STANFORD BUSINESS GRADUATE SCHOOL OF

CASE: E-521
DATE: 06/20/14

SEARCH FUNDS—2013: SELECTED OBSERVATIONS

Since 1996, the Center for Entrepreneurial Studies (CES) at the Stanford Graduate School of Business has conducted a series of studies on the performance of search funds. This study, as well as its predecessors, has endeavored to gather data and gain insight into all known search funds.[1] Each of these studies portrays the aggregate characteristics of search funds, presents their principals' backgrounds, and evaluates the investment returns generated by first-time search funds to their original investors.[2] This series of studies reflects changes in the characteristics of search fund entrepreneurs and the performance of their funds over time.[3] For this study, using conservative assumptions, the aggregate pre-tax internal rate of return of the search fund asset class through year-end 2013 is 34.9 percent, and the aggregate pre-tax return on invested capital is 10.0x.

[1] "Known search funds" refers to those of which the CES is aware. Despite the well-known network of search fund principals, investors, and advisors, it is possible that search funds have existed or do exist that are not known to the CES.

[2] An original investor is defined as an investor who contributed capital to the initial search fund raise and may or may not have contributed to any follow-on acquisition capital.

[3] The data in this study is reported as of December 31, 2013.

Jason Luther (MBA 2013) and Sara Rosenthal (MBA 2004) prepared this study under the direction of David Dodson, Lecturer in Management, Peter Kelly, Lecturer in Management, and H. Irving Grousbeck, MBA Class of 1980 Consulting Professor of Management, as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

The CES would like to thank the Searchers who elected to participate in this study. Additional thanks goes to Doug Wells (1996 study), Josh Hannah (1998 study), Chris Flanagan (2001 study), Mu Y. Li (2003 study), Mike Harkey (2005 study), Sean Harrington (2007 study), Aimee LaFont Leifer and Tjarko Leifer (2009 study), Arar Han and Sara Rosenthal (2011 study), and Lisa Sweeney (oversight on 2009 and 2011 studies) for pioneering and updating earlier versions of this study.

For the uninitiated, the opening sections of this note describe in detail what a search fund is and how search capital is used.[4] Those already familiar with search funds may move forward to the section called "Survey Results: Fundraising, Search, and Acquisition" on page five.

WHAT IS A SEARCH FUND?

A search fund is a pool of capital raised to support the efforts of an entrepreneur, or a pair of entrepreneurs, in locating and acquiring a privately held company for the purpose of operating and growing it. The lifecycle of a search fund tends to include four stages:

- **Fundraising**: The *initial search capital* is raised to finance the search stage, that is, the identification, evaluation, and negotiation of an acquisition. Principals often need to tap a wide network of potential investors to raise initial search capital, including friends and family, business associates, business school faculty, angel investors, business owners and executives, and institutional search fund investors.

- **Search and acquisition**: There are multiple steps in this stage: generating deal flow, screening potential candidates, assessing seller interest, performing due diligence on the target company, negotiating the terms of the acquisition, raising debt and/or equity capital, and closing the deal. When a target is identified, contributors of search capital are given the right of first refusal on their pro-rata share of new *acquisition capital*. Initial search capital is commonly stepped up by a certain percentage (e.g., 50 percent) in the acquisition round, whether or not investors of search capital decide to participate. In addition to follow-on investment, acquisition capital can come from a combination of other sources: seller's debt, bank loans, and equity financing from new investors. Investor debt, commonly in the form of subordinated debt, may also be part of the capital structure.

- **Operation**: After completing the acquisition, principals will recruit a board of directors for the company, which often includes substantial representation from the initial search fund investors. In the first 6 to 18 months after the acquisition, principals typically make few radical changes, opting instead to learn the business and gain management experience. After becoming comfortable operating the business, principals then begin to make changes to improve and further grow the business.

- **Exit**: Most search funds are established with a long-term outlook, often no less than five to seven years. A typical search fund entrepreneur may spend on average six years from the beginning of the search to an exit. Liquidity events for investors and principals can occur in a number of ways, similar to exit opportunities for equity holders in a privately held company.

Since the first known search fund was formed in 1983, aspiring entrepreneurs have been drawn to search funds for two main reasons: first, they offer relatively inexperienced professionals with limited capital resources a direct path to owning and managing a small business. Second, search funds have generated significant financial returns for a small but growing number of principals.

---

[4] For a more in-depth explanation of the search fund model, readers may request the Search Fund Primer from the Stanford GSB's Center for Entrepreneurial Studies.

Although the search fund model is growing in popularity, relatively few recent business school graduates raise search funds each year as compared to those who pursue more traditional career paths. The narrow appeal may be explained in part by the non-traditional financial outlook for search fund principals. While many post-MBA compensation packages include a high starting salary and a signing bonus, the principal of a search fund commands a relatively low income through much of the process, with the upside, if achieved, typically occurring upon exit. The uncertain nature of the location and the industry of the ultimate acquisition are other likely factors that may play into an individual's decision to pursue the search fund model.

SEARCH FUND LIFECYCLE

The following is an overview of the four stages in the search fund lifecycle. A detailed analysis of principal demographics and fund performance is found in the "Survey Results: Fundraising, Search, and Acquisition" and "Financial Returns" sections, beginning on page five and page ten, respectively.

Stage One: Fundraising

Principals begin the process of raising initial search capital by writing a formal private placement memorandum. This document can serve as an initial point of contact with potential investors and can signal the principals' commitment and professionalism. The memorandum typically includes the following sections:

- Executive summary and overview of the search fund process
- List of specific criteria that will be used in the acquisition search and screening process
- Detailed timeline with expected completion dates for specific activities
- Explanation of financing sought and the structure of the search fund vehicle
- Detailed breakdown of expected use of proceeds
- Outline of potential exit alternatives
- Summary of personal backgrounds of principal(s) and allocation of future responsibilities

Given that most principals lack significant management experience, they commonly look for investors who also can serve as high-quality advisors. The best investors offer expert guidance, assist in generating deal flow, and provide leverage with lawyers, accountants, and bankers. In many cases, the investors are drawn to search funds not only by the potential financial returns of an investment, but also by the psychological rewards of advising and mentoring young entrepreneurs.

In a typical search fund, investors purchase one or several units of initial search capital, at about $25,000 to $35,000 per unit. A community of institutional investors and funds has grown up around the search fund investment vehicle, helping to facilitate principals' fundraising efforts. In recent years, some individual investors have purchased a half unit of initial search capital, effectively increasing the number of investors per fund. As of this most recent study, the median number of investors in a fund was 16.

Contributors to initial search capital receive the right, but not the obligation, to participate in the any subsequent round of acquisition capital. As compensation for taking on early-stage risk, original investors receive a percentage step up on all initial search capital, regardless of whether or not they participate in the acquisition round. For example, assuming an investor contributes $30,000 to the initial search capital and the deal is structured so that these funds receive a 1.5x step up, the investor's interest would be worth $45,000 upon acquisition of a company.

Stage Two: Search and Acquisition

Creating a stream of potential deals can be difficult for principals, many of whom have little buyout experience. Principals typically focus their search by industry, although many also review deals geographically and opportunistically (e.g., deals sourced from third parties such as brokers, bankers, and professionals who may be outside the principals' primary scopes of interest). Whereas an industry focus may provide faster results, having a geographic focus may help a principal home in more quickly on an acquisition target by narrowing the search area. Applying geographic limits to opportunities, however, may be imprudent given that 26 percent of all funds raised (not including those still searching or that have deviated from the traditional model) failed to make an acquisition, and potential investors may view such limits unfavorably.

Industry-based searches generally target two to four industries to start. Searching by industry can help principals build credibility with sellers and intermediaries, and can allow principals to screen potential acquisitions more efficiently. Conversely, principals run the risk of spending too much time trying to identify the perfect industry.

By adhering to a strict list of acquisition guidelines, search fund principals have been able to greatly reduce the risks inherent in investing in individuals with little operating experience. To further mitigate operating and investment risk, search fund principals generally target industries that have high growth and high margins. They also tend to favor stable industries, such as those not subject to rapid technology change, and those that are fairly easy to understand. Some might target fragmented industries, as they may offer enhanced opportunities for growth through acquisition, or product or market extension.

Within the preferred industries, companies are targeted based on their sustainable market position, history of positive, stable cash flows, and opportunities for growth and improvement. Search fund principals and their investors tend to prefer healthy, profitable companies with a proven second-tier management team versus turnaround situations. Preferably, the acquired company provides adequate cash flow and be without high debt service, so that the short-term survival of the company does not rely on immediate, significant improvement in company performance.

