus should garner larger returns; that is, the higher returns are not anomalous but, rather, are compensation for higher risks associated with neglected stocks. Specifically, greater risks may arise from (1) less institutional monitoring and the presumably greater likelihood that managers and insiders might exploit shareholders and (2) greater uncertainty regarding firm value associated with having sparser analyst following.

Recent studies have questioned the robustness of the neglected-firm effect. Brennan, Chordia, and Subrahmanyam (1997), for example, found evidence that NYSE security returns were not related to the degree of analyst following or institutional ownership during the 1978–89 period after accounting for other risk factors. Moreover, Sias, Starks, and Tinic (1996) found that, after accounting for size, cross-sectional variation of NYSE stock returns during the 1977–91 period was positively associated with the degree of institutional ownership.

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In this study, we reinvestigated the neglected-firm effect over a recent (1982–95) time period with a much larger cross-section of securities (more than 7,000) than previous studies used. We found that neglected firms do tend to outperform less-neglected firms, but the cause is the correlation between the degree of neglect and capitalization. When comparing similar-size securities, we found little evidence of a neglected-firm effect during the study period.

DATA

The degree of neglect of each of the sample stocks was obtained from Zacks Investment Research as the number of earnings estimates for the current fiscal year.[3] Returns and beginning-of-year capitalizations were obtained from Compustat and merged with Zacks' data. The resulting set of tickers was then screened to eliminate foreign companies, investment trusts, and limited partnerships. The remaining sample consisted of 7,117 companies from the NYSE, Amex, and the over-the-counter markets from January 1982 through December 1995. On average, 3,752 firms were included each year.

NEGLECT AND RETURNS

Using Zacks Easy Equity Analysis System, we ranked securities according to their degree of neglect and divided them into four groups: highly neglected (no analyst following), moderately neglected (one analyst), moderately followed (two to four analysts), and highly followed (five or more analysts). We used the number of analyst estimates as of the previous November to ensure the information would be available for investors prior to making their investment decisions. Firms were classified into the appropriate neglect category each January and held for the calendar year.[4]

Table 1 contains the time-series average (over the 14 years) of the annual cross-sectional mean return, capitalization, and standard deviation of

Table 2. Mean Return, Risk, and Capitalization for Securities Cross-Classified by Capitalization Decile and Degree of Neglect, 1982–95

Degree of Neglect	Smallest	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Largest
Highly neglected										
Return	56.74%	31.26%	25.71%	25.72%	19.19%	13.82%	14.48%	17.16%	14.21%	—
Standard deviation	278.19	89.43	68.24	85.20	55.15	46.39	46.29	42.85	33.72	—
Capitalization (millions)	$5.7	$15.8	$28.8	$46.7	$73.4	$117.2	$197.6	$373.9	$831.8	—
Number of firms	284	235	188	152	116	91	61	39	26	—
Moderately neglected										
Return	31.12%	16.11%	20.27%	17.83%	14.39%	16.38%	12.53%	15.54%	—	—
Standard deviation	86.70	71.65	61.85	53.50	47.15	43.35	40.57	35.90	—	—
Capitalization (millions)	$7.2	$16.3	$29.3	$47.2	$73.9	$118.5	$197.8	$373.6	—	—
Number of firms	44	86	95	94	85	66	47	28	—	—
Moderately followed										
Return	—	30.19%	14.30%	20.23%	14.97%	16.08%	16.49%	17.33%	14.78%	10.95%
Standard deviation	—	120.39	57.43	61.44	51.08	47.35	42.37	39.14	31.47	26.49
Capitalization (millions)	—	$17.2	$29.9	$47.8	$74.6	$119.3	$200.8	$373.2	$811.5	$3,092.6
Number of firms	—	44	80	113	137	149	144	113	55	15
Highly followed										
Return	—	—	—	—	17.55%	16.09%	16.35%	16.50%	16.71%	16.55%
Standard deviation	—	—	—	—	54.50	53.69	48.76	41.63	32.70	26.62
Capitalization (millions)	—	—	—	—	$76.6	$123.0	$207.2	$397.0	$902.85	$5,483.8
Number of firms	—	—	—	—	36	69	127	200	288	355
Chi-square statistics										
Return	1.48	2.50	2.00	1.88	0.57	0.18	0.40	0.07	0.67	1.33
Standard deviation	22.92**	19.13**	3.36	27.12**	2.50	3.24	3.73	1.42	0.19	0.01
Capitalization	14.00**	2.73	1.62	0.84	3.44	4.93	5.23	8.55*	10.17**	9.04**

Note: A dash signifies fewer than 10 firms available each year.

* Significant at the 5 percent level.

**Significant at the 1 percent level.

neglected-firm effect once capitalization is controlled.[6] Only two capitalization deciles (1 and 3), for example, show a monotonic positive relation between neglect and mean returns. Although highly neglected firms tend to garner larger returns than less-neglected firms in the smaller capitalization deciles, less-neglected firms tend to garner larger returns than highly neglected firms in the larger capitalization deciles. In no case, however, can we reject the hypothesis (at traditional levels) that mean returns differ significantly across the degrees of neglect.

