2007

"Off the Rack" versus "Savile Row" The Value of Custom Tailoring for Equity Investors

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Preliminary -- January 11, 2007

Abstract:
Equity asset managers within professional investment advisory firms will often manage both discretionary fee-based accounts as well as open-ended mutual funds - using comparable domestic equity investment disciplines. When retail and institutional investors choose between these products, their decision often hinges on performance and portfolio customization. After reconciling each product's gross performance for calculation methodology, management and trading costs, and systematic risk measures, we find that concurrently-managed (where the same personnel manage a separately managed account and an open-ended mutual fund over the same time period using identical investment disciplines) small-cap separately managed accounts outperform small-cap actively-managed open-ended mutual funds between 1998 and 2003. We argue that this difference in performance is attributable to differences in asset growth as well as an advisory firm's reluctance to accept smaller separately managed accounts.

1. Introduction

Retail and institutional investors often employ investment advisory firms to actively manage their portfolios. For example, as of the fourth quarter of 2005, $9.13 trillion[1] were invested in actively managed portfolios. Furthermore, over the period from 2000 to 2005, assets under management have increased 34 percent (from $6.79 trillion to $9.13 trillion). Even on a relative basis, actively managed portfolios continue to dominate the investment landscape.

One interesting aspect of the growth in assets under management is the popularity of separately-managed accounts (SMAs) that provide investors with custom portfolio management strategies. Customized portfolio strategies through SMAs can take many forms, ranging from the asset manager having complete discretion over all investments to instructions limiting the sale of specific stocks. However, customized portfolio management is costly and thus, brokerage firms traditionally maintained minimum account sizes of $1 million to $5 million in order to have access to SMAs. Yet competition in the investment advisory industry and technological advances in information management have resulted in a dramatic decline in SMA fees and minimum asset sizes. For example, brokerage firms now offer SMA services to investors with as little as $100,000 while average SMA fees have declined from 2.03 percent in 2000 to 1.65 percent in 2005.[2]

However, growth in SMA popularity resulting from the decline in minimum account sizes, management costs, and trading fees, has also had an adverse effect on the investment advisory firms' ability (or willingness) to customize portfolios to investor

[1] Sum of open-ended, closed-end, and exchange-traded funds as well as separately managed accounts.
[2] Cerulli Associates

specific objectives. For example, in exchange for an advisory firm's willingness to manage SMA portfolios with minimum account sizes as low as $50,000, investors are often restricted to "target allocations" that are consistent across all portfolios under the firm's management.

The growth in the popularity of SMA accounts and the technological changes that allow an advisory firm to manage smaller account sizes motivate the two research questions addressed in this paper: (1) Do SMAs that are concurrently managed by the same person(s) offer higher returns than traditional actively managed mutual funds? and (2) Are differences in SMA and mutual fund performance related to an advisory firm's ability to offer customized SMA portfolio management?

To answer these questions we analyze returns of domestic equity SMAs and mutual funds (MFs). In addition, we focus on a subset of SMAs and MFs that are concurrently-managed within the same advisory firm. By examining the performance of concurrently managed accounts, we directly test whether SMAs outperform MFs, holding the effects of the asset manager constant. Our initial findings suggest that the returns from large and small-cap SMAs are significantly higher than the returns from MFs, and this difference is significantly stronger when comparing institutional-oriented SMAs and MFs.

In the following section, we briefly survey the development of the separately managed account and discuss the differences between SMAs and MFs. Section 3 describes the data and empirical methods. Section 4 presents the results from our analysis and Section 5 concludes.

2 Differences Between Managed Accounts and Open-Ended Mutual Funds

Institutional and retail brokerage investors who desire fee-based professional asset management may purchase shares in open-ended, actively managed mutual funds or contractually employ an independent investment advisory firm to manage a discretionary portfolio on their behalf. Although some confusion exists in the investment consulting industry as to what actually constitutes a managed account, the industry generally classifies accounts into five program types with the primary differences being who actually manages the portfolio and the types of investment products held within the portfolio. For example, Consultant Separately Managed Account Programs (the traditional SMA) include all discretionary portfolios that are managed by unaffiliated investment advisors for investors whose assets are held in custody at a broker/dealer. Minimum account sizes can be as low as $50,000 (in a WRAP program), and all-inclusive WRAP fees often range between 1.5% and 2.5%, depending on account size.

The SMA typically has two different cost structures. First, an investor can have a fee-plus-commission arrangement where the asset manager collects a percentage of assets under management (usually paid quarterly) and the broker/dealer receives a per-trade commission. Alternatively, under an all-inclusive “WRAP” fee arrangement, the investor pays for both asset management and broker/dealer fees at once. The WRAP fee arrangement is most commonly used with retail-oriented brokerage accounts, and the fee-plus-commission arrangement is primarily used with relatively larger institutional SMAs (minimum portfolio size of $5 to $10 million).

E.F. Hutton alleges that it first offered SMAs to institutional clients in the 1970s – initially offering such a product to retail clients in 1974. However, due to the higher

transaction costs associated with these accounts, fee-based individually managed accounts were only accessible to institutions, pension plans, and high net-worth individuals in the 1970s and 1980s. During the late 1970s and 1980s, competition among broker/dealers resulted in the introduction of SMA programs that commonly charged a set fee plus commission or a WRAP fee. Fee arrangements varied due to differences in account sizes, allowing for portfolio value "breakpoints" that would reduce management and brokerage fees. During this period, minimum account sizes were rarely less than $1 million given the time and bookkeeping costs necessary to trade and administer client accounts.

The development of new technology and trading software in the early and mid-1990s allowed professional asset managers to individually manage fee-based portfolios in a fraction of the time and at significantly reduced costs. For example, the development of specialized software now allows brokerage firms to disseminate a large trade among hundreds of accounts with no manual bookkeeping. As a result of these cost savings, SMA minimum account sizes have declined to the $50,000 level with all-inclusive fees of approximately 2% of assets under management. Today, the industry's five market leading firms, Merrill Lynch, Morgan Stanley Dean Witter, UBS PaineWebber, Prudential, and Salomon Smith Barney, collectively custody approximately 70% of assets held in SMAs.

In classifying mutual fund accounts, James and Karceski (2002) suggest that open-ended MFs fall into three categories: (1) "large institutional" funds with a minimum initial investment of at least $500,000, (2) "small institutional" funds with a minimum initial investment between $100,000 and $500,000, and (3) retail funds with minimums

below $100,000. James and Karceski (2002) find that large institutional funds commonly exist for pension funds, endowments, foundations, and high net-worth individuals, whereas small institutional funds typically solicit clients within bank trust departments, insurance companies, and fee-based financial advisors. However, the primary difference between managed accounts and mutual funds is that MFs cannot offer customized tax selling to enhance losses and possibly offset gains, specialized stock screening to meet an account's social, ethical, or economic preferences, or control of timing and direction of the inflows and outflows of specific assets from an account.

One of the more obvious differences in MFs and SMAs is that a traditional open-ended MF offers shareholders a percentage ownership or stake in a co-mingled pooled account, whereas a SMA provides ownership of securities that are in custody at a broker-dealer. As a result, the MF is commonly perceived to be more restrictive given that investors cannot specifically request particular trading guidelines. Conversely, SMAs offer investors greater control over account management, particularly the ability to restrict the manager's trading activity. The ability to set trading parameters can be important for investors who are sensitive to incurring realized capital gains and losses. Although MF managers may adhere to a tax-sensitive trading discipline in terms of incurring realized capital gains, they cannot meet specific capital gain restrictions for individual shareholders. Furthermore, new shareholders can inherit embedded capital gains that were realized prior to purchase.[3] In contrast, most SMAs claim to offer asset management guidelines that include client-specific tax planning strategies. For example, if a client wishes to withhold a particular security from sale, the SMA asset manager can

[3] For example, assuming a fund pays its capital gains distributions to its shareholders in November, a new shareholder who purchases the fund in October (prior to its ex-dividend date) will fully participate in such a distribution.