If the target is a sustainable business with modest growth, its purchase price will often be a multiple equivalent of four to eight times EBITDA.[5] Purchase prices generally range from $5 million to $20 million. The equity portion of the acquisition tends to range between $1 million and $7 million, representing 10 percent to 75 percent of the total purchase price. The purchase is expected to be at fair market value.

Searching for a target acquisition and completing a transaction is a time-consuming process. The

[5] EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortization.

general economic environment, industry characteristics, sellers' willingness to sell, and regulatory issues are among the factors that can prolong or derail the process. Depending on the complexity of the deal, four to six months, or more, can elapse between a signed letter of intent and the close of deal. If the initial search capital is exhausted before a target can be identified, principals may choose either to close the fund or to raise additional funding to continue the search.

Stages Three and Four: Operation and Exit

After a company is purchased, search fund principals assume the role of top management and may create value through one or more ways: revenue growth, improvements in operating efficiency, appropriate use of leverage, and expansion. Revenue growth may result from internal growth initiatives, pricing improvements, or scale attained from acquiring similar businesses. If additional funds are required for acquisitions or other growth initiatives, original search fund investors may be invited to participate.

After a growth plan has been executed, the resulting company can be expected to gain value, even if sold at the same multiple at which it was purchased. In addition to revenue growth, improvements in operating efficiency can make a business more profitable. If an acquired company is leveraged, the equity in the business can grow as the debt is paid off successfully.

In addition to annual salary and other compensation, successful searchers usually earn a material percentage of the upside of the investment.[6] This upside is almost always structured to vest upon achievement of specific hurdles. A common vesting schedule vests one third when the acquisition closes, one third over time, and one third upon hitting defined performance targets.[7]

Principals evaluate exit alternatives throughout the life of the business: companies can be sold in part or in whole; investor equity may be sold to other investors or bought by the company; or dividends may be issued.

SURVEY RESULTS: FUNDRAISING, SEARCH, AND ACQUISITION

The demographic sample in this study includes 177 first-time search funds formed since 1983. Keeping with previous studies, we excluded funds raised by principals who had previously raised a search fund. The focus of this study is to understand the returns from investing with a new entrepreneur in an industry in which she or he has limited prior experience. "Serial" search fund entrepreneurs have a track record that implies different fundraising techniques, management and operational capabilities, and an established network of investors, intermediaries, and sellers.

For each search fund, we collected information on the demographic characteristics of the principal(s), as well as key metrics relating to fundraising, the acquisition, company operations, and liquidity events. We have made every effort to include all known search funds.

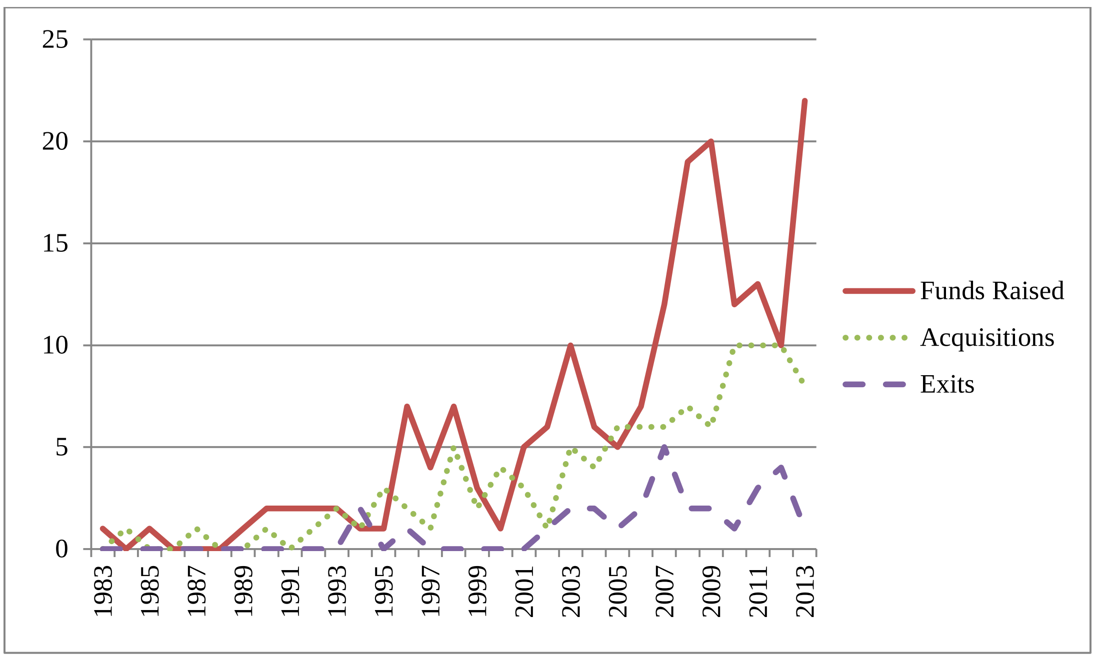
---

[6] The focus of this study historically has been to collect and report data on returns to search fund investors, and not the searchers themselves. Therefore, only anecdotal data related to searchers' gains is available.

[7] In some search funds, principals' equity is subordinate to investors' preferred shares. As such, principals would only earn equity once investors have been paid back their original capital, possibly with a preferred return.

Many more search funds have been raised in recent years than in the past. The first time more than 10 funds were raised in one year was 2003. Since 2007, the annual figure has been 10 or more. Similarly, the first time there were 10 search fund acquisitions in a single year was 2010, a trend that was repeated the following two years. Exits have been relatively rare in any given year so far. This is likely a result of the relatively recent emergence of the search fund model and the historical five to seven year lag between acquisition and exit. As funds mature, the industry is likely to experience more exits. The year 2007 had five exits, a high in the overall record, with zero to two exits the norm. The years 2011 and 2012 were slightly higher, having three and four exits, respectively. (**Graph 1** shows fund activity by year.)

Graph 1
Search Fund Activity by Year

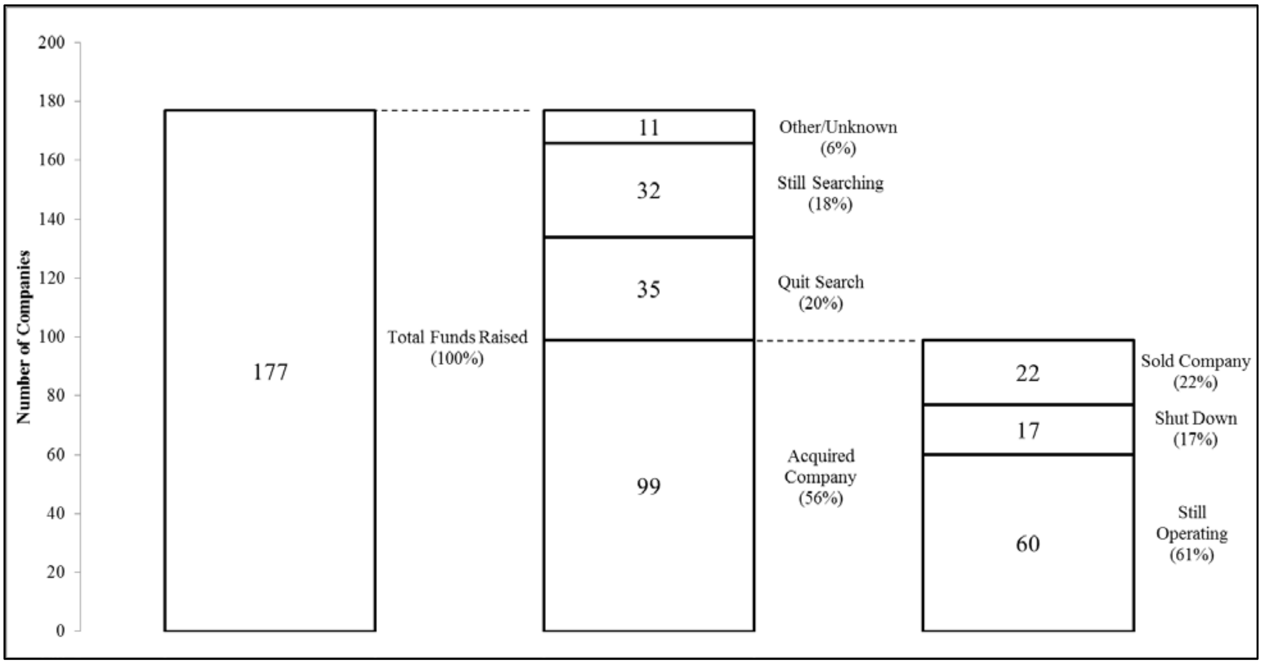


Source: Case writer surveys, data from previous search fund studies.

