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This paper investigates the market reaction to a firm switching from a male CEO to a female CEO. We compare these firms against a four dimensional matched sample of male to male CEO appointments. Our results indicate that female CEO appointments are followed by small insignificant negative reactions, whereas male CEO announcements are followed by economically and statistically significant negative reactions. Analysis of compensation data indicates that female CEOs receive more equity compensation than males, though this difference is statistically insignificant.

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G14 - Information and Market Efficiency

G30 – General Corporate Governance

J16 - Economics of Gender

Keywords: CEO Turnover, Gender, Event Study

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Abstract:

This paper investigates the market reaction to a firm switching from a male CEO to a female CEO. We compare these firms against a four dimensional matched sample of male to male CEO appointments. Our results indicate that female CEO appointments are followed by small insignificant negative reactions, whereas male CEO announcements are followed by economically and statistically significant negative reactions. Analysis of compensation data indicates that female CEOs receive more equity compensation than males, though this difference is statistically insignificant.

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1. Introduction

Many studies document gender discrimination in the workplace both in the level of compensation and in the positions that women can obtain. Keating (2006) reports that of the largest U.S. firms, only 7.2% have more than two women in the top ranks and only 2.6% have more than three; of the total CEO population, females represent only 0.63%. Given this stark disparity, an important question is whether the primary impetus for the asymmetry originates from internal sources (such as personal preferences of managers and directors) or external sources (the market's perception of unequal ability to generate shareholder value). The answer to this question, hitherto unexplored in the literature, carries direct implications for policies that may be effective in promoting a more equitable allocation of corporate leadership.

Motivated by these considerations, this paper investigates the market reaction to the appointment of a female CEO to a position previously held by a male. Recognizing that women may be appointed to CEO positions of firms with different average characteristics (e.g., industry or size) than male CEOs, we match male-to- female appointments with male-to-male appointments along four dimensions: industry, date of appointment, firm leverage, and firm size. We also analyze the level and composition of female CEO pay relative to their male matched-firm counterparts and to their outgoing male predecessors.

Our results indicate that the market reaction to a change in CEO gender is insignificant, suggesting an absence of systematic external incentives to avoid female CEOs.

We document small and insignificant negative returns for female appointments to previously male CEO positions. However, we document economically and statistically significant negative reactions to the matched male appointments, in apparent contrast to prior literature. Compensation data indicate that female CEOs are paid with more equity compensation (stock and stock options) and less cash compensation than their male counterparts.

The remainder of this paper is organized as follows. Section 2 briefly reviews related literature and discusses the hypotheses. Section 3 describes the data and methodology, Section 4 reports the results, and Section 5 concludes.

2. Related Literature and Hypotheses

At least three strands of literature relate somewhat to our analysis. One strand has explored market reactions to a change in CEO, but those studies have not delineated the role of gender. Another strand has explored some associations between CEO gender and firm performance, including market reactions to mergers and acquisitions. A third strand has addressed factors influencing gender-related mobility into the top ranks of corporate management, along with disparities in compensation.

Due to the very limited number of female CEOs, prior studies of CEO turnover are best interpreted as characterizing male-to-male appointments. Ertugrul and Krishnan (2007) find that when the market suspects the dismissal of the CEO, there is no measurable market reaction. Whereas, if the announcement is an early rather than a late¹ dismissal, there is a negative reaction as the market takes time to reassess the quality of the new appointee.

¹ The authors define an early dismissal as when the board does not wait for the market reaction of the quality of the outgoing CEO. A late dismissal is when the board waits for the market to react to the CEO quality before they make the decision to dismiss.

Other research estimates that the probability of a CEO dismissal is higher if the firm is performing poorly (e.g., Coughlan and Schmidt, 1985, Huson et al., 2004) but does not assess market reactions.

A separate branch of the literature analyzes the financial consequences of females in the corporate setting. Strelcova (2004) finds lower returns for firms in the six months following newly appointed female CEOs than for a matched sample of firms run by male CEOs but not experiencing a change in the CEO position. Wolfers (2006), analyzing longer horizon returns from 1992 through 2004, finds no difference between the performance of male and female run firms. Catalyst (2006) reports that firms with female-dominated management teams exhibit an ROE that is 35.1 percent higher on average than firms with male-dominated management teams.

At least two studies analyze the role of female CEOs in merger and acquisition decisions. Levi et al. (2008) document smaller bid premiums when the acquiring firm has a female CEO. In those cases, abnormal returns are smaller for the target firm following the acquisition announcement. Moreover, if the target firm has a female CEO, the likelihood of a tender offer is higher.

Sudarsanam and Huang (2007) document that the market has a more favorable short-run response to mergers and acquisitions conducted by female CEOs. This reaction is reversed in the long run. They also find that female CEOs undertake less risky M&A deals.

In research closely related to ours, Lee and James (2007) document more negative market reactions to female CEO appointments than to male appointments. For their sample they document a -3.71 percent abnormal return for the 17 female CEO appointments

(significant at the 0.10 level) and -0.49 percent for the 518 male appointments (significant at the 0.05). Our study differs from theirs in two important dimensions. First, Lee and James use all female appointments whereas our sample is limited to only those female appointments which result in a change in the CEO gender. This is an important distinction because the market may perceive a change in CEO gender differently than the appointment of a female to a position previously held by a female CEO. Our approach also offers a sharper empirical test of the market's perception of CEO gender because a female-to-female CEO change need not result in significant abnormal returns even if investors believe that there is a significant difference between male and female CEOs.

Second, we match our male to female CEO appointment sample with a male to male CEO appointment sample based upon announcement date, industry, and firm characteristics (size and leverage). This matching method avoids several potential biases in firm type across male and female CEOs. For example, industries in our female CEO sample include Jewelry Stores, Cosmetics, Apparel Manufactures, Clothing Stores, among others. Females may rise more easily to the CEO position in certain industries or in smaller firms. Therefore, controlling for such factors in the sample selection is important.

Besides quantifying market reactions, it is also of interest to examine CEO compensation across genders. Karlin et al. (2002) discuss two assumptions underlying a “queueing” theory of employer discrimination and wage gap. The first is that employers have a preference for hiring males in nearly all jobs. The second is that both males and females prefer higher paying jobs. Together, these assumptions imply that employers offering high paying jobs will attract both males and females but preferentially hire males,

leaving females with lower paying jobs. We note that this hypothesis implies that some firms may be able to hire a female CEO more cheaply than a male CEO, which may appeal to financially constrained firms. But low compensation may lead to poor incentive alignment between the firm and the manager, especially if most of the shortfall is in the equity component of compensation.

