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Happy analysts

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ABSTRACT

This paper is the first to investigate the role of work-life balance in financial analysts' performance and career advancement. Using a large sample of Glassdoor reviews by financial analysts, we find a significant non-linear relation between work-life balance satisfaction and analyst performance and analyst career advancement. Specifically, when work-life balance satisfaction is relatively low, an increase in work-life balance is associated with better analyst performance and career advancement; however, when perceived work-life balance is already high, a further increase in work-life balance is associated with worse analyst performance and career advancement.

Happy Analysts

Abstract

This paper is the first to investigate the role of work-life balance in financial analysts' performance and career advancement. Using a large sample of Glassdoor reviews by financial analysts, we find a significant non-linear relation between work-life balance satisfaction and analyst performance and analyst career advancement. Specifically, when work-life balance satisfaction is relatively low, an increase in work-life balance is associated with better analyst performance and career advancement; however, when perceived work-life balance is already high, a further increase in work-life balance is associated with worse analyst performance and career advancement.

Happy Analysts

1. Introduction

Sell-side financial analysts are widely considered to hold one of the most challenging professions to achieve work-life balance due to long working hours and a competitive work environment.[1] Although financial analysts earn high salaries and have promising career growth prospects, they also bear the costs of high stress levels and limited time for self and family. In recent years, several investment banks have started programs to promote work-life balance among their employees. For example, Morgan Stanley offers month-long paid sabbaticals to junior bankers. Goldman Sachs reduced working hours for their junior employees after the death of the 21-year-old Bank of America Merrill Lynch intern Moritz Erhardt, who passed away after allegedly working nonstop for 72 hours.[2] Although work-life balance (henceforth, **WLB**) is a universally important issue, it is expected to vary across occupations, and its impact on financial analysts' careers has not yet been explored. The hurdle has likely been the lack of data on WLB of financial analysts. The recent emergence of social media such as Glassdoor makes such an inquiry possible. This paper investigates the role of broker-level WLB environment in financial analysts' performance and career advancement.

WLB has been defined as satisfaction at both work and non-work domains with minimum conflicts between these two roles (e.g., Braun and Peus 2016). In addition to work obligations, employees need to deal with the demands of personal and family life. While WLB is an individual construct, it is greatly affected by the WLB environment (e.g., work culture, work-life benefits and policies, etc.) shaped by the individual's employer. Ex-ante, the role of WLB in analyst performance is unclear. According to the "Yerkes and Dodson Law" (1908), stress and job performance have an inverted-U relation, implying that stress can initially improve performance

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but after a certain point, marginal increases in stress are associated with decreases in performance. Employees who can deal with the demands from their personal and professional life are less likely to be stressed at work, which in turn may facilitate job performance through creative problem solving and through better interpersonal performance (e.g., better social interactions). But practices that promote WLB may also hurt analyst performance by encouraging lateness and absenteeism to the workplace, which may result in lower levels of analyst job involvement and effort. Therefore, based on the Yerkes and Dodson Law, we predict an inverted-U relation between WLB and job performance. Meanwhile, analysts work in a more competitive and intense environment than many other employees, which brings into question whether WLB is associated with analyst job performance.[3] Prior studies suggest that the relation between job satisfaction and job performance is weak in professions with high performance standards because the pressure for production provides motivation to perform even when the employees are not satisfied with their employers (Judge, Thoresen, Bono, and Patton 2001). Given that financial analysts are among the highest-pressure professionals and are burdened with a large amount of responsibility, WLB may therefore not have an incremental effect on their performance.[4]

Similarly, the directional impact of WLB on analyst career advancement is ex-ante unclear. Analysts are known to frequently interact with institutional clients and managers of the covered firms, which are crucial to analyst career advancement (Hong and Kubik 2003; Groysberg, Healy, and Maber 2011; Maber, Groysberg, and Healy 2014; Brown, Call, Clement, and Sharp 2015). To the extent that lower stress resulting from better WLB facilitate an analyst's communications, responsiveness, and relationships with clients and managers, better WLB should lead to better career advancement. On the other hand, lower job involvement and effort resulting from better

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[3] https://www.investopedia.com/articles/financialcareers/06/financialanalyst.asp
[4] In other words, these are individuals who self-select into a career with less WLB than in many other professions, likely because they find satisfaction in the high compensation, excitement of the work, prestige, and/or future career opportunities.

WLB may hurt the value of the analyst as perceived by institutional clients and managers, leading to worse career advancement.

We hypothesize that an optimal level of WLB environment for analysts exists and thus the effect of WLB on analyst performance and career advancement depends on the current level of WLB relative to the optimal level. While low WLB satisfaction (e.g., extremely long hours at work) induces stress, and inefficiency, high WLB may encourage analysts to allocate too much of their resources such as time, energy, and cognitive effort to personal or family life. Given that these resources are not infinite, the more resources an analyst allocates to her personal life, the fewer resources are left for her work. Therefore, we expect that when the current level of WLB is relatively low, betterment of WLB improves analyst performance and career advancement through higher efficiency and better social interactions. In contrast, when the current level of WLB is already high, we expect that an increase in WLB decreases analyst performance and career advancement because the analyst may shift her focus to personal and family life.

To conduct our analyses, we first obtain the names of all U.S. brokers in the I/B/E/S database between 2008 and 2016. We manually collect *all* Glassdoor employee review webpages of each broker, identify reviews submitted by analyst employees, and extract data on individual reviews. Glassdoor is the largest online resource for prospective job candidates for employee reviews and potential compensation ranges. Glassdoor allows users to anonymously rate the WLB environment of their firms on a 1 to 5 scale. For each broker and year, we aggregate individual analysts' ratings to measure the WLB environment shaped by the broker. We construct two samples of Glassdoor reviews by analysts. The first (full) sample includes 11,602 Glassdoor reviews submitted by all research analyst employees, and the resulting WLB measure captures the overall WLB environment in a brokerage firm's research department.[5] The second (constrained)

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[5] We identify research analyst employees using following keywords in an employee's job title: analyst, associate, capital market, derivative, equity, fixed income, quantitative, research, securities, and valuation. We further carefully screen each employee's job title to exclude individuals who are not equity analysts.

sample includes 6,192 Glassdoor reviews submitted by equity research analyst employees, and the resulting WLB measure captures the WLB environment as perceived by equity research analysts.

Using a sample of I/B/E/S analysts who issued at least one earnings forecast, we first examine whether analysts' earnings forecast accuracy varies with WLB satisfaction about their employers. We document a non-linear relation. In the full sample, on average, analysts' forecast accuracy reaches the highest level when the WLB satisfaction with their employer is around 2.69 out of 5. Positive or negative deviations from this level result in lower forecast accuracy. We also find a non-linear relation between WLB and analysts' buy-recommendation profitability. For analysts working for brokers with WLB below (above) the inflection point, their recommendation profitability increases (decreases) with WLB satisfaction. These results hold also for the constrained sample. Overall, these results suggest that analysts' performance varies with WLB.

We next investigate the role of WLB in analysts' career advancement. We focus on two primary career outcomes: whether the analyst is voted as an All-Star by institutional investors and whether the analyst moves to a larger brokerage house (e.g., Hong and Kubik 2003). The results again suggest a non-linear relation for both the full and constrained samples. In particular, for analysts working at brokerage houses with WLB below (above) the inflection point, their likelihood of being voted as an All-Star Analyst and being promoted to larger brokerage houses increase (decrease) with WLB. Overall, these results suggest that the WLB environment shaped by employers has a direct impact on analysts' career outcomes.

We conduct several additional analyses. In our main analyses, we aggregate individual analysts' ratings at the broker-year level. We extend our analyses to the broker-*office*-year level. To obtain such granular data, we manually collect the LinkedIn profiles of the financial analysts in our sample and extract data on their current and historical work locations. We then aggregate a broker's WLB ratings in a given year and city to create a broker-office-year measure. In this way,

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we are able to test the cross-sectional difference of WLB environment *within* a broker.[6] The broker-office-level results are similar to the results at the broker level. For both the full and constrained samples, we consistently find a non-linear relation between the broker-office-level WLB and analysts' performance and career advancement.[7]

Our regressions include controls for a host of widely documented analyst, brokerage, and firm characteristics. Our inferences are robust after excluding brokers with extremely high or low ratings or excluding brokers with few Glassdoor reviews, after excluding the Glassdoor reviews submitted in October, when there is a higher likelihood of rating manipulation, and after controlling for other Glassdoor ratings such as Company Benefits and Career Opportunities. We also conduct tests that employ mergers and acquisitions among brokerage firms for exogenous variation in WLB as well as an instrumental-variables approach to better identify causality. Taken together, our results suggest that achieving optimal WLB is important for both analysts' performance and their career advancement.

We make several contributions to research and practice. First, we provide the first large-sample evidence that reaching the optimal broker-level WLB is important for financial analysts. Second, we contribute to the debate on WLB in the financial industry. Our findings suggest that shifting too much focus from work to life can hurt analysts' performance and their career advancement. Third, our findings complement the literature on the interaction of job satisfaction and job performance. Prior studies find that job satisfaction is positively correlated with stock returns (Edmans 2011; Green, Huang, Wen, and Zhou 2018) and that firms with high levels of job satisfaction have low financial reporting risks and are less likely to be subjected to SEC fraud enforcement actions and class action lawsuits (Ji, Rozenbaum, and Welch 2017). Our results suggest that job satisfaction may not always benefit job performance. Job satisfaction resulting

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[6] In other words, these analyses fully control for potential brokerage-house effects.
[7] In additional analyses, we also examine the potential moderating effects of analyst seniority, gender, and education. We find that gender and seniority matter but that education does not (see Section 5.2 for details).

from a high-level WLB may imply lower effort and thus hurt employees' performance and careers.[8]

We also contribute to the analyst literature by providing novel evidence on the effect of an important aspect of brokerage firm culture, WLB, on analysts. While prior studies have established the importance of tangible brokerage firm resources to analysts' performance, including general brokerage firm resources (Clement 1999; Jacob, Lys, and Neale 1999), analyst team members (Brown and Hugon 2009; Fang and Hope 2019), in-house debt analysts and macroeconomists (Hugon, Kumar, and Lin 2016; Hugon, Markov, and Lin 2019), and research directors (Bradley, Gokkaya, and Liu 2019), little is known about the role of intangible brokerage firm culture in analysts' performance and career outcomes. Our study fills this void and suggests that maintaining an adequate level of WLB should help brokerage firms remain competitive.

2. Literature Review and Hypotheses

2.1 Prior Literature on Work-Life Balance

In the management literature, WLB is an important component of job satisfaction. WLB is the perceived satisfaction between the arrangement of different roles in life (Braun and Peus 2016). WLB is not limited to family life, such as parenting and partnering, but also includes personal activities including sports, travel, and leisure. In addition to work obligations, an employee has to deal with the demands of personal and family life and seeks to achieve satisfying experiences in all life domains. To promote WLB among employees, firms adopt various types of programs such as on-site childcare, elder-care services, flextime, job sharing, paid leaves, compressed work weeks, shorter work weeks, and work-from-home programs given recent developments in

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[8] Our study also adds to the growing literature on information aggregation and the wisdom of the crowd. Research has examined the role of information aggregation from the online investing community in investment strategies (Chen, De, Hu, and Hwang 2014), and the role of online customer reviews in driving stock returns (Huang 2018). Our findings suggest that the aggregated opinions of individual financial analysts on their employers are associated with individual analysts' performance.

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telecommuting and social media. Overall, these WLB programs fall into three main categories: dependent care, family-stress programs, and flexible work arrangements (see Arthur 2003).

Prior research documents different consequences of WLB. On one hand, WLB can improve an employee's productivity. WLB is an important way to reduce the potential conflicts between work and personal life. Such conflicts can yield job stress, such as nervousness and anxiety associated with the job, which can affect an employee's emotional and physical health (Shamir and Salomon 1985; Netemeyer, Maxham, and Pullig. 2005; Jennings and McDougald 2007; Trefalt 2013). In this regard, WLB programs provide relief for non-work concerns. Employees may feel that they are receiving special treatment and in return contribute more effort to their employers. Konrad and Mangel (2000) and Bloom, Kretschmer, and Van Reenen (2011) find that work-life programs improve a firm's productivity when a higher percentage of professional employees are employed. Arthur (2003) documents a positive stock-market reaction to firms announcing WLB programs in the *Wall Street Journal*. He finds that stock returns increase 0.36% on the day of a work-family announcement. Netemeyer et al. (2005) show that WLB programs improve the performance of customer-service employees by reducing their job stress. In addition, prior studies find that long hours do not lead to greater productivity and may actually hurt work efficiency (Major, Klein, and Ehrhart 2002). For example, Lazear's (1981) model suggests that an efficient employment contract that maximizes productivity should have restrictions on the number of hours of work.

However, WLB programs can also hurt an employee's productivity. According to the competing-demands theory, both working and personal life have demands on resources such as time, energy, and cognitive effort (Konrad and Mangel 2000). All these resources are not infinite and can drain at some point. The more resources an employee allocates to personal life, the fewer resources are left for work. For example, Blau and Boal (1987) suggest that WLB programs can reduce work effort, encourage lateness, and even cause absenteeism. Using samples of New

Zealand firms, Guthrie (2001) and Rich, Lepine, and Crawford (2010) find that work involvement has a positive association with firm productivity. To the extent that WLB programs reduce the level of work involvement, these programs may hurt employees' performance (Perry-Smith and Blum 2000). Moreover, corporate management may fear that their WLB programs provide flexibility, which can result in less stable employment patterns and lower organizational commitment from employees. Some prior studies suggest that the shift to more flexible job functions (e.g., working-at-home) can reduce employees' social connections and dissatisfy the social needs of employees and thus hurt their performance (Shamir and Salomon 1985).

In recent years, researchers have started to investigate the role of job satisfaction, including WLB, in capital-market settings. For example, Edmans (2011) and Green et al. (2018) find a positive association between employee satisfaction and stock returns. Ji et al. (2017) document that firms with low levels of job satisfaction are more likely to be subjected to SEC fraud enforcement actions and securities class action lawsuits. Khavis and Krishnan (2018) show that better WLB is associated with higher audit quality.[9]

2.2 Work-Life Balance for Financial Analysts

The investment banking industry, including sell-side equity research, is well-known for its long working hours. It is common for equity-research analysts to work 70 to 110 hours each week during the earnings season. There are three reasons for financial analysts to work long hours. First, analysts sell their time and attention to clients. When a client pays the brokerage firm large fees to advise on a deal, or when an institutional investor calls about the prospects of a firm the brokerage firm follows, the analysts are expected to do whatever the client wants at any time of the day. Analysts also need to spend time marketing themselves and their covered firms to their clients.

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[9] Khavis and Krishnan (2018) use a sample of Glassdoor reviews by audit employees to construct WLB ratings for audit firms. They examine the linear association between accounting-firm-level WLB and audit quality, as measured by clients' propensity of financial restatements and the likelihood of receiving a going-concern opinion, and they find a positive association between WLB and audit quality. See also Buchheit, Dalton, Harp, and Hollingsworth (2016).

Second, in the middle of their service, random events, requests, and problems arise. Other industries with unpredictable work demands handle these issues by hiring teams working in shifts, but this approach does not work as well in the banking industry. Third, working long hours is deeply embedded into the culture of financial service firms. Given this long-hour practice, it is challenging for analysts to rest enough and/or spend time on their own personal interests or family.

After the financial crisis, investment banks had to cut costs and had difficulty relying on large bonuses to keep their junior employees. Instead, the banks needed to find other ways, such as improving WLB, to retain their financial analysts. In recognition of these issues, in recent years, brokerage firms have started various programs to promote WLB among their employees. For example, UBS permits investment bankers to take at least two hours of personal time each week. JPMorgan Chase asks their employees to take weekends off unless they are working on a major deal. Morgan Stanley offers month-long paid sabbaticals to junior bankers. Goldman Sachs has reduced working hours for their junior employees after a Bank of America Merrill Lynch intern died after allegedly working 72 hours without sleep.

2.3 Hypotheses

2.3.1 Work-Life Balance and Analysts' Performance

While WLB is an individual level construct, it is greatly affected by employer-level factors such as business scope, work culture, and work-life benefits and policies. Yet, the effect of WLB satisfaction on an analyst's performance is ex ante unclear. WLB satisfaction can affect analysts' job performance through the level of stress. Starting from Yerkes and Dodson (1908), researchers find an inverted-U relation between stress and job performance.[10] This robust relation is referred to as the Yerkes-Dodson Law in the management and psychology literature. This law posits that

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[10] Eysenck (1955) and Hebb (1955) suggest that Yerkes-Dodson Law holds true for the relations between anxiety and task performance in humans. Broadhurst (1957) find a curvilinear relation between motivation and performance when increasingly intense motivation is used. Cohen (2011) concludes that the inverted-U-shaped function between arousal and performance is robust.

there is an optimal level of stress for task performance, and that departures from this level in either direction reduce performance (Ariely, Gneezy, and Loewenstein 2009). Ashton (1990) introduced this concept to the accounting literature and suggests that pressures can initially improve decision-making performance to a point and then result in a decrease in performance as pressures keep increasing. Analysts who can balance their multiple roles in personal and family life are less likely to be stressed at work, which in turn can facilitate job performance such as creative problem solving, and can also facilitate their social interactions and thus increase the breadth and depth of their information sources (Organ 1977; Petty, McGee, and Cavender 1984; Ostroff 1992; Staw and Barsade 1993; Fisher 2003; Barsade and Gibson 2007). Meanwhile, analysts have limited resources including time, energy, and effort (Konrad and Mangel 2000). When they allocate more resources to "life," they have to allocate fewer resources to work. In this regard, at some point further WLB satisfaction may decrease an analyst's work involvement and thus hurt their performance.

Based on the above discussion, according to the Yerkes and Dodson Law, we predict an inverted-U relation between WLB and job performance. In particular, we hypothesize that the effect of WLB satisfaction on an analyst's performance depends on the current level of WLB relative to the optimal level. We expect that when WLB satisfaction is relatively low, an increase in WLB satisfaction can improve an analyst's efficiency and thus lead to better performance. In contrast, when WLB satisfaction is already high, we expect that a further increase in WLB causes an analyst to shift too much focus to personal and family life, thus leading to worse performance. Summarizing the preceding discussion, our first hypothesis is (stated in the alternative form):

H1: Additional work-life balance improves analysts' performance when work-life balance is low, but decreases analysts' performance when work-life balance is high.