As of December 2013, 32 principals or partnerships were looking for a company to buy,[8] 60 had acquired companies that were still in operation, 11 had either deviated from the search fund model or had a status that was unknown,[9] and 74 were classified as "terminal." Of the 74 terminal search funds, 22 acquired and exited a business,[10] 17 acquired then shut down a company,[11] and 35 concluded without an acquisition. **(Graph 2** shows the distribution of funds by stage.)

[8] This category now includes those funds "Fundraising for Acquisition."
[9] The "Other" category has been expanded to include funds for which the status is unknown. As with previous studies, this category includes search funds that later deviated from the model to pursue a materially different end, such as putting the initial capital toward a start-up business or purchasing multiple companies.
[10] This category was previously classified as "Successful Exit."
[11] The 2013 study now defines an acquired and "Shut Down" company as one that was exited and returned <1x of investor capital. In previous studies, this category included any exited company that had returned <0.75x of investor capital.

Graph 2
Distribution of All Search Funds by Status



Source: Case writer surveys, data from previous search fund studies.

Note: The 74 "terminal" search funds are those that had Quit Search (35), Sold Company (22), or Shut Down a Company (17).

International Search Funds

In 2011, the Stanford GSB partnered with the IESE Business School in Barcelona, Spain, to conduct a separate analysis on the growing cohort of international funds, located in Latin America, Europe, Asia and Africa. International searchers remain part of the historical record retained herein, but new reporting on the 2010, 2011, 2012, and 2013 classes includes U.S. domestic funds and Canadian funds only.

As of December 2013, IESE identified 28 first-time international search funds. More than half of these search funds were formed after 2008, with the earliest formed in 1992. Of these 28 search funds, ten were in the United Kingdom, five were in Continental Europe, six were in Mexico, three were in other Latin American countries, two were in India, one was in the Middle East, and one was in Africa.

As of the time of this study, eight search funds were searching for an acquisition, seven had acquired and were operating a company, five had deviated from the search fund model and eight were classified as "terminal." Of those eight terminal funds, four had acquired and exited a business for a positive return to investors, two had acquired and then shut down a company and two had ended their search without making an acquisition. New funds and additional exits in 2014 have been noted but not included in this study for consistency.

Given that there had only been four exits made by search fund entrepreneurs and two cases of companies failing as of December 2013, it is too early to publish meaningful performance data for the international search fund asset class. However, directionally speaking the performance seems to mirror the search fund performance data published in this note on U.S. and Canadian search funds.[12]

Profile of Principals

In 2013, most search fund entrepreneurs conformed to the profile of a relatively young, recent business school graduate. Of the 45 new principals in 32 new funds raised in 2012 and 2013, 49 percent had graduated from an MBA program within a year of raising their fund, and 84 percent were under 36 years old. While there were two female searchers represented in the 2011 study, the 45 new searchers in 2012 and 2013 were all male. (See **Exhibit 1** for more information on the profiles of search fund principals.)

There continues to be a diversity of professional experience among search fund entrepreneurs. As in previous surveys, over one quarter of all search fund principals listed management consulting or investment banking as their primary professional background. In this year's survey, those with a background in line or general management decreased from 19 to 2 percent, and those with an entrepreneurial background dropped from 6 to 4 percent. Searchers from the private equity industry remained at just over one quarter of all new searchers. (See **Exhibit 2** for more information on search fund principals' professional backgrounds.)

Fundraising and Search

The number of funds headed by a single principal (as opposed to a pair) has averaged around 60 percent for the last four years, though the mix has tended to fluctuate from study to study (read more later on the implications of partnership structure on financial returns). The median amount of initial search capital raised by the 32 new search funds in this study was $426,000, roughly $25,000 less than the figure for funds new to the 2011 study. Average capital raised per principal (rather than per fund) rose by 17 percent, from $302,500 to $355,000. The median number of search fund investors decreased from 18.5 to 16, and the median number of months to raise a fund increased slightly from 3.8 to 4.1. (See **Exhibit 3A** for additional comparisons of search fund metrics.)

From 2001 to 2009, search funds increasingly chose to target services firms over other types. In 2009, almost three-quarters of new searchers aimed to acquire companies that provided some suite of services, up from 69 percent in the 2007 study and 35 percent in the 2005 study. This was likely due to the fact that the best-known and most successful search funds had acquired service-oriented firms, and new principals may have been attempting to model their efforts on these exemplary cases.

---

[12] For more information on IESE's research effort see "International Search Funds—2013: Selected Observations," IESE, ST-342-E, http://www.iese.edu/en/faculty-research/research-centers/eic/search-funds/
June 2014.

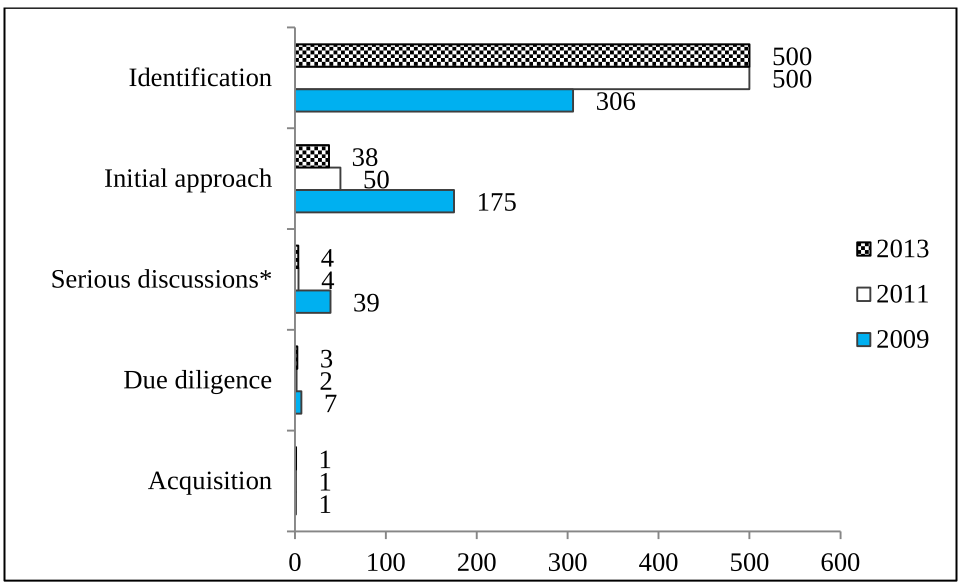
In the 2011 study, three new sectors that had attracted notable activity in recent years were added: Internet/information technology (IT), health care, and education. After service, these industries represented the most targeted industries in both the 2011 and 2013 studies (see **Exhibit 3B**).

The Acquisition

Acquisition Funnel

Anecdotally, the most desirable search fund target acquisitions are larger, faster-growing companies with better EBITDA margins. Therefore, it is the primary work of principals during the search phase to discover fruitful sources of such targets. Surveys from 2011 suggest that search fund principals who completed an acquisition focused more on researching business opportunities than their predecessors from the 2009 study did. Relative to 2009 searchers, they also tended to approach potential targets for initial to more serious discussion less frequently. These trends proved true in the 2013 survey as well. **Graph 3** shows the acquisition funnel in 2009, 2011, and 2013.

Graph 3
Acquisition Funnel of Successful Acquisitions: 2009, 2011, and 2013



* "Serious discussions" was defined as "Number of Companies under Letter of Intent (LOI)" in the 2011 and 2013 survey, which may account for the delta between 2009 and 2011/2013.

Source: Case writer surveys, data from previous search fund studies.

It is unclear why the acquisition funnel has shifted as it has from 2009 to 2011/2013, or what the implications for search fund principals will be, if any. One contributing factor to the shift may be a heavier reliance on business brokers. In the 2007 study, only four percent of all searchers reported relying on business brokers. That figure rose to 30 percent in the 2009 study and has remained high in in 2011 and 2013. Business brokers may increase the volume of opportunities reviewed by search fund principals, and decrease the need to contact businesses directly in the early stages of learning about a potential acquisition. However, they are unlikely to replace the high-quality deals that can be discovered in the open market.

Acquisition Metrics

As shown in Graph 4 on page 12, twenty-six percent of all search funds that have reached conclusion have closed without making an acquisition. Of those that successfully completed an acquisition, 28 percent of companies were purchased for \$4 million to \$8 million, 23 percent for \$8 million to \$12 million, and 35 percent for \$12 million or more. At \$71 million, the size of the largest acquisition in the 2011 study was much greater than the largest acquisition in all other years, with the next closest being a \$33.2 million purchase in 2013. Acquisitions consummated since the 2011 study had a median purchase price of \$11.6 million, greater than the median purchase price of \$8.5 million for those occurring up to the 2011 study.

Since 1984, 97 of the 99 companies acquired via a search fund acquisition have had positive EBITDA margins at the time of acquisition.[13] The median search fund acquisition has the following characteristics: \$7.4 million in revenues, EBITDA margin of 22.6 percent, purchase price to EBITDA multiple of 5.1x, trailing annual EBITDA growth rate of 15 percent, and 45 employees. (See **Exhibits 4 and 5** for more search fund acquisition statistics.)

