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Managerial Multitasking in the Mutual Fund Industry*

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Managerial Multitasking in the Mutual Fund Industry

Abstract

We examine the determinants and consequences of mutual fund managers simultaneously managing multiple funds. Well-performing managers multitask by taking over poorly performing funds or launching new funds. Subsequent to multitasking, funds run by managers prior to multitasking (*i.e.*, incumbent funds) experience performance deterioration while the performance of the acquired funds improves. Multitasking increases the assets of fund companies but results in a wealth transfer from shareholders of the incumbent funds to those of the funds the managers take over. Multitasking arrangements are terminated when investors recognize the associated agency problem and withdraw their capital from the incumbent funds.

Keywords: Multitasking, Fund Performance, Fund Flows, Agency Problems

JEL Classification: G10, G20, G23

It is commonly believed that mutual fund companies assign a single fund to a portfolio manager. For example, the Fidelity Magellan Fund was the only fund run by their star manager, Peter Lynch. In reality, fund companies frequently assign multiple funds to the same portfolio manager. For instance, Will Danoff, manager of Fidelity Contrafund since 1990, also began managing Fidelity New Insights Fund in 2003. Moreover, 48% of mutual fund managers managed multiple funds simultaneously (*i.e.*, multitask) and these managers controlled about 62% of the total assets in the industry during our sample period of 1980 to 2012. Despite being a widely prevalent practice, there has been little academic research on the subject of managerial multitasking in the mutual fund industry (Yadav, 2011; and Choi, Kahraman, and Mukherjee, 2014 being two exceptions). We attempt to fill this gap in the literature by examining the determinants and consequences of the multitasking phenomenon in the mutual fund industry.

We identify a sample of managers of U.S. open-end equity mutual funds that switch from single-tasking (*i.e.*, managing one fund, which we refer to as *incumbent*) to multitasking (*i.e.*, managing multiple funds) by either taking over existing funds within fund companies (which we refer to as *acquired*) or by launching *new* funds.¹ We refer to the acquired and new funds together as new-task funds. We document several findings that shed light on the economics of multitasking.

We find that managers who switch to multitasking exhibit superior past performance in the incumbent funds prior to the switch. Moreover, these managers multitask either by taking over other funds in the fund companies that are poorly performing or by launching new funds. We offer three explanations for these findings. First, well-performing managers of incumbent

¹ We borrow the terms, *incumbent* and *acquired*, from the mergers and acquisitions literature although our paper is not about mutual fund mergers, which have been studied by Jayaraman, Khorana, and Nelling (2002).

funds can generate a positive spillover effect in form of greater investor flows into the acquired funds and new funds. Second, multitasking mechanism can help fund companies to turn around poorly performing funds, whose presence can adversely affect companies' reputation. Lastly, since multitasking arrangement increases the manager's span of control, mutual fund companies can use it to retain their good managers and to replace their bad managers, thereby maximizing the economic surplus generated through their monitoring role.²

We next examine the implications of managerial multitasking for fund performance, for which we have three hypotheses. First, managers are likely to be more distracted when running multiple funds simultaneously. These distractions can negatively impact managers' performance. This *distraction hypothesis* predicts that both the performance of the incumbent and the acquired funds suffer when managers multitask. Second, multitasking managers can divert their attention and effort from the existing funds to the new task. This *effort diversion hypothesis* predicts performance deterioration for the incumbent funds but performance improvement for the acquired funds. Third, multitasking managers can exploit synergistic benefits associated with learning while conducting investment research for multiple funds.³ This *synergy creation hypothesis* predicts that performance of both the incumbent and acquired funds improve after the managers' switch to multitasking.

To test these hypotheses, we compare the performance of the incumbent funds and the acquired funds before and after their managers' switch to multitasking. We find that there is a striking decline in the risk-adjusted performance of the incumbent funds over the 12-month period subsequent to the switch – a decline of 0.13, 1.77%, and 1.23% in the annualized Sharpe

² Gervais, Lynch, and Musto (2005) theoretically model mutual fund companies as delegated monitors of money managers, who can credibly convey manager quality and generate value through their firing and retention decisions.

³ This notion is similar to cross-learning documented in the context of firms offering hedge funds and funds of hedge funds simultaneously, as studied by Agarwal, Lu, and Ray (2015).

ratio, the Carhart (1997) four-factor alpha and the benchmark-adjusted alpha, respectively. In contrast, there is an improvement in the performance of the acquired funds: 0.21, 1.91%, and 2.89% using the annualized Sharpe ratio, four-factor alpha and benchmark-adjusted alpha, respectively. These changes in the three performance measures are economically significant since the average values for the incumbent funds prior to multitasking are 0.84, 1.39%, and 1.68%, while the corresponding values for the acquired funds are 0.46, -2.15%, and -1.93%. We interpret these results being consistent with the effort diversion hypothesis, and not in favor of either the distraction or the synergy creation hypothesis.

An obvious concern is that the above results may be driven by mean reversion in fund performance and/or decreasing returns to scale. To allay such concerns, we use propensity score matching to construct samples of *control* funds that are similar to our *treated* groups of incumbent and acquired funds but whose managers remain single-tasking. That is, the difference between the two groups allows us to capture the treatment effect of multitasking. We continue to find performance decline and improvement in the incumbent and acquired funds, respectively, even after taking into account the changes in performance of the respective matched control funds. In fact, unlike our treated samples of incumbent and acquired funds, the matched control samples show virtually no change in performance. Together, these findings suggest that mean reversion in fund performance and decreasing returns to scale do not entirely explain our results related to the effect of multitasking on fund performance.

To further corroborate the effort diversion hypothesis, we examine if the exertion of greater effort in the new-task fund is associated with more pronounced deterioration in the performance of the manager's incumbent fund. Since it is challenging to observe and measure effort, we use three proxies for effort in the new task that include managing a new fund versus an

existing fund, new-task funds' turnover ratio, and new-task funds' deviation from the Morningstar style index.⁴ Each of these proxies attempts to capture the intensity of multitasking managers' active involvement in the new-task funds. Consistent with our effort diversion hypothesis, we find that the incumbent funds' performance suffers more when their managers launch a new fund and manage funds with greater turnover ratio and larger style deviation.

Next, we examine the economic incentives of mutual fund companies to engage in these multitasking arrangements by analyzing their effect on investor flows. We compare the net dollar flows into the incumbent and acquired funds before and after their managers' switch to multitasking. We find that incumbent funds do not display a significant change in investor flows while acquired funds are rewarded with greater investor flows over the 12-month period subsequent to the switch. Further, new funds launched by multitasking managers attract more investor flows compared to the ones launched by single-tasking managers. These findings are consistent with the aforementioned positive spillover effect of multitasking on investor flows that allows mutual fund companies to increase their assets. Finally, in well-functioning financial markets with rational investors, fund companies should terminate these multitasking arrangements if investors withdraw their capital from the poorly performing incumbent funds. We find that this is indeed the case.

Taken together, our findings uncover an important and hitherto unexplored manifestation of potential agency problems in the form of managerial multitasking in the mutual fund industry. By assigning multiple funds to the same portfolio manager, fund companies benefit from managerial multitasking by increasing their assets, turning around their poorly performing funds,

⁴ The deviation from the style index is similar to the active share measure proposed by Cremers and Petajisto (2009) for mutual funds and strategy distinctiveness measure proposed by Sun, Wang, and Zheng (2012) for hedge funds.

and retaining their well-performing managers. However, investors of the incumbent funds bear the costs of poor performance due to managers' multitasking. We show that these costs largely accrue to investors in the short run as fund performance improves after value-destroying multitasking arrangements are discontinued. Our work thus contributes to the large literature on the agency problems in the delegated asset management industry.⁵

In addition, our paper complements the growing literature studying how fund performance relates to different organizational structures such as team management (*e.g.*, Bliss, Potter, and Schwarz, 2008; Massa, Reuter, and Zitzewitz, 2010; Baer, Kempf, and Ruenzi, 2011; and Patel and Sarkissian, 2014), side-by-side management (*e.g.*, Cici, Gibson, and Moussawi, 2010; Nohel, Wang, and Zheng, 2010; and Deuskar et al., 2011), and outsourcing arrangement (*e.g.*, Chen, Hong, and Kubik, 2013) in the mutual fund industry. Finally, our paper relates to the corporate finance literature that studies whether firms with directors serving multiple boards are associated with weak corporate governance (*e.g.*, Ferris, Jagannathan, and Pritchard, 2003; and Fich and Shivdasani, 2006).

