

THE IMPACT OF FIRM REPUTATION AND
VISIBILITY ON PORTFOLIO MANAGER DECISION
MAKING

By

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I develop and test theory about the impact of heuristics on the composition of actively managed equity portfolios. Active equity portfolio managers are charged with the task of outperforming their peers and a benchmark index. However, on average, they fail to do so, despite the ability (and expectation) to make decisions deviating from the portfolio composition of their benchmark. While we know that people generally rely on heuristics at the individual level when making economic decisions, it is not yet clear to what extent that these findings extend to portfolio managers with a sophisticated understanding of financial concepts and resources to acquire and process information. I argue that, despite these advantages, portfolio managers will systematically prefer certain firms, suggesting a reliance on heuristics based on firms' social approval assets. Using the holdings of active equity portfolios, I examine the how high reputation, firm visibility, and high reputation for capital return (a construct that I introduce) impact portfolio composition decisions, finding robust support for high reputation for capital return and multiple conditional relationships.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
II. REVIEW OF LITERATURE.....	3
Firm Reputation	3
High Reputation	5
Benefits Of High Reputation	5
The Dark Side Of High Reputation	7
Behavioral Biases.....	8
Representativeness	8
Familiarity	12
Anchoring	16
Regret Aversion	18
Dividend Policy	19
Volatility	21
Analyst Recommendations	22
Momentum.....	23
III. THEORY AND HYPOTHESIS	25
High Reputation Influence On Portfolio Holdings	27
Firm Visibility Influence On Holdings	29
High Reputation For Capital Return Influence On Holdings	31
Market Volatility Impact On Portfolio Manager Decisions	33
Momentum Impact On Holdings	35
Analyst Recommendation On Holdings	37
Client Influence On Decisions	39

Chapter	Page
IV. DATA AND METHODS	40
Sample / Data	40
Dependent Variable	41
Market Relative Weighting	41
Independent Variables	42
High Reputation	42
Firm Visibility	42
High Reputation for Capital Return	42
Moderating Variables	43
Market Volatility	43
Price Momentum	43
Analyst Recommendations	43
Control Variables	44
Earnings Surprise	44
Firm Stock Performance	44
Share Count Change	45
Analyses	45
V. RESULTS	46
Main Effects	46
Moderators	47
VI. CONCLUSION.....	53
Discussion	53
Implications For Research	53
Implications For Practice	54
Limitations And Future Research	55
Conclusion	55
REFERENCES	57

LIST OF TABLES

Table	Page
1 Summary Statistics.....	41
2 Correlations.....	41
3 Model 1 – Model 5 Results.....	48
4 Model 5 – Model 9 Results.....	49

LIST OF FIGURES

Figure	Page
1 Daily Closing Prices for Bitcoin in US Dollars June 1, 2017 to May 31, 2018	12
2 Demonstration of Higher and Lower Volatility of Security Price Changes	21
3 Predictive Margins High Reputation Firm Holdings And High Volatility	51
4 Predictive Margins High Visibility And Low Recommendations.....	52

CHAPTER I

INTRODUCTION

The study of behaviors with respect to financial decision making is still an emerging area in academic literature (Sharma & Kumar 2019). A variety of reasons that individuals make suboptimal financial decisions vary from relying on what an individual knows about a situation (familiarity) to making decisions based on the source of funds (mental accounting) (Byrne & Brooks 2008). The majority of the research exploring decision making has focused on choices made by individuals and not investment professionals (Ramiah & Moosa 2015). However, there is reason to believe that professional investors are prone to making decisions that incorporate the same behavioral biases as those made by individuals more generally. This study focuses on portfolio composition decisions made by professional investors and how various heuristics are associated with differences in portfolio construction. In general, professional investors—by virtue of their training, resources, and financial sophistication—are expected to focus on the fundamentals of a potential investment and not rely on heuristics that may result in suboptimal performance (Bodie, Kane, & Marcus, 2018; Lo & Hasanhodzic, 2011). I examine how two forms of a firm’s reputation and the firm’s visibility impacts decisions made by professional portfolio managers.

I explore two related questions about social perceptions and portfolio construction. First, do professional portfolio managers exhibit a preference for the shared of firms who possess perceptual assets? Specifically, I examine high reputation, visibility, and high reputation for

capital return, a novel construct that I introduce (Huberman, 2001; King & Whetten, 2008; Shefrin & Statman, 1985). While these assets may fairly be considered as positive attributes, they may not make for attractive investments, as they may already carry a premium price (Mizik & Jacobsen, 2008; Smith 2010). In other words, portfolio managers may be swayed into favoring these firms based only on their historical record and not due to future prospects (Fan 1995; Furnham 2011; Sautua 2017). I generally expect that portfolio managers will overweight firms that possess these assets.

The second question I examine is, do contextual market factors and information affect the strength of association between these perceptual assets (and their associated heuristics) and portfolio construction, suggesting moderation? Specifically, I examine the extent to which market volatility, stock momentum, and analyst recommendations moderate my main proposed relationships (Busse, Green, & Jegadeesh, 2012; Fama & French, 1993; Gigerenzer & Selten 2001). The presence of high levels these factors may make reliance on heuristics more attractive to professional investors.

I test my theory by examining security-level portfolio weighting decisions by active managers as they relate to portfolio firms' high reputation, visibility, and high reputation for capital return (Doshi, Elkamhi, & Simutin 2015; Stark, 2019). Further, I examine how volatility, price momentum, and analyst recommendations moderate these relationships. I find that portfolio managers systematically overweight firms that possess high reputation for capital return, and their weighting decisions have some conditional relationships with firm visibility and high reputation for capital return at varying levels of contextual moderating variables.

Below, I review the literature on social perceptions of firms (i.e. reputation, high reputation, and visibility), heuristics that affect financial decision-making, and contextual factors that relate to active equity portfolio management. Next, I develop theoretical arguments and hypotheses

explaining why professional investors may rely on behavioral shortcuts when making portfolio decisions, as well as contextual factors that may moderate these relationships. Finally, I describe a sample, define variables, and a related set of analyses to test my hypotheses.

CHAPTER II

LITERATURE REVIEW

Firm Reputation

Reputation, for any entity, is the assessed capabilities or qualities of that entity (Grafin & Ward, 2010). The reputation for an organization is more complex than that of other entities as there are many stakeholders appraising the behavior of an organization (Friedman, 2009). A first step of a reputation being developed is a firm being known or recognized (Shamsie, 2003). However, an organization's reputation begins with the firm being known without any judgement (Barnett, Jermier & Lafferty, 2006). An organization's reputation goes beyond prominence, or just being known (Boy, Bergh & Ketchen 2010), and it is based on impressions and evaluations of the organization (Highhouse, Brooks & Gregarus, 2009). An organization's reputation is developed over time and rooted in the organization's historical behavior and associations (Lange, Lee, & Dai, 2011). Firm reputation is uniquely defined by the observer or specific stakeholder.

Examples of this include developing a reputation associated with product quality for potential customers or financial performance for potential investors or lenders (Rindova & Fombrun, 1999). There is a perceived quality aspect to reputation that grows out of interactions with an organization (Fombrun & Shanley, 1990; Roberts & Dowling, 2002).

Firms will take actions to develop the reputation they seek. Firm reputation is influenced by both firm actions and the actions of audiences of the firm. A firm will strive to shape its reputation through paid marketing and advertising (Fombrun & Shanley, 1990). When a firm is taking

steps to develop an awareness or brand, they are establishing an organization's reputation (Bromley, 2000). Firm reputation is also shaped through unpaid attention through media coverage (Rindova, Williamson, Petkova, & Sever, 2005). Many firms pursue activities geared toward improving their reputation with the general public through initiatives that would fall under being considered a good corporate citizen (Pacheco, Alves, Krüger, Lourenção, & Caldana 2018). The nature of a firm's reputation can also develop based on various firm attributes such as environmental, social, and financial impacts over time (Barnett et al., 2006).

High Reputation

High reputation is the high level of public recognition of a firm's capabilities and outputs (Bitekine, 2011; Pfarrer, Pollock, & Rindova, 2010). High reputation results when a firm is viewed favorably to what would be considered the ideal firm in their industry (King & Whetten, 2008). Following prior research, I define high reputation as that a firm is known for something, this awareness is favorable and that a firm is meeting specific stakeholders' expectations of delivering high valued outcomes over time (King & Whetten 2008; Rindova et al., 2005; Lange et al., 2011). A high reputation grows from a firm exhibiting consistent behaviors that result in outcomes recognized and valued by various stakeholders (Fombrun, 1996).

Benefits of High Reputation

Having a high reputation may provide firms with a series of positive benefits across contexts. First, high-reputation firms may benefit from positive perceptions by the general public (Schwaiger, 2004). A firm may have an advantage relative to competitors due to its reputation in terms of the perceived quality of product offerings, allowing them to charge more for its services or products (Dierickx, Cool, & Barney, 1989). Also, firms with a high reputation are likely to be mentioned by customers or patronized more frequently (Rindova et al., 2005).

Firms with a high reputation attract more potential employees than other firms (Hannon & Milkovich, 1996). Also, a strong human resources department aids in enhancing the reputation of a firm, specifically with service-oriented firms where customer interaction shapes opinions (Friedman, 2009). Firms need to attract and retain talented employees to maintain success. A primary method of doing this is to develop a reputation of being a great place to work in various ranking venues (Fulmer, Gerhart, & Scott, 2003).

There are also financial benefits for high-reputation firms in relationships with lenders. A firm with a high reputation in the media will receive more trade credit from suppliers than firms that do not (Van Den Bogaerd & Aerts, 2013). A firm with a longer track record of having a high reputation receives more favorable terms when borrowing funds than competitors (Diamond, 1989). Also, firms that have a less established reputation, or do not possess a high reputation, experience higher monitoring by lenders (Diamond, 1991). High-reputation firms are perceived by lenders as more trustworthy than other firms, hence they are offered financing at lower costs and more flexibility in choosing a method of sourcing capital (Wang, Berens, & Van Riel, 2012).

High-reputation firms may also benefit from favorable cost of raising equity capital. High-reputation firms experience a lower cost of raising equity than other firms (Cao, Myers, & Omer 2012). There is an association between corporate reputation and firm financial performance, a market value premium, and lower cost of capital (Smith, Smith, & Wang, 2010). Also, firms experience a lower cost of equity capital after initiating voluntary disclosure of corporate social responsibility activities (Dhaliwal, Li, Tsange, & Yang, 2011).

High reputation also tends to be associated with subsequent performance using accounting measures. There is a positive relationship between high-reputation firms and the financial performance of those firms versus firms with a low reputation (Lee & Roh 2012). There is a positive relationship between corporate reputation and financial performance, specifically profit

persistence (Roberts & Dowling, 2002). A firm developing a high reputation in the media is associated with a slight increase in a firm's return on assets (Deephouse, 2000).

High reputation may be associated with superior performance of a firm's equity securities. High reputation, as measured by the general public's perception and not just the financial industry, is associated with superior long-term stock price performance (Raithel & Schwaiger, 2015). Along the same lines, stocks associated with high-reputation brands are awarded higher valuations than those without this asset (Billett, Jiang, & Rego, 2014). Firms with a higher reputation experience lower volatility in stock price returns and superior risk adjusted returns (Kruger & Wrolstad, 2016).

The Dark Side of High Reputation

On balance, firms benefit from having high reputation, but they may also incur partially offsetting costs. A firm that strives to maintain or achieve a high reputation may incur financial costs have a short-term negative impact on a firm's profitability, but these costs are mitigated by an increase in financial stakeholder attitudes (Wang & Berens, 2015). High-reputation firms may be more defensive in allocation of resources which may lead to pursuing lower risk investment as opposed to higher risk investments (Fasaei, Tempelaar, & Jansen, 2017). Also, maintaining a high reputation for a long period of time may result in ambivalence by stakeholders (Brooks, Highhouse, Russell, & Mohr, 2003). In an industry with informed buyers, high-reputation firms may experience more pricing pressure than lower-reputation competitors (Liu, Feng, & Wei, 2012). High reputation may also increase the expectations audiences have of the firm. For example, when a firm has achieved a high reputation among investors that favor dividends, the firm's reputation is not further enhanced when a dividend payout increase is announced, however, when a dividend is not increased or cut the firm's reputation will diminish (Gillet, Lapointe, &

Raimbourg, 2008). Finally, if a firm does too well or is too dominant in its industry, the perception of a firm may be negatively affected (Lange et al., 2011).

In particular, having a high reputation may have mixed results with respect to influence in the financial markets. For example, sell-side financial analysts do not appear to be influenced by corporate reputation, focusing more on firm performance, corporate governance, transparency of financial disclosures, quality of management, and future prospects (Gabbioneta, Ravasi, & Mazzola, 2007). On the other hand, at the individual investor level, loyalty and not necessarily reputation has played a part in making investment mistakes or holding a low-quality stock (Helm, 2007). Despite there being advantages for a firm having a high reputation, financial markets may not view brand differentiation as having incremental information content (Mizik & Jacobsen, 2008).

Behavioral Biases

Bounded rationality is the idea that when individuals make decisions, his or her rationality is limited to the ease with which the decision may be made, the individual's cognitive ability to process the decision, and the time available to make the decision (Simon, 1997). Bounded rationality rolls back the assumption that decision making is a perfectly rational process (Cristofaro, 2017). Prospect theory is closely related to bounded rationality as an explanation for decisions made in risk situations, (Kahneman & Tversky, 1979). Prospect theory suggests that people use three general heuristics; representativeness, availability, and anchoring. These heuristics cause his or her decisions to diverge from the predictions of a perfectly rational model (Kahneman & Tversky, 1982).

Representativeness. Representativeness is the impact of superficial characteristics on decision making or relying on stereotypes (Shefrin, 2001). People are better suited to making decisions in a natural and not a probabilistic situation (Gigerenzer & Hoffrage 1995). As a result, individuals

presented with choices will transfer characteristics of something known to an unknown if they see some sort of similarities (Nofsinger, 2012). In general, a decision maker may fall prey to a representativeness bias whenever he or she has to assess the probability of an uncertain outcome without access all pertinent information (Ferrara, Pansera, & Strati, 2018).

The representative heuristic results in investors believing that a good firm is synonymous with the stock of the firm being a good investment. The stock in a good firm is often a low risk investment, but low risk investments typically result in lower returns (Chang, Hagan, Chang, & Lin, 2015). Even a firm that accomplishes something completely unrelated to its core business, but creates a favorable impression, may benefit through higher returns (Sinnewe & Niblock, 2015). For example, the shares of firms that air popular commercials during the Super Bowl experience higher returns for a period of time following the airing of the commercial (Chang, Jiang, & Kim, 2009).

Representativeness bias is associated with stock price overreaction—both upward and downward—when the stocks have outperformed or underperformed respectively (De Bondt, Werner, & Thaler, 1985). Investors follow the highest winners and losers through the business press which will lead to chasing performance (Shefrin, 2002). In a price bubble environment, financial asset will accelerate herd mentality that pushes prices higher (Ricciardi, 2017b).

Conversely, stock price reactions to negative earnings announcements may result in a price drop that overreacts to the new fundamental news and is corrected in time (Abarbanell & Bernard, 1992). This behavior by investors may result in both buying and selling activity as previous experience with financial markets will directly influence the amount of risk investors are willing to take and this attitude regarding risk often disconnects from an investors' ability to take on risk (Malmendier & Nagle 2011).

The internet ‘.com’ bubble in 1998 – 1999 is an example of reactions to both a positive and negative representative bias toward companies associated with the internet. Headlines regarding the dramatic and quick rise in the price of new internet stocks were commonplace at the time. One result was a positive representativeness bias with respect to companies associated with the internet. During this bubble, firms that added ‘.com’ to its name experienced a 53% price premium based on this minor name change (Cooper, Dimitrov, & Rau, 2001). After the internet bubble burst, firms that disassociated themselves from the internet by removing a ‘.com’ reference in its names subsequently outperformed (Cooper, Khorana, Osobov, Patel, & Rau, 2005).

Even the most sophisticated firms fall prey to the representativeness heuristic. In 1997 a single hedge fund firm, Long Term Capital Management (LTCM), almost brought down the financial system in the United States due to a strategy that exploited small market anomalies through the extensive use of leverage (Marthinsen, 2009). LTCM was headed up by a group of professionals and academics with very strong credentials. This included two individuals, Robert Merton and Myron Scholes, who received the Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel shortly after the demise of LTCM (The Royal Swedish Academy of Sciences, 1997). In 1994, LTCM was able to raise over \$1 billion in capital before placing a single trade (Dunbar, 2000). The reputation of both Myron Scholes and Robert Merton within the financial world enticed Goldman Sachs, J.P. Morgan and Merrill Lynch to invest based only on the individuals associated with LTCM plus a description of the firm’s proposed strategy (Slivinski, 2009). LTCM’s returns were impressive returning 20% in 1994, 43% in 1995, 41% in 1996, and 17% in 1997 (Marthinsen, 2009). By 1998 the firm had \$4.7 billion under management, but almost \$130 billion in positions or a leveraged position of about 25 to 1 (Lowenstein, 2000). The largest investment banks allowed the firm to take on such a high level of risk based on a short track record and the perception of success that the firm represented. In a very short time, the

name Long Term Capital Management represented the best, brightest, and most successful investors on Wall Street. However, today the term Long Term Capital Management represents how leverage and reliance on models can result in failure. In 1998 Long Term Capital managed to lose \$4.6 billion in a very short period of time due to its core strategy being negatively impacted by two macro-economic events, the Asian Financial Crisis of late 1997 and the Russian government defaulting on sovereign debt in 1998 (Lowenstein, 2000).

Similarly, the 2017 rise in the price of bitcoin is consistent with representative bias. The Bitcoin network and bitcoin cryptocurrency launched in 2009 and began trading on organized exchanges in 2010 (Gerlach, Guilherme, & Didier, 2018). Early uses of bitcoin as a medium of exchange consisted mostly of transactions on dark markets such as Silk Road. The Silk Road dark market facilitated the trade of drugs, weapons and other illegal items (Bradbury, 2019). On August 2, 2017, Cboe Global Markets announced its intent to offer listed futures trading at the Cboe Futures Exchange with bitcoin as the underlying market (Cboe, 2017a). This announcement may have helped legitimize bitcoin as an accepted asset class among the professional investment community (Suchman, 1995). Bitcoin futures contracts began trading on December 10, 2017 after going through the regulatory approval process (Cboe, 2017b). On the announcement date (August 2, 2017), bitcoin was trading at \$2809.99. The price rose to \$16,732.47 on the day of the launch (December 10, 2017), a gain of almost 500 percent. A contemporary media report noted that bitcoin was attracting interest from professional investors for the first time, and that the mainstream news flow associated with bitcoin had increased tremendously in reaction to Cboe's intent to list bitcoin futures (Boviard, 2017).

Figure 1 Daily Closing Prices for Bitcoin in US Dollars June 1, 2017 to May 31, 2018



Data Source: Bloomberg

The .com situation repeated itself as firms associated with bitcoin experienced strong stock performance. For example, Long Island Iced Tea Corporation changed its name to Long Blockchain Corp in December 2017. The share price rose 50 percent over the course of just a few days based on this name change (Hankin, 2018). Tulip Biomed changed its name to Bitcoin Services which took the price of the penny stock from 0.02 a share to 0.45. (Yuen, 2018) and both Agrivest changed its name to NXChain and Bioptix to Riot Blockchain with these two stocks rising over 1,000 percent (Detrihxe, 2018).

Familiarity. Familiarity is one of the main processes involved in recalling information as people associate new situations with prior experiences (Yonelinas, 2002). Familiarity based information recollection is fast acting and automatic without considering much quantitative information (Schwikert, Curran, & Gauthier, 2014). Due to the presence of unknown factors for an outcome, a decision maker may rely on the familiar aspects related to a given situation (Epstein, 1999).

In the investment context, a common familiarity bias occurs when investors consider the stocks of well-known firms to be good investments regardless of the valuation of a company or the potential benefit of portfolio diversification (Ricciardi, 2017a). Falling prey to a bias toward familiar investments may have a negative impact on portfolio returns as the potential returns available from less familiar investments can be higher than those that are better known by the investment community (Peijnenburg, 2018).

Familiarity bias can be a result of investors having limited resources or a limited amount of time to focus on investments. Based on this aspect of familiarity, it is more prevalent with individual investors versus professional investors (Skiba & Skiba, 2017).