"set aside" that position. In addition, given that SMAs operationally function as retail brokerage accounts, an asset manager can attempt to harvest a specific amount of capital gains/losses at any time. Such customization, however, is costly. Restrictions on the realization of capital gains and losses can potentially compromise the SMA asset manager's investment strategy and discipline. Thus, some asset managers refrain from accepting accounts with client-specific constraints.

Differences also exist in how investors access MFs and SMAs. Retail MFs typically have account minimum sizes ranging between $500 and $10,000, with some funds having minimums as low as $50 for clients agreeing to systematic monthly automatic withdrawals. Institutional MF minimum account sizes typically range between $25,000 and $500,000, depending on client characteristics and/or a fund's client referral source.[4] Conversely, SMA minimums are usually $50,000 for broker-sponsored WRAP fee accounts, and upwards of $5 million for institutional fee-plus-commission arrangements. The lower SMA minimum account size ($50,000) is typically reserved for consultant programs in which an external investment advisory firm has a contractual arrangement with a broker-dealer. Under these arrangements a broker/dealer agrees to promote an advisory firm (as being included in its managed account program) in exchange for low account size minimums and/or favorable management fees for its clients. In order to manage the hundreds or thousands of accounts under the broker/dealer WRAP program, most broker/dealers provide an automated trading platform that enables advisory firms to create block trades and disseminate allocations to individual accounts

[4] James and Karceski (2002) suggest that fund minimums are related to whether concentration of a fund's shareholders are referred by a specific type of institution, such as a bank trust department.

without tedious bookkeeping or non-productive time on the phone with various trading desks.

The last important difference between MFs and SMAs is the number of positions usually held. A typical equity MF will hold in excess of 75 different common or preferred stocks, whereas a typical SMA will hold between 40 and 60 positions. Even MFs that are concurrently managed with SMA accounts will commonly hold two to three times as many positions as their SMA counterpart, diversifying among and within more sectors and industry groups. SMA clients may even specifically prohibit industry or individual asset concentrations. For example, an investment policy statement can prohibit investment advisory firms from portfolio concentrations greater than 20% among industries and 5% among individual assets. In contrast, a MF is limited in its ability to concentrate funds in a particular security. The Investment Company Act of 1940 prohibits MFs from allocating more than 5% of a fund's market value to an individual security.

Portfolio customization and investor characteristics aside, prior research suggests that actively managed SMAs can achieve superior performance over co-mingled, open-ended MFs. For example, Padgette (1998) finds that large-cap, domestic equity SMA portfolios outperformed similar open-ended retail MF's from 1988 to 1997. However, Padgette (1988) only compares gross returns and thus his analysis does not control for the higher fees (trading, management, and administrative costs) charged to SMA investors. In this study, we compare net SMA returns to net MF returns – adjusting for management

and trading costs.[5] In addition, we test for differences in both large-cap and small-cap products.

James and Karceski (2003) suggest that a client's account size may influence a fund manager's portfolio management decisions within particular classes of open-ended mutual funds. For example, samples of institutional funds with minimum initial investments of $500,000 significantly outperform institutional funds with minimum initial investments of $100,000 as well as retail funds with minimums under $100,000. They find that these differences cannot be fully explained by variations in internal expenses. In addition, Del Guercio and Tkac (2001) find a disparity in sophistication and monitoring efforts among different classes of retail and institutional investors. As a result, they argue that a difference in an investor's account size is associated with differences in how a portfolio's fund flows relate to performance. Similar to James and Karceski (2003), we categorize accounts into *small retail* (accounts having less than $500,000 under management), *large-retail* (accounts with minimum account sizes between $500,000 and $5,000,000), and *institutional* (accounts with at least $5,000,000 under management.)

We also consider whether actively managed portfolios (SMAs or MFs) offer risk-adjusted abnormal returns. If an advisor's management of a portfolio adds value beyond the performance of a passively managed market portfolio, she will generate positive risk-adjusted abnormal performance. SMA and MF risk-adjusted abnormal returns are the intercepts estimated from the following model:

[5] We adjust SMA and MF returns for management, administrative, and trading costs, but not front or back-end loads. We do not adjust for sales loads for two reasons: (1) many open-ended mutual funds do not carry loads, and (2) funds that do carry loads usually offer reductions in loads with larger accounts, whereas a shareholder can reduce his load by "hitting breakpoints" that reduce the front or back-end load in exchange for a promise to place a minimum dollar amount under the fund's management.

$$ERETURN_{it} = \alpha_i + B_{it}RMRF_{it} + B_{it}SMB_{it} + B_{it}HML_{it} + B_{it}PR1YR_{it} + \varepsilon_{it} \quad (1)$$

where ERETURN is the quarterly return of an SMA or a MF in excess of the risk-free rate. RMRF is the excess return of the CRSP value-weighted market index. SMB, HML, and PR1YR are obtained from Ken French and Mark Carhart, and represent factor-mimicking portfolio returns adjusted for size, book-to-market, and momentum, respectively (see Fama and French, 1993 and Carhart, 1997.)

Advances in technology in the early-to-mid 1990's enabled advisory firms to concurrently manage SMA portfolios and MFs without losing efficiencies associated with trading and asset allocation. By comparing each product within an advisory firm, we can target portfolio and firm characteristics that can help explain potential disparities in performance. Accordingly, we also compare the performance of concurrently managed SMAs and MFs that employ the same personnel and investment objectives.

Furthermore, we also consider whether firm characteristics pertaining to asset growth, reputation, and the decision to accept smaller SMA account sizes can explain performance differences. SMAs differ from MFs in their availability to offer portfolio customization. Advisory firms that concentrate on managing relatively larger SMA portfolios (minimum account sizes in excess of $500,000) are considered to offer greater customization. Conversely, advisory firms that participate in broker-dealer sub-advisory programs, and in exchange are forced to accept account sizes as low as $50,000, are less likely to tailor individual portfolios to a client's specific investment objectives.

With regard to reputation, industry experts agree that reputable firms are more transparent and thus better known and scrutinized among institutional and retail investors. As a result, experts argue that investor monitoring motivates advisory firms to

concurrently manage their SMAs and MFs in a more similar fashion. We use total assets under management, age, percentage growth in size, average *MORNINGSTAR* rating among its mutual funds, percentage growth in "Endowment" or "Foundation" accounts, as well as whether it manages retail SMA portfolios as a "sub-advisor" within a broker-dealer program, as measures of firm reputation.

3. Data and Empirical Methodology

We collected quarterly returns for a sample of SMA accounts and open-ended mutual funds for the period from 1998 to 2005. Our data sources are Prima Capital for SMA returns, the Center for Research and Securities Prices for MF returns, and Morningstar for other MF data. We require that each MF and SMA follow industry reporting standards in order to minimize differences in return calculation methodology, management style categorization, and the treatment of management and brokerage fees. In order to compare SMA returns to MF returns, we made three adjustments to the individual returns. First, we adjust SMA returns to reconcile a discrepancy between SMA and MF return calculation methodology. Second, we reconcile differences in how SMAs and MFs define their investment objectives. Third, we reconcile differences in how returns may or may not include specific management or brokerage costs.

