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SEARCH FUNDS—2003: WHAT HAS CHANGED SINCE 2001?

EXECUTIVE SUMMARY

Since 1996, the Center for Entrepreneurial Studies ("CES") at Stanford Graduate School of Business has conducted a series of studies on the performance of search funds. This study, as well as its predecessors in 1996, 1998, and 2001, portrays the aggregate characteristics of search funds and their principals, and evaluates the investment returns generated by all *first-time* search funds of which the CES was aware to their *original investors*. Together, these studies reflect changes in search fund entrepreneurs and fund performance over time.

As of June 2003, we collected information on a total of 52 first-time search funds that agreed to participate in this study. Among them, one search fund was still in the process of fund-raising. Of the 51 completed search funds, thirteen were still looking for a company to buy, 20 had made an acquisition and the acquired firms were still being operated by the search fund principals, and the remaining 18 had either failed to make an acquisition, sold, or closed down their acquired firms. The investment return analysis portion of this study includes 36 search funds that had either terminated or had been in operation for at least one year. Using conservative assumptions, the blended pre-tax internal rates of return (IRRs) for individuals investing an equal amount in each of those funds was 33.4% or 34.7%, depending on the method used to calculate the terminal values. See Exhibits 1-4 for additional findings of interest related to the sample of first-time search funds evaluated in this study.

SEARCH FUND PROCESS

The search fund concept originated in 1984 and has become increasingly well known among business schools and private investors. A search fund is an investment vehicle in which investors provide financial support to an entrepreneur, or a team of entrepreneurs, while he/she

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Research Associate Mu Y. Li prepared this case under the supervision of Professor Irv Grousbeck 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 search fund entrepreneurs who elected to participate in this study. Additional thanks goes to Doug Wells (Stanford MBA '95), Josh Hannah (Stanford MBA '98), Chris Flanagan (Stanford MBA '96) for pioneering and updating earlier versions of this study.

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or the team endeavors to identify and acquire a privately held company. The search fund process involves more than simply making an investment—it consists of up to four stages: fund-raising, search and acquisition, operation, and eventual sale or other event providing shareholder liquidity. For specific metrics of these stages, please refer to Exhibits 1-4.

Stage One: Raising Initial Capital

Search funds are usually structured as limited liability companies. The typical profile of a first-time "search funder" was, until this study, a relatively new MBA graduate who did not possess much, if any, general management or operating experience. However, as will be illustrated shortly, search funds formed since 2001 seem to be headed by principals with more operating experience.

The search funder begins by writing a business plan that describes what he or she hopes to acquire in general terms, emphasizing the acquisition process and criteria. The document is used to assemble a group of private investors who will provide advice and assistance, as well as contribute the initial capital to pay the search funder a salary and cover administrative expenses during the search process.[1] Typically, this group consists of ten or more investors who purchase one or several units of the initial capital of the search fund, at about $20,000 to $25,000 per unit. On average, search funders raise $300,000 to $400,000 in this initial round in about four to five months, although some can take as many as nine months (see Exhibit 2).

Stage Two: Identifying and Making an Acquisition

Compared to raising initial capital, searching for an acquisition target and completing the transaction is more time-consuming—a process that can easily take over a year. The length of the second stage is also more varied from fund to fund. The general economic environment, industry characteristics, sellers' willingness to sell, and regulatory issues are among the factors that can prolong or derail the acquisition process. Depending on the complexity of the deal, it can take six months or more from the time the search funder signs the letter of intent until he or she closes the deal.

In order to mitigate operating and investment risk, search funders generally target industries that are not subject to rapid technology change, are fairly easy for them to understand, and are in fragmented geographical or product market. Presumably, industries fragmented across one or more dimensions offer enhanced opportunities for growth, either through acquisition or product or market extension. Within the preferred industries, companies are targeted based on their sustainable market position, their history of positive, stable cash flows, and opportunities for improvement and growth. Search funders and their investors tend to prefer healthy, profitable companies with a proven second-tier management team to turn-around situations. By adhering to such a disciplined list of acquisition guidelines, search fund investors have been able to greatly reduce the risks typically associated with investing in individuals possessing little operating experience.