The rest of our paper is organized as follows. Section I describes the data, sample selection, and construction of key variables. Section II examines the characteristics of funds associated with multitasking. Section III studies the performance implications of managerial multitasking. Section IV discusses the economic incentives of the fund companies to engage in

⁵ This literature includes the window-dressing behavior among portfolio managers (*e.g.*, Lakonishok et al., 1991; He, Ng, and Wang, 2004; Ng and Wang, 2004; Meier and Schaumburg, 2006; and Agarwal, Gay, and Ling, 2014), strategic risk-shifting motivated by agency issues (*e.g.*, Brown, Harlow, and Starks, 1996; Chevalier and Ellison, 1997; Kempf and Ruenzi, 2008; Kempf, Ruenzi, and Thiele, 2009; Hu et al., 2011; Huang, Sialm, and Zhang, 2011; and Schwarz, 2012), conflict of interests arising from offering multiple products (*e.g.*, Gaspar, Massa, and Matos, 2006; Chen and Chen, 2009; Cici, Gibson, and Moussawi, 2010; Bhattacharya, Lee, and Pool, 2013; and Sandhya, 2012) and incentive misalignment due to business ties (*e.g.*, Davis and Kim, 2007; Cohen and Schmidt, 2009; and Ashraf, Jayaraman, and Ryan 2012).

multitasking by analyzing its effect on investor flows. Section V focuses on fund companies' decisions to terminate multitasking arrangements. Section VI concludes.

I. Data Sample and Construction of Variables

A. Data Sample

The primary data source for our study is the survivorship-bias free Morningstar Direct Mutual Fund database. This database covers U.S. open-end mutual funds and provides information about fund names, manager names, returns, assets, inception dates, expense ratios, turnover ratios, net dollar flows, investment styles, fund tickers, fund CUSIPs, and other fund characteristics. We rely primarily on the Morningstar database for two reasons. First, manager information is available over a longer time period in the Morningstar database than it is in the CRSP database.⁶ Second, manager information is more accurate in the Morningstar database than in the CRSP database (see Massa, Reuter, and Zitzewitz, 2010).

We focus only on actively managed equity funds that have more than 50% of their assets invested in common stocks and we exclude funds whose managers are anonymous. We also exclude team-managed funds since task allocation among different team members is not observable. This yields a final sample of 3,316 portfolio managers from 4,195 domestic equity funds, covering 268,205 fund-month observations between 1980 and 2012.

We construct time-series data on manager-fund pairs that allows us to identify the exact month in which the managers switch from single-tasking to multitasking by tracking the number of funds they manage over time. We use the month in which a manager switches from managing one fund (*i.e.*, single-tasking) to more than one fund (*i.e.*, multitasking) as the event month for

⁶ Morningstar provides information on mutual fund managers from 1949 onward while this information is only available in CRSP beginning in 1993.

our empirical analyses. To avoid the cases of temporary arrangements, we require the managers to (a) have at least 12-month tenure in the incumbent funds before switching to multitasking, and (b) continue managing both the incumbent fund and the new-task fund (*i.e.*, acquired fund or new fund) for at least 12 months after the switch. Using this criterion, we find a total of 688 managers that switch from single-tasking to multitasking: 274 cases (39.83%) where the managers acquire an existing fund, 315 cases (45.78%) where the managers launch a new fund, and 99 cases (14.39%) where the managers is entrusted with more than one new-task fund.⁷ The sample of new-task funds consists of 298 acquired funds and 236 new funds. As for the control group for multitasking managers, we find 82,611 fund-month observations whose managers continue to be single-tasking. We term this group as the non-switchers. In addition, we also create a control group for the acquired funds. In our sample, there are 202,893 fund-month observations that are not acquired by managers to multitask. We refer to these funds as the non-acquired funds. Note that the managers in the non-switcher group have to be single-tasking whereas the managers in the non-acquired funds can be single-tasking or multitasking. Therefore, the sample of non-acquired funds is much larger than the sample of the non-switchers.

B. Construction of Variables

We construct three variables to evaluate the risk-adjusted performance of the mutual funds in our sample. The first variable is the Sharpe ratio (*Sharpe*), calculated as a fund's annualized excess return over the risk-free rate divided by its annualized standard deviation (Sharpe (1966, 1994)). The second performance measure is the Carhart (1997) four-factor alpha (*Alpha*) estimated as the intercept of the following regression:

⁷ We exclude the cases (less than 1% of the sample) where managers take over more than four new-task funds as these are likely to be instances where a senior person's name (e.g., Bill Gross in case of PIMCO funds) is reported for administrative purposes.

$$R_{i,t} - R_{f,t} = \alpha_i + \beta_{i,m}(R_{m,t} - R_{f,t}) + \beta_{i,s}SMB_t + \beta_{i,h}HML_t + \beta_{i,MOM}MOM_t + \varepsilon_{i,t} \quad (1)$$

where $R_{i,t} - R_{f,t}$ is the return of the fund i in month t minus the risk free rate; $R_{m,t} - R_{f,t}$ is the excess return of the market over the risk free rate in month t ; SMB_t is the return difference between small and large capitalization stocks in month t ; HML_t is the return difference between high and low book-to-market stocks in month t , and MOM_t is the return difference between the stocks with high and low past returns in month t .⁸ The third performance measure is the Morningstar Category-adjusted alpha (*MS Alpha*) calculated as the intercept (α_i) from the following regression:

$$R_{i,j,t} - R_{f,t} = \alpha_i + \beta_{i,MS}(MS_Index_{j,t} - R_{f,t}) \quad (2)$$

where $R_{i,j,t} - R_{f,t}$ is the return of fund i , following style j , in month t minus the risk-free rate and $MS_Index_{j,t}$ is the average return of the funds following style j in month t .

Since the objective of the mutual fund companies is to maximize their assets, we quantify their economic incentives by estimating the net dollar flows, *i.e.*, the change in their total net assets over time, net of internal growth, under the assumption that all the dividends and other distributions are reinvested at the realized return:

$$EstimatedDollarFlows_{i,t} = TNA_{i,t} - TNA_{i,t-1}(1 + R_{i,t}) \quad (3)$$

where $TNA_{i,t}$ and $TNA_{i,t-1}$ are the total net assets of mutual fund i at time t and $t-1$, respectively and $R_{i,t}$ is the realized return earned by investors from time $t-1$ to t . We also compute an alternative measure, namely *N-SAR Flows*, using the *actual* net dollar flows reported

⁸ We thank Professor Kenneth French for making the returns on the market, risk-free rate, and the three factors (size, book-to-market, and momentum) available on his website: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

by the mutual funds in their N-SAR forms filed with the Securities and Exchange Commission (SEC). Since the SEC started to require all the mutual funds to file N-SAR form in 1996, the measure *N-SAR Flows* is only available from January 1996 to December 2012.

II. Determinants of Managerial Multitasking

We begin our empirical investigation by analyzing the determinants of managers' switch to multitasking. To do so, we compare the performance of the funds whose managers switch from single-tasking to multitasking (*i.e.*, switchers) with the performance of the funds whose managers continue to manage a single fund (*i.e.*, non-switchers). Here and throughout the paper, we exclude the three months before and after the reported switch date to allow for the possibility that there is a transitional period where the incumbent manager continues to receive assistance running the acquired from the exiting manager. Results reported in panel A of Table I show that the funds managed by switchers outperform funds run by non-switchers over the 12-month period prior to the switch by 0.24, 1.63%, and 1.33% in terms of annual Sharpe ratio, alpha, and MS alpha, respectively. This finding indicates that managers who switch to multitasking exhibit superior performance prior to the switch.