Indeed, Masson (1971) and Abowd (1990) suggest that managers respond to equity based compensation packages and that higher stock based compensation is related to better subsequent firm performance. As the proportion of equity given to the manager rises, their incentives become more aligned with shareholders and the agency conflict is reduced (Jensen and Meckling, 1976). If less equity based compensation is given to the manager, then the managers will tend to exert less effort and consume more perquisites. The market reaction to these increased agency costs would be negative. If there are observed differences in the market reaction to CEO appointments, these differences could stem from compensation differences and not from gender alone. Moreover, Mohan and Ruggiero (2007) suggest that the incentive pay component of total compensation may be particularly low for women due to some combination of greater risk aversion and less tough negotiation compared to men. Therefore, it is important to measure the level and composition of the compensation packages for M2F firms and M2M firms.

Because compensation packages are typically reset during CEO turnover (Blackwell et al., 2007), those turnover events offer an opportunity for a sharp test of these predictions. Therefore, we test the following hypotheses related to the reaction to a CEO turnover from male to female:

H1: The market reaction to an appointment of a female CEO will be a smaller positive reaction or a larger negative reaction than to a male CEO appointment.

H2: Following CEO turnover, the observed compensation packages should be less in total compensation or less equity based for females.

3. Data and Descriptive Statistics

3.1. Data Sources

The data used for this study come from the Standard & Poor's Compustat Execucomp database. Execucomp provides detailed information on top executive compensation for S&P 1500 firms (and select other firms). This information includes salary, bonus, stock options granted, restricted stock granted, and other total annual compensation. Execucomp also provides information on CEO characteristics including gender, age, and effective date of hire. We use these data to identify Male CEO to Female CEO turnover (M2F) firms and to identify Male CEO to Male CEO turnover (M2M) firms.

3.2. Matched Sample

We use firm level data from Execucomp to form an M2M control group based upon SIC code², market value of equity (MVE), book leverage, and time of announcement (within the same Compustat reporting year).³ Firm size, measured by the market value of equity, is an important matching dimension since CEO compensation is positively related to firm size (Murphy, 1999). After identifying M2M turnovers within the same year and industry, we match on size and leverage (book value). Average leverage ratios between the M2F firms

² Eighteen Firms are matched by 4-four digit SIC code. Fifteen firms do not have a 4-digit SIC match, and thus are matched at the 2-digit level.

³ Matched pairs exhibited a mean difference in the effective date of hire of 47 calendar days, not statistically different from zero ($p = 0.2796$).

and the matched M2M firms are within 3 percent and are not statistically different ($p = 0.379$).

Figure 2 displays the MVE for M2F and M2M firms. The majority of M2F firms have MVE in the range of 500 to 1000 (\$Millions) with the other categories having approximately the same size firms except the 250-500 and 1,500-2,000 categories. Although the graph indicates some differences in the size of firms, the mean MVE is not statistically different between M2F and M2M matched pairs ($p = 0.168$).^{4,5}

3.3. *Measurement of abnormal returns*

CRSP returns are obtained for each firm around the CEO appointment date from $t = -200$ to $t = 20$. We define a firm's abnormal returns relative to three expected return benchmarks: the market adjusted model, the market model, and the Fama French three-factor model (Fama and French, 1993). Daily S&P 500 returns are used for the market adjusted model, and the CRSP equally-weighted index returns are used for the market model. The Fama French factors are published by Kenneth French and obtained from WRDS. The three factors consist of the market factor ($RM_t - RF_t$), the size factor (SMB_t), and the book-to-market factor (HML_t).

⁴ While female firms are on average 60% the size of male firms, the median difference is 9%.

⁵ To address the robustness of the hand matched sample described above, an alternative matched sample is created. We first identify firms with a male CEO turnover in the same Execucomp reporting year and in the same industry. We then employ matching bounds on MVE and leverage such that all MCFC firms maintain at least one MCMC matching firm falling within the bounds. This process addresses selection issues and potential biases arising from the hand selection. The results from the alternative matched sample are qualitatively similar and are available from the authors upon request.

Cumulative abnormal returns (CARs) and buy-and-hold abnormal returns (BHARs) (see Lyon, Barber, and Tsai, 1999) are computed by first calculating the abnormal return (AR) for firm i on day t relative to each of the three expected return benchmarks:

$$AR_{it} = R_{it} - \hat{R}_{it}, \quad (1)$$

where R_{it} is the return for firm i on day t , and $\hat{R}_{it}$ is the expected return for firm i on day t .

The expected return for the market model is calculated as follows where $Market_t$ is represented by the CRSP equally weighted index:

$$\hat{R}_{it} = \hat{\alpha}_i + \hat{\beta}_i Market_t, \quad (2)$$

where alpha (α_i) and beta (β_i) are estimated over a 180 day period ending 21 days prior to the event, to avoid any overlap with the event window. The market adjusted model calculates abnormal returns as the difference between the firm's actual return (R_{it}) and the market return ($Market_t$).

$$AR_{it} = R_{it} - Market_t. \quad (3)$$

The implicit assumption in the market adjusted model is that, relative to the market model, alpha is zero and beta is one for all firms.

The Fama-French three-factor model (TFM) is used in addition to the single factor Market Model. Bartholdy and Peare (2005) find that the TFM explains individual firm returns more accurately than the single factor Market Model, as measured by R^2 values. Using the TFM, a firm's α s and β s are estimated as follows:

$$\hat{R}_{it} - RF_t = \hat{\alpha}_i + \hat{\beta}_{1i}(RM_t - RF_t) + \hat{\beta}_{2i}(SMB_t) + \hat{\beta}_{3i}(HML_t) \quad (4)$$

Abnormal returns are calculated as in equation (1) where the expected return, $\hat{R}_{it}$, is calculated from equation (4), and R_{it} is the return for firm i on day t .

