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Best Ideas

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Best Ideas

Abstract

This paper provides powerful evidence that mutual fund managers can pick stocks that outperform the market. Many have argued that the inability of mutual fund managers to outperform benchmarks is the most persuasive evidence in favor of capital market efficiency. Berk and Green (2004) argue that this is not necessarily the case, because factors related to the structure of the money management industry will cause even good stock pickers not to outperform. We circumvent this problem by examining the performance of stocks that represent managers' "Best Ideas." We find that the stock that active managers display the most conviction towards ex-ante, outperforms the market, as well as the other stocks in those managers' portfolios, by approximately 39 to 127 basis points per month depending on the benchmark employed. This leads us to two conclusions. First, the U.S. stock market does not appear to be efficiently priced, since even the typical active mutual fund manager is able to identify a stock that outperforms. Second, consistent with the view of Berk and Green, the organization of the money management industry appears to make it optimal for managers to introduce stocks into their portfolio that are not outperformers, even though they are able to pick good stocks.

JEL classification: G11, G23

1. Introduction

The informational efficiency of the stock market is of central concern to financial economists. Arguably, the track records of active mutual fund managers provide the best place to look for evidence on this issue. Consequently, researchers have used measures such as Jensen's alpha (Jensen, 1968) or the Sharpe ratio (Sharpe, 1966) to measure abnormal performance in the historical returns on fund portfolios. More recently, studies have taken advantage of the additional information contained in fund holdings in order to better measure any potential outperformance. Still, despite over four decades of empirical studies, it remains an open question as to whether managers can significantly outperform benchmarks or not. We reexamine the evidence on manager stock-picking ability, but with a novel perspective that is designed to avoid a common flaw in those previous studies. Specifically, by examining only the *total* performance of a fund's holdings, past work has used a watered-down version of manager's opinions. In stark contrast, we filter out potentially alpha-neutral positions in fund portfolios, focusing instead on the best ideas of portfolio managers.

There are several plausible reasons why examining total portfolio performance may be misleading concerning stock-picking skills. First, manager compensation is often tied to the size of the fund's holdings. As a consequence, managers may have incentives to continue investing fund capital after their supply of alpha-generating ideas has run out. This tension has been the subject of recent analysis, highlighted by the work of Berk and Green (2004). Second, the very nature of fund evaluation may cause managers to hold some or even many stocks on which they have neutral views concerning future performance. In particular, since managers may be penalized for exposing investors to idiosyncratic risk, diversification may cause managers to hold some stocks not because they increase the mean return on the portfolio but simply because these stocks reduce overall portfolio volatility. Third, open end mutual funds provide a liquidity service to investors. Edelen (1999) provides strong evidence that liquidity management is a major concern for fund managers and that performance evaluation methods should take it into account. Alexander et al. (2007) show explicitly that fund managers trade-off liquidity against valuation motives, when making investment decisions. Finally, even if managers were to only hold stocks that they expect to outperform, it is likely that they believe that some of these bets are better than others.

The ideal research design for this study would be if managers were to identify, at the beginning of each quarter, which of the stocks in their portfolio they felt particularly strongly about. Then, we could simply test whether these best ideas perform better than other positions in the portfolio. Unfortunately for us, managers have no particular mechanism or incentive to identify their best ideas in such a way. Therefore, we must attempt to proxy for what would have been their selections - to use the data available to us to identify a plausible set of best ideas.

We do so by assuming that managers are maximizing Sharpe Ratio in order to back out their views about alpha from their portfolio holdings. In particular, we select the Capital Asset Pricing Model in order to estimate stocks' idiosyncratic risk component. With the assumption that that model captures the factor structure in stock returns, a manager that wishes to maximize his portfolio's excess return relative to volatility should overweight each stock (relative to the factor model's weights) by alpha scaled by its idiosyncratic variance (MacKinlay and Pastor (2000)).

Our findings are quite consistent across all combinations of specifications: different benchmarks, different risk models, different definitions of best ideas. We find that best ideas do not only generate statistically and economically significant risk adjusted returns over time but they also systematically outperform the rest of managers' portfolios. The level of outperformance varies depending on the specifications, but falls in the range between 39 and 127 basis points per month in our primary specification. Thus, we argue that our findings present strong evidence that the U.S. stock market was not efficiently priced during the period of the study, and that professional stock pickers (even average ones) were able to exploit these inefficiencies to produce profitable trades.

The rest of the paper is structured as follows. In section 2 we provide motivation and our methodology. In section 3 we summarize the dataset. In section 4 we describe the results and their implications. Section 5 concludes.

2. Methodology

To formally motivate how we extract the best ideas of portfolio managers, we first consider a simple portfolio optimization problem. Consider a linear factor model for the returns on N given assets. Let r_t be the vector of returns on those N assets at time t, with mean μ and covariance matrix Ω. Returns are in excess of the risk-free rate, unless the asset is a zero-investment portfolio. For a set of K factor portfolios, we assume that the following relation holds

$$\begin{aligned} r_t &= \alpha + B r_{Kt} + \varepsilon_t \\ E[\varepsilon_t] &= 0, E[\varepsilon_t \varepsilon_t'] = \Sigma, Cov[r_{Kt,} \varepsilon_t] = 0 \\ r_{Kt} &= \omega_{Kt}' r_t \end{aligned}$$

where B is a NxK matrix of factor sensitivities, r_{Kt} is the K-vector of factor portfolio returns in period t, ω_{Kt} is the matrix of stock weights resulting in these factor returns, and α and ε_t are the N-vectors of mispricings and disturbances, respectively. Finally, Σ is assumed to be of full rank.

An exact K-factor pricing relation implies that α is a vector of zeros. If pricing is not exact, then α is non-zero and related to the residual covariance matrix Σ as described in MacKinlay (1995). MacKinlay shows how the optimal orthogonal portfolio is the unique portfolio that can be constructed from these N assets to be uncorrelated with the factor portfolios and, in conjunction with the factor portfolios, forms the tangency portfolio. For example, when K=1 and the residual covariance matrix Σ is diagonal and proportional to the identity matrix, the orthogonal portfolio weights in the N assets and in the factor portfolio are

$$c \begin{bmatrix} \alpha \\ -\beta' \alpha \end{bmatrix}$$

where c is a normalizing constant and β is the vector of loadings on the factor. The weights on the N assets are proportional to the mispricing vector while the weight on the factor portfolio makes the portfolio orthogonal with respect to the factor. With less restrictive assumptions about Σ, the weights in the orthogonal portfolio then become proportional to $\Sigma^{-1}\alpha$. For example, if Σ is diagonal but stocks differ in the level of residual variance, the weight in each stock is proportional to $\frac{\alpha_i}{\sigma_i^2}$.

This textbook theory motivates benchmark-adjusted weights as appropriate measures of managers' views on mispricing. Practically speaking, we adjust the weights we observe in holdings data in one of four ways. Our basic approach is to identify best ideas as those which the manager overweights the most relative to some benchmark weighting scheme. In order to show robustness of the result, we use several different weighting schemes motivated by theory as well as simplicity and intuition. The simplest approach we consider is to compare the weights in the portfolio to the market capitalization weights of the stocks. That is, if Microsoft makes up 2 percent of the U.S. stock market, and Merk makes up 1 percent, we identify Microsoft's overweight as its portfolio weight minus 2 percent while Merk's overweight is its performance weight minus 1 percent. Of course, it is quite possible that every stock in a manager's portfolio is viewed as overweighted by this metric. This is especially true for the portfolios of small-cap managers, where a typical stock might have a market weight that is quite tiny, and each stock in the portfolio may have weights greater than 2 percent, for example. However, this is not a problem because we are only interested in the relative overweights of each stock - there is no need for the overweights to add to zero or to anything else. Therefore, our most intuitive approach is to define manager j's tilt in stock i as the difference between the fund's portfolio weight in i, λ_{ijt}, and the weight of stock i in the market portfolio, λ_{iMt}

$$market\_tilt_{ijt} = \lambda_{ijt} - \lambda_{iMt}$$

While intuitive, the weighting scheme discussed above is not clearly motivated by theory. A scheme that does follow from theory represents our second approach. For simplicity we select the Capital Asset Pricing Model to capture the return generating process of equity returns.[1] Using this model, we estimate the idiosyncratic risk component of each stock in the CRSP universe. This is nothing but the mean square error obtained by regressing a daily time series of stock i 's excess returns over the risk-free rate on market excess returns over a period of 60 days. We then need to add two strong assumptions: first, the model we have selected captures the factor structure of returns, so that the idiosyncratic risk components of stocks relative to this model are independent. Second, the goal of each manager is to create a portfolio with maximum information ratio - that is, he wishes to maximize excess return relative to volatility by combining the set of stocks that he has selected. Given that the Sharpe Ratio is probably the most widely cited performance statistic of mutual fund managers our second assumption does not appear to be very restrictive. Under these conditions, the manager's weight in each stock relative to the benchmark will be given by its expected risk adjusted return divided by the stock's idiosyncratic variance. Each stock is viewed as being an equally good investment on a risk vs. return

[1]In unreported results we repeat the analysis using the Fama-French Model (Fama and French 1993) as the underlying asset pricing model. We found that this does not influence our results significanly.

basis. Therefore, we thus modify the above tilt by scaling it with our estimate of the stock's idiosyncratic variance,

$$CAPM\_tilt_{ijt} = \sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$$

However, not all managers are benchmarked against the market. Ideally, we would subtract the portfolio weights of the benchmark relevant to the specific manager. One very general way to achieve this is to construct the benchmark as the market-capitalization-weighted portfolio of stocks contained in the manager's portfolio. To clarify: suppose that a portfolio consisted of Stocks A and B, each of which makes up only a very tiny fraction of the stock market (i.e., they are micro-cap stocks). Further, suppose that Stock A has twice the market capitalization of Stock B. Then, in this weighting scheme, Stock A would have a benchmark weight of 66.67%, and Stock B a benchmark weight of 33.33%. If the portfolio held equal dollar amounts of Stock A and Stock B, Stock A would be viewed as being underweight by 16.67%, while Stock B as being overweight by 16.67%. Using this scheme, the summed tilts do equal zero. Regardless, it is the relative tilt within each portfolio that matters for our approach: in this example, Stock B would be the best idea, and Stock A would be the worst idea. Formally we define the portfolio tilt measures as,

$$\begin{aligned} portfolio\_tilt_{ijt} &= \lambda_{ijt} - \lambda_{iVt} \\ CAPM\_portfolio\_tilt_{ijt} &= \sigma^2_{it}(\lambda_{ijt} - \lambda_{iVt}) \end{aligned}$$

We identify the "Best Idea" of a manager as the stock with the highest tilt in his portfolio. Each of our four tilt measures proxies for the manager's relative conviction about his holdings. High tilt ranks indicate strong conviction.