We conduct a similar analysis for the acquired funds by comparing the performance of the acquired funds with that of the funds not acquired by managers to multitask (*i.e.*, non-acquired). Results in panel B of Table I show that the acquired funds underperform the non-acquired funds over the 12-month period prior to the switch by 0.10, 2.60%, and 2.46% using the *Sharpe*, *Alpha*, and *MS Alpha*, respectively. This finding suggests that one of the motives behind managerial multitasking is to turn around poorly performing funds by employing well-performing managers to take over these funds.

[Insert Table I Here]

In terms of other fund characteristics, we observe that the funds managed by the switchers have significantly greater turnover and attract greater investor flows compared to the funds managed by the non-switchers. We find that the acquired funds have significantly higher turnover and receive lower investor flows than the sample of non-acquired funds.

These univariate comparisons provide preliminary evidence that well-performing managers are more likely to switch from single-tasking to multitasking, and that the existing funds they acquire tend to be poorly performing. Next, we test whether this finding continues to hold in a multivariate setting after controlling for various fund characteristics. Such an analysis should also provide insights into the rationale for the mutual fund companies to initiate multitasking arrangements.

To examine the determinants in a multivariate framework, we estimate the following logistic regression modeling the type of incumbent funds from which the managers switch to multitasking:

$$Prob(y_{i,t}) = \beta_i' \overline{FundChar}_{i,[t-3,t-15]} + \alpha_i + \delta_i + \varepsilon_{i,t} \quad (4)$$

where the dependent variable $y_{i,t}$ is an indicator variable equal to one if a manager i switches from single-tasking to multitasking in month t and zero if a manager continues to manage a single fund. $\overline{FundChar}_{i,[t-3,t-15]}$ is a vector of fund characteristics that includes a measure of the fund's risk-adjusted performance (*Sharpe*, *Alpha*, or *MS Alpha*) and its average total net assets, average expense ratio, average turnover ratio, and net dollar flows, all estimated or measured over the 12-month period prior to the switch after allowing for three-month gaps on either side of

the switch in month t . We include both investment style (i.e., Morningstar Category) dummies, α_i , and time dummies, δ_i for style and time fixed effects. We also cluster the standard errors at the fund level in all the empirical tests.

[Insert Table II Here]

We report the results in models (1) – (3) of Table II. We find that managers who exhibit superior past performance are more likely to switch to multitasking. The estimated slope coefficients on all three performance measures are positive and statistically significant at the 1% level. In terms of the economic magnitude, a one-standard-deviation increase in past performance is associated with increases of 13.9 to 17.9% in the probability of a manager switching to multitasking. Regarding other fund characteristics, we find that the estimated slope coefficients on the fund's total net assets, the turnover ratio, and the net dollar flows are all positive and statistically significant. These additional characteristics indicate that the incumbent funds tend to be larger, exhibit more portfolio churning, and attract more investor flows compared to the funds managed by the non-switchers. These findings corroborate our univariate results in Table I.

Having examined the characteristics of the incumbent funds, we proceed to investigate the characteristics of the acquired funds. Khorana (1996) documents an inverse relation between the probability of managerial replacement and fund's past performance. Motivated by his finding, we hypothesize that funds are more likely to be acquired by managers to multitask if they perform poorly. Models (4) – (6) of Table II report the results of the logistic regressions modeling the type of existing funds that are acquired by managers to multitask. The dependent variable is an indicator variable that equals one if a fund is acquired by managers to multitask in

month t and zero otherwise. The independent variables are identical to those used in analyzing the determinants of the incumbent funds in models (1) – (3) of Table II.

Consistent with our hypothesis, we find that funds are more likely to be acquired by managers to multitask subsequent to poor performance. The estimated slope coefficients on all three performance measures are negative and highly significant. In terms of the economic magnitude, a one-standard-deviation increase in fund performance reduces the probability of the fund being acquired by 11.3% to 25.8%. Further, we find positive estimated slope coefficients on the fund's total net assets and the expense ratio. The coefficient on the net dollar flows, however, is negative. These results suggest that the acquired funds tend to be larger, have higher turnover, and experience lower investor flows compared to non-acquired funds. Again, these findings are consistent with the univariate results in Table I.

Overall, the results from both the univariate and multivariate analyses in this section show that managers who switch from single-tasking to multitasking exhibit superior past performance in the incumbent funds prior to the switch. Moreover, the existing funds they acquire to multitask tend to be poorly performing. We offer three explanations for these findings. First, well-performing managers of incumbent funds can create a positive spillover effect in form of greater investor flows into the acquired funds. Similar spillover effects have been documented in the context of star funds in fund families (Nanda, Wang, and Zheng, 2004) and reputable managers launching new funds (Chen and Lai, 2010). Second, enlisting well-performing managers to multitask can help fund companies to turn around their poorly performing funds, whose presence can adversely affect companies' reputation. There can be other benefits of replacing the managers of poorly performing funds. For example, Lynch and Musto (2003) theoretically model and empirically test the decrease in the flow-performance sensitivity

subsequent to manager turnover. They show that investors are less likely to withdraw from poorly performing funds if the managers are replaced. Finally, since multitasking increases the manager's span of control, mutual fund companies can use it to retain their good managers and to replace their bad managers, thereby maximizing the economic surplus through their monitoring role (Gervais, Lynch, and Musto, 2005).

III. Managerial Multitasking and Fund Performance

In this section, we examine the implications of managerial multitasking for fund performance, for which we have three hypotheses. Our first hypothesis, *distraction hypothesis*, predicts that both the performance of the incumbent and the acquired funds suffer due to managerial multitasking since managers running multiple funds simultaneously are more likely to be distracted and overstretched. Our second hypothesis, which we refer to as the *effort diversion hypothesis*, is that multitasking managers can divert their attention and effort from the existing funds to the new task, resulting in performance deterioration for the incumbent funds but improvement of performance in the acquired funds. Our third and final hypothesis, *synergy creation hypothesis*, predicts that the performance of both the incumbent and acquired funds improve after the managers' switch to multitasking. The underlying premise is that by managing multiple funds simultaneously, multitasking managers can exploit the synergistic benefits associated with learning while conducting investment research for multiple funds.

[Insert Table III Here]

To test these three hypotheses, we start by examining the changes in both incumbent and acquired funds' performance for the two-year period around the managers' switch to

multitasking.⁹ The univariate results reported in Table III suggest that there is a striking decline in the risk-adjusted performance of the incumbent funds over the two-year period (one year on either side of managers' switch to multitasking). All three performance measures are significantly lower in the period after the managers begin multitasking. Annual *Sharpe*, *Alpha*, and *MS Alpha* decline by 0.206, 1.82%, and 1.43% respectively in the post-switch one-year period. In contrast to the incumbent funds, there is a statistically significant improvement in the performance of the acquired funds over the same one-year period after the switch: 0.206, 2.28%, and 2.97% increases in the annual *Sharpe*, *Alpha*, and *MS Alpha*, respectively.

To corroborate these univariate results, we next estimate the following multivariate regression modeling the risk-adjusted performance over the two-year period around managers' switch to multitasking:

$$Perf_{i,t} = \lambda_i After_{i,t} + \overline{\phi_i FundChar}_{i,[t-1,t-12]} + \alpha_i + \delta_t + \xi_{i,t} \quad (5)$$

To estimate the above regression, we construct a panel of fund-year observations from both before and after the switch. The dependent variable in the regression is the risk-adjusted performance for fund i at time t , $Perf_{i,t}$, where t is either the one-year period before or after the switch. The main independent variable of interest is an indicator variable, $After_{i,t}$, which equals one if the fund-year observation is from the one-year period after the switch and zero if the fund-year observation is from the one-year period before the switch. The estimated slope coefficient λ_i on $After_{i,t}$ captures the impact of the switch on fund performance. We include a vector of average fund characteristics $\overline{FundChar}_{i,[t-1,t-12]}$ such as fund's total net assets, expense ratio,

⁹ Throughout the paper, we focus on the two-year period around the managers' switch to multitasking. Analysis over a longer period will impose significant survivorship bias, in addition to substantially reducing the sample because the mean and median manager tenure in our sample is 3.7 and 5.1 years, respectively.

turnover ratio, and net dollar flows. Finally, we also include both style and time fixed effects, α_i and δ_t .