We measure abnormal returns over several windows, extending from 20 days before a CEO appointment to 20 days following an appointment. We calculate CAR_i for a given firm over a window of length T as:

$$CAR_i = \sum_{t=1}^T AR_{it} . \quad (5)$$

The average CAR for an event window is the average across N firms:

$$CAR = \sum_{i=1}^N CAR_i / N . \quad (6)$$

To compute $BHAR_i$ for firm i , we subtract the compounded expected return over a window of length T from the compounded raw return for firm i :

$$BHAR_i = \left(\prod_{t=1}^T (1 + R_{it}) - 1 \right) - \left(\prod_{t=1}^T (1 + \hat{R}_{it}) - 1 \right) . \quad (7)$$

The compounded expected returns are calculated for each of our three expected returns benchmarks. The average $BHAR$ for an event window is the average across N firms:

$$BHAR = \sum_{i=1}^N BHAR_i / N . \quad (8)$$

3.4. Compensation data

We collect compensation information from Execucomp for the outgoing and incoming CEOs. The compensation data include salary⁶, bonus, restricted stock granted, the Black-Scholes value of options granted, and all other compensation. Salary is the dollar value of the base salary, including cash and non-cash earned by the named executive officer during the reported fiscal year. The bonus is the dollar value of cash and non-cash bonuses during the fiscal year. Restricted stock granted is the value of restricted stock granted during the year. The Black-Scholes value of options granted is the aggregate value of stock options granted to the executive during the year as valued using the Black-Scholes methodology. All other compensation includes perquisites and other personal benefits, above market earnings on restricted stock, earnings on long-term incentive plan compensation paid during the year, and tax reimbursements. All compensation values are reported in thousands of dollars.

IV. Results

Table 2 reports the Market Adjusted cumulative average abnormal returns for M2M firms and M2F firms. Panels A and B display the average abnormal returns, CARs, t-statistics, and sign test for M2M and M2F firms for the event window (-20, 20). Panel A (M2F) indicates that there is no significant effect for female CEO appointments on or around the announcement day (t-1, t-0, or t+1). Looking at event days 0 and 1 in Panel B, M2M firms experience a negative stock market reaction to the appointment of a CEO. There is a -1.21% abnormal return on the appointment date, significant at the 10% level. On day t +1,

⁶ Salary is annualized if the effective date of hire does not occur on January 1 of the respective year. Salary is annualized by taking the effective date of hire date and dividing it by the number of days left in the year then multiplying by 365 days. Annualization is needed to compare the outgoing CEO's compensation to the new incoming CEO's compensation.

M2M firms have a -1.28% abnormal return, significant at the 5% level. This t+1 reaction may be due in part to announcements made after market closure on day 0 therefore reflected in the t+1 price. On the event day, 25 of the 33 firms had negative stock market appointment reactions, with sign test significant at the 5% level. This is compared to the M2F sample of 19 negative reactions and 14 positive reactions on the day of appointment.

Table 3 displays the CARs and BHARs for M2F firms and M2M firms across different event windows and across the three expected return benchmarks (market model, market adjusted model, and the TFM). M2F firms have no statistically significant cumulative or buy-and-hold abnormal returns for any of the pre-event or event windows.

On the appointment date, M2F firms have an insignificant abnormal return of approximately -0.22%, depending on the reference portfolio. M2M firms have a negative market reaction ranging from a high of -1.21% ($p < .10$) with the market adjusted model to a statistically insignificant -.86% using the market model. Given the uncertainty of the timing of announcements⁷ a two day event window (0, 1) may better capture the actual market reaction. The results of the two day event window (0, 1) reveal abnormal M2M returns ranging from a low of -1.74% ($p < .05$) for the market model BHARs to -2.49% ($p < .01$) for the market adjusted CARs. Thus, in contrast to Lee and James (2007), we find a larger negative market reaction to M2M firms than to M2F firms over the (0, 1) window.⁸

⁷ There is uncertainty as to the timing of an announcement on a given day for both M2F and M2M appointments. We do not observe whether an announcement occurs before or after the closing of financial markets. If the announcement happens while the financial markets are open, then the observed reaction would occur on the announcement date, $t=0$. If the announcement occurs after the close of the financial markets, then the observed market reaction would occur on the following trading day, $t=1$.

⁸ Lee and James (2007) report female CEO appointment CARs for time (-1,1) of -3.71% ($p < 0.10$) and male CEO appointment CARs of -0.49% ($p < 0.01$).

Taken as a whole, the results of Table 3 indicate that the market reaction to a female CEO appointment to a firm which previously had a male CEO (M2F firms) is statistically insignificant and economically small. The results for the market reaction to a male CEO appointment to a firm which previously had a male CEO (M2M firms) is statistically significant and approximately -2%, on an abnormal basis, for a two day window. The “queuing-view” theory would suggest that the market reaction to female CEO appointments would be negative or at least below that of male CEO appointments, assuming that the market views females as inferior hires or at least less preferred by employers. The results we document suggest the contrary; the market reacts negatively to the appointment of male CEOs and has an insignificant reaction to the appointment of female CEOs.

However, these results are consistent with some previous findings supporting a “glass ceiling,” in that women often have superior education and other qualifications than men in the same job, and successful women must work harder and perform better than comparable men (Wirth, 1998). Our findings are also consistent with previous findings that firms with more women in senior positions tend to exhibit better financial performance, though we do not test for financial performance per se; see Welbourne (1999) and Catalyst (2004) for U.S. data, and Smith et al. (2005) and Kyereboah-Coleman (2006) for similar evidence from other countries. In addition, our results are consistent with the finding of Wolfers (2006) that financial markets do not systematically under-estimate firms with a female CEO.

Related to our second hypothesis, we also analyze differences in the level and composition of compensation between the male and female CEO matched samples. This is

one dimension not controlled for in our matching process. In particular, we analyze the compensation of the CEOs of the M2F firms and the M2M firms, and also analyze the compensation for the outgoing CEO for both firm types. Table 4 displays descriptive statistics for the executive compensation packages for M2F firms and M2M firms. Although males are paid with more cash compensation, they are paid less than their female counterparts in incentive based compensation (stock and stock options). However, a difference of means tests indicates that none of these compensation differences between males and females is statistically significant.

As a robustness measure, a sign test is performed for the incoming female CEOs against their matched male CEOs. The sign test is computed for all compensation measures and indicates that females receive higher restricted stock grants ($p < 0.001$) and higher other annual compensation ($p = 0.014$) than their matched male counterparts.