Recent papers have emphasized the importance of trades in conveying management opinion on the value of a stock.[2] Inefficiencies in the pricing of stocks are

[2] Chen et al. (2000) show that the stock holdings of mutual funds in general do not outperform the rest of the market. In contrast, purchases of fund managers outperform their sales by roughly 2% over the year folowing the trade. The authors interpret this result as managers possessing superior information and acting on short-lived investment opportunities in the market.

unlikely to persist for extended periods. Mutual fund portfolios, on the other hand, exhibit inertia: Most managers cannot fully adjust their portfolios as a reaction to new information on the value of an asset, due to the price impact and the tax implications of their actions. Recent trades, by being incremental changes to managers' exposures, thus reflect "fresh" information on their valuation of a particular asset. We take account of this insight by reporting separate results for best ideas that have been recently bought by managers. Whenever we do so, we refer to them as best "fresh" ideas.

3. Data and Sample

Our stock return data comes from CRSP (Center of Research for Security Prices) and covers assets traded on the NYSE, AMEX and NASDAQ. We use the new mutual fund holdings data from Thompson Rueters. Our sample consists of US domestic equity funds that report their holdings in the period from January 1991 to December 2005. The holdings data are gathered from quarterly filings of every U.S.- registered mutual fund with the Securities Exchange Commission. The mandatory nature of these filings implies that we can observe the holdings of the vast majority of funds that are in existence during that period. For a portfolio to be eligible for consideration, it must contain at least 20 stocks and must have total net assets exceeding $5 million.[3] A crucial assumption of our analysis is that fund managers try to maximize the information ratio of their portfolios. Therefore we exclude portfolios that are unlikely to be managed with this aim in mind, such as index or tax-managed funds. We identify best ideas as of the true holding date of the fund manager's portfolio as we are primarily interested in whether managers have stock-picking ability, not whether outsiders can piggyback on the information content in managers' holdings data.[4]

Table 1 provides summary statistics on our sample of mutual fund portfolios over the 15 year period under consideration. It points at the impressive growth of the industry, partly due to the growth in the market itself but also due to the increased demand for equity mutual fund investment. While the number of funds in our sample

[3] This minimum requirements on the reported portolios are standard in the the literature and imposed to filter out the most obvious errors present in the holdings data.

[4] In research not shown, we have also documented that historically one is able to generate profitable best-ideas trading strategies using holdings information as of the date the positions are made public. See Figure 5 for indirect evidence on this question.

roughly doubles from the end of 1990 to the end of 2005, assets under management increase from $211.3 billion to more than $2.6 trillion in the same time span. Column 4 indicates that active mutual funds as a whole have grown to be dominant investors in U.S. equity markets. The stocks that managers cover tend to be on average between the sixth and seventh market capitalization decile. This bias towards large capitalization stocks is gradually decreasing over time. During the sample period, the mean number of assets in a fund has increased by roughly half. In summary, our analysis covers a substantial segment of the professional money management industry that in turn scans a substantial part of the U.S stock market for investment ideas.

4. Empirical Results

4.1. The Distribution of Best Ideas

In theory the number of best ideas that exist in the industry at any point in time could be as many as the number of managers or as few as one (if each manager had the same best idea). Of course this latter case is quite unlikely since mutual fund holdings make up a substantial proportion of the market. Therefore massive overweighting of a stock by mutual funds would be difficult to reconcile with financial market equilibrium. The black bars in Figure 1 indicate that best ideas are generally not overlapping across managers. Over the entire sample period, more than 70% of Best Ideas do not overlap across managers. Any of these stocks are a Best Idea of only one manager at the time. Less than 19% of best ideas are considered by two managers, and only 8% of Best Ideas overlap over three managers at a time. On very rare occasions, it does occur that a stock is the best idea of ten or more funds. Clearly, managers best ideas are not entirely independent. However, the best idea portfolios we identify does not consist of just a few names that are hot on Wall Street. Rather, it represents the opinions of hundreds of managers each of whom independently found at least one stock about which they appeared to have real conviction.

Figure 2 graphs the median of top tilts (best ideas) over time. Panel 1 depicts the typical top market and portfolio tilts, while Panel 2 contains the same data for the CAPM-market and CAPM-portfolio tilts. As a group, fund managers exhibit a slightly decreasing tendency over time to tilt away from the market and portfolio benchmarks respectively. Panel 2 shows that the distribution of CAPM-tilts reflects trends in idiosyncratic volatility over time.[5] This is a desirable feature of our measures: A 2% tilt away from the benchmark in 2000 is a stronger sign of conviction than a 2% tilt in 1997, since idiosyncratic risk has risen in between.

Note that at any point in time, a portion of these tilts are very small as they are due to small deviations from benchmarks by essentially passive indexers. As a consequence, most of our analysis will focus on the top 25% of tilts at any point in time. However, we show that our conclusions do not depend on this restriction as our findings are still evident when we consider even the smallest top tilt as indicative of active management.

4.2. The Features and Performance of Best Ideas

We measure the performance of best ideas using two approaches. Our primary approach is to measure the out-of-sample performance of a portfolio of all active managers' best ideas. Each best idea in the portfolio is equal-weighted (if more than one manager considers a stock a best idea we overweight accordingly). Results are qualitatively similar if we equal-weight unique names in the portfolio, if we weight by market capitalization, or if we weight by the amount of dollar invested in the best idea. The portfolio is rebalanced on the first day of every quarter to reflect new information on the stock holdings of fund managers and its performance is tracked until the end of the quarter. Each best ideas portfolio differs according to which of the four tilt measures we use to identify best ideas. Our secondary approach is to instead examine "best-minus-rest" portfolios, where for every manager, we are long his or her best idea and short the remaining stocks in the manager's portfolio (with the weights for the rest of the portfolio being proportional to the manager's weights). Thus for each manager we have a style-neutral best-idea bet, which we as before aggregate over managers according to the dollar amount invested in each best idea.[6] Again, we then track the monthly performance of these four portfolios (one for each

[5] Campbell, Lettau, Makiel, and Xu (2001) document a positive trend in idiosyncratic volatility during the 1962 to 1997 period. See Brandt, Brav, Graham, and Kumar (forthcoming) for post-1997 evidence on this time-series variation.

[6] Note that our best-minus-rest approach has at least one attractive benefit: By comparing the manager's best idea to other stocks in the manager's portfolio, the best-minus-rest measure tends to cancel out most style and sector effects that might otherwise bias our performance inference. However, we emphasize the first approach for the simple reason that some managers may have the ability to pick more than one good stock.

tilt measure) over the following three months and rebalance thereafter.

We apply three different measures of performance to this test portfolio - that is three different methods to detect manager's abilities to make use of inefficiencies in stock markets. We choose these models, partly to reflect industry standards in fund evaluation and to make our results comparable to the findings of previous work in the literature. We first examine the simple average excess return of the test portfolio. This is equivalent to using a model of market equilibrium in which all stocks have equal expected return. While financial economists view this model as simplistic, it is still the case that raw returns are an important benchmark against which money managers may be judged by many investors. Second, we use Carhart's (1997) four-factor enhancement of the Fama-French model, in which an additional factor is added to take account of correlation with a momentum bet, i.e. a winners-minus-losers portfolio. Third, we report performance results measured by a six-factor specification, which adds two more regressors to the Carhart model. The fifth factor is a standard value-weighted long-short portfolio, long in stocks with high idiosyncratic risk and short in stocks with low idiosyncratic risk. A recent paper by Ang, Hodrick, and Xi (2004) indicates that stocks with high idiosyncratic risk perform poorly, and given the nature of our tilt measures, not accounting for the performance of such stocks would skew our results. The sixth factor captures the documented short term reversion in the typical stock's performance. A short-term reversal factor is included here for similar reasons as the momentum factor, to control for mechanical and thus easily replicable investment strategies that should not be attributed to managers acting on private information. All standard factor return data is gathered from Kenneth French's website.[7] We construct the idiosyncratic volatility factor following Ang, Hodrick, and Xi (2004).

Table 2 reports the results of analyzing the best ideas of active fund managers. Panel A studies the best ideas portfolios using each tilt measure while Panel B analyzes the best fresh ideas for each tilt measure. We first study the covariance properties of these portfolios. We find that the best ideas of managers covary with small, high-beta, volatile, growth stocks that have recently performed well. Thus, despite considerable evidence that value outperforms growth, as well as weaker but still interesting evidence that low beta as well as less volatile stocks have positive alphas, it does not appear that fund managers systematically find their highest-conviction ideas among these sorts of stocks.

[7] http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html

The fact that we find that managers best ideas are small stocks that load positively on the momentum factor, UMD, is interesting. The first result would be expected even if managers ultimately had no stock-picking ability as the managers themselves would expect to be able to pick smaller stocks better, recognizing that the market for large-cap stocks would be relatively more efficient.

As for the covariance with momentum, when a stock performs well, it tends to load positively on UMD and negatively on SR. Thus, in part what we are finding is a failure to rebalance on the part of managers. Stocks that have a substantial tilt tend to be those that have performed well over the past year, thus, achieving their high position at least in part because of past growth in their stock price. Typical coefficients on the UMD factor are in the range between 0.2 and 0.3. While loadings of this size on hedge portfolios do lead to tremendous statistical significance (often with t-statistics above 5), it does not appear that mere price increases are the primary cause of stocks being significantly overweighted in portfolios, since a momentum tilt in the neighborhood of .2 does not imply past performance so high as to massively increase the portfolio weight of the stock. After all, for a stock that is 2% of a portfolio to organically become 3.5% of the portfolio, its price has to rise 75% relative to the return on the rest of the stocks in the portfolio. This is a rare occurrence, and generally, as the data are showing, is not the norm among the best idea stocks we are observing.

In Table 2, we adjust returns using three models of market equilibrium. Over the entire sample, our most straightforward best ideas portfolio has an average return of 126 basis points per month in excess of the risk-free rate. This return has an associated four-factor alpha of 29 b.p. with a t-statistic of 2.24. The six-factor alpha is stronger at 39 basis points resulting in a higher t-statistic of 3.08. When we measure tilt relative to the manager's holdings, the point estimates as well as the t-statistics increase by twenty to thirty percent, suggesting that our benchmark may not be perfect. Finally, once we follow theory and interact our market tilt measure with an estimate of idiosyncratic variance, estimates of alpha increase to 112 basis points (t-statistic of 4.75) and 115 basis points (t-statistic of 5.31) for the market and portfolio tilt measures respectively.