[Insert Table IV Here]

We report our findings in Table IV. Consistent with the univariate results in Table III, we find that the performance of the incumbent funds deteriorates while the performance of acquired funds improves after the switch. The estimated slope coefficients on *After* are negative and highly significant for the incumbent funds using the three performance measures (−0.126, −1.766, and −1.227) while the coefficients are significantly positive for the acquired funds (0.209, 1.914, and 2.889). These coefficients provide the economic impact of the multitasking arrangement on fund performance. For example, the annual *Alpha* of the incumbent (acquired) funds declines (improves) by 1.766% (1.914%) as a result of managerial multitasking. These performance changes are also economically significant considering the average annual *Alphas* of the incumbent and acquired funds prior to the switch are 1.39% and −2.15%, respectively (see Table I).

Taken together, both the univariate and multivariate analyses in Tables III and IV show a decline in the incumbent funds' performance and an improvement in the acquired funds' performance. We interpret these results as being consistent with the effort diversion hypothesis, and not in favor of either the distraction hypothesis or the synergy creation hypothesis.

A. Matched Sample Analysis

There are two potential concerns with our findings in Tables III and IV. First, the performance deterioration of previously well-performing incumbent funds and the performance

improvement of previously poorly performing acquired funds can simply be due to mean reversion in fund performance. In other words, the observed change in fund performance would have happened even if the manager did not switch to multitasking. Second, since we observe that the incumbent funds tend to be larger and have received greater investor flows, the decline in their performance after the switch can be potentially driven by decreasing returns to scale documented in Berk and Green (2004), Chen et al. (2004), and Pástor and Stambaugh (2012) and may have little to do with the diversion of managerial effort.

[Insert Table V Here]

To address these two concerns, we conduct matched-sample analyses by investigating the change in the risk-adjusted performance of the funds that share similar characteristics with the incumbent funds and the acquired funds except that their managers are not involved in multitasking. In particular, we construct control samples by matching the incumbent and acquired funds using the propensity score estimates from the results of the logistic regressions modeling the switch (see Table II, Models 1 and 4). We then estimate the same multivariate regressions used in Table IV using the matched control samples and compare the coefficients on *After* for the multitasking funds and the control funds. For robustness, we also use random matching to construct a second set of control funds.

We report our findings in Table V. Panel A contains the results for the incumbent funds and Panel B contains the results for the acquired funds. Two findings merit mention. First, the coefficients on *After* for the control samples of funds are uniformly insignificant at conventional levels, regardless of whether we construct our control samples using propensity scores or through random matching. Second, we use *F*-tests to compare the differences of the change in

performance of the treated group to that of the control group and find that, in general, the differences are statistically significant. For example, using the results of the tests that compare the performance of the treatment funds to that of the propensity-score-matched samples of funds, incumbent (acquired) funds experience a 1.93% (2.59%) larger drop (increase) in *Alpha*. These results help allay concerns that our earlier findings are not driven by either mean reversion or decreasing returns to scale.

B. Further evidence supporting the effort diversion hypothesis

Our findings so far show that the performance of the incumbent funds deteriorates after their managers begin to multitask while the performance of the acquired funds improves. We now turn our attention to uncovering further evidence supporting the effort diversion hypothesis. If the incumbent funds' performance suffers because managers are diverting effort away from the incumbent funds to their newly acquired funds, we should expect that the magnitude of performance deterioration to be increasing in the level of effort diverted. However, since the manager's effort level is not directly observable, we use three proxies for the level of effort directed towards the acquired fund. The first variable we use is *New Fund*, an indicator variable equal to one if the acquired fund is a newly-launched fund and zero if the acquired fund is pre-existent. Prior literature finds that flow-performance sensitivity is higher for younger funds than it is for older funds (e.g., Chevalier and Ellison, 1997). Given this evidence, multitasking managers acquiring new funds may allocate more effort to the acquired fund, relative to managers acquiring existing funds, to ensure that these new funds perform well and attract flows.

Our second proxy for effort is *Acquired Fund Turnover*. Portfolio turnover measures how frequently the securities in a portfolio are bought or sold and thus captures, to some extent, the

amount of effort a manager expends managing the acquired fund.¹⁰ Finally, our third and final measure of managerial effort is *Acquired Style Deviation*, which equals the absolute value of the acquired fund's beta with respect to its Morningstar style index in a one-factor model (e.g., its $\beta_{i,MS}$ from Equation 2 above) minus 1. This measure is similar in spirit to the Active Share measure of Cremers and Petajisto (2009), which is designed to measure how much a fund deviates from its benchmark. We argue that the level of effort a manager expends on the acquired fund is increasing in the degree of the acquired fund's return deviation from its benchmark.

To test the prediction that the magnitude of the incumbent funds' performance drop is increasing in the level of effort the managers allocate to their acquired funds, we estimate the following multivariate regression:

$$Perf_{i,t} = \nu_i (After \times EffortProxy_{i,t}) + \kappa_i After_{i,t} + \omega_i \overline{FundChar}_{i,[t-1,t-12]} + \alpha_i + \delta_t + \xi_{i,t} \quad (6)$$

As in the case of equation (5), we include observations both before and after the managers' switch to multitasking. The dependent variable is incumbent fund i 's one-year risk-adjusted performance, $Perf_{i,t}$, at time t . The independent variable of interest is $After \times EffortProxy$, which is the interaction of *After* and one of our three proxies for effort. The estimated slope coefficient, ν_i , on $After \times EffortProxy$ captures the incremental impact of greater effort diversion on the incumbent fund's performance. We expect the coefficient on $After \times EffortProxy$ to be negative if greater effort diversion is associated with more performance deterioration in the incumbent

¹⁰ We acknowledge that higher turnover can also be associated with undesirable practices such as window dressing (Musto, 1997, 1999; Agarwal, Gay, and Ling, 2014) and therefore turnover may not necessarily capture effort. That said, many studies find turnover and other measures of a manager's activeness to be positively related to fund performance (Wermers, 2000; Cremers and Petajisto, 2009; Amihud and Goyenko, 2013). To the extent that managerial effort is positively correlated with fund performance, manager's effort should be at least somewhat reflected in fund turnover.

funds. The vector $\overline{FundChar}$ includes all of the variables used earlier in equation (5) (e.g., average fund size, expense ratio, turnover, and flows) and α_i and δ_t are style and year fixed effects, respectively.

[Insert Table VI Here]

We report the results in Table VI. Panels A, B, and C contain the results with *New Fund Acquired Fund Turnover*, and *Acquired Style Deviation* as proxy for effort, respectively. The coefficient on $After \times EffortProxy$ is negative in all specifications and statistically significant at the 5% level in seven out of nine cases. These findings suggest that the decline in the risk-adjusted performance of incumbent funds is greater when managers take over funds in which they devote greater effort to manage. This evidence provides further support to the effort diversion hypothesis.

IV. Managerial Multitasking and Fund Flows

In this section, we examine the economic incentives of the mutual fund companies to engage in multitasking by analyzing its effect on the investor flows. In the previous section, we have shown that when portfolio managers switch from single-tasking to multitasking, they divert their effort from the incumbent funds to the acquired funds. As a result, the incumbent funds experience significant performance deterioration over a 12-month window following the switch, while the performance of the acquired funds improves. If investors of the incumbent funds can anticipate the adverse effects of multitasking on future performance, investor flows should decrease for these funds. In contrast, we posit that investor flows into the acquired funds should increase due to the positive spillover effect of well-performing multitasking managers. For multitasking to be a profitable arrangement, the marginal benefits of engaging in multitasking

should exceed the marginal costs for fund companies. Therefore, we predict that the net impact on dollar flows into the fund companies should be positive.

