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ABSTRACT

Work experiences, conceptualized as work attitudes, influence employees' turnover and performance. Therefore, it is essential for investment banks to understand the determinants of traders' work experience. Analyzing traders' reviews of major investment banks, this study shows that traders' attitudes depend on the banks' culture, traders' career opportunities, and, to a lesser extent, their pay perceptions. Furthermore, traders are often happy with their coworkers but dissatisfied with their banks' technology, bureaucracy, ethics, and their work-life balance. Hence, this study identifies non-monetary determinants of traders' work attitudes, extends behavioral finance research, and offers applications for investment banks as well as their shareholders.

KEYWORDS

Trader; Investment bank;
Pay; Ethics; Job satisfaction

Introduction



Wall Street's leading banks increased pay by nearly 15 per cent last year as they fought a war for talent [...] JPMorgan Chase, Citigroup, Goldman Sachs, Morgan Stanley and Bank of America disclosed in recent days that they had handed out \$142bn in pay and benefits in 2021, up from \$124bn in 2020, in an effort to keep their top bankers satisfied (Franklin and Moise 2022).

Investment banks are known to pay financial practitioners well. For instance, the typical yearly salary of traders working at J.P. Morgan is \$94,522, and traders' salaries can reach \$270,000. Similarly, the average yearly salary of traders working at Goldman Sachs is \$92,150, and traders' salaries can reach \$366,000 (Glassdoor 2022). On top of that, investment banks offer practitioners generous bonuses. These large salaries and bonuses aim to enhance practitioner performance and retention. But how do these monetary rewards impact financial practitioners' overall attitudes toward their banks? Which factors motivate them to work at their banks? And with which work characteristics are they dissatisfied?

Understanding the determinants of financial practitioners' work experiences, motivators and job satisfaction could have applications for decision-makers in investment banks and their shareholders. This is because practitioners' work experiences influence their

performance (Judge et al. 2001) and turnover intent. In fact, in nurses (Lum et al. 1998) and USA federal employees (Pitts, Marvel, and Fernandez 2011), turnover intent has been found to depend more on job satisfaction than on pay perceptions. However, the factors affecting work experience and job satisfaction are context- and industry-dependent (Judge et al. 2010). The case of the financial industry is unique, because unlike many other industries, the financial industry is often perceived to be predominantly motivated by greed (e.g., Murdoch 2021). To date, research has not systematically investigated job satisfaction in the financial industry. Hence, *a-priori*—before examining the financial industry—the determinants of financial practitioners' work experiences were unclear.

To address this issue, this study explores financial practitioners' work experiences. Research has conceptualized the experience of work through several aspects, including work attitudes, job satisfaction, work moods and emotions (George and Jones 1996). Of these aspects, this study focuses on practitioners' attitudes toward their banks. In addition, it examines the factors that motivate practitioners to work at the banks and the work characteristics with which they are dissatisfied. Because traders' decision-making is central to markets behavior (Coval and Shumway 2005), it focuses on traders. To provide a comprehensive and

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updated picture of influential investment banks, it investigates all traders' Glassdoor reviews written between 2012 and 2021 on ten major investment banks (<https://www.glassdoor.co.uk>). Specifically, it quantitatively and qualitatively examines the banks which had the greatest returns in 2020, including J.P. Morgan, Goldman Sachs, Bank of America, Morgan Stanley, Citi, Credit Suisse, Barclays, Deutsche Bank, Jefferies, and UBS (Norrestad 2021).

Quantitatively analyzing traders' reviews of these banks, this study shows that traders' overall attitudes toward their banks significantly depend on their pay satisfaction. However, they depend on the banks' culture more strongly than on traders' pay perceptions, and this result is robust when the analysis controls for the bank itself and the occurrence of COVID-19. Traders' bank attitudes significantly depend also on their career opportunities, work-life balance and senior management. Qualitatively analyzing the reviews, this study identifies additional factors that serve as work motivators in investment banks, including satisfaction with coworkers and learning opportunities. Moreover, it shows that a proportion of traders are dissatisfied with their work-life balance, stress level, the banks' technology, bureaucracy, management and a wide range of ethics-related issues, such as their reward fairness and the bank's internal politics. Finally, this paper establishes that although traders' perceptions of their banks and work are diverse, most traders are happy with their pay and career opportunities.

This study makes two major theoretical contributions and an empirical contribution to the literature on practitioners' work experience within behavioral finance. First, it complements previous research by systematically identifying non-financial factors that influence traders' experience. Previous research has contributed important insights into practitioners' experience by showing that certain experiential aspects—emotions—impact financial performance (Rubaltelli et al. 2010; Wynes 2021). However, it has focused on the dependence of practitioners' experience on financial factors, such as returns (Merkle, Egan, and Davies 2015) or return patterns (Grosshans and Zeisberger 2018). Only few, separated studies have examined how organizational factors impact practitioners' experience (Deng and Gao 2017; Mahmood et al. 2019; Sobolev 2020), and these studies have provided disjointed and partial descriptions of it. For instance, they have disregarded traders' perceptions of their coworkers, pay fairness, and bank politics. Elucidating the effects of a system of organizational factors, this study provides a comprehensive picture of

the determinants of traders' experience. Furthermore, some of the identified factors challenge common perceptions of investment banks. For instance, although investment banks are perceived to be highly advanced technologically (Shevlin 2019), this study suggests that many practitioners consider their banks technologically underdeveloped.

Second, this study is the first to suggest that traders' experience at the banks is, overall, positive. Relating practitioners' emotions to volatile market parameters, the literature about traders' experience has often portrayed it as highly unstable, ranging between the highs of gains and the lows of losses (Fenton-O'Creevy et al. 2011; Lo and Repin 2002). In particular, it has emphasized that professionals often feel extreme emotions such as anxiety, fear, stress, burnout, and euphoria (Fairchild 2014; Peterson 2007; Shefrin 2002). Revealing that most traders in large investment banks are satisfied with many aspects of their work, including their pay and coworkers, this study extends the understanding of traders' experience and highlights its positive facets.

Third, this paper contributes to the literature by empirically investigating traders' experiences in ten influential investment banks. Quantitatively and qualitatively analyzing their reviews, it provides a personal account of their work perceptions.

Theoretical background and research questions

Behavioral finance research on practitioners' work experience

Behavioral finance research on financial agents' experience has aimed to characterize their reactions to financial events. Hence, it has conceptualized happiness as practitioners' satisfaction with their financial performance. Using this definition, research has established that happiness depends on realized returns and relative performance (Merkle, Egan, and Davies 2015) and that satisfaction with stock performance depends on stock price patterns (Grosshans and Zeisberger 2018). Furthermore, a study has shown that traders often experience significant mood swings due to their gains and losses. These depressive or euphoric moods could persist for a long time (Fenton-O'Creevy et al. 2011). Both inexperienced and experienced practitioners could feel intense fear during the trading day, and many agents experience short-term stress episodes as well as chronic stress. The anticipation of negative events is especially painful (Peterson 2007). In fact, a study has demonstrated that practitioners exhibit also

physiological responses to market volatility (Lo and Repin 2002). Thus, highlighting practitioners' extreme highs and lows, behavioral finance research has portrayed agents' experience as a series of positive and negative episodes, which are correlated with financial parameters.

