

Internet Appendix for “Salience and Mutual Fund Investor Demand for Idiosyncratic Volatility”

We tabulate and discuss results from select robustness and supplementary analyses referenced in the paper.

IA.1. Idiosyncratic Volatility (IV) and Fund Flows - Robustness

In Table IA.1, we examine the robustness of the relation between *IV* and fund flows. In the interest of brevity, in each row we only report the coefficient on *IV*. For reference, Row 1 of Table IA.1 reports the coefficient and *t*-statistic on *IV* from the baseline results reported in Specifications 1 through 3 of Table 3.

In Row 2, following Ang, Hodrick, Xing, and Zhang (2006, 2009) we redefine *IV* as the standard deviation of the fund’s residuals from the Fama-French (1993) three-factor model using daily returns over the previous calendar month and find very similar results. In Row 3 we replace *IV* and *SV* with total volatility.¹ We continue to find that inflows and outflows are both significantly related to total volatility. In Row 4, we repeat our analysis after excluding the month of December and January and continue to find very similar results. This suggests that tax-loss selling and other end-of-year adjustments are unlikely to drive our results. In Row 5, we document very similar coefficients if we estimate Fama-MacBeth regressions, with Newey-West standard errors, rather than panel regressions.

Since net flows tend to be persistent (see, e.g., Coval and Stafford, 2007, and Lou, 2012), it is also possible that the ability of *IV* to predict flows is a consequence of *IV* proxying for past buying or selling pressure. For example, a fund with extreme inflows may have very high returns (and thus high *IV*) due to price pressure as the fund purchases many of its existing positions. An analogous but opposite pattern could arise for funds with extreme outflows. To explore this possibility, we develop a measure of buying and selling pressure. Specifically, for each fund *i* and month *t*, we compute *Buying Pressure* as: $\text{Max}(0, \text{NetFlow}_{i,t})$. Similarly, we define *Selling Pressure* as: $\text{Max}(0, \text{NetFlow}_{i,t} \times -1)$. Since *IV* is measured over the prior 12 months, we also sum *Buying Pressure* and *Selling Pressure* over the prior 12 months. In Row 6, we repeat our baseline specification after including *Buying Pressure* and *Selling Pressure*. We find that the ability of *IV* to predict both inflows and outflows is reduced, but the estimates remain highly significant.² Thus, the ability of *IV* to predict flows cannot be fully explained by past buying or selling pressure.

One limitation of gross flows is that offsetting flows across share classes within the same fund are treated as a simultaneous inflow and outflow to the fund. This could result in

¹While much of the asset pricing literature has focused on the *IV* puzzle, other work highlights the puzzling negative relationship between *total volatility* and returns, including Haugen and Heins (1975) and Blitz and Van Vilet (2007).

²The reduced coefficient is a consequence of the significant contemporaneous correlation between *IV* and *Buying Pressure* ($\rho = 0.12$) and *Selling Pressure* ($\rho = 0.11$). Controlling for *Buying Pressure* and *Selling Pressure* is appropriate if the contemporaneous correlation is driven by high inflows and outflows causing *IV*, but conservative if the correlation is driven by higher *IV* causing greater inflows and outflows.

misleading estimates of inflows and outflows among funds that experience dramatic shifts in flows across asset classes (e.g., all investors in a 401K plan move out of share class B into share class A). To explore the potential impact of this issue on our main findings, we split the sample into two groups: *Offsetting Funds*, defined as funds that have share classes with net flows in the opposite direction, (e.g., share class A received net inflows, while share class B received net outflows), and all other funds (*Non-Offsetting Funds*). We then re-estimate the baseline model for each group. The results are reported in Rows 7 and 8. We find that the point estimate is larger for *Offsetting Funds*; however, the point estimate is also economically large and statistically significant (at a 1% level) among *Non-Offsetting Funds*, which suggests that our main findings are robust to limiting the sample to funds where offsetting flows are unlikely to be a significant driver of gross flows.

We also explore whether the relation between IV and inflows is limited to funds with very high or very low annual performance. To explore this possibility, we re-estimate the baseline results separately for funds in the bottom, middle, and top tercile of past one-year returns. We find that the relation between IV and gross flows is present across all return terciles (Rows 9 through 11), which suggests that our findings are not limited to funds with extreme returns over the prior year.

The patterns in Rows 9 through 11 also indicate that the impact of IV on inflows is strongest among low performing funds and weaker among high performing funds. One potential explanation is that rational investors may discount extremely good performance (and tolerate extremely bad performance) more for funds with higher IV because their extreme returns are more likely to be attributable to luck rather than skill. To explore this possibility, we estimate the following panel regression:

$$Flow_{i,t} = \alpha + \beta_1 RetLow_{i,t-1} + \beta_2 RetMid_{i,t-1} + \beta_3 RetHigh_{i,t-1} + \beta_4 SV_{i,t-1} + \beta_5 IV_{i,t-1} + \beta_6 RetLow_{i,t-1} \times IV_{i,t-1} + \beta_7 RetMid_{i,t-1} \times IV_{i,t-1} + \beta_8 RetHigh_{i,t-1} \times IV_{i,t-1} + \gamma \mathbf{X}_{i,t-1} + FE + \epsilon_{i,t}. \quad (IA1)$$

All variables are as defined in equation (1). The key variables of interest are $\beta_6 - \beta_8$, which examine how the performance-flow relation for funds with weak, average, and strong performance varies with IV . The results are reported in Table IA.2. We find that the performance-inflow relationship is less sensitive for poorly performing funds with greater IV . This is consistent with investors being more tolerant of very bad performance for high IV funds. However, we do not find any significant pattern for inflows among funds with average or strong performance, and the sign is generally in the wrong direction. We also do not find very consistent evidence for outflows. Collectively, there is not very compelling evidence to suggest that investors discount the extreme performance of funds with greater IV .

IA.2. IV and Fund Flows: Piecewise Regressions

The salience explanation for the relationship between IV and inflows points to a possible nonlinear relationship between IV and inflows. For example, moving from the 1st percentile of IV to the 19th percentile of IV is unlikely to have significant effects on inflows, since the fund is still unlikely to have extreme returns. In contrast, moving from the 80th percentile of

IV to the 99th percentile of IV is likely to have a more dramatic effect, since such funds will be increasingly more likely to be extreme winners or losers over a variety of different return horizons. This view is consistent with the Figure 1 results, which show that the relationship between IV and the likelihood of being an extreme winner is highly convex.

To explore the nonlinear relationship between IV and flows, we replace $IV_{i,t-1}$ with an IV rank variable. Specifically, each month we calculate a fractional rank ($RANK_{i,t-1}$) ranging from 0 to 1 for each fund based on the fund's IV . The variable $IV Low$ is defined as $\text{Min}(0.2, RANK_{i,t-1})$, while $IV Mid$ is defined as $\text{Min}(0.6, RANK_{i,t-1} - IV Low)$. Finally, $IV High$ is zero for funds outside the top quintile of performers and equal to $(RANK_{i,t-1} - .8)$ for funds in the top quintile. We conduct an analogous adjustment for $SV_{i,t-1}$. We then estimate the following panel regression:

$$\begin{aligned} Flow_{i,t} = & \alpha + \beta_1 RetLow_{i,t-1} + \beta_2 RetMid_{i,t-1} + \beta_3 RetHigh_{i,t-1} \\ & + \beta_4 SVLow_{i,t-1} + \beta_5 SVMid_{i,t-1} + \beta_6 SVHigh_{i,t-1} \\ & + \beta_7 IVLow_{i,t-1} + \beta_8 IVMid_{i,t-1} + \beta_9 IVHigh_{i,t-1} \\ & + \gamma \mathbf{X}_{i,t-1} + FE + \epsilon_{i,t}, \quad (\text{IA2}) \end{aligned}$$

where all other variables are defined as in equation (1). The coefficients of interest are $\beta_7 - \beta_9$, which measure the sensitivity of flows to IV for different levels of IV .

Table IA.3 presents the results. Across all specifications, there is very little evidence that IV is related to fund flows for funds in the bottom 20% of IV or for funds in the middle 60% of IV . However, we document a strong relationship between inflows (or outflows) and IV for funds in the top 20% of IV . For example, Specifications 2 indicates that a 10 percentile increase in a fund's IV rank (e.g., moving from the 85th percentile to the 95th percentile) is associated with a 1.04 percentage point increase in inflows. Our findings suggest that the relationship between IV and flows is driven by funds with the most extreme IV . Since such funds are the most likely to have extreme returns, this pattern is consistent with the salience hypothesis.