Board of Directors

While this study does not currently provide data on board composition, anecdotal evidence suggests that search funds with a board comprised of both financial interests and operating talent will be able to generate more favorable returns. Of these, operating talent is reportedly the harder to find, given that financial oversight has become more readily available through institutional search fund investors.

FINANCIAL RETURNS

This study calculated financial returns from the perspective of investors of *initial search capital*, that is, it measured returns based on infusions from and distributions to the *original search fund investors*, including both the search and acquisition phases of the deal. Two measures of return were used: return on investment (ROI)[14] and internal rate of return (IRR)[15]. Both ROIs and IRRs were calculated on a cash flow basis, including both equity and debt that was invested as initial search capital and as acquisition capital, and includes both unsuccessful searches (i.e., those that did not complete an acquisition) and completed acquisitions. As in prior years' studies, the

[13] Since 1984, there have been 106 companies acquired via a search fund acquisition. The CES has data on 99 of these companies.

[14] Return on investment (ROI) represents the multiple of initial cash invested that is returned to investors. For example, if the group of initial investors invested \$5 million and received back \$10 million, this would be described as a 2.0x ROI. A return of \$1 million would be a 0.2x ROI and so forth. A complete loss of capital is an ROI of 0.0x.

[15] Internal rate of return (IRR) represents the annual compounding rate derived from the adjusted dates and actual amounts of search and acquisition capital invested and returned by an investment. For investments returning nothing, or only a fraction of the investors' original investment, IRR is not a meaningful metric.

timing of the cash flows for each search fund was adjusted to a common start date.[16] All returns were calculated on a pre-tax basis using data provided by the principals of the funds. We assumed that the searchers' share of equity had fully vested,[17] that all external debt was repaid, and that funds were distributed in proportion to the investors' share of equity and subordinated debt.

Of the 134 funds eligible (i.e., they raised a search fund and either acquired a company, or subsequently shut down the fund), 117 were included in the calculations of returns.[18] The calculation of enterprise value was straightforward for the 74 terminal funds included; the capital table as of the terminal event, e.g., closure, exit, sale, recapitalization, etc., was applied. For the remaining 43 funds that were operating companies at the time of the study, the enterprise value as of December 31, 2013, was based on principals' estimates of market value.[19]

While we have made every effort to provide accurate returns, it is important to note that precise information for all cash infusions and distributions over the life of each fund is difficult to obtain, especially for funds with long operating histories and complex capital structures. Readers should keep this in mind when considering the ROI and IRR figures presented in this study.

Summary of Performance

As an asset class, search funds have achieved an ROI of 10.0x and an IRR of 34.9 percent. The median fund returned 1.0x of initial search fund investors' capital, whereas the top-performing fund returned well over 200x. ROI, which has been calculated since the 2009 study, declined from 11.1x in 2011 to 10.0x in 2013. Since the 2001 study, the aggregate IRR of all search funds (including both unsuccessful searches and those that completed an acquisition) has mostly fluctuated between 32 and 38 percent, with the exception of the 2007 study, where IRR rose to 52 percent. (See **Exhibits 6 and 7** for more ROI and IRR information, respectively.)

The performance of individual search funds has varied widely over the years. Distribution by ROI ranges from greater than 10x for a highly successful company to a total loss of capital for funds that do not complete an acquisition. Distribution by IRR ranges from greater than 100 percent to negative; in cases of a total loss of capital, IRR cannot be calculated. (**Graph 4**

---

[16] The IRR for search funds as an asset class was calculated by shifting the dates of all cash flows such that all funds appear to have raised initial search capital on the same "day one." Subsequent infusions from, and distributions to, search fund investors occurred at the same intervals reported by each fund. Thus, the asset class IRR is a hypothetical return an investor would have realized if all funds had started at the same time and the investor had participated in each fund in proportion to the amount of capital raised by each fund.

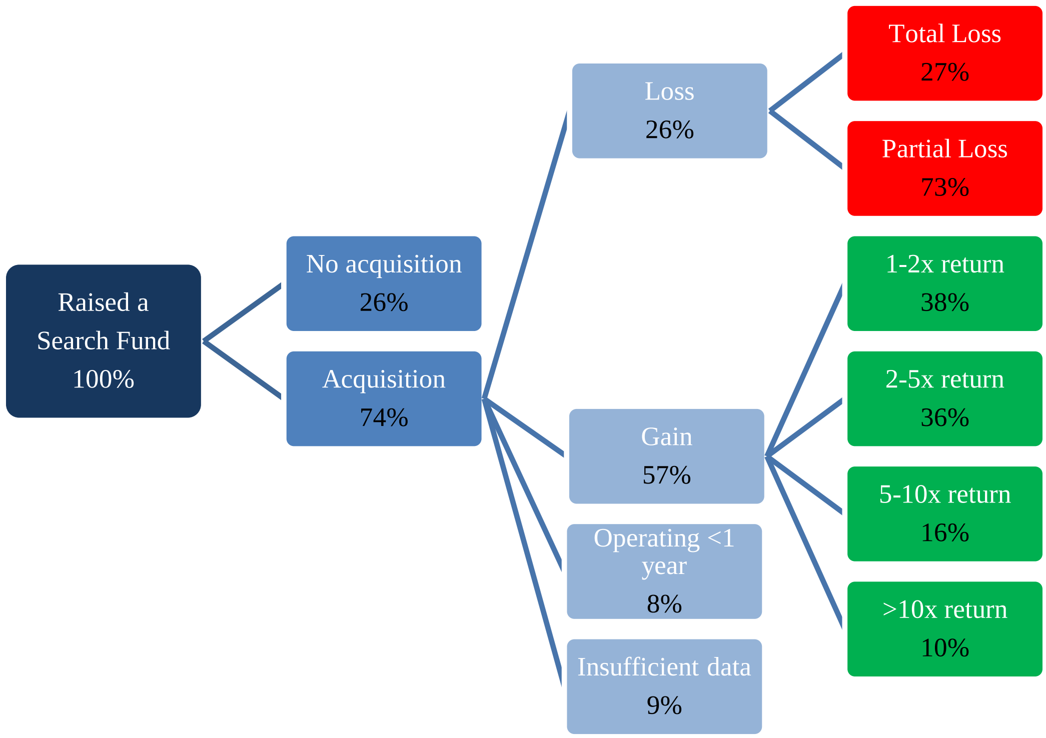
[17] This results in a more conservative IRR to investors since funds typically include both time-based vesting and performance hurdle rates which must be exceeded before the searchers vest at least a portion of their equity.

[18] Eight funds were removed from the sample because the principals had operated the acquisition for less than one year, and nine were removed due to insufficient data, unresponsiveness, or personnel change resulting in the principals' exits. The impact of removing these older funds is slightly, but not significantly, beneficial to the overall calculations of returns.

[19] Over the years, the estimation of enterprise value has ranged from a calculation that multiplies the recent annual EBITDA (or EBITDA run-rate, if more appropriate) by the original multiple paid at acquisition to an independent estimation of value based on a recent equity transaction, comparable company transaction, or third party valuation. The latter approach was applied in the 2013 study.

reflects the percentage of search funds in each phase of the search fund life cycle, as well as return characteristics for terminal funds. For a distribution of funds by ROI, see **Exhibit 8**; for a histogram by IRR, see **Exhibit 9**.)