Organizational behavior research on job satisfaction, motivators, and dissatisfaction factors

Organizational behavior research has developed several conceptualizations of the notion of job satisfaction. In particular, a classical study has defined job satisfaction to be the pleasurable emotional experience, resulting from the appraisal of one's job (Locke 1976). Another early study has defined job satisfaction to be the extent to which a person expresses satisfaction with the features of the job (Warr, Cook, and Wall 1979). Additional definitions conceptualized job satisfaction as a type of work attitude or work experience (George and Jones 1996).

Research has suggested that job satisfaction comprises many aspects, including satisfaction with pay, coworkers, supervisors, the characteristics of the work itself, promotion and career opportunities, as well as autonomy (the freedom to choose the method of work), recognition for good work, and the amount of responsibility that the work involves (Warr, Cook, and Wall 1979). Modern job satisfaction theories often conceptualize job satisfaction through the system of the first five factors on this list (Kinicki et al. 2002).

The aspects appearing in conceptualizations of job satisfaction have been termed "motivators." A fundamental study has theorized that motivators, which positively affect job satisfaction (e.g., the work itself, recognition for achievement and responsibility) are different from the factors which lead to job dissatisfaction (originally termed "hygiene factors"; e.g., supervision and company administration; Herzberg 1974). In line with this classification, throughout this study, I refer by "motivators" to factors that increase job satisfaction and by "dissatisfaction factors" to factors that decrease it.

Research questions

Organizational behavior research has related work experience and job satisfaction to a large number of outcomes, including turnover intent (Pitts, Marvel, and Fernandez 2011), employee performance (Judge et al. 2001), and firm financial performance (Kessler

et al. 2020). However, research investigating work experience and job satisfaction in the financial industry has been sparse. Moreover, it has often referred to narrow aspects of the conceptualization of the terms. For instance, a study has examined whether work-family conflicts affect job satisfaction of employees in Shanghai banking industry. That study has found that this effect is significant (Deng and Gao 2017), but has not explored the effects of any other job motivator or dissatisfaction factor. A more recent study has explored the effects of salary, job stability, and job enrichment on job satisfaction of commercial bank employees in Pakistan (Mahmood et al. 2019). The results revealed significant relationship between these variables but the study has not embedded them in a complete system of job satisfaction motivators. Therefore, neither of these studies has enabled the evaluation of the relative importance of these variables. Furthermore, neither of these studies has provided details about the positions of the participants in their banks and hence it was unclear whether traders were included in their samples. A third study has shown that perceptions of work ethicality influence the well-being of practitioners in the high frequency trading industry (Sobolev 2020). However, it has not examined the effects of other work motivators either. Therefore, this study explores the following research questions:

Research question 1: Which factors determine traders' overall work attitudes?

Research question 2: Which factors motivate traders to work at large investment banks?

Research question 3: With which work characteristics are traders working at large investment banks dissatisfied?

Materials and methods

I chose to focus on the ten investment banks, which had the greatest revenues in 2020 worldwide. Data about the banks' revenues was obtained from Norrestad (2021). Thus, the study sample included J. P. Morgan, Goldman Sachs, Bank of America, Morgan Stanley, Citi, Credit Suisse, Barclays, Deutsche Bank, Jefferies, and UBS. Bank revenues ranged between \$1.78 billion (UBS) and \$8.50 billion (J. P. Morgan; Norrestad 2021). All banks, except for Jefferies, employed more than 10,000 people. Additional details about the bank sample are presented in Table A in the [supplementary material](#) file.

The analyzed data set consisted of all traders' reviews of the ten investment banks, which were

written on Glassdoor (<https://www.glassdoor.co.uk>) between June 2012 and December 2021. Glassdoor is considered a leading firm-review platform (Campbell and Shang 2021). Its overall rating has been validated as an overall job satisfaction measure. For instance, overall Glassdoor ratings have been shown to be significantly correlated with the results of independent job satisfaction surveys of US federal agencies (Landers, Brusso, and Auer 2019). Furthermore, in the banking industry, Glassdoor reviews of financial analysts fitted theory-based predictions of the relation between perceived work-life balance and analyst performance (Hope et al. 2021). In addition, research has demonstrated that Glassdoor reviews contain valid information about organizational behavior (Campbell and Shang 2021).

Traders' reviews were identified by searching for the keyword "trader" on the Glassdoor review page of each of the banks. However, trading in investment banks involves many tasks and hence the search led to a wide range of job titles. To obtain a comprehensive understanding of traders' perceptions of leading investment banks, I included in the analyzed sample the reviews of traders who had diverse titles. Thus, for example, I included in the sample the reviews of employees whose job titles were "trader," "junior trader," "senior trader," "fixed-income trader," "derivatives trader," "equity trader," "senior equity trader," "senior FX options trader," and "vice president trader." However, I excluded from the sample reviews of employees whose professions did not involve trading, e.g., "trade support associate" and "trade surveillance analyst." Traders' locations were diverse, too, and included, among others, New York, Chicago, London, Paris, Moscow, and Tokyo. Additional review sample characteristics are presented in Table B in the [supplementary material](#) file. In total, the analyzed data set consisted of 372 reviews.

Glassdoor's review instructions required the reviewers to provide an overall rating of their company on the scale ranging between 1 and 5 stars. I used this overall company rating as a measure of traders' overall attitudes toward their banks. Reviewers were also required to specify the "pros" and the "cons" of their work. The "pros" review instructions were "share some of the best reasons to work at [your company]." Because motivation has been defined to be the set of reasons, explaining a person's action (Leduc-Cummings, Milyavskaya, and Peetz 2017), I used the "pros" to explore traders' work motivators. The "cons" review instructions were "share some of the downsides of working at [your company]." I used the "cons" to investigate traders' job dissatisfaction factors.

In addition, Glassdoor enabled reviewers to rate five factors, including the career opportunities that their banks offered them, the banks' culture and values, their senior management, the traders' compensation and benefits, and their work/life balance. These five factors were measured using a 1–5 star scale. As this five-factor set overlapped with that of the job descriptive index (JDI; Kinicki et al. 2002), I used it to measure the corresponding aspects of traders' job satisfaction. In addition, reviewers were asked to report whether they would recommend the job to a friend by choosing between the thumb up icon (yes) and the thumb down icon (no). However, differently from the overall ratings, "pros" and "cons," the rating of the five-factor set and the recommendations were not compulsory and hence not all reviewers completed them. Glassdoor enabled reviewers to provide additional data. In particular, since 2021, reviewers were asked to rate their firms' diversity and inclusion. However, as these ratings were limited to 2021, I did not include them in the quantitative analysis.