So far our analysis identifies each manager's best individual idea based purely on a snapshot of the manager's holdings. Of course, one would expect that managers are not able to immediately reoptimize their positions. So as a consequence, we focus on those best ideas that are fresh, where the manager is not actively selling the position.[8] This allows us to ignore large positions that managers are slowly scaling down. In every case, the point estimates as well as the significance of risk-adjusted returns on the best-ideas portfolios increase substantially. Clearly, best fresh ideas outperform their benchmarks to a statistically and economically significant extent. The portfolio of best fresh ideas yields risk-adjusted returns in the range of 46 to 127 basis points per month.

One concern is that the factor model may not perfectly price characteristic-sorted portfolios. The small-growth portfolio and the large-growth portfolio have three-factor alphas of -34 bps/month (t-stat -3.16) and +21 bps/month (t-stat of 3.20) in Fama and French (1993). As Daniel, Grinblatt, Titman, Wermers (1997) (DGTW) point out, this fact can distort performance evaluation. For example, the passive strategy of buying the S&P 500 growth and selling the Russell 2000 growth results in a 44 bps/month Carhart alpha (Cremers, Petajisto, and Zitzewitz; 2008). As a consequence, we also adjust the returns on the best-ideas strategy using characteristic-sorted benchmark portfolios as in DGTW. Specifically we assign each best idea to a passive portfolio according to its size, book-to-market, and momentum rank and subtract the passive portfolio's return from the best idea's return. The Characteristic Selectivity (CS) measure for the best ideas portfolio is just the weighted differenced return, $CS_t = r_{p,t} - r_{DGTW,t}$. Table 3 and Table 4 show the mean of the benchmarked return, CS_t, as well as the mean of the benchmark return, $r_{DGTW,t}$. We also report in those tables the intercept and loadings estimates from corresponding four and six factor regressions. We find that most of the abnormal performance we measure in the four and six-factor regressions comes from stock selection within a characteristic benchmark, not from holding that benchmark passively or tactically [what DGTW denote as Average Style and Characteristic Timing].

Our analysis has focused on the top 25% best ideas across the universe of active managers in order to make sure we were not examining passive funds, sometimes labeled "closet indexers". Table 5 documents that our findings concerning the performance of best ideas generally hold as we vary this threshold from the top 100% to top 50% to top 5% of active tilts. Even if we consider the entire sample of best fresh ideas in the industry (Panel A in Table 6) we find that they outperform by 20 to 65 basis points per month, all statistically significant. In particular note the very strong performance of best ideas representing the top 5% of tilts in Panel C of that Table. For the top 5% of CAPM-portfolio tilts, the six-factor alpha is 1.88% per month, or

[8] An idea is considered "fresh" if and only if the percentage of the fund allocated to that stock is larger than in the previous quarter.

22.56% per year.

The analysis in Table 7 indicates that missing controls are probably not responsible for the alphas we measure by examining the performance of a best-minus-rest strategy. Unless best ideas of managers systematically have a different risk or characteristic profile than the rest of the stocks in their portfolios, this strategy controls for any unknown style effects that the manager may possibly be following. Throughout the table, the six factor alphas are statistically significant at the 1% level of significance. Managers' best ideas, whether fresh or not, significantly outperform the rest of managers' portfolios.

Table 8 repeats the analysis of Table 7 replacing the best idea in the long side of the bet with the manager's top three ideas (Panel A) or top 5 ideas (Panel B). These top three/five positions are equally-weighted. We find that generalizing what managers feel is their top picks continues to show economically and statistically significant performance. Consistent with the idea that managers' tilts reflect their views concerning stocks' prospect, the alpha of the trading strategy is smaller as we include the lower-ranked stocks. Consistent with diversification benefits, the standard error of the estimate is usually lower as more stocks are included on the long side.

We examine more carefully how views concerning alpha that are implicit in managers' portfolio weights line up with subsequent performance. Recall that the six-factor alpha for the best idea portfolio of Table 2 based on $portfolio\_tilt$ was 47 basis points. We repeat the calculation replacing every manager's best idea with their second-best idea. We then repeat again for the third-best idea, and so on down to the 10th ranked idea. We perform the same analysis starting with the lowest tilt measure and moving up a manager's rank. Therefore we calculate the performance of strategies that bet on manager's worst idea, then on manager's second-worst idea and so on. Figure 5 plots how the six-factor alpha evolves when one moves down the list of best ideas. Figure 3 strikingly shows that the point estimates monotonically decline as we move down manager's rankings.

Figures 4 and 5 plot the cumulative abnormal returns (CAR) of the best ideas portfolios, against the portfolio of all stocks held by mutual fund managers in event time. The CAR's have been adjusted for risk using the six factor model employed above. The graphs show that the superior performance of best ideas is not transitory in nature. The buy-and-hold CAR of the stocks in our best ideas portfolio is increasing even up to 12 months after first appearing in the portfolio. Buying the best-ideas portfolios of Table 2 that exploit variance-weighted tilts and holding these bets for the next twelve months would have returned slightly over 12%, after adjusting for standard factor risk.

4.3. Where are best ideas most effective?

In this subsection, we examine two potential contributing factors to managers' alpha-generating ability. In Table 9, each month we sort all stocks in the best ideas portfolio based on a standard measure of liquidity, the average daily relative bid-ask spread over the preceding quarter. We find that in every case, the less-liquid stocks are generating the majority of the alpha of the best ideas portfolios. For example, Table 9 shows that for our simplest tilt measure, the less-liquid best ideas outperform by 41 basis points with a t-statistic of 2.64 while the more-liquid best ideas actually underperform by 18 basis points. This cross-sectional variation in abnormal return within the best-ideas portfolio is not due to our sort on liquidity. In results not shown, we have also controlled for the Pastor and Stambaugh (2003) and Sadka (2006) liquidity factors, and the estimates of alpha remain economically and statistically significant.

In a rational expectations setting, information should be more valuable to the manager the less his peers act on it at the same time. Information is a strategic substitute. In order to shed light on this point, we calculate a stock-specific measure of conviction in the industry. Each quarter, we sort each manager's portfolio by one of the four tilt measures and assign a percentage rank to it (1% for lowest and 100% percent for highest tilt rank). We then cumulate this rank over all managers to arrive at a stock specific popularity measure. Table 10 provides the risk-adjusted performance of portfolios of above- and below-median popularity stocks. We find that the majority of the abnormal return comes from the best ideas that are the least popular. These results suggest that managers generate alpha in best-ideas that other managers do not seem to have. Consequently, a managerial stock pick outperforms if it is best, fresh, and first.

4.4. How do best ideas bets perform as a function of fund characteristics

In this subsection, we repeat the analysis of Table 5 Panel A where we look at the entire universe of active managers. However we now decompose the result based on fund type. We examine three fund characteristics that might be plausibly related to the performance of a fund's best ideas. First we ask how concentrated the fund is using a normalized Herfindahl index measure of the positions in a fund. Then we ask how focused the manager is based on the number of positions in the portfolio. Then we ask how big the fund is based on assets under management. Tables 11 , 12 , and 13 show that the best ideas of small or concentrated funds outperform the best ideas of their large, unconcentrated counterparts, though only the latter is statistically significant. However, it is not the case that the performance of the best ideas strategy in earlier Tables is completely due to the best ideas of concentrated funds, as the best ideas of unconcentrated funds still outperform. We find no cross-sectional variation in the performance of best ideas as a function of fund focus.

4.5. Why are the rest of the ideas in the portfolio?

In this subsection, we examine the performance of the non-best ideas stocks more carefully. In particular, we sort the rest of the portfolio into quintiles based on the stock's past correlation with the manager's best idea, as defined in Table 2. We then measure the performance of a trading strategy that goes long the top quintile (the most correlated stocks) and short the bottom quintile (the most uncorrelated stocks). We find a spread in returns ranging from 12 to 48 basis points per month depending on the definition of best idea. Five of the eight estimates are statistically significant and the point estimates increase as we move to our more preferred measures of best ideas. These results suggest that managers are willing to accept a lower (abnormal) return for stocks that are less correlated with the stock on which they have strong views.

4.6. Discussion and Implications

Modern portfolio theory makes clear normative statements about optimal investing by managers on behalf of their clients. Suppose for example that the assumptions underlying the CAPM hold, except that one manager has identified a single zero-beta investment opportunity X that has positive CAPM alpha. The optimal risky portfolio for an investor to hold will be a mix of X and M, where M represents the market portfolio. The weights that are optimal are the weights that maximize the resulting portfolio's Sharpe Ratio. Since the manager is not managing the investor's entire portfolio but only a part of it, the managers's optimal portfolio is **any** linear combination of X and M, since any such combination has the same (maximal) CAPM Information Ratio. Under the CAPM assumptions the investor can simply go long or short the market (costlessly) an appropriate amount to get an overall portfolio with maximum Sharpe Ratio.

When we weaken the assumptions to allow more realistic scenarios, we observe several reasons why investors or managers may prefer the manager's portfolio to have a larger or smaller weight in X. For simplicity we will continue to assume that the manager can invest only in X and M, that X has zero beta and positive alpha, and that investors care only about mean and variance of portfolio returns. The logic we develop will extend naturally to more general cases.

The first thing to consider is what happens when we relax the assumption that investors can borrow and lend freely at the riskless rate and costlessly trade the market portfolio long or short. Think, for example, of an investor who has 95% of his portfolio in the market and plans to invest 5% with the manager. (We justify the relatively small 5% assumption with the notion that more generally there will exist more than one manager with distinct stock-picking ability requiring allocations to individual managers to be relatively small.) To fix ideas, suppose that the investment X has 4% annual alpha and that the market premium is also 4%; let the market's annual volatility be 15% and X's be 40% (of course X and M are uncorrelated). The investor wishes to end up with the Sharpe-ratio-maximizing (SRM) combination, which in this example is (approximately) 88% in M and 12% in X. In the absence of constraints the investor will be happy with any combination of X and M from the manager since she can simply unwind it (as in classic Modigliani-Miller fashion) to get to 88/12 through trading market futures. But in the constrained case, the investor cannot get to the optimal portfolio at all, and the best portfolio she can get results from the manager choosing a portfolio that places 100% in X (the "best idea"). (Of course if the manager can borrow and short, the investor can get to the optimum if the manager holds a portfolio long 240% in X and short 140% in the market).