Although a familiarity bias is more prevalent with individual investors, there are several examples of familiarity influencing professional investor's decisions. Portfolio managers will include investments in well-known financial securities without taking into consideration the potential diversification benefit associated with adding these investments (Nofsinger, 2002). This behavior is counter to normative standards of how a professional investor should approach making a new investment (Carpenter, 2013). One example of familiarity involves a portfolio manager is considering international exposure, familiarity may result in a portfolio manager gaining this exposure through investing in large domestic stocks that do business outside the home market versus smaller less familiar international stocks (Davies & Servigny, 2012). Using domestic stocks for this perceived geographic diversification can result in investments that are highly correlated with the overall domestic market. This correlation of stock performance results in lower diversification compared to what can be achieved by purchasing smaller international securities (Kiani, 2011). Also, more familiar investments may have higher prices or

valuations than comparable investments that are less familiar (Sarin & Weber, 1993). Finally, familiarity may impact the exit decision as investors are less willing to take losses on familiar investments (Bulipopova, Zhdanov, & Simonov, 2014; Cao, Han, Hirshleifer, & Zhang, 2011).

Avoiding investments that are less familiar may have a negative impact on investment performance. This bias results in individuals avoiding potentially attractive investments due to unfamiliar risks (Cao et al., 2011). This may have a potential negative impact on performance as returns available from less familiar investments can be higher than those that are better known by the investment community (Peijnenburg, 2018). A limited amount of familiarity with respect to investment choices may have a positive impact on risk adjusted portfolio performance (Boyle, Garlappi, Uppal, & Wang, 2012). Finally, an investor may miss out on buying opportunities if they occur during a market environment that is unfamiliar to them. Specifically, investors may avoid buying opportunities during periods of higher market volatility (Antoniou, Harris, & Zhang, 2015).

Availability Bias. Availability bias is the tendency to take mental shortcuts and relying on information that is most readily available when making decisions (Moten & Copeland, 2017). Specifically, decision makers have the tendency to rely on information that is simple to recall and easily found (Ricciardi, 2017; Stephan & Kiell, 1998). This heuristic is partially based on the belief that if some information is remembered quickly, it must be important (Esgate, Groome, & Baker, 2005). Personal experiences, memories, and even imagined recollection are forms of easily available information which may be associated with an availability bias (Tversky & Kahneman, 1973; Warneyrd, 2001). Quick, irrational or suboptimal decisions may be made relying on easily accessed or known information (Chen, Cheng, Lin, & Peng, 2017).

In the financial markets, traders rely on two categories of information, technical and fundamental analysis (Lo, 2011). Technical analysis involves the use of historical security price activity to make trading or investment decisions (Bodie, Kane, & Marcus, 2018). For example, an investor relying on technical analysis might purchase a stock as the price crosses above a 50-day average of closing prices, with no regard for any of the business aspects of the company (Murphy, 1999). Fundamental analysis uses information such as the price to earnings ratio of a stock or anticipated sales and earnings growth (Bodie et al., 2018). A very common approach to investing using fundamental analysis involves seeking out stocks that have a very low price-to-earnings ratio, suggesting attractive value for the price, versus competitors or the firm's history (Aw, Dornick, & Jiang, 2014).

There are examples of the availability bias influencing decisions relying on recent trading activity or historical market prices. Historical information that is only hours old may impact the decision-making process. For example, a short-term trading decision will be impacted by an availability bias in stocks that are experiencing a one-day price change that differs greatly from the overall stock market (Kaniel, Saar, & Titman, 2008). When traders operate under the influence of short-term price history, the result may be stock price changes that are more dramatic than would occur in a purely rational environment (Kudryavtsev, 2017). The type of information that is utilized influences the decision that is made. For instance, traders that have access only to past stock price behavior, may make completely different decisions than those relying purely on fundamental information about a security (Hong & Stein, 1999). Finally, investors will overweight positions in financial products that have had recent outperformance, such as buying mutual funds that have done well in the previous year (Shefrin & Statman, 1993). This sort of behavior reflects relying on the most recent available information, strong performance.

A good portion of new fundamental information about a firm is shared during its quarterly earnings report and this information often represents the most recent available information (Chi &

Shanthikumar, 2017). Investors are more likely to buy a stock that has reported a positive earnings surprise and sell a stock that has had a recent earnings disappointment, even weeks after the earnings report, a tendency that is attributed to the availability heuristic (Frieder, 2003). The availability bias may influence a fundamental opinion of an investment. For example, analyst forecasts fall into an availability trap through overly reflecting the current state of the economic cycle (Lee, O'Brien, & Sivaramakrishnan, 2008). At the individual investor level, when investors consider buying a new stock, they tend to favor stocks that have recently been in the news over those that have not (Barber & Odean, 2008). At a more macro level, when investors consider what asset class to invest in, they tend to favor investment themes that are getting the most favorable attention from the investing public (Shiller, 1998).

Anchoring. Anchoring is the tendency for a decision to be biased toward an initial impression resulting in insufficient adjustment when presented with new or contradictory information (Fan, Mei-tai, & Wagner, 1995; Furnham & Boo, 2011). Anchoring behavior is associated with visibility, at least for short-term experimentation, and can result in an investor being risk averse or too slow when updating of a model when presented with new information (Edwards, 1968).

In a controlled environment, a subject's estimates of uncertain quantities may be anchored in irrelevant information (Epley & Gilovich, 2001). For example, psychologists found that decision makers' responses were influenced when presented with a random number (between 0 and 100) and then asked how many African countries were members of the United Nations (Tversky & Kahneman, 1974). In a clinical setting, employee performance rankings were influenced by the ranking levels shown in training materials used to prepare for the actual evaluations (Thorsteinson, Breier, Atwell, Hamilton, & Privette, 2008). Similarly, experimental results suggest that an estimate of an uncertain quantity shows a higher likelihood of an anchoring bias when an exact figure is presented versus an anchor that is stated as a range (Janiszewski & Uy, 2008).

There are practical examples of anchoring impacting behavior in the literature. For example, university reputation scoring by academics demonstrates a bias toward anchoring with respect to the previous year's rankings (Bowman & Bastedo, 2011). Along the same lines, the relationship between the amount contestants wager when they have a Daily Double opportunity on the gameshow Jeopardy and the dollar amount that is associated with the original question are related, such that wagers are higher when the original question selected had a higher dollar amount and lower when the original question selected had a lower dollar amount. The authors attribute this relationship to anchoring and theorize that this behavior is more likely in situations where financial decisions are being made under pressure (Jetter & Walker, 2017). Finally, anchoring with respect to housing prices may have attributed to the great financial crisis of 2008 (Grosse, 2017).

Traders may exhibit anchoring behavior to historical data in his or her trading activity. Short-term traders anchor his or her decisions to recent price activity or specific market prices that traders consider significant. For instance, a stock's 52-week high price represents an anchor for investors with unusual volume and trading activity occurring when a stock approaches or exceeds this price (George & Hwang, 2004; Hong & Liu, 2015). There are strategies that take advantage of traders falling prey to the anchoring heuristic. For example, traders may exploit anchoring behavior by buying a stock at the 52-week high or selling short a stock at the 52-week low, both of which generate positive alpha (Ma, Wang, & Zhang, 2017).

Anchoring may affect how new information is processed, resulting in suboptimal investment decisions. Investors who have a positive preconception of an investment will expect higher returns and lower risk associated with the investment without taking any quantitative information into account (Ganzach, 2001). One model explored a combination of anchoring and representativeness with respect to investors updating beliefs based on new information. The finding was a reluctance to update beliefs in a timely manner (Barberis, Schleifer, & Vishny,

1998). Investors may also become anchored to analyst expectations during periods of stock market overreactions to the upside and downside (Michel 2017). In one study individuals with a higher cognitive reflection test score were more likely to fall prey to an anchoring bias (Oechssler, Roider, & Schmitz, 2009). However, professional investors exhibit a lower (but not zero) incidence of anchoring bias than that exhibited by the general public (Kaustia, Alho, & Puttonen, 2008).

Regret Aversion. Regret occurs after a bad decision has been realized and the decision maker experiences an unpleasant feeling associated with wishing they had acted differently (Zeelenberg, Beattie, van Der Pligt, & de Vries, 2002). Regret aversion refers to the impact of various concerns that impact a decision maker before any of those concerns materialize (Janis & Mann 1977). Regret aversion occurs when people make decisions or avoid making a decision in order to avoid future pain (Moten & Copeland, 2017). Just the potential for future regret contributes to indecisiveness in making decisions (Sautua, 2017). When no decision is made, or it is delayed, the result may be missing out on an opportunity due to fear of future regret. Also, the anticipation of regret results in a decision-makers being overly cautious which may result in missed opportunities (Bell, 1983).

Regret aversion translates to avoiding perceived risk across a wide array of common human behavior. For instance, a commuter will stick with a known route versus an alternative, even when there is a level of uncertainty with respect to the known route (Chorus, 2014). Similarly, regret aversion impacts decisions made with respect to exercise and driving behavior, specifically the risk associated with speeding (Abraham & Sheeran, 2003).

Regret aversion also manifests itself in several segments of the financial industry. For example, regret aversion may result in a bank choosing to charge high interest on a loan (Lin & Hung, 2013). This could result in a qualified loan seeker looking elsewhere for a source of funds.

Suboptimal trading decisions may result from avoiding future regret as regret aversion is a cause for an investor not properly realizing gains or losses (Shefrin & Statman, 1985). Financial decision makers may be willing to pay a premium to avoid a level of future regret (Bell, 1983). Finally, industry wide, the level of risk aversion is related to the decision maker's perception of market risk (Zhang, Brennan, & Lo, 2014). Regret aversion in the financial space is unique in that decision makers can see the result of indecision that results in not acting. Specifically, if a short-term trader chooses not to act and purchase a stock, they will quickly see if this inaction was the correct choice. The feeling of regret may be less impactful when a trader misses out on what would have been a profitable trade not as opposed trading losses that occur based on decisions (Zeelenberg et al., 2002). When the emotional response to trading decisions and counterfactual responses (not trading) is measured, the results reveal a higher physical response to negative results associated with actual decisions and missing out on positive results due to inaction (Qin, 2015). Finally, investors do not show regret when having incurred a loss as the result of following a broker's advice as opposed to when they make an independent decision (Fogel & Berry 2006). This may result in an investor being more likely to act on a recommendation than on his or her own independent investment thesis.

Dividend Policy

A cash dividend in the equity market is the portion of profits that is paid to shareholders out of earnings (Ross, Westerfield, Jeffrey, & Jordan, 2016). The portion of earnings that are not paid out in the form of a dividend is referred to as retained earnings. When a firm is confident about its future earnings and cash flow prospects, they will be more willing to increase dividends (Fama & Babiak, 1968). Firms making dividend decisions take expected financial need and results into account (Lintner, 1956) as the firm will balance future capital needs versus shareholder expectations.

The method of returning firm capital to investors is a choice between paying and raising dividends and repurchasing shares. Firms are very cognizant of certain investor preferences for dividends and will cater to that need through dividend policy decisions (Baker 2004). For mature firms there is an investor preference for dividends as those that pay dividends receive a higher valuation than those that do not (Hauser & Thornton, 2017).

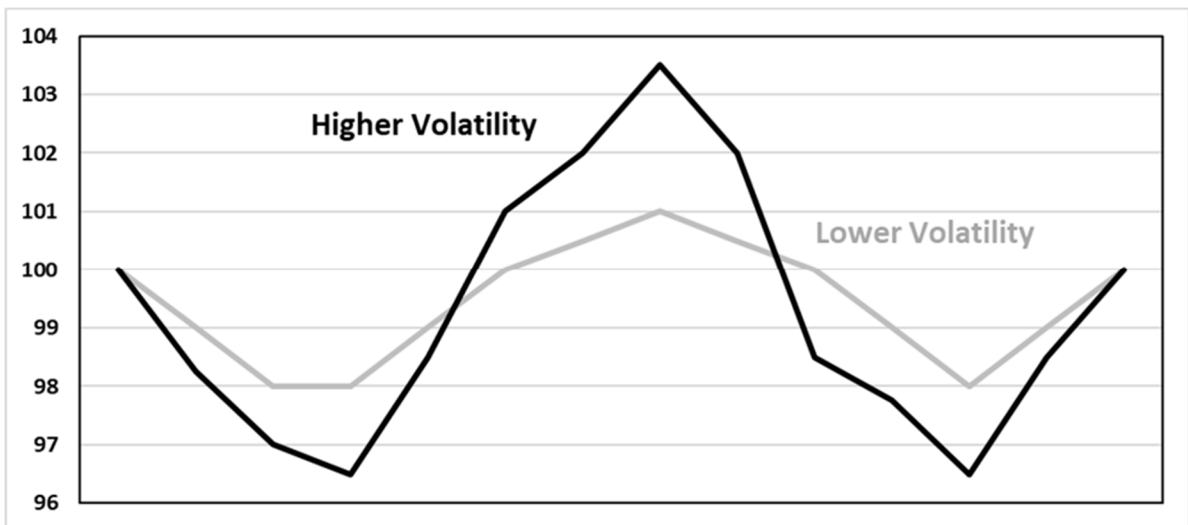
Investors may look at dividend history as a signal of future financial strength. For example, a firm that consistently increases dividend payouts will have more consistent earnings growth in the future relative to firms that have less consistent dividend growth (Benartzi & Thaler, 1997). The “information content of dividends” hypothesis suggests that dividend increases are a signal of financial strength. This perception may be the result of widely-known studies suggesting that dividend growth is positively correlated with rising stock prices (, Eades 1982, Watts, 1973). Markets also tend to award higher valuations to firms with a history of positive dividend growth. Consistent dividend growth expectations are associated with a positive impact on stock valuations (Bergeron, 2013). Finally, firms that have a consistent history of paying and increasing dividends may be perceived as safer investments (Leeds, 1990). Specifically, dividend investing shares characteristics with low volatility and value investing approaches, both of which outperform a buy and hold portfolio over time (Clemens, 2013; Fisher, 2013).

When a firm reduces its dividend payout, it is often associated with financial weakness at a firm. Even the anticipation of a dividend reduction results in downward pressure on a firm’s shares, as institutional investors become net sellers of firms two quarters before an ultimate reduction in a dividend (Henry, Nguyen, and Pham 2017). Also, management behavior and guidance are influenced by investor’s negative reactions to dividend cuts (Bessler & Nohel, 1996). When a reduction is planned, management often guides analysts to anticipate a more dramatic reduction in dividends to cushion the negative stock price reaction that accompanies the dividend cut announcement (Bilinski & Lyssimachou, 2018).

Volatility

There are two types of volatility with respect to trading instruments; realized volatility and expected volatility (Rhoads, 2010). Realized volatility may be measured through observing past price behavior while expected volatility is calculated from derivative markets (Hull, 2018). Past price behavior is used to calculate the realized volatility of a security with wider price swings resulting in greater volatility and less price movement resulting in lower realized volatility. The market's expectation for price volatility directly influences the price of options. The market's expectation for price volatility may be determined through an option's price by using the price as an input into a pricing model and expected volatility as the output. Figure 2 demonstrates the price behavior difference between a low realized volatility and high realized volatility investment.

Figure 2 Demonstration of Higher and Lower Volatility of Security Price Changes



The darker line on the chart represents a financial vehicle that experiences more price volatility than the price changes represented by the lighter line. The Cboe Volatility Index (VIX) is a measure of how much volatility derivative traders are expecting in the daily price change of the S&P 500 over the next 30 calendar days (Whaley, 2009).

Both realized and expected financial market volatility have an impact on investor behavior. Higher stock market volatility is closely associated with investor's reluctance to invest in stocks. A direct relationship exists between investor sentiment and expected stock market volatility (Shu & Chang, 2015). An increase in realized market volatility results in a reduction of flows into equity mutual funds (Naik & Padhi, 2015). There is a direct relationship between stock market performance, equity fund flows, and market volatility. This relationship is stronger in the United States than other markets (Lee, Paek, Ha, & Ko, 2015). One study shows that stocks of companies with higher credit ratings outperform companies with lower credit ratings in times of increased market volatility (Rosch & Kaserer, 2013).

Professional portfolio managers experience an impact in the form of client concerns during periods of higher volatility. Investors are more likely to reach out to his or her financial advisor when the stock market is experiencing more volatility. During periods of higher volatility expectations as indicated by VIX and high realized volatility the number of contacts between portfolio managers and individual clients increases dramatically (Maymin & Fisher, 2011).

Analyst Recommendations

A professional analyst's recommendations may be influenced by heuristics. Analyst forecasts may fall prey to both the representativeness and anchoring heuristics (Amir & Ganzach, 1998). Investors will be more receptive to a recommendation that combines a quantitative argument as well as qualitative information that backs up figures with a 'story' that illustrates why the recommendation is a good or bad potential investment. Price reactions to both positive and negative recommendation changes tend to be amplified when those changes are accompanied by a change in earnings estimates and a qualitative justification behind the recommendation change (Kecskes, Michaely, & Kent, 2017).

Analyst recommendations may also lead to herding behavior. For example, mutual funds exhibit herding behavior when analysts both upgrade and downgrade stocks. Changes in analyst opinions cause excess short-term volatility in individual stock trading activity (Corbet, Dowling, & Cummins, 2015). The herding behavior is more significant for downgrades than upgrades (Brown 2014). This price impact of mutual fund herding behavior is limited to a single day (Busse et al., 2012). Herding behavior is more prevalent in buying of stocks that have outperformed versus selling stocks that have underperformed, specifically toward the end of a quarter (Wermers, 1999).

Analyst rankings—relative to peers—may be more of a popularity contest than recognition of analyst skill (Emery & Li, 2009; Kucheev, Ruiz, & Sorensson, 2017). Recommendations from Wall Street analysts are influenced by momentum, recent results, and strong balance sheets (Stickel, 2007). The relationship between financial strength and analyst recommendations is likely coincident as recommendations have a strong relationship with the cost of equity for specific companies (Aggarwal, Mishra, & Wilson, 2018). Also, equities that are defined as ‘glamour stocks’ which are highly visible and experiencing strong price momentum receive higher ratings than those not defined as glamour stocks (Jegadeesh, Kim, Krische, & Lee, 2004). Often, the information included in analyst buy recommendation reports is more qualitative than quantitative (Breton & Taffler, 2001).

Momentum

Fama and French developed a three-factor model which uses market risk, firm size, and value versus growth measures to explain performance anomalies (Fama & French, 1993). In a later paper this model was expanded to include two more factors which included stock price momentum (Fama & French, 2015).

Stocks that have exhibited positive price momentum over the previous year continue to exhibit positive performance (Fama & French, 2012). Even over a shorter time frame, Nasdaq-100 stocks that performed in the top decile of performance one day showed a 23.9% higher likelihood of being net purchased by institutional investors the following day (Griffin, Harris, & Topaloglu, 2003). Trading based on previous price momentum results in excess returns, but the trading costs associated with chasing momentum offsets much of this excess return (Chan et al., 1999). Stocks that are considered hard to value exhibit higher momentum-based trading returns (Hur, Pritamani, & Sharma, 2010). The largest capitalization stocks offer lower momentum-based trading returns (Sias, 2007).

CHAPTER III

THEORY AND HYPOTHESIS

I argue that three perceptual assets are associated with the representation of individual stocks in actively managed equity portfolios: firm high reputation, firm visibility, and a specific form of high reputation for capital return. Portfolio managers running active equity portfolios are charged with allocating capital to stocks that are expected to outperform some benchmark as well as peers. If they are adhering to this goal, various reputational aspects or how well known a firm is should not be an influencing factor in stock selection. However, associations between these perceptual assets and ownership—above and beyond control variables—would be evidence that behavioral biases may influence decisions to buy or sell shares in a particular firm.

Prospect theory demonstrates how individuals make sub-optimal decisions in the face of uncertainty or risk (Kahneman & Tversky, 1979). Some strategy research has misapplied prospect theory as prospect theory focuses on decisions that are made in isolation which is not applicable to behavioral theory of the firm (BTOF) (Bromiley, 2010). Firm decision-making impacts multiple aspects of a business which can result in a mixed gamble situation (Wu & Markle, 2008). When a portfolio manager makes a decision there is a very straightforward risk, reward, and diversification composition to the decision (Kester, Griffin, Hultink, & Lauche, 2011). A distinct difference between portfolio manager decisions and those made in a management capacity is the amount of uncertainty traditional managers have to take into consideration (Greve, 2015). Investors make less than rational decisions due to using a variety of heuristics and these decisions are based on a single potential outcome, despite a desire to do

otherwise (Shah, Maqsood, & Mahmood 2018). Although prospect theory has not found an appropriate place in strategy research, the literature that builds on Kahneman and Tversky's ideas from the late 1970's reinforces heuristics influencing investor choices. This is more appropriate relative to the decision-making processes explored in this study (Heukelom, 2007).