IA.3. Determinants of IV

The results from Figure 1 suggest that IV is correlated with extreme past returns. In this section, we offer a more formal analysis on the association between extreme returns and IV , after controlling for a host of fund characteristics. Specifically, we estimate the following regression:

$$\begin{aligned} IV_{i,t} = & \alpha + \beta_1 RetLow_{i,1m} + \beta_2 RetMid_{i,1m} + \beta_3 RetHigh_{i,1m} \\ & + \beta_4 RetLow_{i,3m} + \beta_5 RetMid_{i,3m} + \beta_6 RetHigh_{i,3m} \\ & + \beta_7 RetLow_{i,1Y} + \beta_8 RetMid_{i,1Y} + \beta_9 RetHigh_{i,1Y} \\ & + \beta_{10} RetLow_{i,3Y} + \beta_{11} RetMid_{i,3Y} + \beta_{12} RetHigh_{i,3Y} \\ & + \beta_{13} RetLow_{i,5Y} + \beta_{14} RetMid_{i,5Y} + \beta_{15} RetHigh_{i,5Y} \\ & + \gamma \mathbf{X}_{i,t-1} + FE + \epsilon_{i,t}, \quad (\text{IA3}) \end{aligned}$$

where the dependent variable, IV , is the standard deviation of the fund’s residuals from the Carhart (1997) four-factor model estimated over the prior 12 months, the return variables are all defined as in equation (6), and $\gamma\mathbf{X}_{i,t-1}$ is a vector of controls that includes *Log size*, *Log family size*, *turnover*, *expense ratio*, *load fund*, *new share class*, and *closed*. Our results are presented in Table IA.4.

Specification 1 of Table IA.4 tabulates the results prior to including fund fixed effects. We find that $RetHigh_{i,1m}$, $RetHigh_{i,3m}$, $RetHigh_{i,3Y}$, and $RetHigh_{i,5Y}$ are all highly correlated with IV . Specification 2 reports qualitatively similar results after including fund fixed effects. Specifications 3 and 4 augment the model by including three holdings-based measures that are likely strong determinants of fund’s IV : the total number of stocks held by the mutual fund at the end of the prior quarter (*Stocks Held*), the portfolio concentration of the fund (HHI), and the industry concentration of the fund (ICI), as defined in Kacperczyk, Sialm, and Zheng (2005).³ Specifications 3 and 4 confirm that all three holdings-based variables are strongly correlated with the IV of the fund; however $RetHigh_{i,1m}$, $RetHigh_{i,3Y}$, and $RetHigh_{i,5Y}$ remain highly significant.

IA.4. IV , Fund Flows, and Salient Returns: Additional Controls

Throughout the paper, we follow much of the existing literature in controlling for returns using a piecewise linear specification. However, the results from Table 6 suggest that the relationship between past returns and inflows is highly convex, and therefore including even more flexible measures of extreme performance may better explain the relation between flows and performance. Furthermore, since IV is strongly correlated with more extreme past performance, including additional controls for extreme performance may further explain the positive relation between IV and inflows.

To explore this possibility, we re-estimate equation (6) after replacing $RetLow$, $RetMid$, and $RetHigh$ with dummy variables equal to one for funds in the top or bottom 1%, 5%, 10%, or 20%, of the return distribution for a given horizon. We also include additional controls for the maximum and minimum daily returns over the prior month and the absolute return of the fund over the past 10 trading days. The results, reported in Table IA.5, indicate that this alternative specification further attenuates the positive relation between IV and inflows. For example, relative to the augmented model in Table 6, the coefficient on IV now falls by roughly 30% prior to including fund fixed effects (from 0.54% to 0.38%) and by roughly 15% after including fund fixed effects.

Given the strong correlation between IV and the three holdings-based measures, *Stocks Held*, HHI , and ICI , discussed in Section IA.3, it is also natural to ask whether these measures may also help explain the positive relation between IV and inflows. To explore this possibility, we estimate equation (6) after including the three holdings-based measures using the same sample described in Section IA.3. The results are reported in Table IA.6. Prior to including

³Holdings data are unavailable for roughly 10% of the funds in the sample. To allow for a direct comparison with Specifications 1 and 2, we include funds with missing holdings in Specifications 3 and 4. For these funds, we set the value of the three holdings-based measures equal to 0 and include a corresponding *Missing Holdings* dummy variable.

fund fixed effects, the relation between IV and inflows falls by roughly 22% (from 0.54 to 0.42). However, after including fund fixed effects, the coefficient on IV increases by roughly 14% (from 0.07 to 0.08). Overall, we conclude that the three holdings-based measures including in Table IA.6 are not as important as the refined return-based measures included in Table IA.5, which is consistent with the holdings-based measures being less salient than the return-based measures.

IA.5. Experimental Setup and Examples

Our experimental setup includes three settings and 250 simulations, resulting in 750 surveys. Further, each survey has a total of four questions. Below, we summarize the differences across settings, simulations, and questions, and provide figures of each example.

- *Settings*: Our analysis includes three settings which vary 1) the amount of information on past returns across various holding periods and 2) the salience of past returns.
 - *Setting 1* - MTurk workers are asked to allocate \$100 across three mutual funds (Funds A, B, and C), and are given information about six fund characteristics: fund size, fund age, expense ratio, fund turnover, past one-year return, and IV . The funds are similar along the first five characteristics, but differ significantly with respect to IV : the low, mid, and high IV funds are assigned an IV equal to the 5th, 50th, and 95th percentile of the distribution (which equals 0.32%, 0.92%, and 2.93%, respectively).
 - * Figure IA.1 reports an example of a *Setting 1* Question.
 - *Setting 2*: This setting augments *Setting 1* by reporting the fund’s one-month, three-month, three-year, and five-year return. The reported returns are simulated based on a market model (i.e., $R_{i,t} = \alpha_i + \beta_i R_m + \epsilon_{i,t}$) where the mean and standard deviation of the excess market return are set equal to 0.66% and 5.34% (their corresponding values estimated from July 1926 to December 2017), the alphas and betas for all funds are set equal to 0 and 1, respectively, and the idiosyncratic volatility of each fund is given by the values from *Setting 1*.
 - *Setting 3*: This setting augments *Setting 2* by including an additional line (in bold) that reports whether a given fund has the highest three-year and five-year return.
 - * Figure IA.2 reports an example of a *Setting 3* Question.
- *Simulations*: Our analysis includes 250 simulations resulting in 250 unique one-month, three-month, three-year, and five-year returns.
 - * Figure IA.2 reports the simulated values from our first (out of 250) simulation.
 - * Figure IA.3 reports the simulated values from our second (out of 250) simulation.
- *Questions*: Each of the 750 surveys (3 Settings \times 250 Simulations) includes four questions.

- Question 1: the baseline question.
 - * Figure IA.2 reports an example of Question 1 for *Setting 3* and Simulation #1.
- Question 2: the first four fund characteristics of the high and low *IV* funds are switched
 - * Figure IA.4 reports an example of Question 2 for *Setting 3* and Simulation #1.
- Question 3: the *IV* (and the corresponding simulated returns) of the high and low *IV* funds are switched
 - * Figure IA.5 reports an example of Question 3 for *Setting 3* and Simulation #1.
- Question 4: all characteristics of the high versus low *IV* fund are switched.
 - * Figure IA.6 reports an example of Question 4 for *Setting 3* and Simulation #1.

IA.6. Experimental Results - Robustness

In this section, we conduct robustness checks for our experimental results reported in Table 7. In particular, we repeat our main results for various subsamples.

Table IA.7 reports the results separately for Questions 1 and 2 (Panel A) and Questions 3 and 4 (Panel B). We note that in Questions 1 and 2 the high *IV* fund is labeled “Fund A” while in Questions 3 and 4 the high *IV* fund is labeled “Fund C”. We find that the results are qualitatively similar across the two groups.

All of the MTurk workers that complete our survey also provide information on their current income and education level. This data allows us to explore how our experimental findings vary with two common proxies for investor sophistication. Table IA.8 reports the results partitioned based on the median education level (Bachelor’s degree or greater), and Table IA.9 reports the results partitioned based on the median breakpoint for income (\$50,000). There are some differences among the two groups. For example, the R^2 in *Setting 1* is considerably higher for more educated sample (20.74% versus 8.40%) and the higher income group (18.75% versus 12.27%), suggesting that more sophisticated investors are more influenced by observable fund characteristic (i.e., *IV*, past one-year returns, and expenses). Nevertheless, both groups strongly chase more extreme past returns, thereby allocating significantly more capital to the high *IV* fund than they otherwise would.