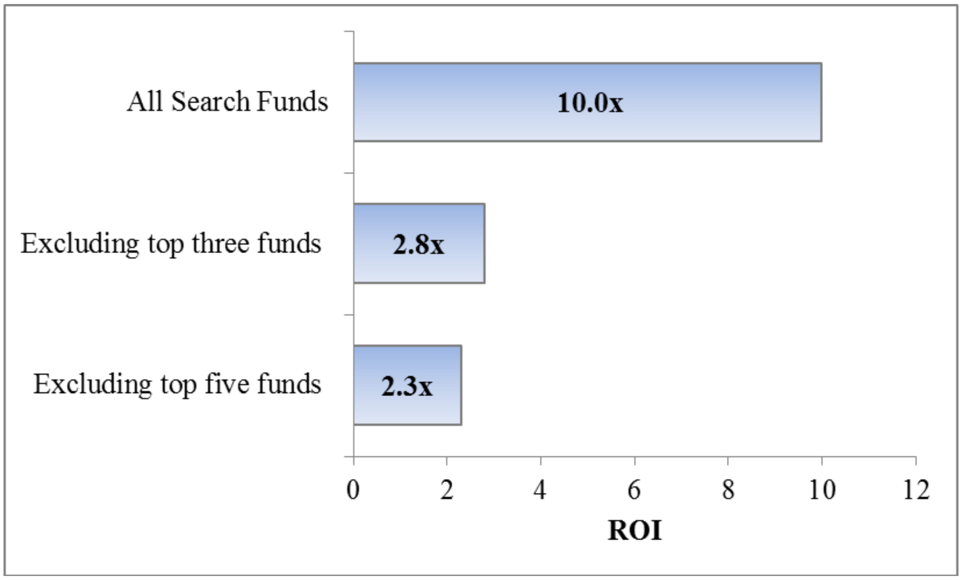
Graph 4
Percentage of Search Funds in each Phase of the Search Fund Life Cycle



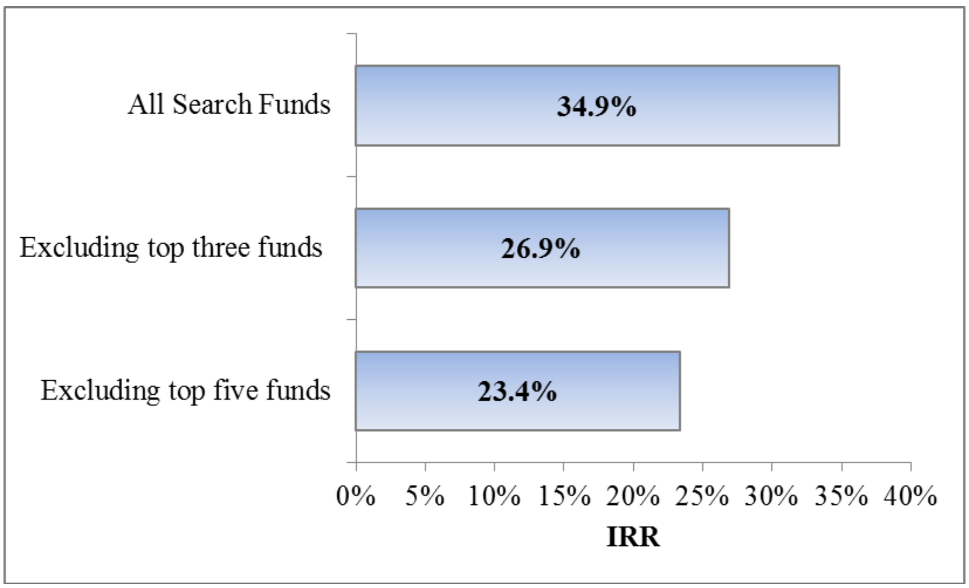
Source: Case writer surveys, data from previous search fund studies.

A small number of highly successful search funds positively affect the aggregate returns, much as principal returns for all risk capital portfolios come from top performers. (For adjusted returns when the top three and five performers are removed, see **Graphs 5A and 5B.**)

Graph 5A: Search Fund Asset Class ROI



Graph 5B: Search Fund Asset Class IRR[20]



Source: Case writer surveys, data from previous search fund studies.

Solo vs. Partnership

A new analysis was conducted this year to map the relationship between ROI and the number of principals in each search fund. This evaluation included all funds that had made acquisitions (both currently operating and terminal) at least one year prior to December 31, 2013. Funds that were searching for an acquisition or had concluded as an unsuccessful search as of December 31,

[20] The top three and top five funds for both Graph 5A and Graph 5B were excluded on the basis of their ROI ranking as one approach to demonstrating the relative impact on financial returns when the same three to five companies were removed from the calculations.

2013, were not considered.

While there was a nearly even split between funds operated by a single searcher versus a partnership,[21] the financial returns told a different story. Over four-fifths of the funds that had achieved 5x or greater returns as of December 31, 2013, were partnerships. The slight majority of funds that produced a partial or total loss were single searchers, about the average mix among funds. (See **Exhibit 10** for a graphical representation of the data.) The median ROIs for partnerships and solo search funds, excluding unsuccessful searches, were 2.78x and 1.19x, respectively. Interestingly, the top three performing funds as measured by ROI were all partnerships. If they were excluded from the calculation, the median ROI for partnerships dropped to 2.28x.

Acquisition Characteristics

Also new to this study is an analysis of how company and industry characteristics correlate with ROI for a subset of funds grouped by returns. Specifically, those search funds that had acquired companies and were in operation for at least one year as of December 31, 2013, were surveyed on the firm's operating leverage, recurring revenues, industry growth rate, and complexity of the business at the time of acquisition. While some of this data proved inconclusive or required deeper exploration, at least two variables, operating leverage and recurring revenue, illustrated an interesting story when graphed according to the funds' ROI.

Operating Leverage

The survey asked each respondent to identify their firm's operating leverage[22] at the time of acquisition as either "High" (>60%), "Medium" (35-60%), or "Low" (<35%), with the "Low" and "High" responses graphed in **Exhibit 11**. As shown, those companies that sustained either total or partial losses were far more likely to have had low operating leverage, although operating leverage did not seem to influence a fund's ability to achieve higher returns.

Recurring Revenue

The survey also asked each respondent to characterize the company's recurring revenue at the time of acquisition as "High" (>60% of the revenue is contractual for periods of longer than 12 months), "Medium" (>30% of the revenue is contractual for periods longer than 12 months OR more than 60% of the revenue is "repeat" purchases, albeit not contractual), or "Low" (neither medium nor high). There did seem to be a strong correlation between performance and recurring revenue, with upwards of 70 percent of the funds that demonstrated a 2x-10x ROI having reported high recurring revenues. (See **Exhibit 12**).

CONCLUSION

In terms of the number of search funds raised, 2013 was a record year. Much of this was due to greater visibility and awareness, both among prospective searchers and investors, of the search fund model. It is likely that the next several years will continue to see an increase of activity in

---

[21] This calculation only includes those searchers who had acquired a company prior to December 31, 2012.

[22] Operating leverage is defined as the marginal contribution, or the additional EBITDA generated for every additional dollar of revenue.

the search fund landscape (acquisitions, failed searches, company closures, and successful exits) as the funds that were raised over the past few years continue to mature and the model continues to become more prevalent in the entrepreneurial community. These events and other changes within the search fund universe will be reported through future editions of this study.

Exhibit 1
Profiles of Search Fund Principals

Time Period	Pre-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013
Age at Start of Search:							
Minimum	26	28	28	27	26	25	24
Median	30	31	32	32	30	30	30
Maximum	35	60	47	50	51	51	46
Under-30	N/A	12%	30%	33%	35%	39%	49%
30-35	N/A	65%	53%	47%	40%	31%	36%
36-40	N/A	12%	10%	10%	16%	14%	11%
Over-40	N/A	12%	7%	10%	9%	17%	4%
Number of Post-MBA Years before Search Fund:							
Minimum	N/A	0	0	0	0	0	-1
Median	N/A	2	1	1	4	2	0
Maximum	N/A	10	18	16	20	17	10
No MBA	N/A	N/A	0%	13%	16%	14%	20%
<1 year post-MBA	N/A	N/A	47%	33%	18%	42%	49%
1-3 years post-MBA	N/A	N/A	17%	27%	20%	17%	20%
4-7 years post-MBA	N/A	N/A	23%	20%	22%	17%	7%
>8 years post-MBA	N/A	N/A	13%	7%	24%	11%	4%
Gender:							
Male	96%	100%	100%	100%	100%	94%	100%
Female	4%	0%	0%	0%	0%	6%	0%

Source: Case writer surveys, data from previous search fund studies.

Exhibit 2
Search Fund Principals' Professional Backgrounds

Professional Background:	Pre-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013
Management Consulting	26%	23%	10%	26%	7%	14%	16%
Investment Banking / Finance	23%	10%	16%	27%	20%	11%	22%
Sales	12%	1%	3%	7%	4%	6%	4%
Venture Capital	8%	3%	5%	1%	0%	0%	2%
Line/General Management	5%	27%	7%	15%	11%	19%	2%
Marketing	5%	2%	4%	0%	4%	0%	0%
Law	4%	0%	2%	0%	0%	0%	7%
Operations	4%	7%	16%	1%	7%	8%	7%
Entrepreneur	2%	13%	8%	7%	13%	6%	4%
Accounting	2%	0%	3%	0%	0%	0%	0%
Engineering	2%	0%	5%	2%	0%	6%	2%
Military	2%	1%	8%	1%	0%	0%	2%
Insurance	2%	1%	0%	2%	0%	0%	0%
Private Equity	1%	5%	11%	4%	27%	28%	31%
Others	0%	7%	2%	8%	7%	3%	0%