SMA returns include quarterly changes in the market values of *portfolios* within a single SMA product of an investment advisory firm. In calculating returns, advisory firms use their own return calculation method or the return calculation methodology sanctioned by the Association of Investment Management and Research's (AIMR) Performance

Presentation Standards (PPS). [6] To minimize inconsistencies and biases related to differences in SMA return calculation methods, we only include SMAs accounts that adhere to AIMR PPS and thus best match standard MF returns calculation methods.

MFs use a standardized calculation method to capture the change in Net Asset Value (NAV) from one period to the next. Quarterly MF returns are calculated from the average change in NAV using the following CRSP calculation:

$$R_{t-1,t} = (NAV_t / NAV_{t-1})[\prod_{j=1}^{J}(1 + X\_AMT_j^D / RE\_NAV_j^D)][\prod_{k=1}^{K}(X\_AMT_k^S / RE\_NAV_k^S)] - 1 \quad (2)$$

where the NAV_t is the fund's net asset value per unit at *t*, *j* is the number of dividend or capital gains distributions during the period *t-1* to *t*, *k* is the number of NAV splits during the period *t-1* to *t*, $X\_AMT_j^D$ is the j^{th} dividend or capital gains distribution during the period *t-1* to *t*, $RE\_NAV_j^D$ is the NAV at which jth dividend or capital gains distribution was reinvested, $X\_AMT_k^S$ is the number of new shares per the number of old shares investors received in the kth NAV split over the period, and $RE\_NAV_k^S$ is the number of old shares investors traded in for new shares in the kth NAV split.

In contrast, SMA returns must accommodate cash flows within specific portfolios. Since SMA accounts are conglomerations of individually managed portfolios, calculating their time period returns present two challenges: (1) accounts must be asset-weighted, where portfolio weightings should reflect market values as well as in-period cash flows and (2) accounts must accommodate time-weighted cash flows, where sub-period returns are computed between cash flows and then geometrically linked.[7]

[6] See Appendix A1 for references to AIMR PPS
[7] AIMR Guidance Statement of Calculation Methodology

To meet these challenges, AIMR Performance Presentation Standards suggest a process for calculating a time-weighted composite return. First, each portfolio must accommodate an investor's cash withdrawals and contributions by computing a weighting factor for each cash flow. For example, the following computation is used to time-weight an individual portfolio's cash flows:

$$W_{i,j} = \frac{(CD - D_{i,j})}{CD} \tag{3}$$

where CD is the total number of calendar days in the period and $D_{i,j}$ is the number of calendar days since the beginning of the period in which cash flow *j* occurred in portfolio i. Second, the composite's period return, R_{BMV+CF}, is calculated by capturing the cash flow-weighted change in the account's beginning market value using the following:

$$R_{BMV+CF} = \frac{\sum_{i=1}^{n} \left\{ \left(BMV_i + \left(\sum_{j=1}^{m} CF_{i,j} \times W_{i,j} \right) \right) \times R_i \right\}}{\sum_{i=1}^{n} \left(BMV_i + \left(\sum_{j=1}^{m} CF_{i,j} \times W_{i,j} \right) \right)} \tag{4}$$

where $CF_{i,j}$ is the cash flow j within the period for portfolio i (contributions to the portfolio are positive flows, and withdrawals or distributions are negative flows) and R_i is the return for portfolio i. R_i represents the change in a portfolio's market value (EMV – BMV) divided by its original value (BMV).

$$R_i = \frac{(EMV - BMV)}{BMV} \tag{5}$$

If an advisory firm adheres to the AIMR calculation standards, its individual portfolio cash flows will have an effect on distorting composite SMA performance. Therefore, in order to create a like SMA-MF comparison, we only compare MF returns to SMA returns that are in AIMR compliance.

A second inconsistency across the SMA and MF accounts is the difference in the definition of a product's style or management objective. Advisory firms follow a variety of self-prescribed equity investment disciplines. While Morningstar is universally known to categorize many MFs, the investment management objectives of most SMAs follow no standardized categorization. Thus, we match SMA and MF style descriptions by pairing benchmarks that are self-prescribed by an advisory firm. As a result, our sample only includes domestic equity SMA composites and MFs that are benchmarked to an identical list of self-proclaimed indexes.[8]

SMAs and MFs also have different mechanisms for how investors pay for broker-dealer services and advisory firm asset management. The open-ended MF has an internal management fee (paid quarterly as a percentage of the fund's market value), trading commissions, and a selling commission (paid at the time of purchase and/or sale for "loaded" funds). Selling commissions only apply to "loaded" funds sold by third parties (banks, brokerages, etc.), but are tiered in size based on an investor's purchase amount. Therefore, larger retail and institutional MFs (loaded) offer reduced or no selling commissions when an investor's purchase amount reaches "break points".

Conversely, an SMA typically offers investor's the opportunity to pay for *all* broker-dealer and asset management costs with one fee. An all-inclusive "WRAP" fee arrangement or a "fee plus commission" arrangement allows a client to pay a fixed percentage of assets under an advisor's management each quarter.

[8] We categorize MFs and SMAs as Large Cap funds if they track one of the following indices: Russell 1000, Russell 1000 Growth, Russell 1000 Value, S&P 500, S&P 500 Barra Growth, S&P 500 Barra Value, Wilshire Target Top 750, Wilshire Target Large Company Growth, Wilshire Target Large Company Value. We categorize MFs and SMAs as Small Cap funds if they track one of the following indices: Russell 2000, Russell 2000 Growth, Russell 2000 Value, S&P Small Cap Barra 600, S&P Small Cap 600 Growth, S&P 600 Small Cap Barra Value, Wilshire Target Small Company Growth, Wilshire Target Small Company Value.

To reconcile differences between MF multiple fees (internal, commissions, and loads) with SMA all inclusive fee structure, we compare SMA returns that are net of management and trading costs to MF returns that are net of management and trading costs, but not selling commissions. Three observations motivate the decision to exclude selling commissions from MF returns: (1) many MFs in our samples are no-load and thus do not carry a selling commission; (2) most loaded MFs in our samples are offered through broker-dealer "fee-only" programs that enable investors to purchase them at NAV (no load), while paying a separate fee based on assets under management; and (3) most loaded MFs offer reduced loads when a shareholder invests a certain amount within the MF's fund family. As a result, loaded MFs usually offer a variety of selling commission arrangements that are based on criteria specific to investor characteristics.

Finally, we exclude from the analysis all funds having names that indicate concentrations in convertible securities, REIT's, or sector funds. In addition, we also exclude all SMAs or MFs that follow a passive index management style, hold a majority concentration in international securities, or include "all-cap" or "mid-cap" in their names.[9]

4. Empirical Results

SMA Fee Adjustments

Prior to comparing SMA and MF returns, we adjust SMA returns for management and trading costs. Unfortunately, SMA managers do not report management and trading cost information. Thus, we adjust the SMA returns using the average the management fee prevailing in the market based on a survey of five representative broker-dealers. We

[9] Parameters used in the Ennis and Sebastian (2002) and Del Guercio and Tkac (2001) studies.

assume that competition for assets from sophisticated SMA investors ensures that SMA management fees are roughly consistent with these estimates.[10] Table 3 displays the midpoint, minimum, and maximum SMA management fees based on assets under management and shows a positive relationship between WRAP fee and account size. For example, the average WRAP fee on the smallest accounts is 2.4% of assets under management while the largest accounts (those with assets greater than $5 million) have average WRAP fees of 1.1%. Furthermore, we note that the range between the maximum and minimum WRAP fee declines as account size increases, indicating that competition among broker-dealers is the most intense for large accounts.