However, there are reasons that we may not observe the predicted results. For example, some prior research suggests that the relation between job satisfaction and job performance is weak in professions with high performance standards because the pressure for production provides motivation to perform even when the employees are not satisfied with their employers (Brayfield and Crockett 1955; Judge et al. 2001; Christen, Iyer, and Soberman 2006). Given that financial analysts are among the highest-pressure professionals and are burdened with a large amount of responsibility, WLB may not have an incremental effect on their performance.

2.3.2 Work-Life Balance and Analysts' Career Advancement

WLB satisfaction has the potential to also influence the career outcomes of financial analysts. In addition to producing equity research, analysts are known to frequently interact with their clients (e.g., arranging non-deal roadshows, hosting investor conferences, and providing one-on-one meetings and other high-touch services) and are expected to meet customer requests and demands (Maber et al. 2014). In a recent survey by Brown et al. (2015), consistent with Groysberg et al. (2011) and Maber et al. (2014), 83% of financial analysts indicate that broker or client votes of approval are important for analysts' compensation and career opportunities. Analysts' interactions with clients have a high degree of discretion and thus provide opportunities for attitudes and motives to affect their behavior (Judge et al. 2001). When analysts have good WLB and are less stressed at work, they can provide their clients additional services and assistance that go beyond their job description. They can also improve the quality of services that they provide, and thus build trust and good relationships with clients, which in turn could help them win All-Star awards or get promoted to larger firms. However, the more analysts allocate their time, energy, and effort to their personal life, the fewer resources are left for them to maintain their relationships with clients and connections. For example, Shamir and Salomon (1985) indicate that the shift to

more flexible job functions (e.g., working-at-home) can reduce the time to maintain employees' social connections.

Overall, our prediction is that the effect of WLB satisfaction about a broker-employer on an analyst's career advancement depends on the current level of WLB satisfaction relative to the optimal level. We expect that when the level of WLB satisfaction is relatively low, increases in WLB satisfaction enhance the likelihood of financial analysts to be voted as All-Stars or to be promoted to a larger brokerage firm. In contrast, when the level of WLB satisfaction is already high, we expect that further WLB satisfaction decreases the likelihood of financial analysts to be voted as All-Stars or obtain a position with a larger brokerage firm. To summarize, our second hypothesis is as follows (stated in the alternative form):

H2: Additional work-life balance helps analysts' career advancement when work-life balance is low, but hurts analysts' career advancement when work-life balance is high.

3. Sample Selection and Variable Measurement

3.1 Sample-Selection Procedures

Table 1 summarizes the sample-selection procedures. We construct two samples of Glassdoor reviews by analysts. We start constructing the first (full) sample by obtaining the names of all of the U.S. brokers in the I/B/E/S database between 2008 and 2016. We then manually collect 11,602 Glassdoor employee review webpages submitted by analysts of these brokers, using the following keywords in an employee's job title: analyst, associate, capital market, derivative, equity, fixed income, quantitative, research, securities, and valuation. Our full sample includes all research analyst employees in a brokerage firm's research departments.[11] We then merge these

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[11] Anecdotal evidence suggests that several sell-side firms have merged their research departments to promote collaboration between analyst employees (Ronan 2006; Abramowitz 2008; Groysberg and Vargas 2007). As such, our full sample captures the perceptions of all research analysts in a brokerage firm.

Glassdoor reviews with the I/B/E/S dataset and further restrict the sample to meet the following criteria: (1) with I/B/E/S information to calculate earnings forecast errors; (2) with financial data such as market value and market-to-book ratio; (3) with sufficient information to calculate control variables. These procedures result in an initial sample of 140,202 analyst-firm-year observations consisting of 5,336 analysts and 3,519 firms for the tests of analyst performance.

Next, to better capture equity analyst employees' perceptions about a brokerage firm, we compile the second (constrained) sample by further screening the job titles of employees who submitted Glassdoor reviews and including 6,192 Glassdoor reviews by equity research analyst employees only. This process results in a smaller sample of 104,258 analyst-firm-year observations consisting of 4,773 analysts and 3,403 firms for the tests of analyst performance. We examine both the full and constrained samples because a trade-off exists between fine-tuning the definition of the analysts included in the sample and the sample size used for empirical analyses (and thus generalizability). Furthermore, fine-tuning the definition of analysts reduces the number of individual Glassdoor reviews available for calculating broker-level measures (see Section 3.2.1), which could potentially affect the stability of such aggregated measures. [12]

3.2 Main Variables

3.2.1 Work-Life Balance Ratings

Glassdoor is the largest online resource for prospective job candidates for employee reviews and compensation information. Glassdoor allows users to anonymously rate various aspects of their firms on a 1 to 5 scale, for instance, overall rating, company benefits, WLB, and senior management.[13] We aggregate all ratings for each broker in a given year to create a broker-

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[12] It is unlikely that all of the I/B/E/S analysts in our sample submit a review to Glassdoor. Some of these Glassdoor reviews may be submitted by analysts who are not in the I/B/E/S database or by other members in an analyst team.
[13] According to Glassdoor, a company rating between 1.00 and 1.50 indicates that employees are "Very Dissatisfied," between 1.51 and 2.50 indicates "Dissatisfied," between 2.51 and 3.50 indicates "OK," between 3.51 and 4.00 indicates "Satisfied," and between 4.01 and 5.00 indicates "Very Satisfied."

year measure, aiming to capture analyst employees' satisfaction about the work-life environment shaped by the broker. [14]

Table 2 presents the summary statistics of Glassdoor ratings (full sample) for the broker-year combinations in our sample. During our sample period, there are 551 broker-years with analyst employee ratings. Comparing the ratings by analyst employees with those by non-analyst employees, we find that analyst employees have lower ratings for WLB but higher ratings for senior management, culture and values, career opportunities, and outlook.[15] Untabulated analyses show that analysts tend to provide more comprehensive reviews that cover both the good and the bad about the company, suggesting that their ratings are based on more careful evaluations.[16] In addition, analysts' ratings for a given broker seem to be quite stable over time.

Our WLB measure in the full sample (constrained sample) is the average WLB rating submitted by research analyst (equity research analyst) employees for a given brokerage firm in year t.[17] Therefore, the WLB measure in the full sample captures the WLB culture of the research department of a given brokerage. We focus on WLB satisfaction instead of other aspects in job satisfaction of financial analysts for three reasons. First, job satisfaction is a broad definition that includes compensation, benefits, job growth, WLB, and culture. Focusing on one aspect, such as WLB, allows us to isolate the effects from other aspects of job satisfaction (see Section 5.7). Second, WLB is an important issue in the financial industry. Unlike other professions that may more easily accommodate a home-based work style (e.g., some IT engineers who can work with

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[14] These employee reviews are anonymous, so we are unable to match individual analysts' WLB ratings to their performance and career outcomes. Nevertheless, given that employer-brokers significantly affect individual analysts' WLB satisfaction, it is important to study the effect of broker-level WLB satisfaction before going further into analyst-level WLB. The use of aggregated ratings is both consistent with prior literature and appropriate because analysts within the same firm are sufficiently homogenous so that the aggregation process can remove random individual differences and result in a more accurate broker-level measure (Hofstede, Neuijen, Ohayv, and Sanders 1990; Ostroff 1992, 1993). In Section 5.1 we examine performance and career outcomes at the *broker-office* level.

[15] We collect an additional 55,012 non-analyst employee reviews for this analysis. The comparison is based on 464 broker-years with both analyst and non-analyst employee ratings.

[16] Glassdoor rejects about 5% to 10% of submitted reviews because those reviews are created by fake accounts, are suspected "ballot box stuffing," have offensive content, or violate its community guidelines.

[17] In an untabulated analysis, we compare the ratings by current analyst employees with those by former analyst employees. We find that the ratings by the two groups are similar in all aspects. Therefore, to increase the precision of the WLB measure, we use both current and former analyst employee ratings to measure WLB at the broker level.

a computer no matter where they are), working long and potentially uncertain hours in the office is the culture in the financial services industry, and it is important to understand how WLB may affect analyst performance. Third, the implications of WLB in the financial services industry is unclear, because there are tradeoffs in implementing WLB programs. As such, our study has implications for both academia and practice.

3.2.2 Analyst Performance Measures

We construct two primary proxies for analyst performance: earnings forecast accuracy and stock-recommendation profitability. Earnings forecast accuracy (*Forecast Accuracy*) is measured as (1 – standardized relative *Forecast Error*), where *Forecast Error* is defined as the absolute value of the analyst's initial earnings forecast for firm *j* minus firm *j*'s actual EPS in year *t*, scaled by the stock price at the beginning of the year, and then standardized to range from 0 to 1 to control for firm-year effects (Clement and Tse 2003). Specifically, the standardized relative *Forecast Error* for analyst *i* following firm *j* in year *t* is calculated as [*Forecast Error$_{i,j,t}$* – min(*Forecast Error$_{j,t}$*)]/[max(*Forecast Error$_{j,t}$*) – min(*Forecast Error$_{j,t}$*)], where max(*Forecast Error$_{j,t}$*) and min(*Forecast Error$_{j,t}$*) denote, respectively, the largest and smallest earnings forecast errors of all of the analysts following firm *j* in year *t*. By construction, a higher value of relative *Forecast Accuracy* indicates that the earnings forecast is more accurate.

Our second proxy for analyst performance is stock-recommendation profitability (*BHAR*), which is measured as the natural logarithm of one plus the buy-and-hold market-adjusted return to the analyst's first recommendation for firm *j* in year *t*. The window for calculating *BHAR* is the analyst's [current recommendation date + 2 days, next recommendation date – 2 days].[18] Following Cohen, Frazzini, and Malloy (2010), we let a recommendation expire if it is not revised or reiterated within 365 days.

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[18] We derive similar results when including the announcement window return (i.e., using [current recommendation date – 1 day, next recommendation date – 2 days]).

3.2.3 Analyst Career Outcome Measures

To examine the role of WLB in analysts' career advancement, we rely on *Institutional Investor*'s All-Star Analyst award status and a promotion measure constructed based on the brokerage firm size. Each year, *Institutional Investor* magazine asks institutional investors to vote for the top sell-side equity analysts, where the buy-side voters would take into account an analyst's industry knowledge, responsiveness, special services, and research quality, among other things, when casting votes. We create an indicator variable (*AA Award*) that is set to one if the analyst is ranked in the top three or as a runner-up in her industry by *Institutional Investor* in year *t* and zero otherwise. For analyst promotion, we follow Hong and Kubik (2003) and create an indicator variable (*Promotion*) that is set to one if the analyst moves to a top-decile-size brokerage firm in year *t* and zero otherwise.[19]

3.2.4 Control Variables

Following the analyst literature (e.g., Clement 1999; Jacob et al. 1999; Lim 2001; Clement and Tse 2003), in our tests of analyst performance, we control for earnings forecast frequency (*Forecast Frequency*), earnings forecast horizon (*Forecast Horizon*), brokerage firm size (*Broker Size*), number of firms followed (*Number of Firms*), number of industries followed (*Number of Industries*), and firm experience (*Firm Experience*), all of which are standardized to range from 0 to 1. In our tests of career advancement, we additionally control for average firm size (*Size*), average market-to-book ratio (*MTB*), and average market beta (*Beta*) of the firms in the analyst's research portfolio. We also control for forecast characteristics such as average relative forecast accuracy (*Forecast Accuracy*), average relative forecast boldness (*Forecast Boldness*), and

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[19] We acknowledge that this measure does not consider within-brokerage firm advancements. However, it is a common proxy for promotion in the analyst literature (e.g., Leone and Wu 2007; Kumar 2010; Hilary and Hsu 2013; Li, Lin, and Lu 2018). In Section 5.8 we consider additional career outcomes.

average forecast optimism (*Forecast Optimism*). The Appendix contains a complete list of variable definitions.

3.3 Descriptive Statistics

Panel A of Table 3 presents the unstandardized descriptive statistics for the full sample used in the forecast accuracy tests. In line with prior findings, the median analyst issues four earnings forecasts for a firm, follows seventeen firms within three two-digit SIC industries, and has four years of client-firm-specific experience. Panel B of Table 3 presents the descriptive statistics for the full sample used in the stock-recommendation tests. Panels D and E of Table 3 respectively report the descriptive statistics for the constrained sample used in the forecast accuracy and stock-recommendation tests, which are similar to those reported in Panel A and B.

Panel C of Table 3 presents descriptive statistics for the full sample used in the analyst career-outcome tests. In this sample, 11.9% of the analysts are awarded All-Stars and 1.9% of the analysts move to a top-decile-size brokerage firm. Untabulated correlations show that *Work-Life Balance* has a negative and significant correlation with *Forecast Accuracy, Forecast Frequency, Number of Firms*, and *Number of Industries*. These correlations suggest that higher WLB satisfaction is associated with less work involvement. Panel F of Table 3 reports the descriptive statistics for the constrained sample, which are similar to those reported in Panel C except that 14.7% of the analysts are awarded All-Stars and 1.6% of the analysts move to a top-decile-size brokerage firm. We winsorize the continuous variables at the top and bottom 1%.

4. Research Design and Empirical Results

4.1 Work-Life Balance and Earnings Forecast Accuracy

H1 predicts that WLB satisfaction will have a non-linear relation with analyst performance. To test this hypothesis, we first examine the effect of WLB satisfaction on analysts' earnings

forecast accuracy, controlling for other determinants including brokerage firm size, number of firms followed, number of industries followed, firm experience, forecast frequency, and forecast horizon. As mentioned in Section 3, we standardize forecast accuracy error and the control variables to control for firm-year effects.[20] Specifically, we estimate the following quadratic model (e.g., McConnell and Servaes 1990; Himmelberg, Hubbard, and Palia 1999; Collin-Dufresne et al. 2001; Wyatt 2005; Hilary and Huang 2018):

$$
\begin{aligned}
\textit{Forecast Accuracy} = \alpha \ + \ &\beta_1 \cdot \textit{Work-Life Balance} \ + \ \beta_2 \cdot \textit{Work-Life Balance}^2 \\
+ \ &\beta_3 \cdot \textit{Broker Size} \ + \ \beta_4 \cdot \textit{Number of Industries} \\
+ \ &\beta_5 \cdot \textit{Number of Firms} \ + \ \beta_6 \cdot \textit{Firm Experience} \\
+ \ &\beta_7 \cdot \textit{Forecast Frequency} + \beta_8 \cdot \textit{Forecast Horizon} + \varepsilon
\end{aligned}
\tag{1A}
$$

where *Work-Life Balance* denotes the work-life environment shaped by the brokerage firm, measured as the average WLB rating submitted by analysts for a given brokerage firm in year *t*. *Work-Life Balance*^{2} is the squared term of *Work-Life Balance*. We include the squared term because we expect a non-linear relation between *Work-Life Balance* and *Forecast Accuracy*. A positive (negative) coefficient on *Work-Life Balance*^{2} would indicate a convex (concave) relation between WLB and forecast accuracy.[21]

Panel A of Table 4 reports the results from estimating Equation (1A) using the full sample. In column 1, we estimate Equation (1A) without the squared term of *Work-Life Balance*. In this specification, *Work-Life Balance* is negative and significant. More importantly, column 2 reports the full result from estimating Equation (1A). The result shows that an inverted U-shaped relation

---

[20] In untabulated tests, we explicitly control for firm size, market-to-book ratio, and firm performance, and our inferences are robust.

[21] In robustness tests, we use spline specifications that include three piecewise-linear terms (Morck, Shleifer, and Vishny 1988; Cho 1998; Himmelberg et al. 1999; Davies, Hillier, and McColgan 2005). Our conclusions are unaltered with this alternative specification (see Section 5.9 for details).

exists between WLB and analysts' forecast accuracy. Both coefficients of *Work-Life Balance* and *Work-Life Balance^2* are statistically significant at the 1% level, with positive and negative signs, respectively. These findings are consistent with our hypothesis that the association between WLB satisfaction and forecast accuracy is different at high and low levels of WLB satisfaction.

We provide a descriptive plot in Panel A of Figure 1 to help with the interpretation of these results. When *Work-Life Balance* is lower than the inflection point (there are 91 broker-years in this case), *Forecast Accuracy* increases with *Work-Life Balance*. However, after the inflection point (there are 460 broker-years in this case), *Forecast Accuracy* decreases with *Work-Life Balance*.[22]

To help interpret the economic magnitude of the effect we document, we further create two variables: *|Abn. Pos. Work-Life Balance|* (*|Abn. Neg. Work-Life Balance|*) is the absolute value of the difference between a brokerage firm's rating and the WLB level at the inflection point when the broker's rating is higher (lower) than the inflection point. Then we estimate the following model:

$$
\begin{aligned}
Forecast\ Accuracy = \alpha &+ \beta_1 \cdot |Abn.\ Pos.\ Work\text{-}Life\ Balance| \\
&+ \beta_2 \cdot |Abn.\ Neg.\ Work\text{-}Life\ Balance| + \beta_3 \cdot Broker\ Size \\
&+ \beta_4 \cdot Number\ of\ Industries + \beta_5 \cdot Number\ of\ Firms \\
&+ \beta_6 \cdot Firm\ Experience + \beta_7 \cdot Forecast\ Frequency \\
&+ \beta_8 \cdot Forecast\ Horizon + \varepsilon \qquad\qquad (1B)
\end{aligned}
$$

In column 3 of Table 4, Panel A, we find the coefficient estimates on *|Abn. Pos. Work-Life Balance|* and *|Abn. Neg. Work-Life Balance|* are both negative and significant, consistent with our

---

[22] To calculate the inflection point, we begin with estimating the partial derivative of column 2, with respect to *Work-Life Balance* and setting it equal to zero. At the inflection point, the marginal effect of *Work-Life Balance* should be equal to zero (since the inflection point is the apex of the curve). The partial derivative is equal to $0.0340 + 2 \times (-0.0063) \times$ *Work-Life Balance* $= 0$. Solving for *Work-Life Balance* gives us 2.69.

prior finding that the inflection point of *Work-Life Balance* is estimated to be approximately 2.69 out of 5. These results suggest that a positive (negative) one-point deviation from the inflection point of *Work-Life Balance* is associated with a 1.13% (0.95%) decrease in the relative *Forecast Accuracy*, which is approximately 3.5% (2.9%) of the standard deviation of the relative *Forecast Accuracy*. We interpret these estimates to be both plausible and economically significant.