The results of our matched pair analysis are in contrast to existing literature which suggests that there is a significant gap in both salary and incentive pay. Lemieux, Macleod, and Parent (2006) find that an increase in performance related pay, (stock and stock options) contributes significantly to the gender gap in compensation. Mohan and Ruggiero (2007) report that female CEOs are more sharply underpaid in stock options than in salary, compared to their male counterparts. Yurtoglu and Zulehner (2007) find that male managers receive 18% more stock options than the female managers and male total compensation is 14.9% higher. In our analysis, the differences between current CEO pay and predecessor pay is also insignificant.

V. Conclusion

This paper investigates the market reaction to the appointment of a new CEO of a different gender. We analyze the market perception of a firm switching from a male CEO to a female CEO by identifying firms that previously had a male CEO and appoint a new female CEO. To control for firm bias – women may be appointed to CEO positions of firms with different characteristics (e.g., industry or size) than their male counterparts - we match our male-to-female CEO appointments with male-to-male appointments along four dimensions: industry, date of the appointment, leverage, and size. To calculate abnormal returns around the appointments, we use three benchmark methods: market model, market adjusted model, and the Fama-French three-factor model. Using both cumulative abnormal returns and buy-and-hold abnormal returns, we document a negative and insignificant market reaction to female CEO appointments of approximately -0.25%. However, for our matched male to male sample, we document a negative and significant reaction on the order of -2.0%. These results are robust to the benchmark returns model, return aggregation model, and sample selection. These results are in contrast to prior literature that documents a larger negative market reaction to female CEO appointments. Using a sample of 17 female CEO and 518 male COE announcements and a three day event window (-1, 1), Lee and James (2007) document a -3.71% significant abnormal return for female CEO announcements and -0.49% significant abnormal return for Male CEO announcements. This difference may be due in part to the fact that we limit our sample to firms experiencing a

change in the gender of the CEO – firms that previously had a male CEO and appoint a new female CEO.

The market may be reacting to other information beyond gender, namely incentive alignment between the new CEO and the shareholders. We analyze the compensation of the female CEOs against that for the outgoing male CEOs of the same firm as the incoming male of the matched firm. These results are weakly supported by the compensation packages of the two samples. Passing a sign test but not a difference of means test, females have higher equity based compensation (restricted stock). Thus it appears that equity based compensation levels are unable to fully explain the difference in market reaction between male CEO appointments and female CEO appointments. It also appears that, in our sample, the market does not on average penalize firms hiring female CEOs and does on average penalize firms hiring male CEOs. These results are robust to an alternative sampling technique.

One possible explanation for the contrasting results from Lee and James (2007) is the size and construction of the study sample. Extending the sample period (1993-2005) nearly doubles the sample size to 33 female CEOs appointments. Another possible explanation is that we match by firm characteristics including leverage, industry, and size. We also match male firms to female firms based upon the effective date of the CEO turnover, an important dimension to capture changes in the market price of risk over time, which may not be captured by the benchmark portfolios. However, strong conclusions are avoided based upon the limited sample size and the lack of statistical power. Our results are not in support of the gender wage gap because females in the same CEO position of similar firms are

compensated insignificantly more (equity based) than their male counterparts. Taken as a whole, our results may suggest that the relatively few females who are able to break through the “glass ceiling” and become CEOs are compensated equally to the male CEOs both in level and composition. As more observations become available, future research may be able to sharpen these results and also usefully explore the market’s reaction to CEO turnover in which female CEOs are replaced by either male or female CEOs

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Figure 1: Number of Female CEOs Appointed in Firms with a Male CEO