We adjust SMA returns for the average annual WRAP fee as follows:

$$NR_{it} = \left(1 - \frac{W_{im}}{4}\right) * GR_{it} \qquad (10)$$

where NR_{it} is the net-of-fee quarterly SMA return for fund i at quarter t, W_{im} is the average annual SMA WRAP fee corresponding to the minimum account size m for fund i, and GR_{it} is the gross-of-fee quarterly SMA return for fund i at quarter t. All analysis is conducted using SMA net of fee returns. [11]

Comparing Performance across Concurrently-Managed SMA and MF Samples

Table 1 reports the summary statistics for the 115 concurrently-managed SMA and MF products. We compare SMA and MF return performance and portfolio

[10] We conducted separate analysis using the midpoint, minimum, and maximum fee and found that the results are not materially different.

[11] The MF sample returns do not include applicable selling commissions. Selling commissions only apply to "loaded" funds sold by third parties and are tiered in size based on the size of investment. Therefore, we are unaware of the return impact of selling commissions, but do know that their neglect possibly overstates the results.

characteristics, including portfolio turnover, average number of positions, assets under management, minimum initial investment, and average annual 6-year net inflow.[12] Turnover and the average number of positions are directly controlled by the investment advisor who has discretion over the management and allocation of the fund's portfolio. The decision of where to set an SMA or MF's minimum initial investment is directed by the fund's advisory firm, whereas a fund's assets under management and annual net inflow are market-driven variables that capture investor sentiment.

Table 1 shows that the mean returns for small-cap SMAs are significantly larger (at a 1% level) than the mean returns on the corresponding MFs. Small-cap SMAs outperformed small-cap MFs by an average of 28 basis points. In comparing the mean portfolio turnover and number of position it appears that SMA managers trade less aggressively than MF managers, where aggressive trading activity corresponds to holding more positions and having higher portfolio turnover rates. For example, large-cap mutual fund managers have a 9.72% less annual turnover rate, while both large-cap and small-cap MFs hold approximately 13 more positions.

On average, the assets under management within an advisory firm's SMA portfolios are significantly larger than the assets under management within a firm's MFs. Relative to MFs, we find that SMAs hold more assets. These results are consistent with the average minimum initial investment of an SMA, given that SMAs rarely offer minimums less than $100,000 and many MFs offer minimums in the $500 to $2,000 range.

[12] The portfolio turnover, number of positions and assets under management reflect year 2003 only. These characteristics are unavailable for earlier years.

Finally, we find that average annual net inflow is also significantly different across large-cap SMAs and MFs. Large-cap SMAs annually attract a greater (significant at a 5% level) percentage of new capital, in excess of capital outflow, than MFs. However, we find little evidence that stronger net capital inflows exist among small-cap investors.

Evaluating Risk-Adjusted Performance

We specifically compare each individual firm's concurrently-managed SMA and MF products to determine whether a significant difference in risk-adjusted returns exists. Based on the results in Table 2, we find that only two of the large-cap firms offer significantly different (at a 5% level or better) conditional abnormal returns; one firm with stronger SMA returns and the other with stronger MF returns. The small-cap sample reveals seven firms with significant abnormal performance (at a 5% level or better) and one firm with a difference significant at a 10% level. In addition, we find that each of these differences in small-cap return sets favors the SMA product. In aggregate, the Table 2 results illustrate that only 9 of 115 firms (8%) have any significant risk-adjusted return difference in their concurrently-managed SMA and MF accounts.

We also test for relationships between differences in concurrently-managed fund performance and exogenous and endogenous variables. Based on information gathered from industry experts, prior literature, and our earlier results, we expect that an advisor's decision to target investor clienteles (categorized by minimum account size), the inflow of new capital, and an advisory firm's reputation may explain the existence of any difference in abnormal returns.

To capture an advisory firm's exogenous relationships, we develop six variables that are designed to control for firm reputation: (1) the annual average percentage growth in size for all SMAs managed by an investment management firm, (2) the average annual percentage growth in size for all SMAs managed by an investment management firm that are categorized as either an "Endowment" or "Foundation", (3) the average 5-year Morningstar rating for all mutual funds managed by an investment management firm, (4) the total number of years an investment management firm has been in existence (as of 2003), (5) a binary variable that captures whether an advisory firm's SMA minimum account size is less than $500,000, and (6) a binary variable that captures whether an advisory firm manages retail SMA portfolios within a broker-dealer program. We use these variables in an attempt to capture an advisory firm's transparency in the market place as well as the level of investor monitoring of their funds. Industry experts suggest that greater market visibility is correlated to a greater influx of new capital. As a result, we test whether an advisory firm's ability or decision to acquire more accounts is related to an inability to customize its SMAs, therefore leading to less of a performance difference between its concurrently-managed SMAs and MFs. Table 4 shows the simple correlation coefficients for the variables that are proxies for reputation. The low correlations among the variables indicate that the variables are capturing different aspects of firm reputation.

Table 5 reports the descriptive statistics for the concurrently-managed SMAs and MFs accounts. We regress the differences in abnormal performance on the differences in net inflows, differences in assets under management, differences in asset growth, and the reputation variables (Table 6).

For both large-cap and small cap accounts, we find a positive and significant (at a 1% level) relationship between the difference in SMA and MF assets under management and the difference in SMA and MF abnormal performance. Therefore, the greater the disparity in an advisory firm's SMA-MF assets under management, the greater the division in how the two product types are managed.

The difference in net inflow is negative and significant (at a 5% level) for both large and small cap accounts. We expect that a greater difference in net inflow would instead be positively related to a difference in SMA and MF abnormal returns – as more reputable firms experience greater investor monitoring, and thus are less capable of individually customizing SMA portfolios.

The regression models in Table 6 neither support nor contradict the argument that an advisory firm's ability to customize an SMA portfolio is constrained by its growth in assets or number of accounts.

5. Conclusion

This paper tests for the existence of performance discrepancies among concurrently-managed, domestic equity separately managed accounts (SMAs) and open-ended mutual funds (MFs). By comparing SMA and MF performance, our results indicate that, net of all management and trading costs, raw and risk-adjusted small-cap SMA returns outperform MF returns from 1998 to 2003. In addition, our results suggest that differences in SMA and MF portfolio characteristics exist. On average, SMAs hold fewer positions, experience less portfolio turnover, and encounter stronger net inflows of capital.

We find evidence that differences in abnormal performance within concurrently-managed SMAs and MFs can be attributed to an advisor's ability to customize individual SMA portfolios. Advisory firms that experience greater SMA asset growth experience larger discrepancies in SMA and MF performance. We suggest that a higher level of SMA accounts under management discourages an advisory firm from tailoring individual portfolios to investor objectives. However, our results do not support the hypothesis that smaller account sizes are a prohibiting factor in customizing and differentiating SMA portfolios (relative to MF portfolios). We find no significant difference in SMA/MF performance within an advisory firm that focuses on larger, institutional ($500,000 and above minimum account size) portfolios.

In conclusion, when comparing average SMA and MF returns, our results suggest that investors place a greater percentage of new capital in SMAs and can achieve higher abnormal returns with particular classes of SMA portfolios.