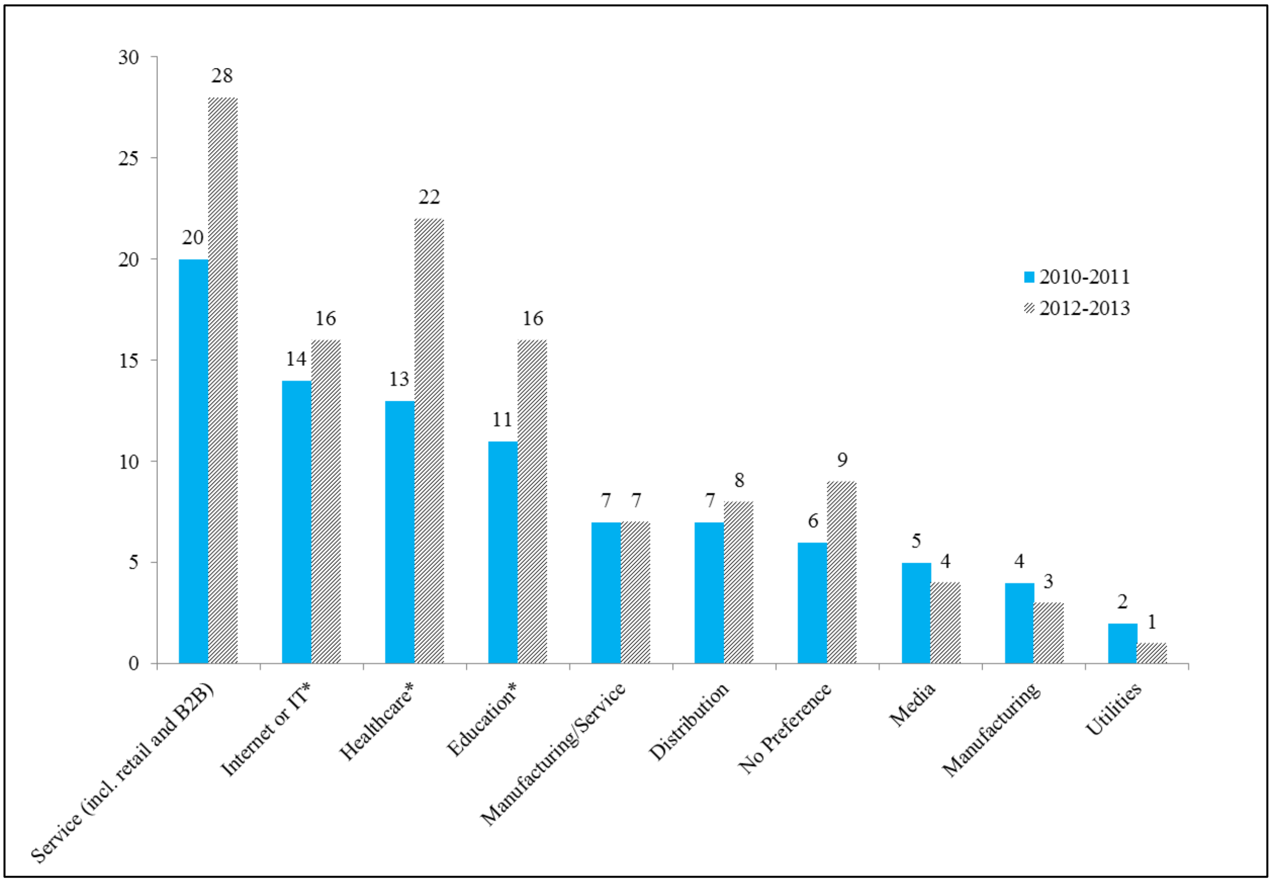
Source: Case writer surveys, data from previous search fund studies.

Exhibit 3A
Comparison of Search Fund Metrics

Time Period	Pre-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013
Number of Principals:							
Single	68%	41%	42%	75%	36%	62%	59%
Partners	32%	59%	58%	25%	64%	38%	41%
Amount of Initial Capital Raised:							
Minimum	$40,000	$125,000	$150,000	$200,000	$200,000	$140,000	$125,000
Median	$290,000	$350,000	$395,000	$385,000	$450,000	$446,250	$426,000
Maximum	$1,000,000	N/A	$750,000	$550,000	$750,000	$850,000	$650,000
Amount of Initial Capital Raised per Principal:							
Minimum	N/A	N/A	$106,250	$175,000	$143,750	$140,000	$125,000
Median	N/A	N/A	$276,250	$350,000	$262,500	$302,500	$355,000
Maximum	N/A	N/A	$750,000	$540,000	$450,000	$575,000	$560,000
Number of Search Fund Investors:							
Minimum	2	1	3	10	5	8	2
Median	12	13	12	14	15	18	16
Maximum	25	20	24	23	28	26	30
Number of Months Fundraising:							
Minimum	N/A	1.0	2.0	0.8	0.0	1.5	0.8
Median	N/A	4.5	5.0	3.0	4.0	3.8	4.1
Maximum	N/A	9.0	12.0	10.0	20.0	28.4	8.6
Targeted Industries:							
Service (incl. retail and B2B)	62%	33%	35%	69%	74%	New chart for 2010-2013 follows	
Manufacturing	19%	30%	25%	14%	0%		
Manufacturing/ Service	12%	0%	5%	0%	5%		
Distribution	8%	5%	3%	0%	0%		
Media	0%	13%	0%	0%	0%		
Utilities	0%	6%	0%	0%	0%		
No Preference	0%	13%	32%	17%	21%		

Source: Case writer surveys, data from previous search fund studies.

Exhibit 3B
Targeted Industries by Frequency (2010-2013)*



* In the 2011 and 2013 studies, principals were asked to choose all industries they targeted, rather than choosing only one. The above units represent the frequency of each response across all search funds newly surveyed for this study. Additionally, due to their increasing prevalence as search fund targets, Internet/IT, Education and Health care have been added to the 2011 and 2013 studies.

Source: Case writer surveys.

Exhibit 4
Median Statistics for Recent Search Fund Acquisitions

Median	Acquisitions 2006-2007	Acquisitions 2008-2009	Acquisitions 2010-2011	Acquisitions 2012-2013
Length of Search (months)	19	14	18	19
Purchase Price	$9.4 M	$6.5 M	$7.9 M	$11.6 M
Company Revenues at Purchase	$9.1 M	$5.3 M	$6.0 M	$6.2 M
Company EBITDA at Purchase	$2.0 M	$1.3 M	$1.5 M	$2.0 M
EBITDA Margin	18.2%	20.5%	23.5%	29.9%
EBITDA growth rate at purchase	16.5%	9.3%	11.9%	18.0%
Purchase Price / EBITDA	5.2x	4.9x	5.2x	5.6x
Purchase Price / Revenue	0.9x	1.5x	1.3x	1.6x
Company Employees at Purchase	60	38	38	21

Source: Case writer surveys, data from previous search fund studies.

Exhibit 5
Selected Statistics for All Search Fund Acquisitions

Total Number of Months From Start of Search to Deal Close	All Acquisitions
Minimum	3
Median	19
Maximum	87
<11 months	13%
11-20 months	40%
21-30 months	26%
31+ months	21%

Purchase Price Statistics	All Acquisitions
Minimum	$0.6 M
Median	$9.2 M
Maximum	$71.0 M
<$4 M	14%
$4 M to $8 M	28%
$8 M to $12 M	23%
>$12 M	35%

Additional Statistics for All Search Fund Acquisitions	Minimum	Median	Maximum
Company Revenues at Purchase	$0.4 M	$7.4 M	$103.0 M
Company EBITDA at Purchase	-$1.6 M	$1.7 M	$12.0 M
Company EBITDA Margin at Purchase	-18.5%	22.6%	60.0%
Purchase Price / EBITDA	NM	5.1x	18.0x
Purchase Price / Revenue	0.3x	1.1x	6.7x
EBITDA Growth Rate at Purchase	-20.0%	15.0%	300.0%
Company Employees at Purchase	4	45	740

Source: Case writer surveys, data from previous search fund studies.

Exhibit 6
ROIs to Original Search Fund Investors, Including Search and Acquisition Rounds[23]

Study Year	2009	2011	2013
Individual ROIs			
Minimum	0.0 x	0.0 x	0.0 x
25th Percentile	0.0 x	0.0 x	0.0 x
Median	0.5 x	0.8 x	1.0 x
75th Percentile	1.9 x	2.1 x	3.1 x
Maximum	>200 x	>200 x	>200 x
Distribution of individual ROIs:			
0.0 x (total loss)	30%	29%	25%
< 1.0 x (partial loss)	29%	27%	26%
Exactly 1 x (return of capital)	3%	2%	2%
1.0 x - 1.5 x	10%	10%	15%
1.5 x - 2.0 x	3%	6%	3%
2.0 x - 5.0 x	13%	14%	17%
5.0 x - 10.0 x	5%	6%	8%
>10.0 x	7%	6%	5%
Aggregate blended ROI:	13.5 x	11.1 x	10.0 x

Source: Case writer surveys, data from previous search fund studies.