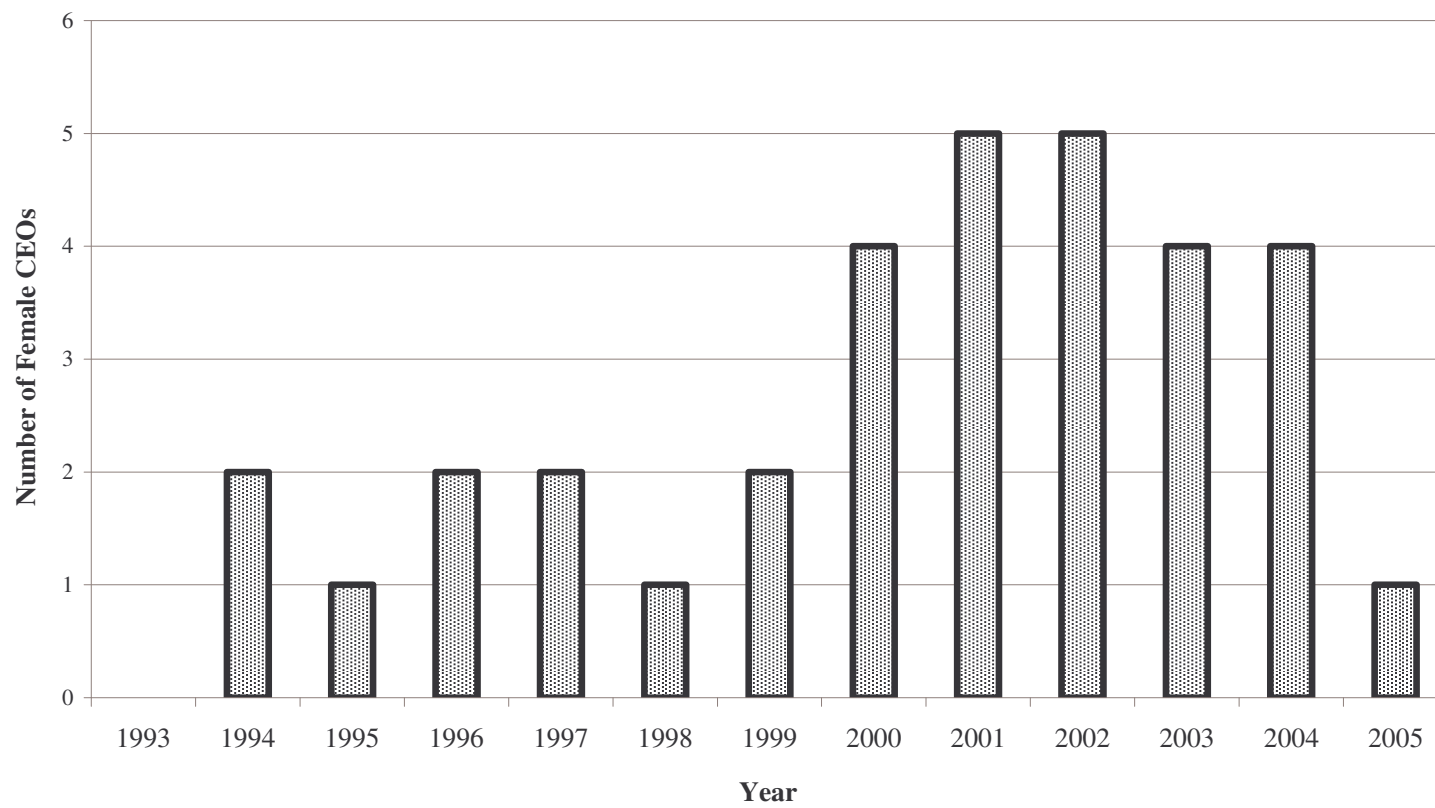


Figure 2: Market Value of Equity for M2F Firms and M2M Firms

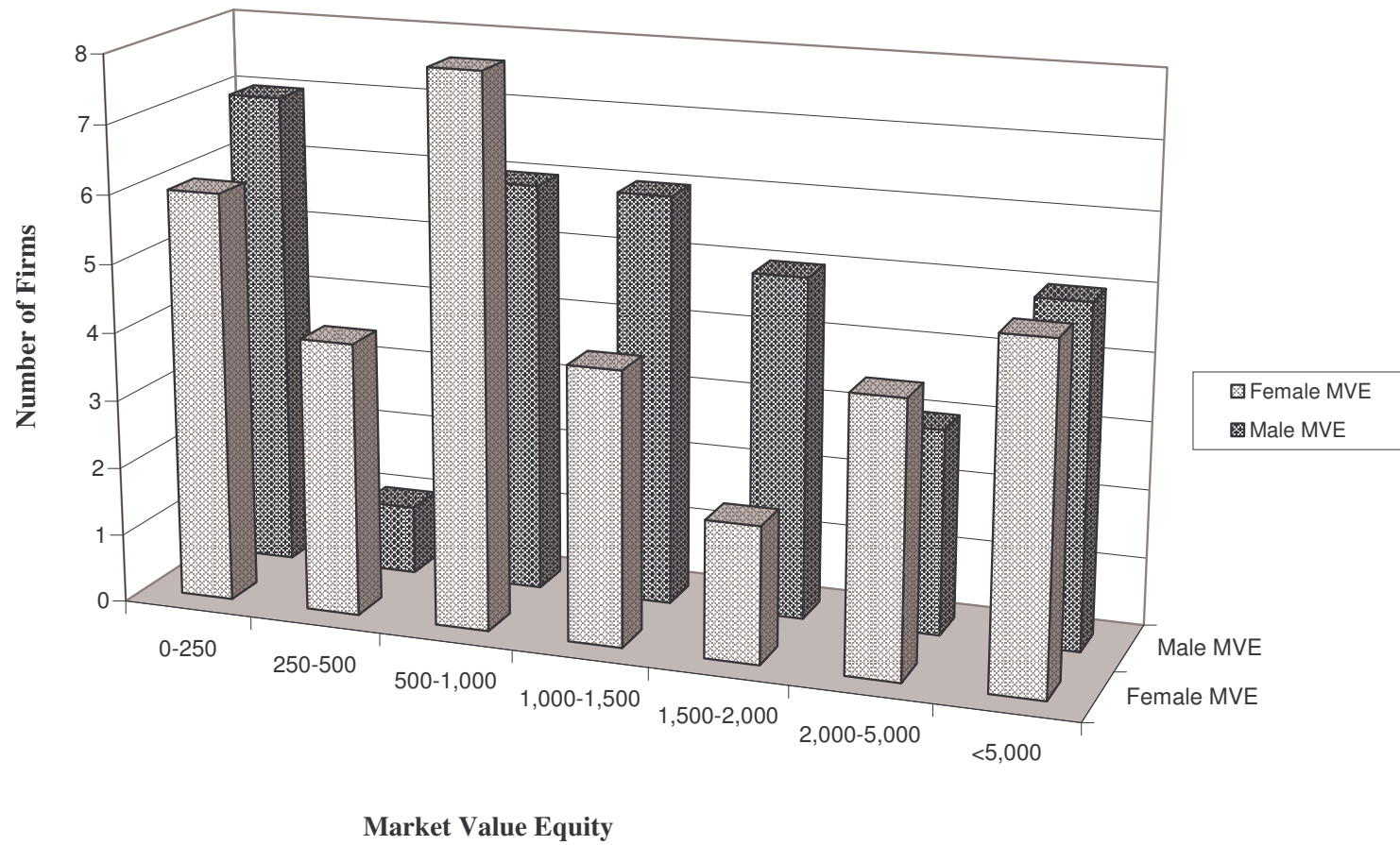


Table 1: Sample Set										
Panel A: Firm Characteristics										
Female Company Name	IN	SICDESC	Effective Date of Hire	Leverage	MVE	Male Company Name	IN	SICDESC	Effective Date of Hire	Leverage MVE
Reynolds American	3	CIGARETTES	7/30/2004	0.549	14054.79	Altria Group	3	CIGARETTES	4/25/2002	0.669 1557.36
Gymboree	4	APPAREL & OTHER FINISHED PDS	2/1/2001	0.352	401.10	Albany International	4	BRDWOVN FABRIC MAN MADE,SILK	10/1/2000	0.660 680.99
Springs Industries	4	BRDWOVEN FABRIC MILL, COTTON	1/1/1998	0.496	738.72	Russell Corporation	4	KNIT OUTERWEAR MILLS	3/31/1998	0.467 721.50
Avon	6	PERFUME,COSMETIC,TOILET PREP	11/4/1999	1.082	11402.05	Lauder Estee Cosmetics	6	PERFUME,COSMETIC,TOILET PREP	1/1/2000	0.619 11759.37
Natures Sunshine Products	6	PHARMACEUTICAL PREPARATIONS	9/1/1996	0.302	483.21	Immulogic Pharmaceutical	6	PHARMACEUTICAL PREPARATIONS	12/1/1996	0.093 38.14
Alpharma Incorporated	6	PHARMACEUTICAL PREPARATIONS	1/1/2000	0.474	1764.39	Baush & Lomb	6	PHARMACEUTICAL PREPARATIONS	11/9/2001	0.650 1942.88
Tower Automotive	7	METAL FORGINGS AND STAMPINGS	8/18/2003	1.047	139.77	Interment Corporation	7	IRON AND STEEL FOUNDRIES	7/17/2003	1.212 8.34
Hewlett Packard	8	COMPUTER & OFFICE EQUIPMENT	7/17/1999	0.582	90550.01	Intel Corporation	8	SEMICONDUCTOR,RELATED DEVICE	5/20/1998	0.222 202053.40
Xerox	8	COMPUTER PERIPHERAL EQ, NEC	7/26/2001	0.926	5943.10	Nortel Networks	8	TELE & TELEGRAPH APPARATUS	11/1/2001	0.812 6198.77
National Presto	8	ELECTRIC HOUSEWARES AND FANS	5/1/1994	0.165	304.53	Juno Lighting	8	ELECTRIC LIGHTING, WIRING EQ	12/1/1994	0.130 332.23
Axcelis Technologies	8	SPECIAL INDUSTRY MACHY, NEC	1/23/2002	0.324	551.02	Ionics	8	SPECIAL INDUSTRY MACHY, NEC	7/1/2003	0.297 570.05
Breed Technologies	9	MOTOR VEHICLE PART,ACCESSORY	9/1/1997	1.007	564.28	McDermott International	9	SHIP & BOAT BLDG & REPAIRING	3/1/1997	0.816 1497.19
Comsat Corporation	12	COMMUNICATIONS SERVICES, NEC	7/19/1996	0.691	1213.86	TCA Cable TV	12	CABLE AND OTHER PAY TV SVCS	9/19/1997	0.819 1373.85
Citizens Communication	12	PHONE COMM EX RADIOTELEPHONE	11/1/2004	0.838	4013.49	Cincinnati Bell	12	PHONE COMM EX RADIOTELEPHONE	7/31/2003	1.385 1018.41
Enesco Group	13	MISC NONDURABLE GOODS-WHSL	1/15/2005	0.594	27.45	Owens & Minor	13	MED, DENTAL, HOSP EQ-WHSL	7/1/2005	0.587 1098.17