In general it seems likely that borrowing, lending, shorting, and maximum-investment constraints will create a situation where the investor's optimum requires the manager to choose a weight in X far greater than the SRM weight. This would appear to be the case in typical real-world situations. A manager has a small number of good investment ideas. Modern portfolio theory says that any portfolio of stocks that maximizes CAPM information ratio is equally good for investors. But in truth, if the manager offers a portfolio with small weights in the good ideas and a very large weight in the market [or a near-market portfolio of zero- (or near-zero-) alpha stocks], the results for investors will be entirely unsatisfactory. The small allocation that investors make to any given manager, combined with the small weight such a manager places in the good ideas, mean that the manager adds very little value. Few are the investors who will find 50 good managers of this type, take their 100 of capital, borrow 4900, and give each manager 100 while shorting the market 4900 in order to extract the edge from the best ideas while maintaining a portfolio beta of 1.0.

So: MPT says all X-M combinations are equally good. A natural choice for managers would be the SRM portfolio (88-12 in our example). But we see that the more realistic constrained case suggests that managers can serve their clients better by putting a much greater weight in X than the SRM weight –e.g. 100% instead of 12%. And yet as we see in Figure 2, overweights of best ideas by actual managers are **smaller** than 12%. Indeed overweights of that magnitude are rare. Of course the 12% figure came from our simple example; perhaps managers view their best ideas as having far less than 4% alpha. But this seems unlikely, since we find actual outperformance of this order of magnitude despite our very poor proxy for best ideas. Of course other conditions may differ from our simple example, but it appears probable that what we are observing is a decision by managers to diversify as much or more than the SRM portfolio despite the argument above that their clients would be best served by them diversifying far less than SRM. We identify four reasons managers may overdiversify.

1. **Regulatory/legal.** A number of regulations make it impossible or at least risky for many investment funds to be highly concentrated. Specific regulations bar overconcentration; additionally vague standards such as the "Prudent man" rule make it more attractive for funds to be better diversified from a regulatory perspective. Managers may well feel that a concentrated portfolio that performs

poorly is likely to lead to investor litigation against the manager.

Anecdotally, discussions with institutional fund-pickers make their preference for individual funds with low idiosyncratic risk clear. Some attribute the effect to a lack of understanding of portfolio theory by the selectors. Others argue that the selector's superior (whether inside or outside the organization) will tend to zero in on the worst performing funds, regardless of portfolio performance. Whatever the cause, we have little doubt that most managers feel pressure to be diversified.

2. **Price impact, liquidity and asset-gathering**. Berk and Green (2004) outline a model in which managers attempt to maximize profits by maximizing assets under management. In their model, as in ours, managers mix their positive-alpha ideas with a weighting in the market portfolio. The motivation in their model for the market weight is that investing in an individual stock will affect the stock's price, each purchase pushing it toward fair value. Thus there is a maximum number of dollars of alpha that the manager can extract from a given idea. In the Berk and Green model managers collect fees as a fixed percentage of assets under management, and investors react to performance, so that in equilibrium each manager will raise assets until the fees are equal to the alpha that can be extracted from his good ideas. This leaves the investors with zero after-fee alpha.

   Clearly in the world of Berk and Green, (and in the real world of mutual funds), a manager with one great idea would be foolish to invest his entire fund in that idea, for this would make it impossible for him to capture a very high fraction of the idea's alpha in his fees. In other words, while investors benefit from concentration as noted above, managers under most commonly-used fee structures are better off with a more diversified portfolio. The distribution of bargaining power between managers and investors may therefore be a key determinant of diversification levels in funds.

3. **Manager risk aversion.** While the investor is diversified beyond the manager's portfolio, the manager himself is not. The portfolio's performance is likely the central determinant of the manager's wealth, and as such we should expect him to be risk averse over fund performance. A heavy bet on one or a small number of positions can, in the presence of bad luck, cause the manager to lose his business or his job. If manager talent were fully observable this would not be the case – for a skilled manager the poor performance would be correctly attributed to luck, and no penalty would be exacted. But when ability is being

estimated by investors based on performance, risk-averse managers will have incentive to overdiversify.

4. **Investor irrationality**. There is ample reason to believe that many investors – even sophisticated institutional investors – do not fully appreciate portfolio theory and therefore tend to judge individual investments on their expected Sharpe Ratio rather than on what they are expected to contribute to the Sharpe Ratio of their portfolio. For example, Morningstar's well-known star rating system is based on a risk-return trade-off that is highly correlated with Sharpe ratio. It is very difficult for a highly concentrated fund to get a top rating even if average returns are very high, as the star methodology heavily penalizes idiosyncratic risk. Since 90% of all flows to mutual funds are to four- and five-star funds, concentrated funds would appear to be at a significant disadvantage in fund-raising. Other evidence of this bias includes the prominence of fund-level Sharpe Ratios in the marketing materials of funds, as well as maximum drawdown and other idiosyncratic measures.

Both theory and evidence suggest that investors would benefit from managers holding more concentrated portfolios.[9] Our belief is that we fail to see managers focusing on their best ideas for a number of reasons. Most of these relate to benefits to the manager of holding a diversified portfolio. Indeed Table 14 provides evidence consistent with this interpretation. But if those were the only causes we would be hearing outcry from investors about overdiversification by managers, while in fact such cries are rare. Thus we speculate that investor irrationality (or at least bounded rationality) in the form of manager-level analytics and heuristics that are not truly appropriate in a portfolio context, play a major role in causing overdiversification.

5. Conclusions

How efficient are stock prices? This is perhaps the central question in the study of investing. Many have interpreted the fact that skilled professionals fail to beat the market by a significant amount as very strong evidence for the efficiency of the stock market. In fact, Rubinstein (2001) describes that evidence as a "nuclear bomb against the puny rifles" [of those who believed markets are inefficient]."

[9] See recent work by Van Nieuwerburgh and Veldkamp (2008)

This paper asks a related simple question. What if each mutual fund manager had only to pick a few stocks, their best ideas? Could they outperform under those circumstances? We document strong evidence that they could, as the best ideas of active managers generate up to an order of magnitude more alpha than their portfolio as whole, depending on the performance benchmark.

We argue that this presents powerful evidence that markets are, indeed, inefficient, and that typical mutual fund managers can, indeed, pick stocks. The poor overall performance of mutual fund managers in the past is not due to a lack of stock-picking ability, but rather to institutional factors that encourage them to overdiversify, i.e. pick more stocks than their best alpha-generating ideas. We point out that these factors may include not only the desire to have a very large fund and therefore collect more fees [as detailed in Berk and Green (2004)] but also the desire by both managers **and** investors to minimize idiosyncratic volatility: Though of course managers are risk averse, investors appear to judge funds irrationally by measures such as Sharpe Ratio or Morningstar rating. Both of these measures penalize idiosyncratic volatility, which is not truly appropriate in a portfolio context.

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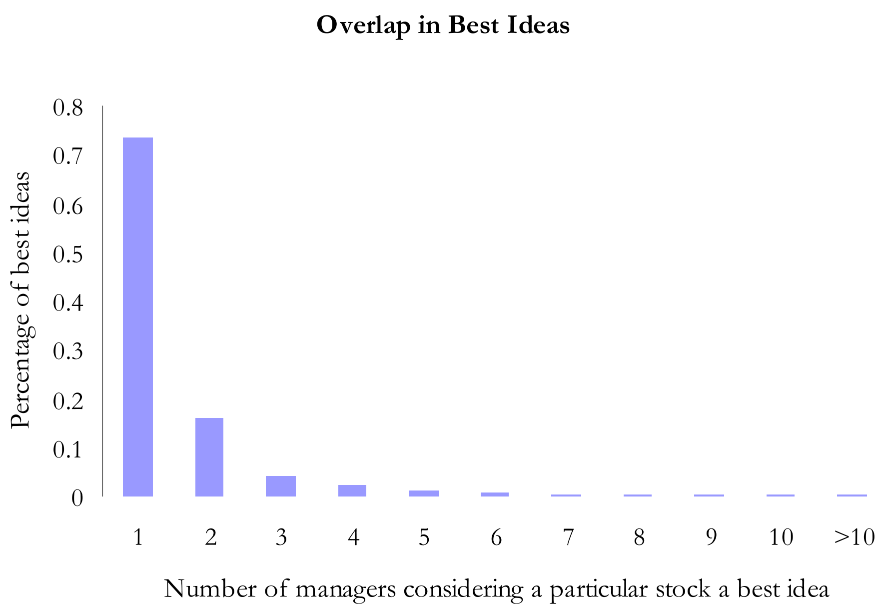
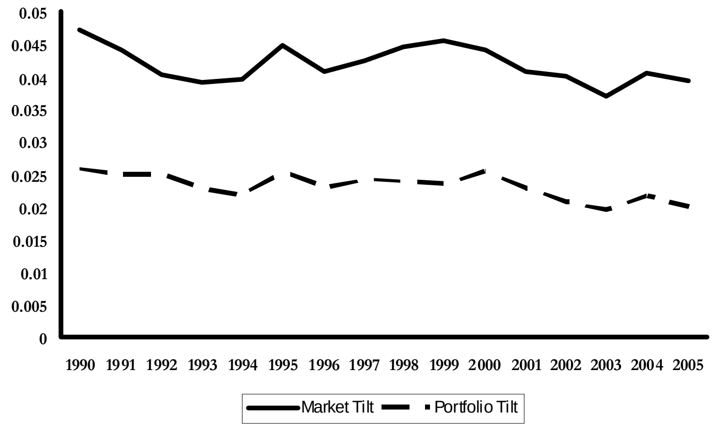


Figure 1. This figure displays the histogram of the popularity of the stocks that we select as manager's best ideas from 1990-2005. Popularity is defined as the number of managers at any point in time which consider a particular stock their best idea. Best ideas are determined within each fund as the stock with the maximum value of $market\_tilt_{ijt} = \lambda_{ijt} - \lambda_{iMt}$, where λ_{ijt} is manager j's portfolio weight in stock i and λ_{iMt} is the weight of stock i in the market portfolio.



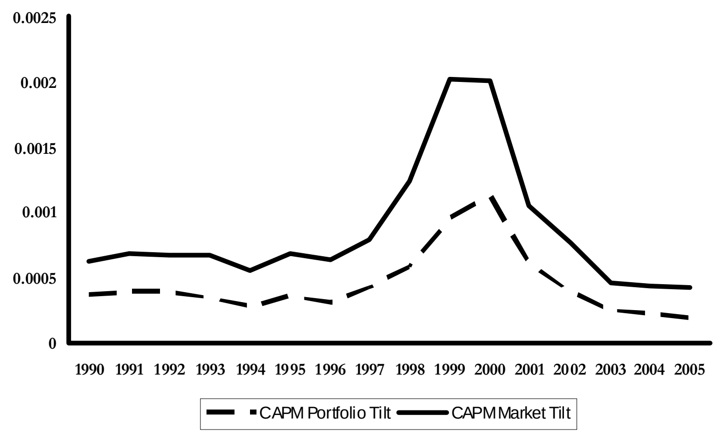


Figure 2. This figure graphs the value of the various measures we use to identify the best idea of a portfolio for the median manager over the time period in question. Best ideas are determined within each fund as the stock with the maximum value of one of four possible measures: 1) $market\_tilt_{ijt} = \lambda_{ijt} - \lambda_{iMt}$, 2) $CAPM\_tilt_{ijt} = \sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, 3) $portfolio\_tilt_{ijt} = \lambda_{ijt} - \lambda_{ijtV}$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, and σ^2_{it} is the most-recent estimate (as of the time of the ranking) of a stock's CAPM idiosyncratic variance.

