Managerial Multitasking in the Mutual Fund Industry[*]

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Abstract

We examine the determinants and consequences of the multitasking phenomenon in the mutual fund industry where fund managers simultaneously manage multiple funds. We show that well-performing managers multitask either by taking over poorly performing funds within fund companies (*i.e.*, acquired funds) or by launching new funds. We find that funds managed by managers prior to multitasking (*i.e.*, incumbent funds) experience significant performance deterioration subsequent to multitasking while the performance of the acquired funds improves. Although there is no change in the investor flows into the incumbent funds, the acquired funds and new funds attract greater investor flows. As a result, multitasking arrangement increases the assets of fund companies. Taken together, these findings are indicative of potential agency problems associated with managerial multitasking.

It is commonly believed that mutual fund companies assign a single fund to a portfolio manager. For example, 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 example, Will Danoff, manager of Fidelity Contrafund since 1990, also began managing Fidelity New Insights Fund in 2003. During our sample period between 1980 and 2010, on average, 37% of the managers in the mutual fund industry manage multiple funds simultaneously (*i.e.*, multitask), managing about 50% of the total assets in the industry. Despite being a prevalent practice, there has been little academic research on the subject of managerial multitasking in the mutual fund industry. 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 conduct time-series analyses surrounding the managers' *switch* to multitasking and document several findings that shed light on the economics of multitasking.

First, we find that managers who switch to multitasking exhibit superior past performance and stock selection ability 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

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[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).

performing or by launching new funds. We offer three explanations for these findings. First, well-performing managers of incumbent 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 their poorly performing funds, whose presence can adversely affect their 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]

Second, we examine the implications of managerial multitasking for fund performance, for which we have two competing hypotheses. Since manager's attention and effort are likely to be limited, managing additional funds can result in diversion of effort from the existing fund. This *effort diversion hypothesis* predicts that the performance of the incumbent funds deteriorates while the performance of the acquired funds improves after managers' switch to multitasking. Alternatively, by managing multiple funds simultaneously, multitasking managers can exploit the synergistic benefits derived from greater economies of scale and wider scope of investment opportunities. This *synergy creation hypothesis* predicts that performance of both the incumbent and acquired funds improve after the managers' switch to multitasking. To test these two competing 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

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[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.

decline in the risk-adjusted performance of the incumbent funds over the 24-month period subsequent to the switch: 3.55% and 2.53% in terms of the Carhart (1997) four-factor alpha and the Daniel, Grinblatt, Titman, and Wermers (DGTW) (1997) benchmark-adjusted return, respectively. In contrast, there is an improvement in the performance of the acquired funds: 2.61% and 2.58% using the four-factor alpha and DGTW return, respectively. We interpret these results being consistent with the effort diversion hypothesis, and not in favor of the synergy creation hypothesis.

Three additional tests further support the effort diversion hypothesis. First, we conduct matched-sample analyses and confirm that the changes in the performance of the incumbent and acquired funds are not driven by performance mean-reversion or decreasing returns to scale (*e.g.*, Berk and Green (2004), Chen et al. (2004), and Pástor and Stambaugh (2012)). Second, we find more pronounced performance deterioration in the incumbent funds when managers acquire funds with investment styles that differ from those of the incumbent funds. Lastly, when managers switch back from multitasking to single-tasking, the performance of the funds they continue to manage improves.

Finally, we examine the economic incentives of the mutual fund companies to engage in multitasking arrangement by analyzing its effect on the investor flows. Multitasking managers should divert their efforts in such a way that the marginal benefits of doing so exceed the marginal costs. For this purpose, we compare the net dollar flows into the incumbent funds and the acquired funds before and after their managers' switch to multitasking. We find that although

incumbent funds do not display a significant change in the investor flows, the acquired funds are rewarded with greater investor flows over the 24-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 aforementioned positive spillover effect of multitasking on investor flows that allows mutual fund companies to increase their assets.

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, and retaining their well-performing managers. These benefits, however, come at the expense of the investors of the incumbent funds. Our work thus contributes to the large literature on the agency problems in the delegated asset management industry. 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 (2012)), 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 (2011)), 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 (2012), 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)).

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 (2012)), side-by-side management (*e.g.*, Cici, Gibson, and Moussawi (2010), Nohel, Wang, and Zheng (2010), and Deuskar et al. (2011)), and outsourcing arrangement (Chen, Hong, and Kubik (2011)) 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 multitasking by analyzing its effect on investor flows. Section V concludes.

I. Data Sample and Construction of Variables

A. Data Sample

The primary data source for our study is the Morningstar Direct Mutual Fund (MDMF) database. This database covers the 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, starting in 1949 compared with 1993 in the CRSP database. Second, manager information is more accurate in the Morningstar database compared with CRSP database (see Massa, Reuter, and Zitzewitz (2010).