The review instructions informed the website users that their reviews would help others make work decisions. They required the reviewers to avoid using aggressive language and disclosing trade secrets or confidential information. Examples of traders' reviews, Glassdoor review instructions and Glassdoor review panels are presented in Figures A, B, and C (respectively) in the [supplementary material](#) file.

Results

The factors determining traders' overall attitudes toward their banks

To answer research question 1 (which factors determine traders' overall work attitudes?), I used quantitative methods. In particular, I regressed traders' overall bank ratings and recommendations to friends over their ratings of the career opportunities that the bank offered them, their compensation and benefits, the banks' culture and values, their senior management, and traders' work/life balance. The first regression showed that traders' overall work attitudes significantly depended on all factors (culture: $\beta = 0.34$, $p < 0.01$; career opportunities: $\beta = 0.25$, $p < 0.01$; compensation and benefits: $\beta = 0.22$, $p < 0.01$; senior management: $\beta = 0.14$, $p = 0.01$; work-life balance: $\beta = 0.11$, $p = 0.01$). However, traders' overall work attitudes depended more strongly on the banks' culture and career opportunities than on compensation and benefits. The second regression revealed that traders' recommendations to friends significantly depended on career

opportunities ($\beta = 0.22$, $p = 0.004$) and the banks' management ($\beta = 0.30$, $p = 0.001$). However, they did not significantly depend on any of the other variables, including compensation and benefits.

Traders' motivators and dissatisfaction factors

Qualitative analysis methods have been used in behavioral finance research (e.g., Foster and Warren 2016; Sobolev 2020; Wu 2022). Hence, to answer research question 2 (which factors motivate traders to work at large investment banks?) and research question 3 (with which work characteristics are traders working at large investment banks dissatisfied?), I used qualitative analysis methods. Specifically, to explore traders' work motivators, I conducted content analysis of the "pros" parts of their reviews, and to explore the factors with which they were dissatisfied, I conducted content analysis of the "cons" parts of their reviews. In line with content analysis methodologies (Corbin and Strauss 2008), I coded the "pros" and "cons" parts of the reviews according to the ideas that the traders expressed in them and generalized the codes into work motivators and dissatisfaction factors. Then, I grouped the factors into dimensions.

The content analysis yielded the same eight dimensions for the work motivators and dissatisfaction factors: compensation and benefits, professional development, work characteristics, bank characteristics, management characteristics, coworkers, ethics, and culture. However, these dimensions were linked to different and often contradictory themes in the "pros" and "cons," thus highlighting the large variance in traders' perceptions of their banks and work. Below, I describe traders' perceptions of each of these dimensions and exemplify them by quoting corresponding reviews. The number of traders' reviews, referring to each motivator and dissatisfaction factor in the "pros" and "cons" answers, and additional exemplifying quotations are presented in Table C in the [supplementary material](#) file.

Compensation and benefits

Work motivators ("pros"). A relatively large proportion of the reviews referred to monetary work outcomes ($78/372 = 20.97\%$) or other benefits ($26/372 = 6.99\%$) as reasons to work at the banks. Traders often described their pay as good or better than the pay given in other banks. For instance, traders wrote as reasons to work at the banks: "good pay" (option trader, J. P. Morgan, 2020), "can make a ton of money" (equity trader, Goldman Sachs, 2020), and "massive

salary" (junior trader, City, 2016). Similarly, many traders expressed satisfaction with the benefits that they received. Smaller proportions of reviews mentioned the food and drinks that the banks provided and the location of the banks as work motivators.

Job dissatisfaction factors ("cons"). Fifty reviews (13.44%) expressed traders' dissatisfaction with the monetary outcomes of their work. For instance, traders wrote: "slightly below market pay" (trader, Goldman Sachs, 2021) and "total comp is poor" (equity trader, Morgan Stanley, 2021). Smaller proportions of traders ($3/372 = 0.081\%$ or less) expressed dissatisfaction with their benefits, pay growth, the food and drink that the banks provided, or their locations.

Professional development

Work motivators ("pros"). Forty-one reviews (11.02%) mentioned learning opportunities as reasons to work at the banks. For example, a vice president trader who worked at the Bank of America emphasized that there were "plenty of resources available for those willing to learn" (vice president trader, Bank of America, 2015), and a trader who worked at City wrote "excellent place to learn and grow" (trader, City, 2021). Traders mentioned in their "pros" also that their bank was a good place to be trained, and that they had a "huge learning curve" (trader, Morgan Stanley, 2017). Fewer reviews referred to developmental aspects of the jobs or noted that traders worked in diverse professional areas (e.g., that they enjoyed the exposure to different asset classes or different types of strategies). Thirty-six traders (9.68%) mentioned the career opportunities that their banks offered as reasons to work at the banks.

Job dissatisfaction factors ("cons"). Small proportions of traders ($11/372 = 2.96\%$) expressed dissatisfaction with the learning or training opportunities of their banks, and yet smaller proportions expressed dissatisfaction with their development, task diversity, and interest. However, 30 reviews (8.06%) reflected dissatisfaction with traders' career opportunities. For instance, traders wrote that it was "difficult to navigate further on in career" (fixed income trader - vice president, Goldman Sachs, 2019), "not great for advancement of career" (equity trader, Barclays, 2021), and "not the fastest career growth" (credit trader, Deutsche Bank, 2021).

Work characteristics

Work motivators ("pros"). Twenty reviews (5.38%) described positive overall work perceptions. For instance, traders wrote: "enjoyed my time" (junior trader, Goldman Sachs, 2019), "fun place to work on a

day to day basis” (trader, Barclays, 2012), and “being on the trading floor is certainly one of the most exciting roles—seeing market moves in action and discussing the global economy” (trader, Morgan Stanley, 2016).

Twenty-five traders (6.72%) considered the work-life balance at the bank to be good or satisfactory. For instance, a trader suggested “good work life balance” (trader, City, 2015) as a reason to work at the bank. Ten reviews (2.69%) suggested that having a challenging work environment was another reason to work at the banks.

Only nine reviews (2.42%) referred to the financial characteristics of the traders’ work. These reviewers highlighted that “large risk taking for trading” (equity trader, Goldman Sachs, 2016) and “trading in niche products” (institutional sales trader, Deutsche Bank, 2021) were reasons to work at their bank (among other reasons). Few traders considered their work efficient. That is, they wrote that it involved little bureaucracy and that decision-making processes were fast. A few traders mentioned that it was secure.