Recently, scholars have noted that there are issues associated with applying prospect theory to organizational decision making (Holmes et al., 2011). In contrast to the concerns raised by Holmes and colleagues (2011), the investment decisions examined in the present study are not as multifaceted as decisions that managers typically make for organizations. There are several issues associated with applying prospect theory to organizational decision-making, and the core of these issues is in applying prospect theory to higher level choices being made by an individual or team (Holmes et al., 2011).

In the present study, the decisions under examination are more like the more straightforward economic decisions in the canonical prospect theory literature than typical firm-level decisions. These investment decisions, while involving more parameters than some prospect theory experiments, are largely focused on potential returns and diversification benefits of decisions made in changing the composition of an investment portfolio, which is similar to the kinds of utility maximization and risk decisions in experimental work (Dhankar, 2019). This resemblance to the experimental work avoids the construct and theoretical consistency issues noted by Holmes and colleagues (2011). Finally, unlike decisions by management teams that have both individual and team components, these decisions are generally made by a single responsible manager (cf. Holmes et al., 2011).

I explore the use of heuristics, reflected by perceptual assets, in the portfolio allocation decisions made by investment managers. First, I examine the direct effects of high reputation, firm visibility, and high reputation for capital return. Then, I examine how those relationships are

moderated by market and stock characteristics, including market volatility, stock price momentum, and sell-side analyst recommendations.

High Reputation Influence on Portfolio Holdings

I argue that portfolio managers will rely on the representativeness heuristic when evaluating a firm with a high reputation, and judge them to be better investments than fundamental factors would suggest (Luo, 2014). While a strictly rational manager may equal weight—or even underweight—shares of high-reputation firms, a manager relying on the representativeness heuristic may instead overweight shares of these firms.

The representativeness heuristic causes investors to use current information and project it out into the future (Fisher, 2014). Portfolio managers may have a favorable impression of firms that possess a high reputation. Representativeness is one heuristic that influences investment decisions being made without a thorough analysis of a firm as it involves relying on superficial characteristics when making a decision (Ricciardi 2017b). In the context of this study, a preference for a high-reputation firm is shown by overweighting the shares that would suggest reliance on a representativeness heuristic.

In contrast, in a purely rational decision-making context, the portfolio manager should only base his or her decisions on quantifiable fundamental factors. (Shleifer, 2000). There is a reasonable consensus in the literature that focusing on fundamental factors when choosing where to invest results in superior performance (Fama & French, 2015). Primary factors include focusing on smaller firms, firms with lower valuations, stocks with positive price momentum, lower volatility stocks, and firms with quality earnings (Fama & French, 2015). When a portfolio manager is considering making changes to his or her holdings, factors like those above should be a primary reason that managers choose the stock.

There are no fundamental reasons to favor purchasing a stock based on a firm having a high reputation, beyond those observable factors that can be accounted for empirically. In fact, firms with a high reputation will usually be larger firms with a share price that may imply a premium valuation (Smith, et al., 2010). Both of these characteristics would be counter to the factors that would generally contribute to outperformance. Finally, if a firm is already well known, the shares may already be widely held, which would result in a lower number of future new investors who could push the price of the firm's stock higher. This is counter to what is commonly referred to as "the greater fool theory," where one expects to find a buyer at some point when they make an investment (Law 2016).

However, there are reasons to suspect that portfolio managers may rely on representativeness when evaluating high-reputation firms. Recall that high-reputation firms have more access to trade credit and are subjected to less stringent financial monitoring while firms with a low reputation will be subjected to more scrutiny from lenders (Diamond, 1991; Wang et al., 2012). It may be that portfolio managers engage in analogous behavior, specifically spending more time analyzing a non-high-reputation firm versus a high-reputation firm before making the decision to invest in shares (Feldheim & Shawky, 2001). Spending less time analyzing a potential investment opens the door to a higher likelihood of relying on shortcuts or heuristics (Nilsson, Juslin, & Olsson, 2008).

I argue that high reputation results in portfolio managers relying on the representativeness heuristic and will weight high-reputation firms more heavily in portfolio allocations.

Hypothesis 1: High reputation will be positively associated with the relative weighting of a firm's stock in equity portfolios.

Firm Visibility Influence on Holdings

I argue that portfolio managers will rely on the familiarity heuristic when evaluating a high-visibility firm and judge them to be better investments than fundamental factors would suggest (Huberman, 2001). While a strictly rational manager may equal weight – or even underweight – shares of high-visibility firms, a manager relying on the familiarity heuristic may instead overweight shares of these firms.

Use of the familiarity heuristic is when a decision maker favors a choice that he or she feels more familiar with (Schwikert, et al., 2014). Decision makers will favor what is more familiar when presented with alternatives (Yonelinas, 2002). The familiarity heuristic causes investors to favor firms that they are familiar with over those that are unfamiliar to them (De Vries, Annalieu, & Gerber, 2017). The familiarity heuristic influences investment decisions favoring well known financial securities regardless of the potential portfolio diversification benefits (Nofsinger, 2002). Portfolio managers may think they have a better understanding of a high-visibility firm due to the familiarity heuristic (Ruffino, 2014). In this study, a preference for high-visibility firms is shown by overweighting the shares that would suggest reliance on a familiarity heuristic.

In contrast, in a purely rational decision-making context, the portfolio manager should only base his or her decisions on fundamental factors and not how familiar they are with a firm (Carpenter, 2013). These factors include an outlook for the industry the firm operates in and the firm's competitive position within the industry (Hall & Mcvitar, 2013). There are also broader factors, including overall expectations for economic activity and the valuation of the overall stock market (Tsuchida & Tucker, 2012). When a portfolio manager is considering making changes to his or her holdings, these factors should be prominent in the reasoning of purely-rational managers in choosing a stock and its proportion of a portfolio.

There are no fundamental reasons to favor purchasing shares of a high-visibility firm, beyond those observable factors that can be accounted for empirically. In fact, more familiar investments may have a higher valuation than less-familiar ones which, in a rational context, should result in favoring shares of a less-familiar firm (Sarin & Weber, 1993). Recall, less familiarity with respect to investment choices may have a positive impact on risk adjusted portfolio performance (Boyle et al., 2012). Lesser known companies may also tend to have a smaller market capitalization (Baker, Powell, & Weaver, 1999). Focusing on lesser-known small firms may be associated with relative outperformance of the broader market on average (Fama & French, 2015). For these reasons, favoring firms with these characteristics for familiarity reasons may run counter to demonstrated strategies for outperforming broad stock indices (Cong, et al., 2010).

However, there are reasons to suspect that portfolio managers may rely on familiarity when evaluating high-visibility firms. A familiarity bias exists when portfolio managers choose investments based on how familiar they are with a firm (Belcher, 2010). In this context, familiarity is not limited to knowledge of a firm's financials; it may also include how well a firm is known as an operating entity, brand, or corporate citizen (Perera & Chaminda, 2013). When portfolio managers make trading decisions, they risk being wrong and losing capital. Investing in a firm that has high visibility may offset some of uncertainty that they experience when making a buy or sell decision (Jung & Kellaris, 2004).

=I argue that high visibility results in portfolio managers relying on the familiarity heuristic and will weight high-reputation firms more heavily in portfolio allocations.

Hypothesis 2: Firm visibility will be positively associated with the relative weighting of a firm's stock in equity portfolios.

High Reputation for Capital Return Influence on Holdings

I argue that portfolio managers will rely on the regret aversion heuristic when evaluating a firm that has developed a high reputation for capital return, and judge them to be better investments than fundamental factors would suggest (Fan et al., 1995; Furnham & Boo, 2011; Sautua, 2017). Firms that have consistently raised dividend payments to shareholders will develop what I call a high reputation for capital return (Shefrin & Statman, 1985). While a strictly rational portfolio manager may equal weight – or even underweight – shares of firms that have a high reputation for capital return, a manager relying on the regret aversion heuristic may instead overweight shares of these firms.

The regret aversion heuristic results in avoiding the unpleasant feeling associated with wishing an action had not been taken (Zeelenberg et al., 2002). An actor may avoid decisions that they believe will result in regret at some point in the future (Sautua, 2017). This heuristic would also cause a portfolio manager to favor investing in a firm that has achieved a high reputation for returning capital to investors. In the context of this study, a preference for a firm that has a high reputation for capital return, shown by overweighting the shares, would suggest a reliance on the regret aversion heuristic.

In contrast, in a purely rational decision-making context, the portfolio manager should base his or her decisions on forward looking fundamental factors and not a firm's historic dividend policy (Troup, 2012). All valuation models used to value firms depend on estimates of a firm's financial results in the future. For example, a dividend discount model considers future dividends, the expected growth of those dividends, and a discount factor based on perceived risk of owning shares (Brealey, Myers, & Marcus, 2010). Other valuation models are based on future earnings, sales, or cash flows (Brealey et al., 2010). Historical results offer a benchmark, but the forward estimates are used to determine the valuation that results in a trading decision.

There are no fundamental reasons to favor purchasing a stock based on a firm having developed a high reputation for capital return above and beyond the implied future cash flows. Prior work suggests that there is a qualitative and quantitative relationship between a firm's dividend policy and a high reputation with respect to financial strength (Ha, 2011). The "information content of dividends", which suggests financial strength and lower risk of future business prospects, is a practitioner hypothesis associated with this belief (Michaely, 2018). A rational manager is expected to take into account the current valuation of shares and a firm's business prospects. These more important factors would tend to result in a manager choosing to even weight or underweight shares despite the firm's dividend history.

However, there are reasons to suspect portfolio managers may rely on the regret aversion heuristic when choosing between investing in firms with a high reputation for capital return versus other firms that may be seen as having a higher risk of a negative outcome (see Varvouzou 2013). Reputation is developed over time based on some sort of behavior and the perception of that behavior (Lange et al., 2011). When a firm has a high reputation for capital return, portfolio managers may rely on their expectations for continued capital return to estimate a lower likelihood of regret for choosing that firm for investment. I argue that portfolio managers will favor investing in firms that have developed a high reputation with respect to returning capital to investors regardless of expectations about future firm prospects. A portfolio manager who is concerned about a negative outcome will favor a firm that has a high reputation for capital return. Managers will pay a premium for an investment that they believe lessens the risk of loss in the future (Bell 1983). Firms that possess a high reputation for capital return are more likely favored by managers to avoid future feelings of regret.

I argue that portfolio managers will rely on the regret aversion heuristic, and exhibit a preference for firms with a high reputation for capital return.

Hypothesis 3: High reputation for capital return to investors will be positively associated with the relative weighting of a firm's stock in equity portfolios.

A possible alternative explanation for this hypothesized association is that portfolio managers may instead be relying on the anchoring heuristic. The anchoring heuristic is the tendency for a decision to be biased toward an initial impression, resulting in insufficient adjustment when presented with new or contradictory information (Fan 1995, Furnham 2011). Anchoring occurs when portfolio managers' decisions are influenced by a quantitative aspect of an investment that he or she previously encountered (Varvouzou 2013). Portfolio managers may form an impression of a firm being a quality investment, as a result of a pattern of the firm consistently raising its dividend. On balance, I think this association is more consistent with regret aversion, but my statistical methods do not allow me to rule out managers relying instead on the anchoring heuristic for the hypothesized relationship.

Market Volatility Impact on Portfolio Manager Decisions

I argue that, during periods of elevated stock market volatility, portfolio managers will show an enhanced preference to invest in firms that have a high reputation, are high visibility, and possess a high reputation for capital return. Portfolio managers may experience heightened levels of stress during periods of higher market volatility, which may lead to less rational decision-making than at other times (Coates, 2012). At these times, portfolio managers may increase their reliance on cognitive shortcuts and heuristics (Gigerenzer & Selten 2001). Consequently, portfolio managers' baseline use of heuristics may be enhanced during these higher market volatility periods.

Elevated market volatility is associated with more uncertainty in stock markets (Marfatia, 2014). When the financial markets experience higher price volatility, portfolio managers must make decisions that have an increased uncertainty of potential outcomes. Making portfolio rebalancing

decisions when stress levels are heightened results in higher likelihood that a decision maker will rely on heuristics like representativeness, familiarity, or regret aversion (Samson & Voyer, 2014). In the context of this study, an increased preference for shares of firms with high reputation, high visibility, and high reputation for capital return during periods of elevated market volatility would suggest an enhanced reliance on heuristics during these periods.

In a purely rational decision-making context, a period of higher volatility may be an opportunity for portfolio managers to purchase shares at attractive valuations. Stock valuations compress during periods of higher volatility, thereby creating buying opportunities (Malagon, Moreno, & Rodriguez, 2015). Because stock valuations compress during periods when volatility is elevated, some prominent investors argue that portfolio managers should consider elevated levels of volatility as a signal to increase equity exposure (Fisher, 2014). A purely-rational manager should logically exhibit a preference for higher-risk equities that may be more affected by volatility, suggesting a lower weighting for firms with these perceptual assets.

However, there are reasons to believe portfolio managers may increase their reliance on these heuristics during periods of higher market volatility. Despite the potential buying opportunity presented by increased risk in times of higher volatility (Fisher 2014), managers tend to become more risk averse. Elevated psychological stress occurs during periods of increased market volatility, which will lead to more reliance on heuristics when making decisions (Coates, 2012; Hepler & Kovacs, 2017). For example, during periods of high volatility, funds flow to investments that are perceived as safe, a phenomenon that is commonly referred to as a 'flight to quality' (Rosch 2013, Fuerst 2015). Along the same lines, during periods of elevated market volatility, portfolio managers experience an increase in client inbound calls (Maymin & Fisher, 2011), trading volumes increase (Kao, Hwei-Lin, & Yu-Cheng, 2019), and market liquidity decreases (Ozenbas, Schwartz, & Wood 2002). For these reasons, portfolio managers may tend

to have heightened reliance on cognitive shortcuts as a way of coping with the varying demands created by elevated market volatility.

I argue that portfolio managers will rely more on the representativeness, familiarity, and regret aversion heuristics during periods of higher market volatility.

Hypothesis 4: Higher equity market volatility will positively moderate the relationship between institutional weightings of individual stocks for (a) high reputation, (b) firm visibility, and (c) high-reputation for capital return.

Momentum Impact on Holdings

I argue that when shares of firms that are experiencing positive price momentum, portfolio managers will show an enhanced preference to invest in firms that also have a high reputation, are high visibility, or possess a high reputation for capital return. Portfolio managers may be attracted to invest in firms when shares are regularly moving higher, which may lead to less reliance on a rational evaluation of the fundamental outlook for a firm (Yang, Goh, & Chiyachantana, 2016). Excess positive price momentum is associated with irrational decision making and stock price activity (Pawel & Konarzewski, 2015). Consequently, portfolio managers' use of heuristics may be enhanced when shares of a firm are experiencing positive price momentum.

Stock prices experience positive price momentum as a result of investors aggressively purchasing shares, often due to irrational positive market sentiment (Davies & Servigny, 2012). For example, positive price momentum is associated with behavioral anomalies such as representativeness (Foerster, 2011). Also, positive price momentum is associated with confirmation bias regarding a conscious or unconscious positive preconception of a firm (Costa et al., 2017). When a firm's share price is exhibiting positive price momentum, there is a higher likelihood that decision maker will rely on heuristics like representativeness, familiarity, or regret

aversion (Pawel & Konarzewski, 2015). In the context of this study, an increased preference for shares of firms with high reputation, high visibility, and high reputation for capital return during periods when shares experience positive price momentum would suggest an enhanced reliance on heuristics during these periods.

In a purely rational decision-making context, a portfolio manager should make his or her decisions on a variety of factors and not just stock price momentum. Shares of a firm that experience positive price momentum reflect a net positive outlook by the investment community, but also a premium valuation relative to similar investments (Davies & Servigny, 2012).

Combining valuation and momentum may be a winning strategy, but these two factors are often negatively correlated, indicating that momentum stocks are not offering a favorable valuation on average (Asness, Moskowitz, & Pedersen, 2013). Because firm valuations are elevated when shares are experiencing positive price momentum (Yang, et al., 2016), a purely rational manager should not generally increase exposure to shares. Therefore, a rational manager analyzing the value of a firm is likely to even weight or underweight high price momentum stocks on average.

However, there are reasons to believe portfolio managers may increase their reliance on heuristics when shares exhibit positive price momentum despite shares having a premium valuation. A stock price that is experiencing positive price momentum offers a positive feedback loop which will reinforce the representativeness heuristic that exists when a firm has a high reputation or a high reputation for capital return (Rizzi, 2014). A firm that experiences strong positive stock price momentum is more likely to be discussed in the financial press as business television networks, who are often accused of having a bullish bias in reporting (Roszkowski & Richie, 2016), as they tend to spend more time discussing winning stocks. Financial publications will publish lists of stocks making new 52-week highs, a factor that investor's find attractive when seeking out investments (Bhootra & Hur, 2013). Similarly, more exposure will increase the level of familiarity a portfolio manager feels with respect to the firm, which, in turn, may increase

reliance on the regret aversion heuristic, as a manager wishes they had more exposure to shares of a firm experiencing strong price momentum. For these reasons, portfolio managers may tend to rely more on these heuristics when analyzing a firm when shares are experiencing positive stock price momentum.

I argue that portfolio managers will rely more on the representativeness, familiarity, and regret aversion heuristics when firm shares are experiencing positive price momentum.

Hypothesis 5: Stock price momentum will positively moderate the relationship between institutional weightings of individual stocks for (a) high reputation, (b) firm visibility, and (c) high reputation for capital return.

Analyst Recommendation on Holdings

I argue that, when shares of a firm are being recommended by sell-side analysts, portfolio managers will show an enhanced preference for shares of firms that have a high reputation, are high visibility, and possess a high reputation for capital return. Portfolio managers rely on sell-side analysts for investment ideas and vital fundamental firm information (Busse et al., 2012).

The more effective sell-side recommendations tend to be combined with some sort of narrative or ‘story’ to convince a portfolio manager to purchase shares (Steverman, 2007), perhaps triggering cognitive shortcuts. Consequently, portfolio managers may rely more on heuristics when considering purchase of shares of a firm that is being recommended by sell-side analysts.

Many buy-side portfolio managers rely on sell-side analyst recommendations when making portfolio rebalancing decisions (Hobbs & Singh, 2015). Portfolio managers depend on sell-side counterparts for financial projections on firms that they either own or may considered purchasing (Brown, Wei, & Wermers, 2014). This is a function of portfolio manager’s duties causing him or her to rely on other sources of information in his or her decision-making process (Maymin 2011). Input from better informed and more specialized sell-side analysts may have some influence on a

portfolio manager's final trading decision (Busse et al., 2012), beyond—or in opposition to—fundamentals. In the context of this study, an increased preference for shares of firms with high reputation, high visibility, and high reputation for capital return during periods when shares are being recommended for purchase by sell-side analysts would suggest an enhanced reliance on heuristics.

In a purely rational decision-making context, a portfolio manager should make his or her decisions on a variety of factors and not be influenced by sell-side analyst recommendations beyond their resemblance to observable objective factors. Sell-side analyst ratings may be a good place to start when seeking out a new investment, but fundamental factors such as current valuation and the outlook for future firm prospects should be considered (Bodie et al., 2018). Portfolio managers should be cautious when considering sell-side analyst recommendations, as there is some inconsistency between analysts' ratings and the formal rating definitions issued by securities firms (Barber 2010). Also, many sell-side analysts have conflicts of interest that result in their recommendations not always being in the best interests of portfolio managers (Jung 2012). Finally, greater reliance on buy-side research and lower reliance on sell-side recommendations results in better portfolio performance (Rebello 2014). Therefore, a rational manager analyzing a firm is likely to even weight or underweight firms that are being recommended by sell-side analysts.

However, there are reasons to believe portfolio managers may increase their reliance on heuristics when shares are being recommended for purchase by sell-side analysts. Despite the information content of the recommendation by the sell-side analyst, he or she may not necessarily have the best interest of the portfolio manager in mind (Walker & Claassen, 2006). Often sell-side reports will contain as much qualitative information which is telling a positive story in addition to quantitative information influences buy-side actions (Breton & Taffler, 2001). If a sell-side analyst is recommending two or three stocks in a sector where the portfolio manager is

considering adding a stock, the manager may choose to add shares in a firm that has a high reputation or is more familiar to the manager. Similarly, the better known a firm is (i.e. visibility), the stronger the positive price reaction will be when sell-side analysts raise their recommendation level (Loh, 2010). A buy recommendation from a sell-side analyst may trigger a confirmation bias when a manager is already relying on heuristics (Zahera & Rohit, 2018). For these reasons, portfolio managers may tend to have heightened reliance on cognitive shortcuts when shares are being recommended for purchase by sell-side analysts.