To construct holdings-based performance measure, we use the Thomson Reuters Mutual Fund Holdings (TRMFH) database, formerly CDA/Spectrum S12 database, which contains the quarterly or semiannual equity holdings of the U.S. open-end mutual funds. Our sample starts in 1980 when the TRMFH database became first available, and ends in 2010. Our initial sample from the MDMF database consists of 6,850 domestic equity funds and 8,865 portfolio managers.[3] We first merge the MDMF and TRMFH databases using fund tickers and fund CUSIPs, whenever available.[4] We then match the remaining sample manually using fund names. Out of 6,850 domestic equity funds in the MDMF database, we are able to match a total of 5,724 (83.56%) funds in the TRMFH database: 2,724 (39.77%) using tickers, 1,271 (18.55%) using CUSIPs, and the remaining 1,729 (25.24%) using fund names.[5] Note that we focus only on the actively managed equity funds that have more than 50% of their assets invested in common

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[3] Multiple share classes are listed as separate funds in the MDMF database. To avoid multiple counting, we aggregate the share-class level (22,866 share classes) data to portfolio level (6,850 funds), using the identifier, *FundID*.

[4] For the TRMFH database, we obtain the fund tickers and CUSIPs from the CRSP Mutual Fund database using the MFLINKS tables. For more details about the MFLINKS tables, see Wermers (2000).

[5] Among the 1,729 funds matched manually using fund names, 986 (57%) funds have exactly the same names in both the MDMF and TRMFH databases. The remaining 743 (43%) funds have slightly different names in the two databases due to the abbreviation of fund names in the TRMFH database.

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 2010.

Each month, we identify managers that switch from single-tasking to multitasking by tracking the number of funds they manage. 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 our empirical analyses. To avoid the cases of temporary arrangements, we require the managers to (a) have at least 24-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 24 months after the switch. Using this criterion, we find a total of 656 managers that switch from single-tasking to multitasking: 295 (44.97%) cases where the managers acquire an existing fund, 310 (47.26%) cases where the managers launch a new fund, and 51 (7.77%) cases where the managers is entrusted with more than one new-task fund.[6] As a result, the sample of new-task funds consists of 394 acquired funds and 335 new funds. As for the control group, we find 64,791 fund-month observations whose managers continue to be single-tasking. We term this group as the non-switchers. There are 210,269 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

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[6] 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 is reported for administrative purposes. Our results remain unchanged without this filter.

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

To evaluate the risk-adjusted performance of the mutual funds, we use both return-based and holdings-based performance measures. The return-based measure is the four-factor alpha (α_i) estimated using the Carhart (1997) model:

$$R_{i,t} - R_{f,t} = \alpha_i + \beta_{i,m}(R_{m,t} - R_{f,t}) + \beta_{i,s}SMB + \beta_{i,h}HML + \beta_{i,mom}MOM_t + \varepsilon_{i,t} \tag{1}$$

where $R_{i,t} - R_{f,t}$ is the return of the fund *i* in month *t* minus the risk free rate; and $R_{m,t} - R_{f,t}$ is the excess return of the market over the risk free rate; *SMB* is the return difference between small and large capitalization stocks; *HML* is the return difference between high and low book-to-market stocks, and *MOM* is the return difference between the stocks with high and low past returns.[7] We use the Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted return as the holdings-based performance measure. In June of each year, we obtain 125 benchmark portfolios using all the common stocks listed on NYSE, AMEX, and NASDAQ based on a three-way sorting along the size, the book-to-market ratio, and the momentum quintiles.[8] The abnormal performance of a stock is its return in excess of the return on its corresponding benchmark over the next quarter. The quarterly DGTW benchmark-adjusted

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[7] 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.
8 We thank Professor Russ Wermers for making DGTW benchmarks available on his website:
http://www.rhsmith.umd.edu/faculty/rwermers/ftpsite/Dgtw/coverpage.htm..

return for a given fund is the value-weighted average over all the component stocks. While the four-factor alpha is the most commonly used performance measure in the literature, one advantage of the DGTW measure is its focus on the stock selection ability of managers.

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:

$$EstimatedDollarFlows_{i,t} = TNA_{i,t} - TNA_{i,t-1}(1 + R_{i,t}) \tag{2}$$

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 Dollar Flows*, using the *actual* net dollar flows reported by the mutual funds in the N-SAR form filed with the Securities and Exchange Commission (SEC).[9]

II. Determinants of Managerial Multitasking

We begin our empirical investigation by analyzing the determinants of managers' switch to multitasking. For this purpose, we compare the performance of the funds whose managers switch from single-tasking to multitasking (*i.e.*, switchers) with the performance of the funds

[9] Since the SEC started to require all the mutual funds to file N-SAR form in 1996, the measure *N-SAR Dollar Flows* is only available from January 1996 to December 2010.

whose managers continue to manage a single fund (*i.e.*, non-switchers). Results reported in panel A of Table I show that the funds managed by switchers outperform the ones run by non-switchers over the 24-month period prior to the switch by 2.15% and 2.28% in terms of the four-factor alpha and DGTW benchmark-adjusted return, respectively. This finding indicates that managers who switch to multitasking exhibit superior past performance and stock picking ability 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 which are 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 24-month period prior to the switch by 3.32% and 2.95% using the four-factor alpha and DGTW return, 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 are larger, have greater turnover, charge lower fees, and attract greater investor flows compared to the funds managed by the non-switchers. Compared with the non-acquired funds, we find that the acquired funds charge more fees and attract fewer investor flows.

The univariate comparisons provide preliminary evidence that well-performing managers are more likely to switch from single-tasking to multitasking, and 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 adopt multitasking arrangement.