Panel B of Table 4 reports the results based on the constrained sample, which measures WLB using only equity analysts' reviews. The inferences are the same as those based on the full sample. In column 2, we find an inverted U-shaped relation between WLB and analysts' forecast accuracy. In column 3, we document that a positive (negative) one-point deviation from the inflection point of *Work-Life Balance* is associated with a 0.80% (0.89%) decrease in the relative *Forecast Accuracy*, which is approximately 2.5% (2.8%) of the standard deviation of the relative *Forecast Accuracy* in the constrained sample.

4.2 Work-Life Balance and Stock-Recommendation Profitability

Next, we examine the effect of WLB satisfaction on analysts' stock-recommendation profitability (*BHAR*) as another measure for performance. We estimate the following quadratic model separately for buy and sell recommendations, where buy (sell) recommendations include analysts' strong buy and buy (hold, sell, and strong sell) recommendations.

$$
\begin{aligned}
BHAR = {} & \alpha + \beta_1 \cdot \textit{Work-Life Balance} + \beta_2 \cdot \textit{Work-Life Balance}^2 \\
& + \beta_3 \cdot \textit{Broker Size} + \beta_4 \cdot \textit{Number of Industries} + \beta_5 \cdot \textit{Number of Firms} \\
& + \beta_6 \cdot \textit{Firm Experience} + \beta_7 \cdot \textit{Firm Size} + \beta_8 \cdot \textit{Market-to-Book} + \beta_9 \cdot \textit{Beta} \\
& + \textit{Industry Fixed Effects} + \varepsilon \qquad\qquad\qquad\qquad\qquad\qquad (2A)
\end{aligned}
$$

where *BHAR* is the natural logarithm of one plus the buy-and-hold market-adjusted return to the analyst's stock recommendation for firm *j*. *Firm Size* is the natural logarithm of firm *j*'s market value at the beginning of year *t*. Market-to-Book is firm *j*'s market-to-book ratio at the beginning of year *t*. *Beta* is firm *j*'s market beta during year *t*.

Panel A of Table 5 reports the results from estimating Equation (2A) using the full sample. Column 1 reports the result without the squared term of *Work-Life Balance* for analysts' buy recommendations. In this specification, *Work-Life Balance* is insignificant. Column 2 reports the full result from estimating Equation (2A). The result shows that an inverted U-shaped relation also exists between WLB and analysts' buy-recommendation profitability. Both coefficients of *Work-Life Balance* and *Work-Life Balance²* are statistically significant at the 5% level, with positive and negative signs, respectively. These findings are consistent with H1. However, in columns 4 and 5, we do not find significant effects of *Work-Life Balance* on analysts' sell-recommendation profitability.[23]

As with the test of forecast accuracy, we calculate the inflection points based on the coefficients of *Work-Life Balance* and *Work-Life Balance²* in column 2. Then we define *|Abn. Pos. Work-Life Balance|* (*|Abn. Neg. Work-Life Balance|*) as the absolute value of the difference between a brokerage firm's rating and the WLB level at the inflection point when the broker's rating is higher (lower) than the inflection point, and estimate the following model:

$$
\begin{aligned}
BHAR = {}& \alpha + \beta_1 \cdot |Abn.\ Pos.\ Work\text{-}Life\ Balance| + \beta_2 \cdot |Abn.\ Neg.\ Work\text{-}Life\ Balance| \\
& + \beta_3 \cdot Broker\ Size + \beta_4 \cdot Number\ of\ Industries + \beta_5 \cdot Number\ of\ Firms \\
& + \beta_6 \cdot Firm\ Experience + \beta_7 \cdot Firm\ Size + \beta_8 \cdot Market\text{-}to\text{-}Book + \beta_9 \cdot Beta \\
& + Industry\ Fixed\ Effects + \varepsilon
\end{aligned}
\tag{2B}
$$

---

[23] A possible explanation is that the literature consistently shows a much stronger market response to sell recommendations (i.e., there may be less room for incremental effects of WLB).

In column 3 of Table 5, Panel A, the results show that the coefficient estimates on *|Abn. Pos. Work-Life Balance|* and *|Abn. Neg. Work-Life Balance|* are both negative and significant, suggesting that deviations from the inflection point of WLB level are associated with less profitable buy recommendations and thus worse analyst performance.[24] In economic terms, a positive (negative) one-point deviation from the inflection point of *Work-Life Balance* is associated with a 1.05% (1.17%) decrease in the stock return, which is approximately 3.7% (4.1%) of the standard deviation of the untransformed *BHAR*.

Panel B of Table 5 reports the results based on the constrained sample, which measures WLB using only equity analysts' reviews. The inferences are similar to those based on the full sample. In column 2, we again find an inverted U-shaped relation between WLB and analysts' buy-recommendation profitability. In column 3, the results suggest that a positive one-point deviation from the inflection point of *Work-Life Balance* is associated with a 1.81% decrease in stock returns, which is approximately 5.7% of the standard deviation of the untransformed *BHAR*. However, in contrast to the full sample, we do not find a significant effect of a negative deviation from the inflection point of *Work-Life Balance* on stock returns.

4.3 Work-Life Balance and Analyst Career Outcomes

H2 predicts that WLB satisfaction has a non-linear relation on analysts' career outcomes. We examine whether additional WLB satisfaction helps analysts to be voted as All-Stars or to be promoted to a large brokerage firm when the current WLB is relatively low, and whether additional WLB decreases the likelihood for analysts to be voted as All-Stars or to be promoted to a large brokerage firm when the current WLB satisfaction is already high. To test this hypothesis, we estimate the following probit models:

---

[24] For completeness, we conduct a similar analysis for analysts' sell recommendations and report the result in column 6. However, given the insignificant result in column 5, we do not discuss the result in column 6.

$$
\begin{aligned}
\textit{Career Outcome} = \alpha\ +\ &\beta_1 \cdot \textit{Work-Life Balance}\ +\ \beta_2 \cdot \textit{Work-Life Balance}^2 \\
+\ &\beta_3 \cdot \textit{Forecast Accuracy}\ +\ \beta_4 \cdot \textit{Forecast Boldness} \\
+\ &\beta_5 \cdot \textit{Forecast Optimism}\ +\ \beta_6 \cdot \textit{Forecast Frequency} \\
+\ &\beta_7 \cdot \textit{Forecast Horizon}\ +\ \beta_8 \cdot \textit{Broker Size} \\
+\ &\beta_9 \cdot \textit{Number of Industries}\ +\ \beta_{10} \cdot \textit{Number of Firms} \\
+\ &\beta_{11} \cdot \textit{Firm Experience}\ +\ \beta_{12} \cdot \textit{Beta}\ +\ \beta_{13} \cdot \textit{Firm Size} \\
+\ &\beta_{14} \cdot \textit{Market-to-Book}\ +\ \textit{Year Fixed Effects}\ +\ \varepsilon \qquad (3A)
\end{aligned}
$$

$$
\begin{aligned}
\textit{Career Outcome} = \alpha\ +\ &\beta_1 \cdot |\textit{Abn. Pos. Work-Life Balance}| \\
+\ &\beta_2 \cdot |\textit{Abn. Neg. Work-Life Balance}|\ +\ \beta_3 \cdot \textit{Forecast Accuracy} \\
+\ &\beta_4 \cdot \textit{Forecast Boldness}\ +\ \beta_5 \cdot \textit{Forecast Optimism} \\
+\ &\beta_6 \cdot \textit{Forecast Frequency}\ +\ \beta_7 \cdot \textit{Forecast Horizon} \\
+\ &\beta_8 \cdot \textit{Broker Size}\ +\ \beta_9 \cdot \textit{Number of Industries} \\
+\ &\beta_{10} \cdot \textit{Number of Firms}\ +\ \beta_{11} \cdot \textit{Firm Experience}\ +\ \beta_{12} \cdot \textit{Beta} \\
+\ &\beta_{13} \cdot \textit{Firm Size}\ +\ \beta_{14} \cdot \textit{Market-to-Book}\ +\ \textit{Year Fixed Effects}\ +\ \varepsilon \qquad (3B)
\end{aligned}
$$

where *Career Outcome* denotes *AA_Award* or *Promote*. *AA_Award* is an analyst's All-American Research Team status, an indicator variable set to one if the analyst is ranked in the top three or as a runner-up by *Institutional Investor* in her industry in year *t*, and zero otherwise. *Promotion* proxies for analyst promotion to a large brokerage firm and is measured as an indicator variable set to one if the analyst moves to a top-decile-size brokerage firm in year *t*, and zero otherwise. All other variables are defined in the Appendix.

Panel A of Table 6 reports the results from estimating Equation (3A) and (3B) using the full sample.[25] In columns 1 and 2, before including *Work-Life Balance^2*, the coefficient estimate

---

[25] The lower sample size in Table 6 compared with Table 4 and 5 is explained by the fact that whereas the performance tests are at the analyst-firm-year level, the career-outcome tests are at the analyst-year level.

on *Work-Life Balance* is insignificant. However, columns 3 and 4 show that an inverted U-shaped relation exists between WLB satisfaction and analysts' career outcomes. Both coefficients of *Work-Life Balance* and *Work-Life Balance²* are statistically significant at the 5% level or better. These results are consistent with H2 that WLB satisfaction has a non-linear effect on analysts' career advancement.

In columns 5 and 6 of Table 6, Panel A, we find the coefficient estimates on *|Abn. Pos. Work-Life Balance|* and *|Abn. Neg. Work-Life Balance|* are both negative and significant, consistent with the existence of optimal WLB level. In economic terms, a positive (negative) one-point deviation from the estimated inflection point is associated with a 4.6% (5.2%) decrease in the likelihood of winning an All-Star Analyst award, which is approximately 14.2% (16.1%) of the standard deviation of winning an *AA Award*.[26] Similarly, a positive (negative) one-point deviation from the estimated inflection point is associated with a 2.2% (2.7%) decrease in the likelihood of being promoted to a large brokerage firm, which is approximately 16.2% (19.9%) of the standard deviation of *Promotion*.[27]

Panel B of Table 6 reports the results based on the constrained sample. The inferences the same as those based on the full sample. In columns 3 and 4, we again find that an inverted U-shaped relation exists between WLB satisfaction and analysts' career outcomes. In columns 5 and 6, we find that a positive (negative) one-point deviation from the estimated inflection point is associated with a 4.3% (5.1%) decrease in the likelihood of winning an All-Star Analyst award, as well as with a 0.8% (0.9%) decrease in the likelihood of being promoted to a large brokerage firm.

In the tests of career advancement, we control for analysts' performance at the portfolio level such as earnings forecast accuracy and other forecast characteristics including boldness, optimism, frequency, and horizon. The results suggest that longer earnings forecast horizon is

---

[26] Alternatively, these numbers correspond to 38.7% and 43.7% of the mean *AA Award*, respectively.
[27] Alternatively, these numbers correspond to 115.8% and 142.1% of the mean *Promotion*, respectively.

valued by both institutional investors and prospective employers. Earnings forecast frequency is additionally valued by institutional investors. Importantly, even after controlling for analysts' performance, WLB satisfaction still has an incremental effect on analysts' career advancement. One plausible explanation is that satisfaction about the WLB environment affect the analysts' job involvement, which in turn affects their interactions and therefore relationships with clients. We also control for analysts' research-portfolio characteristics and consistently find that analysts who follow more firms and larger firms tend to have better career outcomes (which is consistent with prior literature).

5. Additional Analyses and Robustness Tests

5.1 Work-Life Balance Measured at the Broker-Office Level

In our main analyses, we focus on broker-level WLB to examine the role of WLB environment in an analyst's performance and career path. We extend our study to the broker-*office* level. We manually collect the LinkedIn profiles of financial analysts in our sample and extract data on their current and historical locations.[28] We then aggregate all analyst employees' WLB ratings in a given year and city to create a broker-office-year measure. In this way, we are able to capture analysts' perceived WLB more directly and test the cross-sectional difference of WLB environment *within* a broker. We re-estimate Equations (1) – (3) using the office-level WLB ratings.

Focusing on the full sample, in Panel A of Table 7, we find that a non-linear inverted U-shaped relation exists between WLB satisfaction and analysts' earnings forecast accuracy (column 1) - both coefficients of *Work-Life Balance* and *Work-Life Balance²* are statistically significant. In addition, both coefficient estimates of *|Abn. Pos. Work-Life Balance|* and *|Abn. Neg. Work-Life Balance|* are statistically significant (column 2).

---

[28] The sample size for the broker-office-level analysis is smaller due to missing location information of some anonymous Glassdoor reviewers and I/B/E/S analysts.

Similarly, in Panel B of Table 7, we find a non-linear inverted U-shaped relation between WLB satisfaction and analysts' buy-recommendation profitability (column 1). However, both coefficient estimates of *|Abn. Pos. Work-Life Balance|* and *|Abn. Neg. Work-Life Balance|* are insignificant (column 2). We continue to find insignificant results for analysts' sell-recommendation profitability (columns 3 and 4).

In Panel C of Table 7, we consistently find an inverted U-shaped relation between WLB satisfaction and analysts' career outcomes (columns 1 and 2), with both coefficients of *Work-Life Balance* and *Work-Life Balance²* being statistically significant. The coefficient estimates on *|Abn. Pos. Work-Life Balance|* and *|Abn. Neg. Work-Life Balance|* are significant in three out of four cases (columns 3 and 4).

Turning to the constrained sample, in Panel D, E, and F of Table 7, we find results similar to those based on the full sample, except for the following: (1) in column 2 of Panel D, a positive deviation from the estimated inflection point has no significant effect on earnings forecast accuracy; (2) in Panel E, we find significant results for analysts' sell-recommendation, but not for buy recommendations; 3) in column 4 of Panel F, a positive deviation from the estimated inflection point has no significant effect on the likelihood of being promoted to a large brokerage firm.

Overall, the results at the broker-office-level are similar to those at the broker level. We document a non-linear association between WLB satisfaction and analysts' performance and career advancement. In particular, for analysts working at offices with relatively low (high) level of WLB, an increase in WLB can benefit (hurt) their performance and career outcomes.[29]

---

[29] In untabulated tests, we control for WLB in different cities by including city fixed effects in all regressions. Our inferences are robust.

5.2 Potential Moderating Effects of Personal Characteristics

We further explore potential moderating effects of analyst-specific personal characteristics. We examine the role of level of seniority, workload, gender, and education (i.e., whether or not the analyst has an MBA degree).

5.2.1 Level of Seniority

To investigate the potential moderating effect of seniority, we re-estimate Equations (1) – (3) separately for analysts with less than 5 years of general experience (i.e., typically junior analysts), analysts with between 5 and 20 years of experience, and analysts with more than 20 years of experience.

Focusing on the full sample, in Panel A of Table 8, we find that WLB environment has a significant and non-linear effect on forecast accuracy for all three groups of analysts (columns 1, 3 and 5). However, the effects of |*Abn. Pos. Work-Life Balance*| and |*Abn. Neg. Work-Life Balance*| increase monotonically with seniority (columns 2, 4 and 6). The results in Panel B reveal that WLB satisfaction has a significant and non-linear effect only on the most senior analyst group's buy-recommendation profitability (columns 5 and 6). Taken together, these results suggest that junior analysts' performance are less affected by WLB relative to senior analysts. This is intuitive and likely because junior analysts have higher motivation to perform. Regarding analysts' career advancement, we find mixed results. While the results of Panel C and D collectively suggest that WLB has a significant and non-linear effect on the career outcomes for all three groups of analysts, junior analysts' likelihood of being voted as All-Star (promoted to larger brokerage firms) seems to be more (less) affected by WLB environment relative to senior analysts.[30]

Turning to the constrained sample, in Panel E of Table 8, we find that WLB environment has a significant and non-linear effect on forecast accuracy for all three groups of analysts

---

[30] Although merely a conjecture, the former result is consistent with sub-optimal WLB preventing junior analysts from building good relationships with clients.

(columns 1, 3 and 5). However, while the effects of |*Abn. Pos. Work-Life Balance*| and |*Abn. Neg. Work-Life Balance*| increase monotonically with seniority, the differences among the three groups seem smaller than those reported in Panel A. In Panel F, we continue to find that a significant and non-linear effect of WLB on the most senior analyst group's buy-recommendation profitability. In contrast to the full sample, in Panel G and H, we find that WLB has the stronger effect on the career outcomes of the analysts with between 5 and 20 years of experience. Overall, the results of the constrained sample suggest that junior analysts are less affected by WLB relative to more senior analysts.

5.2.2 Workload

To investigate the moderating effect of workload, we use the median number of firms followed (*Number of Firms*) to split the sample and re-estimate Equations (1) – (3) separately for analysts following less (≤ 13) firms and analysts following more (> 13) firms. We expect that the effect of broker-level WLB is more pronounced for busier analysts relative to other analysts. Untabulated results show that the effects of WLB satisfaction are statistically and economically stronger for busier analysts' forecast accuracy, buy-recommendation profitability, and likelihood of promotion to larger brokerage firms. The effects of WLB on the likelihood of being voted as All-Star analysts are similar across the groups of analysts. Together, the results suggest that busier analysts are more affected by broker-level WLB environment relative to other analysts.

5.2.3 Gender and Education

To investigate the moderating effect of gender, we construct a matched sample of male and female analysts because females only account for 10% of the analysts in our sample. Specifically, each female analyst is randomly matched with a male analyst working for the same broker and who follows the same industry in the same year. Then, we modify Equations (1) – (3) by including

a *Female* indicator and its interactions with *Work-Life Balance*, *Work-Life Balance^2*, *|Abn. Pos. Work-Life Balance|*, and *|Abn. Neg. Work-Life Balance|*. Untabulated results show that WLB affects both female and male analysts' forecast accuracy. However, we find that female analysts' buy-recommendation profitability and career advancement are less affected by WLB environment. These findings are consistent with Kumar (2010) who suggests that female analysts are a special group of competitive and less risk-averse females who choose to pursue a career in a male-dominated industry. Due to this self-selection process, females are likely to be more skillful and stronger than male counterpart analysts. Finally, we do not find any differential effects for analysts with and without an MBA degree (untabulated).