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Table 1: Summary Statistics – Concurrently-Managed SMAs and MFs

Summary statistics of domestic equity, concurrently-managed retail and institutional separately managed accounts and mutual funds. Panel A includes descriptive statistics of the full sample. Panel B and Panel C represent samples of large-cap and small-cap accounts. Differences in SMA and MF performance, turnover, and product assets under management, are from the Mobius MSEARCH database and the CRSP mutual fund database. Product asset under management (AUM) and net inflows are 6-year annual averages, while annual turnover and number of positions are for 2003. Quarterly returns are net of any fees associated with fund management, fund administration, and trading commissions. FFC Alphas represent intercepts from regressing a fund's excess returns on factor-mimicking portfolio returns adjusted for the excess return of the CRSP value-weighted market index, market-capitalization, book-to-market, and momentum obtained from Ken French and Mark Carhart. T-Statistics are the results from significance tests (means different from zero). Standard deviations are in parenthesis.

* Significance at a 10% level.
** Significance at a 5% level.
*** Significance at a 1% level.

Panel A: All SMAs and MFs

All (n=115):	Mean	Median	t-Statistics
Quarterly Return Difference (%)	0.166 (5.122)	0.100	1.71*
FFC Alpha Difference (%)	0.758 (0.975)	0.900	0.83
Annual Portfolio Turnover Difference (%)	-3.254 (29.698)	3.500	-1.17
Number of Stocks in Portfolio Difference	-13.292 (35.997)	-5.000	-3.93***
Average Cash Position Difference (%)	0.423 (3.428)	0.855	1.32
Product AUM a/o 2003 Difference ($billions)	1.797 (4.474)	0.514	4.29***
Annual Net Inflow Difference (%)	2.602 (169.23)	-0.523	0.15

Table 1 (contd.):

Panel B: Large and Small-Cap SMAs and MFs

Large-Cap (n=58):	Mean	Median	t-Statistics
Quarterly Return Difference (%)	0.056 (6.320)	0.004	0.33
FFC Alpha Difference (%)	-0.084 (1.148)	-0.033	-0.55
Annual Portfolio Turnover Difference (%)	-9.724 (30.026)	-2.500	-2.46**
Number of Stocks in Portfolio Difference	-12.810 (45.536)	-3.500	-2.14**
Average Cash Position Difference (%)	0.475 (3.235)	0.595	1.12
Product AUM a/o 2003 Difference ($billions)	2.828 (6.056)	0.840	3.52***
Annual Net Inflow Difference (%)	-15.628 (50.53)	-3.395	-2.07**

Small-Cap (n=57):	Mean	Median	t-Statistics
Quarterly Return Difference (%)	0.278 (3.488)	0.122	2.94***
FFC Alpha Difference (%)	0.238 (0.735)	0.200	2.44**
Annual Portfolio Turnover Difference (%)	3.446 (28.068)	6.000	0.92
Number of Stocks in Portfolio Difference	-13.800 (22.323)	-7.000	-4.58**
Average Cash Position Difference (%)	0.371 (3.643)	0.9666	0.76
Product AUM a/o 2003 Difference ($billions)	0.766 (1.244)	0.377	4.65***
Annual Net Inflow Difference (%)	19.345 (229.242)	-0.062	0.59

Table 2: Itemized Comparisons of Raw and Risk-Adjusted Performance for Concurrently-Managed Retail and Institutional Class SMAs and MFs (1998-2003)

The following table presents four-factor regression results for each firm that concurrently manages a SMA and MF. Panel A includes comparisons of large-cap SMAs and MFs, while Panel B represents comparisons of small-cap SMAs and MFs T-Stat is the result from significance tests (different from zero) on the difference between the abnormal performance of the SMA and MF products. Abnormal performance is defined as the gross return on an SMA of MF less the return of a risk-free rate over the same time. The last three columns present regression results for the four-factor Fama/French/Carhart model – where the dependent variable is quarterly difference in SMA and MF net returns. Alpha is the abnormal performance after adjusting for the four factors (RMRF, SMB, HML, and PR1YR). T-Statistics are in parenthesis and represent the results from significance tests (means different from zero).

* Significance at a 10% level.
** Significance at a 5% level.
*** Significance at a 1% level.

$$ERETURN_{it} = \alpha_i + B_{it}RMRF_{it} + B_{it}SMB_{it} + B_{it}HML_{it} + B_{it}PR1YR_{it} + \varepsilon_{it}$$

Panel A: Large-Cap

	Difference				
Firm	Alpha	RMRF	SMB	HML	PR1YR
1	0.001 (0.08)	0.160 (1.550)	0.290** (2.470)	0.590*** (4.760)	0.190 (1.590)
2	-0.002 (-0.150)	0.040 (0.360)	-0.150 (-1.090)	-0.280* (-2.040)	0.480*** (3.700)
3	0.006 (0.700)	0.040 (0.400)	-0.070 (-0.600)	-0.610*** (-4.820)	-0.060 (-0.540)
4	-0.008 (-0.550)	-0.110 (-0.670)	0.100 (0.530)	0.620*** (2.960)	0.710*** (3.680)
5	-0.011 (-0.900)	0.230 (1.700)	0.290* (1.870)	0.550*** (3.320)	0.320* (2.060)
6	0.006 (0.450)	-0.180 (-1.220)	-0.440** (-2.490)	-0.030 (-0.170)	-0.310* (-1.810)
7	-0.008 (-0.910)	-0.070 (-0.650)	0.060 (0.490)	0.230** (1.830)	0.210** (1.840)
8	-0.028 (-1.690)	-0.020 (-0.130)	-0.120 (-0.560)	-0.510** (2.250)	0.250 (1.160)
9	0.014 (1.310)	0.070 (0.620)	-0.470*** (-3.410)	-0.290* (-2.040)	-0.240* (-1.770)
10	-0.005 (-0.270)	0.060 (0.300)	-0.160 (-0.730)	0.850*** (3.590)	-0.180 (-0.810)
11	0.002 (0.190)	-0.040 (-0.360)	-0.050 (-0.410)	0.190 (1.540)	-0.003 (-0.020)
12	-0.009 (-0.840)	0.240* (1.980)	0.150 (1.100)	-0.360** (-2.470)	0.210 (1.530)
13	-0.018** (-2.670)	0.210** (2.760)	0.230** (2.600)	0.070 (0.740)	0.160* (1.850)
14	-0.004 (-0.290)	-0.520*** (-3.190)	-0.550*** (-2.900)	0.590*** (2.980)	0.210 (1.160)
15	0.000 (0.030)	0.010 (0.070)	-0.130 (-0.700)	-0.960*** (-5.040)	-0.450** (-2.510)
16	-0.005 (-0.510)	0.090 (0.730)	0.170 (1.260)	0.030 (0.180)	0.430*** (3.260)
17	-0.014 (-1.190)	0.110 (0.820)	0.180 (1.190)	0.560*** (3.460)	0.290* (1.920)
18	0.016 (1.260)	-0.130 (-0.860)	-0.090 (-0.490)	-0.440** (-2.430)	-0.440** (-2.590)

Table 2 (contd.)