We first estimate the following logistic regression modeling the type of incumbent funds from which the managers switch to multitasking:

$$y_{i,t} = \beta_i \overline{FundChar}_{i,[t-1,t-24]} + \alpha_i + \delta_i + \varepsilon_{i,t} \tag{3}$$

where the dependent variable $y_{i,t}$ is an indicator variable that equals one if a manager i switches from single-tasking to multitasking in month t and zero if a manager continues to managing a single fund. The independent variables include a vector of fund characteristics, $\overline{FundChar}_{i,[t-1,t-24]}$ such as four-factor alpha, the DGTW return, the fund's average total net assets, the average expense ratio, the average turnover ratio and the net dollar flows, all estimated or measured over the 24-month period prior to the switch. In our empirical tests here and throughout the paper, we include both the investment style dummies α_i and time dummies δ_i, and cluster the standard errors at the fund level.

[Insert Table II Here]

We report the results in models (1) and (2) of Table II. We find that managers who exhibit superior past performance and stock picking skills are more likely to switch to multitasking. The estimated slope coefficient on the four-factor alpha is 0.008, significant at the 1% level, while that on the DGTW return is 0.011, significant at the 5% level. In terms of the

economic magnitude, a one-standard-deviation increase in the four-factor alpha and DGTW return is associated with an increase in the probability of managers' switching to multitasking by 12.50% and 11.11%, respectively. 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. These additional characteristics indicate that the incumbent funds tend to be larger, more actively managed, and attracting more investor flows compared to 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 (3) and (4) 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) and (2) 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 both the four-factor alpha and DGTW return are negative (-0.015 and -0.028, respectively) and highly significant. In terms of the economic magnitude, a one-standard-deviation increase in the

four-factor alpha and DGTW return reduces the probability of the fund being acquired by 15.38% and 21.43%, respectively. 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, charge higher fees, and experiencing fewer 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 and stock selection ability 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 effect has 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, multitasking mechanism can help fund companies to turn around their poorly performing funds, whose presence can adversely affect their reputation. There can be other benefits of changing 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. Finally, 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 through their monitoring role (Gervais, Lynch, and Musto (2005)).

III. Managerial Multitasking and Fund Performance

We next examine the effects of managerial multitasking on the performance of the incumbent funds and the acquired funds before and after the managers' switch to multitasking. We have two competing hypotheses. Since manager's attention and effort are likely to be limited, managing additional funds can result in diversion of effort from the existing fund. This diversion of effort is analogous to the "new toy" effect documented in Schoar (2002) where managers shift their focus towards the new segments from the incumbent segments after corporate diversification. *Effort diversion hypothesis* predicts that the performance of the incumbent funds deteriorates while the performance of the acquired funds improves after the managers' switch to multitasking. Alternatively, by managing multiple funds simultaneously, multitasking managers can exploit the synergistic benefits derived from greater economies of scale and wider scope of investment opportunities. For instance, greater economies of scale can result from managers running multiple funds sharing the common research costs among those funds. Further, when managers are responsible for multiple funds, it helps generate a broader set of investment ideas from their researching multiple industries or sectors economically linked through product market customer-supplier interrelations.[10] Hence, the *synergy creation hypothesis* predicts that both the

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[10] Cohen and Frazzini (2008) find evidence of return predictability among economically linked firms while Huang and Kale (2012) show that mutual funds using such information exhibit better performance.

performance of the incumbent funds and the acquired funds improves after the managers' switch to multitasking.

[Insert Table III Here]

To test the two competing hypotheses, we first conduct a univariate comparison between the performance of the incumbent funds and the acquired funds 24 months before the managers' switch to multitasking and 24 months after the switch.[11] In the results reported in Table III, we find that there is a striking decline in the risk-adjusted performance of the incumbent funds over the four-year period surrounding the managers' switch to multitasking. Both the four-factor alpha and DGTW benchmark-adjusted return are significantly lower by 3.90% and 2.82%, respectively. In contrast to the incumbent funds, there is a significant improvement in the performance of the acquired funds over the same four-year period around the switch: 2.66% and 2.34% increase in the four-factor alpha and DGTW return, respectively.

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

$$Perf_{i,t} = \lambda_i After_i + \phi \overline{FundChar}_{i,[t-1,t-24]} + \alpha_i + \delta_i + \xi_{i,t} \tag{4}$$

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[11] Throughout the paper, we focus on the four-year period around the managers' switch to multitasking. Analysis over a longer period will impose significant survivorship basis, 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.

The dependent variable is the risk-adjusted performance of fund i at time t, $Perf_{i,t}$. The main independent variable of interest is an indicator variable *After* which equals one if the observation is from the 24-month period after the switch and zero if the observation is from the 24-month period before the switch. The estimated slope coefficient λ_i on *After* therefore captures the impact of the switch on fund performance. We include a vector of average fund characteristics $\overline{FundChar}_{i,[t-1,t-24]}$ such as fund's total net assets, expense ratio, turnover ratio, and net dollar flows. Finally, we include style and time fixed effects, α_i and δ_i. Note that for each incumbent fund and each acquired fund, data for estimating the regression in equation (4) includes two sets of observations on fund performance and characteristics, one before the switch and one after the switch.