Rite Aid Corporation	14	DRUG & PROPRIETARY STORES	6/1/2003	1.068	2882.05	Neighborcare	14	DRUG & PROPRIETARY STORES	12/31/2003	0.545 1116.90
Bombay Company	14	FURNITURE STORES	2/7/2000	0.251	76.50	House2Home	14	LUMBER & OTH BLDG MATL-RETL	3/2/2000	0.445 98.50
Zale Corporation	14	JEWELRY STORES	8/1/2002	0.496	1312.90	Mayors Jewelers	14	JEWELRY STORES	10/1/2002	0.682 26.98
Books A Million	14	MISC SHOPPING GOODS STORES	2/1/2004	0.552	153.15	Dollar Tree Stores	14	VARIETY STORES	1/1/2004	0.351 3077.56
Charming Shoppes	14	WOMEN'S CLOTHING STORES	8/23/1995	0.407	500.98	Chicos	14	WOMEN'S CLOTHING STORES	2/1/1995	0.423 31.54
Sotheby's Holdings	15	BUSINESS SERVICES, NEC	4/1/1994	0.621	641.96	Safety-Kleen Corporation	15	BUSINESS SERVICES, NEC	1/1/1995	0.570 896.97
Tricord Systems	15	CMP INTEGRATED SYS DESIGN	11/1/2000	0.693	29.64	Reynolds & Reynolds	15	CMP INTEGRATED SYS DESIGN	11/8/2000	0.583 1659.66
Lucent Technologies	15	CMP INTEGRATED SYS DESIGN	1/6/2002	1.266	2652.64	Radiant Systems	15	CMP INTEGRATED SYS DESIGN	1/1/2002	0.278 236.08
Edgewater Technologies	15	CMP PROGRAMMING,DATA PROCESS	1/8/2002	0.063	54.21	Gtech Holdings	15	CMP PROGRAMMING,DATA PROCESS	8/1/2000	0.668 1648.17
Spherion Corporation	15	HELP SUPPLY SERVICES	4/9/2001	0.307	569.75	CDI Corporation	15	HELP SUPPLY SERVICES	10/1/2001	0.289 522.22
Aspect Communications	15	PREPACKAGED SOFTWARE	4/1/2000	0.554	411.40	Edwards J D & Co	15	PREPACKAGED SOFTWARE	4/7/2000	0.505 2848.48
Advent Software	15	PREPACKAGED SOFTWARE	5/1/2003	0.193	574.11	Verity	15	PREPACKAGED SOFTWARE	3/1/2003	0.137 518.19
Quintiles Transnational	16	COML PHYSICAL, BIOLOGCL RESH	4/2/2001	0.253	1903.92	Health Mgmt Assoc.	16	GEN MED & SURGICAL HOSPITALS	1/1/2001	0.354 5095.23
Banta Corporation	16	COMMERCIAL PRINTING	10/1/2002	0.421	1044.58	American Greetings	16	GREETING CARDS	6/1/2003	0.490 1529.52
Mattel	16	DOLLS AND STUFFED TOYS	1/1/1997	0.521	10862.10	Galooob Toys	16	GAMES,TOYS,CHLD VEH,EX DOLLS	6/1/1991	0.220 184.48
Russ Berrie & Co	16	DOLLS AND STUFFED TOYS	1/22/2003	0.102	700.41	Hasbro	16	GAMES,TOYS,CHLD VEH,EX DOLLS	5/14/2003	0.556 3734.64
Lee Enterprises	16	NEWSPAPER:PUBG, PUBG & PRINT	1/1/2001	0.318	1394.68	Gannett	16	NEWSPAPER:PUBG, PUBG & PRINT	6/1/2000	0.562 17869.53
New York Times	16	NEWSPAPER:PUBG, PUBG & PRINT	12/27/2004	0.666	3840.94	Media General	16	NEWSPAPER:PUBG, PUBG & PRINT	7/1/2005	0.536 1219.18