IA.7. Google Scaling Factor

We collect the monthly normalized search volume index (*NSVI*), as reported by Google Trends, for each fund ticker from January 2004 (the begin date for Google Trends data) through December 2012. Google defines the *NSVI* for fund i in month t as: $NSVI_{i,t} = \frac{SearchVolume_{i,t}}{Max(SearchVolume_i)} \times 100$, where $Max(SearchVolume_i)$ is the maximum search volume for fund i over the time period of the search. By scaling by $Max(SearchVolume_i)$, *NSVI*

abstracts from cross-sectional differences in search volume. For example, a large fund with a maximum monthly search volume of 1,000 and a small fund with a maximum monthly search volume of 10 would both report a maximum *NSVI* of 100. More generally, across all months the large fund's *NSVI* would be understated by a factor of 100 (1000/10) relative to the small fund's *NSVI*.

To circumvent this limitation, we estimate a scaling factor that accurately portrays the relative popularity of each fund.⁴ To create the scaling factor for fund i relative to fund k ($Scaling_{i,k}$) we first collect the monthly values of $NSVI_i$ and $NSVI_k$ from two independent searches. We then conduct a joint search for funds i and k . When conducting the joint search, the joint *NSVI* for $fund_i$ is computed by Google as: $JointNSVI_{i,t} = \frac{SearchVolume_{i,t}}{Max[Max(SearchVolume_i), Max(SearchVolume_k)]} \times 100$. We then compute the scaling factor for $fund_i$ relative to $fund_k$ as: $Scaling_{i,k} = \frac{Max(JointNSVI_{i,t})}{Max(JointNSVI_{k,t})}$.⁵ For example, if fund i had a maximum *JointNSVI* of 100 and fund k had a maximum *JointNSVI* of 50, we would multiply all monthly values of $NSVI_i$ by 2 [i.e., (100/50)].

To extend the two-fund example above to the universe of funds, we first sort funds based on TNA, and compute a scaling factor for each fund relative to the next largest fund, resulting in a vector of scaling factors. The smallest fund (fund 1), by construction, has a scaling factor of 1; the second smallest fund (fund 2) has a scaling factor of $Scaling_{2,1}$; the third smallest fund (fund 3) has a scaling factor of $Scaling_{2,1} \times Scaling_{3,2}$, etc.⁶ More generally, $ScalingFactor_i = \prod_{k=1}^{i-1} Scaling_{k+1,k}$. The vector has the useful property of allowing us to estimate the popularity of $fund_i$ relative to the smallest fund. To reduce the influence of outliers, we winsorize the scaling factor at the 99th percentile. Our primary measure of interest is *Search* defined as $NSVI_{i,t}$ multiplied by the scaling factor for fund i . We compute a fund-level measure of *Search* by summing the *Search* of each ticker (i.e., share class) of the fund.

IA.8. IV and Fund Flows of New versus Existing Investors

The results from Panel E of Table 8 indicate that *IV* is a significantly stronger driver of inflows for funds that are open to new investors relative to closed funds. In this section, we re-examine the relationship between *IV* and purchasing decisions of new and existing investors by studying the mutual fund purchases of 78,000 households at a large discount brokerage firm from January 1991 through November 1996. We define a purchase as *New*

⁴Many studies that rely on Google search volume (e.g., Da, Engelberg, and Gao, 2011) focus on within firm variation in search volume and thus are unaffected by the normalization procedure. However, *IV* is highly persistent at the fund-level, and thus focusing on within-fund variation results in significantly less powerful tests.

⁵We chose the maximum search volume month for each fund to avoid rounding errors. For example, a fund with zero search volume in a given month would have a value of zero which would not reflect the true ratio.

⁶We choose to compute the scaling factor of fund 3 as $Scaling_{2,1} \times Scaling_{3,2}$, rather than $Scaling_{3,1}$, because as the gap between TNA increases, differences in search volume can differ dramatically, resulting in significant rounding errors.

if the household that purchases the mutual fund did not previously own the fund at any point during the sample period, and we define a purchase as *Existing* if the household owned the fund at some point during the sample. We define *New Inflows* (*Existing Inflows*) for a fund as the total dollar volume bought by new (existing) investors over the month scaled by the sum of all households' holdings of the fund at the end of the previous month. The average and median number of households that own a fund in our sample are 112 and 18, respectively. Since our measure of flows, particularly existing flows, are very noisy for funds with low ownership, we limit the analysis to funds with at least 20 existing investors at the end of the prior month.⁷ We next merge the discount brokerage trading data with the CRSP mutual fund universe. As in the main analysis, we limit the sample to funds that hold at least 80% of their assets in equity and have at least \$20 million in total net assets. In addition, we screen out foreign funds, sector funds, and index funds. Our final sample includes 5,008 fund-month observations for 123 unique funds. We examine the impact of *IV* on *New Inflows* and *Existing Inflows* by estimating the following panel regression:

$$\begin{aligned}
Flow_{i,t} = & \alpha + \beta_1 RetLow_{i,t-1} + \beta_2 RetMid_{i,t-1} + \beta_3 RetHigh_{i,t-1} \\
& + \beta_4 SVLow_{i,t-1} + \beta_5 SVMid_{i,t-1} + \beta_6 SVHigh_{i,t-1} \\
& + \beta_7 IVLow_{i,t-1} + \beta_8 IVMid_{i,t-1} + \beta_9 IVHigh_{i,t-1} \\
& + \gamma \mathbf{X}_{i,t-1} + FE + \epsilon_{i,t}, \quad (\text{IA4})
\end{aligned}$$

This regression is similar to the piecewise linear regression reported in Section IA.2 with a few minor differences.⁸ First, due to more limited data availability, the set of control variables from CRSP is reduced to the following variables: Log (age), Log (size), and expense ratio. In addition, we include the natural log of the number of investors in the discount brokerage data holding the fund in the prior month. All specifications include time fixed effects. Specifications 1 through 3 also include product-style fixed effects (as reported in the discount brokerage data), while Specifications 4 through 6 include fund fixed effects. Standard errors are clustered by fund. Specification 1 of Table IA.10 reports a positive and marginally significant ($p < 0.10$) coefficient on *High IV* for new investors, consistent with new investors being attracted to funds with high *IV*. The coefficient estimate of 9.07 is also very similar to the estimate reported for the main CRSP sample in Table IA.3 of 10.17. In contrast, Specification 2 shows that the coefficient on *High IV* is insignificantly negative for existing investors, and Specification 3 confirms that new investors are significantly more likely to purchase high *IV* funds relative to existing investors. After including fund fixed effects (Specifications 4 through 6), we find that the coefficient on *High IV* is insignificantly positive for new investors, significantly negative for existing investors, and the difference between the two estimates is statistically significant. The results of this analysis, and the results from Panel E of Table 8, both show that *IV* is a stronger predictor of purchases among new investors relative to existing investors. Since fund salience is likely less relevant for existing investors who are already familiar with the fund, these findings support the view that salience is the primary driver of the positive relation between *IV* and inflows.

⁷Using a 30-investor cutoff results in stronger results, while using a 10-investor cutoff yields weaker results.

⁸We focus on the piecewise linear model reported in Table IA.3 rather than the baseline model reported in Table 3 because we find that discount brokerage investor demand for *IV* is highly non-linear.

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	Fund A	Fund B	Fund C
Fund Size (\$ Millions)	352	337	367
Fund Age (Years)	10	12	11
Expense Ratio	1.24%	1.15%	1.20%
Fund Turnover	53%	58%	48%
Idiosyncratic Volatility of the Fund	2.93%	0.92%	0.32%
Past 1 Year Return of the Fund	5.25%	5.89%	5.56%

Figure IA.1
Example of Online Experiment (Setting 1, Simulation # 1, & Question 1)

Subjects were given the following instructions:

“This assignment includes 4 questions. In each question, you will be given information about three mutual funds (which have been randomly named Fund A, Fund B, and Fund C) and asked to allocate \$100 across the three funds. In each question, the characteristics of each fund will change, so please review the fund characteristics carefully each time before answering. When answering the questions, please ensure that your total allocation sums to \$100. Answers that do not conform to the above rule will be rejected!”