Job dissatisfaction factors (“cons”). Whereas only six reviews (1.61%) described negative overall work perceptions (e.g., not fun, not interesting, or repetitive work), 57 reviews (15.32%) expressed negative work-life balance perceptions. For instance, traders wrote: “long hours” (fixed income trader, Morgan Stanley, 2021), “the hours can be brutal even if you love what you do” (institutional sales trader, Goldman Sachs, 2019), and “long working hours with 10 to 13 hours per day” (junior quant trader, UBS, 2021). In fact, more reviews expressed dissatisfaction with work-life balance (57) than dissatisfaction with pay (50).

Furthermore, 20 reviews (5.38%) expressed traders’ dissatisfaction with their stress level and 12 reviews (3.23%) reflected dissatisfaction with the level of difficulty of their work. For example, traders wrote: “it can be pretty stressful” (trader, Morgan Stanley, 2013), “hard work” (senior trader, Barclays, 2021), and “high pressured, cutthroat, unfriendly, stressful” (junior trader, UBS, 2014).

Thirty-two reviews (8.60%) revealed that some traders were dissatisfied with their work efficiency. In particular, they were unhappy with the banks’ bureaucracy and slow decision-making processes. For instance, traders wrote: “lots of red tape” (trader, Morgan Stanley, 2012), “can be extremely bureaucratic reducing nimbleness” (trader, Goldman Sachs, 2017), “Tends to be bureaucratic and slow-moving” (trader, Barclays, 2017), and “overly complex processes slow down decision making” (trader, Deutsche Bank, 2020).

Twenty-four reviews (6.45%) expressed traders’ sense of job insecurity. For instance, reviewers referred to the “massive employee turnover, low employee morale” (equity trader, Bank of America, 2020) at the bank and emphasized that their “firm tends to do a lot of layoffs. Not many people ever feel secure with a job here” (block trader, City, 2014).

Bank characteristics

Work motivators (“pros”). Fifty-three reviews (14.25%) suggested that traders were often happy with their banks’ environment or atmosphere. These reviews described the banks’ environment as nice, good, great, amazing, cool, friendly, collaborative, professional, or fast-paced.

Twenty-six reviews (6.99%) suggested that prestige motivated traders to work at their banks. For example, traders described their banks as “a well-respected investment bank” (equity trader, J. P. Morgan, 2020) and “prestigious” (trader, Goldman Sachs, 2014).

Twenty-four reviews (6.45%) described other positive bank perceptions, such as “overall impressive and ideal organization to work for” (trader, City, 2021) and “good place to work” (trader, Credit Suisse, 2016). Seventeen reviews (4.57%) referred to positive aspects of the size or strength of the banks. Thus, a trader who worked at the Bank of America wrote “safety in size” (trader, Bank of America, 2020).

Only a small proportion of reviews ($12/372 = 3.23\%$) referred to the financial qualities of the banks. For instance, UBS was described as having “substantial market size in FX trading” (assistant FX trader, UBS, 2017) and Credit Suisse—as a “great platform with trading risk appetite” (senior trader, Credit Suisse, 2020). Ten reviews (2.69%) described positive aspects of the banks’ technology, IT and infrastructure qualities.

Smaller proportions of reviews expressed satisfaction with the banks’ competitiveness (using expressions such as “ahead of the game”, “cutting edge,” and “pioneering”), the banks’ drive (e.g., “excellence” and “PnL driven”), and the international nature of the banks.

Job dissatisfaction factors (“cons”). Twenty-one reviews (5.65%) expressed traders’ dissatisfaction with the environment or atmosphere of the bank. For instance, traders described the environment at their banks as “toxic environment at times” (options trader, J. P. Morgan, 2020) and the atmosphere on the floor as “very dog-eat-dog whereby people will step on their own team members for personal gain” (junior trader, Barclays, 2019).

Thirty-three reviews (8.87%) referred to the banks' technology, IT, systems, and infrastructure problems. For instance, traders wrote in the "cons" field "in house technology is too ancient" (junior trader, Credit Suisse, 2021), "bad tech here, legacy systems" (trader, Goldman Sachs, 2020), and "bad technology" (trader, City, 2020).

Eighteen reviews (4.84%) referred to the financial qualities of the banks. In particular, several traders were unhappy with the risk propensity of their banks. Hence, they suggested that their banks were "conservative in risk taking" (equity derivatives trader, Bank of America, 2021) and had "low risk tolerance" (trader, UBS, 2018).

Seventeen reviews (4.57%) expressed dissatisfaction with a range of aspects of the size or strength of the banks. For example, a quantitative trader reported that the bank was "a bit too slow to change as every big company" (quantitative trader, City, 2021) and an equity trader reported the feeling of "a small cog in a big, political machine" (equity trader, UBS, 2018).

Smaller percentages of reviews referred to the banks' competitiveness or to other negative aspects of the banks (e.g., lack of innovation, agility, or insufficient prestige).

Management characteristics

Work motivators ("pros"). Twelve reviews (3.23%) described positive perceptions of the management, suggesting that it was supportive, considerate, and accessible. For instance, traders wrote: "senior management are very accessible and laid back" (trader, Barclays, 2013) and "superiors don't micromanage or create undue stress" (trader, Jefferies, 2021). Few reviews reflected positive perceptions of the management structure (e.g., "lean hierarchy"; trader, J. P. Morgan, 2020) and vision. Additional 12 reviews expressed other general positive perceptions.

Job dissatisfaction factors ("cons"). Fourteen reviews (3.76%) suggested that some of the traders were dissatisfied with the extent to which the management respected them, supported them, or communicated with them. Thus, traders wrote: "managers treat staff without respect [...]. They will pounce on any member of staff for any small misdemeanor [...] and dock pay" (institutional sales trader, Credit Suisse, 2021) and "new management brought a different feeling... just a number. Keep your head down..." (trader, Jefferies, 2014).

Twenty-two reviews (5.91%) suggested that some of the traders were unhappy with the management structure. For instance, traders wrote as "cons":

"hierarchical structure prevalent in most divisions" (trader, Goldman Sachs, 2020) and "too many directors and managing directors only giving orders and doing nothing" (vice president trader, City, 2014).

Twenty reviews (5.38%) expressed traders' dissatisfaction with the management vision. For instance, traders wrote: "management is focused on short term as they all think they will get fired in a year maximum. So no long term projects" (senior trader, Bank of America, 2014) and "poor vision of the management" (equity trader, Barclays, 2016). Finally, 25 reviews (6.72%) referred to other negative perceptions of the management, including, e.g., "poor," "inept," "sloppy," "strict," "pain," "terrible," "rotten," and "avaricious." Thus, a trader wrote: "absolute dictatorship, where the leader works toward a goal of destroying individual confidence and self-worth, creating an environment where the trader loses confidence in their abilities, resulting in fear of losing money" (power trader, City, 2013).

