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Keywords
corporate purpose, performance, employee engagement, work meaning

Disciplines
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Corporate Purpose and Financial Performance

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Abstract

We construct a measure of corporate purpose within a sample of US companies based on approximately 500,000 survey responses of worker perceptions about their employers. We find that this measure of purpose is not related to financial performance. However, high purpose firms come in two forms: firms characterized by high camaraderie between workers and firms characterized by high clarity from management. We document that firms exhibiting both high purpose and clarity have systematically higher future accounting and stock market performance, even after controlling for current performance, and that this relation is driven by the perceptions of middle management and professional staff rather than senior executives, hourly or commissioned workers. Taken together, these results suggest that firms with mid-level employees with strong beliefs in the purpose of their organization and the clarity in the path towards that purpose experience better performance.

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Introduction

Does purpose influence firm performance? More than two decades ago, Bartlett and Ghoshal (1994) issued a call for scholars to consider purpose as the essential precursor to effective strategic management. They argued for a shift from the “old doctrine of strategy, structure, and systems” to “a softer, more organic model built on the development of purpose, process, and people.” The primary role of top management, in their view, is not to set strategy, but instead to instill a common sense of purpose (Bartlett and Ghoshal 1994).

Since then, however, there has been little empirical progress on the role of purpose in strategic management (Hollensbe et al. 2014; Henderson and Van den Steen 2015). This gap persists despite both a five-fold increase in the public conversation about purpose between 1995 and 2016 (Oxford University and Ernst and Young 2016) and a resurgence of academic interest in incorporating “soft” organizational characteristics into studies of strategic outcomes (e.g., Helfat and Peteraf 2015; Felin, Foss and Ployhart 2015; Blader et al. 2015; Agarwal et al. 2012; Argyres 2011; Nickerson and Zenger 2008; Kaplan and Henderson 2005).

Perhaps one important reason for this limited progress is the lack of measurement technology to evaluate purpose systematically across firms and years. We aim to overcome this measurement challenge and provide evidence on the relation between purpose and firm performance based on the most comprehensive data available to researchers, to our knowledge, on worker perceptions of their employers. Our data is from a proprietary survey of individual employees that spans multiple firms and years. As a result, we do not need to rely on reports from designated company representatives or advertised values on each company’s website that have been shown to be “cheap talk” and not predictive of corporate outcomes (Guiso, Sapienza, and Zingales 2015).

What exactly is corporate purpose? Absent a settled definition within either academic or practitioner literature, we adopt a definition of purpose proposed by Henderson and Van den Steen
(2015) as “a concrete goal or objective for the firm that reaches beyond profit maximization.” This definition need not be explicitly pro-social in orientation and is broadly in line with related definitions that we later discuss. A crucial aspect of purpose is its inherent intangibility. An organization’s purpose is not a formal announcement, but instead a set of common beliefs that are held by and guide the actions of employees. Dennis Bakke, the CEO of AES, highlighted the importance of this soft or implicit aspect by stating that it is only the company’s “primary purpose—the real one, which isn’t necessarily the one written in official documents or etched in wall plaques—that guides its actions and decisions.” This intangible nature renders purpose challenging to explore in a large-scale setting. One of the primary benefits of our study is that our data allows us, at least in part, to address this challenge.

From a theoretical perspective, there are conflicting views regarding whether and how purpose might relate to performance. Purpose could be unrelated to performance if it is a corporate characteristic that does not affect employee productivity or customer choices. Less trivially, purpose could have a positive influence by motivating employees beyond their formal employment contracts (Ariely et al. 2008; Grant 2008; Gibbons and Henderson 2012), thereby decentralizing decision-making (Bartlett and Ghoshal 1994), or alternatively affecting other stakeholder groups such as customers (Elfenbein, Fisman and McManus 2012; Elfenbein and McManus 2010) or investors (Ton 2014).

Alternately, a focus on purpose could draw attention away from shareholder returns and ultimately lead to financial underperformance (Friedman, 1962). To illustrate, the Purposeful Company Report—a review and policy report written by a consortium of academics and industry participants—provides myriad examples of corporate purposes defined, among others, in terms of universality, global responsibility, and human values. Advocates of this view argue that focusing on these goals distracts employees and management from due attention to shareholder returns, thereby underperforming their more market-oriented competitors (e.g., Jensen 2010). Moreover, instilling
purpose likely requires costly commitments to establish credibility (Henderson and Van den Steen 2015). If the costs outweigh the financial benefits, then purpose may further lead to financial underperformance.