We test these three predictions by estimating multivariate regressions modeling investor flows before and after managers' switch to multitasking for both the incumbent and acquired funds. The specification is similar to the one used in the previous section for examining the changes in fund performance around the switch to multitasking in equation (5). The dependent variable is the estimated dollar flows as defined in equation (3). The main independent variable of interest is *After*, an indicator variable which equals one if the observation is from the 12-month period after the switch and zero if the observation is from the 12-month period before the switch. The coefficient on *After* therefore captures the impact of the switch on the investor flows. We control for various fund characteristics that have been previously shown to affect fund flows. These characteristics include the contemporaneous and lagged risk-adjusted performance, the fund's total net assets, the expense ratio, and the turnover ratio. Note that in our empirical tests, we control for both contemporaneous and past performance, which implies that any effect on fund flows stems from investors' response to how multitasking affects *future* fund performance. This intuition underlies our hypotheses outlined above.

We report the results in models (1) and (3) of Table VII. Contrary to our prediction, we find no significant change in the estimated dollar flows of incumbent funds after the switch as the coefficient on *After* is positive but insignificant (coeff. = -2.956 , t -stat = -0.21). It is conceivable that investors may not be able to fully anticipate the undesirable consequences of multitasking on the future performance of incumbent funds. Another potential explanation for this unexpected result is that the investors of the incumbent funds may regard multitasking as a

signal of the manager's quality and/or importance in the fund companies and thus remain invested in the manager's incumbent fund.

In contrast to the incumbent funds and consistent with our prediction, the acquired funds experience a significant increase in the investor flows after the managers' switch to multitasking. The coefficient on *After* is 22.397, significant at the 5% level, suggesting an increase of about \$22.40 million net dollar flows for the acquired funds. This increase in the investor flows is economically significant as the acquired funds experience a *negative* 30.95 million net dollar flows in the 12-month period before being acquired (see panel B of Table I). This finding is consistent with the idea that these funds experience a positive spillover effect when they are taken over by well-performing managers who begin multitasking.

[Insert Table VII Here]

Our results so far are based on *estimated* dollar flows using equation (3). For robustness, we employ an alternative dollar flow measure, *N-SAR Flows*, using the *actual* monthly flows reported by mutual funds to the SEC in the N-SAR forms since 1996. Despite the drop in the observations, in results reported in models (2) and (4) in Table VII, we continue to find a positive but insignificant coefficient (coeff. = 15.256, t -stat = 0.58) on the *After* variable for the incumbent funds and a positive and significant coefficient (coeff. = 30.364, t -stat = 2.04) for the acquired funds.

Next, we test whether the positive spillover effect of multitasking managers also impacts the new funds launched by these managers. In particular, we compare the net dollar flows into the new funds managed by multitasking managers versus those managed by single-tasking managers. Note that since there is no prior data on new funds, it is not possible to do a time-

series analysis of changes in investor flows as we do for the existing funds acquired by the multitasking managers. Instead, we estimate the following cross-sectional regression:

$$\$Flows_i = \theta_i Multitasking_i + \rho_i FundChar_i + \alpha_i + \delta_i + \zeta_i \quad (6)$$

where the dependent variable $Dollarflow_i$ is either the *Estimated* or the *N-SAR Flows* over the 12-month window after the launch of a new fund. The main independent variable of interest is an indicator variable, *Multitasking*, that equals one if a new fund is launched by a manager to multitask and zero if the new fund is the only fund managed by a manager. We again control for the same set of fund characteristics as in our previous regressions with the exception of past performance and size since these variables are not available for the new funds.¹¹

[Insert Table VIII Here]

The results reported in Table VIII confirm a positive spillover effect of multitasking managers on the new funds launched by them. On average, new funds launched by multitasking managers attract \$9.27 million and \$14.53 million greater estimated and actual dollar flows, respectively, compared to the funds launched by single-tasking managers. Taken together, the asymmetry in the responses of the investors of the incumbent funds and the new-task funds (*i.e.*, acquired funds and new funds) allows the fund companies to increase their assets.¹²

V. Switchback from Multitasking to Single-tasking

As discussed in the previous section, mutual fund appear to trade off the benefit of higher acquired fund flows with the cost of lower incumbent fund performance when deciding to initiate

¹¹ Since all the new funds have zero assets under management at inception, the fund size and fund flows are the same.

¹² We also estimate these regressions using the piecewise specification of Sirri and Tufano (1998). The results are similar to those presented in Table VIII and are available upon request.

multitasking arrangements. In well-functioning financial markets with rational investors, incumbent funds' investors should recognize the negative externalities associated with multitasking and withdraw their capital from underperforming funds at some point in the future. These outflows should, in turn, induce the fund companies to terminate these multitasking arrangements. To test this hypothesis, we examine the determinants of 351 cases where managers *switchback* from multitasking to single-tasking. We estimate logistic regressions similar to those reported in Table 2 using the dependent variable, *Switchback*, an indicator variable that equals one in the month a manager stops multitasking and zero otherwise. The independent variables include the incumbent fund's performance, flows, turnover, expense ratio, and size.

The results are reported in Panel A of Table IX. Consistent with our intuition, fund companies are more likely to terminate multitasking arrangements when the incumbent funds' performance is especially low and when funds experience outflows. The coefficients on all three risk-adjusted performance measures as well as past flows are negative and statistically significant. For instance, a one-standard-deviation decrease in the incumbent fund's annual *Sharpe* (*Flows*) increases the probability of a multitasking arrangement being terminated by 16.09% (20.95%).

[Insert Table IX here]

We now examine the impact of the termination of the multitasking arrangements on the performance of the funds the managers retain. The findings in Section III consistently suggest that, when managers switch from single-tasking to multitasking, they divert their effort away from the incumbent funds which leads to performance deterioration for these funds. To further

test the effort diversion hypothesis, we examine if the converse is true, *i.e.*, when managers switchback, is there an improvement in the performance of the funds retained by these managers subsequent to the switchback? We conduct similar multivariate analysis as in Table IV for the fund performance after the switchback, and report our findings in Panel B of Table IX. We find the coefficient on *After* is positive and significant for all three performance measures: 0.154, 1.666, and 1.159 for *Sharpe*, *Alpha* and *MS Alpha* respectively. The fact that the risk-adjusted performance of the funds retained by the managers who switchback improves significantly provides further support for the effort diversion hypothesis.

Taken together, the results in this section show that agency problems associated with multitasking do not persist as investors of incumbent funds rationally respond by withdrawing their capital which forces fund companies to terminate the multitasking arrangements. Moreover, we observe an improvement in the performance of the funds retained by the managers after discontinuance of multitasking which further corroborates the effort diversion hypothesis.

VI. Concluding Remarks

In this paper, we investigate the determinants and consequences of managerial multitasking in the mutual fund industry. Our empirical analyses reveal four notable findings. First, fund companies select well-performing managers to multitask to either turn around poorly performing funds or to launch new funds. Second, when managers multitask, the performance of the incumbent funds declines while that of the acquired funds improves during the 12-month period subsequent to multitasking. Third, while incumbent funds experience no changes in the investor flows, the acquired funds and new funds attract more flows subsequent to multitasking. As a result, mutual fund companies benefit in terms of greater aggregate investor flows and more

assets under management. This advantage is in addition to the other benefits fund companies receive from multitasking such as the improvement of their struggling funds, the retention of their superior managers, and the launching of new funds. These benefits, however, come at the expense of the investors of the incumbent funds. Finally, we observe that investors of incumbent funds respond rationally by withdrawing their capital, which leads to the termination of these multitasking arrangements.

Taken together, these findings suggest potential agency problems that arise when mutual fund managers multitask. The fact that some investors are adversely affected, at least in the short run, by their manager's distorted incentives has policy implications for the regulatory bodies governing the mutual fund industry. For instance, investors may benefit from more transparent and timelier disclosure about the changes in their fund managers' workload. Our study also sheds light on the pivotal role played by fund companies in determining the span of control for their portfolio managers and the internal allocation of their managerial resources, including the replacement of poorly performing managers and the retention of well-performing managers.