Table 1: Sample Set
Panel B: CEO Characteristics

Female Company Name	Age	Insider/ Outsider	Total Cash Comp.	Other Comp.	Restricted Stock	Options Granted	Male Company Name	Age	Insider/ Outsider	Total Cash Comp.	Other Comp.	Restricted Stock	Options Granted
Reynolds American	47	Out	2601.75	84.579	0	0	Altria Group	51	In	3760.078	28.175	0	8005.728
Gymboree	-	In	634.0118	0	0	1930.388	Albany International	67	In	1015.785	0	0	537.719
Springs Industries	-	In	677.7	0	0	1930.388	Russell Corporation	62	Out	1003.333	44.375	325.913	2537.044
Avon	47	In	1979.37	60.259	5400	0	Lauder Estee Cosmetics	-	In	4300	0	1500	31087.35
Natures Sunshine Products	-	In	100	0	0	0	Immulogic Pharmaceutical	-	Out	310	0	0	501.779
Alpharma Incorporated	-	In	1059.247	0	0	1226.884	Baush & Lomb	-	In	1100	883.608	5581.081	7911.373
Tower Automotive	-	Out	2350	0	254.8	0	Interment Corporation	-	In	475	112.184	0	287.866
Hewlett Packard	-	Out	2766.25	205.113	0	33706.65	Intel Corporation	66	In	2568.429	35.5	0	12836.61
Xerox	53	In	2500	185.212	2605	4166.855	Nortel Networks	-	In	825	0	0	3001.271
National Presto	53	In	282	0	0	0	Juno Lighting	-	Out	362.5	0	3.5	120.296
Axcelis Technologies	48	In	441.6202	3.5	0	1189.986	Ionics	-	Out	900	0	0	3835.161
Breed Technologies	-	In	414.299	27.341	0	0	McDermott International	-	In	1416	122.031	0	475.177
Comsat Corporation	-	In	778.872	8.37	498.749	0	TCA Cable TV	-	In	296.528	0	0	2752.063
Citizens Communication	51	Out	1540	377.635	2059.2	0	Cincinnati Bell	51	In	1516.41	43.364	0	1735.182
Enesco Group	43	In	577.1429	14.4	0	341.958	Owens & Minor	54	In	1738.207	0	278.355	689.07
Rite Aid Corporation	-	In	3623.875	123.776	0	0	Neighborcare	-	In	980	102.184	6077.521	14957.22
Bombay Company	-	In	763.4382	0	0	300.782	House2Home	67	In	420.2303	36.068	0	719.258
Zale Corporation	54	In	600	71.791	0	2345.7	Mayors Jewelers	-	Out	970.384	6.343	0	298.366
Books A Million	47	In	816.3636	4.725	116.99	0	Dollar Tree Stores	-	In	851.035	0	0	843.577
Charming Shoppes	-	Out	1570	67.978	1900	0	Chicos	-	In	418.1818	0	0	53.737
Sotheby's Holdings	-	In	1026	7.2	0	1168.541	Safety-Kleen Corporation	-	In	510.831	0	0	268.634
Tricord Systems	-	In	250	0	0	1508.66	Reynolds & Reynolds	-	In	867.548	1092.849	0	0
Lucent Technologies	53	In	2702.528	528.607	11005	22783.08	Radiant Systems	-	In	256.513	0	0	203.233
Edgewater Technologies	54	In	204.4818	10.961	0	341.358	Gtech Holdings	-	In	493.49	448.467	1794.421	4435.685
Spherion Corporation	-	Out	1677.171	0	619.5	1636.325	CDI Corporation	55	Out	936.875	0	0	0
Aspect Communications	-	In	835.201	0	0	8296.42	Edwards J D & Co	-	In	124.8	0	0	0
Advent Software	48	In	587.003	0	0	2401.392	Verity	-	In	687.5	0	0	819.345
Quintiles Transnational	-	Out	499.063	0	0	11062.29	Health Mgmt Assoc.	60	In	1251.563	0	695.313	7482.608
Banta Corporation	48	In	1030.529	0	0	1030.105	American Greetings	-	In	1628.571	2.01	0	579.766
Mattel	-	In	1545.511	0	0	28331.84	Galoob Toys	-	-	1437.5	0	0	594.232
Russ Berrie & Co	-	In	398.8498	47.505	0	11.015	Hasbro	63	In	3357.999	10.296	0	2316.36
Lee Enterprises	58	In	875	0	709.2	799.101	Gannett	66	In	4371.714	2.931	0	6484.491
New York Times	55	In	1377.9	121.45	2016.5	1085.087	Media General	60	In	1776.139	90.882	1909.44	512.011

Table 2: Market Adjusted Cumulative Average Abnormal Returns
Panel A: Male CEO to Female CEO Turnover (M2F)

Day	Average Abnormal Return	t-Statistic		Cumulative Average Abnormal Return	+: -
-20	-0.05%	-0.937		-0.05%	16:17
-19	-0.18%	-0.776		-0.23%	15:18
-18	-0.62%	-0.324		-0.85%	14:19
-17	0.36%	-0.566		-0.49%	18:15
-16	-0.07%	-0.913		-0.56%	15:18
-15	-0.02%	-0.975		-0.58%	18:15
-14	-0.19%	-0.758		-0.77%	14:19
-13	0.52%	-0.411		-0.25%	18:15
-12	0.17%	-0.785		-0.08%	16:17
-11	0.36%	-0.574		0.28%	17:16
-10	-0.57%	-0.37		-0.29%	17:16
-9	0.15%	-0.818		-0.14%	17:16
-8	0.31%	-0.62		0.17%	16:17
-7	-1.01%	-0.109		-0.84%	11:22 #
-6	0.91%	-0.151		0.07%	22:11 #
-5	-0.16%	-0.801		-0.09%	18:15
-4	-1.42%	-0.024	*	-1.51%	9:24 *
-3	0.02%	-0.981		-1.49%	16:17
-2	-0.34%	-0.593		-1.83%	19:14
-1	0.14%	-0.819		-1.69%	17:16
0	-0.19%	-0.768		-1.88%	14:19
1	0.25%	-0.694		-1.63%	12:21
2	0.01%	-0.982		-1.62%	15:18
3	-0.40%	-0.53		-2.02%	14:19
4	0.19%	-0.758		-1.83%	16:17
5	-1.11%	-0.078	#	-2.94%	17:16
6	-0.17%	-0.789		-3.11%	14:19
7	0.45%	-0.473		-2.66%	15:18
8	-0.08%	-0.899		-2.74%	17:16
9	0.32%	-0.614		-2.42%	15:18
10	0.44%	-0.482		-1.98%	19:14
11	-0.47%	-0.454		-2.45%	18:15
12	0.78%	-0.215		-1.67%	21:12
13	-0.25%	-0.696		-1.92%	14:19
14	-1.49%	-0.018	*	-3.41%	16:17
15	0.17%	-0.789		-3.24%	16:17
16	0.82%	-0.194		-2.42%	21:12
17	-0.27%	-0.674		-2.69%	13:20
18	0.18%	-0.778		-2.51%	16:17
19	0.30%	-0.633		-2.21%	15:18
20	-0.79%	-0.213		-3.00%	14:19