Given these divergent perspectives, our paper seeks to provide evidence about the nature of the relationship between the strength of employee beliefs in a corporate purpose and financial performance. Our evidence comes from a proprietary survey from the Great Places To Work Institute (GPTW). This survey includes employees within hundreds of organizations across hierarchical job levels from hourly workers up to executives. In the survey, respondents rate their employers in terms of a wide variety of organizational characteristics, including workplace collegiality, management, and the nature of the job itself.

Critically, this survey allows us to circumvent corporate cheap talk and measure actual employee beliefs about the strength of purpose. We consider companies with strong purpose to be those in which employees in aggregate have a strong sense of the meaningfulness and collective impact of their work (“My work has special meaning: this is not just a job”; “I feel good about the ways we contribute to the community”; “When I look at what we accomplish, I feel a sense of pride”; and “I'm proud to tell others I work here.”). This interpretation is consistent with the literature on the role of leaders as meaning-makers (Podolny, Khurana and Hill-popper, 2004), as well as the importance of meaningful work and individuals’ perceptions about the significance of their work (Pratt and Ashforth 2003; Grant 2008; Blau and Scott 1962; Katz and Kahn 1966; Wrzesniewski 2003; Grant et al. 2007; Grant and Hoffman 2011; Cassar and Meier 2016).

The dataset also allows us to construct an array of measures on other employee beliefs about their employer (e.g. fairness, management quality) and relate them both to purpose and financial performance. Moreover, we can measure employee beliefs at various job levels, from executives down to hourly workers, and report how beliefs at different levels relate to performance.
For this study, we focus on publicly listed companies and calculate measures of purpose for 456,666 employees within 429 firms and six years across a broad range of industries. In our first analysis, we aggregate employees’ responses to the four meaning-related questions above into an overall measure of purposefulness. We then associate this measure to two common firm performance outcomes, operating Return on Assets (ROA) and Tobin’s Q. Notably, this analysis yields a null result. We find no relation between the strength of employee beliefs in purpose – either aggregated to a firm level, or by job level – and our two measures of firm performance.

We then perform an exploratory factor analysis on the survey responses to identify whether purpose co-varies with other constructs within the data. From this analysis, we identify two types of organizations with purpose. The first type, high Purpose-Camaraderie organizations, includes organizations that score high on purpose and also on dimensions of workplace camaraderie (e.g. “This is a fun place to work”; “We are all in this together”; “There is a family or team feeling here”). The second type, high Purpose-Clarity organizations, score high on purpose and also on dimensions of management clarity (specifically, the following two questions: “Management makes its expectations clear”; “Management has a clear view of where the organization is going and how to get there” as well as a third question, “I am given the resources and equipment to do my job”).

When we replace our aggregate measure of purpose with the factor measures capturing the two types of purpose organizations, we find that the high Purpose-Clarity organizations exhibit superior accounting and stock market performance. Our results hold after controlling for the full set of factors representing the remaining dimensions of employee beliefs mitigating concerns that an omitted measure of employee beliefs is driving the association. In nearly all specifications, we also find a significant association even after controlling for the lagged level of the dependent variable, mitigating concerns about reverse causality. We also find a positive association in models with firm fixed effects.
on a balanced sample of firms over time, suggesting that time-invariant firm-specific unobservable characteristics are also unlikely to explain the results.

Of course, lacking an instrument or a natural experiment, it remains a concern that an omitted variable not part of the GPTW survey could drive the association between our main variables of interest. To address this concern and also to explore further the association between purpose and performance, we separate our firm-level measures of purpose into measures at each of five hierarchical levels of the organization (i.e., executives and senior managers, sales force, middle managers, salaried professionals, and hourly workers). Several additional findings emerge. First, we find systematic differences across levels of employees in the degree of purpose: the more senior the employee, the stronger is the perceived purpose of the organization. This result is in line with practitioner claims that diffusing a sense of purpose in lower levels of the organization has not been successful in many firms (Graham et al. 2015; Oxford University and Ernst and Young 2016).