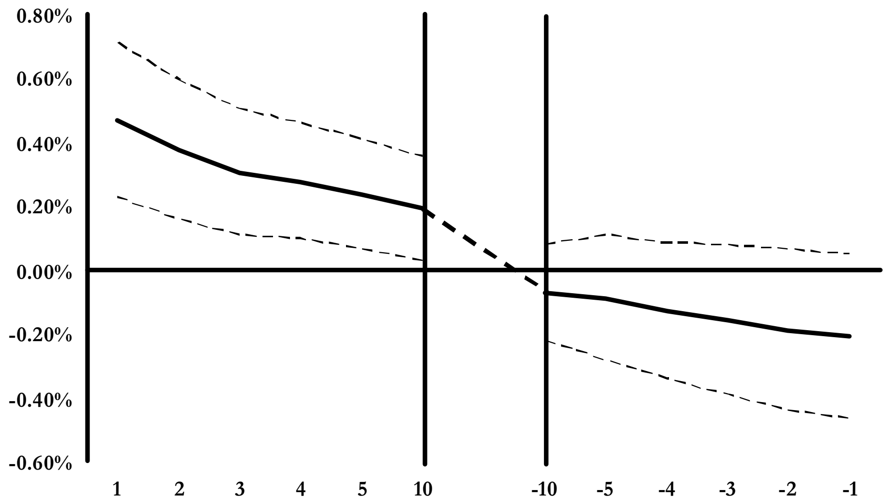


Figure 3. This figure graphs the six-factor alpha along with the accompanying two standard deviation bounds of trading strategies based on the $portfolio\_tilt_{ijt}$ measure of Table 2 Panel A for managers' best idea, second-best idea, down to their worst idea.

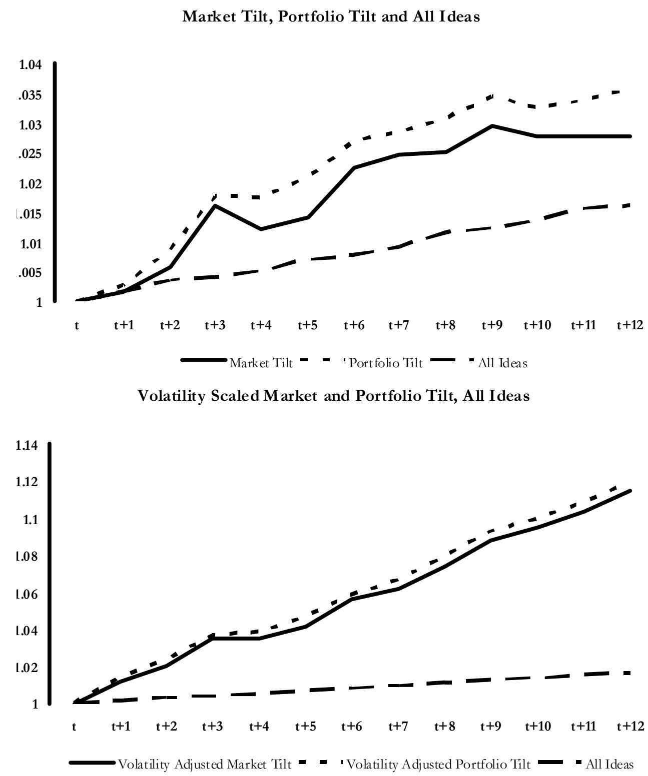


Figure 4. This figure graphs the risk-adjusted cumulative buy-and-hold abnormal returns of the best ideas portfolio as identified by our various tilt measures. The performance of the best ideas portfolios is contrasted with the performance of all stocks held by the mutual fund industry at the same points in time. All cumulative abnormal returns are adjusted using the six factor model

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. The sample period for the dependent variables is January 1991 - December 2005.

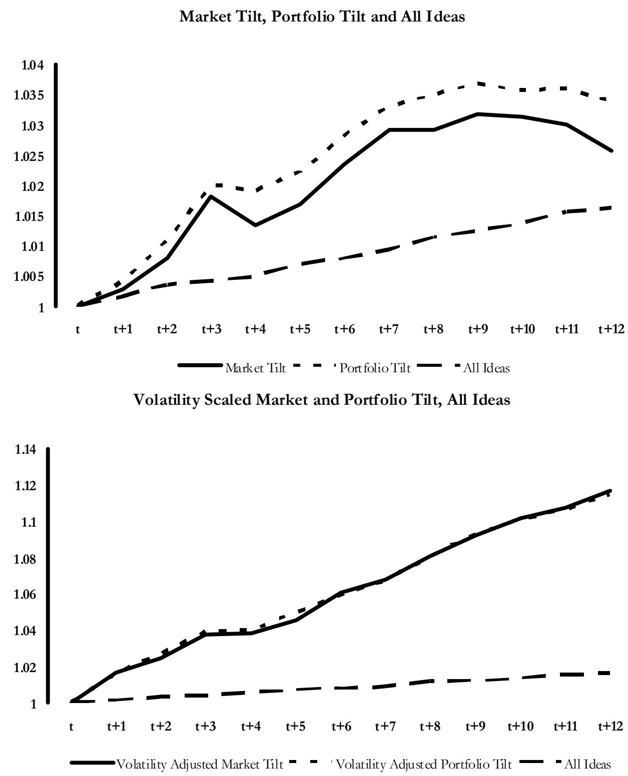


Figure 5. This figure graphs the risk-adjusted cumulative buy-and-hold abnormal returns of the best fresh ideas portfolio as identified by our various tilt measures. The performance of the best fresh ideas portfolios is contrasted with the performance of all stocks held by the mutual fund industry at the same points in time. All cumulative abnormal returns are adjusted using the six factor model

$$r_{p,t}-r_{f,t}= a_6+bRMRF_t+sSMB_t+hHML_t+mMOM_t+iIDI_t+rSTREV_t+\varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. The sample period for the dependent variables is January 1991 - December 2005.

Table 1: **Sample Summary Statistics**

The table reports year-end summary statistics from January 1990 to December 2005 for all mutual fund portfolios detailed on Thompson Financial that contain at least five stocks, are not index or tax-managed funds, have total net assets exceeding five million dollars, and have disclosed fund holdings within the past six months. Column 2 reports the total number of these funds. Column 3 reports the average fund size while Column 4 reports the total value of stocks held in those portfolios (both columns in billions of dollars). Column 4 reports the average market capitalization decile of the stocks held by the funds in the sample. Column 5 reports the average number of stocks in a fund.

Year	Number of Funds	Average Fund Size	Total Assets	Average Market-Cap Decile	Mean Number of Assets
1990	736	0.29	211.3	6.9	68.1
1991	844	0.36	300.4	6.8	74.1
1992	935	0.45	423.7	6.7	87.2
1993	1471	0.46	671.8	6.4	91.1
1994	1588	0.36	570.4	6.1	92.4
1995	1645	0.55	899.9	5.9	96.2
1996	2078	0.56	1172.5	6.3	96.8
1997	2210	0.68	1513.0	6.3	94.6
1998	2389	0.79	1877.6	6.1	98.5
1999	2324	1.01	2337.4	6.2	96.9
2000	2223	1.06	2350.1	5.8	105.8
2001	2061	0.93	1920.3	5.7	107.6
2002	1890	0.83	1565.6	5.8	104.2
2003	1848	1.11	2059.4	5.7	107.4
2004	1666	1.38	2301.4	6.0	106.6
2005	1563	1.68	2619.7	5.8	110.0

Table 2: **Performance of Best Ideas**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Best Ideas					
r_1	0.0126	0.0029	0.0039	1.02	0.09	0.00	0.22	0.07	-0.07
		2.24	3.08	26.40	1.79	-0.03	8.28	2.53	-2.30
r_2	0.0142	0.0038	0.0047	1.03	0.23	0.09	0.18	0.05	-0.06
		3.13	3.77	27.33	4.91	1.99	7.10	1.97	-1.98
r_3	0.0170	0.0059	0.0112	1.15	0.09	-0.32	0.29	0.52	-0.03
		2.06	4.75	16.16	1.00	-3.63	5.95	10.14	-0.53
r_4	0.0188	0.0070	0.0115	1.20	0.29	-0.30	0.27	0.44	-0.04
		2.75	5.31	18.26	3.57	-3.73	5.92	9.22	-0.77
				Panel B: Best Fresh Ideas					
r_1	0.0135	0.0037	0.0046	1.06	0.13	-0.01	0.19	0.04	-0.10
		2.53	3.14	24.01	2.31	-0.14	6.31	1.33	-2.68
r_2	0.0151	0.0049	0.0057	1.06	0.26	0.07	0.15	0.04	-0.08
		3.53	4.03	24.80	4.82	1.24	5.04	1.18	-2.36
r_3	0.0179	0.0070	0.0127	1.19	0.06	-0.37	0.26	0.55	-0.05
		2.21	4.74	14.69	0.60	-3.68	4.61	9.40	-0.83
r_4	0.0193	0.0077	0.0127	1.26	0.26	-0.34	0.21	0.48	-0.06
		2.65	5.04	16.58	2.70	-3.57	4.07	8.62	-1.00

Table 3: **Performance of Best Ideas: Characteristic Selectivity**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{DGTW,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t} - r_{DGTW,t}$ is the equal-weight and DGTW characteristic-benchmark-matched excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Best Ideas					
r_1	0.0041	0.0024	0.0035	0.03	-0.08	-0.02	0.19	0.07	-0.09
		1.91	2.86	0.81	-1.81	-0.53	7.50	2.53	-3.11
r_2	0.0049	0.0033	0.0044	0.03	-0.07	-0.01	0.18	0.05	-0.10
		2.53	3.36	0.66	-1.38	-0.23	6.73	1.90	-3.28
r_3	0.0095	0.0072	0.0106	0.17	-0.20	-0.21	0.24	0.32	-0.08
		2.72	4.29	2.26	-2.11	-2.21	4.77	5.85	-1.39
r_4	0.0107	0.0083	0.0111	0.20	-0.11	-0.25	0.22	0.25	-0.08
		3.37	4.64	2.81	-1.20	-2.76	4.39	4.76	-1.30
				Panel B: Best Fresh Ideas					
r_1	0.0054	0.0036	0.0047	0.05	-0.07	-0.05	0.19	0.06	-0.12
		2.27	2.98	1.12	-1.21	-0.84	5.92	1.62	-2.97
r_2	0.0062	0.0045	0.0057	0.07	-0.09	-0.03	0.17	0.05	-0.14
		2.86	3.64	1.42	-1.44	-0.50	5.08	1.47	-3.58
r_3	0.0120	0.0092	0.0130	0.24	-0.19	-0.17	0.20	0.31	-0.15
		3.06	4.48	2.72	-1.74	-1.56	3.38	4.91	-2.05
r_4	0.0120	0.0094	0.0126	0.29	-0.12	-0.23	0.16	0.27	-0.14
		3.32	4.63	3.58	-1.21	-2.23	2.90	4.47	-2.08