I argue that portfolio managers will rely more on the representativeness, familiarity, and regret aversion heuristics when firm shares are being recommended for purchase by sell-side analysts.

Hypothesis 6: Analyst recommendations will positively moderate the relationship between institutional weightings of individual stocks for (a) high reputation, (b) firm visibility, and (c) high reputation for capital return.

Client Influence on Decisions

One potential alternative explanation for my theorized relationships—albeit consistent with them—is that portfolio managers’ choices are driven by an anticipation of their clients’ reliance on heuristics, rather than their own reliance. Portfolio managers are influenced by client expectations (Coleman 2015). Along the same lines, portfolio managers know that clients’ non-quantitative feelings impact decisions to hire or fire managers, or to change the capital allocated to managers (O’Barr 1992). Nonetheless, whether the manager relies on the heuristics himself or herself, or is a conduit for the reliance of clients, the logic operates the same.

CHAPTER IV

DATA AND METHODS

Sample / Data

I test my hypotheses using the quarterly holdings, from 2011 to 2019, of actively managed equity funds for which the S&P 500 is a benchmark. Morningstar screens identify relevant managers. S&P Capital IQ is the source for quarter end holdings data. As the study hypotheses consider the collective stock holdings decisions of investment managers, the data is at the holding-quarter (i.e. firm-quarter) level.

Quarterly S&P 500 membership information is from Sibilis research, high reputation rankings from Fortune and the Wall Street Journal, firm visibility data from Dow Jones Factiva. Bloomberg is the source historical S&P 500 index performance, individual component performance, component weightings in the S&P 500, industry classifications for each member of the S&P 500, members of the S&P 500 Dividend Aristocrats Index, daily closing prices for the Cboe Volatility Index, historical shares outstanding, and historical individual stock recommendation data. I report summary statistics as in Table 1 and correlations in Table 2.

Table 1: Summary Statistics

	Observations	Mean	Standard Deviation	Min	Max
Market Relative Weighting	4,611	-0.0392	0.7393	-1	10
High Reputation	4,611	0.0590	0.2356	0	1
Firm Visibility	4,595	48.1741	159.5292	0	2185
High Reputation Capital Return	4,611	0.1026	0.3034	0	1
VIX Average	4,611	16.3742	2.6336	10.3079	30.5836
Price Momentum	4,611	5.4355	2.8822	1	10
Analyst Recommendation	4,611	3.8240	0.6946	0	5
Earnings Surprise	4,610	2.4544	1.1077	1	4
Firm Stock Performance	4,611	0.0007	0.0545	-0.23766	1.61934
Share Count	4,611	-0.0033	0.5485	-1	1

Table 2: Correlations

	Market Relative Weighting	High Reputation	Firm Visibility	High Reputation Capital Return	VIX Avg.	Price Momentum	Analyst Rec	Earnings Surprise	Firm Stock Performance	Share Count
Market Relative Weighting	1.000									
High Reputation	0.012	1.000								
Firm Visibility	0.008	0.431	1.000							
High Reputation Capital Return	0.087	0.088	-0.011	1.000						
VIX Avg	0.007	-0.001	0.005	-0.006	1.000					
Price Momentum	0.005	0.037	0.014	0.039	0.010	1.000				
Analyst Rec	0.018	0.093	0.112	-0.084	0.031	-0.047	1.000			
Earnings Surprise	-0.001	-0.016	-0.030	-0.012	0.015	-0.017	0.004	1.000		
Firm Stock Performance	-0.012	-0.020	0.009	-0.016	0.011	0.012	0.046	-0.006	1.000	
Share Count	-0.005	-0.007	0.000	-0.012	0.018	-0.010	0.029	0.006	-0.016	1.000

Dependent Variable

Market Relative Weighting. Active equity portfolio ownership of the individual components in the S&P 500, when compared to the component weightings in the S&P 500, indicates whether a portfolio manager is under weight, equal weight, or overweight versus the index, and to what degree (Stark, 2019). Using quarterly holdings data from S&P Capital IQ, Market Relative

Weighting is the proportion of the focal portfolio minus the S&P 500 component weighting (Doshi et al., 2015), then divided by the S&P 500 component weighting. As a result, positive (negative) values indicate an overweight (underweight) allocation, and the magnitude of overweighting or underweighting indicates the degree of divergence from the index weightings. For example, a holding of exactly the market weighting a value of zero, twice the market weighting would have a value of 1.0, and no holding a value of -1.0.

Independent Variables

High Reputation. The reputation of a firm may increase the general perception of the firm (Haleblian, et al., 2017; Pfarrer et al., 2010), and I examine the influence of those perceptions on portfolio manager holdings. High Reputation is a binary variable, with a value of 1 for firms that appeared in the top 25 of either Fortune magazine's most admired company list or the corporate reputation survey published by the Wall Street Journal in each year from 2011 to 2019. Firms that do not appear on either list have a value of 0.

Firm Visibility. Firm visibility may lead portfolio managers to recall a firm when considering which equities to purchase. Firm visibility is the annual cumulative count of articles mentioning a focal firm in the Wall Street Journal, New York Times, and Financial Times, using metadata from Dow Jones' Factiva.

High Reputation for Capital Return. I argue that some firms develop a specific form of reputation, high reputation for capital return, as a result of the consistency of their capital return behaviors in the form of consistent dividend payments over long periods of time. High Reputation for Capital Return is a binary measure using the S&P 500 Dividend Aristocrats Index with members coded as a 1 and non-members coded as 0.

The S&P 500 Dividend Aristocrats Index includes S&P 500 companies that increase dividends over a minimum of the past consecutive 25 years. Membership in the Dividend Aristocrats Index

is determined by examining which firms meet the dividend and S&P 500 index criteria as of the last business day of each year. The stocks that are in the index changes on the last business day in January (S&P Dow Jones Indices 2018). This measure is the most recent prior year in all analyses.

Moderating Variables

Market Volatility. I argue that market volatility moderates the associations between each of high reputation, visibility, and high reputation for capital return and the dependent variable, market relative weighting. The measure of market volatility uses Cboe Volatility Index (VIX) daily closing prices. The average daily closing price for VIX each quarter from 2011 to 2019 is calculated.

Price Momentum. I argue that price momentum moderates the associations between each of high reputation, visibility, and high reputation for capital return and the dependent variable, market relative weighting. Price Momentum is the performance decile of the holding, with the stocks that rank among the best 10% of stocks having a code of 1 continuing to increase by decile with the bottom 10% of performers being coded as 10 (Chan, Jegadeesh, & Lakonishok, 1996).

Analyst Recommendations. I argue that analyst recommendations moderate the associations between each of high reputation, visibility, and high reputation for capital return and the dependent variable, market relative weighting.

Sell-side analysts generally disseminate ordinal-valued recommendations that vary by analysts' firms. For example, analysts at JP Morgan use underweight and overweight as their most negative and most positive rankings. In contrast, analysts at Deutsche Bank use sell and buy as their most negative and most positive rankings (Bloomberg Info Nov 2020). Despite these differences, these recommendations tend to have no more than five levels across firms. Bloomberg tracks analyst recommendations, normalizes the scores, and calculates an average recommendation score. This

scoring from Bloomberg determines analyst rec. Analyst rec varies from 5 to 1 based on a strong buy (5) to sell (1) scale that normalizes various firm recommendation methods and averages these recommendations into a single number.

Control Variables

Earnings Surprise. To control for short-term news influences in models I control for earnings announcement data relative to expectations. Earnings results have one of three classifications based on the actual stock price change relative to historical one-day price reaction.

Earnings surprise represents the stock price reaction to an earnings announcement relative to the absolute value of the average stock price changes over the past eight quarters. A positive price change is greater than the average historical stock price reaction is coded 1 and a negative price change that exceeds the inverse of the average price change is coded -1. Finally, a stock price reaction that falls between the negative to positive range of the average historical price reaction is coded 0.

$$earnings\ surprise = \begin{cases} 1, & \text{if firm reports a positive earnings announcement} \\ 0, & \text{if firm reports earnings in line with expectations} \\ -1, & \text{if firm reports a negative earnings announcement} \end{cases}$$

Firm Stock Performance. There is a phenomenon in the equity markets referred to as window dressing where portfolios buy the best performing stocks at the end of a period to highlight his or her better performing holdings (Huang 2010). Visibility and reputation should impact the choices portfolio managers make if they are purchasing stocks under the window dressing phenomenon.

Individual stock performance is compared to the performance of the S&P 500 and relative performance to a firm's specific index sector in each quarter. Performance is segmented into four classifications. Each firm that is in a sector that underperformed the S&P 500 and that underperformed the sector index is coded 1. A firm in a sector that underperformed the S&P 500

and outperformed the sector index is coded 2. A firm in a sector that outperformed the S&P 500, but underperformed the sector index is coded 3. Finally, a firm in a sector that outperformed the S&P 500 and outperformed the sector index is coded 4.

$$StockPerformance = \begin{cases} 1, & \text{sector underperforms SP 500, firm underperforms sector} \\ 2, & \text{sector underperforms SP 500, firm outperforms sector} \\ 3, & \text{sector outperforms SP 500, firm underperforms sector} \\ 4, & \text{sector outperforms SP 500, firm outperforms sector} \end{cases}$$

Share Count Change. A reduction in share count from quarter to quarter is an indication that companies have been repurchasing outstanding shares. Share repurchase is a feature of corporate governance that investors find attractive as the reduction of the number of shares outstanding increases the value of each remaining share (all else being the same). Share count change represents the percent change in shares outstanding on the final business day of each quarter from data obtained from Bloomberg.

$$Share\ Count\ Change = \frac{Shares\ Current\ Quarter - Shares\ Prev\ Quarter}{Shares\ Prev\ Quarter}$$

The variable shares current quarter is the number of shares outstanding as reported to Bloomberg on the last business day of each quarter. The shares prev quarter variable is the number of shares outstanding reported to Bloomberg on the last day of the previous quarter.

Analyses

My market relative weighting dependent variable is a continuous measure, and the data has a panel structure, so I use Stata's xtreg command for testing all hypotheses. The panel variable is a firm-level identifier, and the time period is year. I had previously considered using tobit models, but the dependent variable shows a minimal amount of censoring at the lower bound (i.e. -1, representing no holdings by any fund manager at year end).

CHAPTER V

RESULTS

Main Effects

In Hypothesis 1, I predict the relative weighting of a firm's stock in equity portfolios will be positively associated with the firm possessing a high reputation. Table 3 reports the xtreg model results for models with market relative weighting as the dependent variable. Models 2 and 5 (with all main effects) show no statistically significant difference from zero. Thus, Hypothesis 1 is not supported.

In Hypothesis 2, I predict the relative weighting of a firm's stock in equity portfolios will be positively associated with firm visibility. Table 3 reports the xtreg model results for models with market relative weighting as the dependent variable. Models 3 and 5 (with all main effects) show no statistically significant difference from zero. Thus, Hypothesis 2 is not supported.

In Hypothesis 3, I predict the relative weighting of a firm's stock in equity portfolios will be positively associated with high reputation for capital return. Table 3 reports the xtreg model with relative weighting of a firm's stock in equity portfolios as the dependent variable. Models 4 and 5 show that high reputation for capital return is positively associated with the relative weighting of a firm's shares relative to the S&P 500. The shares of a firm that has a high reputation for capital return is over weighted by an average of 21.6% while all firms in the S&P 500 are underweighted by an average of 3.92% (see Table 1) in active equity portfolios. Thus, Hypothesis 3 is supported.

Moderators

In Hypothesis 4, I predict higher equity market volatility will positively moderate the relationship between institutional weightings of individual stocks for (a) high reputation, (b) firm visibility, and (c) high reputation for capital return. Table 4 reports the xtreg model with moderating factors for each independent variable. Examining the predictive margins (i.e. using Stata 17's margins command) of high reputation for capital return and volatility along with the interaction plot in Figure 3, the relative weighting of firms with high reputation for capital return increases as volatility increases. Thus, Hypothesis 4 is partially supported as to 4(c).

In Hypothesis 5, I predict stock price momentum will positively moderate the relationship between institutional weightings of individual stocks for (a) high reputation, (b) firm visibility, and (c) high reputation for capital return. Thus, Hypothesis 5 is not supported.

In Hypothesis 6, I predict analyst recommendations will positively moderate the relationship between institutional weightings of individual stocks for (a) high reputation, (b) firm visibility, and (c) high reputation for capital return. Table 4 reports the xtreg model with analyst recommendations as a moderating factor for each independent variable. Examining the predictive margins of firm visibility and analyst recommendations along with the interaction plot in Figure 4, there are significant differences when visibility is high and analyst recommendations are low such that stocks of such firms are significantly underweighted. Thus, Hypothesis 6 is partially supported as to H6(b).

Table 3: Model 1 – Model 5 Results

	Model 1	Model 3	Model 2	Model 4	Model 5
<i>Moderating Variables</i>					
VIX Average	0.004 (0.009)	0.004 (0.009)	0.004 (0.009)	0.004 (0.009)	0.004 (0.009)
Price Momentum	0.007 * (0.003)	0.007 * (0.003)	0.007 * (0.003)	0.007 * (0.003)	0.007 * (0.003)
Analyst Rec	0.005 (0.029)	0.006 (0.029)	0.005 (0.029)	0.009 (0.030)	0.009 (0.030)
<i>Control Variables</i>					
Firm Stock Performance	-0.001 (0.008)	-0.002 (0.008)	-0.001 (0.008)	-0.001 (0.008)	-0.002 (0.008)
Share Count Change	-0.093 (0.169)	-0.090 (0.168)	-0.092 (0.168)	-0.088 (0.168)	-0.085 (0.167)
Earnings Surprise	-0.002 (0.012)	-0.002 (0.012)	-0.002 (0.012)	-0.002 (0.012)	-0.001 (0.012)
<i>Year</i>					
2013	-0.040 (0.032)	-0.040 (0.032)	-0.041 (0.032)	-0.042 (0.032)	-0.041 (0.032)
2014	-0.024 (0.061)	-0.024 (0.061)	-0.024 (0.061)	-0.026 (0.061)	-0.026 (0.061)
2015	-0.087 (0.052)	-0.087 (0.053)	-0.087 (0.053)	-0.089 (0.053)	-0.088 (0.053)
2016	-0.068 (0.047)	-0.067 (0.047)	-0.068 (0.047)	-0.069 (0.047)	-0.068 (0.047)
2017	-0.096 * (0.042)	-0.097 * (0.043)	-0.096 * (0.042)	-0.097 * (0.042)	-0.098 * (0.043)
2018	-0.074 (0.078)	-0.075 (0.078)	-0.074 (0.078)	-0.076 (0.078)	-0.076 (0.078)
2019	-0.123 ** (0.044)	-0.123 ** (0.044)	-0.123 * (0.044)	-0.125 ** (0.044)	-0.125 ** (0.044)
<i>Independent Variables</i>					
Visibility		-0.000 (0.000)			-0.000 (0.000)
High Reputation			0.022 (0.058)		0.018 (0.059)
High Reputation For Capital Return				0.217 ** (0.065)	0.216 ** (0.065)
Intercept	-0.123 (0.208)	-0.120 (0.208)	-0.123 (0.208)	-0.154 (0.210)	-0.150 (0.210)
Number of observations	3924	3911	3924	3924	3911

Table 4: Model 5 – Model 9 Results

	Model 5	Model 6	Model 7	Model 8	Model 9
<i>Independent Variables</i>					
High Reputation	0.018 (0.059)	0.128 (0.119)	-0.041 (0.072)	-0.073 (0.333)	-0.047 (0.300)
Visibility	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.001 * (0.000)	-0.001 * (0.000)
High Reputation For Capital Return	0.216 ** (0.065)	-0.129 (0.110)	0.242 ** (0.071)	-0.425 (0.382)	-0.689 (0.367)
<i>Moderating Variables</i>					
VIX Avg	0.004 (0.009)	0.004 (0.009)	0.004 (0.009)	0.004 (0.009)	0.004 (0.009)
Price Momentum	0.007 * (0.003)	0.007 * (0.003)	0.007 * (0.004)	0.007 * (0.003)	0.007 * (0.004)
Analyst Rec	0.009 (0.030)	0.009 (0.030)	0.009 (0.030)	-0.018 (0.032)	-0.017 (0.032)
<i>Control Variables</i>					
Firm Stock Performance					
	-0.002 (0.008)	-0.001 (0.008)	-0.001 (0.008)	-0.001 (0.008)	-0.001 (0.008)
Share Count Change					
	-0.085 (0.167)	-0.085 (0.167)	-0.085 (0.167)	-0.080 (0.163)	-0.080 (0.162)
Earnings Surprise					
	-0.001 (0.012)	-0.002 (0.012)	-0.001 (0.012)	-0.001 (0.012)	-0.001 (0.012)
Year					
2013	-0.041 (0.032)	-0.041 (0.032)	-0.041 (0.032)	-0.038 (0.033)	-0.037 (0.033)
2014	-0.026 (0.061)	-0.019 (0.061)	-0.026 (0.061)	-0.022 (0.061)	-0.018 (0.062)
2015	-0.088 (0.053)	-0.083 (0.053)	-0.088 (0.053)	-0.085 (0.053)	-0.081 (0.053)
2016	-0.068 (0.047)	-0.066 (0.047)	-0.068 (0.047)	-0.065 (0.047)	-0.062 (0.048)
2017	-0.098 * (0.043)	-0.100 * (0.042)	-0.098 * (0.043)	-0.097 * (0.043)	-0.099 * (0.043)
2018	-0.076 (0.078)	-0.068 (0.079)	-0.076 (0.079)	-0.074 (0.079)	-0.067 (0.079)
2019	-0.125 ** (0.044)	-0.123 ** (0.044)	-0.124 ** (0.044)	-0.124 ** (0.045)	-0.123 ** (0.045)
High Reputation x VIX Avg					
		-0.007 (0.037)			-0.007 (0.008)
Visibility x VIX Avg					
		0.000 (0.000)			-0.000 (0.000)
High Reputation For Capital Return x VIX Avg					
		0.021 ** (0.006)			0.019 ** (0.006)
High Reputation x Price Momentum					
			0.010 (0.008)		-0.005 (0.009)

Visibility x Price Momentum			-0.000 (0.000)		-0.000 (0.000)
High Reputation For Capital Return x Price Momentum			-0.005 (0.009)		-0.005 (0.009)
High Reputation x Analyst Rec				0.020 (0.082)	0.031 (0.084)
Visibility x Analyst Rec				0.000 * (0.000)	0.000 * (0.000)
High Reputation For Capital Return x Analyst Rec				0.174 (0.102)	0.167 (0.103)
Intercept	-0.150 (0.210)	-0.147 (0.210)	-0.152 (0.210)	-0.051 (0.213)	-0.053 (0.212)
Number of observations	3911	3911	3911	3911	3911