Coworkers

Work motivators ("pros"). A large number of reviews (110, 29.57%) suggested that many traders considered their coworkers to be their reason to work at the banks. In particular, reviewers described their coworkers as agreeable people (e.g., nice, friendly, and social), professional (e.g., professional, motivated, brilliant), or positive in general (e.g., good, excellent, and amazing). For example, traders described their colleagues as "great people" (trader, Credit Suisse, 2021) and "supportive people" (trader, Deutsche Bank, 2021). Thus, the percentage of reviews in which coworkers were described as a central motivating factor (29.57%) was greater than the percentage of reviews that mentioned monetary work outcomes (20.97%) or other benefits (6.99%) as reasons to work at the banks.

Twenty-two reviews (5.91%) emphasized that traders considered team work to be a central motivator, too. For instance, answering the "pros" question, traders wrote: "team collaboration" (trader, Goldman Sachs, 2021), "good teamwork" (equity trader, City, 2020), and "good team spirit" (vice president trader, Credit Suisse, 2017).

Job dissatisfaction factors ("cons"). Fourteen reviews (3.76%) described negative perceptions of traders' coworkers. Few additional reviews referred to inadequate team work.

Ethics-related issues

Work motivators ("pros"). Reviews referred to a wide range of aspects of ethics. Sixteen reviews (4.30%)

highlighted fairness in pay or other rewards as a central work motivator. In particular, traders considered meritocracy to be fair. Hence, a vice president trader answered the “pros” question by: “meritocratic environment. Will pick winners to move forward quickly. Career support with honest feedback—the honest feedback is sometimes that the firm is not for you, but I’d take that over political agenda any day” (vice president trader, Credit Suisse, 2020).

Smaller proportions of reviews referred to voice, transparency, and general ethical conduct, the encouragement of charity, diversity and inclusion. For example, a trader, who worked at the Bank of America wrote: “opportunities to be involved with volunteering/charity work” (trader, Bank of America, 2017). Few reviews suggested that there was only little politics in the bank (e.g.: “not much politics”; trader, UBS, 2019).

Two reviews suggested that some traders might have been involved in illegal conduct. In particular, one of the traders mentioned as an answer to the “pros” question: “insider trading information” (trader, Goldman Sachs, 2021; see Figure A in the [supplementary material](#) file).

Job dissatisfaction factors (“cons”). Twenty reviews (5.38%) revealed that traders did not always consider their rewards fair. For instance, traders wrote: “some favoritism—a lot of people there that shouldn’t be. Ability and contribution aren’t the main factors with progression at the firm” (trader, Bank of America, 2016) and “perpetually depleted bonus pools which are raided by the well-connected leaving nothing for the rest of the company” (trader, Deutsche Bank, 2018). A trader, who worked at Barclays, wrote: “I was [...] making the kind of money my AVP wasn’t and he was paid double what I was. That’s just not the right way to treat people, especially a woman [...] I worked 12+ hour work days all the time; it went completely unnoticed despite my book absolutely killing it” (trader, Barclays, 2020).

Small proportions of reviews referred to ethical issues such as the lack of transparency, accountability, or diversity. For instance, a trader expressed the perception that “the board go and lose billions of dollars to people like Greensill and Archegos and do not take any responsibility until major news outlets publish something critical” (institutional sales trader, Credit Suisse, 2021). Other traders reported that the management “makes no real effort to improve diversity, a slew of female managers left or [got] fired” (junior trader, Barclays, 2021) and that “treatment of women leadership is terrible” (assistant trader, Morgan Stanley, 2021).

Twenty-eight reviews (7.53%) suggested that a proportion of traders were unhappy with the internal politics at their banks. Thus, traders wrote as “cons”: “very political place as you go up the ranks” (trader, Goldman Sachs, 2016), and “it is a large firm so you will have to deal with a lot of politics” (trader, Morgan Stanley, 2013).

Five reviews (1.34%) suggested that some of the traders engaged in unethical or illegal conduct. For instance, traders wrote: “I always [...] manipulate some markets” (quantitative trader, Goldman Sachs, 2021) and “many parts of the business have unethical practices. Customer abuse, collusion with competitors, problems dealing with confidential information” (senior trader, City, 2018). In addition, nine reviews (2.42%) expressed dissatisfaction with the bank’s reaction to regulation. For instance, a derivatives trader, who worked at UBS, wrote: “more focus on compliance than making money” (derivatives trader, UBS, 2019).

Culture

Work motivators (“pros”). Forty-four reviews (11.83%) described positive perceptions of the banks’ culture (e.g., “good,” “great,” “amazing,” “awesome,” “innovative,” “entrepreneurial,” and “friendly”). For example, a senior trader who worked at J. P. Morgan wrote “good friendly culture” (senior trader, J. P. Morgan, 2018) and a trader who worked at Barclays wrote: “innovative culture that lets you go after profit” (trader, Barclays, 2012). Four reviews (1.08%) expressed positive perceptions of the banks’ risk taking and hard work culture.

Job dissatisfaction factors (“cons”). Twenty reviews (5.38%) expressed negative banks’ culture perceptions. Thus, traders wrote: “work culture is terrible. No collaboration” (power trader, Bank of America, 2013), “not a good culture that fosters growth and development. Survival of the fittest” (trader, Barclays, 2014), and “zero culture. When you take people from deceased firms—Bear, Leh, Mer, GCM—and throw them into an eat what you kill pool and no management from the top you get a toxic stew” (senior sales trader, Jefferies, 2013).

Additional analysis

Traders’ job satisfaction in large investment banks

One-sample t-tests, comparing traders’ overall attitudes toward their banks and ratings of the banks’ culture, career opportunities, compensation and benefits, senior management, work-life balance, and recommendation to friends, to the scales’ midpoint

Table 1. Descriptive statistics of traders' ratings and the results of t-tests, comparing them to the scale midpoint value.

Variable	Number of reviews	Mean (std. dev.)	T-test results
Overall attitudes toward the bank	372	3.80 (1.11)	t (371) = 13.97***
Culture	261	3.42 (1.30)	t (260) = 5.24***
Career opportunities	262	3.61 (1.20)	t (261) = 8.18***
Compensation and benefits	263	3.51 (1.71)	t (262) = 7.11***
Senior management	262	3.17 (1.34)	t (261) = 2.07*
Work-life balance	261	3.26 (1.27)	t (260) = 3.37**
Recommendations	243	0.37 (0.93)	t (242) = 6.12***

The scales of all ratings apart from the "recommendation to friends" scale ranged between 1 and 5 stars and their midpoint value was 3. The recommendation scale included the answers "do not recommend to a friend" (−1) and "recommend to a friend" (1). Hence, the scale midpoint value was 0. Notations: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 2. Correlations and partial correlations (in brackets) between reviewers' job satisfaction factor ratings.