When a target is identified, each search fund investor is given the pro-rata right of first refusal on the capital required to fund the acquisition. Commonly, the search fund investment is stepped up by a certain percentage (e.g. 50%) in the acquisition round, irrespective of whether the investor

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[1] There are rare cases where search funders seek full-time or part-time employment for financial support while searching.

decides to participate in the transaction. In addition to the follow-on equity investment from the original team of investors, the funds for acquisition 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 added to the capital structure.

If the target is a sustainable business with only modest growth, oftentimes it will sell for a multiple equivalent to 40% to 100% of revenues. Purchase prices generally range from $5 million to $20 million, with the equity portion of the completed transaction between $1 million and $7 million, or between 10 % and 75% of the total purchase price. The acquisition is expected to be at fair market value. Ideally, the acquired company would provide adequate cash flow and be without significant debt service, so that the short-term survival of the company does not rely on immediate, significant improvement in company performance by the search funders.

If the initial capital is exhausted before a target can be identified, search funders may choose either to close the fund or to solicit additional funding to continue the search. For the purpose of this study, the "initial capital" or "initial investment" includes all investments made prior to acquisition or liquidation.

Stage Three: Operation and Value Creation

After completing the acquisition, search funders will recruit a board of directors for the company, which often includes substantial representation from the initial investors. In the first twelve to eighteen months after the acquisition, search funders typically make few radical changes to the existing business, opting instead to gain management familiarity.[2] After becoming comfortable operating the business, search funders then begin to make changes as they see fit.

After a company is purchased, search funders can create value through one or more of the following ways: revenue growth, improvements in operating efficiency, appropriate use of leverage, or expansion. Typically, these means of creating value are not mutually exclusive; ideally, more than one will apply to a search fund investment. Revenue growth may result from internal growth initiatives, pricing improvements or scale attained from acquiring like businesses. Original search fund investors may be invited to participate in subsequent acquisitions and these amounts are included in computing the rates of return in this study.[3] After a growth plan has been executed, the resulting company can be expected to be much more valuable, even when sold at the same multiple for which it was purchased. Improvements in operating efficiency can obviously make a business more profitable. Purchasing a company with leverage can enable the equity in the business to grow as debt is paid off successfully.

RESEARCH METHODOLOGY AND POTENTIAL BIASES

In May 2003, the CES conducted a survey of search funds included in the 2001 study and new search funds that it had become aware of since June 2001. For each of the search funds, we collected information on demographic characteristics of search funders as well as key metrics of fund-raising, acquisition, company operations, and liquidity events. The response rate for search

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[2] And because of this, the series of search fund studies excludes companies with fewer than twelve months of operation from the computation of IRRs.

[3] Please note that IRRs thus calculated do not represent the rates of return to investors who did not contribute the *initial* search fund capital.

funds identified after the 2001 study was 100%. For the search funds included in the 2001 study, the response rate was close to 100%; for the few cases where the company or search funders could no longer be contacted, the CES sought to update the relevant information from such secondary sources as search fund investors. Therefore, the extent of "*selection bias*," where the willingness to participate and disclose information by the respondents may skew the true performance of *all* search funds, is limited to the selection bias of the 2001 study, where 46 out of a universe of 62 search funds elected to participate. The absence of additional selection bias in this current study provides the basis for inter-temporal comparison of IRRs across 2001 and 2003.

When interpreting IRRs computed in this study, it is important to note the following additions to the group of companies from which we derived the 2001 IRRs. First of all, at the time of the 2001 study, three funds were still actively searching. Their search outcomes and financial performances, now available, are included here. Furthermore, the 2001 study excluded two funds that had been managing their companies for less than a year, and they are also included. In addition, the 2001 study excluded one fund because at the time it was pursuing a strategy of industry roll-up. However, the company subsequently decided to opt for a more conventional search fund strategy and its performance is thus included. Finally, IRR calculations include search funds that closed down (failed to buy a company) after the 2001 study.