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Table I: Characteristics of Incumbent and Acquired Funds

Panel A compares the characteristics of the funds whose managers switch from single-tasking to multitasking (*i.e.*, switchers) with those of the funds whose managers continue to manage a single fund (*i.e.*, non-switchers). The differences between the characteristics of the switchers and non-switchers are reported in the last column. Panel B compares the characteristics of the acquired funds (*i.e.*, acquired) with those of the funds that are not acquired by managers to multitask (*i.e.*, non-acquired). The differences between the characteristics of the acquired and the non-acquired funds are reported in the last column. Reported fund characteristics include the three measures of risk-adjusted performance (Sharpe ratio, Carhart (1997) four-factor alpha (in % p.a.), and Morningstar Category-adjusted alpha (in % p.a)), the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio (in %), and the net dollar flows (in millions of dollars), all estimated or measured over a 12-month window prior to the month of the switch. All variables are winsorized at the 1st and the 99th percentile levels. Our sample period is from January 1980 to December 2012. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Panel A: Incumbent Funds

Fund Characteristic	Switchers	Non-switchers	Difference
Sharpe Ratio	0.835	0.596	0.239***
Four-Factor Alpha	1.39%	-0.24%	1.63%***
Morningstar Alpha	1.68%	0.35%	1.33%***
Net Assets (\$ Millions)	699.76	630.60	69.16
Expense Ratio (%)	1.37	1.37	0.00
Turnover (%)	99.00	91.00	8.00**
Net Flows (\$ Millions)	57.86	19.38	38.48***

Panel B: Acquired Funds

Fund Characteristic	Acquired	Non-Acquired	Difference
Sharpe Ratio	0.464	0.563	-0.099
Four-Factor Alpha	-2.15%	0.45%	-2.60%***
Morningstar Alpha	-1.93%	0.53%	-2.46%***
Net Assets (\$ Millions)	668.35	669.93	-1.58
Expense Ratio (%)	1.42	1.37	0.05
Turnover (%)	1.20	0.95	0.25***
Net Flows (\$ Millions)	-30.95	27.22	-58.17***

Table II: Determinants of Incumbent and Acquired Funds

This table reports the results of logistic regressions modeling the type of incumbent funds from which the managers switch from single-tasking to multitasking (models (1) – (3)) and the type of existing funds acquired by those managers to multitask (models (4) – (6)) over the sample period of January 1980 to December 2012. In models (1) – (3), the dependent variable is an indicator variable that equals one if a manager switches from single-tasking to multitasking in month t and zero if a manager continues managing a single fund. In models (4) – (6), the dependent variable is an indicator variable that equals one if a fund is acquired by a manager to multitask in month t and zero otherwise. The independent variables include one of the three measures of annual risk-adjusted performance (Sharpe ratio, Carhart (1997) four-factor alpha (in % p.a.), or Morningstar Category-adjusted alpha (in % p.a)), the natural logarithm of the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio (in %), and the natural logarithm of net dollar flows (in millions of dollars), all estimated or measured over the 12-month period three months prior to the month of the switch. All variables are winsorized at the 1st and the 99th percentile levels. We control for investment style and year fixed effects. The standard errors are clustered by fund. The t -statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	Incumbent Funds			Acquired Funds		
	(1)	(2)	(3)	(4)	(5)	(6)
Sharpe Ratio	0.135*** (3.02)			-0.178*** (-2.62)		
Four-Factor Alpha		0.013*** (3.06)			-0.013** (-2.00)	
Morningstar Alpha			0.021*** (3.77)			-0.042*** (-4.25)
Ln Assets (\$millions)	0.114*** (4.21)	0.116*** (4.30)	0.116*** (4.27)	0.070* (1.76)	0.069* (1.73)	0.072* (1.81)
Avg. Expense Ratio	0.123 (1.08)	0.118 (1.04)	0.128 (1.13)	0.047 (0.34)	0.054 (0.39)	0.014 (0.10)
Avg. Turnover	0.001** (2.10)	0.001** (2.10)	0.001** (2.01)	0.001** (2.10)	0.001** (2.03)	0.001* (1.77)
Ln Flows ((\$millions))	0.010*** (3.63)	0.010*** (3.74)	0.009*** (3.45)	-0.016*** (-4.11)	-0.017*** (-4.29)	-0.014*** (-3.79)
Style FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Observations	83,299	83,299	83,299	203,191	203,191	203,191
Pseudo R ²	0.0181	0.0181	0.0182	0.0391	0.0385	0.0433

Table III: Change in Fund Characteristics Before and After the Switch

Panel A (Panel B) reports the characteristics of the incumbent (acquired) funds prior to the switch (*i.e.*, month $t-15$ to $t-3$) and after the switch (*i.e.*, month $t+3$ to $t+15$). The change in the fund characteristics from the pre-switch period (*i.e.*, month $t-15$ to $t-3$) to the post-switch period (*i.e.*, month $t+3$ to $t+15$) are reported in the last column. Reported fund characteristics include three measures of risk-adjusted performance (Sharpe ratio, Carhart (1997) four-factor alpha (in % p.a.), and Morningstar Category-adjusted alpha (in % p.a)), the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio (in %), and the net dollar flows (in millions of dollars), all estimated or measured over 12 months prior to the switch (*i.e.*, month $t-15$ to $t-3$) and 12 months after the switch (*i.e.*, month $t+3$ to $t+15$) after leaving three months around the switch in month t . All variables are winsorized at the 1st and the 99th percentile levels. Our sample period is January 1980 to December 2012. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Panel A: Incumbent Funds

Fund Characteristic	Before	After	Difference
Sharpe Ratio	0.835	0.629	-0.206***
Four-Factor Alpha	1.39%	-0.73%	-1.82%***
Morningstar Alpha	1.69%	0.26%	-1.43%***
Net Assets (\$ Millions)	699.76	910.59	210.83**
Expense Ratio (%)	1.37	1.37	0.00
Turnover (%)	0.993	0.972	-2.05
Net Flows	55.76	56.77	1.01

Panel B: Acquired Funds

Fund Characteristic	Before	After	Difference
Sharpe Ratio	0.464	0.670	0.206*
Four-Factor Alpha	-2.03%	0.25%	2.28%**
Morningstar Alpha	-2.09%	0.88%	2.97%***
Net Assets (\$ Millions)	668.35	667.84	-0.51
Expense Ratio (%)	1.42%	1.40%	-0.02%
Turnover (%)	120.30%	1.29	8.94%
Net Flows	-28.79	-17.41	11.38

Table IV: Multivariate Analysis of the Changes in Fund Performance after the Switch