[Insert Table IV Here]

We report our findings in Table IV. Consistent with the earlier 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. When we use the four-factor alpha and DGTW return as the dependent variable, respectively, the estimated slope coefficients on *After* are negative and highly significant for the incumbent funds (−3.549 and −2.534) while the coefficients are significantly positive for the acquired funds (2.609 and 2.582). These results imply a decline of 3.549% and 2.534% in the risk-adjusted performance of the incumbent funds and a performance improvement of 2.609% and 2.582% for the acquired funds as a result of managerial

multitasking. These findings are also economically significant considering the average four-factor alpha and DGTW return of the incumbent funds prior to the switch are 2.83% and 3.80%, respectively, while those for the acquired funds are −3.17% and −1.54%, 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 being consistent with the effort diversion hypothesis, and not in favor of 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 the 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 receive 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 first construct three control samples by matching funds (a) on their past performance and average size over the 24-month period prior to the switch, (b) on the propensity score estimates from the results of the logistic regressions modeling the switch (see Table II), and (c) randomly. We then estimate the same multivariate regressions as in Table IV using the matched control samples and report our findings in Table V. The coefficients on *After* are uniformly insignificant at the conventional levels, regardless of whether matching on past performance and size, on propensity score, or randomly. These findings rule out the mean reversion in fund performance or decreasing returns to scale as alternative explanations for our earlier results.

B. Related versus Unrelated Investment Style

Our findings so far show that the performance of the incumbent funds deteriorates while the performance of the acquired funds improves as a result of effort diversion by multitasking managers. Given that diversion of effort is likely to be greater in case of managers taking over funds with unrelated or different investment styles, we predict more pronounced deterioration in the performance of incumbent funds in such cases. To test this prediction, we estimate a multivariate regression modeling the effect of related versus unrelated investment styles on the change in the performance of the incumbent funds. For this purpose, we separate the incumbent

funds into two sub-groups: related group for which the investment styles of the acquired funds are the same as those of the incumbent funds and unrelated group where the investment styles differ. We then estimate the following regression:

$$\Delta Perf_i = v_i Unrelated_i + \omega_i \Delta FundChar_i + \vartheta_i \tag{5}$$

The dependent variable now is the change in the fund i's risk-adjusted performance $\Delta Perf_i$ measured as the two-year performance prior to the switch subtracted from the two-year performance after the switch. The main independent variable of interest is an indicator variable *Unrelated$_i$* that equals one if the observation for fund *i* belongs to the unrelated sub-group and zero if the observation is from the related sub-group. The estimated slope coefficient v_i on *Unrelated* variable therefore captures the difference between the change in fund performance of the unrelated group and the change in fund performance of the related group (*i.e.*, difference-in-difference). We include the changes in other fund characteristics in the regression to control for their effects on the change in fund performance. These characteristics include the fund's total net assets, expense ratio, turnover ratio, and the net dollar flows.

[Insert Table VI]

We report the results in models (1) and (2) of Table VI. We find significant coefficients of −4.373 and −5.152 on the *Unrelated* variable when we use the change in the four-factor alpha and change in DGTW return as the dependent variable, respectively. These findings suggest that the decline in the risk-adjusted performance of incumbent funds is greater when managers take

over funds with unrelated investment styles, providing further support to the effort diversion hypothesis.

Unlike the case of incumbent funds, effort diversion hypothesis does not make specific predictions about the change in the performance of the acquired funds. Greater effort diversion by managers of the incumbent funds to the unrelated acquired funds would suggest that the performance of such acquired funds should improve more. However, given that managers are less experienced managing funds with unrelated style, the performance of the unrelated acquired funds may not improve as much. When we repeat our analysis for the sample of acquired funds, we find mixed results. Using the change in the four-factor alpha as the dependent variable in model (3), the estimated slope coefficient on *Unrelated* is positive but insignificant (coeff.= 0.766, t-stat = 0.319) while using the change in the DGTW return as the dependent variable in model (4), the estimated slope coefficient on *Unrelated* −3.788 and significant at the 5% level.

C. Switch-back from Multitasking to Single-tasking

So far, our findings consistently suggest that when managers switch from single-tasking to multitasking, they divert their effort away from the incumbent funds, leading to performance deterioration for these funds. To further test the effort diversion hypothesis, we examine if the converse is true, *i.e.*, when managers *switch back* from multitasking to single-tasking, is there an improvement in the performance of the funds retained by these managers subsequent to the switch-back? To address this question, each month, we track the number of funds multitasking managers manage to identify 398 switch-back cases. We then carry out similar multivariate

analysis as in Table IV for the change in the fund performance after the switch-back, and report our findings in Table VII. Consistent with the effort diversion hypothesis, we find that the risk-adjusted performance of the fund retained by the managers who switch back from multitasking to single-tasking significantly improves. When we use the four-factor alpha and DGTW return as the dependent variable, respectively, the estimated slope coefficients on *After* are positive and highly significant (3.624 and 4.350). These coefficients imply an improvement of 3.624% and 4.350% in the retained funds' risk-adjusted performance as a result of their managers' switch-back from multitasking to single-tasking.

Taken together, above findings from the additional tests (a) using matched sample analysis (section III.A), (b) separating the multitasking cases into related versus unrelated investment styles (section III.B), and (c) examining the cases where managers switch back from multitasking to single-tasking (section III.C), provide 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 the 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 severe performance deterioration over a 24-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 doing so should exceed the marginal costs for mutual fund companies. Therefore, we predict that the net impact on dollar flows into the mutual fund companies, accounting for both the incumbent and acquired funds, should be positive.