In this study, IRRs are calculated on a cash flow basis, with cash infusions or distributions treated as occurring on the first day of the month (when month and year were available) or the first day of the year (when only the year was available). For funds that had either sold or liquidated their companies or closed their funds down without having purchased a company, the terminal value was straightforward. In the cases of companies still under search fund management, we made several assumptions in order to determine investor returns. If a liquidity event had recently taken place at a company, we used the value of the event to determine a current valuation. Otherwise, we used two methodologies. The first assumed that companies were sold at the purchase multiple of EBITDA paid at acquisition, and the second assumed that companies were sold at a "current market multiple" of EBITDA for their industry, minus a 30% private company minority interest discount.[4] The 30% discount, although arbitrary, seems conservatively realistic for the purposes of this study. It is also used for consistency with the 2001 study. In all cases, the study assumes that all debt was repaid and that funds were disbursed to the original search fund investors in proportion to the equity and/or subordinated debt owned by them. All returns are calculated on a pre-tax basis to investors.

Finally, to adjust for variations in deal size, we computed a separate set of IRRs under the assumption that a *representative* investor invested equal amounts in each search fund—$20,000 as the initial capital and $100,000 for acquisition. The difference between the two amounts reflects the pattern that investment in the acquisition round was usually several times the initial search fund investment. In computing the aggregate measures of search fund IRRs, in addition to standardizing investment size, we assumed that all search funds started on the same date, and uniformly adjusted the timing of all subsequent cash flow events accordingly. In other words, if one fund finalized its acquisition in 12 months and another in 24 months, those were the periods of time used although both were assumed to have started on the same date. Standardizing deal sizes had the effect of slightly augmenting the blended IRR (see Exhibit 4).

[4] EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization

Like its predecessors, this study includes only first-time search funds, thus excluding "serial search funders" whose track record may imply different fund-raising techniques, management and operational capabilities, and perceptions by investors and sellers. Since the focus of the CES search fund series is to understand the returns from investing with a new entrepreneur in an industry in which he or she has limited prior experience, we exclude the non first-time funds from this study. For consistency, this study also maintains the tradition of excluding search funds that later became start-ups.

Lastly, the statistics of this report and its predecessors are derived from a relatively small sample. As is common to all small samples, the statistical significance of aggregate metrics is limited and is subject to the presence of a few out-liers. Entrepreneurs and investors interested in search funds are encouraged to pursue more intensive investigations.

CHANGES SINCE 2001

The global economic environment underwent a significant transition between 2001 and 2003. Particularly in the United States, where the majority of search funds and their acquired companies were located, the 2001-2002 recession dealt a severe blow to many sectors of the economy, especially high-technology. How have the changes in the business environment affected the emergence of new search funds and the performance of existing search funds? There are many factors that could either inhibit or promote the creation and success of search funds: the willingness of recent business school graduates to pursue entrepreneurial careers, sellers' attitudes, investors' appetite for risky ventures, availability and cost of professional services and facilities, ease of accessing bank credit, level and volatility of customer demand, and intensity of competition, to name just a few.

To render a tangible picture of the aggregate effects of these factors, this study presents findings in the following four categories: search funder profile, search fund characteristics, acquisitions, and search fund company performance. The figures for the "Pre-2001" columns in the corresponding exhibits may differ from those previously reported due to the addition of one pre-2001 search fund that was not known to the CES at the time of the 2001 study.

Search Funder Profile

Exhibit 1 demonstrates how the profiles of search funders varied between those that were established before and after June 2001, the time of the last study. The most striking difference in search funders' backgrounds is the increased incidence of ex-managers and ex-entrepreneurs in the pool of search funders, from a combined 8% in 2001 to 40% in 2003. The proportion of investment bankers also fell significantly from 23% to 10%.

Statistics on age and number of post-MBA years seem to suggest that in 2003, most search funders still conformed to the typical profile of a relatively young, recent business school graduate. However, the presence of senior search funders in 2003 also indicates that a small number of highly experienced entrepreneurs/executives have ventured into the world of search funds, in most cases as partners of younger, less experienced search funders. This pattern of partnership is consistent with the assumption that search funders sought the operational expertise and credibility of their experienced partners to facilitate fund-raising, acquisition, and company management. To validate this hypothesis would require more in-depth study of individual funds, which is beyond the scope of this study.

Finally, Exhibit 1 reflects the continued lack of women search funders in 2003.

Key Search Fund Metrics: Fund-Raising and Search

How are the post-2001 search funds different from those established prior to 2001? Several distinctions stand out. First, about 59% of post-2001 search funds were headed by more than one principal, versus 32% of pre-2001 funds (see Exhibit 2).[5]

The second difference, which is rather surprising given the economic downturn, is that the post-2001 funds tended to have raised more initial capital than their pre-2001 counterparts. This could be a reflection of the higher anticipated cost of search (and thus the need for capital), or investors' greater recognition and interest in search funds despite the general economic environment. Without further data, it is difficult to tease out which effect dominated the changes in fund-raising.