5.3 Excluding Reviews Submitted in October

It is possible that some companies could manipulate their Glassdoor ratings. For example, a Wall Street Journal article indicates that there tends to be a rating surge in October, implying that the ratings submitted in October may be less credible.[31] To address this possibility, we exclude all reviews submitted in October and re-estimate Equations (1) – (3). The results are tabulated in Table 9, and the inferences remain unchanged. In an untabulated analysis, we exclude only reviews submitted in October with a WLB rating equal to 5, and no conclusions are altered.

5.4 Excluding Extreme Ratings

Our inferences are unaltered after excluding broker-years with extremely high or low ratings or with few reviews (untabulated). Specifically, our conclusions hold after excluding (1) broker-years with a rating lower than 2 or higher than 4, (2) broker-years with a rating lower than

---

[31] https://www.wsj.com/articles/companies-manipulate-glassdoor-by-inflating-rankings-and-pressuring-employees-11548171977

2.5 or higher than 3.5, or (3) broker-years with fewer than 2, 3, 4, or 5 Glassdoor reviews.[32] Our

inferences are robust when we control for the number of Glassdoor reviews used to calculate *Work-*

Life Balance and the standard deviation of individual WLB ratings, suggesting that the results are

not driven by the polarization of WLB ratings.[33]

5.5 Mergers and Acquisitions among Brokerage Firms

We use a sample of brokerage closures, mergers, and acquisitions as an exogenous shock

to WLB. This approach allows an individual analyst to serve as her own control. We examine

whether an analyst's performance changes with WLB when this analyst is forced to leave her

brokerage firm or her employer is acquired. We identify 14 brokerage-firm mergers in both IBES

and SDC databases for the period of 2009 to 2015. Only four of these mergers have available WLB

ratings for both targets and acquirers. Based on these four mergers, we identify 30 analysts who

work for the target firm in year t-1 and for the acquirer firm in year t+1, and then keep the

observations associated with these analysts within the two years before and the two years after the

corresponding brokerage-firm merger (excluding the year of merger for a cleaner sample). We

then re-estimate Equations (1), (2), and (3). The results are reported in Table 10, and we find

consistent results that WLB has a non-linear effect on analyst performance.

5.6 Potential Remaining Endogeneity (IV)

Although our empirical tests include a number of control variables motivated by prior

research and we use standardized measures that embed *firm-year controls*, we acknowledge that

analyst performance could also affect their WLB satisfaction. Therefore, we employ an

---

[32] Specifically, in the analyst-career-outcome sample, 92.04% of the analyst-years are associated with a WLB rating between 2 and 4, 60.8% are associated with a rating between 2.5 and 3.5, and 70.93% are associated with a rating calculated based on 5 or more Glassdoor reviews. The percentages are similar for the analyst-performance sample.
[33] Controlling for the standard deviation of individual WLB ratings also helps to address the concern that employees who are able to benefit from WLB policies tend to submit positive reviews about their employers and those who are unable to benefit tend to submit negative reviews due to the feeling of inequality.

instrumental-variable approach to better identify causality (i.e., to control for unobservable potentially correlated omitted variables). Our instruments are *Best State*, an indicator for brokerage firms located in the best state for living (Massachusetts; USA Today 2016) and *Worst Traffic City*, an indicator for brokers located in the worst city for traffic (Los Angeles; TomTom Traffic Index). These instruments satisfy both the relevance (with F-statistics well above the critical value) and exclusion criteria (with both instruments being statistically insignificant when added to the original model, consistent with the instruments being uncorrelated with the error term).

In the first stage, we regress *Work-Life Balance* and *Work-Life Balance^2* on *Best State, Worst Traffic City*, and all the other independent variables in the corresponding regression models. We include state-level GDP growth to control for economic activity and opportunity. We obtain the predicted values from the first stage. In the second stage, we regress proxies for performance and career advancement on predicted *Work-Life Balance* and *Work-Life Balance^2*. The results are reported in Table 11. Our conclusions are unaltered. We report the partial F-statistics for the instrumental variables in the first stage, which are much higher than the critical value of 7.03 as reported in Stock and Yogo (2005), suggesting that a weak instrument problem is not present. Furthermore, we provide the p-values from the tests of endogeneity. Importantly, the results of the endogeneity tests are all insignificant, suggesting that endogeneity is not a concern and that the coefficient estimates in Table 4 to 6 are consistent.

5.7 Controlling for Other Glassdoor Ratings

Glassdoor also allows users to rate other aspects of their firms, including Company Benefits, Senior Management, Culture & Values, Career Opportunities, Approval of CEO, Outlook, and Recommend to a Friend. In order to ensure that our WLB measure is not merely a

subset of these other ratings, we include all ratings in the same regression. No inferences are affected (untabulated).[34]

5.8 Alternative Career Outcome Measures

Although we rely on a long line of analyst research in choosing to focus on analysts being awarded the All-Star status and being promoted to larger brokerage firms, clearly other outcome variables exist. For example, the motivation behind some of the WLB programs in banks is not only to improve performance but also to increase employee retention. Consequently, we additionally test for the effects on analyst retention.[35] In untabulated analyses we observe that a U-shaped relation exist also for employee retention.

Further, we examine whether analysts tend to move to brokerage firms with high WLB satisfaction. We find that when their current WLB satisfaction is low (high), analysts are indeed attracted (not attracted) by alternative employers who value WLB (untabulated).

5.9 Alternative Specification for Non-Linearity

Given the possibility of a non-linear association, we test our hypothesis using quadratic regressions in the main analyses (McConnell and Servaes 1990; Himmelberg et al. 1999; Collin-Dufresne et al. 2001; Wyatt 2005; Hillary and Huang 2018). In robustness tests, we use spline regressions to ensure that our assumption of nonlinearity is appropriate (Morck et al. 1988; Cho 1998; Himmelberg et al. 1999; Davies et al. 2005). Spline regressions do not assume the association to be of a specific form, thus they are useful in establishing the characteristics of a non-linear association. In untabulated tests, our inferences are unaffected. Spline regressions

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[34] We also test whether these other Glassdoor ratings have a moderating effect on WLB. Not surprisingly, there is some evidence that the effects for WLB are attenuated when the employer's overall ratings or career opportunities are high.

[35] Specifically, analyst retention is an indicator variable set to one if the analyst works for the same brokerage firm in the next year, and zero otherwise.

require specifying knots at which the slope of the function changes and thus may be affected by the choice of knots. In contrast, the quadratic regressions do not impose such requirements. Therefore, spline regressions and quadratic regressions complement each other and increase the reliability of our inferences.

6. Conclusion

This study investigates the role of work-life balance shaped by brokers in financial analysts' performance and career advancement. Using an extensive sample of Glassdoor reviews by financial analysts, we find that when work-life balance satisfaction is relatively low, an increase in work-life balance satisfaction improves performance and is associated with better career advancement of analysts; however, when work-life balance satisfaction is already high, an increase in work-life balance satisfaction is associated with worse performance and career advancement. Collectively, our results suggest a significant non-linear effect of work-life balance on analysts' performance and career advancement.

Our paper contributes to the debate on work-life balance in the financial industry. The findings suggest that shifting too many resources from work or personal life can hurt analysts' performance and career advancement. This study also contributes to the literature on the interaction of job satisfaction and job performance, as well as the growing literature on information aggregation and the wisdom of the crowd. Overall, our article provides the first large-sample evidence that reaching the optimal work-life balance is important not only for individuals but also for employers in the brokerage industry.

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Appendix: Variable Definitions

Variable	Definition
Dependent variables	
Forecast Accuracy	Earnings forecast accuracy, which is measured as (1 – standardized relative *Forecast Error*). *Forecast Error* is defined as the absolute value of the analyst's initial earnings forecast for firm *j* minus firm *j*'s actual EPS in year *t*, scaled by the stock price at the beginning of the year, and then standardized to range from 0 to 1.
BHAR	Buy-and-hold abnormal stock return, which is measured as the natural logarithm of one plus the buy-and-hold market-adjusted return to the analyst's first stock recommendation for firm *j* in year *t*. The window for calculating *BHAR* is the analyst's [current recommendation date + 2 days, next recommendation date – 2 days].
AA_Award	All-Star Analyst award, an indicator variable set to one if the analyst is ranked in the top three or as a runner-up by *Institutional Investor* in year *t* and zero otherwise.
Promote	Analyst promotion to a large brokerage firm, an indicator variable set to one if the analyst moves to a top-decile-size brokerage firm in year *t* and zero otherwise.
Key independent variable	
Work-Life Balance	The average work-life balance rating received by the analyst's brokerage firm from analysts in year *t*.
Control variables	
Forecast Frequency	Earnings forecast frequency, which is calculated as the number of earnings forecasts issued by the analyst for firm *j* in year *t*.
Forecast Horizon	Earnings forecast horizon, which is defined as the natural logarithm of the number of days between the analyst's initial earnings forecast for firm *j* and the announcement date of firm *j*'s actual EPS in year *t*.
Broker Size	Brokerage firm size, which is calculated as the natural logarithm of the number of analysts employed by the sell-side firm in year *t*.
Number of Industries	Number of 2-digit SIC industries that the analyst follows in year *t*.
Number of Firms	Number of firms the analyst follows in year *t*.
Firm Experience	Firm-specific experience, which is defined as the number of years in which the analyst has issued at least one earnings forecast for firm *j* before year *t*.
Forecast Boldness	The average relative boldness (i.e., the absolute deviation from consensus forecast) of earnings forecasts that the analyst issues on the covered firms between October of year *t-1* and September of year *t*.
Forecast Optimism	The average forecast optimism (i.e., an indicator variable equal to one if the analyst forecast is higher than consensus forecast) of earnings forecasts that the analyst issues on the covered firms between October of year *t-1* and September of year *t*.
Firm Size	Natural logarithm of the average market value of the analyst's covered firms at the end of year *t-1*.
Market-to-Book	The average market-to-book ratio of the analyst's covered firms at the end of year *t-1*.
Beta	The average market beta of the analyst's covered firms during year *t*.

Figure 1
Descriptive Plot - Work-Life Balance and Analyst Performance

Panel A: Earnings Forecast Accuracy
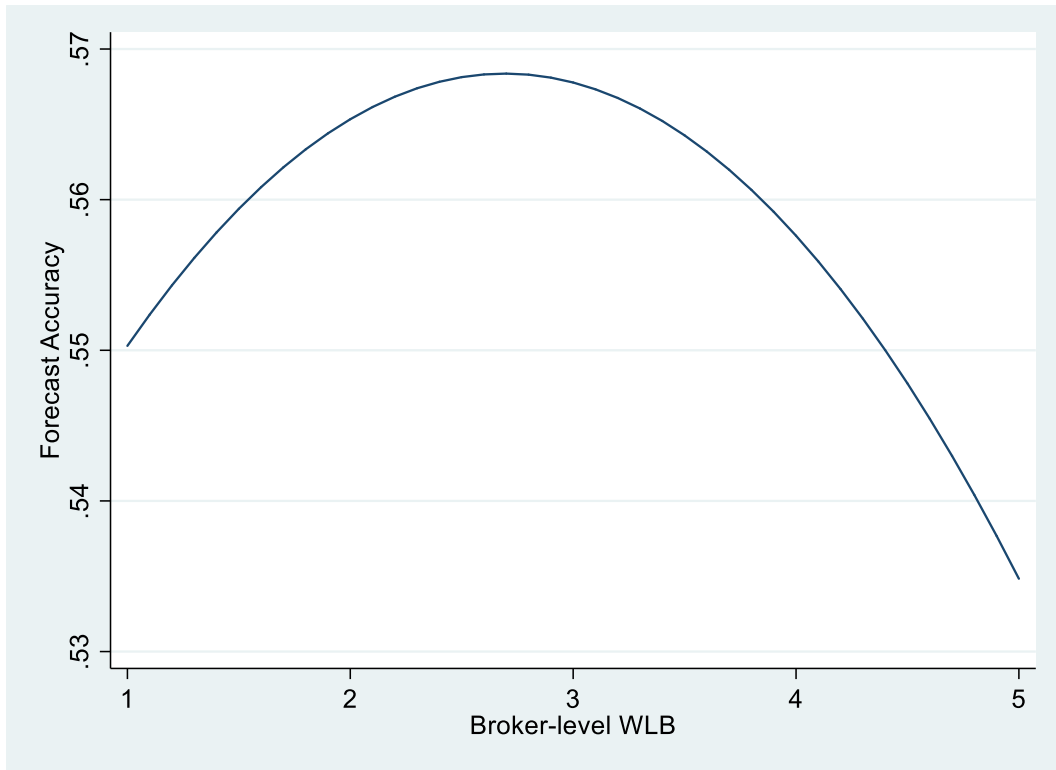
Panel B: Buy-and-Hold Abnormal Returns (Buy Recommendations)
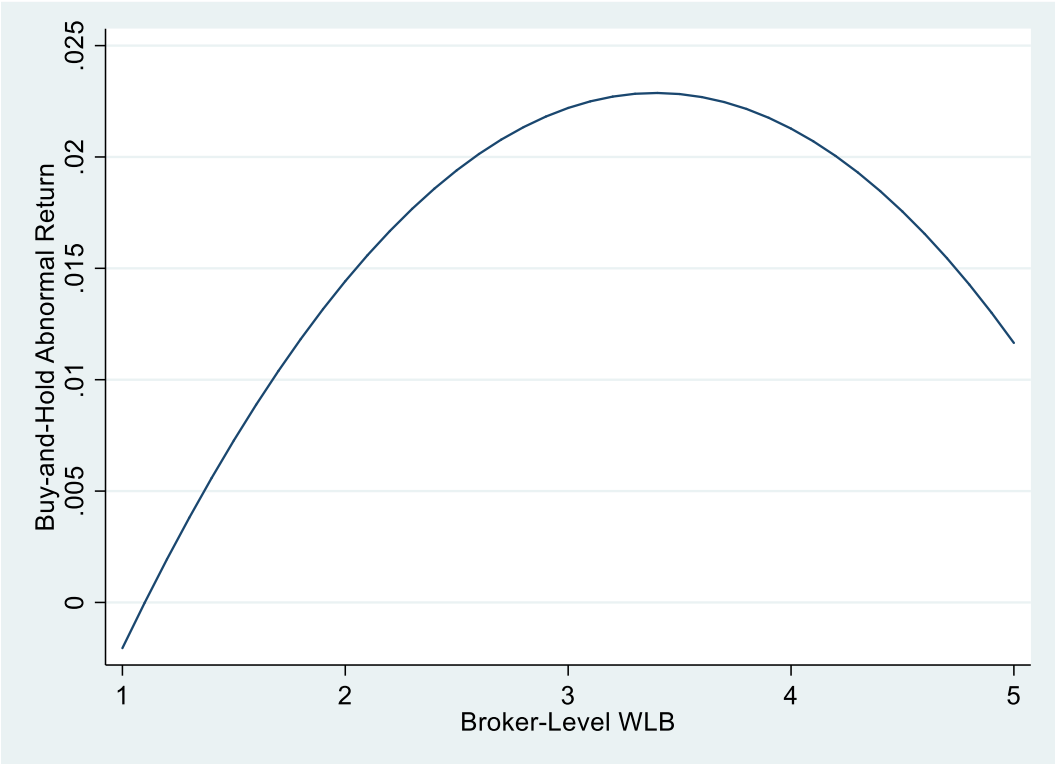
Table 1
Sample Selection

Sample selection criteria	Number of analyst firm-years	Number of firms	Number of analysts
Analyst firm-years with EPS forecasts, 2008-2016	317,310	5,572	8,847
Retain: brokerage firms with analysts' work-life balance ratings in year t	185,715	4,989	5,802
Retain: with I/B/E/S actual earnings information to calculate earnings forecast errors	184,843	4,906	5,788
Retain: with stock price information at the beginning of year t	179,628	4,746	5,751
Retain: with financial data such as market value and market-to-book ratio	144,120	3,875	5,455
Retain: with sufficient information to calculate standardized variables	140,202	3,519	5,336
Final earnings forecast sample	140,202	3,519	5,336

This table presents the procedures to construct the sample for the analyst performance test.

Table 2
Summary Statistics of Glassdoor Ratings for Brokerage Firms

	(1) Mean ratings from analysts	(2) Mean ratings from non-analysts	(1) – (2)
Overall	3.291	3.247	0.044
Company & Benefits	3.184	3.120	0.064
Work-Life Balance	3.338	3.405	-0.067*
Senior Management	3.053	2.934	0.119***
Culture & Values	3.322	3.090	0.232***
Career Opportunities	3.161	3.038	0.123***
Approves of CEO	0.302	0.253	0.049*
Outlook	0.247	0.146	0.101***
Recommends	0.287	0.179	0.108***
# of Words in Review	7.555	5.483	2.072***

Table 3
Descriptive Statistics

Panel A (D) presents the unstandardized descriptive statistics for the full (constrained) sample used in the earnings forecast accuracy tests. Panel B (E) presents the descriptive statistics for the full (constrained) sample used in the stock-recommendation profitability tests. Panel C (F) presents the descriptive statistics for the full (constrained) sample used in the analyst career outcomes tests. See the Appendix for the variable definitions.