Figure 3 – Predictive Margins High Reputation Firm Holdings And High Volatility

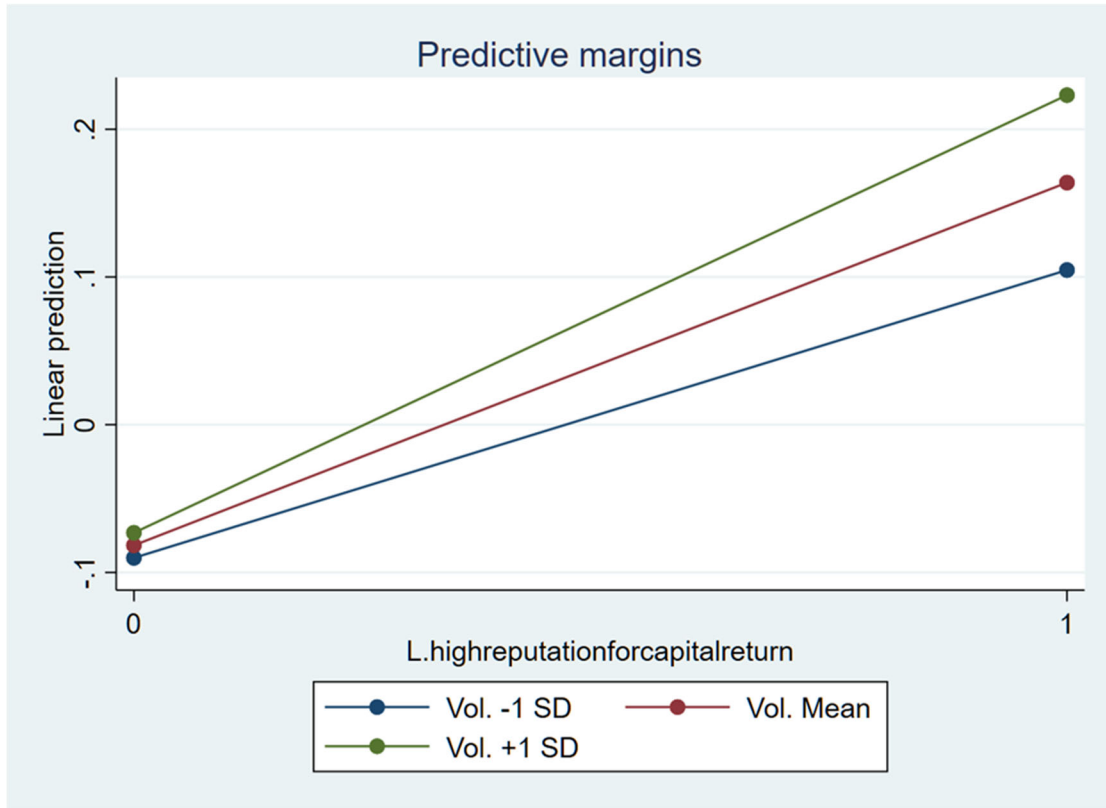
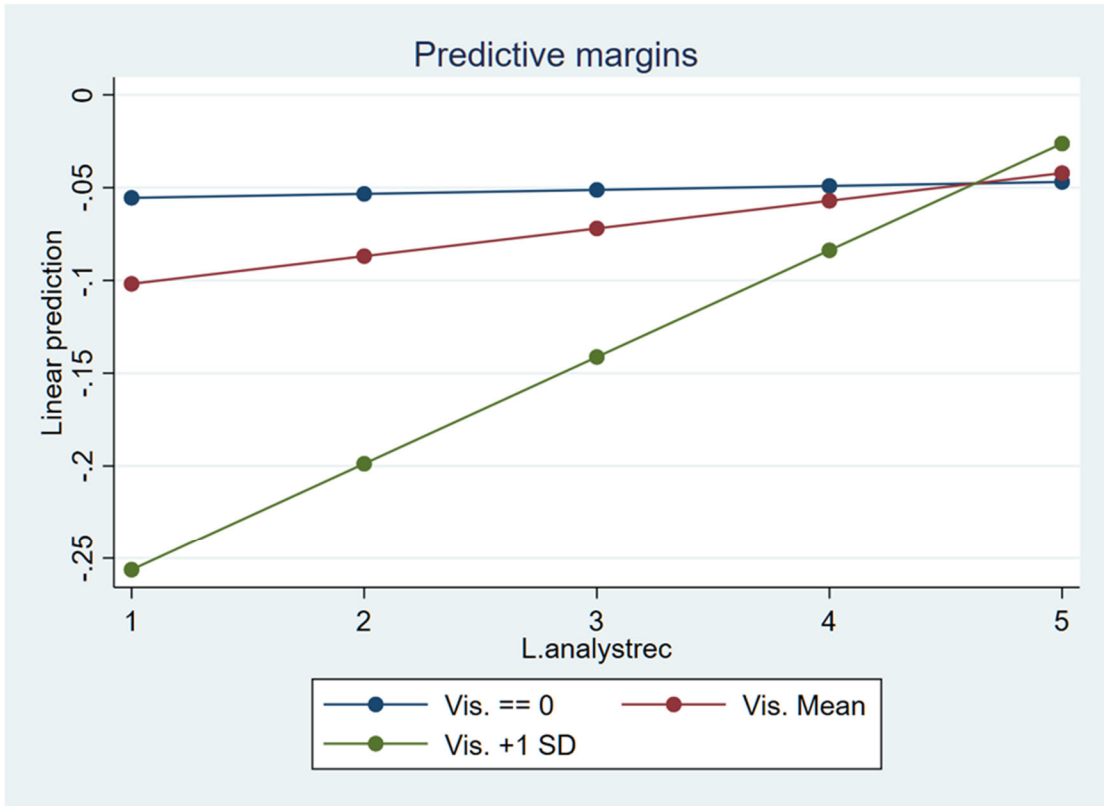


Figure 4 – High Visibility And Low Recommendations



CHAPTER VI

CONCLUSION

Discussion

I ask one overall question in this dissertation: whether social approval assets influence professional portfolio manager decision making. As I argued above, there are reasons to expect that such deviations could be indicative of a reliance on heuristics. I find relatively strong and robust evidence for an association between high reputation for capital return and relative overweighting. I do not find evidence that high reputation is associated with relative overweighting, and I find only conditional evidence that visibility is associated with relative underweighting.

Additionally, I explored the moderating impact of market volatility, analyst recommendations, and price momentum on the social approval constructs of interest. Interestingly, the association between high reputation for capital return and relative overweighting appears to be at least partially driven by market volatility. In addition, there is a conditional association between firm visibility and relative underweighting such that underweighting is quite high when a firm with low analyst ratings is highly visible.

Implications For Research

In this dissertation, I introduce a new, specific firm reputation construct, high reputation for capital return. Firms that have raised their dividend consistently for a minimum of 25 years are firms that have a high reputation for capital return. This construct is novel in that practitioners use

the same definition (by a different term), opening opportunities to examine, for example, when managers make decisions in the lead up to crossing the definitional threshold. Similarly, other stakeholders may form expectations about future behavior from this asset, opening up the potential for research into behavioral inertia or expectancy violations.

I also examine a novel context in the strategic management literature, weighting decisions by active portfolio managers. This context is a natural complement to our traditional focus on managerial decision-making, because portfolio managers have a clear, external performance metrics (e.g., performance of individual securities), while making similarly-bounded decisions about future business prospects. The contextual differences and similarities may provide opportunities to further test theories of decision-making across executive and investor contexts. Finally, my finding that firms with high visibility and low analyst recommendations are substantially relatively underweighted, suggests that fund managers may be engaging in impression management in their choices of investments.

Implications For Practice

My research has important implications for executives. For example, firm managers may anticipate that managerial efforts to enhance visibility could backfire if analysts have poor recommendations. Conversely, possessing high reputation for capital return may soften the effects of volatility on the firm's share price by encouraging fund managers to buy, making maintaining or attaining this asset desirable for some firms.

It also has important implications for fund managers. Fund managers may recognize that high visibility could make portfolio firms susceptible to analyst downgrades, creating threats to long positions or opportunities for short positions. Similarly, high reputation for capital return is sought after when volatility is high, and correctly anticipating those moves may be a path to relative outperformance.

Firms can choose to implement capital in pursuit of enhancing their reputation, visibility, or

reputation for capital return. Public firms exist to increase shareholder value, while doing no harm. This study shows that high reputation for capital return is attractive to portfolio managers and executive efforts should focus on this aspect of high reputation.

Limitations And Future Research

The primary limitation of my study involves the granularity of practically available data, which also presents some opportunities for future research building on my results. First, portfolio holdings are from publicly available mutual fund filings, which do not segment funds by the types of investors, such as individual investors or institutions. A future study could differentiate between funds by investor type.

More broadly, as management research has expanded beyond firms to other actors, fund managers and their decisions have received relatively little attention. However, we know that market actors are important stakeholders for managerial decisions, and a deeper examination into this interplay could be a viable future research stream.

Conclusion

I offered theory on why active fund managers may exhibit a preference for the stock of firms who possess certain social approval assets. I find support for this central idea, particularly with high reputation for capital return, a novel and specific form of reputation. My results and context suggest multiple future avenues for research in social approval, impression management, and decision-making areas.

REFERENCES

- Abarbanell, Jeffery S., and Victor L. Bernard. 1992. Tests of Analysts' Overreaction/Underreaction to Earnings Information as an Explanation for Anomalous Stock Price Behavior. *The Journal of Finance*. 47(3), pp. 1181-207.
- Abraham, C, and Sheeran, P. 2003. Acting on Intentions: The Role of Anticipated Regret. *The British Journal of Social Psychology*. 42, pp. 495-511.
- Abraham, S. E.; Friedman, B. A.; Khan, R. H. and Skolnik, R. J. 2008. Is the Publication of the Reputation Quotient (RQ) Sufficient to Move Stock Prices? *Corporate Reputation Review*, 11(4), pp. 308-319.
- Acharya, Viral V. and Pedersen, Lasse Heje. 2005. Asset Pricing with Liquidity Risk. *Journal of Financial Economics*. 77(2), pp. 375-410.
- Adamiec, L. and Rhoads, R. 2018. Estimating 90-Day Market Volatility with VIX and VXV. *Journal of Global Business Management*. 14(2), pp. 20-33.
- Aggarwal, Raj; Mishra, Dev; and Wilson, Craig 2018. Analyst recommendations and the implied cost of equity. *Review of Quantitative Finance and Accounting*. 50(3), pp. 717-743.
- Aglietta, Michel; Brière, Marie; Rigot, Sandra and Signori, Ombretta. 2012. Rehabilitating the Role of Active Management for Pension Funds. *Journal of Banking and Finance*. 36(9), pp. 2565-2574.
- Ahearne, Alan G.; Grier, William L.; and Warnock, Francis E. 2004. Information Costs and Home Bias: An Analysis of U.S. Holdings of Foreign Equities. *Journal of International Economics*. 62(2), pp. 313-336.
- Amir, Eli and Ganzach, Yoav. 1998. Overreaction and Underreaction in Analysts' Forecasts." *Journal of Economic Behavior and Organization*. 37(3), pp. 333-47.
- Anderson, Jeff and Smith, Gary. 2006. A Great Company Can Be a Great Investment. *Financial Analysts Journal*. 62(4), pp. 86-91.
- Antoniou, C.; Harris, R. and Zhang R. 2015. Ambiguity aversion and stock market participation: An empirical analysis. *Journal of Banking & Finance*. 58, pp. 57-70.
- Asness, C.S., Moskowitz, T.J. and Pedersen, L.H., 2013. Value and Momentum Everywhere. *Journal of Finance*, 68(3): 929–985.
- Auinger, F. 2015. *The Causal Relationship between the S&P 500 and the VIX Index Critical Analysis of Financial Market Volatility and Its Predictability*, BestMasters.

- Augier, M., & March, J. 2008. A retrospective look at A Behavioral Theory of the Firm. *Journal of Economic Behavior and Organization*. 66(1), pp. 1-6.
- Aw, Edward, Christopher Dornick, and John Jiang. 2014. Combining Quantitative and Fundamental Analysis: A Quant-amental Approach. *Journal of Investing*, 23(2), pp. 28-43.
- Badertscher, Brad; Shroff, Nemit and White Hal D. 2013. Externalities of Public Firm Presence: Evidence from Private Firms' Investment Decisions. *Journal of Financial Economics*, 109(3), pp. 682-706.
- Badrinath, S., and Wahal, S. 2002. Momentum Trading by Institutions. *Journal of Finance*, 57(6), pp. 2449-2478.
- Baker, H. Kent, Filbeck, Greg, and Ricciardi, Victor. 2017. *Financial Behavior: Player, Services, Products, and Markets*. Oxford Press.
- Baker, H., Powell, G. & Weaver, D., 1999. Does NYSE listing affect firm visibility? *Financial Management*, 28(2), pp. 46-54.
- Baker, M. and Wurgler, J. 2004. A Catering Theory of Dividends. *The Journal of Finance*, 59(3), pp. 1125-1165.
- Balan, D. 2015. Bridging the Gap in Defining Corporate Reputation: An Extensive Literature Review. *Revista De Stiinte Politice*, (46), pp. 73-83.
- Barber, B.M., Lehavy, R. & Trueman, B., 2010. Ratings Changes, Ratings Levels, and the Predictive Value of Analysts' Recommendations. *Financial Management*, 39(2), pp. 533-553.
- Barber, Brad M., and Odean, Terrance. 1990. The Courage of Misguided Convictions. *Financial Analysts Journal*, 55(6), pp. 41-55.
- Barber, Brad M. and Odean, Terrance 2000. Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors. *The Journal of Finance*, 55(2), pp. 773-806.
- Barber, Brad M.; Odean, Terrance; and Lu, Zheng 2005. Out of Sight, Out of Mind: The Effects of Expenses on Mutual Fund Flows. *The Journal of Business*, 78(6), pp. 2095-2119.
- Barber, B., & Odean, T. 2008. All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors. *The Review of Financial Studies*, 21(2), pp. 785-818.
- Barberis, N., Schleifer, A., & Vishny, R. 1998. A model of investor sentiment. *Journal of Financial Economics*, 49(3), pp. 307-343.
- Barnett, Michael L., Jermier John M., & Lafferty Barbara A. 2006. Corporate Reputation: The Definitional Landscape. *Corporate Reputation Review*, 9(1), pp. 26-38.
- Belcher, L. 2010. Prior Perceptions, Personality Characteristics and Portfolio Preferences among Fund Managers: An Experimental Analysis. *The Journal of Behavioral Finance*, 11(4), 239-248.

- Bender, J., & Nielsen, F. 2013. Earnings Quality Revisited. *Journal of Portfolio Management*, 39(4), pp. 69-79,10.
- Bell, David 1982. Regret in Decision Making Under Uncertainty. *Operations Research*, 30(5), pp. 961-981.
- Bell, David 1983. Risk Premiums for Decision Regret. *Management Science*, 29(10), pp. 1156-1166.
- Bell David 1985. Reply – Putting a Premium on Regret. *Management Science*, 31(1), pp. 117-122.
- Bellah, Robert N. 1986. The Meaning of Reputation in American Society. *California Law Review*, 74, pp. 743-751.
- Bergeron, Claude 2013. Dividend growth, stock valuation, and long-run risk. *Journal of Economics and Finance*, 37(4), pp. 547-559.
- Berk, Jonathan and van Binsbergen, Jules H. 2015. Measuring Skill in the Mutual Fund Industry. *Journal of Financial Economics*, 118, pp. 1-20.
- Bernartzi, Shlomo; Michaely, Roni; and Thaler, Richard 1997. Do Changes in Dividends Signal the Future or the Past? *The Journal of Finance*, 52(3), pp. 1007-1034.
- Bernartzi, Shlomo and Richard H. Thaler 2007. Heuristics and Biases in Retirement Savings Behavior. *Journal of Economic Perspectives*, 21(3) 81-104.
- Bertrand, Philippe and Lapointe, Vincent 2015. How Performance of Risk-Based Strategies is Modified by Socially Responsible Investment Universe? *International Review of Financial Analysis*, 38, pp. 175-190.
- Bessler, Wolfgang and Nohel, Tom. 1996. The Stock-market Reaction to Dividend Cuts and Omissions by Commercial Banks. *Journal of Banking and Finance*, 20.9, pp. 1485-508.
- Bhootha, A. and Hur, J. 2012. On the relationship between concentration of prospect theory/mental accounting investors, cointegration, and momentum. *Journal of Banking and Finance*, 36(5), pp. 1266-1275.
- Bhootha, A. & Hur, J., 2013. The timing of 52-week high price and momentum. *Journal of Banking and Finance*, 37(10), pp.3773–3782.
- Bilinski, and Lyssimachou. 2018. Dividend Guidance to Manage Analyst Dividend Expectations. *International Review of Financial Analysis*, 60, pp. 53-68.
- Billett, M.; Jiang, Z. and Rego L. 2014. Glamour brands and glamour stocks. *Journal of Economic Behavior & Organization*, 107, pp. 744-759.
- Binz, Claudia; Hair Jr., Joseph F.; Pieper, Torsten M.; and Baldauf, Artur. 2013. Exploring the effect of distinct family firm reputation on consumers' preferences. *Journal of Family Business Strategy*, 4, pp. 3-11.
- Bird, Ron; Pellizzari, Paolo and Yeung, Danny 2015. Performance Implications of Active Management of Institutional Mutual Funds. *Accounting & Finance*, 55(1) 1-27.

- Bitektine, Alex 2011. Toward a Theory of Social Judgments of Organizations: The Case of Legitimacy, Reputation, and Status. *Academy of Management*, 36(1) 151-179.
- Blitz, David and Vidojevic, Milan 2017. The Profitability of Low-Volatility. *Journal of Empirical Finance*, 43 33-42.
- Bodie, Zvi; Kane, Alex, and Marcus, Alan J. 2018. *Investments 10th Edition*, McGraw Hill.
- Bordalo, Pedro, Nicola Gennaioli, and Andrei Shleifer. 2018. Diagnostic Expectations and Credit Cycles." *Journal of Finance*, 73.1: 199-227.
- Boviard, Charles 2017. "Why Bitcoin Prices have Risen More than 400% This Year", *Forbes*, September 1, 2017.
- Bowman, Nicholas A., & Bastedo, Michael N. 2011. Anchoring Effects in World University Rankings: Exploring Biases in Reputation Scores. *Higher Education: The International Journal of Higher Education and Educational Planning*, 61(4), 431-444.
- Boyd, B., Bergh, D., & Ketchen, D. 2010. Reconsidering the Reputation—Performance Relationship: A Resource-Based View. *Journal of Management*, 36(3), 588-609.
- Boyle, Phelim; Garlappi, Lorenzo; Uppal, Rama and Wang, Tan 2012. Keynes Meets Markowitz: The Trade-Off Between Familiarity and Diversification. *Management Science*, 58(2) 253-272.
- Bradbury, Danny 2019. "The Illicit World of Bitcoin and the Dark Web." The Balance Online.
- Brav, A.; Graham J.; Harvey, C.; and Michaely R. 2015. Payout policy in the 21st Century. *Journal of Financial Economics*, 77 483-527.
- Brealey, Richard A.; Myers, Stewart C; and Marcus, Alan J. 2010. *Fundamentals of Corporate Finance. 10th Edition*, McGraw-Hill Irwin&.
- Breton, Gaetan, and Richard Taffler. 2001. Accounting Information and Analyst Stock Recommendation Decisions: A Content Analysis Approach. *Accounting and Business Research*, 31.2: 91-101.
- Bromiley, P. 2010. Looking at prospect theory. *Strategic Management Journal*, 31(12), 1357-1370.
- Bromley, D.B. 2000. Psychological Aspects of Corporate Identity, Image, and Reputation. *Corporate Reputation Review*, 3 240-252.
- Brooks, M. E., Highhouse, S., Russell, S. S.,& Mohr, D. C. 2003. Familiarity, ambivalence, and firm reputation: Is corporate fame a double-edged sword? *Journal of Applied Psychology*, 88(5), 904–914.
- Brown, David C. and Davies, Shaun William 2017. Moral Hazard in Active Asset Management. *Journal of Financial Economics*, 125 311-325.
- Brown, L.D. et al., 2016. The activities of buy-side analysts and the determinants of their stock recommendations. *Journal of Accounting and Economics*, 62(1), pp.139–156.
- Brown, Nerissa; Wei, Kelsey; and Wermers, Russ 2014. Analyst Recommendations, Mutual Fund Herding, and Overreaction in Stock Prices. *Management Science*, 60 1-20.