Second, and most relevant to our study, it is solely the middle managers and salaried professionals that drive the relation between high “Purpose-Clarity” organizations and financial performance. We find no association for senior executives, sales or hourly workers. We view this result as especially interesting in the context of a literature that argues that middle managers could play an important role in both strategy development and implementation (Huy 2001; Wooldridge et al. 2008; Rouleau and Balogun, 2011; Mollick 2012). Further, these results do not support a reverse causality explanation, that strong current or anticipated performance drives a high sense of purpose among employees. This alternative would plausibly affect the senior executives and the sales force more strongly than the middle layer within the firm, since the compensation of the first two groups is most directly linked to firm performance. This is not what we find.

Lastly, we calculate stock returns that, by construction, are forward looking and do not suffer from reverse causality and find that a portfolio of high Purpose-Clarity firms earns significant positive
risk-adjusted stock returns in the future, up to 7.6% annually. Our analysis, in sum, suggests that high Purpose-Clarity organizations exhibit higher financial performance in the future, when these beliefs are held by those in the middle ranks of an organization.

In the discussion section, we analyze different mechanisms that could drive the associations we document, focusing on understanding why the combination of purpose and clarity and why the middle ranks give rise to the results. We suggest that our results are consistent with the literature on meaningful work as our key clarity measures “Management has a clear view of where the organization is going and how to get there,” “Management makes its expectations clear” and “I am given the resources and equipment to do my job” relate closely to “meaningfulness at work” practices, such as path-goal leadership where leaders define the path and enable employees to get their work done (House 1997) as well as visionary leadership whereby leaders articulate an inspiring vision linking it to shared values (Kirkpatrick and Locke 1996; Piccolo and Colquitt 2006) and shared meaning (Podolny, Khurana, and Hill-Popper 2004). Similarly, our purpose measures “My work has special meaning: this is ‘not just a job’”, “When I look at what we accomplish, I feel a sense of pride;” and “I feel good about the ways we contribute to the community,” directly relate to “meaningfulness in work” practices, such as task significance and the fact that the task has positive impact on others (Fried and Ferris 1987; Michaelson, Pratt, Grant and Dunn 2014). When these two factors combine additively within the middle organizational ranks, firms experience higher performance.

Our work makes several contributions. First, to the best of our knowledge, there is no study that systematically constructs a firm-level measure of purposefulness, based on actual employee beliefs, to study this phenomenon across a cross-section of firms and over multiple years. While studies of workplace meaningfulness have documented relationships between individual perceptions of meaningful work and job satisfaction using single organizational settings (Hackman and Oldham 1976; Fried and Ferris 1987; Grant 2008; Bunderson and Thompson 2009), it is not clear that these
individual-level results will necessarily translate to superior organizational performance. By providing this firm-level measure of purposefulness in a large sample setting of firms spanning industries and time, this study bridges the individual to firm level research in this area.

Second, uncovering the level of the organization that drives this association provides a deeper understanding of why meaningful work might affect firm level performance. Our evidence suggests that the middle ranks of an organization are the critical layer through which strong sense of purpose is associated with better performance. This finding not only contributes to research on corporate purpose but also to work on the role and importance of middle managers (Huy, 2001; Floyd and Wooldridge, 1997; Mollick, 2012).

Lastly, we contribute to research on strategic management by providing preliminary evidence in support of Bartlett and Ghoshal’s (1994) admonishment to elevate the importance of corporate purpose in studies of firm performance differences, as well as the more recent practitioner dialog on purpose (e.g., Ernst and Young 2016; Harvard Business Review, 2016). Our evidence suggests that a strong sense of corporate purpose is indeed associated with better firm performance, but only if that sense is held within the middle ranks of an organization, and only if accompanied with clear direction and resources from management.

Corporate Purpose

What Is Corporate Purpose?

Practitioners, including CEOs, consultants and the press, have long articulated purpose within their organizations. One of the authors of this study, prior to joining academia, worked at a company whose purpose was “to change the way the world works.” Dennis Bakke, the CEO of AES, a global electric utility, alludes to the purpose of AES as “meeting the world’s need for safe, clean, reliable and economically priced electricity” (Bakke, 2005, pg. 30). The Brazilian cosmetics firm Natura and the
Danish pharmaceutical firm Novo Nordisk, two of the most successful companies in terms of stock price performance in the last decade, have explicitly stated a purpose beyond profit maximization since their founding.\(^1\) Richard Branson, CEO of Virgin Group has said, “It’s always been my objective to create businesses with a defined Purpose beyond just making money…our newest investment in OneWeb is also very much a Purpose-driven business, looking to create the world’s largest constellation of satellites to bring connectivity and communications to billions.”\(^2\) Similarly, Paul Polman, CEO of Unilever, has long supported the importance of purpose in business, “We have committed to help provide good hygiene, safe drinking water and better sanitation for the millions of people around the world…It is about opportunity and aligning our purpose in business with this opportunity.”\(^3\) In these examples, purpose is a meaning-rich articulation of the main business of the firm.