Panel A: Full Sample for Earnings Forecast Accuracy Tests (n = 140,202)

Variable	Mean	Stdev	Q1	Median	Q3
Work-Life Balance	3.238	0.640	3.000	3.284	3.563
Forecast Error	0.018	0.037	0.002	0.006	0.016
Forecast Horizon	5.657	0.516	5.666	5.892	5.900
Forecast Frequency	4.458	2.618	3.000	4.000	6.000
Broker Size	4.259	0.753	3.784	4.419	4.745
Number of Industries	3.489	2.290	2.000	3.000	5.000
Number of Firms	17.245	8.934	12.000	17.000	22.000
Firm Experience	4.830	3.858	2.000	4.000	7.000
Firm Size	8.275	1.662	7.120	8.208	9.412
Market-to-Book	4.036	4.433	1.657	2.676	4.465

Panel B: Full Sample for Stock-Recommendation Profitability Tests (n = 61,549)

Variable	Mean	Stdev	Q1	Median	Q3
Work-Life Balance	3.231	0.630	3.000	3.283	3.550
BHAR	-0.044	0.296	-0.189	-0.014	0.139
Broker Size	4.254	0.775	3.761	4.419	4.754
Number of Industries	3.310	2.210	2.000	3.000	5.000
Number of Firms	16.384	8.955	11.000	16.000	21.000
Firm Experience	4.306	3.794	1.000	3.000	6.000
Firm Size	8.271	1.623	7.152	8.206	9.371
Market-to-Book	3.975	4.377	1.637	2.637	4.373
Beta	1.129	0.419	0.845	1.088	1.378

Panel C: Full Sample for Analyst Career Outcome Tests (n = 13,964)

Variable	Mean	Stdev	Q1	Median	Q3
Work-Life Balance	3.263	0.627	3.018	3.294	3.579
AA Award	0.119	0.323	0.000	0.000	0.000
Promotion	0.019	0.136	0.000	0.000	0.000
Forecast Accuracy	0.508	0.577	0.488	0.627	0.720
Forecast Boldness	0.389	0.439	0.211	0.309	0.457
Forecast Optimism	0.513	0.185	0.406	0.500	0.619
Forecast Frequency	4.394	2.071	3.098	4.000	5.294
Forecast Horizon	4.409	0.580	4.185	4.522	4.735
Broker Size	4.234	0.831	3.714	4.425	4.754
Number of Industries	2.712	1.915	1.000	2.000	4.000
Number of Firms	13.066	7.846	6.000	13.000	18.000
Firm Experience	3.861	2.458	1.898	3.333	5.319
Beta	1.163	0.335	0.943	1.134	1.355
Firm Size	8.776	1.363	7.879	8.851	9.721
Market-to-Book	4.403	5.070	2.006	3.092	4.862

Table 3 (Continued)
Descriptive Statistics

Panel D: Constrained Sample for Earnings Forecast Accuracy Tests (n = 104,258)

Variable	Mean	Stdev	Q1	Median	Q3
Work-Life Balance	3.264	0.685	3.000	3.263	3.625
Forecast Error	0.017	0.035	0.002	0.006	0.016
Forecast Horizon	5.660	0.509	5.670	5.892	5.900
Forecast Frequency	4.534	2.688	3.000	4.000	6.000
Broker Size	4.388	0.697	4.025	4.543	4.787
Number of Industries	3.479	2.261	2.000	3.000	5.000
Number of Firms	17.592	9.425	12.000	17.000	22.000
Firm Experience	4.834	3.878	2.000	4.000	7.000
Firm Size	8.390	1.627	7.249	8.320	9.501
Market-to-Book	4.132	4.611	1.682	2.724	4.580

Panel E: Constrained Sample for Stock-Recommendation Profitability Tests (n = 44,791)

Variable	Mean	Stdev	Q1	Median	Q3
Work-Life Balance	3.270	0.674	3.000	3.300	3.625
BHAR	-0.050	0.337	-0.196	-0.015	0.141
Broker Size	4.427	0.692	4.094	4.575	4.804
Number of Industries	3.297	2.194	2.000	3.000	4.000
Number of Firms	16.761	9.511	11.000	16.000	22.000
Firm Experience	4.277	3.780	1.000	3.000	6.000
Firm Size	8.379	1.586	7.275	8.302	9.449
Market-to-Book	4.101	4.607	1.665	2.696	4.524
Beta	1.134	0.428	0.842	1.089	1.385

Panel F: Constrained Sample for Analyst Career Outcome Tests (n = 10,871)

Variable	Mean	Stdev	Q1	Median	Q3
Work-Life Balance	3.302	0.642	3.000	3.326	3.636
AA Award	0.147	0.354	0.000	0.000	0.000
Promotion	0.016	0.125	0.000	0.000	0.000
Forecast Accuracy	0.503	0.587	0.482	0.626	0.718
Forecast Boldness	0.396	0.445	0.216	0.311	0.463
Forecast Optimism	0.514	0.188	0.405	0.500	0.622
Forecast Frequency	4.449	2.115	3.114	4.087	5.409
Forecast Horizon	4.383	0.595	4.152	4.504	4.723
Broker Size	4.384	0.794	4.025	4.635	4.828
Number of Industries	2.667	1.888	1.000	2.000	4.000
Number of Firms	12.880	8.036	6.000	13.000	18.000
Firm Experience	3.846	2.479	1.867	3.300	5.318
Beta	1.158	0.338	0.936	1.129	1.352
Firm Size	8.880	1.335	7.989	8.950	9.801
Market-to-Book	4.487	5.170	2.028	3.136	4.961

Table 4
Work-Life Balance and Earnings Forecast Accuracy

This table presents the results from estimating the OLS regression of Equation (1). *Forecast Accuracy* = (1 – standardized relative *Forecast Error*), where *Forecast Error* is the absolute (price-deflated) value of the analyst's earnings forecast for firm *i* minus firm *i*'s actual EPS in year *t* and is standardized to range from 0 to 1 within each firm-year. *Work-Life Balance* = the work-life balance rating of the analyst's brokerage firm submitted by analysts in year *t*. Other variables are defined in the Appendix. Except for *Work-Life Balance*, all of the continuous variables are scaled to range from 0 to 1 within each firm-year (Clement and Tse 2003). Panel A (B) reports the results from full sample including all research analysts (constrained sample including equity analysts only). The t-statistics (in brackets) are calculated based on the standard errors clustered at the broker level. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Full Sample

Variable	(1) *Forecast Accuracy*	(2) *Forecast Accuracy*	(3) *Forecast Accuracy*
Work-Life Balance	-0.0049**	0.0340***	
	(-1.99)	(3.51)	
Work-Life Balance^2		-0.0063***	
		(-3.97)	
|Abn. Pos. Work-Life Balance|			-0.0113***
			(-2.89)
|Abn. Neg. Work-Life Balance|			-0.0095*
			(-1.94)
Broker Size	-0.0288***	-0.0338***	-0.0323***
	(-4.66)	(-5.32)	(-5.29)
Number of Industries	-0.0142***	-0.0136***	-0.0140***
	(-3.03)	(-2.91)	(-2.94)
Number of Firms	0.0055	0.0055	0.0056
	(0.79)	(0.80)	(0.79)
Firm Experience	-0.0204***	-0.0201***	-0.0202***
	(-5.95)	(-5.85)	(-5.88)
Forecast Frequency	-0.0876***	-0.0874***	-0.0876***
	(-15.09)	(-15.17)	(-15.14)
Forecast Horizon	-0.2386***	-0.2392***	-0.2390***
	(-52.90)	(-53.22)	(-52.86)
Intercept	0.8344***	0.7796***	0.8281***
	(91.27)	(48.93)	(128.58)
N	140,202	140,202	140,202
Adj. R-squared	0.086	0.086	0.086

Table 4 (Continued)
Work-Life Balance and Earnings Forecast Accuracy

Panel B. Constrained Sample

Variable	(1) Forecast Accuracy	(2) Forecast Accuracy	(3) Forecast Accuracy
Work-Life Balance	-0.0007	0.0301**	
	(-0.25)	(2.53)	
Work-Life Balance^2		-0.0050***	
		(-2.64)	
|Abn. Pos. Work-Life Balance|			-0.0080*
			(-1.85)
|Abn. Neg. Work-Life Balance|			-0.0089*
			(-1.70)
Broker Size	-0.0308***	-0.0354***	-0.0348***
	(-4.72)	(-5.48)	(-5.59)
Number of Industries	-0.0142***	-0.0139***	-0.0140***
	(-2.72)	(-2.66)	(-2.70)
Number of Firms	0.0082	0.0079	0.0080
	(1.21)	(1.19)	(1.22)
Firm Experience	-0.0202***	-0.0200***	-0.0201***
	(-4.89)	(-4.82)	(-4.85)
Forecast Frequency	-0.0783***	-0.0780***	-0.0781***
	(-14.26)	(-14.39)	(-14.31)
Forecast Horizon	-0.2358***	-0.2361***	-0.2361***
	(-57.83)	(-58.26)	(-58.27)
Intercept	0.8150***	0.7725***	0.8191***
	(75.94)	(40.94)	(126.85)
N	104,258	104,258	104,258
Adj. R-squared	0.080	0.080	0.080

Table 5
Work-Life Balance and Stock-Recommendation Profitability

This table presents the results from estimating the OLS regression of Equation (2). *Buy Recommendations* include analysts' strong buy and buy recommendations. *Sell Recommendations* include analysts' hold, sell, and strong sell recommendations. *BHAR* = the natural logarithm of one plus the buy-and-hold market-adjusted return to the analyst's stock recommendation for firm *i*. *Work-Life Balance* = the work-life balance rating of the analyst's brokerage firm submitted by analysts in year *t*. Other variables are defined in the Appendix. Panel A (B) reports the results from full sample including all research analysts (constrained sample including equity analysts only). The t-statistics (in brackets) are calculated based on the standard errors clustered by broker and by month. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Full Sample

	Buy Recommendations			Sell Recommendations		
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	BHAR	BHAR	BHAR	BHAR	BHAR	BHAR
Work-Life Balance	0.0020	0.0316**		-0.0008	0.0150	
	(0.38)	(2.01)		(-0.25)	(1.23)	
Work-Life Balance^2		-0.0048**			-0.0026	
		(-2.28)			(-1.21)	
|Abn. Pos. Work-Life Balance|			-0.0130***			-0.0053
			(-2.72)			(-0.94)
|Abn. Neg. Work-Life Balance|			-0.0123*			-0.0058
			(-1.71)			(-1.52)
Broker Size	0.0116***	0.0097***	0.0085**	0.0083***	0.0073***	0.0072***
	(3.27)	(2.93)	(2.58)	(3.74)	(3.17)	(3.10)
Number of Industries	0.0020	0.0020	0.0021	0.0012	0.0013	0.0013
	(1.06)	(1.08)	(1.10)	(0.83)	(0.84)	(0.84)
Number of Firms	-0.0004	-0.0004	-0.0004	-0.0005	-0.0005	-0.0005
	(-0.56)	(-0.56)	(-0.55)	(-1.13)	(-1.13)	(-1.13)
Firm Experience	0.0028***	0.0028***	0.0028***	-0.0004	-0.0004	-0.0004
	(3.60)	(3.59)	(3.57)	(-0.39)	(-0.40)	(-0.40)
Firm Size	0.0033	0.0031	0.0030	0.0144***	0.0143***	0.0143***
	(0.65)	(0.63)	(0.60)	(4.55)	(4.52)	(4.52)
Market-to-Book	-0.0017**	-0.0017**	-0.0017**	-0.0019*	-0.0019*	-0.0019*
	(-2.12)	(-2.12)	(-2.11)	(-1.71)	(-1.71)	(-1.71)
Beta	-0.0316**	-0.0317**	-0.0317**	-0.0316*	-0.0316*	-0.0317*
	(-2.16)	(-2.16)	(-2.17)	(-1.79)	(-1.79)	(-1.79)
Industry Fixed Effects	Included	Included	Included	Included	Included	Included
N	27,885	27,885	27,885	33,664	33,664	33,664
Adj. R-squared	0.022	0.022	0.022	0.027	0.027	0.027

Panel B. Constrained Sample

Variable	Buy Recommendations			Sell Recommendations		
	(1)	(2)	(3)	(4)	(5)	(6)
	BHAR	BHAR	BHAR	BHAR	BHAR	BHAR
Work-Life Balance	-0.0043	0.0389*		0.0032	-0.0009	
	(-0.98)	(1.73)		(0.73)	(-0.04)	
Work-Life Balance^2		-0.0070*			0.0007	
		(-1.86)			(0.18)	
|Abn. Pos. Work-Life Balance|			-0.0169*			0.0123
			(-1.77)			(1.25)
|Abn. Neg. Work-Life Balance|			-0.0068			0.0044
			(-0.98)			(0.69)
Broker Size	0.0078*	0.0043	0.0043	0.0107***	0.0110***	0.0132***
	(1.82)	(0.91)	(0.90)	(2.87)	(2.67)	(3.12)
Number of Industries	0.0031	0.0031	0.0031	0.0040**	0.0040**	0.0040**
	(1.52)	(1.54)	(1.56)	(2.28)	(2.28)	(2.25)
Number of Firms	-0.0004	-0.0004	-0.0004	-0.0015***	-0.0015***	-0.0015***
	(-0.85)	(-0.85)	(-0.85)	(-3.63)	(-3.63)	(-3.63)
Firm Experience	0.0035***	0.0035***	0.0035***	-0.0000	-0.0000	-0.0001
	(4.93)	(4.93)	(4.94)	(-0.06)	(-0.07)	(-0.09)
Firm Size	0.0008	0.0008	0.0007	0.0183***	0.0183***	0.0183***
	(0.31)	(0.28)	(0.28)	(6.87)	(6.87)	(6.89)
Market-to-Book	-0.0011	-0.0011	-0.0011	-0.0020**	-0.0020**	-0.0020**
	(-1.29)	(-1.29)	(-1.29)	(-2.25)	(-2.25)	(-2.25)
Beta	-0.0419***	-0.0414***	-0.0416***	-0.0326***	-0.0327***	-0.0329***
	(-3.71)	(-3.67)	(-3.69)	(-2.92)	(-2.93)	(-2.95)
Industry Fixed Effects	Included	Included	Included	Included	Included	Included
N	19,565	19,565	19,565	25,226	25,226	25,226
Adj. R-squared	0.025	0.026	0.026	0.032	0.032	0.032

Table 6
Work-Life Balance and Analyst Career Outcomes

This table presents the results from estimating the probit regression of Equation (3). *AA Award* = an indicator variable set to one if the analyst is ranked in the top three or as a runner-up by *Institutional Investor* in year *t* and zero otherwise. *Promotion* = an indicator variable set to one if the analyst moves to a top 10% largest brokerage firm in year *t* and zero otherwise. *Work-Life Balance* = the work-life balance rating of the analyst's brokerage firm in year *t*. Other variables are defined in the Appendix. Panel A (B) reports the results from full sample including all research analysts (constrained sample including equity analysts only). The z-statistics (in brackets) are calculated based on the standard errors clustered at the broker level. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Full Sample

Variable	(1) AA Award	(2) Promotion	(3) AA Award	(4) Promotion	(5) AA Award	(6) Promotion
Work-Life Balance	0.0071	-0.1203	4.2380***	3.4099**		
	(0.07)	(-1.20)	(2.79)	(2.25)		
Work-Life Balance^2			-0.6845***	-0.5828**		
			(-2.85)	(-2.22)		
|Abn. Pos. Work-Life Balance|					-0.9575***	-0.7765**
					(-3.74)	(-2.25)
|Abn. Neg. Work-Life Balance|					-1.0861***	-0.9363***
					(-3.40)	(-2.61)
Forecast Accuracy	0.0634	0.1715***	0.0648	0.1793***	0.0701	0.1825***
	(1.56)	(3.47)	(1.56)	(3.51)	(1.64)	(3.50)
Forecast Boldness	0.0370	0.0567	0.0296	0.0509	0.0234	0.0507
	(0.68)	(1.05)	(0.55)	(0.97)	(0.43)	(0.97)
Forecast Optimism	-0.2953*	0.1650	-0.2808*	0.1580	-0.2630*	0.1573
	(-1.90)	(1.19)	(-1.85)	(1.13)	(-1.77)	(1.10)
Forecast Frequency	0.0504**	-0.0473	0.0505**	-0.0472	0.0523**	-0.0450
	(2.04)	(-1.56)	(2.10)	(-1.59)	(2.23)	(-1.57)
Forecast Horizon	0.1636**	0.2240***	0.1656***	0.2407***	0.1760***	0.2486***
	(2.56)	(3.01)	(2.60)	(3.47)	(2.78)	(3.62)
Broker Size	1.0109***	0.2853**	0.8779***	0.1946*	0.8535***	0.2059*
	(6.97)	(2.48)	(6.58)	(1.70)	(6.76)	(1.88)
Number of Industries	0.0430***	-0.0308*	0.0441***	-0.0323*	0.0444***	-0.0339*
	(2.69)	(-1.81)	(2.76)	(-1.83)	(2.75)	(-1.90)
Number of Firms	0.0739***	0.0122**	0.0737***	0.0122**	0.0738***	0.0118**
	(6.26)	(2.27)	(6.38)	(2.33)	(6.41)	(2.32)
Firm Experience	0.1603***	-0.0005	0.1628***	0.0002	0.1654***	0.0003
	(7.65)	(-0.03)	(7.86)	(0.02)	(8.27)	(0.02)
Beta	0.0232	0.0726	0.0328	0.0743	0.0358	0.0732
	(0.25)	(0.96)	(0.37)	(0.99)	(0.41)	(0.97)
Firm Size	0.2260***	0.0644***	0.2194***	0.0583***	0.2161***	0.0598***
	(6.17)	(3.44)	(6.25)	(3.06)	(6.31)	(3.05)
Market-to-Book	0.0089**	0.0063	0.0091**	0.0061	0.0089**	0.0055
	(2.43)	(1.37)	(2.39)	(1.33)	(2.32)	(1.20)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	13,964	13,964	13,964	13,964	13,964	13,964
Pseudo R-squared	0.368	0.068	0.381	0.085	0.388	0.092