- Bulipopova, E.; Zhdanov, V.; and Simonov, A. 2014. Do investors hold that they know? Impact of familiarity bias on investor's reluctance to realized losses: Experimental Approach. *Finance Research Letters*, 11(4) 463-469.
- Busse, Jeffrey A.; Clifton Green, T.; and Jegadeesh, Narasimhan 2012. Buy-side trades and sell-side recommendations: Interactions and information content. *Journal of Finance*, 15(2) 207-232.
- Byrne, Alistair and Brooks, Mike 2008. Behavioral Finance: Theories and Evidence. *The Research Foundation of CFA Institute Literature Review*, 3(1)
- Cao, H., Bing Han, David Hirshleifer, and Harold Zhang. 2011. Fear of the Unknown: Familiarity and Economic Decisions. *Review of Finance*, 15.1: 173-206.
- Cao, Ying; Myers, Linda A.; and Omer, Thomas C. 2012. Company reputation and the cost of equity capital. *Review of Accounting Studies*, 20(1) 42-81.
- Carpenter, Michael. 2013. Help Investors Make Better Risk/Reward Decisions. *Journal of Financial Planning*, 26.5: 22-23.
- Carter, Richard, Dark, Frederick, and Sapp, Travis 2010. Underwriter Reputation and IPO Issuer Alignment 1981-2005. *Quarterly Review of Economics and Finance*, 50(4) 443-455.
- Carter, Richard, Dark, Frederick, and Singh, Ajai K. 1998. Underwriter Reputation, Initial Returns, and the Long-Run Performance of IPO Stocks. *Journal of Finance*, 53(1) 285-311.
- Carter, Richard and Manaster, Steven 1990. Initial Public Offerings and Underwriter Reputation. *The Journal of Finance*, 45(4) 1045-1067.
- Cboe Global Markets 2017a. CBOE and Gemini Enter Into Exclusive License Agreement to Use Bitcoin Market Data. Cboe Global Markets Press Release August 2, 2017.
- CFA Institute 2016. *The CFA Charter*.
- Chan, Louis K.C., Jegadeesh, N., and Lakonishok, J. 1996. Momentum Strategies. *The Journal of Finance*, 51(5), 1681-1713.
- Chan, Louis, K.C.; Jegadeesh, Narasimhan; and Lakonishok, Josef. 1999. The Profitability of Momentum Strategies. *Financial Analysts Journal*, 55(6) 80-90.
- Chan, Wesley S., Frankel, Richard, and Kothari, S.P. 2004. Testing behavioral finance theories using trends and consistency in financial performance. *Journal of Accounting and Economics*, 38 (Dec) 3-50.
- Chang, Chih-Hsiang, Huang, Hsu-Huei, Chang, Ying-Chih, and Lin, Tsai-Yin. 2015. Stock Characteristics, Trading Behavior, and Psychological Pitfalls. *Managerial Finance*, 41.12: 1298-317.
- Chang, C., Jiang, J., & Kim, K. 2009. A test of the representativeness bias effect on stock prices: A study of Super Bowl commercial likeability. *Economics Letters*, 103(1), 49-51.
- Chen, Joseph, Hong, Harrison and Stein, Jeremy C. 2002. Breadth of Ownership and Stock Returns. *Journal of Financial Economics*, 66(2) 171-205.

- Chen, Chieh-Shuo; Cheng, Jia Chi; Lin, Fang-Chi, and Peng, Chihwei 2017. The role of house money effect and availability heuristic in investor behavior. *Management Decision*, 55(8) 1598-1612.
- Cheng, Y., Liu, M., & Qian, J. 2006. Buy-Side Analysts, Sell-Side Analysts, and Investment Decisions of Money Managers. *Journal of Financial and Quantitative Analysis*, 41(1), 51-83.
- Chemmanur, Thomas J. and Fulghieri, Paolo. 1994. Investment Bank Reputation, Information Production, and Financial Intermediation, *The Journal of Finance*, 49(1) 57-79.
- Chew, Soo, Hong Ebbstein, and Richard Zhong. 2012. Ambiguity Aversion and Familiarity Bias: Evidence from Behavioral and Gene Association Studies. *Journal of Risk and Uncertainty* 44.1: 1-18.
- Chi, Sabrina, and Shanthikumar, Devin. 2017. Local Bias in Google Search and the Market Response around Earnings Announcements. *The Accounting Review*, 92(4): 115-143.
- Chorus, Caspar G. 2014. Risk Aversion, Regret Aversion and Travel Choice Inertia: An Experimental Study. *Transportation Planning and Technology* 37.4: 1-12.
- Chow, C. and Sarin, R. 2001. Comparative Ignorance and the Ellsberg Paradox. *The Journal of Risk and Uncertainty*, 22(2) 129-139.
- Clemens, M. 2013. Dividend Investing Performance and Explanations: A Practitioner Perspective. *International Journal of Managerial Finance*, 9(3) 185-197.
- Coates, J. 2012. *The hour between dog and wolf: risk-taking, gut feelings and the biology of boom and bust*, 1st American. New York: Penguin Press.
- Cohn, Richard A.; Lewellen, Wilbur G.; Lease, Ronald C.; and Schlarbaum, Garg G. 1975. Individual Risk Aversion and Investment Portfolio Composition. *The Journal of Finance*, 30(2) 605-620.
- Coleman, Les. 2015. Facing up to fund managers: An exploratory field study of how institutional investors make decisions, *Qualitative Research in Financial Markets*, 7(2) 111-135.
- Colyvas, J. A. 2012. Performance metrics as formal structures and through the lens of social mechanisms: When do they work and how do they influence? *American Journal of Education*, 118(2), 167-197.
- Cong Chen, C. et al., 2010. Investment manager skill in small-cap equities. *Australian Journal of Management*, 35(1): 23-49.
- Cooper, M., Khorana, A., Osobov, I., Patel, A., & Rau, P. 2005. Managerial actions in response to a market downturn: valuation effects of name changes in the dot.com decline. *Journal of Corporate Finance (Amsterdam, Netherlands)*, 11(1), 319-335.
- Cooper, Michael J., Dimitrov, Orlin, & Rau, P. Raghavendra. 2001. "A Rose.com by Any Other Name." *Journal of Finance*, 56.6: 2371-388.
- Corbet, Shaen; Dowling, Michael; and Cummins, Mark 2015. Analyst recommendations and volatility in a rising, falling, and crisis equity market. *Finance Research Letters*, 15 187-194.

- Corzo, T., Prat, M., & Vaquero, E. 2014. Behavioral Finance in Joseph de la Vega's Confusion de Confusiones. *Journal of Behavioral Finance*, 15(4), 341-350.
- Costa, D. et al., 2017. Bibliometric analysis on the association between behavioral finance and decision making with cognitive biases such as overconfidence, anchoring effect and confirmation bias. *Scientometrics*, 111(3): 1775–1799.
- Coval, Joshua D. and Moskowitz, Tobias J. 1999. Home Bias at Home: Local Equity Preference in Domestic Portfolios, *The Journal of Finance*, 54(6) 2045-2073.
- Cristofaro, Matteo. 2017. Herbert Simon's bounded rationality: Its historical evolution in management and cross-fertilizing contribution. *Journal of Management History*, 23(2) 170-190.
- Cyert, R.M. and March J.G. 1992. **A Behavioral Theory of the Firm, 2nd Ed.** Blackwell, Oxford UK.
- Davies, G. & Servigny, A.de. 2012. *Behavioral investment management : an efficient alternative to modern portfolio theory*, New York: McGraw-Hill.
- DeAngelo, Harry and DeAngelo Linda 1990. Dividend Policy and Financial Distress: An Empirical Investigation of Troubled NYSE Firms, *The Journal of Finance*, 45(5) 1415-1431.
- De Bondt, Werner F. M., and Richard Thaler 1985. "Does the Stock Market Overreact?" *Journal of Finance*, 40.3: 793-805.
- De Vries, Annalien, Erasmus Pierre D. & Gerber, Charlene. 2017. The familiar versus the unfamiliar: Familiarity bias amongst individual investors. *Acta Commercii*, 17(1) 1–10.
- Deephouse, David L. 2000. Media Reputation as a Strategic Resource: An Integration of Mass Communication and Resource-Based Theories. *Journal of Management*, 26(6) 1091-1112.
- Detrixhe, John 2018. A dozen companies that reaped rewards by putting “bitcoin” or “blockchain” in their name. *Quartz*, January 12, 2018.
- Dhaliwal, D., Li, O., Tsang, A., & Yang, Y. 2011. Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting. *The Accounting Review*, 86(1), 59-100.
- Dhanani, Alpa 2005. Corporate Dividend Policy: The Views of British Financial Meveanagers. *Journal of Business Finance & Accounting*, 32(7-8) 1625-1672.
- Dhankar, Raj S. 2019. *Capital Markets and Investment Decision Making*, Springer.
- Diamond, Douglas 1989. Reputation Acquisition in Debt Markets. *The Journal of Political Economy*, 97(4) 828-862.
- Diamond, Douglas 1991. Monitoring and Reputation: The Choice Between Bank Loans and Directly Placed Debt. *The Journal of Political Economy*, 99(4) 689-721.
- Dierickx, Ingemar; Cool, Karel, and Barney, Jay B. 1989. Asset Stock Accumulation and Sustainability of Competitive Advantage. *Management Science*, 35(12) 1504-1511.
- Ding, Zhuanxin and Martin, R. Douglas 2017. The Fundamental Law of Active Management: Redux. *Journal of Empirical Finance*, 43 91-114.

- Doellman, Thomas W. and Sardarli, Sabuhi H. 2016. Investment Fees, Net Returns, and Conflict of Interest in 401(K) Plans. *Journal of Financial Research*, 39(1) 5-33.
- Doshi, H., Elkamhi, R., & Simutin, M. 2015. Managerial Activeness and Mutual Fund Performance. *Review of Asset Pricing Studies*, 5(2), 156–184.
- Dunbar, Nicholas. **Inventing Money : The Story of Long-term Capital Management and the Legends behind It.** Chichester; New York: Wiley, 2000.
- Dutt, Tanuj and Humphery-Jenner, Mark 2013. Stock Return Volatility, Operating Performance, and Stock Returns: International Evidence on Drivers of the Low Volatility Anomaly. *Journal of Banking and Finance*, 37(3) 999-1017.
- Eades, Kenneth M. 1982. Empirical Evidence on Dividends as a Signal of Firm Value. *Journal of Financial and Quantitative Analysis*, 17(4) 471-500.
- Edwards, W. 1968. Conservatism in human information processing. *Formal Representation of Human Judgement.* John Wiley and Sons 17-52.
- Egan, Daniel; Merkle, Christoph; and Weber, Martin 2014. Second-order beliefs and the individual investor. *Journal of Economic Behavior & Organization*, 107 652-666.
- Ellis, Charles D. 2012. Investment Management Fees Are (Much) Higher Than You Think. *Financial Analysts Journal*, 68(3) 4-6.
- Ellsberg, Daniel 1961. Risk, Ambiguity, and the Savage Axioms. *Quarterly Journal of Economics*, 75(4) 643-669.
- Emery, Douglas R. and Li, Xi 2009. Are the Wall Street Analyst Rankings Popularity Contests? *Journal of Financial and Quantitative Analysis*, 44(2) 411-437.
- Emler, N. 1990. A Social Psychology of Reputation. *European Review of Social Psychology*, 1:1, 171-193.
- Epley, N., & Gilovich, T. 2001. Putting adjustment back in the anchoring and adjustment heuristic: Differential processing of self-generated and experimenter-provided anchors. *Psychological Science*, 12(5), 391-6.
- Epstein, Larry 1999. A definition of uncertainty aversion. *The Review of Economic Studies*, 66(226) 579-608.
- Esgate, Anthony, Groome, David and Baker, Kevin 2005. **An Introduction to Applied Cognitive Psychology.** Psychology Press.
- Fallon, Corey K, Gerald Matthews, April Rose Panganiban, Ryan Wohleber, and Richard D Roberts. 2013. Emotional Intelligence and Decision Making Under Stress. Proceedings of the Human Factors and Ergonomics Society Annual Meeting 57, no. 1: 873-77.
- Fama, Eugene F. 1970. Efficient Capital Markets: A Review of Theory and Empirical Work. *Journal of Finance*, 25(2), 383-417.
- Fama, Eugene F. and Blasi, Harvey 1968. Dividend Policy: An Empirical Analysis. *Journal of The American Statistical Association*, 63:324 1132-1161.

- Fama, Eugene F. and French, Kenneth R. 1993. Common risk factors in the returns on stocks and bonds. *Journal of Financial Economics*, 33(3) 3-56.
- Fama, Eugene F. 1998. Market Efficiency, Long-Term Returns, and Behavioral Finance. *Journal of Financial Economics*, 49, 283-306.
- Fama, Eugene F. and French Kenneth R. 2010. Luck Versus Skill in the Cross-Section of Mutual Fund Returns. *The Journal of Finance*, 65(5) 1915-1947.
- Fama, Eugene F. and French, Kenneth R. 2012. Size, value and momentum in international stock returns. *Journal of Financial Economics*, 105 457-472.
- Fama, Eugene F. and French, Kenneth R., Dissecting Anomalies with a Five-Factor Model 2015. Fama-Miller Working Paper.
- Fan, Ruth Mei-tai, Wagner, H.L., and Manstead, Antony S.R. 1995. *Anchoring, Familiarity, and Confidence in the Detection of Deception*, Basic and Applied Social Psychology, 17:1-2, 83-96
- Fang, Lily 2005. Investment Bank Reputation and the Price and Quality of Underwriting Services. *Journal of Finance*, 60(6) 2729-2761.
- Fang, Lily and Yashuda, Ayako 2009. The Effectiveness of Reputation as a Disciplinary Mechanism in Sell-Side Research. *The Review of Financial Studies*, 22(9), 3735-3777.
- Fasaei, Hesam; Tempelaar, Michiel P. and Jansen, Justin J.P. 2017. Firm Reputation and Investment Decisions: The Contingency Role of Securities Analysts' Recommendations. *Long Range Planning*, Forthcoming.
- Faugere, C. and Shawky H. 2003. Volatility and Institutional Investor Holdings in a Declining Market: A Study of Nasdaq during the Year 2000. *Journal of Applied Finance*, 13(2) 32-42.
- Feldheim, David and Yacoe, Don 2001. An Education in Risk Health Care Providers Begin to Use Hedge Funds Investments. *The Bond Buyer*, 336.31162: A24.
- Feldman, Todd. 2010. Portfolio Manager Behavior and Global Financial Crises. *Journal of Economic Behavior and Organization* 75(2): 192-202.
- Feldman, Todd and Liu, Shuming 2018. A New Predictive Measure Using Agent-Based Behavioral Finance, *Computational Economics*, 51:941-959.
- Feng, Lei and Seasholes, Mark S. 2004. Correlated Trading and Location. *Journal of Finance*, 59(5) 2117-2144.
- Fennema, Hein, and Peter Wakker. 1997. Original and Cumulative Prospect Theory: A Discussion of Empirical Differences. *Journal of Behavioral Decision Making*, 10.1: 53-64.
- Ferrara, M., Pansera, B., & Strati, F. 2018. Classic rational bubbles and representativeness. *Decisions in Economics and Finance*, 41(1), 19-34.
- Fernandez, Viviana 2014. Stock volatility and pension funds under an individual capitalization-based system. *Journal of Business Research*, 67 536-541.
- Fisher, G. 2013. Dividend Investing: A Value Tilt in Disguise? *Journal of Financial Planning*, 26(4) 52-55.

- Fisher, G. 2014. Advising the Behavioral Investor: Lessons from the Real World from *Investor Behavior: The Psychology of Financial Planning and Investing*, 2014. Wiley Finance.
- Flanagan David J., O'Shaughnessy K.C., & Palmer, Timothy B. 2011. Re-Assessing the Relationship between the Fortune Reputation Data and Financial Performance: Overwhelming Influence or Just a Part of the Puzzle? *Corporate Reputation Review*, 14(1), 3-14.
- Floyd, Eric; Li, Nan, and Skinner, Douglas J. 2015. Payout policy through the financial crisis: The growth of repurchases and the resilience of dividends. *Journal of Financial Economics*, 118 299-316.
- Forbes, W. and Igboekwu, A. 2015. The explanatory power of representative agent earnings momentum models. *Review of Quantitative Finance and Accounting*, 44(3): 473–492.
- Foerster, S., 2011. Double then Nothing: Why Stock Investments Relying on Simple Heuristics May Disappoint. *Review of Behavioural Finance*, 3(2), pp.115–140.
- Fogel, Suzanne O'Curry, and Thomas Berry 2006. The Disposition Effect and Individual Investor Decisions: The Roles of Regret and Counterfactual Alternatives. *Journal of Behavioral Finance*, 7(2) 107-16.
- Fombrun, C. 1996. **Reputation: Realizing value from the corporate image**. Boston, Mass.: Harvard Business School Press.
- Fombrun, C., & Shanley, M. 1990. What's in a Name? Reputation Building and Corporate Strategy. *Academy of Management Journal*, 33(2), 233.
- Foster, F. Douglas and Warren, Geoffrey J. 2015. Why Might Investors Choose Active Management? *Journal of Behavioral Finance*, 16(1) 20-39.
- Fox, Craig R. and Levav, Jonathan 2000. Familiarity Bias and Belief Reversal in Relative Likelihood Judgment. *Organizational Behavior and Human Decision Processes*, 82(2) 268-292.
- French, Kenneth R., The Cost of Active Investing. 2008. Available at SSRN: <https://ssrn.com/abstract=1105775>.
- French, Kenneth R. and Poterba, James M. 1991. Investor Diversification and International Equity Markets. *American Economic Review*, 81, 222-226.
- Frieder, Laura. Evidence on Behavioral Biases in Trading Activity. 2003. Available at SSRN: <https://ssrn.com/abstract=479983>.
- Frieder, L. & Subrahmanyam, A., 2005. Brand Perceptions and the Market for Common Stock. *Journal of Financial and Quantitative Analysis*, 40(1): 57–85.
- Friedman, Barry A. 2009. Human Resource Management Role Implications for Corporate Reputation. *Corporate Reputation Review*, 12(3), 229.
- Fryxel, Gerald E. and Wang, Jia 1994. The Fortune Corporate Reputation Index: Reputation for What? *Journal of Management*, 20(1) 1-14.
- Fuerst, F., Mcallister, P., & Sivitanides, P. 2015. Flight to quality? *Studies in Economics and Finance*, 32(1), 2-16.

- Fulmer, I., Gerhart, B., & Scott, K. 2003. Are the 100 best better? An empirical investigation of the relationship between being a great place to work and firm performance. *Personnel Psychology*, 56(4), 965-993.
- Furnham and Boo. 2011. "A Literature Review of the Anchoring Effect." *Journal of Socio-Economics*, 40.1: 35-42.
- Gabbioneta, Claudia; Ravasi, Davide and Mazzola, Pietro 2007. Exploring the Drivers of Corporate Reputation: A Study of Italian Securities Analysts. *Corporate Reputation Review*, 10(2) 99-123.
- Ganzach, Yoav 2001. Judging risk and return of financial assets. *Organizational Behavior and Human Decisions Processes*, 83(2) 353-370.
- George, T., & Hwang, C. 2004. The 52-Week High and Momentum Investing. *Journal of Finance*, 59(5), 2145-2176.
- Gerlach, Jan-Christian, Guilherme Demos, and Didier Sornette. 2018. Dissection of Bitcoin's Multiscale Bubble History from January 2012 to February 2018.
- Gigerenzer, Gerd, and Hoffrage, Ulrich 1995. "How to Improve Bayesian Reasoning without Instruction: Frequency Formats." *Psychological Review*, 102.4: 684-704.
- Gigerenzer, G. & Selten, R. 2001. *Bounded rationality: the adaptive toolbox*, Cambridge, Mass. MIT Press.
- Gillet, Roland; Lapointe, Marc-André; and Raimbourg, Philippe 2008. Dividend Policy and Reputation. *Journal of Business Finance & Accounting*, 35(3-4) 516-540.
- Golub, Bennett W. 2010. Merging the Risk Management Objectives of the Client and Investment Manager. From *Risk Management Foundations for a Changing World*, Hoboken, NJ John Wiley & Sons.
- Gorman, Michael F. 2012. Management Insights. *Management Science*, 58(2) iv-vi.
- Gotsi, M., & Wilson, A. M. 2001. Corporate reputation: Seeking a definition. *Corporate Communications*, 6(1), 24-30.
- Grafin, S.D and Ward, A.J. 2010. Certifications and reputation: Determining the standard of desirability amidst uncertainty. *Organization Science*, 21(2) 331-346.
- Greve, H. 2015. The Building of the Behavioral Theory of the Firm Continues. *Journal of Management Inquiry*, 24(3), 334-335.
- Griffin, John M.; Harris, Jeffrey H.; and Topaloglu, Selim 2003. The Dynamics of Institutional and Individual Trading. *The Journal of Finance*, 58(6) 2285-2320.
- Grinblatt, M. and Keloharju, M. 2001. How Distance, Language, and Culture Influence Stockholdings and Trades. *Journal of Finance*, 56(3) 1053-1073.
- Grinblatt, M. and Han, B. 2005. Prospect theory, mental accounting, and momentum. *Journal of Financial Economics*, 78(2), 311-339.