Post-2001 search funders spent four to five months, on average, raising their necessary capital. Although the corresponding figures were not collected for the 2001 survey, there seems to have be little variation in the time spent on initial fund-raising.

As of April 2003, sixteen post-2001 funds had spent on average 11.7 months searching for an appropriate acquisition target (the median is 8.5 months, see Exhibit 2). When comparing these figures with those from the 2001 study, it should be noted that most of these funds intended to continue their search beyond April 2003, thereby increasing the time taken to either complete an acquisition or close down. Of the sixteen post-2001 funds, three had purchased a company by June 2003 and all of them took more than twelve months to complete the search and close a transaction. The corresponding figures for 2001 are for funds that had terminated their search. They differ slightly from those reported in the 2001 study because four funds (one not known to the CES plus three still actively searching at that time) are included in this study.

For the 2003 survey, we collected information on targeted industries from the post-2001 search funds, the results of which are tabulated in Exhibit 2. Viewed in conjunction with the sectoral distribution of *actual* acquisitions made by pre-2001 search funds, services and manufacturing continued to be the focus of search funds, although interest in manufacturing companies rose relatively in 2003. However, until the post-2001 funds complete their acquisitions, such a comparison would continue to be preliminary.

The 2003 survey also asked the post-2001 search funders to identify the geographic regions they targeted for their search, a piece of information that was not previously collected in 2001. Seven of these sixteen funds had little geographic preference, and the remaining funds focused on rather broadly defined regions as the mid-Atlantic, the Northeast, or the West Coast.

Key Search Fund Company Metrics: Acquisition and Financial Performance

Exhibit 3 lists a number of key metrics regarding the acquisitions made by search funds in our sample. A small number of these funds elected to disclose only partial information about their transactions. Because the sample consists mainly of firms that had already completed their

[5] However, no post-2001 funds had more than two partners.

acquisitions by 2001, the tabulated figures are consistent with the 2001 study. The only notable difference is the slightly higher *median* profit margin (at purchase) of 16.5% vs. the previous 14.6%.

How do returns to original search fund investors in 2003 differ from those in 2001? First of all, individual IRRs varied widely, ranging from -100% (implying a complete loss of investor capital) to over 80% per year for a highly successful company or companies (see Exhibit 4). The distribution of IRRs is skewed with about 39% of the funds from which we had sufficient data to calculate IRRs resulting in complete or near complete loss of investor capital. Over half of these situations involved the failure of search funders to identify or execute an acquisition. The remaining returns distribute fairly evenly over the -50% to 50% range, with few attaining higher than 50% IRRs. However, search fund investments, although relatively risky if undiversified, may not be as unattractive as the high "failure" rate suggests. Because the initial capital raised by search funds is generally modest compared to the acquisition rounds, to accurately gauge the quality of search funds as an investment opportunity in general, we need to standardize the funds to adjust for deal size and timing differences. Adopting the methodology described in the previous section, we calculated the blended IRR for a person investing an equal amount in each of the 36 "first-time" search funds at the same start date to be (also see Exhibit 4):

- 33.4% if the terminal value was based on the original purchase price/EBITDA multiple
- 34.7% if the terminal value was based on a 30% discount to the current estimated multiple

Consistent with the hypothesis that the business environment had deteriorated as a result of the 2001-2002 recession, the aggregate IRR measures thus calculated are lower, albeit slightly, than the corresponding 36.8% and 35.9% reported in the 2001 study.