We test these three predictions by estimating a multivariate regression modeling the change in the 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 (4). The dependent variable is the estimated dollar flows as defined in equation (2). The main independent variable of interest is an indicator variable *After* which equals one if the observation is from the 24-month period after the switch and zero if the observation is from the 24-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 might affect fund flows. These characteristics include the contemporaneous and lagged risk-adjusted performance as well as their respective quadratic terms, 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' anticipation of

how multitasking affects *future* fund performance. This intuition underlies our hypotheses outlined above.

We report the results in models (1) and (3) of Table VIII. 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. = 2.645, t-stat = 0.180). One potential explanation for this unexpected result can be that the investors of the incumbent funds regard multitasking as a signal of managerial quality and importance in the fund companies. This can potentially offset the undesirable consequences on the future performance that investors expect from multitasking.

In contrast to the incumbent funds, 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 31.888, significant at the 5% level, suggesting an increase of about $32 million net dollar flows for the acquired funds. This increase in the investor flows is economically significant as the acquired funds experience a *negative* 48.212 million net dollar flows in the 24-month period before being acquired (see panel B of Table I). This finding is consistent with the positive spillover effect of well-performing managers.

[Insert Table VIII Here]

Our results so far are based on *estimated* dollar flows using equation (2). Hence, for robustness, we employ an alternative dollar flow measure, N-SAR Dollar Flows, using the *actual*

monthly flows reported by mutual funds to the SEC in the N-SAR forms since 1996. In results reported in models (2) and (4) in Table VIII, we continue to find a positive but insignificant coefficient (coeff. = 12.727, t-stat = 0.606) on the *After* variable for the incumbent funds and a positive and significant coefficient (coeff. = 46.208, t-stat = 2.227) for the acquired funds. [12]

Next, we test whether positive spillover effect of multitasking managers also applies to 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 done previously. Instead, we estimate the following cross-sectional regression:

$$Dollarflow_i = \theta_i Multitasking_i + \rho_i FundChar_i + \alpha_i + \delta_i + \varsigma_i \qquad (6)$$

where the dependent variable $Dollarflow_i$ is either the *Estimated* or the *N-SAR* Dollar Flows over the 24-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 the manager. Except for the past performance and size which are not available for the new funds[13], we again control

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[12] As in Table V, we repeat our analyses on fund flows using control samples of funds that are matched with the incumbent funds and acquired funds using past performance and size, propensity scores, and randomization, we find there are no significant changes in net dollar flows for the control samples regardless of the matching procedure. These results are available from the authors upon request.
[13] Since all the new funds have zero assets under management at inception, the fund size and fund flows are the same in those cases.

for the same set of fund characteristics as before, such as contemporaneous risk-adjusted performance and its quadratic term, the expense ratio, the turnover ratio, the style dummies and the time dummies.

[Insert Table IX Here]

The results reported in Table IX confirm a positive spillover effect of multitasking managers on the new funds launched by them. On average, new funds launched by multitasking managers attract $36.990 million and $42.738 million greater estimated and actual dollar flows, respectively, compared to the funds launched by single-tasking managers. Taken together, the asymmetry between the responses of the investors of the incumbent funds and the new-task funds (*i.e.*, acquired funds and new funds) makes multitasking arrangement a profitable mechanism for the fund companies to increase their assets.

V. Concluding Remarks

In this paper, we investigate the determinants and consequences of managerial multitasking in the mutual fund industry. Our empirical analyses reveal three notable findings. First, we find that fund companies select well-performing managers to multitask to either turn around poorly performing funds or to launch new funds. Second, we show that when managers multitask, the performance of the incumbent funds declines while that of the acquired funds improves during the 24-month period subsequent to multitasking. Finally, we find that 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 of multitasking to the fund companies such as turning around their struggling funds, retaining their superior managers, and launching new funds. These benefits, however, come at the expense of the investors of the incumbent funds.

Taken together, these findings suggest potential agency problems associated with multitasking by portfolio managers in the mutual fund industry. The fact that some investors are adversely affected by the distorted incentives of their portfolio managers has policy implications for the regulatory bodies governing the mutual fund industry. Our study also sheds light on the pivotal role played by the fund companies in determining the span of control for their portfolio managers, and internal allocation of their managerial resources, which involves 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 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 risk-adjusted performance (the two-year Carhart (1997) four-factor alpha (in %) and the two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted return (in %)), the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio, and the net dollar flows (in millions of dollars), all estimated or measured over a 24-month window prior to the month of the switch. Net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. Our sample period is from January 1980 to December 2010. The standard errors from the t-tests are clustered by fund. Statistical significance of 1%, 5%, and 10% is indicated by ***,**, and * respectively.