- Grinold, Richard C. 1989. The Fundamental Law of Active Management. *Journal of Portfolio Management*, 15(3), 30-38.
- Grosse, R. 2017. The global financial crisis—Market misconduct and regulation from a behavioral view. *Research in International Business and Finance*, 41, 387-398.
- Guerard, J., Xu, G. & Gültekin, M., 2012. Investing with Momentum: The Past, Present, and Future. *Journal of Investing*, 21(1): 68–80.
- Guillemette, Michael A; Finke, Michael; and Gilliam John 2012. Risk Tolerance Questions to Best Determine Client Portfolio Allocation Preferences. *Journal of Financial Planning*, 25(5): 36-44.
- H. Chowdhury, Reza, Min Maung, and Jenny Zhang. 2014. Information Content of Dividends: A Case of an Emerging Financial Market. *Studies in Economics and Finance*, 31.3: 272-90.
- Ha, Inbong, Gwangheon Hong, and Bong Lee 2011. Information Content of Dividends and Share Repurchases. *Asia-Pacific Journal of Financial Studies*, 40.4: 517-549.
- Haleblian Jerayr J.; Pfarrer, Michael D.; and Kiley, Jason T. 2017. High-Reputation Firms and Their Differential Acquisition Behaviors. *Strategic Management Journal*, 38, 2237 – 2254.
- Hall, J. & Mcvigar, B., 2013. Impact of sector versus security choice on equity portfolios. *Applied Financial Economics*, 23(12): 991–1004.
- Halstead, John, and Shantaram Hegde. 2005. Hedge Fund Crisis and Financial Contagion: Evidence from Long-Term Capital Management. *The Journal of Alternative Investments*, 8.1: 65-82,6.
- Hankin, Aaron 2018. Nasdaq to delist Long Blockchain Corp, underlining fading bitcoin fervor. *Marketwatch*.
- Hannon, J., & Milkovich, G. 1996. The effect of human resource reputation signals on share prices: An event study. *Human Resource Management*, 35(3), 405-424.
- Hauser, Richard and Thornton, John H. Jr. 2017. Dividend policy and corporate valuation. *Managerial Finance*, 43(6) 663-678.
- Hausman, J. 1978. Specification Tests in Econometrics. *Econometrica*, 46(6), 1251-1271.
- Hayward, Mathew L. A., et al. 2004. Believing one's own press: the causes and consequences of CEO celebrity. *Strategic Management Journal*, 25(7) 637-653.
- Helm, Sabrina 2007. The Role of Corporate Reputation in Determining Investor Satisfaction and Loyalty. *Corporate Reputation Review*, 10(1) 22-37.
- Henry, Nguyen, and Pham. 2017. "Institutional Trading before Dividend Reduction Announcements." *Journal of Financial Markets*, 36: 40-55.
- Hepler, T.J. & Kovacs, A.J., 2017. Influence of acute stress on decision outcomes and heuristics. *The Journal of sports medicine and physical fitness* 57(3): 305–312.
- Heukelom, Floris. 2007. Kahneman and Tversky and the Origin of Behavioral Economics. Tinbergen Institute Discussion Paper No. 07-003/1.

- Highhouse, S., Brooks, M., & Gregarus, G. 2009. An Organizational Impression Management Perspective on the Formation of Corporate Reputations. *Journal of Management*, 35(6), 1481–1493.
- Hobbs, J., & Singh, V. 2015. A comparison of buy-side and sell-side analysts. *Review of Financial Economics*, 24(C), 42-51.
- Holmes, R., Bromiley, P., Devers, C., Holcomb, T., & Mcguire, J. 2011. Management Theory Applications of Prospect Theory: Accomplishments, Challenges, and Opportunities. *Journal of Management*, 37(4), 1069-1107.
- Hong, H., & Stein, J. 1999. A Unified Theory of Underreaction, Momentum Trading, and Overreaction in Asset Markets. *Journal of Finance*, 54(6), 2143-2184.
- Hong, Jordan, & Liu. 2015. Industry information and the 52-week high effect. *Pacific-Basin Finance Journal*, 32(C), 111-130.
- Howard, C. Thomas 2014. **Behavioral Portfolio Management**, Harriman House Publishing.
- Huang, Chuan Yu and Chan, Shu Hui 2010. Trading Behavior on Expiration Days and Quarter-End Days: The Effect of a New Closing Method. *Emerging Markets Finance and Trade*, 46(4) 105-125.
- Huberman, Gur 2001. Familiarity breeds investment. *Review of Financial Studies*, 14(3) 659-680.
- Hull, J. 2018. **Options, futures, and other derivatives**. 10th Edition.
- Hur, Jungshik, and Cedric Luma. 2017. Aggregate Idiosyncratic Volatility, Dynamic Aspects of Loss Aversion, and Narrow Framing. *Review of Quantitative Finance and Accounting*, 40(2) 407-33.
- Hur, J., Pritamani, M., & Sharma, V. 2010. Momentum and the Disposition Effect: The Role of Individual Investors. *Financial Management*, 39(3), 1155-1176.
- Hussainey, Khaled; Walker, Martin 2009. The effects of voluntary disclosure and dividend propensity on prices leading earnings. *Accounting and Business Research*, 39(1) 37-55.
- Ikenberry, David L; Shockley, Richard L.; and Womack, Kent L. 1998. Why Active Managers Often Underperform the S&P 500. *Journal of Private Portfolio Management*, 1(1) 13–26.
- Inman J. and McAlister L. 1994. Do Coupon Expiration Dates Affect Consumer Behavior? *Journal of Marketing Research*, 31 423-428.
- Imam, Shahed; Barker, Richard; and Clubb, Colin 2008. The Use of Valuation Models by UK Investment Analysts. *European Accounting Review*, 17(3) 505-535.
- Ivkovic, Zoran and Weisbenner, Scott 2005. Local Does as Local Is: Information Content of the Geography of Individual Investors' Common Stock Investments. *Journal of Finance*, 60(1) 267-307.
- Javaheri, Alireza 2005. *Inside Volatility Arbitrage*, Wiley Publishing.

- Jamal, Karim and Sunder, Shyam 1996. Bayesian equilibrium in double actions populated by biased heuristic traders. *Journal of Economic Behavior and Organization* (31) 273-291.
- Janis, I. L., and Mann, L. 1977. *Decision making: A psychological analysis of conflict, choice, and commitment*. Free Press.
- Janiszewski, C., & Uy, D. 2008. Precision of the Anchor Influences the Amount of Adjustment. *Psychological Science*, 19(2): 121-127.
- Jegadeesh, N., Kim, J., Krische, S., & Lee, C. 2004. Analyzing the Analysts: When Do Recommendations Add Value? *Journal of Finance*, 59(3), 1083-1124.
- Jegadeesh N. and Titman S. 2001. Profitability of Momentum Strategies: An Evaluation of Alternative Explanations. *The Journal of Finance*, 56(2) 699-720.
- Jensen, M., & Roy, A. 2008. Staging Exchange Partner Choices: When do Status and Reputation Matter? *Academy of Management Journal*, 51(3), 495-516.
- Jetter, Michael and Walker, Jay K. 2017. Anchoring in Financial Decision-making: Evidence from Jeopardy! *Journal of Economic Behavior and Organization*, 141: 164-76.
- Jonas, Mark E. 2016. Three Misunderstandings of Plato's Theory of Moral Education. *Educational Theory*, 66(3), 301-322.
- Jones, P. 2008. Responding to the decline of corporate reputation. *Strategic Communication Management*, 12(6), 20-23.
- Jung, J.M. & Kellaris, J.J., 2004. Cross-national differences in proneness to scarcity effects: The moderating roles of familiarity, uncertainty avoidance, and need for cognitive closure. *Psychology and Marketing*, 21(9): 739–753.
- Jung, B., Sun, K.J. & Yang, Y.S., 2012. Do Financial Analysts Add Value by Facilitating More Effective Monitoring of Firms' Activities? *Journal of Accounting, Auditing & Finance*, 27(1): 61–99.
- Kahneman, Daniel 2013. *Thinking Fast and Slow* Farrar, Straus and Giroux.
- Kahneman, Daniel, Slovic, Paul and Tversky, Amos 1982. *Judgement Uncertainty: Heuristics and Biases*, Cambridge University Press.
- Kahneman, D. and Tversky, A. (1979), Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47 (2) 263-291.
- Kaniel, R.; Saar, G.; and Titman, S. (2008), Individual Investor Trading and Stock Returns. *The Journal of Finance*, 63(1) 273-310.
- Kao, Yu-Sheng S., Hwei-Lin L. Chuang, and Yu-Cheng C. Ku. 2019. The Empirical Linkages among Market Returns, Return Volatility, and Trading Volume: Evidence from the S&P 500 VIX Futures. *North American Journal of Economics and Finance*. Vol 48.
- Kaustia, Markku, Alho, Eeva, and Puttonen, Vesa. 2008. How Much Does Expertise Reduce Behavioral Biases? The Case of Anchoring Effects in Stock Return Estimates. *Financial Management*, 37(3) 391-412.

- Kecskes, A., Michaely, R., and Kent, L. 2017. Do Earnings Estimates Add Value to Sell-Side Analysts' Investment Recommendations? *Management Science*, 63.6: 1855-871.
- Kester, L., Griffin, A., Hultink, E., & Lauche, K. 2011. Exploring Portfolio Decision-Making Processes. *Journal of Product Innovation Management*, 28(5), 641-661.
- Kiani, Khurshid M. 2011. Relationship between Portfolio Diversification and Value at Risk: Empirical Evidence. *Emerging Markets Review*, 12.4: 443-59.
- King, B. and Whetten, D. 2008. Rethinking the Relationship Between Reputation and Legitimacy: A Social Actor Conceptualization. *Corporate Reputation Review*, 11(3), 192-207.
- Kliger, D., & Kudryavtsev, A. 2010. The Availability Heuristic and Investors' Reaction to Company-Specific Events. *Journal of Behavioral Finance*, 11(1), 50-65.
- Koch, Erika J. 2014. How Does Anticipated Regret Influence Health and Safety Decisions? A Literature Review. *Basic and Applied Social Psychology*, 397-412.
- Kreps, David M. and Wilson Robert 1982. Reputation and Imperfect Information. *Journal of Economic Theory*, 27(2) 253-279.
- Kruger, Thomas M. and Wroldstad, Mark A. 2016. Impact of the Reputation Quotient® on Investment Performance. *Corporate Reputation Review*, 19(2) 140-151.
- Kucheev, Yury; Ruiz, Felipe; Sorensson, Tomas. 2017. Do Stars Shine? Comparing the Performance Persistence of Star Sell-Side Analysts Listed by Institutional Investor, the Wall Street Journal, and StarMine. *Journal of Financial Services Research*, 52(3) 277-305.
- Kudryavtsev, Andrey 2017. The Availability Heuristic and Reversal Following Large Stock Price Changes. *Journal of Behavioral Finance*, 25 1-18.
- Lam, K., Liu, T. & Wong, W.-K., 2010. A pseudo-Bayesian model in financial decision making with implications to market volatility, under- and overreaction. *European Journal of Operational Research*, 203(1): 166-175.
- Lange, D., Lee, P.M., & Dai, Y. 2011. Organizational reputation: A review. *Journal of Management*, 37(1) 153-184.
- Law, J. 2016. Greater-fool theory. *A Dictionary of Business and Management*, Oxford University Press.
- Lee, B., O'Brien, J., & Sivaramakrishnan, K. 2008. An Analysis of Financial Analysts' Optimism in Long-term Growth Forecasts. *Journal of Behavioral Finance*, 9(3), 171-184.
- Lee, Bong Soo; Paek, Miyou; Ha, Yeonjeong; and Ko, Kwangsoo. 2015. The dynamics of market volatility, market return, and equity fund flow: International evidence. *International Review of Economics and Finance*, 35 214-227.
- Lee, Jooh and Roh, James J. 2012. Revisiting corporate reputation and firm performance link. *Benchmarking: An International Journal*, 19(4/5) 649-664.
- Leeds, Eva. 1990. The Bird-in-the-hand Argument Revisited. *Atlantic Economic Journal*, 18.4: 77.

- Li, & Yu. 2012. Investor attention, psychological anchors, and stock return predictability. *Journal of Financial Economics*, 104(2), 401-419.
- Liang, Hanchao; Yang, Chunpeng; Zhang, Rengui and Cai, Chuangqun (2017). Bound rationality, anchoring-and-adjustment sentiment, and asset pricing. *North American Journal of Economics and Finance*, 40 85-102.
- Lin, & Hung. 2013. A barrier option framework for bank interest margin management under anticipatory regret aversion. *Economic Modelling*, 33, 794-801.
- Lintner, John. 1956. Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. *The American Economic Review*, 46(2) 97-113.
- Ljungqvist, A. et al., 2007. Conflicts of interest in sell-side research and the moderating role of institutional investors. *Journal of Financial Economics*, 85(2), pp.420–456.
- Lo, Andrew 2010. Reconciling Efficient Markets with Behavioral Finance: The Adaptive Markets Hypothesis. *Journal of Investment Consulting*, 7(2) 21-44.
- Lo, Andrew and Hasanhodzic, Jasmina. 2011. *The Evolution of Technical Analysis: Financial Prediction from Babylonian Tablets to Bloomberg Terminals*, Bloomberg Press.
- Lobão, J., Pacheco, L. & Pereira, C., 2017. The use of the recognition heuristic as an investment strategy in European stock markets. *Journal of Economics, Finance and Administrative Science*, 22(43): 207–223.
- Loh, R.K., 2010. Investor Inattention and the Under reaction to Stock Recommendations. *Financial Management*, 39(3): 1223–1252.
- Lourie, B., 2019. The Revolving Door of Sell-Side Analysts. *The Accounting Review*, 94(1), pp.249–270.
- Love, E and Kraatz, M. 2017. Failed Stakeholder Exchanges and Corporate Reputation: The Case of Earnings Misses. *Academy of Management Journal*, 60(3) 880-903.
- Lowenstein, Roger 2000. *When Genius Failed: The Rise and Fall of Long-Term Capital Management*. Random House.
- Liu, Feng, & Wei. 2012. Negative price premium effect in online market—The impact of competition and buyer informativeness on the pricing strategies of sellers with different reputation levels. *Decision Support Systems*, 54(1), 681-690.
- Luo, Guo Ying. 2013. Can representativeness heuristic traders survive in a competitive securities market? *Journal of Financial Markets*, 16(1)152–164.
- Luo, Guo Ying. 2014. *Asset Price Response to New Information: The Effects of Conservatism Bias and Representativeness Heuristic*. Springer Briefs in Finance.
- Luo, X. et al., 2015. Corporate social performance, analyst stock recommendations, and firm future returns. *Strategic Management Journal*, 36(1):123–136.
- Ma, Q., Wang, H., & Zhang, W. 2017. Trading against anchoring. *Review of Behavioral Finance*, 9(3): 242-261.

- Mairs & Power. 2016. Focused Investing for the Long Term. *Mairs & Power White Paper*, April 2016.
- Malagon, J., Moreno, D. & Rodríguez, R., 2015. The idiosyncratic volatility anomaly: Corporate investment or investor mispricing? *Journal of Banking and Finance*, 60(C): 224–238.
- Maller, Ross, Robert Durand, and Hediah Jafarpour. 2010. Optimal Portfolio Choice Using the Maximum Sharpe Ratio." *The Journal of Risk*, 12.4: 49-73.
- Malmendier, U., & Nagel, S., 2011. Depression babies: do macroeconomic experiences affect risk taking? *Quarterly Journal of Economics*, 126(1), 373–416.
- Marfatia, H.A., 2014. Impact of uncertainty on high frequency response of the U.S. stock markets to the Fed's policy surprises. *Quarterly Review of Economics and Finance*, 54(3): 382–392.
- Marthinsen, John E. 2009. *Risk Takers: Uses and Abuses of Financial Derivatives (Second Edition)*, Pearson.
- Mariconda, Simone and Lurati, Francesco. 2015. Does familiarity breed stability? The role of familiarity in moderating the effects of new information on reputational judgments. *Journal of Business Research*, 68 957-964.
- Martin, Gerald S. and Puthenpurackal, John. 2008. Imitation is the Sincerest Form of Flattery: Warren Buffett and Berkshire Hathaway (April 15, 2008). Working Paper on SSRN: <https://ssrn.com/abstract=806246>
- Maymin, Philip Z and Fisher, Gregg S. 2011. Preventing Emotional Investing: An Added Value of an Investment Manager. *The Journal of Wealth Management*, 13 (4) 34-44.
- McDevitt, R. 2014. "A" Business by Any Other Name: Firm Name Choice as a Signal of Firm Quality. *The Journal of Political Economy*, 122(4) 909.
- Meggison, William L. and Weiss, Kathleen A. 1991. Venture Capitalist Certification in Initial Public Offerings. *The Journal of Finance*, 46(3) 879-903.
- Michaely, R., Rossi, S. & Weber, M. 2018. The Information Content of Dividends: Safer Profits, Not Higher Profits. *IDEAS Working Paper Series from RePEc*.
- Michel, J. 2017. Investor Overreaction to Analyst Reference Points. *Journal of Behavioral Finance*, 18(3): 329-343.
- Miller, M.H. and Modigliani, F. 1961. Dividend policy, growth, and valuation of shares. *Journal of Business*, 34(4): 411-433.
- Mishina, Y., Block, E., & Mannor, M. 2012. The path dependence of organizational reputation: How social judgment influences assessments of capability and character. *Strategic Management Journal*. 33(5) 459-477.
- Mishina, Y., Dykes, B. J., Block, E. S., & Pollock, T. G. 2010. Why “good” firms do bad things: The effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. *Academy of Management Journal*, 53(4), 701–722.

- Mizik, Natalie and Jacobson, Robert 2008. The Financial Value Impact of Perceptual Brand Attributes. *Journal of Marketing Research*, 45(1) 15-32.
- Mokoaleli-Mokoteli, T., Taffler, R., & Agarwal, V. 2009. Behavioural Bias and Conflicts of Interest in Analyst Stock Recommendations. *Journal of Business Finance & Accounting*, 36(3-4), 384-418.
- Moten, J.M. and Copeland C.W. 2017. Insurance and Risk Management. *Financial Behavior: Players, Services, Products, and Markets*, 302-317. Oxford University Press.
- Mullainathan, Sendhil and Thaler, Richard H. 2000. Behavioral Economics. MIT Dept. of Economics Working Paper No. 00-27.
- Munch, Kirke, L. Noble, Daniel Wapstra, and W. While. 2018. Mate Familiarity and Social Learning in a Monogamous Lizard. *Oecologia* 188(1): 1-10.
- Murphy, John J. 1999. *Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications*, New York Institute of Finance.
- Naik, P. and Padhi, P. 2015. Interaction of Institutional Investment Activity and Stock Market Volatility: Evidence from India. *Asia Pacific Journal of Management Research and Innovation*, 11(3) 219-22
- Nanigian, David. 2015. Low-Beta Investing: Why and How? *Journal of Financial Planning*, 28(5) 40-41.
- Navone, Marco and Pagani, Marco. 2015. Brothers from Different Mothers How Distribution Fees Change Investment Behavior. *Journal of Banking and Finance*, 51 12-25.
- Nilsson, Håkan, Juslin, Peter, and Olsson, Henrik. 2008. Exemplars in the Mist: The Cognitive Substrate of the Representativeness Heuristic. *Scandinavian Journal of Psychology*, 49.3: 201-12.
- Nofsinger, John R. 2002. *The Psychology of Investing*, Pearson Education, Inc.
- Nofsinger, John R. 2012. Household Behavior and Boom/bust Cycles. *Journal of Financial Stability*, 8.3: 161-73.
- O'Barr, William and Conley, John. 1992. Managing Relationships: The Culture of Institutional Investing. *Financial Analysts Journal*, 48(5) 21-27.
- Odean, Terrance. 1998. Are Investors Reluctant to Realize Their Losses? *Journal of Finance*, 53.5: 1775-798.
- Oechssler, Roeder, and Schmitz. 2009. Cognitive Abilities and Behavioral Biases. *Journal of Economic Behavior and Organization*, 72(1) 147-52.
- Oehler, Andreas, Horn, Matthias, and Wendt, Stephan 2016. Benefits from Social Trading? Empirical Evidence for Certificates on Wikifolios. *International Review of Financial Analysis*, 46 202-210.
- Olsen, R. A. 2001. Behavioral Finance as Science: Implications from the Research of Paul Slovic. *Journal of Behavioral Finance*, 2(3) 157-159.