Variable	Culture	Career opportunities	Senior management	Work-life balance
Career opportunities	0.64** (0.51**)			
Senior management	0.75** (0.68**)	0.68** (0.51**)		
Work-life balance	0.66** (0.60**)	0.44** (0.32**)	0.57** (0.49**)	
Compensation and benefits	0.44**	0.63**	0.55**	0.34**

The partial correlations were calculated by controlling for reviewers' compensation and benefits ratings. Notations: ** $p < 0.01$.

values revealed that all traders' ratings were significantly greater than the midpoint values. Thus, I concluded that most traders were happy with major aspects of their work. In particular, more than 79% of traders rated their compensation and benefits as average (3) or better. Descriptive statistics of traders' ratings and the results of t-tests, comparing them to the scales' midpoint values, are presented in Table 1.

Relationship between the job satisfaction components

To characterize the relationship between the different facets of traders' job satisfaction, I calculated the correlations between them. The correlation matrix is presented in Table 2. The results showed that reviewers, who rated their compensation and benefits higher, considered their work-life balance ($r = 0.34$, $p < 0.01$) and career opportunities ($r = 0.63$, $p < 0.01$) to be better. They also perceived the management ($r = 0.55$, $p < 0.01$) and the organizational culture ($r = 0.44$, $p < 0.01$) to be better. Reviewers strongly associated between the banks' culture and senior management ($r = 0.75$, $p < 0.01$), as well the bank's culture and their career opportunities ($r = 0.64$, $p < 0.01$). All these correlations remained statistically significant when I controlled for reviewers' compensation and benefits ratings (see Table 2), suggesting that individual reviewers had coherent perceptions of their banks.

Bank effects

To assess the extent to which the banks themselves impacted traders' ratings of their overall attitudes and job satisfaction factors, I conducted one-way ANOVAs on these variables, using bank number (e.g.,

J. P. Morgan – 1, Goldman Sachs – 2, Bank of America – 3, see Table A in the [supplementary material file](#)) as an independent (nominal) variable. The results showed that the banks themselves significantly affected reviewers' overall bank ratings (F (9,362) = 3.004, $p = 0.002$), career opportunities (F (9,252) = 2.78, $p = 0.004$), compensation and benefits (F (9,253) = 2.16, $p = 0.03$), and senior management (F (9,252) = 2.21, $p = 0.02$). However, the banks did not significantly affect reviewers' work-life balance and culture ratings.

Additional independent-samples t-tests revealed that the significant effect of the bank itself on reviewers' overall attitudes toward the banks arose due to differences between reviewers' ratings of some of the banks, but not all banks. For instance, a t-test comparing reviewers' overall ratings of Goldman Sachs to those of J. P. Morgan yielded insignificant results. However, a t-test comparing the overall ratings of Goldman Sachs to those of Deutsche Bank showed that reviewers' attitudes toward Goldman Sachs (mean: 4.32, std: 0.83) were significantly more positive than toward Deutsche Bank (mean: 3.40, std: 1.35, $t(85) = 3.9$, $p < 0.001$).

In line with these results, to assess the effect of the bank itself on the relationship between traders' job satisfaction ratings and overall attitudes toward the banks, I focused on the bank which had the greatest overall ratings in my sample—Goldman Sachs, and the bank which had the lowest overall ratings—Deutsche Bank (see Table B in the [supplementary material file](#)). Defining "Bank" to be a dummy variable, which equaled 0 for Goldman Sachs and 1 for Deutsche Bank, I regressed reviewers' overall ratings of

these two banks on the five job satisfaction factors and “Bank.” The results showed that culture ($\beta = 0.35$, $p = 0.002$) and compensation and benefits ($\beta = 0.29$, $p = 0.003$) significantly affected reviewers’ overall attitudes toward their banks. However, none of the other variables, including “Bank,” significantly affected reviewers’ overall attitudes. In particular, the effect of the bank itself was weaker than the effects of the other variables.

COVID-19 effects

The COVID-19 outbreak in December 2019 in China had major effects on the world’s financial markets (Zhang, Hu, and Ji 2020). To explore the possibility that it impacted traders’ job satisfaction, I conducted t-tests on traders’ reviews, using the occurrence of COVID-19 as the independent variable. I chose January 2020 as the cutoff date for the occurrence of the pandemic because in January 2020, the World Health Organization named the virus (World Health Organization 2020). The analysis showed that traders’ overall attitudes toward their banks were better after the outbreak (overall ratings before January 2020: mean: 3.49, std: 1.21; overall ratings after January 2020: mean: 4.02, std: 1.05; $t(370) = 4.61$, $p < 0.001$). However, controlling for the five job-satisfaction factors, regression of traders’ overall attitudes on the occurrence of COVID-19 showed an insignificant COVID-19 effect. For the job satisfaction factors, regression results were similar to the ones obtained before (culture: $\beta = 0.34$, $p < 0.01$; career opportunities: $\beta = 0.24$, $p < 0.01$; compensation and benefits: $\beta = 0.22$, $p < 0.01$; senior management: $\beta = 0.13$, $p = 0.02$; work-life balance: $\beta = 0.11$, $p = 0.01$). Hence, the results suggested that at the same period, co-occurring events improved traders’ attitudes.

Analysis of theme co-occurrence

To investigate the co-occurrence of job satisfaction factors in traders’ reviews, I coded the occurrence of each job satisfaction factor in each “pro” and “con” part of each review. Thus, for each of the five job satisfaction factors, I defined a dummy variable, which equaled 1 if the factor appeared in a “pro” comment and 0 otherwise, and a dummy variable, which equaled 1 if the factor appeared in a “con” comment and 0 otherwise. Correlations of these ten dummy variables showed that traders who referred to compensation and benefits themes in the “con” part of their reviews tended to refer to work-life balance in the “pros” part of their reviews ($r = 0.16$, $p < 0.001$). Traders who referred to work-life balance themes in

the “con” part of their reviews tended to refer to compensation and benefits themes in the “pros” part of their reviews ($r = 0.23$, $p < 0.001$). Several additional themes co-occurred in the reviews, but most themes were independent of each other (see Table D in the [supplementary material file](#)).

Discussion

Research has acknowledged that financial practitioners have wide range of psychological and social motivators including, for instance, career concerns (Brown, Wei, and Wermers 2014) and ethics (Riedl and Smeets 2017). It has also suggested that financial practitioners are aware that well-being comprises many aspects (Statman 2020). However, research examining practitioners’ job satisfaction has been limited (Deng and Gao 2017; Mahmood et al. 2019).

Drawing on organizational behavior research, this study investigates the factors that motivate traders to work at major investment banks, the job characteristics with which they are dissatisfied, and the determinants of their overall attitudes toward their banks. In line with research on financial practitioners’ experience (Mahmood et al. 2019), this study shows that pay serves as a motivator, improving traders’ attitudes toward their banks. However, extending previous practitioners’ experience research (Deng and Gao 2017; Mahmood et al. 2019; Sobolev 2020), it reveals that traders’ attitudes depend on their banks’ culture and career opportunities more than on their compensation and benefits. Traders’ attitudes depend also on their management, technology, bureaucracy, internal politics, and traders’ work-life balance.