Panel A: Incumbent Funds

Fund Characteristics	Switchers	Non−switchers	Difference
Four−Factor Alpha (%)	2.825	0.678	2.147***
DGTW Return (%)	3.798	1.522	2.275***
Net Assets (Millions)	665.441	565.028	100.413*
Expense Ratio (%)	1.349	1.420	−0.071**
Turnover Ratio	0.986	0.907	0.079**
Net Flows (Millions)	80.009	22.927	57.082***

Panel B: Acquired Funds

Fund Characteristics	Acquired	Non−acquired	Difference
Four−Factor Alpha (%)	−3.166	0.154	−3.320***
DGTW Return (%)	−1.540	1.406	−2.946***
Net Assets (Millions)	779.424	693.487	85.937
Expense Ratio (%)	1.390	1.320	0.069**
Turnover Ratio	1.023	0.960	0.063
Net Flows (Millions)	−48.212	62.394	−110.605***

Table II: Determinants of Incumbent and Acquired Funds

This table reports the results of the logistic regressions modeling the type of incumbent funds from which the managers switch from single-taksing to multitasking (models (1) and (2)) and the type of existing funds that are acquired by those managers to multitask (models (3) and (4)) over the sample period from January 1980 to December 2010. In models (1) and (2), 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 (3) and (4), 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 include the risk-adjusted performance (the two-year Carhart (1997) four-factor alpha (in %) and the two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted return (in %)), the natural logarithm of the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio, and the net dollar flows (in millions of dollars), all estimated or measured over the 24-month period prior to the month of the switch. Net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. We include both investment style dummies and time dummies. 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.

Variables	Incumbent		Acquired	
	(1)	(2)	(3)	(4)
Four−Factor Alpha (%)	0.008***		−0.015***	
	(2.594)		(−2.887)	
DGTW Return (%)		0.011**		−0.028***
		(2.346)		(−4.396)
Ln Assets (Millions)	0.120***	0.092***	0.175***	0.153***
	(4.183)	(2.767)	(5.918)	(4.343)
Expense Ratio (%)	−0.070	−0.094	0.382***	0.437***
	(−0.712)	(−0.851)	(4.193)	(4.139)
Turnover Ratio	0.121***	0.131***	0.004	0.030
	(2.996)	(2.710)	(0.137)	(0.926)
Net Flows (Millions)	0.001***	0.001**	−0.001***	−0.002***
	(2.634)	(2.298)	(−5.106)	(−5.367)
Style Dummies	Yes	Yes	Yes	Yes
Time Dummies	Yes	Yes	Yes	Yes
#Obs.	65,447	44,695	210,663	145,334
Pseudo R−squared	0.034	0.028	0.039	0.044

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

Panel A (Panel B) reports the characteristics for the incumbent (acquired) funds prior to the switch (*i.e.*, month *t-24* to *t-1*) and after the switch (*i.e.*, month *t+1* to *t+24*) in the second and third columns, respectively. The change in the fund characteristics from the pre-switch period (*i.e.*, month *t-24* to *t-1*) to the post-switch period (*i.e.*, month *t+1* to *t+24*) are reported in the last column. Reported fund characteristics include the risk-adjusted performance (two-year Carhart (1997) four-factor alpha (in %) and two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted returns (in %)), the fund's average total net assets (in millions of dollars), the average expense ratio (in %), the average turnover ratio, and the net dollar flows (in millions of dollars), all estimated or measured over 24 months prior to the switch (*i.e.*, month *t-24* to *t-1*) and 24 months after the switch (*i.e.*, month *t+1* to *t+24*). Net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. Our sample period is from January 1980 to December 2010. Statistical significance of 1%, 5%, and 10% is indicated by ***,**, and * respectively.

Panel A:Incumbent Funds

Fund Characteristics	Before	After	Difference (*After−Before*)
Four−Factor Alpha (%)	2.825	−1.071	−3.897***
DGTW Return (%)	3.798	0.974	−2.824***
Net Assets (Millions)	665.441	907.185	241.744***
Expense Ratio (%)	1.349	1.350	0.001
Turnover Ratio	0.986	0.945	−0.041
Net Flows (Millions)	80.009	74.672	−5.337

Panel B: Acquired Funds

Fund Characteristics	Before	After	Difference (*After−Before*)
Four−Factor Alpha (%)	−3.166	−0.504	2.662***
DGTW Return (%)	−1.540	0.802	2.342***
Net Assets (in Millions)	779.424	814.738	35.315
Expense Ratio (%)	1.390	1.384	−0.006
Turnover Ratio	1.023	1.003	−0.020
Net Flows (Millions)	−48.212	−43.162	5.050

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) and (2)) and the acquired funds (models (3) and (4)) before (*i.e.*, month *t-24* to *t-1*) and after (*i.e.*, month *t+1* to *t+24*) the switch over the sample period from January 1980 to December 2010. The dependent variable in models (1) and (3) is the two-year Carhart (1997) four-factor alpha estimated over the 24-month window. The dependent variable in models (2) and (4) is the two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted returns measured over the 24-month window. The main independent variable of interest is *After* that equals one (zero) if the observation is within the 24-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, and the net dollar flows (in millions of dollars), all estimated or measured over the 24-month window. Net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. We control for the investment style fixed effects and time 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.