	Fund A	Fund B	Fund C
Fund Size (\$ Millions)	352	337	367
Fund Age (Years)	10	12	11
Expense Ratio	1.24%	1.15%	1.20%
Fund Turnover	53%	58%	48%
Idiosyncratic Volatility of the Fund	2.93%	0.92%	0.32%
Past 1 Month of the Fund (Annualized)	6.16%	6.89%	6.93%
Past 3 Month Return of the Fund (Annualized)	9.37%	10.23%	9.91%
Past 1 Year Return of the Fund	5.25%	5.89%	5.56%
Past 3 Year Return of the Fund (Annualized)	13.45%	13.34%	13.41%
Past 5 Year Return of the Fund (Annualized)	8.76%	7.58%	7.99%
Highest returns over both the past 3 & 5 years?	Yes	No	No

Figure IA.2
Example of Online Experiment (Setting 3, Simulation #1, & Question 1)

Subjects were given the same instructions as in Figure IA.1

	Fund A	Fund B	Fund C
Fund Size (\$ Millions)	352	337	367
Fund Age (Years)	10	12	11
Expense Ratio	1.24%	1.15%	1.20%
Fund Turnover	53%	58%	48%
Idiosyncratic Volatility of the Fund	2.93%	0.92%	0.32%
Past 1 Month Return of the Fund (Annualized)	3.93%	3.92%	3.75%
Past 3 Month Return of the Fund (Annualized)	8.16%	7.31%	7.37%
Past 1 Year Return of the Fund	5.25%	5.89%	5.56%
Past 3 Year Return of the Fund (Annualized)	14.95%	14.07%	13.82%
Past 5 Year Return of the Fund (Annualized)	11.11%	11.46%	11.56%
Highest returns over both the past 3 & 5 years?	No	No	No

Figure IA.3
Example of Online Experiment (Setting 3, Simulation #2, & Question 1)

Subjects were given the same instructions as in Figure IA.1

	Fund A	Fund B	Fund C
Fund Size (\$ Millions)	367	211	352
Fund Age (Years)	11	12	10
Expense Ratio	1.20%	1.4%	1.24%
Fund Turnover	48%	72%	53%
Idiosyncratic Volatility of the Fund	2.93%	0.92%	0.32%
Past 1 Month of the Fund (Annualized)	6.16%	6.89%	6.933%
Past 3 Month Return of the Fund (Annualized)	9.37%	10.23%	9.91%
Past 1 Year Return of the Fund	5.25%	5.89%	5.56%
Past 3 Year Return of the Fund (Annualized)	13.45%	13.34%	13.41%
Past 5 Year Return of the Fund (Annualized)	8.76%	7.58%	7.99%
Highest returns over both the past 3 & 5 years?	Yes	No	No

Figure IA.4
Example of Online Experiment (Setting 3, Simulation #1, & Question 2)

Subjects were given the same instructions as in Figure IA.1

	Fund A	Fund B	Fund C
Fund Size (\$ Millions)	352	337	367
Fund Age (Years)	10	12	11
Expense Ratio	1.24%	1.15%	1.20%
Fund Turnover	53%	58%	48%
Idiosyncratic Volatility of the Fund	0.32%	0.92%	2.93%
Past 1 Month of the Fund (Annualized)	6.93%	6.89%	6.16%
Past 3 Month Return of the Fund (Annualized)	9.91%	10.23%	9.37%
Past 1 Year Return of the Fund	5.25%	5.89%	5.56%
Past 3 Year Return of the Fund (Annualized)	13.41%	13.34%	13.45%
Past 5 Year Return of the Fund (Annualized)	7.99%	7.58%	8.76%
Highest returns over both the past 3 & 5 years?	No	No	Yes

Figure IA.5
Example of Online Experiment (Setting 3, Simulation #1, & Question 3)

Subjects were given the same instructions as in Figure IA.1

	Fund A	Fund B	Fund C
Fund Size (\$ Millions)	367	337	352
Fund Age (Years)	11	12	10
Expense Ratio	1.20%	1.15%	1.24%
Fund Turnover	48%	58%	53%
Idiosyncratic Volatility of the Fund	0.32%	0.92%	2.93%
Past 1 Month of the Fund (Annualized)	6.93%	6.89%	6.16%
Past 3 Month Return of the Fund (Annualized)	9.91%	10.23%	9.37%
Past 1 Year Return of the Fund	5.56%	5.89%	5.25%
Past 3 Year Return of the Fund (Annualized)	13.41%	13.34%	13.45%
Past 5 Year Return of the Fund (Annualized)	7.99%	7.58%	8.76%
Highest returns over both the past 3 & 5 years?	No	No	Yes

Figure IA.6
Example of Online Experiment (Setting 3, Simulation #1, & Question 4)

Subjects were given the same instructions as in Figure IA.1

Table IA.1
Idiosyncratic Volatility and Fund Flows - Robustness Tests

This table presents the estimates of panel regressions, where the dependent variable is the fund's monthly net flow, inflow, or outflow. Each row represents a unique robustness test based on Models 1-3 of Table 3. We include identical variables as in Table 3, but only report the coefficient on idiosyncratic volatility for brevity. In brackets, we report *t*-statistics. In Rows 1-4 and 6-11, standard errors are clustered by fund; in Row 5 standard errors are estimated via Fama-MacBeth regressions with a Newey-West (1987) adjustment. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level respectively.

	Net flow	Inflow	Outflow
1. Baseline Specification	0.08*** [3.13]	0.84*** [3.05]	0.84*** [3.10]
2. IV defined as daily residuals from 3-factor model	0.12*** [4.32]	1.01*** [3.18]	0.97*** [3.08]
3. Replace IV with total volatility	-0.06 [-1.59]	0.54*** [2.71]	0.72*** [3.67]
4. Exclude December and January	0.08*** [3.23]	0.82*** [2.78]	0.84*** [2.93]
5. Estimate via Fama-Macbeth	0.00 [-0.03]	0.78*** [10.17]	0.76*** [9.49]
6. Control for Lagged Buying and Selling Pressure	0.02 [1.03]	0.55** [2.25]	0.57** [2.23]
7. Shareclass Flows in the Opposite Direction (<i>Offsetting</i>)	0.05 [1.61]	1.09*** [3.06]	1.11*** [3.28]
8. Shareclass Flows in the Same Direction (<i>Non-Offsetting</i>)	0.09*** [2.60]	0.68*** [2.98]	0.65*** [2.92]
9. Funds in Bottom 1/3 of Performance	0.33*** [7.85]	1.01*** [2.69]	0.76** [2.14]
10. Funds in Middle 1/3 of Performance	0.11*** [2.29]	0.85*** [3.89]	0.83*** [3.93]
11. Funds in Top 1/3 of Performance	-0.13*** [-2.82]	0.70*** [2.86]	0.89*** [3.54]

Table IA.2
Idiosyncratic Volatility and Fund Flows: Interactions with Past Performance

This table reports estimates of panel regressions where the dependent variable is the fund's monthly net flow, inflow, and outflow, respectively. The regressions include all the variables from Table 3 and also interact all the variables with the piecewise linear past one-year returns. In the interest of brevity, we only report the coefficients on the past returns (*Ret Low*, *Ret Mid*, *Ret High*), *IV*, and the interactions of *IV* and past returns. In brackets, we report *t*-statistics computed from standard errors clustered by fund. ***,**, and * denote statistical significance at the 1%, 5%, and 10% level respectively. Each model has 204,072 observations.