Table 4: **Performance of Best Ideas: Characteristic Timing / Average Style**

We report coefficients from monthly regressions of

$$r_{DGTW,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{DGTW,t} - r_{f,t}$ is the DGTW characteristic-benchmark-matched return for the equal-weight portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Best Ideas					
r_1	0.0091	0.0011	0.0010	1.05	0.10	-0.06	0.07	-0.01	-0.01
		2.05	1.85	63.08	5.00	-2.95	6.01	-1.00	-0.61
r_2	0.0097	0.0011	0.0010	1.05	0.27	0.03	0.04	-0.02	-0.02
		1.78	1.66	55.07	11.54	1.36	2.77	-1.15	-1.26
r_3	0.0098	0.0006	0.0020	1.09	0.39	-0.03	0.02	0.12	-0.04
		0.60	2.06	36.84	10.62	-0.76	1.13	5.67	-1.86
r_4	0.0100	0.0004	0.0016	1.08	0.51	-0.01	0.03	0.11	-0.04
		0.41	1.83	40.39	15.25	-0.27	1.76	5.46	-1.90
				Panel B: Best Fresh Ideas					
r_1	0.0092	0.0013	0.0011	1.05	0.11	-0.04	0.04	-0.02	-0.01
		2.09	1.80	54.50	4.70	-1.58	3.25	-1.65	-0.87
r_2	0.0099	0.0016	0.0016	1.04	0.27	0.05	0.00	-0.02	-0.03
		2.31	2.20	48.89	10.07	1.73	-0.13	-1.49	-1.91
r_3	0.0096	0.0004	0.0018	1.09	0.41	-0.03	0.02	0.12	-0.05
		0.41	1.81	36.49	11.02	-0.78	0.88	5.40	-1.87
r_4	0.0100	0.0005	0.0017	1.09	0.52	-0.02	0.02	0.10	-0.04
		0.51	1.78	38.90	14.79	-0.46	1.14	4.84	-1.80

Table 5: **Performance of Best Ideas at Different Threshold Levels**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is set to 1 throughout this table's analysis. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
Panel A: Top 100% of Tilts									
r_1	0.0110	0.0008	0.0012	1.08	0.14	0.01	0.22	0.01	-0.06
		0.93	1.34	41.47	4.20	0.29	12.33	0.33	-2.67
r_2	0.0121	0.0011	0.0013	1.09	0.30	0.15	0.17	-0.01	-0.06
		1.14	1.37	37.54	8.19	4.22	8.71	-0.41	-2.55
r_3	0.0133	0.0026	0.0061	1.22	0.14	-0.14	0.13	0.32	-0.07
		1.34	3.76	24.93	2.25	-2.22	4.01	9.04	-1.82
r_4	0.0138	0.0025	0.0049	1.24	0.32	-0.06	0.11	0.23	-0.03
		1.56	3.40	28.76	5.91	-1.18	3.58	7.28	-0.94
Panel B: Top 50% of Tilts									
r_1	0.0122	0.0023	0.0029	1.06	0.12	-0.01	0.21	0.03	-0.06
		2.29	2.84	34.71	3.12	-0.34	9.95	1.15	-2.57
r_2	0.0134	0.0026	0.0033	1.06	0.24	0.12	0.19	0.03	-0.06
		2.46	2.99	32.08	5.77	2.95	8.47	1.23	-2.31
r_3	0.0149	0.0036	0.0084	1.21	0.14	-0.26	0.24	0.45	-0.07
		1.47	4.23	19.98	1.87	-3.48	5.74	10.37	-1.45
r_4	0.0164	0.0046	0.0083	1.24	0.34	-0.20	0.20	0.36	-0.04
		2.17	4.65	22.91	4.96	-2.99	5.29	9.21	-0.96
Panel C: Top 5% of Tilts									
r_1	0.0139	0.0039	0.0055	0.98	0.18	0.00	0.24	0.10	-0.12
		1.80	2.52	14.94	2.21	-0.05	5.38	2.04	-2.30
r_2	0.0155	0.0048	0.0066	1.02	0.30	-0.01	0.23	0.09	-0.16
		2.39	3.27	16.70	3.89	-0.11	5.40	2.13	-3.20
r_3	0.0207	0.0094	0.0151	1.12	0.15	-0.53	0.41	0.54	-0.09
		2.33	4.07	10.02	1.10	-3.78	5.35	6.61	-1.02
r_4	0.0238	0.0118	0.0170	1.22	0.31	-0.57	0.40	0.47	-0.12
		3.20	4.92	11.61	2.37	-4.38	5.53	6.14	-1.42

Table 6: **Performance of Best Fresh Ideas at Different Threshold Levels**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Top 100% of Tilts					
r_1	0.0115	0.0016	0.0020	1.09	0.15	0.01	0.17	0.00	-0.08
		1.61	1.97	35.71	4.04	0.17	8.31	-0.21	-3.15
r_2	0.0128	0.0021	0.0024	1.10	0.31	0.12	0.14	-0.01	-0.08
		1.97	2.24	34.21	7.71	3.02	6.27	-0.59	-3.20
r_3	0.0144	0.0042	0.0081	1.24	0.13	-0.22	0.11	0.34	-0.10
		2.05	4.70	23.86	1.98	-3.39	2.96	9.11	-2.45
r_4	0.0145	0.0037	0.0065	1.26	0.31	-0.15	0.08	0.25	-0.05
		2.16	4.19	26.97	5.30	-2.56	2.35	7.49	-1.37
				Panel B: Top 50% of Tilts					
r_1	0.0127	0.0030	0.0035	1.08	0.15	-0.01	0.16	0.00	-0.09
		2.60	3.01	30.91	3.38	-0.32	6.76	0.09	-3.18
r_2	0.0142	0.0038	0.0045	1.08	0.25	0.08	0.15	0.02	-0.09
		3.21	3.74	29.70	5.44	1.88	6.16	0.67	-3.16
r_3	0.0158	0.0050	0.0102	1.24	0.12	-0.35	0.20	0.48	-0.11
		1.88	4.67	18.66	1.44	-4.28	4.41	9.91	-1.97
r_4	0.0172	0.0056	0.0098	1.27	0.31	-0.27	0.16	0.39	-0.06
		2.45	4.95	21.35	4.22	-3.63	3.93	8.99	-1.23
				Panel C: Top 5% of Tilts					
r_1	0.0164	0.0060	0.0081	1.01	0.27	-0.06	0.23	0.09	-0.23
		2.44	3.31	13.67	2.90	-0.67	4.61	1.61	-3.84
r_2	0.0168	0.0062	0.0079	1.04	0.32	0.02	0.18	0.09	-0.16
		2.51	3.17	13.80	3.44	0.23	3.41	1.61	-2.60
r_3	0.0254	0.0139	0.0203	1.21	0.10	-0.58	0.39	0.59	-0.11
		3.02	4.70	9.29	0.64	-3.57	4.35	6.24	-1.01
r_4	0.0256	0.0132	0.0188	1.32	0.26	-0.56	0.36	0.51	-0.13
		3.04	4.58	10.58	1.71	-3.61	4.27	5.67	-1.26

Table 7: **Performance of Best-Minus-Rest Portfolios**

We report coefficients from monthly regressions of

$$spread_{p,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $spread_{p,t}$ is the return on an equal-weight long-short portfolio, long a dollar in each manager's best idea and short a dollar in each manager's investment-weight portfolio of the rest of their ideas. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Best Ideas					
$spread_1$	0.0046	0.0015	0.0027	0.03	0.10	0.01	0.26	0.06	-0.10
		1.32	2.39	0.84	2.47	0.30	11.22	2.62	-3.70
$spread_2$	0.0069	0.0029	0.0039	0.03	0.31	0.18	0.20	0.05	-0.09
		2.42	3.26	0.87	6.86	4.08	8.30	2.07	-3.00
$spread_3$	0.0085	0.0053	0.0103	0.11	-0.01	-0.20	0.24	0.48	-0.07
		1.93	4.51	1.52	-0.13	-2.28	5.08	9.57	-1.21
$spread_4$	0.0107	0.0063	0.0103	0.16	0.29	-0.12	0.21	0.38	-0.07
		2.62	4.89	2.44	3.58	-1.56	4.80	8.10	-1.35
				Panel B: Best Fresh Ideas					
$spread_1$	0.0057	0.0026	0.0036	0.04	0.15	0.02	0.22	0.05	-0.09
		1.89	2.55	0.99	2.80	0.46	7.67	1.53	-2.71
$spread_2$	0.0080	0.0041	0.0050	0.05	0.34	0.18	0.17	0.04	-0.10
		2.95	3.56	1.10	6.46	3.32	5.76	1.27	-2.77
$spread_3$	0.0092	0.0064	0.0118	0.13	-0.05	-0.21	0.18	0.51	-0.08
		2.03	4.36	1.60	-0.50	-2.08	3.17	8.63	-1.27
$spread_4$	0.0113	0.0072	0.0117	0.20	0.25	-0.13	0.14	0.42	-0.08
		2.53	4.58	2.53	2.54	-1.32	2.68	7.48	-1.28