In academic literature, various definitions of purpose have been offered over time. One set of definitions explicitly focus on a social objective for the firm. For example, Bartlett and Ghoshal (1994) define purpose as “the statement of a company’s moral response to its broadly defined responsibilities, not an amoral plan for exploiting commercial opportunity.” Thakor and Quinn (2013) similarly define it as “something that is perceived as producing a social benefit over and above the tangible pecuniary payoff that is shared by the principal and the agent.”

Purpose, however, need not be explicitly pro-social. Oxford Dictionaries define purpose as “the reason for which something is done or created or for which something exists.”\(^4\) Applying this general definition to a firm context, the Purposeful Company Report—written by a consortium of


academics studying purpose in businesses—defines the purpose of a company as “its reason for being.” Similarly, Henderson and Van den Steen (2015) write that purpose is “a concrete goal or objective for the firm that reaches beyond profit maximization.” We adopt this broader view of corporate purpose, as a set of beliefs about the meaning of a firm’s work beyond quantitative measures of financial performance.

How Might Purpose Influence Performance? 6

A strong sense of purpose could positively impact performance through various mechanisms. First, it might increase employee effort and productivity because of higher employee satisfaction and engagement. A rich literature has shown that employees that perceive their work as more meaningful exhibit higher job performance, organizational citizenship behavior, and organizational commitment and identification (Liden et al. 2000; Michaelson et al. 2014). If those characteristics ultimately influence firm performance, consistent with evidence that companies having higher employee satisfaction tend to perform better in the future (Edmans 2011), then purpose will be related to performance at the firm level.

A separate literature has proposed that purpose leads to higher customer satisfaction and loyalty when customers themselves care about the firm’s purpose (Du, Bhattacharya, and Sen 2007a). This would be especially true if the firm’s purpose is pro-social (Du, Bhattacharya, and Sen 2007b; Hainmueller and Hiscox 2012). Moreover, in line with the service-profit chain theory (Heskett et al.

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6 Note that we use the term “purpose” in this section and throughout our discussion. “Purpose” as a construct generally refers to the content of beliefs. In this study, however, we are interested in the strength of the beliefs, or “purposefulness,” independent of the actual content of the beliefs themselves. Similarly, when we later refer to “meaning” within the workplace, we generally are interested in “meaningfulness,” or the strength, rather than the content, of meaning. For readability, we have shortened “purposefulness” and “meaningfulness” to “purpose” and “meaning” in our exposition, but the reader should understand those terms as purposefulness and meaningfulness or the strength of purpose and meaning, respectively.
In firms where employees perceive their work as more meaningful, customer satisfaction is higher (Leiter et al. 1998).

Alternatively, purpose could be a mechanism to mitigate short-term pressures on business and as a result reduce managerial myopia. Senior policymakers have argued that many corporations exhibit short-termism, a tendency to take actions that maximize reported short-term earnings and stock prices at the expense of long-term corporate performance (e.g., Levitt 2000). Prior studies have documented the sources of short-termism, such as capital market pressures and managerial monetary incentives (Brochet, Loumioti and Serafeim 2015), as well as the negative effects of short-termism on strategic orientation (Connelly et al. 2010) and future shareholder value (e.g., Bushee 1998; Bhojraj et al. 2009). Corporate purpose could mitigate such short-term pressures by signaling to investors the type of the organization and as a result creating a more long-term oriented investor base or by aligning incentives inside the organization (Ton 2014).

On the other hand, these perceptions about the benefits of purpose contrast with a long-standing argument that a corporation’s sole purpose is to maximize profits and as a result shareholder value (Friedman 1961). According to this view, the purpose of every (public) firm should be profit maximization, as managers are agents of shareholders, and any deviation is evidence of agency problems and impending financial underperformance (Jensen 2010).