	(1)	(2)	(3)	(4)	(5)	(6)
	Net flow	Inflow	Outflow	Net flow	Inflow	Outflow
Ret Low	6.87*** [10.95]	2.38* [1.84]	-4.58*** [-3.62]	6.29*** [10.10]	1.43* [1.79]	-4.78*** [-7.25]
Ret Mid	2.52*** [26.72]	1.78*** [14.30]	-0.70*** [-6.71]	2.14*** [24.30]	1.42*** [14.68]	-0.75*** [-11.09]
Ret High	8.29*** [16.44]	10.09*** [11.65]	2.02*** [2.80]	7.63*** [16.72]	8.59*** [16.71]	0.91*** [3.16]
Idiosyncratic Vol. (IV)	0.60*** [6.20]	1.66*** [2.93]	1.11** [2.16]	0.65*** [6.36]	0.57*** [3.06]	-0.04 [-0.28]
Ret Low × IV	-2.30*** [-3.86]	-4.82** [-2.50]	-2.27 [-1.37]	-2.49*** [-4.21]	-2.08** [-2.08]	0.36 [0.44]
Ret Mid × IV	-0.22** [-2.00]	0.02 [0.11]	0.22 [1.13]	-0.21* [-1.96]	-0.00 [-0.02]	0.21** [2.10]
Ret High × IV	-0.50 [-1.54]	0.74 [0.78]	1.06 [1.17]	-0.17 [-0.56]	0.27 [0.70]	0.44* [1.67]
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	-	-	-	Yes	Yes	Yes
R ²	5.7%	12.8%	14.1%	13.6%	44.5%	57.6%

Table IA.3
Piecewise Idiosyncratic Volatility and Fund Flows

This table presents the results of panel regressions on actively managed, equity funds' flows while allowing investors' sensitivity to risk to be nonlinear. The dependent variable in the model is the fund's monthly net flow, inflow, or outflow. As in Table 3, we allow for non-linearity in performance sensitivity (Sirri and Tufano (1998)), but repeat the analysis for the fund's systematic and idiosyncratic risk. We rank funds each month based on their systematic (*SV*) and idiosyncratic volatility (*IV*) over the trailing 12 months. The regression also includes all the control variables reported in Table 3, but the coefficients on these variables are not reported. Definitions of all variables are available in the Appendix. In brackets, we report *t*-statistics computed from standard errors clustered by fund. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level respectively. Each model has 204,072 observations.

	(1)	(2)	(3)	(4)	(5)	(6)
	Net flow	Inflow	Outflow	Net flow	Inflow	Outflow
Ret Low	5.37*** [8.42]	0.66 [0.60]	-4.85*** [-4.69]	4.68*** [7.44]	0.25 [0.27]	-4.42*** [-5.70]
Ret Mid	2.53*** [27.38]	1.82*** [16.31]	-0.67*** [-7.39]	2.13*** [24.64]	1.36*** [15.00]	-0.79*** [-12.74]
Ret High	7.73*** [15.88]	10.40*** [14.94]	2.80*** [5.50]	7.14*** [16.19]	8.58*** [16.60]	1.38*** [4.60]
SV Low	-1.64** [-2.31]	-6.07*** [-2.69]	-4.76** [-2.19]	-0.92 [-1.38]	-1.75** [-2.26]	-0.73 [-1.55]
SV Mid	-0.30*** [-2.85]	-0.44* [-1.82]	-0.05 [-0.23]	0.19 [1.60]	0.34** [2.40]	0.11 [1.05]
SV High	-1.34*** [-3.42]	1.14 [0.94]	2.68** [2.25]	-0.78* [-1.91]	0.22 [0.33]	1.01* [1.70]
IV Low	0.71 [1.22]	-0.56 [-0.68]	-1.09 [-1.60]	-0.88 [-1.54]	-0.80 [-1.22]	0 [0.21]
IV Mid	0.23** [2.18]	0.19 [0.87]	0.19 [0.98]	0.12 [0.99]	0.18 [1.44]	0.09 [1.11]
IV High	0.42 [0.98]	10.17*** [4.03]	10.49*** [4.26]	0.98* [1.90]	3.05*** [3.88]	2.22*** [3.59]
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Fund Fixed Effects	-	-	-	Yes	Yes	Yes
R ²	5.7%	12.6%	13.9%	13.5%	44.3%	57.5%

Table IA.4
Past Returns and IV

This table reports estimates of panel regressions where the dependent variable is the fund's *IV*, defined as the standard deviation of the fund's residuals from the Carhart (1997) four-factor model over the previous 12 months. We include fund returns measured over the prior one month, three months, three years, and five years. We control for all past returns using the piecewise linear model of Sirri and Tufano (1998). Specifications 3 and 4 also include controls for the total number of stocks held by the fund (*# of Stocks Held*), the portfolio concentration of the fund (*HHI*), and industry concentration of the fund (*ICI*). All regressions include the following control variables: *Log(Size)*, *Log(Family Size)*, *Turnover Ratio*, *Expense Ratio*, *Load Fund*, *New Share Class*, and *Closed Fund*. We omit their coefficients for brevity. Detailed definitions of all variables are in the Appendix. In brackets, we report *t*-statistics computed from standard errors clustered by fund. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level respectively. Each model has 149,774 observations.

	(1)	(2)	(3)	(4)
	IV	IV	IV	IV
Ret Low (12 month)	-2.23*** [-14.15]	-0.21* [-1.92]	-1.40*** [-9.86]	-0.15 [-1.44]
Ret Mid (12 month)	-0.01 [-0.64]	0.01 [1.05]	0.00 [0.20]	0.02 [1.21]
Ret High (12 month)	1.43*** [11.88]	0.19*** [3.12]	1.07*** [10.13]	0.17*** [2.87]
Ret Low (1 month)	-3.82*** [-17.10]	-0.40*** [-5.84]	-2.72*** [-12.26]	-0.34*** [-5.09]
Ret Mid (1 month)	-0.00 [-0.57]	-0.01 [-1.58]	-0.00 [-0.42]	-0.01* [-1.73]
Ret High (1 month)	1.80*** [15.40]	0.08*** [2.82]	1.26*** [11.31]	0.05* [1.87]
Ret Low (3 month)	-3.00*** [-16.04]	-0.27*** [-3.68]	-2.09*** [-11.14]	-0.21*** [-2.94]
Ret Mid (3 month)	0.01 [0.49]	-0.02*** [-3.12]	-0.01 [-0.68]	-0.02*** [-3.62]
Ret High (3 month)	1.42*** [15.00]	0.01 [0.38]	0.97*** [10.99]	-0.02 [-0.45]
Ret Low (3 year)	-1.62*** [-9.45]	-0.20 [-1.63]	-1.10*** [-7.16]	-0.19 [-1.50]
Ret Mid (3 year)	0.06** [2.24]	0.02 [0.89]	0.06** [2.47]	0.02 [0.82]
Ret High (3 year)	2.06*** [8.74]	0.39*** [4.22]	1.64*** [7.84]	0.38*** [4.24]
Ret Low (5 year)	-0.81*** [-3.74]	0.53*** [3.47]	-0.32 [-1.41]	0.52*** [3.52]
Ret Mid (5 year)	0.31*** [9.50]	0.03 [1.23]	0.26*** [8.92]	0.03 [1.11]
Ret High (5 year)	2.61*** [9.38]	0.26*** [2.75]	2.12*** [8.93]	0.26*** [2.84]
# of Stocks Held			-0.02*** [-2.98]	-0.03*** [-3.28]
HHI			0.12*** [8.75]	0.05*** [3.62]
ICI			0.17*** [9.74]	0.09*** [3.68]
Missing Holdings			0.53*** [6.40]	-0.03* [-1.66]
Controls	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes
Fund Fixed Effects	-	Yes	-	Yes
R ²	36.2% JA19	76.8%	44.1%	77.0%

Table IA.5**IV, Fund Flows, and Salient Returns - Additional Return Controls**

This table repeats the regressions in Specifications 5-8 of Table 6 after making the following adjustments: 1) replacing the piecewise linear regression controls for returns over the past 1 month, 3 months, 1 year, 3 years, and 5 years with indicator variables equal to one if the funds returns, estimated over the past 1 month, 3 months, 1 year, 3 years, or 5 years were in the top or bottom 20%, 10%, 5%, and 1% ; 2) adding variables for the funds maximum and minimum daily returns over the past month, and 3) including the fund's absolute returns over each of the past 10 trading days. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively. Each model has 161,560 observations.