Table 8: **Performance of Best-Minus-Rest Portfolios: Top Three / Top Five**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $spread_{p,t}$ is the return on an equal-weight long-short portfolio, long a dollar in each manager's best ideas and short a dollar in each manager's investment-weight portfolio of the rest of their ideas. The best ideas are determined within each fund as the top three (Panel A) or top five (Panel B) stocks with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is set to 1 throughout the analysis. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Best Three Ideas					
$spread_1$	0.0037	0.0008	0.0016	0.02	0.15	0.07	0.21	0.04	-0.08
		0.99	1.98	0.73	4.92	2.40	12.34	2.09	-3.97
$spread_2$	0.0058	0.0017	0.0023	0.05	0.36	0.24	0.15	0.02	-0.06
		1.73	2.26	1.54	9.47	6.20	7.05	1.04	-2.55
$spread_3$	0.0067	0.0036	0.0074	0.09	0.12	-0.10	0.17	0.39	-0.01
		1.74	4.47	1.75	1.91	-1.55	5.08	10.71	-0.20
$spread_4$	0.0093	0.0054	0.0083	0.12	0.36	-0.02	0.12	0.30	0.01
		2.97	5.18	2.40	5.97	-0.31	3.75	8.44	0.18
				Panel B: Best Five Ideas					
$spread_1$	0.0033	0.0005	0.0010	0.03	0.16	0.11	0.17	0.02	-0.06
		0.75	1.51	1.23	6.27	4.29	11.78	1.42	-3.41
$spread_2$	0.0050	0.0012	0.0016	0.05	0.38	0.28	0.11	0.02	-0.05
		1.28	1.70	1.61	10.38	7.65	5.39	0.77	-2.14
$spread_3$	0.0055	0.0023	0.0057	0.10	0.15	-0.07	0.15	0.35	-0.01
		1.35	4.29	2.35	3.07	-1.38	5.48	11.78	-0.16
$spread_4$	0.0079	0.0044	0.0069	0.11	0.39	0.01	0.08	0.25	0.00
		2.85	5.13	2.60	7.63	0.23	3.01	8.64	0.00

Table 9: **Performance of Best Ideas by Liquidity**

We estimate coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout this table. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We report decompositions of these coefficients based on whether the best idea stock is above, $r_{p,high,t}$, or below, $r_{p,low,t}$, the portfolio's median bid-ask spread. T-statistics are below the parameter estimates. Sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
			Low and High Bid-Ask Spread Splits						
$r_{1.low}$	0.0139	0.0019	0.0041	1.18	0.15	-0.15	0.36	0.16	-0.11
		1.16	2.64	25.22	2.60	-2.61	11.18	4.84	-2.89
$r_{1.high}$	0.0081	-0.0004	-0.0018	0.97	0.13	0.17	0.08	-0.15	0.00
		-0.36	-1.86	33.35	3.55	4.79	4.02	-6.90	-0.09
$r_{2.low}$	0.0143	0.0015	0.0034	1.22	0.34	-0.06	0.31	0.13	-0.12
		0.94	2.17	25.55	5.62	-0.99	9.33	3.69	-3.15
$r_{2.high}$	0.0094	0.0001	-0.0013	0.97	0.25	0.33	0.04	-0.15	0.00
		0.15	-1.41	35.32	7.38	9.60	2.31	-7.40	-0.13
$r_{3.low}$	0.0146	0.0037	0.0092	1.29	0.11	-0.42	0.19	0.54	-0.04
		1.22	3.69	17.17	1.23	-4.55	3.77	9.97	-0.61
$r_{3.high}$	0.0118	0.0013	0.0030	1.15	0.14	0.14	0.09	0.10	-0.12
		0.86	1.95	24.85	2.47	2.41	2.82	3.13	-3.12
$r_{4.low}$	0.0157	0.0042	0.0089	1.33	0.31	-0.42	0.17	0.46	-0.04
		1.65	4.13	20.27	3.85	-5.12	3.72	9.63	-0.78
$r_{4.high}$	0.0117	0.0007	0.0009	1.15	0.30	0.28	0.05	0.00	-0.03
		0.58	0.71	30.36	6.44	5.90	1.94	0.14	-0.92

Table 10: **Performance of Best Ideas by Popularity**

We estimate coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout this table. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We report decompositions of these estimates based on whether the best idea stock is above, $r_{p,high,t}$, or below, $r_{p,low,t}$, the portfolio's median popularity. Popularity is defined as follows: Within each portfolio we rank each stock by the tilt measure in question and assign a percentage rank to it. To arrive at the tilt–stock-specific popularity measure we cumulate this statistic over the cross-section of managers. T-statistics are below the parameter estimates. Sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Low and High Popularity Splits					
$r_{1.low}$	0.0145	0.0017	0.0027	1.08	0.37	0.21	0.30	0.05	-0.08
		1.32	2.00	26.73	7.36	4.12	10.84	1.70	-2.50
$r_{1.high}$	0.0077	-0.0001	-0.0002	1.08	-0.08	-0.19	0.14	-0.03	-0.03
		-0.10	-0.21	32.09	-2.02	-4.43	6.11	-1.27	-1.20
$r_{2.low}$	0.0139	0.0022	0.0023	1.06	0.50	0.25	0.15	-0.01	-0.06
		2.06	2.19	32.68	12.37	6.21	6.75	-0.60	-2.33
$r_{2.high}$	0.0099	-0.0004	-0.0001	1.13	0.09	0.02	0.20	0.00	-0.06
		-0.35	-0.08	32.45	2.06	0.46	8.34	-0.16	-2.25
$r_{3.low}$	0.0164	0.0038	0.0080	1.21	0.42	-0.16	0.24	0.39	-0.06
		1.70	4.19	21.04	5.82	-2.28	6.19	9.41	-1.24
$r_{3.high}$	0.0106	0.0016	0.0045	1.24	-0.15	-0.11	0.04	0.25	-0.09
		0.72	2.21	20.03	-1.91	-1.42	0.94	5.69	-1.72
$r_{4.low}$	0.0172	0.0049	0.0068	1.21	0.63	-0.02	0.12	0.21	0.02
		3.13	4.73	27.92	11.53	-0.36	4.06	6.69	0.64
$r_{4.high}$	0.0108	0.0006	0.0036	1.26	0.00	-0.11	0.10	0.25	-0.09
		0.31	1.88	22.15	0.00	-1.60	2.50	6.05	-1.93

Table 11: **Best Ideas by Concentration of Portfolio**

We estimate coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. We report decompositions of these estimates based on how concentrated are the holdings of the fund manager. We measure concentration as the normalized Herfindahl index of the fund, sorting managers into tritles (Panel A: low, Panel B: medium, Panel C: high, Panel D: high-minus-low) based on this measure. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Low					
$r_{1.low}$	0.0113	-0.0004	-0.0002	1.12	0.26	0.14	0.25	-0.02	-0.07
		-0.40	-0.18	34.06	6.41	3.36	11.28	-0.64	-2.67
$r_{2.low}$	0.0112	-0.0007	-0.0008	1.13	0.41	0.24	0.17	-0.04	-0.06
		-0.65	-0.69	32.61	9.47	5.67	7.20	-1.53	-2.16
$r_{3.low}$	0.0124	0.0008	0.0046	1.30	0.20	-0.18	0.15	0.35	-0.08
		0.36	2.35	21.92	2.69	-2.40	3.66	8.09	-1.59
$r_{4.low}$	0.0128	0.0009	0.0033	1.33	0.41	-0.09	0.09	0.23	-0.02
		0.53	1.94	26.09	6.39	-1.45	2.48	6.15	-0.40
				Panel B: Medium					
$r_{1.medium}$	0.0105	0.0006	0.0007	1.10	0.14	-0.05	0.20	-0.03	-0.05
		0.72	0.71	39.54	3.98	-1.46	10.56	-1.32	-2.18
$r_{2.medium}$	0.0120	0.0011	0.0011	1.11	0.31	0.12	0.17	-0.04	-0.08
		1.06	1.08	35.15	7.79	3.01	7.71	-1.79	-3.07
$r_{3.medium}$	0.0127	0.0023	0.0057	1.24	0.13	-0.17	0.10	0.30	-0.09
		1.10	3.10	22.25	1.90	-2.41	2.68	7.42	-2.07
$r_{4.medium}$	0.0130	0.0020	0.0043	1.27	0.33	-0.10	0.07	0.21	-0.06
		1.14	2.63	25.30	5.26	-1.57	2.14	5.67	-1.59

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel C: High					
$r_{1.high}$	0.0114	0.0022	0.0032	1.02	0.03	-0.06	0.21	0.07	-0.06
		1.85	2.64	28.19	0.56	-1.34	8.51	2.52	-2.00
$r_{2.high}$	0.0125	0.0025	0.0032	1.05	0.16	0.03	0.19	0.05	-0.05
		2.18	2.84	30.47	3.67	0.72	8.14	2.06	-1.88
$r_{3.high}$	0.0156	0.0052	0.0087	1.12	0.06	-0.07	0.18	0.32	-0.05
		2.74	5.37	22.93	1.02	-1.15	5.25	9.16	-1.36
$r_{4.high}$	0.0163	0.0054	0.0081	1.12	0.20	-0.02	0.17	0.26	-0.03
		3.24	5.45	25.02	3.55	-0.32	5.61	7.98	-0.69
				Panel D: High-Low					
$r_{1.high-low}$	0.0001	0.0026	0.0034	-0.09	-0.24	-0.20	-0.04	0.08	0.01
		2.02	2.54	-2.36	-4.75	-3.96	-1.53	2.81	0.38
$r_{2.high-low}$	0.0013	0.0032	0.0040	-0.07	-0.25	-0.21	0.02	0.09	0.01
		2.75	3.46	-2.07	-5.68	-4.85	0.93	3.52	0.27
$r_{3.high-low}$	0.0032	0.0044	0.0040	-0.19	-0.14	0.11	0.03	-0.03	0.02
		2.67	2.36	-3.59	-2.14	1.67	0.74	-0.67	0.55
$r_{4.high-low}$	0.0035	0.0045	0.0049	-0.20	-0.21	0.07	0.09	0.03	-0.01
		3.00	3.14	-4.33	-3.54	1.27	2.71	0.98	-0.23

Table 12: **Best Ideas by Focus of Portfolio**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. We report decompositions of these estimates based on how focused are the holdings of the fund manager. We measure focus as the number of assets within the fund, sorting managers into tritles (Panel A: low, Panel B: medium, Panel C: high, Panel D: high-minus-low) based on this measure. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Low					
$r_{1.low}$	0.0110	0.0003	0.0012	1.09	0.09	-0.05	0.30	0.05	-0.06
		0.31	1.08	33.43	2.21	-1.33	13.25	2.16	-2.35
$r_{2.low}$	0.0124	0.0008	0.0014	1.13	0.27	0.11	0.23	0.01	-0.10
		0.68	1.24	32.51	6.20	2.49	9.81	0.58	-3.35
$r_{3.low}$	0.0129	0.0014	0.0063	1.26	0.04	-0.25	0.25	0.42	-0.15
		0.56	3.07	20.35	0.55	-3.20	5.94	9.32	-3.02
$r_{4.low}$	0.0138	0.0015	0.0049	1.30	0.27	-0.16	0.22	0.30	-0.10
		0.75	2.85	24.88	4.19	-2.51	6.06	7.83	-2.44
				Panel B: Medium					
$r_{1.medium}$	0.0109	0.0008	0.0009	1.12	0.14	-0.04	0.21	-0.02	-0.05
		0.78	0.86	37.16	3.69	-1.02	10.07	-0.87	-2.18
$r_{2.medium}$	0.0115	0.0006	0.0007	1.12	0.28	0.11	0.17	-0.02	-0.07
		0.58	0.68	34.68	7.00	2.66	7.50	-1.05	-2.55
$r_{3.medium}$	0.0138	0.0034	0.0070	1.23	0.10	-0.18	0.12	0.34	-0.04
		1.67	3.91	20.90	1.50	-2.69	3.21	8.62	-0.99
$r_{4.medium}$	0.0135	0.0026	0.0052	1.25	0.25	-0.10	0.10	0.26	0.00
		1.44	3.16	25.21	4.09	-1.62	2.82	7.35	-0.01