19	0.008 (0.520)	0.005 (0.030)	0.110 (0.530)	-1.290*** (-5.990)	-0.450** (-2.230)
20	0.012 (1.690)	-0.005 (-0.060)	0.150 (1.520)	-0.010 (-0.100)	0.020 (0.170)
21	-0.023 (-1.590)	-0.050 (-0.330)	0.040 (0.200)	0.610*** (3.040)	0.410** (2.220)
22	-0.001 (-0.070)	0.160 (1.460)	0.240* (1.940)	0.780*** (6.030)	-0.100 (-0.830)
23	0.025* (2.060)	-0.380** (-2.660)	-0.090 (-0.560)	-0.450** (-2.620)	-0.280* (-1.730)
24	-0.006 (-0.520)	-0.120 (-0.970)	-0.060 (-0.410)	-0.370** (-2.490)	0.020 (0.150)
25	-0.009 (-0.870)	0.060 (0.480)	-0.020 (-0.160)	0.310** (2.170)	0.070 (0.550)
26	0.021 (1.160)	0.380* (1.910)	-0.390 (1.660)	-0.140 (-0.590)	-0.260 (-1.120)
27	0.009 (0.870)	0.020 (0.160)	-0.090 (-0.680)	0.280* (2.090)	0.040 (0.350)
28	0.014 (0.850)	0.270 (1.450)	0.310 (1.430)	-0.770*** (-3.390)	-0.010 (-0.060)
29	-0.004 (-0.530)	0.100 (1.270)	-0.110 (-1.170)	0.090 (0.890)	0.010 (0.150)
30	0.005 (0.350)	-0.030 (-0.190)	-0.070 (-0.350)	-1.060*** (-5.400)	-0.320* (-1.740)
31	-0.003 (-0.420)	-0.060 (-0.690)	0.040 (0.400)	0.260** (2.490)	0.040 (0.450)
32	-0.001 (-0.040)	0.440** (2.740)	0.210 (1.140)	-0.240 (-1.240)	-0.060 (-0.320)
33	0.013 (1.120)	-0.160 (-1.180)	0.030 (0.190)	0.050 (0.310)	-0.300* (-2.030)
34	-0.006 (-0.620)	-0.070 (-0.680)	-0.140 (-1.210)	0.080 (0.640)	0.090 (0.780)
35	0.002 (0.140)	0.000 (0.000)	0.110 (0.690)	-0.030 (-0.200)	-0.100 (-0.620)
36	-0.018 (-1.730)	0.360*** (3.130)	-0.170 (-1.300)	0.700*** (5.010)	0.310** (2.340)
37	-0.002 (-0.180)	-0.090 (-0.830)	0.030 (0.210)	0.360** (2.670)	0.170 (1.380)
38	0.035*** (3.320)	0.150 (1.210)	0.090 (0.610)	-0.460*** (-3.140)	-0.310** (-2.310)
39	0.001 (0.060)	0.007 (0.050)	0.490*** (2.940)	-0.140 (-0.780)	0.130 (0.770)
40	-0.008 (-0.490)	-0.110 (-0.560)	0.006 (0.030)	0.680*** (2.910)	0.260 (1.200)
41	-0.016 (-1.450)	-0.020 (-0.150)	-0.030 (-0.230)	0.470*** (3.060)	0.170 (1.200)
42	-0.001 (-0.130)	0.060 (0.710)	-0.210* (-2.070)	-0.420*** (-3.850)	-0.070 (-0.650)
43	-0.026* (-2.080)	-0.030 (-0.230)	0.460** (2.730)	0.370** (2.110)	0.290* (1.770)
44	-0.011** (-2.270)	0.013 (0.230)	0.025 (0.370)	0.006 (0.090)	0.040 (0.600)
45	-0.007 (-1.130)	0.470*** (7.150)	0.006 (0.740)	0.150* (1.860)	0.030 (0.400)
46	-0.006 (-0.700)	0.096 1.030	-0.038 -0.360	0.085 0.750	0.045 0.430

Table 2 (contd.)

47	0.002 (0.660)	0.052 1.400	-0.020 -0.460	-0.007 -0.150	0.019 0.450
48	0.000 (0.040)	0.055 1.560	0.039 0.950	-0.039 -0.910	0.045 1.120
49	0.001 (0.090)	0.017 0.200	-0.300** -3.010	-0.150 -1.400	0.031 0.320
50	0.008 (0.780)	0.022 0.180	0.044 0.320	-0.011 -0.770	-0.012 -0.090
51	-0.001 (-0.330)	0.045 2.260	0.019** 0.830	0.030 1.240	0.041* 1.810
52	0.000 (0.050)	0.021 1.330	0.012 0.650	0.009 0.470	0.020 1.160
53	0.000 (0.210)	0.013 0.720	0.029 1.390	0.008 0.350	0.033 1.650
54	0.000 (-0.110)	0.016 0.980	0.026 1.410	0.003 0.160	0.027 1.470
55	0.001 (0.770)	-0.006 -0.270	-0.006 -0.250	-0.010 -0.390	-0.001 -0.030
56	0.000 (0.200)	0.011 0.770	0.006 0.360	0.018 1.040	0.002 0.120
57	0.002 (1.500)	0.035* 1.890	0.001 0.030	0.029 1.310	0.007 0.310
58	0.006 (1.380)	0.046 0.900	-0.063 -1.080	-0.016 -0.270	0.031 0.540

Table 2 (contd.)
Panel B: Small-Cap

	Difference				
Fund	Alpha	RMRF	SMB	HML	PR1YR
1	0.008 (1.410)	-0.110* (-1.770)	0.070 (1.000)	-0.050 (-0.680)	-0.060 (-0.880)
2	-0.004 (-0.800)	0.020 (0.500)	0.060 (0.950)	0.010 (0.220)	0.070 (1.230)
3	0 (0.150)	-0.005 (-0.230)	0.060** (2.290)	0.010 (0.520)	0.009 (0.360)
4	0.008** (2.690)	0.000 (0.00)	-0.030 (-0.770)	-0.030 (-0.630)	-0.020 (-0.460)
5	-0.002 (-0.300)	0.120* (2.070)	0.080 (1.200)	-0.180** (-2.600)	0.030 (0.490)
6	0.008* (1.760)	-0.006 (-0.130)	-0.180*** (-3.070)	-0.110 (-1.730)	-0.110* (-1.860)
7	0.002 (0.790)	-0.007 (-0.270)	0.030 (1.140)	0.000 (0.010)	-0.010 (-0.440)
8	0.002** (2.210)	0.018 (1.470)	0.013 (0.920)	-0.001 (-0.040)	0.002 (0.140)
9	0.032* (1.990)	-0.234 (-1.290)	-0.310 (-1.480)	-0.320 (-1.450)	-0.310 (-1.490)
10	0.001 (0.430)	-0.001 (-0.030)	0.040 (0.800)	-0.060 (-1.200)	-0.100** (-2.280)
11	-0.010 (-0.790)	0.630*** (4.580)	0.020 (0.130)	0.290* (1.750)	0.170 (1.080)
12	0.012 (1.200)	0.050 (0.420)	-0.310** (-2.400)	-0.084 (-0.620)	-0.120 (-0.960)
13	0.001 (1.240)	0.011 (0.940)	-0.006 (-0.390)	0.000 (-0.020)	-0.001 (-0.080)
14	0.005** (2.580)	0.020 (0.950)	0.060** (2.140)	-0.030 (-0.940)	-0.010 (-0.470)
15	0.000 (-0.090)	0.030 (0.660)	0.100** (2.110)	-0.020 (-0.410)	-0.040 (-0.810)
16	0.007* (1.750)	-0.011 (-0.230)	0.080 (1.510)	-0.020 (-0.420)	-0.010 (-0.220)
17	0.003 (1.050)	-0.010 (-0.330)	0.040 (1.020)	-0.006 (-0.170)	0.008 (0.220)
18	0.003 (0.740)	-0.010 (-0.310)	0.120** (2.150)	-0.060 (-0.940)	-0.060 (-1.010)
19	0.022 (1.490)	0.005 (0.030)	-0.160 (-0.850)	0.910*** (4.460)	0.360* (1.900)
20	0.002 (0.270)	0.003 (0.040)	-0.008 (-0.080)	0.050 (0.550)	0.030 (0.380)
21	0.003** (2.110)	0.010 (0.730)	0.030 (1.390)	-0.014 (-0.650)	-0.007 (-0.370)
22	0.001 (0.490)	0.030 (1.150)	0.030 (1.330)	0.000 (-0.010)	0.020 (0.700)
23	0.001 (1.390)	0.013 (1.090)	0.000 (-0.010)	0.010* (0.760)	0.006 (0.460)
24	0.000 (-0.090)	-0.043 (-1.050)	-0.013 (-0.280)	-0.070 (-1.510)	0.046 (1.010)
25	-0.020 (-1.440)	0.020 (0.120)	0.230 (1.260)	-0.890*** (-4.630)	-0.350* (-1.970)
26	0.003 (0.630)	0.046 (0.940)	0.065 (1.140)	-0.020 (-0.420)	0.030 (0.540)
27	0.003 (0.270)	0.081 (0.670)	0.160 (1.120)	-0.110 (-0.780)	0.190 (1.370)
28	0.004*** (3.920)	0.000 (-0.040)	-0.004 (-0.340)	-0.009 (-0.730)	-0.020* (-2.050)