This table reports the changes in the risk-adjusted performance of the incumbent funds (models (1) – (3)) and the acquired funds (models (4) – (6)) before (*i.e.*, month $t-15$ to $t-3$) and after (*i.e.*, month $t+3$ to $t+15$) the switch over the sample period from January 1980 to December 2012. The dependent variable in models (1) and (4) is the one-year Sharpe ratio calculated over the 12-month window after the switch. The dependent variable in models (2) and (5) is the one-year Carhart (1997) four-factor alpha estimated over the 12-month window after the switch. The dependent variable in models (3) and (6) is the one-year Morningstar Category-adjusted alpha estimated over the 12-month window after the switch. The main independent variable of interest is *After*, an indicator variable that equals one (zero) if the observation is within the 12-month period after (before) the managers' switch to multitasking. Other independent variables include the natural logarithm of the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio (in %), and the natural logarithm of net dollar flows (in millions of dollars), all estimated or measured over the 12-month windows before and after the switch. All variables are winsorized at the 1st and the 99th percentile levels. We control for investment style and year fixed effects. The standard errors are clustered at the fund level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	Incumbent Funds			Acquired Funds		
	(1) Sharpe	(2) Alpha	(3) MS Alpha	(4) Sharpe	(5) Alpha	(6) MS Alpha
After	-0.126** (-2.14)	-1.766*** (-2.96)	-1.227*** (-2.91)	0.209** (2.56)	1.914** (2.11)	2.889*** (3.67)
Ln Assets (\$ millions)	-0.018 (-0.99)	-0.361** (-2.09)	-0.336*** (-2.94)	-0.030 (-1.14)	0.257 (1.17)	-0.091 (-0.43)
Expense Ratio	-0.085 (-1.13)	-0.750 (-1.06)	-1.059** (-2.06)	-0.251*** (-2.79)	-1.106 (-1.27)	-2.544*** (-3.07)
Turnover	0.000 (0.63)	0.000 (0.04)	-0.002 (-0.69)	-0.000 (-0.07)	0.005 (1.12)	0.009** (2.18)
Ln Flows (\$ millions)	0.013*** (7.64)	0.081*** (4.57)	0.071*** (5.45)	0.011*** (3.95)	0.081*** (3.21)	0.097*** (4.74)
Style FE	YES	YES	YES	YES	YES	YES
Time FE	YES	YES	YES	YES	YES	YES
Observations	1,125	1,125	1,125	480	480	480
Adj. R-squared	0.431	0.102	0.069	0.486	0.134	0.126

Table V: Matched Sample Analysis of the Changes in Fund Performance after the Switch

This table reports the comparisons of the risk-adjusted performance of the incumbent and acquired funds to the performance of matched samples of funds over the sample period of January 1980 to December 2012. Panel A contains the results comparing the change in performance of the incumbent funds to that of i) the propensity-score-matched and ii) randomly-matched samples of funds. Panel B contains the results comparing the change in performance of the acquired funds to that of the corresponding matched samples. The propensity score matched sample for the incumbent (acquired) funds is constructed based on the propensity scores estimated from Model 1 (4) of Table 2. The dependent variable in each regression is a measure of risk-adjusted performance. The dependent variable in models (1) and (4) in each panel is the one-year Sharpe ratio measured over the 12-month windows before and after the switch. The dependent variable in models (2) and (5) in each panel is the one-year Carhart (1997) four-factor estimated over the 12-month windows before and after the switch. The dependent variable in models (3) and (6) in each panel is the one-year Morningstar Category-adjusted alpha estimated over the 12-month windows before and after the switch. The main independent variable of interest is *After* that equals one (zero) if the observation is within the 12-month period after (before) the managers' switch to multitasking. Other independent variables include the natural logarithm of the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio (in %), and the natural logarithm of net dollar flows (in millions of dollars), all measured over the 12-month periods before and after the switch date. The last two rows in each panel report the differences in the coefficient on *After* and the *p*-values from the *F*-tests of the differences. All variables are winsorized at the 1st and the 99th percentile levels. We control for the investment style and year fixed effects. The standard errors are clustered at the fund level and *t*-statistics are reported in parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Panel A: Incumbent Funds

	Propensity-Score Matching			Random Matching		
	(1) Sharpe	(2) Alpha	(3) MS Alpha	(4) Sharpe	(5) Alpha	(6) MS Alpha
<u>Regression for Multitasking Funds</u>						
After (Multitasking)	-0.170** (-2.02)	-1.662*** (-2.66)	-1.261*** (-3.01)	-0.172** (-2.15)	-1.894*** (-3.15)	-1.580*** (-3.58)
<u>Regression for Matched Funds</u>						
After (Matched)	-0.066 (-0.85)	0.261 (0.45)	0.655 (1.61)	-0.041 (-0.57)	0.390 (0.74)	-0.057 (-0.13)
Diff. (Multitasking – Matched)	-0.102	-1.933**	-2.122***	-0.131	-2.284***	-1.523**
<i>p</i> -value (F-Test of Difference)	0.364	0.024	0.001	0.217	0.005	0.015

Panel B: Acquired Funds

	Propensity-Score Matching			Random Matching		
	(1) Sharpe	(2) Alpha	(3) MS Alpha	(1) Sharpe	(2) Alpha	(3) MS Alpha
After (Multitasking)	0.199** (2.01)	1.924** (2.03)	2.674*** (3.71)	0.188* (1.95)	1.932** (2.13)	2.255*** (3.24)
After (Matched)	0.041 (0.42)	−0.665 (−0.71)	0.227 (0.32)	−0.018 (−0.19)	−0.518 (−0.57)	0.167 (0.24)
Diff. (Multitasking – Matched)				0.206	2.45*	2.088**
<i>p</i> –value (F–Test of Difference)	0.158	2.589*	2.447**	0.149	0.058	0.035

Table VI: Impact of Acquired Fund Characteristics on Incumbent Fund Performance

This table reports regressions examining the impact of the manager's effort diversion on the performance of the incumbent funds after their manager's switch to multitasking. Panel A contains the results when the characteristic considered is *New Fund*, an indicator variable equal to one (zero) if the fund the manager acquires is new (existing). Panel B contains the results when the characteristic considered is *AcquirerTurnover*, which is equal to the acquired fund's turnover ratio for the one-year after the manager begins running it. Panel C contains the results when the characteristic considered is *Acquired Style Deviation*, which is the absolute value of the acquired fund's beta from a single factor regression of its returns on the returns of its Morningstar Style Index minus one for the year after the manager begins running that fund. The dependent variable in model (1) is the one-year Sharpe ratio calculated from the 12-month periods before and after the switch. The dependent variable in model (2) is the one-year Carhart (1997) four-factor alpha estimated from the 12-month periods before and after the switch. The dependent variable in models (3) is the one-year Morningstar Category-adjusted alpha estimated from the 12-month periods before and after the switch. The main independent variable of interest is *After*×*Y*, which is the interaction of *After*, an indicator variable that equals one (zero) if the observation is within the 12-month period after (before) the managers' switch to multitasking, and an acquirer characteristic, *Y*. Other independent variables include the natural logarithm of the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio (in %), and the natural logarithm of net dollar flows (in millions of dollars), all estimated or measured over the 12-month windows before and after the switch. All variables are winsorized at the 1st and the 99th percentile levels. We control for the investment style and year fixed effects. The standard errors are clustered at the fund level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Panel A: Effort Proxy = New Fund Dummy

	(1) Sharpe	(2) Alpha	(3) MS Alpha
After × Effort Proxy	−0.234** (−2.43)	−1.066 (−1.11)	−2.136*** (−2.90)
After	−0.045 (−0.52)	−1.151 (−1.41)	0.003 (0.00)
Ln Assets (\$ millions)	−0.018 (−0.89)	−0.377** (−2.02)	−0.369*** (−3.12)
Expense Ratio	−0.123 (−1.49)	−1.270 (−1.62)	−1.356** (−2.48)
Turnover	0.001* (1.80)	0.004 (0.77)	−0.001 (−0.28)
Ln Flows (\$ millions)	0.013*** (7.33)	0.074*** (3.80)	0.063*** (4.24)
Style FE	YES	YES	YES
Time FE	YES	YES	YES
Observations	1,355	1,355	1,355
Adj. R-squared	0.434	0.115	0.091

Panel B. Effort Proxy = Acquired Fund Turnover

	(1) Sharpe	(2) Alpha	(3) MS Alpha
After × Effort Proxy	−0.066*** (−3.37)	−1.002*** (−6.68)	−0.453*** (−4.76)
After	−0.079 (−1.07)	−0.697 (−0.93)	−0.646 (−1.25)
Ln Assets (\$ millions)	−0.017 (−0.74)	−0.404** (−1.98)	−0.420*** (−3.39)
Expense Ratio	−0.075 (−0.86)	−1.184 (−1.42)	−1.154* (−1.95)
Turnover	0.001*** (2.63)	0.011** (2.37)	0.003 (0.93)
Ln Flows (\$ millions)	0.013*** (6.74)	0.065*** (3.13)	0.059*** (3.59)
Style FE	YES	YES	YES
Time FE	YES	YES	YES
Observations	1,189	1,189	1,189
Adj. R-squared	0.437	0.132	0.090