	(1)	(2)	(3)	(4)
	Inflow	Outflow	Inflow	Outflow
Systematic Volatility	-0.17 [-0.88]	-0.02 [-0.09]	0.27** [2.31]	0.26** [2.55]
Idiosyncratic Volatility	0.38* [1.73]	0.62*** [2.91]	0.06 [0.96]	0.10** [2.11]
One Year Rankings				
Top 1% (DV)	0.95 [1.53]	0.96** [1.99]	0.55 [1.33]	0.61** [2.19]
Top 5% (DV)	0.45** [2.39]	0.20 [1.55]	0.55*** [3.53]	0.08 [0.90]
Top 10% (DV)	0.71*** [5.07]	0.25** [2.28]	0.60*** [5.67]	0.16** [2.12]
Top 20% (DV)	0.27*** [3.86]	-0.16*** [-2.87]	0.30*** [5.50]	-0.05 [-1.59]
Bottom 1% (DV)	0.89 [1.31]	0.44 [0.71]	0.41 [1.23]	-0.05 [-0.17]
Bottom 5% (DV)	0.13 [0.63]	0.22 [1.13]	0.10 [0.85]	0.15 [1.45]
Bottom 10% (DV)	-0.15 [-1.54]	0.02 [0.22]	0.01 [0.09]	0.13* [1.80]
Bottom 20% (DV)	-0.19*** [-3.15]	0.22*** [4.11]	-0.13*** [-2.85]	0.25*** [6.42]
One Month Rankings				
Top 1% (DV)	3.06*** [4.26]	1.43** [2.23]	1.52*** [3.82]	-0.11 [-0.54]
Top 5% (DV)	0.27 [1.54]	0.07 [0.50]	0.32*** [2.65]	-0.00 [-0.00]
Top 10% (DV)	0.22** [2.17]	0.02 [0.25]	0.11 [1.40]	-0.06 [-1.12]
Top 20% (DV)	0.09 [1.33]	-0.02 [-0.47]	0.10* [1.80]	-0.01 [-0.21]
Bottom 1% (DV)	0.31 [0.67]	0.99** [2.02]	-0.37 [-1.61]	0.24 [1.31]
Bottom 5% (DV)	0.31* [1.78]	0.52*** [3.29]	0.05 [0.48]	0.19** [2.52]
Bottom 10% (DV)	-0.12 [-1.47]	-0.00 [-0.03]	-0.12* [-1.65]	0.01 [0.14]
Bottom 20% (DV)	0.11 [1.62]	0.16** [2.58]	0.06 [1.32]	0.11*** [3.31]

Table IA.5 Continued

Three Month Ranking

Top 1% (DV)	1.54*** [3.76]	0.88*** [2.59]	0.96*** [2.84]	0.32 [1.58]
Top 5% (DV)	0.54*** [2.62]	0.21 [1.30]	0.60*** [3.70]	0.16 [1.57]
Top 10% (DV)	0.28*** [2.76]	0.08 [1.01]	0.19** [2.02]	0.03 [0.52]
Top 20% (DV)	0.15** [2.28]	-0.05 [-1.06]	0.13*** [2.64]	-0.07** [-2.10]
Bottom 1% (DV)	1.35*** [2.67]	1.01** [2.20]	0.54** [2.14]	0.22 [0.98]
Bottom 5% (DV)	-0.14 [-1.00]	0.01 [0.10]	-0.12 [-1.42]	0.01 [0.15]
Bottom 10% (DV)	-0.02 [-0.16]	0.09 [1.00]	-0.04 [-0.50]	0.07 [1.15]
Bottom 20% (DV)	-0.05 [-0.95]	0.06 [1.52]	0.01 [0.17]	0.10*** [3.21]

Three Year Ranking

Top 1% (DV)	-0.67 [-1.11]	-1.13*** [-2.61]	-0.09 [-0.23]	-0.38 [-1.57]
Top 5% (DV)	0.10 [0.47]	0.26* [1.66]	0.04 [0.22]	0.12 [1.09]
Top 10% (DV)	0.31** [2.43]	-0.04 [-0.42]	0.40*** [4.03]	0.02 [0.34]
Top 20% (DV)	0.52*** [5.45]	-0.00 [-0.00]	0.44*** [6.50]	-0.03 [-0.62]
Bottom 1% (DV)	1.03 [1.19]	0.50 [0.56]	0.05 [0.14]	-0.44 [-1.32]
Bottom 5% (DV)	-0.22 [-1.13]	0.01 [0.04]	-0.17 [-1.35]	-0.06 [-0.55]
Bottom 10% (DV)	0.09 [0.81]	0.16 [1.47]	0.03 [0.33]	0.13* [1.76]
Bottom 20% (DV)	-0.40*** [-4.86]	0.18** [2.33]	-0.31*** [-5.33]	0.25*** [4.76]

Five Year Ranking

Top 1% (DV)	-1.54** [-2.25]	-1.68*** [-3.04]	-0.88* [-1.88]	-1.14*** [-3.42]
Top 5% (DV)	-0.57** [-2.33]	-0.04 [-0.20]	-0.46** [-2.39]	-0.16 [-1.29]
Top 10% (DV)	0.35** [2.50]	-0.07 [-0.72]	0.42*** [3.14]	-0.19** [-2.06]
Top 20% (DV)	0.78*** [6.90]	0.06 [0.58]	0.59*** [5.72]	-0.22** [-2.46]
Bottom 1% (DV)	1.75** [2.04]	1.23 [1.59]	0.89 [1.48]	0.36 [0.59]
Bottom 5% (DV)	0.67** [2.55]	0.49* [1.77]	0.33** [2.07]	0.15 [1.02]
Bottom 10% (DV)	-0.18* [-1.72]	-0.07 [-0.76]	-0.15* [-1.90]	0.03 [0.42]
Bottom 20% (DV)	-0.52*** [-4.46]	-0.18 [-1.64]	-0.32*** [-4.26]	0.15** [2.43]

Table IA.5 Continued

Daily Returns				
Prior Month Max Daily Return	0.18**	0.09	0.06	-0.03
	[2.09]	[1.41]	[1.02]	[-0.78]
Prior Month Min Daily Return	0.25*	0.10	0.12*	0.07
	[1.75]	[0.80]	[1.79]	[1.37]
Absolute daily returns (t=last day)				
Day t	0.12**	0.14***	0.08*	0.08**
	[2.48]	[3.11]	[1.92]	[2.44]
Day t-1	0.16***	0.03	0.09**	-0.04
	[2.89]	[0.63]	[2.02]	[-1.17]
Day t-2	-0.03	-0.02	0.06	0.03
	[-0.54]	[-0.54]	[1.59]	[1.21]
Day t-3	0.05	0.04	0.11**	0.04
	[0.82]	[0.95]	[2.10]	[1.11]
Day t-4	0.07	0.11***	0.03	0.02
	[1.35]	[2.88]	[0.76]	[0.80]
Day t-5	0.16**	0.18***	0.09**	0.07**
	[2.55]	[3.56]	[2.02]	[2.51]
Day t-6	-0.01	-0.07	-0.02	-0.10***
	[-0.09]	[-1.32]	[-0.44]	[-2.98]
Day t-7	-0.12**	-0.17***	-0.04	-0.10***
	[-2.12]	[-3.72]	[-0.99]	[-3.69]
Day t-8	0.00	0.02	0.04	0.03
	[0.05]	[0.35]	[0.79]	[0.81]
Day t-9	0.03	0.04	0.01	0.01
	[0.65]	[1.00]	[0.14]	[0.28]
Age	-0.45***	-0.29***	-1.17***	-0.19
	[-6.67]	[-4.88]	[-3.79]	[-0.69]
Assets	-0.35***	-0.21**	-1.24***	0.21*
	[-3.44]	[-2.31]	[-7.04]	[1.91]
Family size	-0.06	-0.10	0.50***	0.24*
	[-0.48]	[-0.85]	[2.74]	[1.91]
Turnover	1.83***	1.78***	0.32*	0.22
	[4.37]	[4.35]	[1.96]	[1.50]
Expenses	-0.47***	-0.26**	-0.00	-0.10
	[-4.25]	[-2.46]	[-0.03]	[-0.86]
Load (DV)	0.53***	0.52***	-0.68**	-0.69***
	[3.17]	[3.44]	[-2.52]	[-3.20]
New share class (DV)	1.04***	0.67***	0.64***	0.52***
	[4.83]	[3.63]	[3.21]	[3.22]
Closed (DV)	-0.95***	-0.02	-1.14***	-0.02
	[-6.71]	[-0.16]	[-7.36]	[-0.18]
Observations	161,560	161,560	161,560	161,560
R2	0.138	0.149	0.463	0.582
Time Fixed Effect	Yes	Yes	Yes	Yes
Fund Fixed Effects	-	-	Yes	Yes

Table IA.6**IV, Fund Flows, Salient Returns, and other Fund Characteristics**

This table repeats the regressions in Specifications 5-8 of Tables 6 after including additional controls for the total number of stocks held by the fund (# of stocks held), the portfolio concentration of the fund (HHI), and the industry concentration of the fund (ICI). Detailed definitions of all the variables are in the Appendix. In brackets, we report t -statistics computed from standard errors clustered by fund. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively. Each model has 161,560 observations.