Table 2 (contd.)

29	0.002 (1.220)	0.019 (1.130)	0.001 (0.030)	0.005 (0.250)	-0.009 (-0.470)
30	0.001 (0.280)	0.055** (2.570)	0.014 (0.570)	0.037 (1.410)	0.005 (0.200)
31	0.001 (0.080)	-0.056 (-0.350)	0.153 (0.820)	-0.070 (-0.370)	0.051 (0.280)
32	0.000 (-0.140)	0.053 (1.410)	0.033 (0.770)	-0.002 (-0.040)	0.074* (1.770)
33	0.003** (2.100)	0.008 (0.410)	0.018 (0.820)	0.010 (0.390)	-0.008 (-0.390)
34	0.002 (0.390)	0.013 (0.260)	0.102 (1.680)	0.016 (0.240)	0.082 (1.380)
35	-0.001 (-0.630)	0.028 (1.550)	0.037* (1.820)	-0.003 (-0.140)	0.034 (1.680)
36	0.008* (2.060)	-0.035 (-0.800)	0.016 (0.320)	-0.149** (-2.790)	-0.072 (-1.450)
37	0.004*** (3.800)	0.0016 (0.140)	0.005 (0.380)	-0.005 (-0.390)	-0.010 (-0.820)
38	0.001 (0.320)	0.013 (0.280)	0.054 (1.030)	-0.009 (-0.170)	0.024 (0.470)
39	0.019*** (3.750)	-0.068 (-1.160)	-0.089 (-1.320)	-0.148** (-2.100)	-0.120* (-1.830)
40	-0.001 (-0.170)	0.041 (0.710)	0.0998 (1.500)	0.007 (0.090)	0.111 (1.700)
41	-0.001 (-0.330)	0.113** (2.710)	0.060 (1.250)	0.012 (0.240)	0.082* (1.730)
42	-0.001 (-0.120)	0.0195 (0.170)	0.360 (0.280)	-0.135 (-1.000)	0.167 (1.330)
43	-0.002 (-0.310)	-0.015 (-0.290)	0.060 (0.940)	-0.050 (-0.790)	-0.330 (-0.560)
44	-0.009 (-0.340)	0.340 (1.060)	-0.770** (-2.110)	-0.300 (-0.790)	-0.008 (-0.020)
45	0.002 (0.240)	0.110 (0.960)	-0.020 (-0.160)	-0.030 (-0.220)	-0.060 (-0.470)
46	-0.001 (-0.220)	-0.056 (-1.170)	-0.070 (-1.260)	-0.053 (-0.920)	-0.110* (-20.900)
47	0.002 (0.420)	-0.008 (-0.180)	0.080 (1.480)	-0.140** (-2.590)	-0.056 (-1.070)
48	0.003 (0.460)	0.124* (1.750)	0.120 (1.470)	-0.110 (-1.320)	0.110 (1.390)
49	0.003 (1.320)	0.008 (0.280)	0.010 (0.310)	-0.030 (-0.880)	-0.023 (-0.730)
50	0.008** (2.410)	0.030 (0.780)	0.020 (0.370)	-0.060 (-1.360)	-0.030 (-0.660)
51	0.003 (0.530)	0.034 (0.560)	0.110 (1.560)	-0.010 (-0.130)	0.080 (1.220)
52	0.003 (0.630)	0.050 (0.940)	0.065 (1.140)	-0.025 (-0.420)	0.030 (0.540)
53	0.001 (0.600)	-0.010 (-0.880)	0.060*** (3.090)	-0.030 (-1.510)	-0.030* (-1.860)
54	0.003 (0.650)	0.070 (1.320)	0.133** (2.110)	-0.060 (-0.840)	0.080 (1.370)
55	-0.013 (-1.110)	-0.020 (-0.180)	0.070 (0.450)	-0.140 (-0.820)	-0.060 (-0.410)
56	0.002 (0.960)	0.016 (0.890)	0.028 (1.300)	-0.010 (-0.430)	0.008 (0.390)
57	-0.001 (-0.210)	0.147* (2.060)	0.164* (1.980)	0.058 (0.670)	0.980 (1.220)

Table 3: SMA WRAP Fees

The following table presents ranges of WRAP fees for five broker-dealers that offer sub-advisory arrangements for SMA firms, segmented by minimum account size. WRAP fees are all-inclusive, and therefore include all costs related to and account's management, custodial services, and trading commissions. For each minimum account size, the average, minimum, and maximum WRAP fees are equally weighted averages across the five broker-dealers.

		Account Minimums				
Firm		**$100,000-$500,000**	**$500,000-$1,000,000**	**$1,000,000-$2,000,000**	**$2,000,000-$5,000,000**	**$5,000,000+**
1	Minimum	0.021	0.015	0.013	0.012	0.009
	Mid Point	0.026	0.0185	0.016	0.0145	0.009
	Maximum	0.030	0.022	0.019	0.017	0.010
2	Minimum	0.018	0.016	0.012	0.012	0.008
	Mid Point	0.023	0.021	0.017	0.017	0.011
	Maximum	0.028	0.025	0.021	0.021	0.014
3	Minimum	0.020	0.013	0.011	0.009	0.009
	Mid Point	0.025	0.018	0.015	0.013	0.013
	Maximum	0.030	0.022	0.019	0.017	0.017
4	Minimum	0.020	0.016	0.013	0.010	0.008
	Mid Point	0.024	0.019	0.016	0.013	0.011
	Maximum	0.027	0.023	0.019	0.016	0.013
5	Minimum	0.019	0.014	0.013	0.011	0.008
	Mid Point	0.024	0.018	0.017	0.015	0.011
	Maximum	0.028	0.021	0.021	0.018	0.013
Avg. Mid Point		**0.024**	**0.019**	**0.016**	**0.014**	**0.011**
Avg. Minimum		**0.020**	**0.015**	**0.012**	**0.011**	**0.008**
Avg. Maximum		**0.029**	**0.023**	**0.020**	**0.018**	**0.013**