Table 6 (Continued)
Work-Life Balance and Analyst Career Outcomes

Panel B. Constrained Sample

Variable	(1) AA Award	(2) Promotion	(3) AA Award	(4) Promotion	(5) AA Award	(6) Promotion
Work-Life Balance	-0.0948	0.0344	2.5873*	0.5057***		
	(-0.97)	(0.71)	(1.77)	(4.34)		
Work-Life Balance^2			-0.4229*	-0.0747***		
			(-1.86)	(-3.39)		
|Abn. Pos. Work-Life Balance|					-0.5470***	-0.1664***
					(-2.80)	(-5.57)
|Abn. Neg. Work-Life Balance|					-0.6418**	-0.1763*
					(-2.26)	(-1.91)
Forecast Accuracy	0.0842*	0.0847	0.0824*	0.0823	0.0824*	0.0828
	(1.81)	(1.60)	(1.70)	(1.52)	(1.70)	(1.52)
Forecast Boldness	0.0505	-0.0529	0.0378	-0.0584	0.0369	-0.0600
	(0.80)	(-1.16)	(0.61)	(-1.21)	(0.61)	(-1.22)
Forecast Optimism	-0.3189**	-0.1028	-0.3127**	-0.1022	-0.2951*	-0.1030
	(-1.97)	(-1.00)	(-1.97)	(-1.01)	(-1.87)	(-1.02)
Forecast Frequency	0.0506**	-0.0047	0.0499*	-0.0051	0.0494*	-0.0056
	(2.01)	(-0.26)	(1.95)	(-0.28)	(1.89)	(-0.31)
Forecast Horizon	0.1906***	0.3172***	0.1958***	0.3177***	0.1936***	0.3171***
	(2.79)	(10.54)	(2.85)	(10.15)	(2.95)	(10.13)
Broker Size	0.9158***	0.0561	0.8049***	0.0464	0.7965***	0.0491
	(6.15)	(0.46)	(5.57)	(0.38)	(5.71)	(0.40)
Number of Industries	0.0442**	-0.0426**	0.0444**	-0.0429**	0.0449**	-0.0427**
	(2.45)	(-2.17)	(2.35)	(-2.24)	(2.35)	(-2.25)
Number of Firms	0.0789***	0.0105**	0.0794***	0.0107**	0.0789***	0.0108**
	(6.86)	(2.37)	(6.94)	(2.46)	(6.82)	(2.47)
Firm Experience	0.1801***	0.0012	0.1830***	0.0007	0.1820***	0.0005
	(8.81)	(0.07)	(8.94)	(0.04)	(8.88)	(0.03)
Beta	0.0314	0.0331	0.0532	0.0337	0.0518	0.0350
	(0.36)	(0.44)	(0.62)	(0.45)	(0.60)	(0.47)
Firm Size	0.2163***	0.0059	0.2143***	0.0052	0.2120***	0.0046
	(5.93)	(0.32)	(5.80)	(0.28)	(5.74)	(0.24)
Market-to-Book	0.0069*	0.0084**	0.0070*	0.0085**	0.0069*	0.0085**
	(1.77)	(2.32)	(1.77)	(2.39)	(1.77)	(2.35)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	10,871	10,871	10,871	10,871	10,871	10,871
Pseudo R-squared	0.373	0.035	0.380	0.036	0.381	0.036

Table 7
Office-Level Work-Life Balance

This table presents the results from estimating Equation (1) (Panel A and D), Equation (2) (Panel B and E) and Equation (3) (Panel C and F) with the work-life balance rating of the analyst's office in year *t*. All variables are defined in the Appendix. Panel A, B, and C (D, E, and F) report the results from full sample including all research analysts (constrained sample including equity analysts only). The t- and z-statistics (in brackets) are calculated based on the standard errors clustered at the broker level. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Analyst Performance – Earnings Forecast Accuracy (Full Sample)

Variable	(1) *Forecast Accuracy*	(2) *Forecast Accuracy*
Work-Life Balance	0.0216*	
	(1.71)	
Work-Life Balance^2	-0.0040**	
	(-2.06)	
|Abn. Pos. Work-Life Balance|		-0.0098***
		(-2.84)
|Abn. Neg. Work-Life Balance|		-0.0109**
		(-2.01)
Broker Size	-0.0350***	-0.0356***
	(-4.31)	(-4.45)
Number of Industries	-0.0145**	-0.0146**
	(-2.50)	(-2.46)
Number of Firms	0.0146	0.0145
	(1.58)	(1.55)
Firm Experience	-0.0216***	-0.0215***
	(-4.29)	(-4.27)
Forecast Frequency	-0.0906***	-0.0906***
	(-12.20)	(-12.30)
Forecast Horizon	-0.2270***	-0.2271***
	(-43.18)	(-42.88)
Intercept	0.7850***	0.8184***
	(33.97)	(119.85)
N	67,491	67,491
Adj. R-squared	0.077	0.077

Table 7 (Continued)
Office-Level Work-Life Balance

Panel B: Analyst Performance – Stock-Recommendation Profitability (Full Sample)

	Buy Recommendations		Sell Recommendations	
	(1)	(2)	(3)	(4)
Variable	BHAR	BHAR	BHAR	BHAR
Work-Life Balance	0.0264*		-0.0002	
	(1.72)		(-0.01)	
Work-Life Balance^2	-0.0049**		0.0006	
	(-2.36)		(0.18)	
|Abn. Pos. Work-Life Balance|		-0.0088		0.0033
		(-1.01)		(0.53)
|Abn. Neg. Work-Life Balance|		-0.0065		-0.0031
		(-0.84)		(-0.54)
Broker Size	0.0077*	0.0084*	0.0138**	0.0136**
	(1.70)	(1.78)	(2.28)	(2.16)
Number of Industries	0.0008	0.0008	0.0008	0.0008
	(0.35)	(0.32)	(0.47)	(0.47)
Number of Firms	-0.0007	-0.0007	-0.0007	-0.0007
	(-1.18)	(-1.17)	(-1.06)	(-1.06)
Firm Experience	0.0034***	0.0034***	0.0003	0.0003
	(2.66)	(2.66)	(0.27)	(0.27)
Firm Size	0.0072	0.0073	0.0195***	0.0195***
	(1.49)	(1.50)	(6.23)	(6.24)
Market-to-Book	-0.0019**	-0.0019**	-0.0024	-0.0024
	(-2.31)	(-2.32)	(-1.61)	(-1.61)
Beta	-0.0423**	-0.0424**	-0.0438**	-0.0437**
	(-2.33)	(-2.34)	(-2.20)	(-2.20)
Industry Fixed Effects	Included	Included	Included	Included
N	12,541	12,541	16,507	16,507
Adj. R-squared	0.037	0.036	0.038	0.038

Table 7 (Continued)
Office-Level Work-Life Balance

Panel C: Analyst Career Outcomes (Full Sample)

Variable	(1) AA Award	(2) Promotion	(3) AA Award	(4) Promotion
Work-Life Balance	1.1757***	0.8923*		
	(2.92)	(1.78)		
Work-Life Balance^2	-0.1777***	-0.1436*		
	(-2.71)	(-1.71)		
|Abn. Pos. Work-Life Balance|			-0.4484***	-0.2478
			(-2.67)	(-1.30)
|Abn. Neg. Work-Life Balance|			-0.4085***	-0.2625**
			(-3.20)	(-2.31)
Forecast Accuracy	0.0490	0.1242	0.0529	0.1260**
	(0.75)	(1.55)	(0.82)	(2.27)
Forecast Boldness	0.0148	-0.0042	0.0106	-0.0032
	(0.16)	(-0.05)	(0.12)	(-0.04)
Forecast Optimism	-0.2250	-0.0222	-0.2100	-0.0239
	(-1.41)	(-0.11)	(-1.35)	(-0.12)
Forecast Frequency	0.0646**	-0.0324	0.0661**	-0.0321
	(2.27)	(-1.08)	(2.35)	(-1.40)
Forecast Horizon	0.1827**	0.3257***	0.1864**	0.3273***
	(2.09)	(3.43)	(2.12)	(2.97)
Broker Size	0.8482***	0.1998	0.8257***	0.1970*
	(5.90)	(1.63)	(5.84)	(1.86)
Number of Industries	0.0489*	-0.0608**	0.0479*	-0.0605***
	(1.88)	(-2.33)	(1.83)	(-2.59)
Number of Firms	0.0699***	0.0112*	0.0701***	0.0112*
	(6.89)	(1.80)	(6.90)	(1.85)
Firm Experience	0.1940***	0.0138	0.1944***	0.0134
	(9.26)	(0.89)	(9.34)	(0.60)
Beta	0.2228*	-0.0541	0.2319*	-0.0547
	(1.76)	(-0.41)	(1.87)	(-0.36)
Firm Size	0.2527***	0.0547**	0.2524***	0.0545**
	(5.99)	(2.04)	(6.00)	(2.00)
Market-to-Book	0.0073**	0.0113**	0.0072**	0.0112**
	(2.30)	(2.07)	(2.27)	(2.38)
Year Fixed Effects	Included	Included	Included	Included
N	6,731	6,731	6,731	6,731
Pseudo R-squared	0.363	0.074	0.367	0.075

Table 7 (Continued)
Office-Level Work-Life Balance

Panel D: Analyst Performance – Earnings Forecast Accuracy (Constrained Sample)

Variable	(1) Forecast Accuracy	(2) Forecast Accuracy
Work-Life Balance	0.0171**	
	(2.55)	
Work-Life Balance^2	-0.0032**	
	(-2.10)	
|Abn. Pos. Work-Life Balance|		-0.0044
		(-1.21)
|Abn. Neg. Work-Life Balance|		-0.0030***
		(-3.51)
Broker Size	-0.0455***	-0.0445***
	(-3.66)	(-3.67)
Number of Industries	-0.0116***	-0.0117***
	(-3.98)	(-4.14)
Number of Firms	0.0106*	0.0107
	(1.66)	(1.64)
Firm Experience	-0.0253***	-0.0255***
	(-7.54)	(-7.59)
Forecast Frequency	-0.0862***	-0.0862***
	(-28.85)	(-28.53)
Forecast Horizon	-0.2278***	-0.2277***
	(-74.64)	(-73.84)
Intercept	0.8028***	0.8255***
	(244.03)	(149.51)
N	41,427	41,427
Adj. R-squared	0.079	0.078

Table 7 (Continued)
Office-Level Work-Life Balance

Panel E: Analyst Performance – Stock-Recommendation Profitability (Constrained Sample)

	Buy Recommendations		Sell Recommendations	
	(1)	(2)	(3)	(4)
Variable	*BHAR*	*BHAR*	*BHAR*	*BHAR*
Work-Life Balance	-0.0220		-0.0425**	
	(-0.55)		(-2.21)	
Work-Life Balance²	0.0048		0.0077**	
	(0.67)		(2.32)	
|Abn. Pos. Work-Life Balance|		0.0217		0.0196**
		(1.40)		(2.52)
|Abn. Neg. Work-Life Balance|		0.0186		0.0252***
		(1.06)		(2.58)
Broker Size	0.0126	0.0139	0.0170**	0.0178***
	(1.35)	(1.49)	(2.50)	(2.62)
Number of Industries	0.0002	0.0003	0.0017	0.0017
	(0.07)	(0.08)	(0.71)	(0.71)
Number of Firms	-0.0006	-0.0006	-0.0019***	-0.0019***
	(-1.09)	(-1.07)	(-3.41)	(-3.38)
Firm Experience	0.0027**	0.0027**	0.0006	0.0006
	(2.22)	(2.24)	(0.57)	(0.58)
Firm Size	0.0008	0.0006	0.0199***	0.0199***
	(0.23)	(0.17)	(5.51)	(5.50)
Market-to-Book	-0.0015**	-0.0015**	-0.0027**	-0.0027**
	(-2.14)	(-2.11)	(-2.49)	(-2.48)
Beta	-0.0467***	-0.0461***	-0.0472***	-0.0469***
	(-5.32)	(-5.30)	(-3.15)	(-3.13)
Industry Fixed Effects	Included	Included	Included	Included
N	7,478	7,478	10,420	10,420
Adj. R-squared	0.039	0.040	0.045	0.045

Table 7 (Continued)
Office-Level Work-Life Balance

Panel F: Analyst Career Outcomes (Constrained Sample)

Variable	(1) AA Award	(2) Promotion	(3) AA Award	(4) Promotion
Work-Life Balance	0.2929***	0.4945***		
	(4.34)	(4.12)		
Work-Life Balance^2	-0.0577***	-0.0562**		
	(-5.13)	(-2.55)		
|Abn. Pos. Work-Life Balance|			-0.0998***	-0.3591
			(-4.96)	(-0.89)
|Abn. Neg. Work-Life Balance|			-0.0725*	-0.1863***
			(-1.71)	(-7.66)
Forecast Accuracy	0.0370	0.1056***	0.0370	0.0996***
	(1.09)	(5.04)	(1.10)	(4.78)
Forecast Boldness	-0.0445	0.1302***	-0.0468	0.1223***
	(-0.96)	(6.10)	(-1.04)	(5.29)
Forecast Optimism	-0.1535**	0.1213	-0.1498**	0.1183
	(-2.22)	(1.23)	(-2.22)	(1.18)
Forecast Frequency	0.0534***	-0.0485***	0.0535***	-0.0484***
	(2.95)	(-2.70)	(2.92)	(-2.70)
Forecast Horizon	0.1768***	0.2282***	0.1760***	0.2263***
	(3.94)	(2.64)	(3.91)	(2.62)
Broker Size	0.7248***	-0.0844	0.7349***	-0.0770
	(4.92)	(-0.77)	(4.96)	(-0.70)
Number of Industries	0.0623***	-0.0430***	0.0620***	-0.0423***
	(4.56)	(-6.69)	(4.48)	(-6.61)
Number of Firms	0.0646***	0.0082**	0.0648***	0.0081**
	(19.56)	(2.38)	(19.60)	(2.28)
Firm Experience	0.2109***	0.0125	0.2102***	0.0127
	(38.31)	(0.88)	(37.96)	(0.91)
Beta	0.2231**	0.1721***	0.2227**	0.1754***
	(2.42)	(7.55)	(2.43)	(7.76)
Firm Size	0.2241***	0.0064	0.2244***	0.0047
	(19.01)	(0.51)	(19.12)	(0.39)
Market-to-Book	0.0076***	0.0075***	0.0077***	0.0075***
	(6.39)	(4.85)	(6.53)	(4.63)
Year Fixed Effects	Included	Included	Included	Included
N	4,230	4,230	4,230	4,230
Pseudo R-squared	0.344	0.068	0.344	0.069

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Table 8
The Effects of Work-Life Balance Conditional on General Experience

This table presents the results from estimating Equation (1) (Panel A and E), Equation (2) (Panel B and F) and Equation (3) (Panel C, D, G, and H) on the analysts with low (< 5 years), median, and high (≥ 20 years) general experience. All variables are defined in the Appendix. Panel A, B, C, and D (E, F, G, and H) report the results from full sample including all research analysts (constrained sample including equity analysts only). The t- and z-statistics (in brackets) are calculated based on the standard errors clustered at the broker level. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Analyst Performance – Earnings Forecast Accuracy (Full Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1) Forecast Accuracy	(2) Forecast Accuracy	(3) Forecast Accuracy	(4) Forecast Accuracy	(5) Forecast Accuracy	(6) Forecast Accuracy
Work-Life Balance	0.0218*		0.0315**		0.0533***	
	(1.67)		(2.41)		(2.91)	
Work-Life Balance^2	-0.0044**		-0.0062***		-0.0086***	
	(-2.08)		(-2.98)		(-2.82)	
|Abn. Pos. Work-Life Balance|		-0.0092**		-0.0128***		-0.0163**
		(-2.10)		(-2.97)		(-2.23)
|Abn. Neg. Work-Life Balance|		-0.0088		-0.0114		-0.0173***
		(-1.16)		(-1.50)		(-2.92)
Broker Size	-0.0843***	-0.0844***	-0.0896***	-0.0898***	-0.0827***	-0.0824***
	(-9.06)	(-9.10)	(-13.67)	(-13.64)	(-8.25)	(-8.18)
Number of Industries	-0.2518***	-0.2517***	-0.2304***	-0.2301***	-0.2409***	-0.2410***
	(-36.58)	(-36.42)	(-46.30)	(-46.04)	(-25.24)	(-25.32)
Number of Firms	-0.0377***	-0.0368***	-0.0279***	-0.0262***	-0.0343***	-0.0355***
	(-3.86)	(-3.89)	(-4.16)	(-4.10)	(-4.20)	(-4.25)
Firm Experience	-0.0075	-0.0077	-0.0197***	-0.0201***	-0.0053	-0.0052
	(-0.72)	(-0.73)	(-3.84)	(-3.88)	(-0.73)	(-0.73)
Forecast Frequency	0.0151	0.0151	0.0006	0.0006	-0.0167**	-0.0170**
	(1.36)	(1.35)	(0.07)	(0.07)	(-2.06)	(-2.11)
Forecast Horizon	-0.0498***	-0.0498***	-0.0245***	-0.0246***	-0.0173***	-0.0173***
	(-9.10)	(-9.07)	(-4.95)	(-4.98)	(-3.14)	(-3.13)
Intercept	0.7980***	0.8286***	0.7903***	0.8342***	0.7475***	0.8348***
	(36.86)	(101.60)	(36.67)	(107.91)	(27.47)	(86.72)
N	35,858	35,858	67,383	67,383	36,961	36,961
Adj. R-squared	0.119	0.119	0.073	0.073	0.073	0.074

Table 8 (Continued)
The Effects of Work-Life Balance Conditional on General Experience

Panel B: Analyst Performance – Buy-Recommendation Profitability (Full Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1) BHAR	(2) BHAR	(3) BHAR	(4) BHAR	(5) BHAR	(6) BHAR
Work-Life Balance	0.0299		0.0203		0.0576*	
	(1.14)		(0.69)		(1.76)	
Work-Life Balance^2	-0.0046		-0.0025		-0.0102**	
	(-1.01)		(-0.56)		(-2.07)	
|Abn. Pos. Work-Life Balance|		-0.0087		-0.0296		-0.0197**
		(-1.22)		(-1.25)		(-2.23)
|Abn. Neg. Work-Life Balance|		-0.0091*		-0.0096		-0.0198
		(-1.76)		(-1.47)		(-1.49)
Broker Size	0.0048	0.0044	0.0141***	0.0132***	0.0074	0.0079
	(0.80)	(0.84)	(4.28)	(3.26)	(1.04)	(1.20)
Number of Industries	0.0016	0.0017	0.0012	0.0014	0.0033	0.0033
	(0.57)	(0.59)	(0.50)	(0.55)	(1.53)	(1.52)
Number of Firms	0.0008	0.0008	-0.0006	-0.0006	-0.0011	-0.0011
	(1.10)	(1.09)	(-1.45)	(-1.47)	(-1.37)	(-1.39)
Firm Experience	0.0085**	0.0085**	0.0030***	0.0030***	0.0018*	0.0018*
	(2.09)	(2.09)	(2.81)	(2.83)	(1.85)	(1.86)
Firm Size	0.0011	0.0010	0.0040	0.0040	0.0025	0.0025
	(0.23)	(0.22)	(0.72)	(0.73)	(0.41)	(0.42)
Market-to-Book	-0.0020	-0.0020	-0.0016*	-0.0015*	-0.0016***	-0.0016***
	(-1.42)	(-1.41)	(-1.83)	(-1.82)	(-2.89)	(-2.87)
Beta	-0.0266**	-0.0266**	-0.0354**	-0.0351**	-0.0346	-0.0350
	(-2.11)	(-2.10)	(-2.02)	(-2.02)	(-1.59)	(-1.60)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	8,028	8,028	12,836	12,836	7,021	7,021
Adj. R-squared	0.019	0.019	0.021	0.021	0.029	0.029