Some studies, for example, argue that firms that emphasize strong social purpose undertake unproductive investments because managers capture private benefits as a result (Brammer and Millington, 2008; Cheng, Hong, and Shue, 2013). Relatedly, political beliefs could be another reason for making such inefficient investments (Di Giuli and Kostovetsky, 2014). Consistent with that argument, some scholars have argued for an increase in shareholder rights to reign in managers focused on outside goals (Bebchuk 2013). Following this logic, any focus on corporate purpose that is not explicitly focused on shareholder returns represents, at best, a distraction for employees.
Moreover, as Henderson and Van den Steen (2015) highlight, in order for a corporate purpose to be credible, the firm needs sometimes to make non-profit maximizing decisions. An example of such an action is CVS corporation stopping the sale of cigarettes, a multi-billion dollar business, to commit to its purpose related to promoting health among its customers. In the absence of such decisions, there is a lack of credibility to the stated purpose and it is not possible for employees and other stakeholders to distinguish purposeful firms from the rest leading to a pooling equilibrium. If the firm cannot recover the costs of those decisions from other benefits then over time the firm will underperform its competitors.

Given these opposing arguments, the ex-ante relation between purpose and performance is unclear and we do not formulate a directional prediction.

Where Might Purpose Matter Most Within an Organization?

Since purpose is enacted via the set of beliefs held by employees, a natural question is which employees drive the link, if any, between purpose and performance. Research on purpose has not extensively explored how beliefs about purpose may vary across job levels within an organization, and how those differences might relate to performance. In general, though, a frequent claim is that employees in more senior positions hold stronger beliefs about the purpose of the organization and the corresponding meaning of their work (Ernst & Young 2016; Harvard Business Review, 2015). This is generally ascribed to these employees being better informed about the goals of the organization and also having greater responsibility to influence these goals. A strong sense of purpose among the senior executive team might affect financial performance through restricting the tendency to exhibit short-termism.

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taking actions that increase short-term earnings and stock prices but destroying long-term value (Ton 2014).

On the other hand, the link between purpose and performance may occur at the mid-level, among managers and professional employees. Wooldridge, Schmid and Floyd (2008), in reviewing 25 years of research, note a broad consensus that this layer influences strategy formation and implementation (Bower 1970, Burgelman 1983), as well as strategic innovation (Kanter 1982). Huy (2001) argues that these employees are often closer to the market than their more senior counterparts and have relationships both up and down the formal organization to translate abstract strategic ideas into action. Floyd and Wooldridge (1997) similarly find that middle managers’ ability to exert strategic influence is positively related to organizational performance. Similarly, Mollick (2012) finds that middle managers have a large effect in explaining cross-firm performance. A strong sense of purpose might lead middle management to implement the firm’s strategy more effectively and/or to communicate information more effectively informing strategy especially in the context of incomplete contracting that gives rise to the need for strong relational contracts (Gibbons and Henderson 2012).

Finally, a strong sense of purpose among lower level employees might affect customer loyalty and satisfaction as front-line employees may have more direct contact with external stakeholders and hence more opportunity to translate that purpose beyond the firm boundaries. We would expect that such an effect would be even more pronounced for business-to-consumer companies where brand identification is a more significant driver of customer behavior (Du, Bhattacharya, and Sen 2007a; Eccles et al. 2014).

Given these arguments, exploring the job level at which the relation between purpose and performance manifests, can shed light on the underlying mechanism of the relation between purpose and financial performance.
Data and Research Design

We construct our sample from GPTW survey data. The Great Places to Work® Institute administers Fortune Magazine’s annual “100 Best Companies to Work For” list. Our study makes use of the raw data submitted by companies competing to be included on this list. These data have been previously used by Guiso, Sapienza and Zingales (2015) to understand corporate culture and its association with firm performance, as well as by Garrett, Hoitash and Prawitt (2014) to measure the relationship between employee trust and accounting quality. Edmans (2011) uses the outcome of the process—whether a company was chosen by the Institute to be included on the annual Fortune list—to assess whether companies included in the Top 100 Best Places to Work exhibit positive abnormal stock returns in the future.

To qualify for this list, companies must have more than 1,000 employees in the US for more than seven years. Approximately 400 public and private companies applied each year during our study period. The application process is lengthy and costly to administer; therefore, these large, established firms are a self-selected group that likely competes heavily for human capital (hence their desire to appear on the Fortune list). As such, these firms are likely leaders in employee-related management practices. We view this sample selection as likely decreasing the power of our test since companies are less likely to have a low sense of purpose or poor performance relative to the universe of firms. Once concern is that sample selection may limit the generalizability of our results if, for example, the firms that elect not to apply enact different human capital practices that have different performance implications. In that sense, our results should be considered most applicable to human capital-intensive, high performing firms, and with some caution for firms beyond that definition.