	(1)	(2)	(3)	(4)
	Inflow	Outflow	Inflow	Outflow
Systematic Volatility	-0.02 [-0.08]	0.11 [0.58]	0.36*** [3.04]	0.22** [2.09]
Idiosyncratic Volatility	0.42* [1.65]	0.56** [2.33]	0.08 [1.39]	0.11** [2.09]
Low Return (12 month)	0.95 [0.95]	-1.51 [-1.49]	-0.90 [-0.98]	-2.62*** [-3.45]
Mid Return (12 month)	0.41*** [2.96]	-0.56*** [-4.24]	0.35*** [3.47]	-0.47*** [-5.77]
High Return (12 month)	5.35*** [8.39]	1.58*** [3.29]	5.32*** [11.23]	1.41*** [4.70]
Low Return (1 month)	1.11 [1.30]	-2.33*** [-3.42]	1.28** [2.00]	-1.75*** [-4.09]
Mid Return (1 month)	-0.03 [-0.37]	-0.12** [-2.02]	0.02 [0.34]	-0.05 [-0.98]
High Return (1 month)	3.29*** [7.38]	0.37 [1.31]	2.72*** [7.77]	-0.28 [-1.45]
Low Return (3 month)	1.15 [1.42]	-1.05 [-1.38]	0.53 [0.84]	-1.31** [-2.29]
Mid Return (3 month)	-0.03 [-0.40]	-0.26*** [-3.76]	-0.02 [-0.28]	-0.20*** [-3.97]
High Return (3 month)	3.71*** [6.58]	0.81** [1.97]	3.48*** [7.44]	0.65** [2.30]
Low Return (3 year)	-1.36 [-0.94]	-3.10** [-2.24]	-0.29 [-0.32]	-1.98** [-2.36]
Mid Return (3 year)	1.08*** [5.89]	-0.34** [-2.23]	0.99*** [6.98]	-0.28** [-2.50]
High Return (3 year)	2.58*** [3.56]	-0.05 [-0.09]	3.06*** [5.45]	0.28 [0.73]
Low Return (5 year)	-1.62 [-0.81]	-1.11 [-0.57]	-0.44 [-0.40]	-1.05 [-1.06]
Mid Return (5 year)	1.47*** [7.14]	0.32* [1.81]	1.17*** [6.74]	-0.53*** [-3.85]
High Return (5 year)	1.57* [1.76]	-1.31* [-1.88]	2.35*** [2.83]	-1.75*** [-2.78]
Age	-0.48*** [-6.76]	-0.30*** [-4.77]	-1.15*** [-3.69]	-0.21 [-0.80]

Table IA.6 Continued

TNA	-0.26**	-0.08	-1.30***	0.21*
	[-2.56]	[-0.91]	[-7.31]	[1.81]
Family assets	-0.23	-0.31**	0.49***	0.22*
	[-1.50]	[-2.11]	[2.72]	[1.80]
Turnover	1.81***	1.75***	0.33**	0.21
	[4.48]	[4.47]	[1.97]	[1.46]
Expenses	-0.48***	-0.24**	0.02	-0.08
	[-4.28]	[-2.33]	[0.16]	[-0.73]
Load (DV)	0.48***	0.47***	-0.68**	-0.70***
	[2.95]	[3.17]	[-2.51]	[-3.23]
New share (DV)	1.10***	0.75***	0.64***	0.53***
	[5.08]	[4.01]	[3.24]	[3.27]
Closed (DV)	-0.90***	0.06	-1.15***	-0.02
	[-6.00]	[0.44]	[-7.43]	[-0.15]
# of positions	-0.01	0.07	0.10*	0.04
	[-0.16]	[1.50]	[1.89]	[0.89]
HHI	-0.15	-0.25**	-0.13*	-0.16***
	[-1.19]	[-2.17]	[-1.69]	[-2.68]
ICI (original)	0.74***	0.87***	0.24*	0.26**
	[2.93]	[3.56]	[1.68]	[2.23]
Missing Holdings (DV)	-0.38**	0.03	-0.12	-0.04
	[-2.12]	[0.19]	[-0.95]	[-0.40]
Time Fixed Effects	Yes	Yes	Yes	Yes
Fund Fixed Effects	-	-	Yes	Yes
Observations	161,560	161,560	161,560	161,560
R ²	0.139	0.157	0.461	0.581

Table IA.7
Experimental Results by Question

This table reports the experimental results (Table 7 of the paper) after partitioning the sample into cases where “Fund A” is the high *IV* fund (Questions 1 and 2 of the survey) and cases where “Fund C” is the high *IV* fund (Questions 3 and 4 of the survey). In brackets, we report *t*-statistics computed from standard errors clustered by survey. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level respectively.

Panel A: Questions 1 & 2 (High IV = Fund A)

	(1)	(2)	(3)	(4)
	Setting 1	Setting 2	Setting 3	Setting 3
Intercept	\$31.73***	\$29.58***	\$27.84***	\$21.40***
	[24.36]	[22.27]	[18.49]	[12.80]
High IV	-\$5.42***	\$2.63	\$7.76***	-\$1.58
	[-3.91]	[1.36]	[2.88]	[-0.73]
High Return	\$14.06***	\$9.35***	\$7.32***	\$3.86*
	[5.56]	[3.84]	[2.90]	[1.69]
High Fees [and other controls]	-\$2.59**	-\$0.73	\$1.40	\$1.40
	[-2.17]	[-0.61]	[1.10]	[1.10]
High Return [1 month]				-\$1.31
				[-0.66]
High Return [3 month]				\$4.06
				[1.77]
High Return [3 years]				\$7.33***
				[2.85]
High Return [5 years]				\$14.64***
				[4.67]
Highest Return Indicator [3 & 5 years]				\$10.54***
				[3.34]
Observations	1,462	1,482	1,452	1,452
R ²	14.36%	3.07%	1.66%	25.82%
Δ High IV (Relative to Setting 1)		\$8.05***	\$13.17***	\$3.83
		[3.33]	[4.40]	[1.48]

Panel B: Questions 3 & 4 (High IV = Fund C)

	(1)	(2)	(3)	(4)
	Setting 1	Setting 2	Setting 3	Setting 3
Intercept	\$33.88***	\$33.11***	\$30.38***	\$23.83***
	[24.76]	[21.46]	[19.23]	[14.02]
High IV	-\$7.84***	-\$1.55	\$4.12	-\$5.12**
	[-5.35]	[-0.70]	[1.55]	[-2.30]
High Return	\$12.43***	\$4.21	\$4.78*	\$1.25
	[4.70]	[1.53]	[1.82]	[0.51]
High Fees [and other controls]	-\$4.69***	-\$2.01*	-\$0.05	-\$0.05
	[-4.10]	[-1.66]	[-0.03]	[-0.03]
High Return [1 month]				-\$2.43
				[-1.20]
High Return [3 month]				\$5.58**
				[2.41]
High Return [3 years]				\$7.61***
				[3.26]
High Return [5 years]				\$15.43***
				[4.99]
Highest Return Indicator [3 & 5 years]				\$8.88***
				[2.98]
Observations	1,462	1,482	1,452	1,452
R ²	16.38%	1.41%	0.61%	24.49%
Δ High IV (Relative to Setting 1)		\$6.29**	\$11.95***	\$2.72
		[2.47]	[4.14]	[1.09]

Table IA.8
Experimental Results by Education Level

This table reports the experimental results (Table 7 of the paper) after partitioning the sample into cases where the Amazon Mechanical Turk worker had an education level of less than a Bachelor's degree (Panel A) or greater than or equal to a Bachelor's degree (Panel B). In brackets, we report t -statistics computed from standard errors clustered by survey. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level respectively.