Furthermore, this study suggests that overall, most traders are happy with central aspects of their work. Traders are especially happy with their coworkers and learning opportunities. These findings complement research on financial practitioners’ experience, that focused on the volatile, market-dependent aspects of practitioners’ experience (Fairchild 2014; Fenton-O’Creivy et al. 2011; Lo and Repin 2002; Peterson 2007; Shefrin 2002). However, they also emphasize that traders’ work perceptions are highly diverse. For instance, whereas some traders consider their banks ethical, others judge their rewards unfair and attribute this unfairness to diversity issues or organizational politics. To summarize, this paper shows that a large number of factors, other than pay, determine traders’ satisfaction with their banks. Hence, it suggests that the price of happiness in the financial industry is not merely monetary.

Applications for investment banks

Traders' job satisfaction and retention

As this study highlights that pay is not the only factor motivating traders' work in large investment banks, it suggests that banks could increase traders' job satisfaction and retention by addressing the issues with which they are dissatisfied. In particular, this study suggests that reducing traders' work hours and stress, providing them with more career opportunities, improving the technological systems of the banks, limiting their bureaucracy and internal politics, and addressing ethics-related issues such as reward fairness, could enhance traders' job satisfaction. Job satisfaction has been shown to be positively related to employees' performance (Judge et al. 2010) and retention (Lum et al. 1998; Pitts, Marvel, and Fernandez 2011).

Shareholders' outcomes

As paying practitioners greater shares of the revenues decreases the financial outcomes of the shareholders, practitioners' pay increase has implications on shareholders (Franklin and Moise 2022). Increasing practitioner retention using efficient methods, which are less expensive, could therefore have positive outcomes for shareholders.

Banks' public image

Substantial bonuses and pay increase detrimentally influence the public image of investment banks. For instance, critics of practitioners' bonus increase said that "these sky-high banker bonuses are a kick in the teeth for everyone suffering with the cost of living crisis" (Neate 2022). Attempts to improve financial practitioners' job satisfaction and retention using non-financial measures could help banks avoid criticism of this type.

Limitations and topics for future research

This study's limitations offer paths for future research. First, this study analyses Glassdoor reviews to understand traders' perceptions of their banks. Although Glassdoor has been acknowledged as a valid and insightful data source (Hope et al. 2021; Landers, Brusso, and Auer 2019), it could be beneficial to explore the research questions using complementary research methods, such as interviews. It would be also helpful to extend this study by investigating additional groups of financial practitioners (e.g., financial analysts).

Second, this study suggests that a proportion of financial practitioners experience dissatisfaction with the banks' technology, bureaucracy, internal politics, or

relationship with the management. However, research has established that emotions, such as fear and anger could influence practitioners' financial information processing and decision-making (Wynes 2021). Dissatisfaction is likely to elicit negative emotions of this type. Hence, I hypothesize that these organizational factors could impact traders' returns beyond their direct effects on the banks' efficiency. Testing this hypothesis could have important theoretical and practical implications. Future research could also investigate how traders' satisfaction and financial outcomes depend on the interactions between their individual performance, pay, and overall firm performance.

Finally, the results of this study portray traders as people who often value their banks' ethics, learning opportunities, and coworkers. Research has not examined the effects of these values on trading outcomes. However, it has shown that personality traits such as extraversion and neuroticism impact trading decisions and risk preferences (Oehler et al. 2018). As personality traits influence trading outcomes, I hypothesize that ethics, learning, and social values could influence trading outcomes, too. Future research could test this hypothesis.

Disclosure statement

The author reports that there are no competing interests to declare.

Data availability statement

The data is available from the sources identified in this paper.

References

- Brown, N., K. Wei, and R. Wermers. 2014. "Analyst Recommendations, Mutual Fund Herding, and Overreaction in Stock Prices." *Management Science* 60 (1):1–20. doi:10.1287/mnsc.2013.1751
- Campbell, D. W., and R. Shang. 2021. "Tone at the Bottom: Measuring Corporate Misconduct Risk from the Text of Employee Reviews." *Management Science*. doi:10.1287/mnsc.2021.4211
- Corbin, J. M., and A. L. Strauss. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage.
- Coval, J., and T. Shumway. 2005. "Do Behavioral Biases Affect Prices?" *The Journal of Finance* 60 (1):1–34. doi:10.1111/j.1540-6261.2005.00723.x
- Deng, S., and J. Gao. 2017. "The Mediating Roles of Work–Family Conflict and Facilitation in the Relations between Leisure Experience and Job/Life Satisfaction among Employees in Shanghai Banking Industry." *Journal of Happiness Studies* 18 (6):1641–57. doi:10.1007/s10902-016-9771-8