Exhibit 1
Comparison of Search Funder Profile: Pre-2001 vs. Post-2001

Categories	**Pre-2001** [1]	**Post-2001** [2]
Professional Background:		
Management Consulting	26%	23%
Investment Banking	23%	10%
Sales	12%	1%
Venture Capital	8%	3%
Line/General Management	5%	27%
Marketing	5%	2%
Law	4%	0%
Operations	4%	7%
Entrepreneur	2%	13%
Accounting	2%	0%
Engineering	2%	0%
Military	2%	1%
Insurance	2%	1%
Private Equity	1%	5%
Others [3]	0%	7%
Age at Start of Search:		
Minimum	26	28
Median	30	31
Maximum	35	60
Gender:		
Male	96%	100%
Female	4%	0%
Number of Post-MBA Years before Search Fund: [4]		
Minimum		0
Median		2
Maximum		10

Notes:
1. Includes one pre-2001 search fund not known to the CES at the time of the 2001 study.
2. From all funds formed after June 2001, including one that was still actively raising funds as of 6/2003.
3. Includes teaching, professional sailing, geology, government, and case-writing for business school.
4. For search funders with MBA only; similar data were not collected for 2001.

Exhibit 2
Aggregate Metrics of Search Funds: Pre-2001 vs. Post-2001

Categories	**Pre-2001** [1]	**Post-2001**
Number of Principals: [2]		
Single	68%	41%
Partners	32%	59%
Amount of Initial Capital Raised:		
Minimum	$40,000	$125,000
Median	$290,000	$350,000
Maximum	$1,000,000	$10,000,000
Number of Search Fund Investors:		
Minimum	2	1
Median	12	12.5
Maximum	25	20
Number of Months Fund-Raising: [3]		
Minimum		1
Median		4.5
Maximum		9
Number of Months Searching:		**(as of 4/2003)**
Minimum	5	0
Median	18	8.5
Maximum	54	18
Targeted Industries: [4]		
Service	50%	30%
Manufacturing	19%	30%
Manufacturing/Service Combination	12%	0%
Distribution	8%	5%
Retail/Service Combination	8%	3%
Retail	4%	0%
Media		13%
Utilities		6%
No Preference		13%

Notes:
1. Includes one pre-2001 search fund not known to the CES at the time of the 2001 study.
2. The 2003 figures were computed from all funds formed after June 2001, including one that was still actively raising funds as of 6/2003. All other categories exclude the actively fund-raising entity.
3. Similar data were not collected for 2001.
4. The 2001 column refers to the sectoral distribution of **acquired** search fund companies, while the 2003 column refers to the distribution of industries **targeted** by sixteen post-2001 search funds, excluding the actively fund-raising entity.

Exhibit 3
Summary Statistics for All Search Fund Acquisitions [1]

	Minimum	Median	Maximum
Purchase Price	$ 0.56 M	$ 5.4 M	$ 30.6 M
Search Fund Investor Capital Raised for Company Purchase	$ 0.0 M	$ 2.0 M	$ 7.0 M
Company Revenues at Purchase	$ 0.37 M	$ 7.1M	$ 43 M
Company EBITDA at Purchase	$ (1.6) M	$ 1.0 M	$ 4.5 M
Company EBITDA Margin at Purchase	(3.7)%	16.5%	42.1%
Purchase Price / Revenue Multiple	0.3x	0.9x	3.4x
Purchase Price / EBITDA Multiple [2]	2.3x	5.3x	12.5x
Company Employees at Purchase	12	80	740

Notes:
1. Summary statistics are based on financial information provided by search funders themselves. In many cases, this financial information has not been audited. Information regarding a small number of acquisitions was incomplete.
2. The minimum is calculated by excluding all negative EBITDAs.

Exhibit 4
Search Fund IRRs to Original Investors [1]

	2001 Study Figures	2003
Individual IRRs:		
Minimum	(100)% [2]	(100)%
25th Percentile		(100)%
Median	17.6%	(23.7)%
75th Percentile		21.9%
Maximum	98.3%	84.8%
Aggregate IRRs with Same Starting Dates:		
Actual Cash Flows with Original EBITDA Multiples	37.6%	31.7%
Normalized Cash Flows with Original EBITDA Multiples	36.8%	33.4%
Actual Cash Flows with Estimated Current Multiples minus 30% Discount [3]	35.7%	33.0%
Normalized Cash Flows with Estimated Current Multiples minus 30% Discount [3]	35.9%	34.7%

Notes:
1. Summary statistics are based on financial information provided by 36 funds that were either closed, or have sold or operated acquired companies for more than a year. In many cases, this financial information has not been audited.
2. Negative 100% in the “Minimum” column equates to a total loss of investor capital.
3. When firms elected not to provide an estimate of current EBITDA multiple, the original multiple is used. When respondent provided a range of EBITDA multiple estimates, we used the average figure.