Variables	Incumbent		Acquired	
	(1)	(2)	(3)	(4)
	Alpha	DGTW	Alpha	DGTW
After	−3.549***	−2.534***	2.609**	2.582***
	(−4.246)	(−3.040)	(2.433)	(3.294)
Ln Assets (Millions)	−0.363	−0.012	0.328	0.019
	(−1.538)	(−0.058)	(1.083)	(0.081)
Expense Ratio (%)	−1.361	1.537	−3.364***	0.333
	(−1.280)	(1.526)	(−2.700)	(0.335)
Turnover Ratio	0.151	0.745	1.252	−0.837
	(0.194)	(1.077)	(1.474)	(−1.575)
Net Flows (Millions)	0.011***	0.009***	0.007***	0.001
	(8.006)	(5.265)	(3.634)	(0.524)
Style Fixed Effects	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes
#Obs.	1,312	992	788	596
Adj. R−squared	0.154	0.101	0.136	0.062

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

This table reports the changes in the risk-adjusted performance of the funds that are matched with the incumbent funds (Panel A) and the acquired funds (Panel B) before (*i.e.*, month *t-24* to *t-1*) and after (*i.e.*, month *t+1* to *t+24*) the switch over the sample period from January 1980 to December 2010. We construct the matched sample by matching funds (a) on their past performance and average size over the 24-month period prior to the switch (models (1) and (4)), (b) on the propensity score estimated from the results of the logistic regressions in Table II (models (2) and (5)), and (c) randomly (models (3) and (6)). The dependent variable in models (1) to (3) is the two-year Carhart (1997) four-factor alpha estimated over the 24-month window. The dependent variable in models (4) to (6) is the two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted returns measured over the 24-month window. The main independent variable of interest is *After* that equals one (zero) if the observation is within the 24-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, and the net dollar flows (in millions of dollars), all measured over the 24-month period. Net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. We control for the investment style fixed effects and time fixed effects. The standard errors are clustered at the fund level. Statistical significance of 1%, 5%, and 10% is indicated by ***,**, and * respectively.

Panel A: Control Samples matched with Incumbent Funds

Variables	Four-Factor Alpha (%)			DGTW Return (%)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Per & Size	Propensity	Random	Per & Size	Propensity	Random
After	−0.590	−0.999	−0.395	−0.804	−0.226	−0.644
	(−0.618)	(−1.069)	(−0.415)	(−1.143)	(−0.297)	(−0.892)
Ln Assets (Millions)	0.098	0.009	−0.252	0.229	0.072	0.054
	(0.382)	(0.032)	(−0.886)	(1.116)	(0.378)	(0.277)
Expense Ratio (%)	−1.195	−1.176	−3.326***	1.321*	−0.741	0.593
	(−0.848)	(−0.848)	(−2.861)	(1.895)	(−0.675)	(0.740)
Turnover Ratio	−1.159	−1.385	−0.124	−0.467	−0.268	−0.470
	(−1.384)	(−1.534)	(−0.203)	(−1.072)	(−0.538)	(−1.128)
Net Flows (Millions)	0.006***	0.006***	0.020***	0.005***	0.014***	0.008***
	(4.106)	(3.736)	(6.629)	(3.737)	(5.180)	(3.018)
Style Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
#Obs.	1,312	1,312	1,312	992	992	992
Adj. R−squared	0.178	0.165	0.128	0.113	0.102	0.042

Panel B: Control Samples matched with Acquired Funds

Variables	Four-Factor Alpha (%)			DGTW Return (%)		
	(1)	(2)	(3)	(4)	(5)	(6)
	Per & Size	Propensity	Random	Per & Size	Propensity	Random
After	1.643	0.875	0.978	1.137	1.078	0.266
	(1.428)	(1.058)	(0.766)	(1.169)	(1.238)	(0.293)
Ln Assets (Millions)	−0.752**	0.419	−0.074	0.178	0.257	−0.087
	(−2.406)	(1.632)	(−0.263)	(0.739)	(1.205)	(−0.335)
Expense Ratio (%)	−3.024**	−2.508**	−2.768**	1.334	0.925	0.545
	(−2.453)	(−2.290)	(−2.391)	(1.511)	(0.978)	(0.587)
Turnover Ratio	−0.706	0.082	−0.876***	0.692	0.758	−0.192
	(−1.590)	(0.113)	(−2.701)	(0.898)	(1.200)	(−1.153)
Net Flows (Millions)	0.013***	0.009***	0.008***	0.008***	0.006***	0.005***
	(4.781)	(2.989)	(4.092)	(3.295)	(3.949)	(2.996)
Style Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
#Obs.	788	788	788	596	596	596
Adj. R−squared	0.105	0.134	0.139	0.098	0.067	0.064

Table VI: Effects of Related versus Unrelated Style on Changes in Fund Performance

This table reports the changes in the risk-adjusted performance of the incumbent funds and the acquired funds before and after the switch by separating them into two sub-groups: *related* for which the investment styles of the acquired funds are the same as those of the incumbent funds, and *unrelated* for which the investment styles of the acquired funds differ from those of the incumbent funds. The dependent variable in models (1) and (3) is the two-year Carhart (1997) four-factor alpha prior to the switch (*i.e.*, month *t-24* to *t-1*) subtracted from the four-factor alpha after the switch (*i.e.*, month *t+1* to *t+24*). The dependent variable in models (2) and (4) is the two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted returns prior to the switch (*i.e.*, month *t-24* to *t-1*) subtracted from the DGTW returns after the switch (*i.e.*, month *t+1* to *t+24*). The main independent variable of interest is *Unrelated* that equals one (zero) if the observation is from the unrelated (related) sub-group. Other independent variables include the change in the natural logarithm of the fund's average total net assets (in millions of dollars), the change in the average expense ratio (in %), the change in the average turnover ratio, and the change in the net dollar flows (in millions of dollars) before and after the switch. The change in the net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. We control for the investment style fixed effects and time 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.