Panel A: Education < Bachelors

	(1)	(2)	(3)	(4)
	Setting 1	Setting 2	Setting 3	Setting 3
Intercept	\$33.55***	\$32.34***	\$28.71***	\$25.36***
	[23.24]	[15.03]	[13.96]	[10.75]
High IV	-\$4.30***	\$2.26	\$10.38**	\$1.22
	[-2.97]	[0.77]	[2.39]	[0.34]
High Return	\$7.15**	\$4.50	\$3.80	\$0.48
	[2.67]	[1.17]	[1.13]	[0.14]
High Fees [and other controls]	-\$3.69**	-\$3.77*	-\$0.32	-\$0.32
	[-2.22]	[-1.80]	[-0.22]	[-0.22]
High Return [1 month]				-\$0.98
				[-0.29]
High Return [3 month]				\$1.53
				[0.42]
High Return [3 years]				\$7.00
				[1.55]
High Return [5 years]				\$3.31
				[0.88]
Highest Return Indicator [3 & 5 years]				\$15.46**
				[2.32]
Observations	1,254	1,092	984	984
R ²	8.40%	1.59%	2.80%	19.14%
Δ High IV (Relative to Setting 1)		\$6.56**	\$14.68***	\$5.52
		[2.02]	[3.21]	[1.43]

Panel B: Education \geq Bachelors

	(1)	(2)	(3)	(4)
	Setting 1	Setting 2	Setting 3	Setting 3
Intercept	\$32.25*** [18.52]	\$30.77*** [19.02]	\$29.32*** [16.77]	\$21.33*** [11.62]
High IV	-\$8.41*** [-4.88]	-\$0.46 [-0.19]	\$3.66 [1.19]	-\$5.51** [-2.32]
High Return	\$17.77*** [4.92]	\$8.11** [2.63]	\$7.20** [2.27]	\$3.38 [1.31]
High Fees [and other controls]	-\$3.59*** [-3.26]	\$0.03 [0.03]	\$1.19 [0.90]	\$1.19 [0.89]
High Return [1 month]				-\$2.92 [-1.32]
High Return [3 month]				\$7.27** [2.80]
High Return [3 years]				\$7.72*** [3.07]
High Return [5 years]				\$19.29*** [5.36]
Highest Return Indicator [3 & 5 years]				\$8.25** [2.71]
Observations	1,670	1,872	1,920	1,920
R ²	20.74%	2.57%	0.98%	29.60%
Δ High IV (Relative to Setting 1)		\$7.94** [2.67]	\$12.07*** [3.57]	\$2.90 [1.04]

Table IA.9
Experimental Results by Income

This table reports the experimental results (Table 7 of the paper) after partitioning the sample into cases where the Amazon Mechanical Turk work has an annual income of less than \$50,000 (Panel A) or greater than or equal to \$50,000 (Panel B). In brackets, we report t -statistics computed from standard errors clustered by survey. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level respectively.

Panel A: Income < \$50K				
	(1)	(2)	(3)	(4)
	Setting 1	Setting 2	Setting 3	Setting 3
Intercept	\$32.59***	\$31.27***	\$28.79***	\$21.94***
	[23.22]	[16.64]	[12.98]	[10.85]
High IV	-\$6.25***	\$1.83	\$6.90*	-\$4.03
	[-3.96]	[0.72]	[1.60]	[-1.20]
High Return	\$10.74***	\$4.92	\$6.42*	\$2.14
	[3.76]	[1.44]	[1.65]	[0.60]
High Fees [and other controls]	-\$1.71*	-\$0.56	\$0.31	\$0.31
	[-1.62]	[-0.35]	[0.25]	[0.25]
High Return [1 month]				-\$2.62
				[-0.87]
High Return [3 month]				\$6.30*
				[1.68]
High Return [3 years]				\$7.71**
				[2.28]
High Return [5 years]				\$17.25***
				[3.58]
Highest Return Indicator [3 & 5 years]				\$9.53**
				[2.04]
Observations	1,525	1,500	1,176	1,176
R^2	12.27%	0.86%	1.24%	27.98%
Δ High IV (Relative to Setting 1)		\$8.07***	\$13.15***	\$2.22
		[2.82]	[2.96]	[0.62]

Panel B: Income \geq \$50K

	(1)	(2)	(3)	(4)
	Setting 1	Setting 2	Setting 3	Setting 3
Intercept	\$33.05***	\$31.43***	\$29.33***	\$23.05***
	[17.27]	[17.68]	[17.31]	[11.05]
High IV	-\$7.03***	-\$0.78	\$5.28*	-\$2.86
	[-4.04]	[-0.27]	[1.74]	[-1.19]
High Return	\$15.96***	\$8.69**	\$5.79*	\$2.82
	[4.11]	[2.56]	[1.92]	[1.06]
High Fees [and other controls]	-\$5.76***	-\$2.20**	\$0.93	\$0.93
	[-3.61]	[-1.96]	[0.63]	[0.63]
High Return [1 month]				-\$1.40
				[-0.60]
High Return [3 month]				\$3.88
				[1.54]
High Return [3 years]				\$7.13**
				[2.45]
High Return [5 years]				\$13.85***
				[3.70]
Highest Return Indicator [3 & 5 years]				\$9.67**
				[2.58]
Observations	1,399	1,464	1,728	1,728
R^2	18.75%	3.70%	0.92%	23.07%
Δ High IV (Relative to Setting 1)		\$6.26*	\$12.32***	\$4.17
		[1.94]	[3.53]	[1.40]

Table IA.10
IV and Fund Flows - New versus Existing Investors

This table examines the relationship between *IV* and mutual fund purchases for new and existing investors. New purchases are purchases by a household that did not previously own the fund at any point during the sample period, and existing purchases are purchases by a household that previously owned the fund. New Inflows (Existing Inflows) are defined as the dollar volume bought by new (existing) investors over the month scaled by the sum of all households' holdings of the fund at the end of the previous month. We regress New (or Existing) inflows on idiosyncratic volatility (*IV*), systematic volatility (*SV*), past returns (*Ret*), total net assets (*TNA*), fund age (*Age*), fund expense ratio, and the number of households that owned the fund as of the prior month (Existing Investors). As in Table IA.3, we allow for non-linearity in performance sensitivity as well as the fund's systematic and idiosyncratic volatility. Definitions of all variables are available in the Appendix. In brackets, we report t-statistics computed from standard errors clustered by fund. ***, **, and * denote statistical significance at the 1%, 5%, and 10% level, respectively. Our sample relies on 78,000 households at a large discount brokerage firm from January 1991 through November 1996. The sample includes 5,008 fund-month observations for 123 unique mutual funds.

	(1)	(2)	(3)	(4)	(5)	(6)
	New Investors	Existing	New- Existing	New	Existing	New - Existing
IV High	9.07 [1.68]	-1.85 [-0.53]	10.91 [2.05]	5.74 [0.55]	-18.59 [-2.29]	24.33 [2.00]
IV Mid	-1.05 [-0.91]	1.06 [1.32]	-2.11 [-1.78]	-1.06 [-0.82]	-0.48 [-0.76]	-0.57 [-0.47]
IV Low	-4.39 [-1.18]	-1.47 [-0.90]	-2.92 [-0.84]	-0.54 [-0.11]	1.62 [0.91]	-2.16 [-0.49]
SV High	8.19 [1.46]	21.44 [1.80]	-13.25 [-1.28]	-12.31 [-2.68]	4.99 [1.59]	-17.29 [-3.78]
SV Mid	0.53 [0.56]	-1.00 [-1.52]	1.53 [1.61]	1.01 [0.92]	-0.10 [-0.24]	1.11 [1.16]
SV Low	-4.85 [-1.45]	2.34 [1.44]	-7.19 [-2.41]	-2.87 [-0.74]	2.24 [1.71]	-5.10 [-1.44]
Ret High	16.05 [3.83]	0.34 [0.12]	15.71 [4.29]	7.62 [1.93]	-6.60 [-1.47]	14.21 [2.92]
Ret Mid	2.48 [3.38]	0.97 [2.07]	1.51 [2.12]	2.09 [2.92]	1.02 [1.92]	1.07 [1.37]
Ret Low	6.43 [1.81]	2.43 [0.83]	4.00 [1.00]	9.38 [2.49]	2.57 [1.51]	6.81 [1.79]
Log [TNA]	-2.48 [-4.56]	-0.58 [-2.16]	-1.90 [-4.06]	-8.55 [-5.03]	-1.65 [-2.18]	-6.90 [-4.52]
Log [Age]	-1.36 [-5.00]	0.02 [0.19]	-1.39 [-5.71]	-5.23 [-2.56]	-0.70 [-0.89]	-4.53 [-2.70]
Expense Ratio	-0.88 [-3.15]	0.11 [0.80]	-0.99 [-4.08]	-0.11 [-0.10]	0.54 [1.01]	-0.65 [-0.60]
Log [Existing Investors]	0.36 [0.69]	0.56 [2.56]	-0.21 [-0.45]	3.03 [2.58]	0.87 [1.26]	2.16 [1.78]
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Product Code Fixed Effects	Yes	Yes	Yes	-	-	-
Fund Fixed Effects	-	-	-	Yes	Yes	Yes
R ²	16.86%	8.67%	12.52%	28.57%	23.88%	22.32%