Consider, for example, the five capitalization deciles (i.e., Deciles 5 through 9) that have at least 10 annual observations of either highly neglected or highly followed stocks. The mean return across these capitalization groups averaged 16.64 percent a year for the highly followed stocks versus 15.77 percent a year for the highly neglected stocks. Similarly, the systematic relation between neglect and volatility appears to be small once size is controlled. Only Decile 1 and Decile 3 show a systematic positive relation between volatility and neglect.

Evidence of a neglect premium is weakest for those securities most accessible to professional investors. That is, for those portfolios that contain securities with average market values of at least $100 million (i.e., Deciles 6 through 10), the highly followed groups outperformed, on average, portfolios of the other three neglect groups. Again, however, differences in returns are not statistically significant.

CONCLUSION

Earlier studies have suggested that investors may earn additional returns for the additional risks taken on by investing in neglected stocks. Those conclusions, however, were based on relatively small samples, primarily of S&P 500 Index firms in the 1970s and early 1980s. In reinvestigating the neglected-firm effect over the past 14 years with a much larger data set, we found no support for the neglected-firm effect after controlling for the correlation between neglect and capitalization.

Our results have at least three possible interpretations. First, the neglected-firm effect may have disappeared simply because investors exploited it. The role of institutional investors in smaller-capitalization (and typically more-neglected) securities has certainly increased in recent years. The increased institutional presence in those securities, for example, may have resulted in better monitoring and thus the elimination of a neglect premium. Second, the results documented in the 1970s may have been sample specific. Third, our results may be sample specific and the neglected-firm effect may return in future periods.[7] Regardless of the reason, investors attempting to exploit the neglected-firm effect during the past 14 years are likely to have been disappointed.[8]

NOTES

1. See, for example, Arbel, Carvell, and Strebel (1983), Arbel (1985), and Arbel and Strebel (1982, 1983).
2. For example, nearly all investment texts discuss the neglected-firm effect. See, for example, Bodie, Kane, and Marcus (1995).
3. Zacks places an N/A for any month a company received no analysts estimates. Here, N/As are replaced with zeros.
4. For firms that dropped from the sample midyear, proceeds were invested in cash for the balance of the year.
5. Because Zacks Easy Equity Analysis System uses histogram ranking, the number of firms in each capitalization "decile" differs slightly.
6. Small-capitalization, highly neglected firms averaged extremely large annual returns. Consistent with extant research (e.g., Ball, Kothari, and Shanken 1995), this result is driven by the distribution of these firms being highly skewed to the right. For example, although the time-series average of the cross-sectional mean return for firms in the smallest-capitalization, highly neglected group is 56.74 percent, the time-series average of the cross-sectional median return is only 13.06 percent.
7. See Merton (1985), Black (1986), and Lo and MacKinlay (1990) for discussions of data-snooping biases.
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REFERENCES

Arbel, Avner. 1985. "Generic Stocks: An Old Product in a New Package." *Journal of Portfolio Management*, vol. 11, no. 4 (Summer):4–13.

Arbel, Avner, and Paul Strebel. 1982. "The Neglected and Small Firm Effects." *Financial Review*, vol. 17, no. 4 (November):201–18.

———. 1983. "Pay Attention to Neglected Firms!" *Journal of Portfolio Management*, vol. 9, no. 2 (Winter):37–42.

Arbel, Avner, Steven Carvell, and Paul Strebel. 1983. "Giraffes, Institutions, and Neglected Firms." *Financial Analysts Journal*, vol. 39, no. 3 (May/June):57–63.

Ball, Ray, S. Kothari, and Jay Shanken. 1995. "Problems in Measuring Portfolio Performance: An Application to Contrarian Investment Strategies." *Journal of Financial Economics*, vol. 38, no. 1 (May):79–107.

Black, Fischer. 1986. "Noise." *Journal of Finance*, vol. 41, no. 3 (July):529–43.

Bodie, Zvi, Alex Kane, and Alan Marcus. 1995. *Essentials of Investments*. Chicago: Irwin.

Brennan, Michael, Tarun Chordia, and Avanidhar Subrahmanyam. 1997. "Cross-Sectional Determinants of Expected Returns." Working paper, University of California, Los Angeles.

Lo, Andrew, and Craig MacKinlay. 1990. "Data-Snooping Biases in Tests of Financial Asset Pricing Models." *Review of Financial Studies*, vol. 3, no. 3 (Fall):431–67.

Merton, Robert. 1985. "On the Current State of Stock Market Rationality Hypothesis." In *Macroeconomics and Finance*, edited by R. Dornbusch and S. Fischer. Cambridge, MA: MIT Press.

Sias, Richard, Laura Starks, and Seha Tinic. 1996. "Is Noise Trader Risk Priced?" Working paper, Washington State University.