Variables	Incumbent		Acquired	
	(1)	(2)	(3)	(4)
	Δ Alpha	Δ DGTW	Δ Alpha	Δ DGTW
Unrelated	−4.373**	−5.152***	0.766	−3.788**
	(−2.299)	(−2.866)	(0.319)	(-2.192)
Δ Ln Assets (Millions)	−4.295***	−4.195***	−0.645	−3.541***
	(−3.332)	(−3.431)	(−0.349)	(−2.742)
Δ Expense Ratio (%)	−11.500***	−7.342*	1.234	1.711
	(−2.686)	(−1.815)	(0.172)	(0.341)
Δ Turnover Ratio	3.351**	5.271***	−0.207	−1.086
	(1.965)	(3.187)	(−0.125)	(−0.994)
Δ Net Flows (Millions)	0.002***	0.004***	0.002	0.001
	(2.848)	(5.169)	(1.462)	(0.232)
Style Fixed Effects	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes
#Obs.	656	496	394	298
Adj. R−squared	0.132	0.122	0.143	0.128

Table VII: Multivariate Analysis of the Changes in Fund Performance after the Switch-Back

This table reports the changes in 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 24-month period before (*i.e.*, month *t-24* to *t-1*) and after (*i.e.*, month *t+1* to *t+24*) the switch-back. The dependent variable in model (1) is the two-year Carhart (1997) four-factor alpha estimated over the 24-month period. The dependent variable in model (2) is the two-year cumulative Daniel, Grinblatt, Titman, and Wermers (1997) (DGTW) benchmark-adjusted returns measured over the 24-month period. The main independent variable of interest is *After* that equals one (zero) if the observation is within the 24-month period after (before) the managers' switch back from multitasking to single-tasking. 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, and the net dollar flows (in millions of dollars), all estimated or measured over the 24-month window. Net dollar flows are winsorized at the 5th and the 95th percentile levels. All the other variables are winsorized at the 1st and the 99th percentile levels. Our sample period is from January 1980 to December 2010. We control for the investment style fixed effects and time 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.

Variables	(1)	(2)
	Alpha	DGTW
After	3.624**	4.350***
	(2.289)	(3.017)
Ln Assets (Millions)	−0.600	−0.532
	(−1.497)	(−1.210)
Expense Ratio (%)	−2.616	0.438
	(−1.398)	(0.305)
Turnover Ratio	−0.476	0.507
	(−0.352)	(0.556)
Net Flows (Millions)	0.002	−0.003
	(0.971)	(−0.911)
Style Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
#Obs.	398	296
Adj. R−squared	0.077	0.134

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

This table reports the changes in the fund flows of the incumbent funds (models (1) and (2)) and the acquired funds (models (3) and (4)) before (*i.e.*, month *t−24* to *t−1*) and after (*i.e.*, month *t+1* to *t+24*) 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 24-month periods before and after the switch. The main independent variable of interest is *After* that equals one (zero) if the observation is within the 24-month period after (before) the managers' switch to multitasking. Other independent variables include the contemporaneous and lagged two-year Carhart (1997) four-factor alphas (in %) as well as their respective quadratic terms, the natural logarithm of the average fund's total net assets (in millions of dollars), average expense ratio (in %), and average turnover ratio. We control for the investment style fixed effects and time 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.

Variables	Incumbent		Acquired	
	(1)	(2)	(3)	(4)
	Estimated Flows	N-SAR Flows	Estimated Flows	N-SAR Flows
After	2.654	12.727	31.888**	46.208**
	(0.180)	(0.606)	(2.384)	(2.227)
Alpha (%)	4.699***	4.157***	1.839***	2.129**
	(8.241)	(5.966)	(3.460)	(2.516)
Alpha Square	0.039**	0.027	0.015*	0.017
	(2.518)	(1.455)	(1.753)	(1.292)
Lag Alpha (%)	2.706***	3.686***	2.565***	1.396
	(5.578)	(5.324)	(3.167)	(1.108)
Lag Alpha Square	−0.006	−0.004	−0.004	0.002
	(−0.812)	(−0.293)	(−0.455)	(0.134)
Ln Assets (Millions)	35.722***	22.555**	−38.392***	−65.640***
	(5.052)	(2.435)	(−4.270)	(−4.944)
Expense Ratio (%)	8.324	−47.009	−2.140	−0.025
	(0.362)	(−1.319)	(−0.088)	(−0.001)
Turnover Ratio	−2.801	−9.813	−16.600	−5.480
	(−0.237)	(−0.762)	(−1.433)	(−0.308)
Style Fixed Effects	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes
#Obs.	1,312	692	788	516
Adj. R−squared	0.145	0.117	0.140	0.186

Table IX: 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 24-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 VIII. 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 two-year Carhart (1997) four-factor alpha (in %) and its quadratic term, the average expense ratio (in %), and average turnover ratio. We control for the investment style fixed effects and time 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.

Variables	(1) Estimated Flows	(2) N-SAR Flows
Multitasking	36.990***	42.738***
	(4.502)	(3.216)
Alpha (%)	1.284***	1.065***
	(5.573)	(3.710)
Alpha Square	−0.001	−0.005
	(−0.206)	(−1.164)
Expense Ratio (%)	−12.627**	−16.188
	(−2.223)	(−1.469)
Turnover Ratio	−3.758***	−2.252
	(−3.057)	(−1.349)
Style Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
#Obs.	1,179	533
Adj. R−squared	0.072	0.063