[23] ROI data was first collected in the 2009 study, with ROI calculated on a cash flow basis, including both debt and equity that was invested as initial search capital and as part of the acquisition. In all calculations of returns, we assumed that all debt was repaid, that the searchers' share of equity had fully vested and that funds were distributed in proportion to the investors' share of equity and subordinated debt. All returns were calculated on a pre-tax basis.

Exhibit 7
Search Fund IRRs[24] to Original Investors

Study Year	2001	2003	2005	2007	2009	2011	2013
Individual IRRs:							
Minimum	NM	NM	NM	NM	NM	NM	NM
25th Percentile		NM	NM	NM	NM	NM	NM
Median	18%	NM	NM	NM	NM	NM	NM
75th Percentile		22%	25%	25%	11%	26%	26%
Maximum	98%	85%	215%	189%	189%	189%	189%
Distribution of individual IRRs:							
Not meaningful (NM)			53%	49%	60%	57%	52%
0% to 25%			22%	25%	19%	17%	22%
26% to 50%			14%	18%	14%	18%	16%
51% to 75%			4%	2%	3%	4%	7%
76% to 100%			2%	2%	2%	1%	1%
>100%			4%	5%	2%	2%	2%
Aggregate blended IRR	**38%**	**32%**	**37%**	**52%**	**37%**	**34%**	**35%**

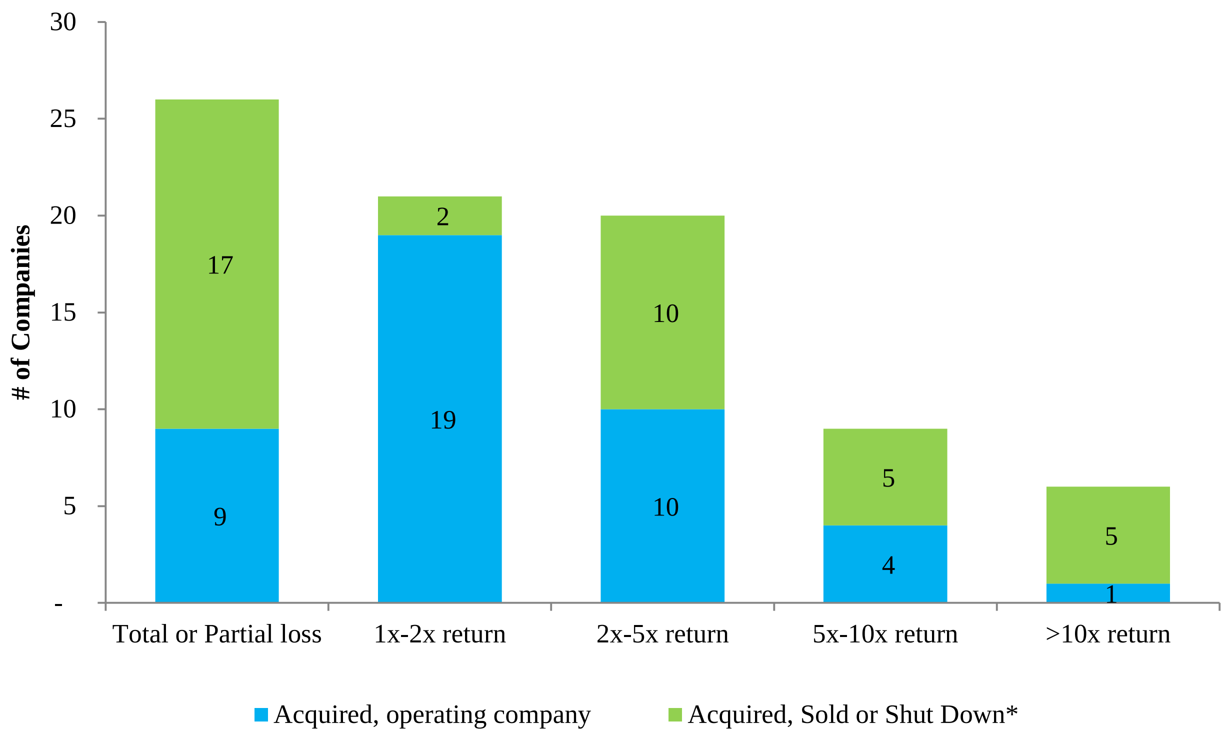
* Not meaningful (NM) is reported in situations of partial or complete loss of capital over a period of years where the IRR metric is not useful

Note: IRR figures are reported in aggregate for all search funds that had acquired a company (including those that were operating, had exited, or were shut down) or had concluded without making an acquisition. Funds that had acquired a company less than one year prior to the end of the respective study period were not included, nor were funds still searching for an acquisition.

Source: Case writer surveys, data from previous search fund studies.

[24] IRRs were calculated on a cash flow basis, including both debt and equity that was invested as initial search capital and as part of the acquisition. As in prior years' studies, the timing of the cash flows for each search fund was adjusted to a common start date. In all calculations of returns, we assumed that all debt was repaid, that the searchers' share of equity had fully vested and that funds were distributed in proportion to the investors' share of equity and subordinated debt. All returns were calculated on a pre-tax basis.

Exhibit 8
Distribution of Search Funds That Have Acquired a Company, by ROI (n=82)[25]

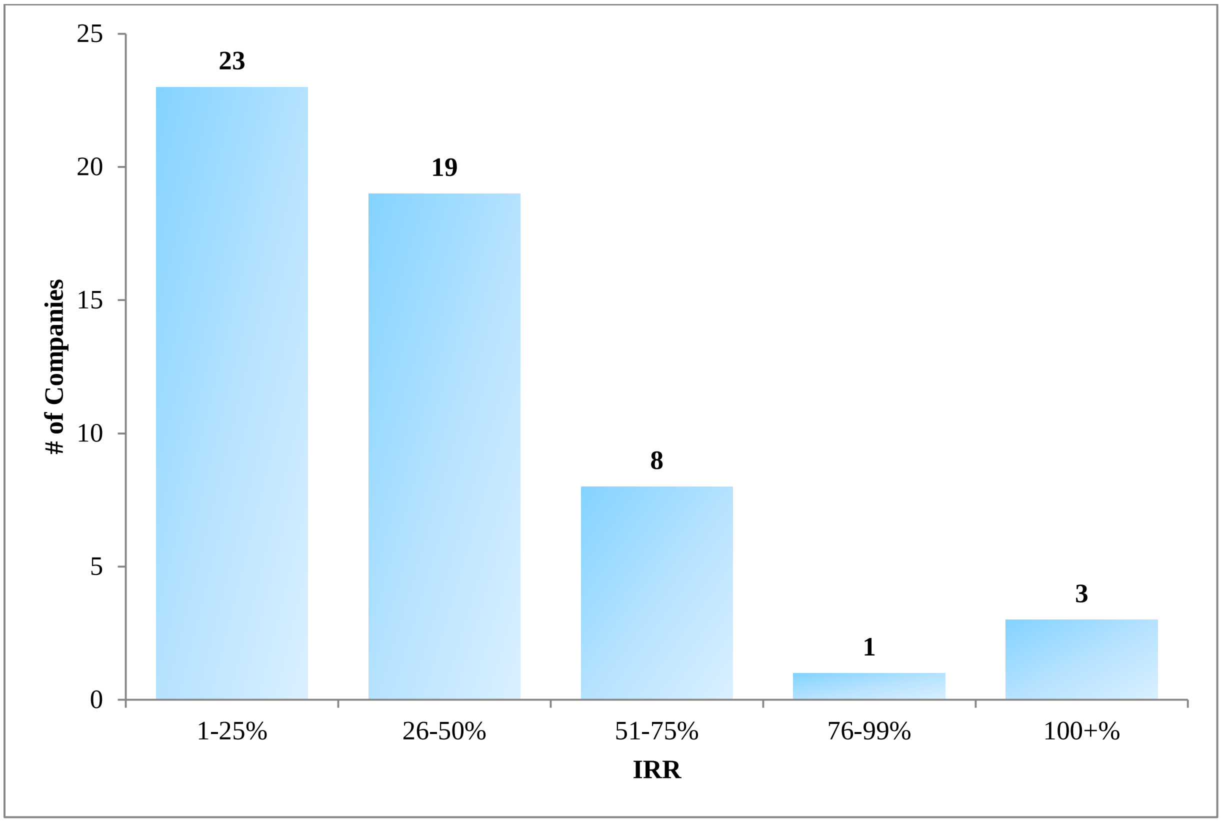


*Acquired, Shut Down refers to those companies that were shut down and provided <1x return to investors.

Source: Case writer surveys, data from previous search fund studies.