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel C: High					
$r_{1.high}$	0.0113	0.0013	0.0016	1.02	0.20	0.12	0.16	-0.01	-0.06
		1.42	1.67	35.71	5.52	3.31	8.19	-0.39	-2.71
$r_{2.high}$	0.0119	0.0014	0.0013	1.04	0.33	0.19	0.13	-0.02	-0.03
		1.40	1.30	34.07	8.80	5.00	6.08	-0.99	-1.20
$r_{3.high}$	0.0137	0.0033	0.0055	1.17	0.26	0.02	0.05	0.21	-0.03
		2.06	3.72	25.97	4.59	0.30	1.69	6.53	-0.74
$r_{4.high}$	0.0147	0.0042	0.0054	1.17	0.41	0.06	0.01	0.13	0.00
		3.04	3.99	28.37	8.06	1.17	0.46	4.29	0.04
				Panel D: High-Low					
$r_{1.high-low}$	0.0003	0.0010	0.0004	-0.07	0.11	0.17	-0.14	-0.06	0.00
		1.03	0.43	-2.39	2.92	4.69	-6.75	-2.77	-0.02
$r_{2.high-low}$	-0.0005	0.0006	-0.0001	-0.09	0.07	0.08	-0.11	-0.04	0.07
		0.63	-0.11	-3.21	1.82	2.30	-5.42	-1.75	2.77
$r_{3.high-low}$	0.0008	0.0019	-0.0008	-0.09	0.21	0.26	-0.20	-0.21	0.13
		1.10	-0.47	-1.92	3.50	4.31	-5.96	-5.79	3.14
$r_{4.high-low}$	0.0010	0.0027	0.0005	-0.13	0.14	0.22	-0.20	-0.17	0.11
		1.78	0.36	-3.02	2.60	4.12	-6.85	-5.35	2.97

Table 13: **Best Ideas by Size of Portfolio**

We report coefficients from monthly regressions of

$$r_{p,t} - r_{f,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $r_{p,t}$ is the equal-weight excess return on the portfolio of the stocks that represent the best idea of each active manager. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. We report decompositions of these estimates based on how large is the manager's fund. We measure size as Assets under management, sorting managers into tritles (Panel A: low, Panel B: medium, Panel C: high, Panel D: high-minus-low) based on this measure. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel A: Low					
$r_{1.low}$	0.0122	0.0021	0.0021	1.03	0.26	0.02	0.20	-0.02	-0.05
		1.63	1.63	26.27	5.26	0.49	7.53	-0.72	-1.50
$r_{2.low}$	0.0132	0.0029	0.0029	1.02	0.37	0.11	0.14	-0.03	-0.04
		2.23	2.13	25.22	7.39	2.22	5.00	-0.98	-1.33
$r_{3.low}$	0.0150	0.0035	0.0061	1.26	0.40	-0.06	0.08	0.23	-0.08
		1.64	3.02	20.50	5.27	-0.82	1.80	5.14	-1.66
$r_{4.low}$	0.0156	0.0043	0.0061	1.22	0.51	-0.02	0.05	0.17	-0.05
		2.36	3.46	22.81	7.65	-0.25	1.38	4.33	-1.04
				Panel B: Medium					
$r_{1.medium}$	0.0118	0.0013	0.0017	1.06	0.17	0.01	0.25	0.01	-0.06
		1.11	1.40	28.16	3.59	0.29	9.68	0.21	-2.08
$r_{2.medium}$	0.0123	0.0015	0.0018	1.05	0.31	0.12	0.20	-0.01	-0.07
		1.15	1.36	26.97	6.26	2.39	7.40	-0.27	-2.19
$r_{3.medium}$	0.0142	0.0033	0.0073	1.15	0.13	-0.16	0.21	0.36	-0.08
		1.48	3.66	19.16	1.70	-2.18	5.13	8.21	-1.65
$r_{4.medium}$	0.0147	0.0037	0.0063	1.17	0.32	-0.10	0.15	0.25	-0.05
		1.93	3.58	21.84	4.79	-1.51	4.20	6.39	-1.06

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
				Panel C: High					
$r_{1.high}$	0.0092	-0.0005	0.0001	1.09	0.06	-0.06	0.22	0.02	-0.07
		-0.59	0.08	41.79	1.76	-1.75	12.43	1.10	-3.34
$r_{2.high}$	0.0116	0.0011	0.0016	1.03	0.21	0.08	0.23	0.02	-0.07
		0.77	1.12	23.34	3.86	1.52	7.56	0.57	-1.88
$r_{3.high}$	0.0114	0.0009	0.0047	1.25	0.00	-0.17	0.15	0.35	-0.08
		0.44	2.73	23.74	0.00	-2.56	4.15	9.19	-1.76
$r_{4.high}$	0.0118	0.0005	0.0031	1.30	0.18	-0.10	0.13	0.25	-0.02
		0.28	1.97	27.20	3.09	-1.70	4.07	7.38	-0.59
				Panel D: High-Low					
$r_{1.high-low}$	-0.0029	-0.0026	-0.0020	0.05	-0.20	-0.08	0.02	0.04	-0.02
		-2.12	-1.64	1.39	-4.27	-1.72	0.71	1.51	-0.73
$r_{2.high-low}$	-0.0015	-0.0018	-0.0012	0.01	-0.16	-0.03	0.09	0.05	-0.02
		-1.47	-0.97	0.14	-3.40	-0.60	3.42	1.70	-0.76
$r_{3.high-low}$	-0.0035	-0.0026	-0.0014	-0.01	-0.40	-0.11	0.07	0.12	0.01
		-1.51	-0.83	-0.23	-6.27	-1.63	2.08	3.24	0.18
$r_{4.high-low}$	-0.0038	-0.0038	-0.0030	0.07	-0.33	-0.08	0.08	0.09	0.02
		-2.36	-1.87	1.48	-5.38	-1.38	2.45	2.43	0.57

Table 14: **Sorting on correlation with manager's best idea**

We report coefficients from monthly regressions of

$$spread_{p,t} = a_6 + bRMRF_t + sSMB_t + hHML_t + mMOM_t + iIDI_t + rSTREV_t + \varepsilon_{p,t}$$

where $spread_{p,t}$ is the return on an equal-weight long-short portfolio, long a dollar in the top 20% of the rest of their ideas which are the most correlated with each manager's best ideas and short a dollar in the 20% of the rest of their ideas which are the least correlated with each manager's best ideas. The best idea is determined within each fund as the stock with the maximum value of one of four possible tilt measures: 1) $market\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{iMt})$, 2) $portfolio\_tilt_{ijt} = \tau_{ijt}(\lambda_{ijt} - \lambda_{ijtV})$, 3) $CAPM\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{iMt})$, and 4) $CAPM\_portfolio\_tilt_{ijt} = \tau_{ijt}\sigma^2_{it}(\lambda_{ijt} - \lambda_{ijtV})$ where λ_{ijt} is manager j's portfolio weight in stock i, λ_{iMt} is the weight of stock i in the market portfolio, λ_{ijtV} is the value weight of stock i in manager j's portfolio, σ^2_{it} is the most-recent estimate of a stock's CAPM-idiosyncratic variance, and τ_{ijt} is a dummy variable which is 1 whenever manager j's recent trade in i was a buy and 0 otherwise. We set τ_{ijt}=1 throughout the analysis of Panel A, meaning that all best ideas are considered. The explanatory variables in the regression are all from Ken French's website except for IDI which we construct following Ang, Hodrick, and Xi (2004). We also report intercept estimates, α_4, when IDI and $STREV$ are excluded from the regression. We restrict the analysis to those managers whose maximum tilt is in the top 25% of all maximum tilts at the time. T-statistics are can be found below the parameter estimates. The sample period for the dependent variables is January 1991 - December 2005.

	Mean	$\widehat{\alpha_4}$	$\widehat{\alpha_6}$	$\widehat{b}$	$\widehat{s}$	$\widehat{h}$	$\widehat{m}$	$\widehat{i}$	$\widehat{r}$
	Rest Ideas Performance based on Correlation with Best Idea								
	Panel A: Best Ideas								
$spread_1$	0.0006	0.0001	0.0012	0.08	-0.19	-0.24	0.17	0.08	-0.07
		0.05	1.06	2.32	-4.47	-5.91	7.57	3.16	-2.51
$spread_2$	0.0026	0.0013	0.0021	0.14	-0.07	-0.14	0.12	0.05	-0.07
		1.33	2.27	4.85	-2.12	-3.92	6.00	2.58	-2.83
$spread_3$	0.0027	0.0018	0.0041	0.16	-0.17	-0.26	0.10	0.21	-0.04
		1.28	3.21	4.22	-3.43	-5.41	3.79	7.59	-1.22
$spread_4$	0.0033	0.0018	0.0035	0.22	-0.08	-0.22	0.08	0.16	-0.03
		1.43	2.97	6.01	-1.74	-4.89	3.29	6.20	-0.92
	Panel B: Best Fresh Ideas								
$spread_1$	0.0012	0.0005	0.0012	0.12	-0.15	-0.21	0.14	0.04	-0.06
		0.42	0.98	3.27	-3.27	-4.61	5.47	1.35	-2.11
$spread_2$	0.0024	0.0013	0.0020	0.14	-0.05	-0.15	0.09	0.04	-0.07
		1.14	1.77	4.00	-1.13	-3.49	3.87	1.40	-2.58
$spread_3$	0.0010	0.0013	0.0048	0.14	-0.32	-0.39	0.06	0.34	-0.02
		0.69	3.07	2.94	-5.52	-6.65	1.95	10.04	-0.64
$spread_4$	0.0013	0.0015	0.0046	0.14	-0.27	-0.35	0.05	0.32	0.00
		0.83	3.06	3.13	-4.72	-6.20	1.55	9.64	0.01