Panel C. Effort Proxy = Acquired Style Deviation

	(1) Sharpe	(2) Alpha	(3) MS Alpha
After × Effort Proxy	−0.423** (−2.36)	−3.727** (−2.11)	−1.349 (−1.08)
After	−0.056 (−0.67)	−1.292 (−1.52)	−0.883 (−1.55)
Ln Assets (\$ millions)	−0.034 (−1.55)	−0.330 (−1.50)	−0.438*** (−3.35)
Expense Ratio	−0.116 (−1.21)	−1.439 (−1.60)	−0.992 (−1.47)
Turnover	0.001** (2.30)	0.007 (1.17)	0.001 (0.39)
Ln Flows (\$ millions)	0.013*** (6.74)	0.075*** (3.44)	0.062*** (3.77)
Style FE	YES	YES	YES
Time FE	YES	YES	YES
Observations	1,035	1,035	1,035
Adj. R-squared	0.472	0.124	0.100

Table VII: Multivariate Analysis of the Changes in Fund Flows after the Switch

This table reports the results of regressions examining the impact of multitasking on the fund flows of the incumbent funds (models (1) and (2)) and the acquired funds (models (3) and (4)) before (*i.e.*, month $t-15$ to $t-3$) and after (*i.e.*, month $t+3$ to $t+15$) the managers' switch to multitasking. The dependent variable in models (1) and (3) is the net dollar flows estimated from reported returns and total net assets as in equation (2). The dependent variable in models (2) and (4) is the aggregated monthly dollar flows from the N-SAR filings. All the dependent variables are either estimated or aggregated over the 12-month periods before and after the switch. The main independent variable of interest is an indicator variable, *After*, that equals one (zero) if the observation is within the 12-month period after (before) the managers' switch to multitasking. Other independent variables include the contemporaneous and lagged one-year Carhart (1997) four-factor alphas (in %), the natural logarithm of the average fund's total net assets (in millions of dollars), average expense ratio (in %), average turnover ratio, and the natural logarithm of fund's lagged net flows. We control for the investment style and year fixed effects. The standard errors are clustered at the fund level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	Incumbent Funds		Acquired Funds	
	(1) Net Flows	(2) NSAR Flows	(3) Net Flows	(4) NSAR Flows
After	-2.956 (-0.21)	15.256 (0.58)	22.397** (2.45)	30.364** (2.04)
Four Factor Alpha	3.102*** (3.85)	3.772*** (2.85)	1.633*** (2.78)	1.813* (1.83)
Lag Four-Factor Alpha	3.349*** (4.26)	1.481 (1.10)	0.998** (2.05)	-0.393 (-0.51)
Ln Assets (\$ millions)	26.329*** (4.15)	-6.196 (-0.71)	-22.720*** (-5.17)	-28.068*** (-4.12)
Expense Ratio	17.567 (1.01)	-25.274 (-0.88)	9.474 (0.69)	8.857 (0.39)
Turnover	-0.132* (-1.88)	-0.179** (-2.28)	-0.040 (-0.82)	-0.076 (-0.93)
Ln Flows (\$ millions)	4.729*** (9.42)	5.018*** (5.92)	2.399*** (6.39)	2.224*** (3.24)
Style FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Observations	1,082	394	465	216
Adj. R-squared	0.157	0.0966	0.257	0.261

Table VIII: Fund Flows into the New Funds: Multitasking versus Single-tasking

This table compares the net dollar flows into the new funds launched by multitasking managers versus those launched by single-tasking managers over the 12-month period after the launch of a new fund. The dependent variable is either the estimated dollar flows (model (1)) or aggregate N-SAR dollar flows (model (2)) as defined in Table VII. The main independent variable of interest is an indicator variable, *Multitasking*, that equals one if a new fund is launched by a manager to multitask, and zero if the new fund is the only fund managed by the manager. Other independent variables include the one-year Carhart (1997) four-factor alpha (in %), the average expense ratio (in %), and average turnover ratio (in %). We control for the investment style and year fixed effects. The standard errors are clustered at the fund level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

	(1) Net Flows	(2) NSAR Flows
Multitasking	9.274** (1.98)	14.526* (1.67)
Four-Factor Alpha	0.251 (1.12)	-0.025 (-0.06)
Expense Ratio	-5.918* (-1.94)	-14.379** (-2.20)
Turnover	0.016 (0.96)	0.018 (0.55)
Style FE	YES	YES
Year FE	YES	YES
Observations	751	253
Adj. R-squared	0.041	-0.002

Table IX: Determinants and Effects of Switchbacks from Multitasking to Single-Tasking

Panel A of this table reports the results from logistic regressions analyzing the determinants of a manager switching back from multitasking to single-tasking (*i.e.*, switchback). The dependent variable for each model is *SwitchBack*, an indicator variable equal to one in the month a manager stops multitasking and zero otherwise. The independent variables are the characteristics of the managers' incumbent fund and include a measure its risk-adjusted performance (Sharpe ratio, Carhart (1997) four-factor alpha, or Morningstar Category-adjusted alpha), its average total net assets (in millions of dollars), average expense ratio (in %), average turnover ratio (in %), and the natural logarithm of net dollar flows (in millions of dollars), all estimated or measured over the 12-month period three months prior to the month of the switch. Panel B reports regressions of the risk-adjusted performance of the fund retained by the managers who switch back from multitasking to single-tasking (*i.e.*, switch-back) over the 12-month period before (*i.e.*, month $t-15$ to $t-3$) and after (*i.e.*, month $t+3$ to $t+15$) the switchback. The dependent variable in model (1) is the one-year Sharpe ratio. The dependent variable in model (2) is the one-year Carhart (1997) four-factor alpha estimated over the 12-month period. The dependent variable in model (3) is the one-year Morningstar Category-adjusted alpha estimated over the 12-month period. The main independent variable of interest is *After*, an indicator variable equal to one (zero) if the observation is within the 12-month period after (before) the managers' switch back from multitasking to single-tasking. The control variables are the same as in Panel A. All variables are winsorized at the 1st and the 99th percentile levels. Our sample period is January 1980 to December 2012. We control for investment style and year fixed effects in all regressions. The standard errors are clustered at the fund level. The *t*-statistics are reported in the parentheses. Statistical significance of 1%, 5%, and 10% is indicated by ***, **, and * respectively.

Panel A. Determinants of Switchbacks

	(1)	(2)	(3)
Sharpe Ratio	-0.121** (-2.15)		
Four Factor Alpha		-0.016*** (-2.96)	
MS Alpha			-0.029*** (-2.62)
Ln Assets (\$ millions)	-0.132*** (-3.40)	-0.132*** (-3.41)	-0.132*** (-3.40)
Expense Ratio	-0.122 (-0.71)	-0.118 (-0.70)	-0.117 (-0.69)
Turnover	0.002*** (2.93)	0.002*** (2.75)	0.002*** (2.87)
Ln Flows (\$ millions)	-0.011*** (-3.07)	-0.011*** (-3.02)	-0.011*** (-2.91)
Style FE	YES	YES	YES
Time FE	YES	YES	YES
Observations	35,505	35,505	35,505
Pseudo R ²	0.0325	0.0334	0.0329

Panel B. Effects of Switchbacks

	(1) Sharpe	(2) Alpha	(3) MS Alpha
After	0.154*	1.666**	1.159**
	(1.67)	(2.11)	(1.99)
Ln Assets (\$ millions)	0.018	0.026	0.133
	(0.84)	(0.11)	(0.72)
Expense Ratio	−0.170**	0.453	−0.307
	(−2.08)	(0.49)	(−0.38)
Turnover	0.000	−0.002	0.005
	(0.63)	(−0.43)	(1.19)
Ln Flows (\$ millions)	0.009***	0.071**	0.053**
	(3.45)	(2.59)	(2.52)
Style FE	YES	YES	YES
Time FE	YES	YES	YES
Observations	570	570	570
Adj. R-squared	0.426	0.114	0.063

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