Table 4: Correlations of Firm Reputation Variables

Panel A: All Managers

	ACCTGROWTH	EFGROWTH	MORNINGSTAR	AGE	MINIMUM	SUBADV
ACCTGROWTH	1.000	0.316	0.127	-0.178	-0.215	-0.492
EFGROWTH		1.000	0.221	-0.216	0.082	-0.062
MORNINGSTAR			1.000	- 0.253	-0.226	-0.315
AGE				1.000	0.054	0.154
MINIMUM					1.000	0.458
SUBADV						1.000

Panel B: Large-Cap Managers

	ACCTGROWTH	EFGROWTH	MORNINGSTAR	AGE	MINIMUM	SUBADV
ACCTGROWTH	1.000	-0.005	0.016	-0.064	-0.346	-0.538
EFGROWTH		1.000	-0.018	-0.061	0.147	0.064
MORNINGSTAR			1.000	-0.237	-0.159	-0.169
AGE				1.000	-0.096	-0.038
MINIMUM					1.000	0.408
SUBADV						1.000

Panel C: Small-Cap Managers

	ACCTGROWTH	EFGROWTH	MORNINGSTAR	AGE	MINIMUM	SUBADV
ACCTGROWTH	1.000	0.474	0.256	-0.286	-0.020	-0.451
EFGROWTH		1.000	0.380	-0.307	0.131	-0.102
MORNINGSTAR			1.000	-0.280	-0.311	-0.445
AGE				1.000	0.198	0.348
MINIMUM					1.000	0.503
SUBADV						1.000

ACCTGROWTH: Average percentage growth in size for all separately-managed accounts from 1998 to 2003.
EFGROWTH: Average percentage growth in size for separately-managed Endowments and Foundations accounts from 1998 to 2003.
MORNINGSTAR: Average 5-year Morningstar rating for all mutual funds managed by investment firm.
AGE: Number of years investment management firm has been in existence.
MINIMUM: Binary variable representing whether an advisory firm's SMA minimum account size is in excess of $500,000, zero otherwise.
SUBADV: Binary variable representing whether an advisory firm participates in an SMA WRAP program sponsored by a broker-dealer, zero otherwise.

Table 5: Descriptive Statistics

This table provides descriptive statistics of the explanatory variables used is the proceeding models (Table 6). D.Alpha is the average annual difference in four-factor alphas from concurrently-managed SMAs and MFs. *D.NetInflow* is the average annual difference in net inflows between concurrently-managed SMA's and MF's. *D.LNAUM* is the average annual difference in SMA and MF assets under management. *D.AUMGROWTH* is the annual average difference in percentage growth in SMA and MF assets under management. *ACCTGROWTH* is the annual average percentage growth in size for all SMAs managed by an investment management firm. *EFGROWTH* is the average annual percentage growth in size for all SMAs managed by an investment management firm that are categorized as either an "Endowment" or "Foundation". *MORNINGSTAR* is the average 5-year Morningstar rating for all mutual funds managed by an investment management firm. *AGE* is the total number of years an investment management firm has been in existence (as of 2003). SMA data regarding performance, product assets under management, and minimum purchase data is from the Mobius MSEARCH database. MF data regarding product assets under management and performance is from the CRSP mutual fund database. Four-factor alphas are based on quarterly returns (1998-2003) that are net of any fees associated with fund management, fund administration, and trading commissions.

All (n=115)

	D.ALPHA	*D.NETINFLOW*	*D.LNAUM*	*D.AUMGROWTH*	*ACCTGROWTH*	*EFACCTGROWTH*	*MORNINGSTAR*	*AGE*
Mean	0.001 (0.010)	-0.128 (0.748)	1.393 (1.471)	0.142 (2.008)	0.050 (0.155)	0.229 (0.529)	3.255 (0.768)	36.736 (33.845)
Median	0.001	-0.011	1.203	0.013	0.025	0.069	3.087	26.250

Large Cap (n=58)

	D.ALPHA	*D.NETINFLOW*	*D.LNAUM*	*D.AUMGROWTH*	*ACCTGROWTH*	*EFACCTGROWTH*	*MORNINGSTAR*	*AGE*
Mean	-0.001 (0.011)	-0.155 (0.491)	1.523 (1.562)	-0.080 (0.443)	0.026 (0.166)	0.157 (0.488)	3.295 (0.799)	41.272 (37.888)
Median	1.1E-4	-0.041	1.213	0.001	0.010	-0.027	3.000	27.125

Small Cap (n=57)

	D.ALPHA	*D.NETINFLOW*	*D.LNAUM*	*D.AUMGROWTH*	*ACCTGROWTH*	*EFACCTGROWTH*	*MORNINGSTAR*	*AGE*
Mean	0.002 (0.007)	-0.102 (0.935)	1.268 (1.382)	0.355 (2.776)	0.075 (0.141)	0.293 (0.560)	3.213 (0.740)	32.120 (28.770)
Median	0.002	-0.005	1.087	0.022	0.060	0.102	3.100	22.000

Table 6: Multivariate Results

This table provides OLS regression results. The dependent variable is the average annual difference in four-factor alphas from concurrently-managed SMAs and MFs. *D.NETINFLOW* is the average annual difference in net inflows between concurrently-managed SMA's and MF's. *D.LNAUM* is the average annual difference in SMA and MF assets under management. *D.AUMGROWTH* is the annual average difference in percentage growth in SMA and MF assets under management from 1998 to 2003. *ACCTGROWTH* is the annual average percentage growth in size for all SMAs managed by an investment management firm. *EFGROWTH* is the average annual percentage growth in size for all SMAs managed by an investment management firm that are categorized as either an "Endowment" or "Foundation". *MORNINGSTAR* is the average 5-year Morningstar rating for all mutual funds managed by an investment management firm. *AGE* is the total number of years an investment management firm has been in existence (as of 2003). *MINIMUM* is a binary variable that captures whether an advisory firm's SMA minimum account size us less than $500,000, zero otherwise. *SUBADV* is a binary variable that captures whether an advisory firm manages retail SMA portfolios within a broker-dealer program, zero otherwise. SMA data regarding performance, product assets under management, and minimum purchase data is from the Mobius MSEARCH database. MF data regarding product assets under management and performance is from the CRSP mutual fund database. Four-factor alphas are based on quarterly returns (1998-2003) that are net of any fees associated with fund management, fund administration, and trading commissions. T-statistics are in parenthesis and are results from significance tests (coefficients different from zero).
* Significance at a 10% level; ** Significance at a 5% level; *** Significance at a 1% level.

Variable	Total	Large-Cap	Small-Cap
INTERCEPT	-0.004	-0.013	0.005
	(-0.51)	(-1.04)	(0.70)
D.NETINFLOW	-0.013***	-0.014**	-0.021**
	(-3.33)	(-2.45)	(-2.42)
D.LNAUM	-0.001	-0.001	0.001
	(-0.37)	(-0.52)	(0.87)
D.AUMGROWTH	0.012***	0.018**	0.018**
	(3.39)	(2.10)	(2.55)
ACCTGROWTH	0.001	-0.009	-0.008**
	(0.03)	(-0.42)	(-0.68)
EFGROWTH	-0.001	-0.009	0.003
	(-0.28)	(-1.28)	(1.06)
MORNINGSTAR	0.001	0.003	-0.002
	(0.39)	(1.17)	(-0.95)
AGE	2E-4	2E-4	9E-4**
	(0.87)	(0.32)	(2.53)
MINIMUM	-0.004	-0.006	-0.001
	(-1.50)	(-1.08)	(-0.29)
SUBADV	0.003	0.004	-0.004
	(0.76)	(0.59)	(-1.41)
Number of Observations	115	58	57
Adjusted R-Square	0.113	0.190	0.096