Table 8 (Continued)
The Effects of Work-Life Balance Conditional on General Experience

Panel C: Analyst Career Outcomes – All-Star Award (Full Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1)	(2)	(3)	(4)	(5)	(6)
	AA Award	AA Award	AA Award	AA Award	AA Award	AA Award
Work-Life Balance	11.5093***		4.0605**		3.7469*	
	(2.80)		(2.53)		(1.91)	
Work-Life Balance^2	-1.7348***		-0.6589***		-0.6177**	
	(-2.87)		(-2.60)		(-1.98)	
|Abn. Pos. Work-Life Balance|		-1.2546***		-0.9243***		-0.8978***
		(-2.65)		(-3.97)		(-3.02)
|Abn. Neg. Work-Life Balance|		-1.5001***		-1.0476***		-1.0468**
		(-3.09)		(-3.07)		(-2.49)
Forecast Accuracy	0.0464	0.0502	0.0930	0.0990	0.0137	0.0181
	(0.51)	(0.53)	(1.06)	(1.10)	(0.17)	(0.22)
Forecast Boldness	0.0343	0.0268	-0.0036	-0.0145	0.0937	0.0883
	(0.48)	(0.38)	(-0.03)	(-0.12)	(0.90)	(0.85)
Forecast Optimism	-0.1406	-0.1334	-0.3955*	-0.3608	-0.2839	-0.2739
	(-0.58)	(-0.56)	(-1.72)	(-1.59)	(-1.08)	(-1.02)
Forecast Frequency	0.0236	0.0231	0.0345	0.0378	0.0579	0.0592
	(0.84)	(0.84)	(1.25)	(1.41)	(1.36)	(1.39)
Forecast Horizon	0.0109	0.0130	0.1099	0.1219*	0.1579	0.1723
	(0.12)	(0.15)	(1.51)	(1.68)	(1.29)	(1.36)
Broker Size	0.6686***	0.6483***	0.8458***	0.8262***	1.0521***	1.0333***
	(3.55)	(3.40)	(5.18)	(5.44)	(6.44)	(6.03)
Number of Industries	0.0691**	0.0719**	0.0308	0.0295	0.0698**	0.0717**
	(2.01)	(2.06)	(1.43)	(1.36)	(2.21)	(2.24)
Number of Firms	0.0835***	0.0839***	0.0781***	0.0782***	0.0506***	0.0506***
	(5.18)	(5.20)	(7.36)	(7.37)	(2.75)	(2.75)
Firm Experience	0.4373***	0.4382***	0.2070***	0.2059***	0.0593**	0.0618**
	(8.18)	(8.21)	(10.72)	(10.86)	(1.99)	(2.10)
Beta	-0.0035	0.0006	-0.0396	-0.0269	0.1513	0.1467
	(-0.02)	(0.00)	(-0.36)	(-0.24)	(0.99)	(0.96)
Firm Size	0.1487***	0.1456***	0.2081***	0.2049***	0.2475***	0.2421***
	(3.23)	(3.16)	(4.49)	(4.46)	(4.51)	(4.60)
Market-to-Book	0.0123	0.0122	-0.0038	-0.0040	0.0227***	0.0225***
	(1.37)	(1.33)	(-0.86)	(-0.89)	(2.80)	(2.70)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	5,166	5,166	5,984	5,984	2,814	2,814
Pseudo R-squared	0.377	0.377	0.345	0.352	0.328	0.336

Panel D: Analyst Career Outcomes – Promotion to Large Brokerage Firms (Full Sample)

Variable	*General Experience < 5 Years*		*General Experience ≥ 5 Years & < 20 Years*		*General Experience ≥ 20 Years*	
	(1) *Promotion*	(2) *Promotion*	(3) *Promotion*	(4) *Promotion*	(5) *Promotion*	(6) *Promotion*
Work-Life Balance	2.4792*		3.8395**		6.6494*	
	(1.79)		(2.02)		(1.73)	
Work-Life Balance²	-0.4566*		-0.6278*		-1.1070*	
	(-1.88)		(-1.93)		(-1.79)	
|Abn. Pos. Work-Life Balance|		-0.5631**		-0.7663*		-1.1049**
		(-2.27)		(-1.70)		(-2.41)
|Abn. Neg. Work-Life Balance|		-0.5580		-0.9334***		-1.3417*
		(-1.43)		(-2.80)		(-1.75)
Forecast Accuracy	0.2489***	0.2512***	0.1088	0.1129	0.2177*	0.2220*
	(3.19)	(3.20)	(1.26)	(1.28)	(1.69)	(1.76)
Forecast Boldness	0.1940*	0.1962*	-0.0495	-0.0527	-0.0876	-0.0877
	(1.85)	(1.87)	(-0.73)	(-0.77)	(-1.18)	(-1.21)
Forecast Optimism	0.1197	0.1154	0.1032	0.1208	0.4307	0.4695
	(0.67)	(0.64)	(0.44)	(0.51)	(1.35)	(1.41)
Forecast Frequency	-0.0114	-0.0108	-0.0998**	-0.0963**	-0.1160***	-0.1113***
	(-0.36)	(-0.34)	(-2.18)	(-2.17)	(-2.59)	(-2.58)
Forecast Horizon	0.1693**	0.1694**	0.2103	0.2216	0.2316*	0.2605**
	(1.99)	(2.00)	(1.45)	(1.54)	(1.95)	(2.15)
Broker Size	0.1909	0.2134*	0.2350*	0.2292*	0.1412	0.1663
	(1.60)	(1.82)	(1.81)	(1.80)	(1.11)	(1.37)
Number of Industries	-0.0868***	-0.0884***	-0.0411**	-0.0433**	0.0368	0.0372
	(-2.89)	(-2.88)	(-2.36)	(-2.45)	(1.12)	(1.13)
Number of Firms	0.0235***	0.0233***	0.0130*	0.0128*	-0.0022	-0.0030
	(3.43)	(3.42)	(1.94)	(1.94)	(-0.26)	(-0.36)
Firm Experience	0.0786*	0.0787	0.0028	0.0029	-0.0069	-0.0059
	(1.65)	(1.64)	(0.10)	(0.11)	(-0.27)	(-0.24)
Beta	0.0716	0.0714	0.0157	0.0166	0.1998	0.1945
	(0.59)	(0.59)	(0.17)	(0.17)	(1.09)	(1.05)
Firm Size	0.0062	0.0099	0.1088***	0.1083***	0.0740	0.0771
	(0.19)	(0.30)	(3.26)	(3.19)	(1.54)	(1.61)
Market-to-Book	0.0102**	0.0104**	0.0073	0.0067	-0.0120	-0.0132
	(2.39)	(2.37)	(0.94)	(0.87)	(-0.71)	(-0.78)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	5,166	5,166	5,984	5,984	2,814	2,814
Pseudo R-squared	0.086	0.085	0.105	0.113	0.167	0.175

Panel E: Analyst Performance – Earnings Forecast Accuracy (Constrained Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1)	(2)	(3)	(4)	(5)	(6)
	Forecast Accuracy	Forecast Accuracy	Forecast Accuracy	Forecast Accuracy	Forecast Accuracy	Forecast Accuracy
Work-Life Balance	0.0269*		0.0274*		0.0363*	
	(1.80)		(1.92)		(1.94)	
Work-Life Balance²	-0.0045*		-0.0049**		-0.0054*	
	(-1.89)		(-2.17)		(-1.80)	
|Abn. Pos. Work-Life Balance|		-0.0070		-0.0079**		-0.0117
		(-1.40)		(-1.98)		(-1.42)
|Abn. Neg. Work-Life Balance|		-0.0078		-0.0071		-0.0126**
		(-1.31)		(-1.09)		(-2.09)
Broker Size	-0.0800***	-0.0801***	-0.0780***	-0.0782***	-0.0718***	-0.0717***
	(-10.61)	(-10.63)	(-12.57)	(-12.58)	(-8.06)	(-8.05)
Number of Industries	-0.2454***	-0.2453***	-0.2310***	-0.2308***	-0.2346***	-0.2346***
	(-36.04)	(-36.04)	(-38.15)	(-38.07)	(-24.35)	(-24.34)
Number of Firms	-0.0395***	-0.0388***	-0.0293***	-0.0280***	-0.0347***	-0.0366***
	(-4.87)	(-4.81)	(-4.25)	(-4.07)	(-3.76)	(-3.85)
Firm Experience	-0.0069	-0.0070	-0.0201***	-0.0202***	-0.0051	-0.0047
	(-0.68)	(-0.70)	(-2.88)	(-2.89)	(-0.53)	(-0.50)
Forecast Frequency	0.0180	0.0181	0.0014	0.0015	-0.0171*	-0.0172*
	(1.60)	(1.61)	(0.18)	(0.20)	(-1.81)	(-1.83)
Forecast Horizon	-0.0543***	-0.0543***	-0.0235***	-0.0236***	-0.0176**	-0.0174**
	(-5.66)	(-5.66)	(-4.29)	(-4.31)	(-2.51)	(-2.48)
Intercept	0.7769***	0.8183***	0.7862***	0.8257***	0.7595***	0.8248***
	(33.35)	(113.11)	(34.91)	(116.72)	(26.16)	(70.21)
N	27,107	27,107	50,615	50,615	26,536	26,536
Adj. R-squared	0.112	0.112	0.070	0.070	0.066	0.067

Panel F: Analyst Performance – Buy-Recommendation Profitability (Constrained Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1) BHAR	(2) BHAR	(3) BHAR	(4) BHAR	(5) BHAR	(6) BHAR
Work-Life Balance	0.0342		0.0171		0.1032**	
	(0.78)		(0.56)		(2.40)	
Work-Life Balance^2	-0.0061		-0.0033		-0.0171**	
	(-0.84)		(-0.62)		(-2.45)	
|Abn. Pos. Work-Life Balance|		-0.0141		-0.0027		-0.0260*
		(-1.05)		(-0.27)		(-1.66)
|Abn. Neg. Work-Life Balance|		-0.0175		0.0034		-0.0288*
		(-0.94)		(0.23)		(-1.77)
Broker Size	0.0047	0.0041	0.0027	0.0045	0.0101	0.0117
	(0.53)	(0.47)	(0.42)	(0.70)	(1.23)	(1.40)
Number of Industries	0.0003	0.0003	0.0018	0.0018	0.0084**	0.0082**
	(0.09)	(0.08)	(0.59)	(0.59)	(2.51)	(2.48)
Number of Firms	0.0013	0.0013	0.0001	0.0001	-0.0028***	-0.0028***
	(1.33)	(1.33)	(0.12)	(0.13)	(-3.62)	(-3.61)
Firm Experience	0.0069	0.0070	0.0037***	0.0037***	0.0024**	0.0024**
	(1.47)	(1.48)	(3.32)	(3.33)	(2.34)	(2.34)
Firm Size	-0.0014	-0.0013	0.0026	0.0026	-0.0002	-0.0002
	(-0.31)	(-0.31)	(0.79)	(0.80)	(-0.04)	(-0.05)
Market-to-Book	-0.0004	-0.0004	-0.0011	-0.0011	-0.0026*	-0.0025*
	(-0.34)	(-0.35)	(-1.06)	(-1.07)	(-1.91)	(-1.89)
Beta	-0.0237	-0.0237	-0.0587***	-0.0590***	-0.0341*	-0.0346**
	(-1.36)	(-1.35)	(-4.36)	(-4.38)	(-1.95)	(-1.98)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	5,816	5,816	9,016	9,016	4,733	4,733
Adj. R-squared	0.017	0.017	0.026	0.026	0.042	0.041

Table 8 (Continued)
The Effects of Work-Life Balance Conditional on General Experience

Panel G: Analyst Career Outcomes – All-Star Award (Constrained Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1) AA Award	(2) AA Award	(3) AA Award	(4) AA Award	(5) AA Award	(6) AA Award
Work-Life Balance	1.5155		3.8702***		1.7373	
	(1.27)		(2.81)		(1.00)	
Work-Life Balance²	-0.2245		-0.6076***		-0.3183	
	(-1.15)		(-2.83)		(-1.20)	
|Abn. Pos. Work-Life Balance|		-0.1827		-0.6208***		-0.3864**
		(-0.48)		(-2.61)		(-2.20)
|Abn. Neg. Work-Life Balance|		-0.2399		-0.6490**		-0.1991
		(-1.37)		(-2.39)		(-0.44)
Forecast Accuracy	0.1555	0.1570	0.0654	0.0694	0.0986	0.0974
	(1.05)	(1.06)	(0.69)	(0.73)	(1.19)	(1.18)
Forecast Boldness	0.0329	0.0315	-0.0550	-0.0490	0.2352**	0.2380**
	(0.42)	(0.39)	(-0.44)	(-0.38)	(1.99)	(2.01)
Forecast Optimism	-0.1193	-0.1190	-0.4289*	-0.4021*	-0.2664	-0.2664
	(-0.45)	(-0.45)	(-1.86)	(-1.73)	(-0.91)	(-0.94)
Forecast Frequency	0.0234	0.0230	0.0356	0.0360	0.0535	0.0573
	(0.79)	(0.77)	(1.20)	(1.22)	(1.30)	(1.37)
Forecast Horizon	0.0313	0.0315	0.1523**	0.1528**	0.1868	0.1917
	(0.35)	(0.35)	(2.21)	(2.20)	(1.52)	(1.58)
Broker Size	0.5722***	0.5792***	0.7295***	0.7296***	1.0006***	1.0559***
	(3.09)	(3.10)	(4.14)	(4.22)	(7.73)	(7.65)
Number of Industries	0.0462	0.0464	0.0230	0.0239	0.0883***	0.0864***
	(1.09)	(1.10)	(0.96)	(1.00)	(2.70)	(2.69)
Number of Firms	0.0871***	0.0874***	0.0827***	0.0825***	0.0578***	0.0583***
	(5.40)	(5.42)	(7.74)	(7.77)	(3.03)	(3.03)
Firm Experience	0.4384***	0.4380***	0.2163***	0.2149***	0.0874***	0.0865***
	(8.03)	(7.98)	(10.54)	(10.66)	(3.02)	(3.04)
Beta	0.0834	0.0823	-0.0233	-0.0259	0.1488	0.1354
	(0.52)	(0.51)	(-0.20)	(-0.22)	(0.96)	(0.87)
Firm Size	0.1532***	0.1529***	0.2004***	0.2021***	0.2245***	0.2298***
	(2.96)	(2.96)	(4.05)	(4.14)	(4.55)	(4.53)
Market-to-Book	0.0149	0.0151*	-0.0051	-0.0051	0.0165*	0.0166*
	(1.63)	(1.65)	(-1.00)	(-0.98)	(1.90)	(1.90)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	4,115	4,115	4,686	4,686	2,070	2,070
Pseudo R-squared	0.352	0.351	0.330	0.329	0.319	0.315

Panel H: Analyst Career Outcomes – Promotion to Large Brokerage Firms (Constrained Sample)

Variable	General Experience < 5 Years		General Experience ≥ 5 Years & < 20 Years		General Experience ≥ 20 Years	
	(1)	(2)	(3)	(4)	(5)	(6)
	Promotion	Promotion	Promotion	Promotion	Promotion	Promotion
Work-Life Balance	0.3793		1.1169***		0.0330	
	(1.25)		(3.69)		(0.11)	
Work-Life Balance²	-0.0584		-0.1679***		0.0086	
	(-1.45)		(-3.69)		(0.17)	
|Abn. Pos. Work-Life Balance|		-0.1110		-0.2751**		0.0697
		(-0.96)		(-2.36)		(0.42)
|Abn. Neg. Work-Life Balance|		-0.1321		-0.3067**		-0.2652
		(-0.81)		(-2.14)		(-0.55)
Forecast Accuracy	0.1454	0.1459	0.0518	0.0518	0.0405	0.0392
	(1.32)	(1.32)	(0.91)	(0.89)	(0.60)	(0.58)
Forecast Boldness	0.0490	0.0483	-0.0945*	-0.0947*	-0.2001	-0.2026
	(0.38)	(0.37)	(-1.85)	(-1.93)	(.)	(.)
Forecast Optimism	-0.0426	-0.0450	-0.1609	-0.1570	-0.3652	-0.3664
	(-0.26)	(-0.28)	(-0.77)	(-0.74)	(-1.35)	(-1.37)
Forecast Frequency	0.0138	0.0136	-0.0536	-0.0545*	-0.0101	-0.0112
	(0.54)	(0.54)	(-1.63)	(-1.65)	(-0.19)	(-0.21)
Forecast Horizon	0.2143***	0.2145***	0.2979***	0.2953***	0.3343**	0.3329**
	(3.13)	(3.16)	(3.86)	(3.80)	(2.17)	(2.17)
Broker Size	-0.0423	-0.0410	0.1443	0.1514	0.0172	0.0119
	(-0.31)	(-0.29)	(0.96)	(0.98)	(0.12)	(0.09)
Number of Industries	-0.0833	-0.0828	-0.0430**	-0.0431**	-0.0106	-0.0106
	(-1.45)	(-1.45)	(-2.14)	(-2.16)	(-0.31)	(-0.31)
Number of Firms	0.0250***	0.0250***	0.0069**	0.0071**	-0.0027	-0.0027
	(2.69)	(2.67)	(2.17)	(2.31)	(-0.16)	(-0.16)
Firm Experience	0.0900**	0.0901**	-0.0026	-0.0030	-0.0187	-0.0193
	(1.96)	(2.00)	(-0.12)	(-0.14)	(-1.26)	(-1.27)
Beta	-0.0146	-0.0147	0.0741	0.0758	0.0645	0.0684
	(-0.22)	(-0.22)	(0.69)	(0.69)	(0.33)	(0.35)
Firm Size	-0.0449	-0.0449	0.0252	0.0244	0.0198	0.0203
	(-1.44)	(-1.43)	(0.62)	(0.59)	(0.46)	(0.48)
Market-to-Book	0.0137**	0.0136**	0.0076	0.0075	-0.0020	-0.0019
	(2.39)	(2.41)	(0.94)	(0.91)	(-0.10)	(-0.10)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	4,115	4,115	4,686	4,686	2,070	2,070
Pseudo R-squared	0.063	0.063	0.056	0.056	0.047	0.048