[25] Of the 99 companies acquired as of December 31, 2013, eight funds had been operating for less than one year and nine funds had reported insufficient data. Thus, return data could be calculated for 82 funds.

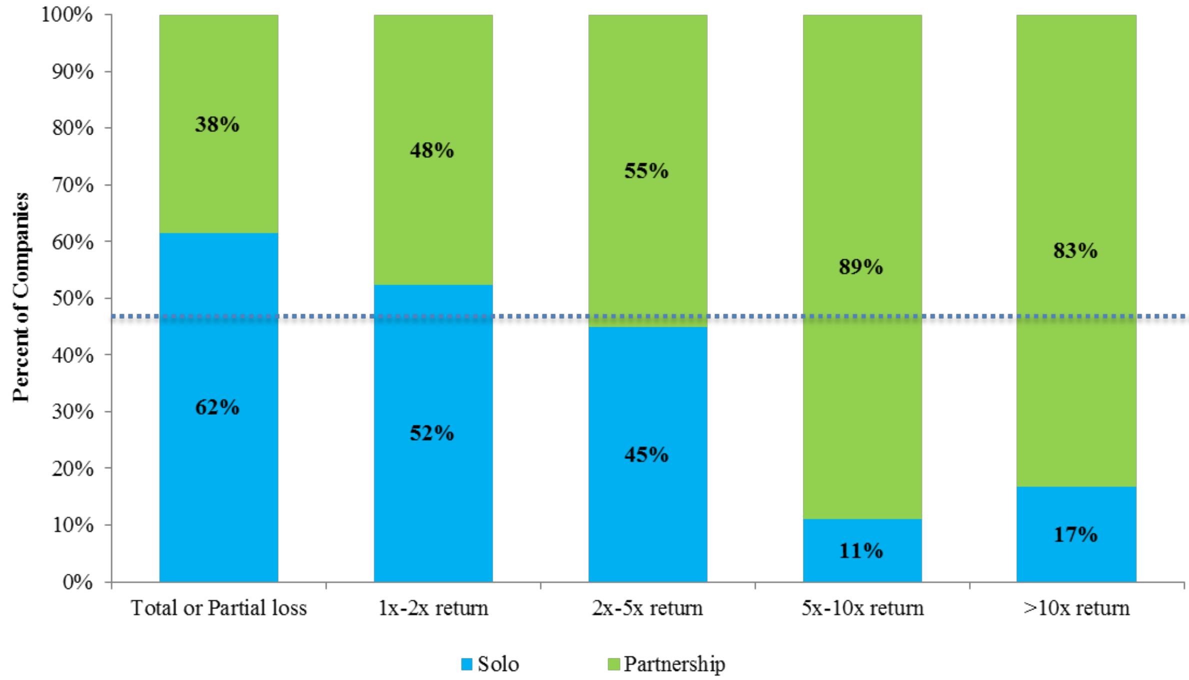
Exhibit 9
Distribution of Search Funds by Positive IRRs (n=54)[26]



Source: Case writer surveys, data from previous search fund studies.

[26] Of the 82 search funds for which there is meaningful return data, 54 had positive IRRs.

Exhibit 10
Comparison of Returns by Solo vs. Partnership Status among Funds that had Acquired a Company (n=82)

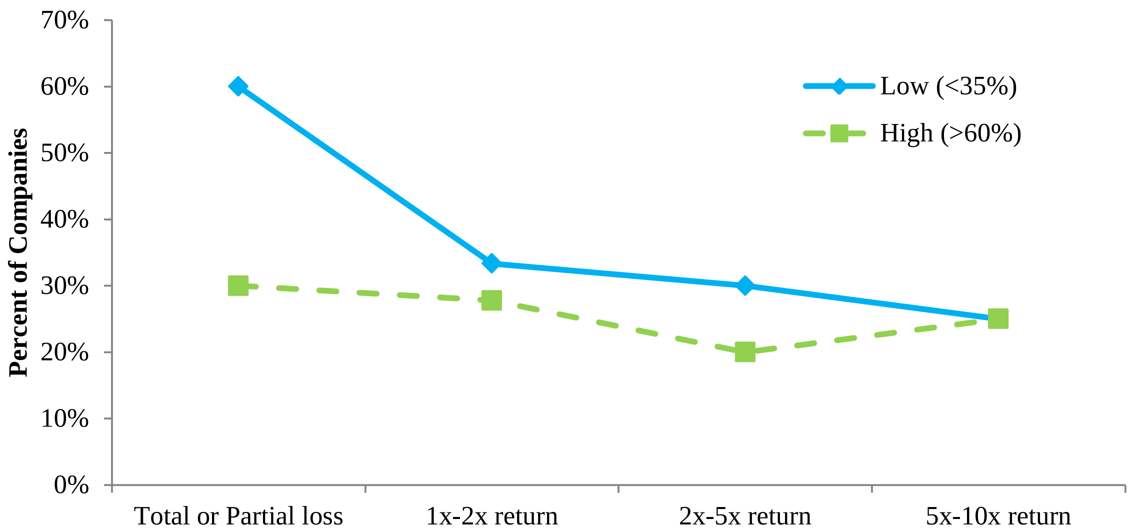


Note: The dotted line indicates that 46% of all funds that acquired a company were led by a solo searcher.

Note: The data reflected is for all search funds that had acquired a company (including those that were operating, had exited or were shut down) at least one year prior to December 31, 2013. Funds that were searching for an acquisition or had concluded as an unsuccessful search as of December 31, 2013 were not included in this analysis.

Source: Case writer surveys.

Exhibit 11
Operating Leverage at Time of Acquisition, by Fund ROI * (n=42)

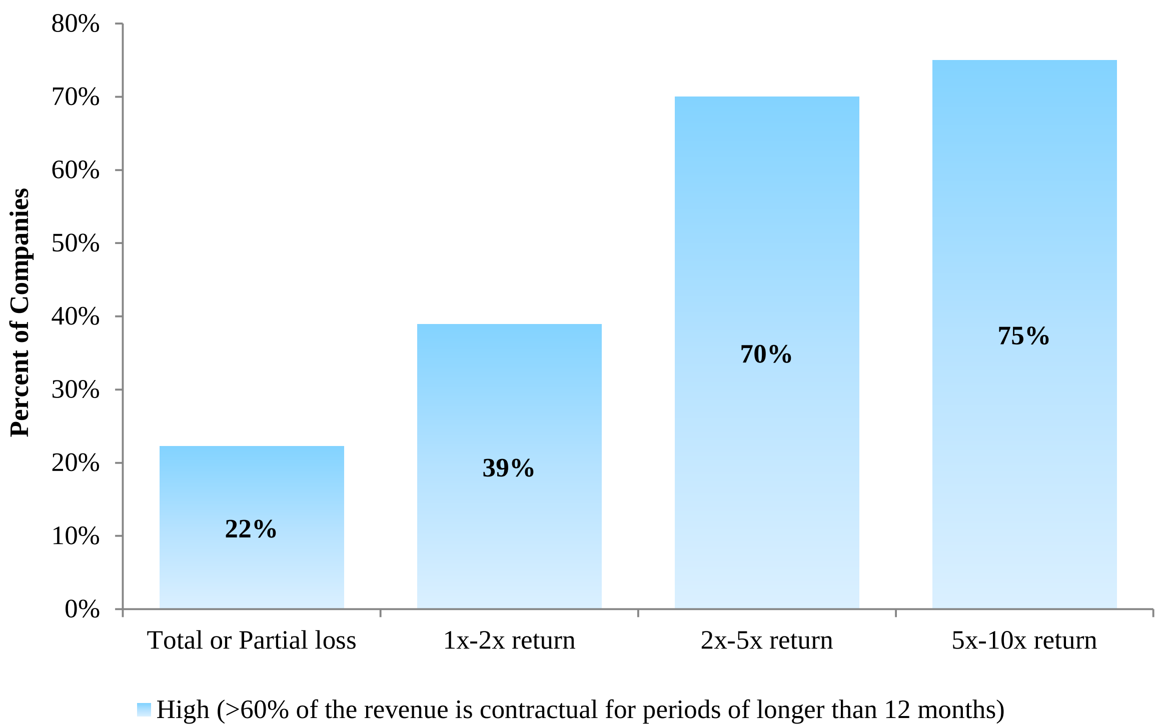


*Data reflects all companies still in operation as of December 31, 2013.

Note: One company had an ROI above 10x and was removed from the chart so as not to skew the data.

Source: Case writer surveys.

Exhibit 12
Recurring Revenue at Time of Acquisition, by Fund ROI* (n=41)



*Data reflects all companies still in operation as of December 31, 2013.

Note: One company had an ROI above 10x and was removed from the chart so as not to skew the data.

Source: Case writer surveys.