- Ozenbas, Schwartz, and Wood. 2002. Volatility in US and European Equity Markets: An Assessment of Market Quality. *International Finance* 5(3): 437-61.
- Pacheco, Alves, Krüger, Lourenção, & Caldana. 2018. Are we all green? Understanding the microfoundations of corporate citizenship. *Journal of Cleaner Production*, 195, 552-561.
- Pastor, Lubos and Stambaugh, Robert F. 2012. On the Size of the Active Management Industry. *Journal of Political Economy*, 120(4) 740-781.
- Pastor, Lubos, Stambaugh, Robert F., and Taylor Lucian A. 2015. Scale and Skill in Active Management. *Journal of Financial Economics*, 116(1), 23-45.
- Paweł, Merło & Konarzewski, Patryk, 2015. The Momentum Effect Exemplifies the Influence of Investors' Irrational Behaviour on Changing Prices of Shares and Stocks: An Analysis of the Momentum Effect on the Warsaw Stock Exchange. *e-Finanse*, 11(1): 56–64.
- Pedersen, Lasse Heje. 2017. Sharpening the Arithmetic of Active Management. *Financial Analysts Journal*, August 2017.
- Peijnenburg, Kim. 2018. Life-Cycle Asset Allocation with Ambiguity Aversion and Learning. *Journal of Financial and Quantitative Analysis*, 53(5): 1963-1994.
- Perera, L.C.R. & Chaminda, J.W.D., 2013. Corporate Social Responsibility and Product Evaluation: The Moderating Role of Brand Familiarity. *Corporate Social Responsibility and Environmental Management*, 20(4): 245–256.
- Petajisto, Antti. 2009. Why Do Demand Curves for Stocks Slope Down? *Journal of Financial and Quantitative Analysis*, 44 1013-1044.
- Pfarrer, M. D., Pollock, T. G., & Rindova, V. P. 2010. A tale of two assets: The effects of firm reputation and celebrity on earnings surprises and investors' reactions. *Academy of Management Journal*, 53(5), 1131–1152.
- Pfeiffer, Shaun. 2015. Low-Volatility Investing: Too Good to Be True or Worth Another Look? *Journal of Financial Services Professionals*, 69(6) 23-26.
- Phillips, D., & Zuckerman, E. 2001. Middle-status conformity: Theoretical restatement and empirical demonstration in two markets. *The American Journal of Sociology*, 107(2), 379-429.
- Pirie, S. & Chan, R.K.T. 2016. Following momentum and avoiding the “Minsky Moment” evidence from investors on the Financial Instability Hypothesis. *Qualitative Research in Financial Markets*, 8(3): 205–217.
- Pratt, John W. 1964. Risk Aversion in the Small and in the Large. *Econometrica*, 32 (1-2) 122-136.
- Pollock, T., Rindova, V., & Maggitti, P. 2008. Market watch: Information and availability cascades among the media and investors in the U.S. IPO market. *Academy of Management Journal*, 51(2), 335–358.
- Pompian, Michael 2006. *Behavioral Finance and Wealth Management*, John Wiley & Sons.

- Pompian, Michael M., McLean, Colin., and Byrne, Alistair 2017. Behavioral Finance and Investment Processes. *CFA Refresher Reading Level III*.
- Qin, Jie. 2012. Regret Aversion and Informational Cascade in a Sequential Trading Model. *Journal of Behavioral Economics and Finance*, 5(0), 60-71.
- Qin, Jie. 2015. A Model of Regret, Investor Behavior, and Market Turbulence. *Journal of Economic Theory*, 160: 150-74.
- Raithel, Sascha and Schwaiger, Manfred. 2015. The Effects of Corporate Reputation Perceptions of the General Public on Shareholder Value. *Strategic Management Journal*, 36, 945-956.
- Ramiah, V., Xu, X., & Moosa, I. 2015. Neoclassical finance, behavioral finance and noise traders: A review and assessment of the literature. *International Review of Financial Analysis*, 41, 89–100.
- Reb, J. 2008. Regret aversion and decision process quality: Effects of regret salience on decision process carefulness. *Organizational Behavior and Human Decision Processes*, 105(2), 169-182.
- Rebello, M. & Wei, K.D., 2014. A Glimpse Behind a Closed Door: The Long-Term Investment Value of Buy-Side Research and Its Effect on Fund Trades and Performance. *Journal of Accounting Research*, 52(3), pp.775–815.
- Rhee, M. and Haunschild, Pamela 2006. The Liability of Good Reputation: A Study of Product Recalls in the U.S. Automobile Industry. *Organization Science*, 17(1), 101-117.
- Ricciardi, Victor. 2008. The Psychology of Risk: The Behavioral Finance Perspective. *Handbook of Finance Volume 2: Investment Management and Financial Management*. John Wiley & Sons 85-111.
- Ricciardi, Victor. 2017a. The Financial Psychology of Players, Services, and Products. *Financial Behavior: Players, Services, Products, and Markets*. 23-44 Oxford University Press.
- Ricciardi, Victor. 2017b. The Role of Group Psychology in Behavioral Finance: A Research Starting Point for Banking, Economic, and Financial Historians. *Decision Making, Confidence and Risk Management in Banks: From Early Modernity to the 20th Century*, Hapmshire: Palgrave Macmillan.
- Ricciardi, Victor and Simon, Helen K., 2000. What is Behavioral Finance? *Business, Education & Technology Journal*, 2(2), 1-9.
- Rindova, V., & Fombrun, C. 1999. Constructing competitive advantage: the role of firm-constituent interactions. *Strategic Management Journal*, 20(8), 691–710.
- Rindova, V.; Petoova, A.; and Kotha, S. 2007. Standing out: how new firms in emerging markets build reputation. *Strategic Organization*, 5(1) 31-70.
- Rindova, V. P., Williamson, I. O., & Petkova, A. 2010. Reputation as an intangible asset: Reflections on theory and methods in two empirical studies of business school reputations. *Journal of Management*, 36(3), 610-619.

- Rindova, V.; Williamson, I., Petkova, A., & Sever, J. 2005. Being Good or Being Known: An Empirical Examination of the Dimensions, Antecedents, and Consequences of Organizational Reputation. *Academy of Management Journal*, 48(6), 1033-1049.
- Rizzi, Joseph. 2014. Post-Crisis Investor Behavior: Experience Matters from *Investor Behavior: The Psychology of Financial Planning and Investing*. Wiley Finance.
- Roberts, Peter W. and Dowling, Grahame R. 2002. Corporate Reputation and Sustained Superior Financial Performance. *Strategic Management Journal*, 23(12) 1077-1093.
- Rosch, Cristoph G. and Kaserer, Christoph. 2013. Market liquidity in the financial crisis: The Role of liquidity commonality and flight-to-quality. *Journal of Banking & Finance*, 37 2284-2302.
- Rose, Caspar and Thomsen, Steen 2004. The Impact of Corporate Reputation on Performance: Some Danish Evidence. *European Management Journal* 22(2) 201-210.
- Ross, Stephen; Westerfield, Randolph; Jeffrey, Jaffe; & Jordan, Bradford, 2016 *Corporate Finance, 11th Edition*, McGraw Hill.
- Rotheli, Tobias F. 2010. Causes of the financial crisis: Risk misperception, policy mistakes, and banks' bounded rationality. *The Journal of Socio-Economics* 39 119-126.
- Roszkowski, A. and Richie, N. (2016). The impact of Mad Money recommendations during bull and bear markets. *International Journal of Managerial Finance*, 12(1), 52-70.
- Ruffino, D., 2014. Resuscitating businessman risk: A rationale for familiarity-based portfolios. *Review of Economic Dynamics*, 17(1): 107–130.
- Russo, Alessandro. 2016. Low-Risk Equity Investment – From Theory to Practice. *Journal of Asset Management*, 17(4) 264-279.
- S&P Dow Jones Indices. March 11, 2016. *2015 SPIVA US Scorecard*.
- S&P Dow Jones Indices. August 2016. *S&P 500 Equal Weighted Index Methodology*.
- S&P Dow Jones Indices. April 12, 2017. *2016 SPIVA US Scorecard*.
- S&P Dow Jones Indices. February 2018. *S&P 500 Dividend Aristocrats Methodology*.
- S&P Dow Jones Indices. October 2019. *S&P Quality Indices Methodology*.
- Samson, A., & Voyer, B. 2014. Emergency purchasing situations: Implications for consumer decision-making. *Journal of Economic Psychology*, (44) 21 - 33.
- Sánchez, José Luis, and Fernández Sotorrió. 2007. The Creation of Value Through Corporate Reputation. *Journal of Business Ethics*, 76.3: 335-46.
- Sapp, Travis and Yan, Xuemin. 2008. Security Concentration and Active Fund Management: Do Focused Funds Offer Superior Performance? *The Financial Review*, 43 27-49.
- Sarin, R. and Weber M. 1993. Effects of Ambiguity in Market Experiments. *Management Science*, 39(5) 602 – 615.

- Sarwar, Ghulam. 2012. Is VIX an Investor Fear Gauge in BRIC Equity Markets? *Journal of Multinational Financial Management*, 22.3: 55-65.
- Sautua, Santiago I. 2017. Does uncertainty cause inertia in decision making? An experimental study of the role of regret aversion and indecisiveness. *Journal of Economic Behavior and Organization*, 136 1-14.
- Scherer, Bernd. 2011. A Note on the Returns from Minimum Variance Investing. *Journal of Empirical Finance*, 18(4) 652-660.
- Schwaiger, Manfred. 2004. Components and Parameters of Corporate Reputation – An Empirical Study. *Schmalenbach Business Review*, 56(1) 46-71.
- Schwikert, Shane R., Tim Curran, and Gauthier, Isabel. 2014. Familiarity and Recollection in Heuristic Decision Making. *Journal of Experimental Psychology: General* 143.6: 2341-365.
- Seiler, Michael, Seiler, Vicky, Traub, Stefan, & Harrison, David. 2008. Regret Aversion and False Reference Points in Residential Real Estate. *The Journal of Real Estate Research*, 30(4), 461-474.
- Seiler, Michael J., & Seiler, Vicky L. (2010). Mitigating Investor Risk-Seeking Behavior in a Down Real Estate Market. *Journal of Behavioral Finance*, 11(3), 161-167.
- Shackford, Charles Chauncy (1891). Aristotle's Politics. *The Unitarian Review*, 35(6), 433.
- Shah, Syed Zulfiqar Ali; Maqsood, Ahmad; and Mahmood, Faisal. 2018. Heuristic Biases in Investment Decision-making and Perceived Market Efficiency. *Qualitative Research in Financial Markets*, 10.1: 85-110.
- Shamsie, J. 2003. The context of dominance: An industry-driven framework for exploiting reputation. *Strategic Management Journal*, 24 199-215.
- Sharma, A., & Kumar, A. 2019. A review paper on behavioral finance: study of emerging trends. *Qualitative Research in Financial Markets*, 12(2), 137–157.
- Sharpe, William F. 1991. The Arithmetic of Active Management. *Financial Analysts Journal*, 47(1) 7-9.
- Sharpe, William F. 2013. The Arithmetic of Investment Expenses. *Financial Analysts Journal*, 69 34-41.
- Shefrin, Hersh and Statman, Meir. 1985. The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence. *Journal of Finance*, 40(3) 77-90.
- Shefrin, Hersh, and Statman, Meir. 1993. Behavioral Aspects of the Design and Marketing of Financial Products. *Financial Management*, 22.2: 123.
- Shefrin, H. 2001. Do Investors Expect Higher Returns From Safer Stocks Than From Riskier Stocks? *Journal of Psychology and Financial Markets*, 2(4), 176-181.
- Shefrin, Hersh. 2002. *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing 2nd edition*, Oxford University Press.

- Shefrin, Hersh and Statman, Meir. 2003. The style of investor expectations. *The Handbook of Equity Style Management 3rd Edition*, John Wiley & Sons 195-218.
- Shefrin, Hersh. 2010. Behavioralizing Finance. *Foundations and Trends in Finance*, 4(1-2), 1-184.
- Shiller, R. J. 1998. Human Behavior and the Efficiency of the Financial System. NBER, Working Paper.
- Shiller, Robert J. 2003. From Efficient Market Theory to Behavioral Finance. *Journal of Economic Perspectives*, 17(1), 83-104.
- Shleifer, Andrei. 2000. *Inefficient Markets: An Introduction to Behavioral Finance*. New York: Oxford University Press.
- Shu, H. and Chang, J. 2015. Investor Sentiment and Financial Market Volatility. *Journal of Behavioral Finance*, 16(3) 206-219.
- Sias, R. 2007. Reconcilable Differences: Momentum Trading by Institutions. *Financial Review*, 42(1), 1-22.
- Siddiqi, H. 2018. Anchoring-Adjusted Capital Asset Pricing Model. *Journal of Behavioral Finance*, 19(3), 249-270.
- Sinnewe, Elisabeth, and Scott J Niblock. 2015. Trial by Media: An Empirical Investigation of Corporate Reputation and Stock Returns in Australia. *Journal of Media Economics*, 28.1: 41-60.
- Simon, Herbert. 1997. *Administrative Behavior*, 4th ed., Free Press, New York, NY.
- Slivinski, Stephen. 2009. Economic History: Too Interconnected to Fail? *Federal Reserve of Richmond Region Focus*, Summer 2009: 34–36.
- Skiba, Alexadre and Skiba, Hilla. 2017. Institutional Investors. *Financial Behavior: Players, Services, Products, and Markets*, 64-78. Oxford University Press.
- Smith, Katherine Taken; Smith, Murphy; and Wang, Kun. 2010. Does Brand Management of Corporate Reputation Translate into Higher Market Value? *Journal of Strategic Marketing*, 18(3) 201-221.
- Smith, Terry. April 12, 2013. Too Many Stocks Spoil the Portfolio. *Financial Times*.
- Song, S. & Wang, Y., 2017. Pricing double barrier options under a volatility regime-switching model with psychological barriers. *Review of Derivatives Research*, 20(3), pp.255–280.
- Spaht, C. and Rubin H. 2014. Comparison of Three Investment Strategies for Financial Independence. *The Journal of Applied Business and Economics*, 16(6) 44-55.
- Spotts, Harlan E; Weinberger, Marc G. and Weinberger, Michelle F. 2014. Publicity and advertising: what matters most for sales? *European Journal of Marketing*, 48(11/12) 1986-2008.
- Stark, J. 2019. Decomposing mutual fund alpha into security selection and security weighting. *Journal of Empirical Finance*, 52, 76–91.

- Starcke, K., & Brand, M. 2016. Effects of Stress on Decisions Under Uncertainty: A Meta-Analysis. *Psychological Bulletin*, 142(9), 909-933.
- Stemple, Jonathan and Valetkevitch, Caroline. August 10, 2015. S&P 500 Soon to Have 505 Listed Shares. *Reuters*.
- Stephan, E. and Kiell G. (1998), “Urteilsprozesse bei professionellen Akteuren im Finanzmarkt” Working Paper Dresden University.
- Steverman, B., 2007. Story Stocks or Fairy Tales? *Business Week (Online)*, p.1.
- Stickel, Scott. 2007. Analyst Incentives and the Financial Characteristics of Wall Street Darlings and Dogs. *Journal of Investing*, 16(3) 23-32.
- Suchman, Mark. 1995. Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review*, 20.3: 571-610.
- Szwajkowski, E., & Figlewicz, R. 1999. Evaluating corporate performance: A comparison of the fortune reputation survey and the socrates social rating database. *Journal of Managerial Issues*, 11(2), 137-154.
- The Royal Swedish Academy of Sciences, Press Release, October 14, 1997.
- Thorsteinson, T., Breier J., Atwell A., Hamilton, C., and Privette, M. 2008. Anchoring Effects on Performance Judgments. *Organizational Behavior and Human Decision Processes*, 107.1: 29-40.
- Troup, K. 2012. Why principles of dividend investing need reassessing. *Investment Week*, 42.
- Tsuchida, Naoshi & Tucker, Ann. 2012. Time-dependent selection of important economic indicators over stock prices. *Investment Management & Financial Innovations*, 9(2): 23–36.
- Tuckett, D. 2009. Addressing the psychology of financial markets. *Economics: The Open-Access, Open Assessment E-Journal* 40.
- Tversky, A and Kahneman D. 1973. Availability: a heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2) 207-232.
- Tversky, A and Kahneman, D. 1974. Judgement Under Uncertainty: Heuristics and Biases. *Science*, (185) 1124-1131.
- Tversky, A and Kahneman D. 1992. Advances in Prospect Theory – Cumulative Representations of Uncertainty. *Journal of Risk and Uncertainty*, 5 297-323.
- Treynor, Jack L. 1975. Long-Term Investing, *Financial Analysts Journal*, 32(3) 56-59.
- Van Den Bogaerd, Machteld and Aerts, Walter (2015), Does media reputation affect properties of accounts payable? *European Management Journal* 33 19-29.
- Varvouzou, I., 2013. *Capital market anomalies: explained by humans irrationality*, Hamburg: Anchor Academic Pub.
- Walker, M. & Claassen, B., 2006. What drives sell-side recommendation announcement returns? *Financial Services Review*, 15(4), pp.315–333.

- Walkshausl, Christian. 2013. The High Returns to Low Volatility Stocks are Actually a Premium on High Quality Firms, *Review of Financial Economics*, 22(4) 180-186.
- Walkup, Brian. 2016. The impact of uncertainty on payout policy. *Managerial Finance*, 42(11) 1054-1072.
- Wang, Yijing and Berens, Guido. 2015. The Impact of Four Types of Corporate Social Performance on Reputation and Financial Performance. *Journal of Business Ethics*, 131(2) 337-359.
- Wang, Yijing; Berens, Guido; and Van Riel, Cees B. M. 2012. Competing in the Capital Market with a Good Reputation, *Corporate Reputation Review*, 15(3) 198-221.
- Warneryd, Karl-Erik. 2001. *Stock Market Psychology: How people value and trade stocks*. Edward Elgar.
- Watts, Ross. 1973. The Information Content of Dividends. *The Journal of Business*, 46(2) 191-211.
- Wermers, Russ. 1999. Mutual Fund Herding and the Impact on Stock Prices. *Journal of Finance*, 54(2) 581-622.
- Whaley, Robert E. 2009. Understanding the VIX. *The Journal of Portfolio Management*, 35(3) 98-105.
- Wong, K. 2012. Production and insurance under regret aversion. *Economic Modelling*, 29(4), 1154-1160.
- Wu, C. and Lin C. 2017. The impact of media coverage on investor trading behavior and stock returns. *Pacific-Basin Finance Journal*, 43 151-172.
- Wu G. and Markle A.B. 2008. An empirical test of gain-loss separability in prospect theory. *Management Science*, 54(7): 1322–1335.
- Wu, J.; Balliet, D.; and Van Lange, P. 2016. Reputation management: Why and how gossip enhances generosity. *Evolution and Human Behavior*, 37(3), 193-201.
- Yang, L., Goh, J. & Chiyachantana, C., 2016. Valuation uncertainty, market sentiment and the informativeness of institutional trades. *Journal of Banking and Finance*, 72(C) 81–98.
- Yanushevsky, Rafael and Yanushevsky Daniel 2015. Comment on A Note on the Returns from Minimum Variance Investing. *Journal of Empirical Finance*, 31 109-110.
- Yonelinas, A. P. 2002. The nature of recollection and familiarity: A review of 30 years of research. *Journal of Memory and Language*, 46, 441–517.
- Yuen, Kimberly 2018. Protean Penny Stock Gets Bitcoin Facelift and Soars 15,000%. *Bloomberg News*, February 1, 2018.
- Zakamulin, Valeriy 2014. Dynamic Asset Allocation Strategies Based on Unexpected Volatility. *The Journal of Alternative Investments*, 16(4) 37-50.
- Zahera, S. A., & Rohit, B. 2018. Do investors exhibit behavioral biases in investment decision making? A systematic review. *Qualitative Research in Financial Markets*, 10(2), 210-251.

Zaremba, Adam 2016. Is There a Low-Risk Anomaly Across Countries? *Eurasian Economic Review*, 6 45-65.

Zeelenberg, Marcel, Kees Van Den Bos, Eric Van Dijk, and Rik Pieters. 2002. The Inaction Effect in the Psychology of Regret. *Journal of Personality and Social Psychology*, 82.3: 314-27.

Zeelenberg, Marcel; Beattie, Jane; van Der Pligt, Joop; and de Vries, Nanne K. 1996. Consequences of Regret Aversion: Effects of Expected Feedback on Risky Decision Making. *Organizational Behavior and Human Decision Processes*, 65(2) 148-158.

Zhang, R., Brennan, T., & Lo, A. 2014. The origin of risk aversion. *Proceedings of the National Academy of Sciences of the United States of America*, 111(50), 17777-82.

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