Table 9
Excluding Ratings Submitted in October

This table presents the results from estimating Equation (1) (Panel A), Equation (2) (Panel B) and Equation (3) (Panel C), where *Work-Life Balance* is measured using all Glassdoor reviews other than those submitted in October. All variables are defined in the Appendix. The t- and z-statistics (in brackets) are calculated based on the standard errors clustered at the broker level. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Work-Life Balance and Earnings Forecast Accuracy

Variable	(1) Forecast Accuracy	(2) Forecast Accuracy	(3) Forecast Accuracy
Work-Life Balance	-0.0048*	0.0351**	
	(-1.73)	(2.46)	
Work-Life Balance²		-0.0063***	
		(-2.94)	
|Abn. Pos. Work-Life Balance|			-0.0097**
			(-2.45)
|Abn. Neg. Work-Life Balance|			-0.0064
			(-1.02)
Broker Size	-0.0311***	-0.0357***	-0.0338***
	(-4.80)	(-5.24)	(-5.28)
Number of Industries	-0.0141***	-0.0136***	-0.0139***
	(-2.76)	(-2.69)	(-2.71)
Number of Firms	0.0045	0.0046	0.0045
	(0.59)	(0.60)	(0.58)
Firm Experience	-0.0207***	-0.0204***	-0.0205***
	(-5.58)	(-5.51)	(-5.55)
Forecast Frequency	-0.0868***	-0.0867***	-0.0868***
	(-14.06)	(-14.04)	(-13.99)
Forecast Horizon	-0.2388***	-0.2394***	-0.2392***
	(-53.70)	(-53.63)	(-53.07)
Intercept	0.8367***	0.7784***	0.8286***
	(80.80)	(32.66)	(115.16)
N	127,514	127,514	127,514
Adj. R-squared	0.086	0.086	0.086

Table 9 (Continued)
Excluding Ratings Submitted in October

Panel B. Work-Life Balance and Stock-Recommendation Profitability

Variable	Buy Recommendations			Sell Recommendations		
	(1)	(2)	(3)	(4)	(5)	(6)
	BHAR	BHAR	BHAR	BHAR	BHAR	BHAR
Work-Life Balance	0.0003	0.0393*		-0.0010	0.0082	
	(0.05)	(1.96)		(-0.43)	(0.50)	
Work-Life Balance^2		-0.0062**			-0.0015	
		(-2.05)			(-0.58)	
|Abn. Pos. Work-Life Balance|			-0.0124*			-0.0024
			(-1.68)			(-0.60)
|Abn. Neg. Work-Life Balance|			-0.0125*			-0.0019
			(-1.85)			(-0.26)
Broker Size	0.0129***	0.0105***	0.0098***	0.0069*	0.0063**	0.0065**
	(3.19)	(2.92)	(2.75)	(1.93)	(2.04)	(2.02)
Number of Industries	0.0031*	0.0032*	0.0032*	0.0028*	0.0029*	0.0028*
	(1.77)	(1.78)	(1.79)	(1.69)	(1.69)	(1.69)
Number of Firms	-0.0004	-0.0004	-0.0004	-0.0009*	-0.0009*	-0.0009*
	(-0.53)	(-0.53)	(-0.53)	(-1.72)	(-1.72)	(-1.72)
Firm Experience	0.0031***	0.0031***	0.0031***	-0.0004	-0.0004	-0.0004
	(4.16)	(4.17)	(4.17)	(-0.57)	(-0.57)	(-0.57)
Firm Size	0.0099***	0.0098***	0.0097***	0.0226***	0.0226***	0.0226***
	(2.86)	(2.84)	(2.81)	(7.62)	(7.59)	(7.60)
Market-to-Book	-0.0023***	-0.0023***	-0.0023***	-0.0023**	-0.0023**	-0.0023**
	(-3.12)	(-3.12)	(-3.11)	(-2.02)	(-2.03)	(-2.02)
Beta	-0.0340**	-0.0341**	-0.0341**	-0.0352**	-0.0352**	-0.0352**
	(-2.20)	(-2.20)	(-2.20)	(-2.54)	(-2.55)	(-2.55)
Industry Fixed Effects	Included	Included	Included	Included	Included	Included
N	24,795	24,795	24,795	30,616	30,616	30,616
Adj. R-squared	0.032	0.032	0.032	0.037	0.037	0.037

Table 9 (Continued)
Excluding Ratings Submitted in October

Panel C. Work-Life Balance and Analyst Career Outcomes

Variable	(1) AA Award	(2) Promotion	(3) AA Award	(4) Promotion	(5) AA Award	(6) Promotion
Work-Life Balance	-0.0328	-0.1077	3.4914***	3.3863**		
	(-0.32)	(-1.03)	(2.67)	(2.29)		
Work-Life Balance^2			-0.5706***	-0.5696**		
			(-2.79)	(-2.25)		
|Abn. Pos. Work-Life Balance|					-0.8435***	-0.7521**
					(-4.00)	(-2.20)
|Abn. Neg. Work-Life Balance|					-0.9835***	-0.9272***
					(-3.20)	(-2.72)
Forecast Accuracy	0.0624	0.1727***	0.0645	0.1818***	0.0701*	0.1862***
	(1.53)	(3.45)	(1.56)	(3.50)	(1.65)	(3.49)
Forecast Boldness	0.0347	0.0555	0.0321	0.0516	0.0288	0.0508
	(0.63)	(1.02)	(0.58)	(0.98)	(0.52)	(0.97)
Forecast Optimism	-0.2991*	0.1652	-0.2815*	0.1614	-0.2656*	0.1616
	(-1.94)	(1.18)	(-1.85)	(1.14)	(-1.78)	(1.11)
Forecast Frequency	0.0504**	-0.0469	0.0507**	-0.0463	0.0527**	-0.0438
	(2.02)	(-1.55)	(2.08)	(-1.57)	(2.20)	(-1.55)
Forecast Horizon	0.1640**	0.2177***	0.1642**	0.2339***	0.1742***	0.2443***
	(2.57)	(2.94)	(2.56)	(3.39)	(2.71)	(3.59)
Broker Size	1.0043***	0.2697**	0.8938***	0.1799	0.8703***	0.1831*
	(7.00)	(2.41)	(6.72)	(1.62)	(6.96)	(1.72)
Number of Industries	0.0433***	-0.0308*	0.0442***	-0.0317*	0.0444***	-0.0335*
	(2.71)	(-1.79)	(2.77)	(-1.78)	(2.76)	(-1.89)
Number of Firms	0.0739***	0.0122**	0.0734***	0.0119**	0.0735***	0.0116**
	(6.26)	(2.24)	(6.37)	(2.28)	(6.41)	(2.28)
Firm Experience	0.1604***	-0.0001	0.1632***	0.0012	0.1651***	0.0011
	(7.60)	(-0.01)	(7.81)	(0.08)	(8.14)	(0.08)
Beta	0.0226	0.0560	0.0260	0.0545	0.0296	0.0504
	(0.25)	(0.73)	(0.29)	(0.72)	(0.34)	(0.67)
Firm Size	0.2261***	0.0664***	0.2194***	0.0602***	0.2165***	0.0608***
	(6.16)	(3.59)	(6.22)	(3.26)	(6.26)	(3.23)
Market-to-Book	0.0089**	0.0067	0.0089**	0.0064	0.0087**	0.0058
	(2.44)	(1.46)	(2.35)	(1.41)	(2.27)	(1.27)
Year Fixed Effects	Included	Included	Included	Included	Included	Included
N	13,742	13,742	13,742	13,742	13,742	13,742
Pseudo R-squared	0.366	0.066	0.377	0.082	0.383	0.091

Table 10
The Effect of Change in Work-Life Balance due to Brokerage-Firm Mergers on Analyst Performance

This table presents the results from estimating Equation (1) (Panel A) and Equation (2) (Panel B) on a sample of analysts (from the full sample) who changed employers as a result of brokerage-firm mergers. For a given affected analyst, we examine her performance within the two years before and the two years after the corresponding brokerage-firm merger. All variables are defined in the Appendix. The t-statistics (in brackets) are calculated based on the standard errors clustered at the broker level. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Analyst Performance – Earnings Forecast Accuracy

Variable	(1) Forecast Accuracy	(2) Forecast Accuracy
Work-Life Balance	0.0969*	
	(1.70)	
Work-Life Balance^2	-0.0232***	
	(-2.93)	
|Abn. Pos. Work-Life Balance|		-0.0483***
		(-3.65)
|Abn. Neg. Work-Life Balance|		-0.0236
		(-0.49)
Broker Size	-0.0397	-0.0512
	(-1.06)	(-1.64)
Number of Industries	-0.2298***	-0.2226***
	(-6.07)	(-5.86)
Number of Firms	-0.0326	-0.0131
	(-0.83)	(-0.42)
Firm Experience	0.0190	0.0173
	(0.37)	(0.34)
Forecast Frequency	-0.0502	-0.0603
	(-0.71)	(-0.82)
Forecast Horizon	-0.0588	-0.0572
	(-1.46)	(-1.43)
Intercept	0.7667***	0.8770***
	(6.28)	(17.25)
N	807	807
Adj. R-squared	0.068	0.066

Table 10 (Continued)
**The Effect of Change in Work-Life Balance due to Brokerage-Firm Mergers on
Analyst Performance**

Panel B: Analyst Performance – Stock-Recommendation Profitability

Variable	Buy Recommendations		Sell Recommendations	
	(1)	(2)	(3)	(4)
	BHAR	*BHAR*	*BHAR*	*BHAR*
Work-Life Balance	0.6134***		0.2596	
	(3.06)		(0.59)	
Work-Life Balance^2	-0.1020***		-0.0435	
	(-2.76)		(-0.57)	
|Abn. Pos. Work-Life Balance|		-0.2157**		-0.1546
		(-2.30)		(-1.05)
|Abn. Neg. Work-Life Balance|		-0.1790***		-0.1102
		(-5.60)		(-0.99)
Broker Size	0.0606	0.0729	-0.0116	-0.0048
	(1.29)	(1.54)	(-0.53)	(-0.24)
Number of Industries	-0.0532**	-0.0469*	-0.0005	0.0040
	(-2.09)	(-1.93)	(-0.04)	(0.34)
Number of Firms	0.0018	0.0032	0.0022	0.0034
	(0.56)	(0.93)	(0.55)	(0.88)
Firm Experience	0.0198*	0.0200*	-0.0033	-0.0034
	(1.97)	(1.97)	(-0.44)	(-0.47)
Firm Size	0.0058	0.0081	-0.0086	-0.0074***
	(0.52)	(0.71)	(-1.44)	(-3.71)
Market-to-Book	-0.0068	-0.0068	0.0045	0.0051
	(-1.11)	(-1.12)	(0.20)	(0.23)
Beta	0.0274	0.0378	0.1277	0.1222
	(0.32)	(0.43)	(0.96)	(0.92)
Industry Fixed Effects	Included	Included	Included	Included
N	253	253	234	234
Adj. R-squared	0.075	0.093	0.119	0.130

Table 11
Robustness Check: Instrumental Variable Approach

This table presents the results from estimating Equation (1) to (3) using he instrumental variable approach. The instrumental variables include an indicator variable of the best state to live in (Massachusetts; USA Today 2016) and an indicator of the worst city for traffic (Los Angeles). All variables are defined in the Appendix. *, **, and *** indicate two-tailed significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Analyst Performance – Earnings Forecast Accuracy

Variable	First Stage		Second Stage
	(1) *Work-Life Balance*	(2) *Work-Life Balance²*	(3) *Forecast Accuracy*
Best State	0.1819***	1.3535***	
	(4.66)	(5.63)	
Worst Traffic City	-0.4840***	-2.6973***	
	(-22.42)	(-21.41)	
Work-Life Balance			0.3240***
			(3.16)
Work-Life Balance²			-0.0548***
			(-3.20)
State GDP Growth	-0.0013	-0.0072	0.0015
	(-0.20)	(-0.18)	(1.55)
Broker Size	0.0027	-0.7901**	-0.0799***
	(0.05)	(-2.49)	(-4.44)
Number of Industries	0.0520*	0.4280**	-0.0114***
	(1.68)	(2.12)	(-2.67)
Number of Firms	-0.0276	-0.1477	0.0120**
	(-1.08)	(-0.95)	(2.26)
Firm Experience	0.0274**	0.2205***	-0.0172***
	(2.28)	(2.86)	(-3.83)
Forecast Frequency	-0.0592***	-0.3341***	-0.0961***
	(-3.82)	(-3.47)	(-21.30)
Forecast Timeliness	0.0131	-0.0203	-0.2437***
	(1.01)	(-0.26)	(-49.26)
Intercept	3.2274***	11.1794***	0.3897***
	(126.88)	(65.99)	(2.92)
N	102,551	102,551	102,551
Adj. R-squared	0.009	0.011	0.074
Partial F-statistic	221.43	259.54	
P-value from Durbin-Wu-Hausman test			0.29

Table 11 (Continued)
Robustness Check: Instrumental Variable Approach

Panel B: Analyst Performance – Stock-Recommendation Profitability

	Buy Recommendations			Sell Recommendations		
	First Stage		Second Stage	First Stage		Second Stage
	(1)	(2)	(3)	(4)	(5)	(6)
Variable	Work-Life Balance	Work-Life Balance^2	BHAR	Work-Life Balance	Work-Life Balance^2	BHAR
Best State	0.2777***	1.8534***		0.1671***	1.1756***	
	(12.01)	(12.46)		(6.24)	(7.00)	
Worst Traffic City	-0.3729***	-2.3453***		-0.3629***	-2.1464***	
	(-16.27)	(-14.71)		(-14.90)	(-12.92)	
Work-Life Balance			-1.8283			-0.8866*
			(-1.37)			(-1.94)
Work-Life Balance^2			0.2827			0.1438*
			(1.35)			(1.89)
State GDP Growth	-0.0047	-0.0401	0.0041	-0.0032	-0.0261	0.0004
	(-1.11)	(-1.63)	(1.19)	(-0.76)	(-1.04)	(0.12)
Broker Size	0.0175	-0.3200**	0.1348	0.0262	-0.2675*	0.0728**
	(0.83)	(-2.29)	(1.48)	(1.06)	(-1.74)	(2.12)
Number of Industries	0.0104*	0.0761**	-0.0008	0.0074	0.0601	-0.0018
	(1.75)	(2.10)	(-0.19)	(1.17)	(1.59)	(-0.96)
Number of Firms	-0.0018	-0.0116	-0.0008*	-0.0031***	-0.0195***	-0.0007**
	(-1.22)	(-1.14)	(-1.71)	(-3.29)	(-3.32)	(-2.46)
Firm Experience	0.0025*	0.0119	0.0035**	0.0032**	0.0173**	0.0000
	(1.81)	(1.31)	(2.12)	(2.57)	(2.29)	(0.08)
Firm Size	-0.0081***	-0.0766***	0.0107**	-0.0092***	-0.0779***	0.0194***
	(-2.66)	(-3.76)	(2.09)	(-2.72)	(-3.54)	(8.70)
Market-to-Book	0.0004	0.0042	-0.0019***	-0.0008	-0.0058	-0.0018***
	(0.45)	(0.74)	(-2.70)	(-1.12)	(-1.25)	(-2.78)
Beta	-0.0472***	-0.3075***	-0.0315***	-0.0463***	-0.2802***	-0.0313***
	(-4.91)	(-5.31)	(-3.84)	(-4.17)	(-4.36)	(-5.77)
Industry Fixed Effects	Included	Included	Included	Included	Included	Included
N	20,447	20,447	20,447	24,700	24,700	24,700
Adj. R-squared	0.012	0.016	0.027	0.012	0.015	0.033
Partial F-statistic	46.26	55.50		35.85	43.13	
P-value from Durbin-Wu-Hausman test			0.41			0.31

Table 11 (Continued)
Table 11 (Continued)
Robustness Check: Instrumental Variable Approach

Panel C: Analyst Career Outcomes

	First Stage		Second Stage	
	(1)	(2)	(3)	(4)
Variable	*Work-Life Balance*	*Work-Life Balance²*	*AA Award*	*Promotion*
Best State	0.1701***	1.2597***		
	(6.11)	(7.16)		
Worst Traffic State	-0.4982***	-3.0342***		
	(-15.67)	(-15.73)		
Work-Life Balance			32.1842*	-6.4918
			(1.73)	(-0.67)
Work-Life Balance²			-5.1733*	1.1118
			(-1.72)	(0.73)
State GDP Growth	-0.0050	-0.0443	-0.0262	0.0542*
	(-0.55)	(-0.77)	(-0.55)	(1.82)
Forecast Accuracy	-0.0235**	-0.1397*	0.0417	0.1604
	(-2.05)	(-1.71)	(0.42)	(1.53)
Forecast Boldness	-0.0060	-0.0359	0.0254	0.0646
	(-0.27)	(-0.23)	(0.20)	(0.58)
Forecast Optimism	-0.0389	-0.2688	-0.3622	0.3331
	(-0.80)	(-0.91)	(-1.35)	(1.49)
Forecast Frequency	-0.0070*	-0.0475**	0.0651**	-0.0460*
	(-2.00)	(-2.13)	(2.16)	(-1.77)
Forecast Timeliness	-0.0007	0.0320	0.3506**	0.2583**
	(-0.09)	(0.65)	(2.33)	(2.38)
Broker Size	-0.0130	-0.4877**	-0.9685	0.8582
	(-0.44)	(-2.67)	(-0.78)	(1.37)
Number of Industries	0.0013	0.0152	0.0868***	-0.0548**
	(0.22)	(0.43)	(2.77)	(-2.37)
Number of Firms	-0.0014	-0.0069	0.0667***	0.0111*
	(-1.51)	(-1.15)	(8.00)	(1.76)
Firm Experience	0.0138***	0.0864***	0.1686***	-0.0071
	(4.39)	(4.49)	(7.71)	(-0.36)
Beta	-0.0411	-0.2553	0.0214	0.0339
	(-1.40)	(-1.36)	(0.16)	(0.29)
Firm Size	-0.0058	-0.0763*	0.0415	0.1243*
	(-0.94)	(-1.89)	(0.33)	(1.83)
Market-to-Book	-0.0030**	-0.0188**	0.0059	0.0085
	(-2.10)	(-2.40)	(0.73)	(1.27)
Year Fixed Effects	Included	Included	Included	Included
N	9,069	9,069	9,069	9,069
Adj./Pseudo R-squared	0.053	0.055	0.342	0.074
Partial F-statistic	21.40	26.06		
P-value from Wald-test of exogeneity			0.17	0.32