- Fairchild, R. 2014. "Emotions in the Financial Markets." In *Investor Behavior*, edited by H. K. Baker and V. Ricciardi, 347–64. Hoboken, NJ: John Wiley & Sons.
- Fenton-O'Creevy, M., E. Soane, N. Nicholson, and P. Willman. 2011. "Thinking, Feeling and Deciding: The Influence of Emotions on the Decision Making and Performance of Traders." *Journal of Organizational Behavior* 32 (8):1044–61. doi:10.1002/job.720
- Foster, F., and G. Warren. 2016. "Interviews with Institutional Investors: The How and Why of Active Investing." *Journal of Behavioral Finance* 17 (1):60–84. doi:10.1080/15427560.2015.1095754
- Franklin, J., and I. Moise. 2022. "Top Wall Street Banks Paid Out \$142bn in Pay and Benefits Last Year." *Financial Times*. <https://www.ft.com/content/9bdef7a6-69f1-4f42-b27d-74dd34db4804>.
- George, J., and G. Jones. 1996. "The Experience of Work and Turnover Intentions." *The Journal of Applied Psychology* 81 (3):318–25. doi:10.1037/0021-9010.81.3.318.
- Glassdoor. 2022. "How Much Does a Trader Make?" https://www.glassdoor.co.uk/Salaries/trader-salary-SRCH_KO0,6.htm.
- Grosshans, D., and S. Zeisberger. 2018. "All's Well That Ends Well? On the Importance of How Returns Are Achieved." *Journal of Banking & Finance* 87:397–410. doi:10.1016/j.jbankfin.2017.09.021
- Herzberg, F. 1974. "Motivation-Hygiene Profiles: Pinpointing What Ails the Organization." *Organizational Dynamics* 3 (2):18–29. doi:10.1016/0090-2616(74)90007-2
- Hope, O., C. Li, A. Lin, and M. Rabier. 2021. "Happy Analysts." *Accounting, Organizations and Society* 90: 101199. doi:10.1016/j.aos.2020.101199
- Judge, T., R. Piccolo, N. Podsakoff, J. Shaw, and B. Rich. 2010. "The Relationship between Pay and Job Satisfaction." *Journal of Vocational Behavior* 77 (2): 157–67. doi:10.1016/j.jvb.2010.04.002
- Judge, T., C. Thoresen, J. Bono, and G. Patton. 2001. "The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review." *Psychological Bulletin* 127 (3): 376–407. doi:10.1037/0033-2909.127.3.376.
- Kessler, S., L. Lucianetti, S. Pindek, Z. Zhu, and P. Spector. 2020. "Job Satisfaction and Firm Performance: Can Employees' Job Satisfaction Change the Trajectory of a Firm's Performance?" *Journal of Applied Social Psychology* 50 (10):563–72. doi:10.1111/jasp.12695
- Kinicki, A., F. McKee-Ryan, C. Schriesheim, and K. Carson. 2002. "Assessing the Construct Validity of the Job Descriptive Index." *The Journal of Applied Psychology* 87 (1):14–32. doi:10.1037/0021-9010.87.1.14.
- Landers, R., R. Brusso, and E. Auer. 2019. "Crowdsourcing Job Satisfaction Data: Examining the Construct Validity of Glassdoor.com Ratings." *Personnel Assessment and Decisions* 5 (3):45–55. doi:10.25035/pad.2019.03.006
- Leduc-Cummings, I., M. Milyavskaya, and J. Peetz. 2017. "Goal Motivation and the Subjective Perception of past and Future Obstacles." *Personality and Individual Differences* 109:160–5. doi:10.1016/j.paid.2016.12.052
- Lo, A., and D. Repin. 2002. "The Psychophysiology of Real-Time Financial Risk Processing." *Journal of Cognitive Neuroscience* 14 (3):323–39. doi:10.1162/089892902317361877.
- Locke, E. A. 1976. "The Nature and Causes of Job Satisfaction." *Handbook of Industrial and Organizational Psychology* 1:1297–343.
- Lum, L., J. Kervin, K. Clark, F. Reid, and W. Sirola. 1998. "Explaining Nursing Turnover Intent: Job Satisfaction, Pay Satisfaction, or Organizational Commitment?" *Journal of Organizational Behavior* 19 (3):305–20. doi:10.1002/(SICI)1099-1379(199805)19:3<305::AID-JOB843>3.0.CO;2-N.
- Mahmood, A., M. Akhtar, U. Talat, C. Shuai, and J. Hyatt. 2019. "Specific HR Practices and Employee Commitment: The Mediating Role of Job Satisfaction." *Employee Relations: The International Journal* 41 (3):420–35. doi:10.1108/ER-03-2018-0074
- Merkle, C., D. Egan, and G. Davies. 2015. "Investor Happiness." *Journal of Economic Psychology* 49:167–86. doi:10.1016/j.joep.2015.05.007
- Murdoch, S. 2021. "Greed Outpacing Fear in World Markets, Goldman Sachs CEO Says." Reuters. <https://www.reuters.com/business/finance/greed-outpacing-fear-world-markets-goldman-sachs-ceo-says-2021-11-17/>.
- Neate, R. 2022. "We've Had a Run on Champagne: Biggest UK Banker Bonuses Since Financial Crash." *The Guardian*. <https://www.theguardian.com/business/2022/feb/16/weve-had-a-run-on-champagne-biggest-uk-banker-bonuses-since-financial-crash>.
- Norrestad, F. 2021. "Leading Banks Worldwide in 2020, by Revenue from Investment Banking (in Million U.S. Dollars)." Statista. <https://www.statista.com/statistics/371143/leading-global-investment-banks-by-revenue/>.
- Oehler, A., S. Wendt, F. Wedlich, and M. Horn. 2018. "Investors' Personality Influences Investment Decisions: Experimental Evidence on Extraversion and Neuroticism." *Journal of Behavioral Finance* 19 (1):30–48. doi:10.1080/15427560.2017.1366495
- Peterson, R. 2007. *Inside the Investor's Brain: The Power of Mind over Money*. Wiley Trading Series. Hoboken, NJ: J. Wiley & Sons. doi:10.1002/9781119196945
- Pitts, D., J. Marvel, and S. Fernandez. 2011. "So Hard to Say Goodbye? Turnover Intention among U.S. Federal Employees." *Public Administration Review* 71 (5):751–60. doi:10.1111/j.1540-6210.2011.02414.x
- Riedl, A., and P. Smeets. 2017. "Why Do Investors Hold Socially Responsible Mutual Funds?" *The Journal of Finance* 72 (6):2505–50. doi:10.1111/jofi.12547
- Rubaltelli, E., G. Pasini, R. Rumiati, R. Olsen, and P. Slovic. 2010. "The Influence of Affective Reactions on Investment Decisions." *Journal of Behavioral Finance* 11 (3):168–76. doi:10.1080/15427560.2010.507409
- Shefrin, H. 2002. *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing*. Oxford Scholarship Online. Oxford: Oxford University Press. doi:10.1093/0195161211.001.0001
- Shevlin, R. 2019. "How Much Do Banks Spend on Technology? (Hint: It Would Weigh 670 Tons in \$100 Bills)." *Forbes*. <https://www.forbes.com/sites/ronshevlin/2019/04/01/how-much-do-banks-spend-on-technology-hint-chase-spends-more-than-all-credit-unions-combined/?sh=32d3de62683a>.
- Sobolev, D. 2020. "Insider Information: The Ethicality of the High Frequency Trading Industry." *British Journal of Management* 31 (1):101–22. doi:10.1111/1467-8551.12366

- Statman, M. 2020. "Well-Being Advisers." *The Journal of Wealth Management* 23 (Supplement1):2–44. doi:10.3905/jwm.23.s1.002
- Warr, P., J. Cook, and T. Wall. 1979. "Scales for the Measurement of Some Work Attitudes and Aspects of Psychological Well-Being." *Journal of Occupational Psychology* 52 (2):129–48. doi:10.1111/j.2044-8325.1979.tb00448.x
- World Health Organization. 2020. "Novel Coronavirus (2019-nCoV) Situation Report—1." <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-ncov.pdf>.
- Wu, H. 2022. "Intuition in Investment Decision-Making across Cultures." *Journal of Behavioral Finance* 23 (1): 106–22. doi:10.1080/15427560.2020.1848839
- Wynes, M. 2021. "Anger, Fear, and Investor's Information Search Behavior." *Journal of Behavioral Finance* 22 (4):403–19. doi:10.1080/15427560.2020.1786386
- Zhang, D., M. Hu, and Q. Ji. 2020. "Financial Markets under the Global Pandemic of COVID-19." *Finance Research Letters* 36:101528. doi:10.1016/j.frl.2020.101528