#, *, **, *** denotes statistical significance at the 0.1, 0.05, 0.01, and 0.001 respectively, using a 2-tailed test.

Table 2: Market Adjusted Cumulative Average Abnormal Returns
Panel B: Male CEO to Male CEO Turnover (M2M)

Day	Average Abnormal Return	t-Statistic		Cumulative	
				Average Abnormal Return	+ : -
-20	0.57%	-0.37		0.57%	22:11 *
-19	-0.73%	-0.246		-0.16%	14:19
-18	0.56%	-0.375		0.40%	16:17
-17	-0.52%	-0.408		-0.12%	10:23 *
-16	0.60%	-0.346		0.48%	18:15
-15	-0.92%	-0.147		-0.44%	17:16
-14	-0.35%	-0.578		-0.79%	15:18
-13	-0.37%	-0.561		-1.16%	16:17
-12	-0.48%	-0.449		-1.64%	16:17
-11	-0.02%	-0.976		-1.66%	17:16
-10	0.73%	-0.248		-0.93%	19:14
-9	-0.58%	-0.357		-1.51%	13:20
-8	0.49%	-0.437		-1.02%	20:13
-7	-1.19%	-0.059	#	-2.21%	15:18
-6	0.09%	-0.884		-2.12%	17:16
-5	-0.19%	-0.767		-2.31%	13:20
-4	0.20%	-0.751		-2.11%	15:18
-3	0.58%	-0.356		-1.53%	20:13
-2	0.13%	-0.836		-1.40%	14:19
-1	0.03%	-0.966		-1.37%	14:19
0	-1.21%	-0.056	#	-2.58%	8:25 **
1	-1.28%	-0.044	*	-3.86%	12:21
2	0.18%	-0.77		-3.68%	19:14
3	0.65%	-0.306		-3.03%	25:8 **
4	0.49%	-0.44		-2.54%	17:16
5	-0.86%	-0.173		-3.40%	17:16
6	-0.33%	-0.599		-3.73%	13:20
7	0.39%	-0.538		-3.34%	14:19
8	-0.87%	-0.168		-4.21%	16:17
9	-0.15%	-0.812		-4.36%	18:15
10	-0.69%	-0.276		-5.05%	18:15
11	-0.44%	-0.483		-5.49%	19:14
12	-0.33%	-0.597		-5.82%	15:18
13	-0.30%	-0.633		-6.12%	17:16
14	-0.69%	-0.274		-6.81%	20:13
15	-1.06%	-0.093	#	-7.87%	13:20
16	-0.36%	-0.572		-8.23%	18:15
17	-0.73%	-0.251		-8.96%	14:19
18	2.00%	-0.002	**	-6.96%	22:11 #
19	1.49%	-0.019	*	-5.47%	22:11 #
20	-0.17%	-0.783		-5.64%	11:22 #

#, *, **, *** denotes statistical significance at the 0.1, 0.05, 0.01, and 0.001 respectively, using a 2-tailed test.

Table 3: Cumulative abnormal returns (CARs) and Buy-and-hold abnormal returns (BHARs)

Panel A: Male CEO to Female CEO Turnover (M2F)

	Cumulative Abnormal Returns (CARs)						Buy-and-Hold Abnormal Returns (BHARs)					
	Market Model	p-value	Market Adjusted	p-value	Fama French TFM	p-value	Market Model	p-value	Market Adjusted	p-value	Fama French TFM	p-value
(-20, -1)	-4.31%	0.112	-1.70%	0.547	-3.74%	0.162	-4.24%	0.118	-1.23%	0.662	-3.59%	0.179
(0, 0)	-0.21%	0.732	-0.19%	0.768	-0.24%	0.686	-0.21%	0.732	-0.19%	0.768	-0.24%	0.686
(0, 1)	-0.18%	0.834	0.06%	0.945	-0.29%	0.724	-0.19%	0.826	0.08%	0.932	-0.30%	0.718
(0, 20)	-1.50%	0.590	-1.28%	0.658	-1.28%	0.637	-1.65%	0.552	-0.91%	0.753	-1.34%	0.620

#, *, **, *** denotes statistical significance at the 0.1, 0.05, 0.01, and 0.001 respectively, using a 2-tailed test.

Panel B: Male CEO to Male CEO Turnover (M2M)

	Cumulative Abnormal Returns (CARs)						Buy-and-Hold Abnormal Returns (BHARs)					
					Fama						Fama	
	Market Model	p-value	Market Adjusted	p-value	French TFM	p-value	Market Model	p-value	Market Adjusted	p-value	French TFM	p-value
(-20, -1)	-0.19%	0.544	-1.37%	0.627	-0.67%	0.811	-0.76%	0.784	-1.59%	0.574	-1.17%	0.677
(0, 0)	-0.86%	0.166	-1.21%	0.056	#	-0.98%	0.124	-0.86%	0.166	-1.21%	0.056	*
(0, 1)	-1.78%	0.042	*	-2.49%	0.005	**	-1.99%	0.030	*	-1.74%	0.046	*
(0, 20)	-3.88%	0.070	#	-4.29%	0.139		-3.84%	0.186		-4.45%	0.116	
												</

#, *, **, *** denotes statistical significance at the 0.1, 0.05, 0.01, and 0.001 respectively, using a 2-tailed test.