Firms must submit two separate filings as part of the application: The Culture Audit Survey© (CAS) and the Trust Index© employee survey (TI). The CAS includes summary information on the company, including number and demographics of employees, geographic footprint of the company
and information about compensation practices and corporate benefits. The TI is a randomized survey, stratified by employee job level, that includes 57 questions measuring various employees’ beliefs about the workplace, such as management-employee relationship, workplace camaraderie, and pride in and meaning of the work. The responses are captured on a Likert-like scale ranging from 1 to five, where 1 corresponds to “almost always untrue” and 5 corresponds to “almost always true.” These responses span five job levels: hourly employees, sales (commission-based) workers, middle managers and supervisors, salaried professional and technical workers and executives and senior managers.8

Under our agreement with the Institute, we have access to all applications – both successful and unsuccessful – from 2006 to 2011. For our study, we focus on publicly-traded companies, which provides us with 429 firms and 917 firm-year observations. We use summary information from the CAS and TI survey data, which we aggregate up to the firm-year level. Altogether, the 917 firm-year observations comprise 456,666 survey responses from full time employees, with a median level of 498 responses per firm.

We construct a measure of purpose by aggregating four of the survey questions that relate directly to the concept of purpose. These questions are “My work has special meaning; this is ‘not just a job’”, “When I look at what we accomplish, I feel a sense of pride;” “I feel good about the ways we contribute to the community,” and “I'm proud to tell others I work here.” We select those questions as they are the closest to research on meaningful work that emphasizes the importance of individuals’ perceptions about the significance of their work (Pratt and Ashforth 2003; Grant 2008) and in particular as it relates to how it positively influences other people (Blau and Scott 1962; Katz and Kahn 1966; Wrzesniewski 2003; Grant et al. 2007; Grant and Hoffman 2011). We equally-weight the four questions and take their average value to construct the index. In unreported analysis, we find very

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8 While our data agreement precludes us from releasing the full set of questions from the survey, a public description of the survey instrument can be found here: [http://www.greatplacetowork.net/our-approach/what-is-a-great-workplace](http://www.greatplacetowork.net/our-approach/what-is-a-great-workplace), accessed 6/25/16. Our four questions on purpose fall under the designated “Employee Pride” category.
similar results when we use just one of the four measures iteratively or when we extract a common factor from the four based on factor analysis. Further, the Cronbach’s alpha for these four questions is 0.86, indicating substantial relationship between the different questions.9

Table 1 shows the summary statistics for our sample. Unsurprisingly, given the application requirements, the sample firms are large, with an average of more than $50 billion in assets and 15,000 employees. Average ROA is 0.10 with a standard deviation of 0.10 Average Tobin’s Q is 1.96 with a standard deviation of 1.2. The mean firm has been incorporated for 59 years and has nearly 15,000 full-time employees, consistent with our sample of larger, more established companies. The average score for our purpose measure is 4.3 with a standard deviation of 0.2.

<< Insert Table 1 about here >>

Figure 1 shows the average purpose measures by job level. Executives and senior managers score the highest, followed by middle managers and salespeople, then salaried professionals. Hourly employees score the lowest. This result is roughly consistent with the degree of responsibility by job level: executives have the most authority and concurrently have the strongest sense of purpose in their work, while hourly employees have the least and the weakest sense of purpose.

<< Insert Figure 1 about here >>

Appendix Table A1 Panel A (provided in “Supplementary Materials”) shows summary statistics by year. Two attributes of the data become apparent from this table. First, survey applications by public firms peak in 2006, with 207 companies applying, and reduce to 125 firms in 2010. We speculate that this trend reflects economic conditions during the period: the GTPW application process is costly and likely fits into discretionary spending that is reduced during downturns. Second, we can see that these firms are larger than the typical firm in the Compustat universe and consistently

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9 Moreover, the item-test correlation of the four questions is 0.87, 0.86, 0.85 and 0.79, indicating that these items are highly correlated with each other. As a check, the item-test correlation of our control question “This is a physically safe place to work,” is only 0.65.
better performing, as measured by ROA. Once again, this result reflects the nature of the sample: these are large, well-performing firms that are competing intensely on human capital.

Appendix Table A1 Panel B examines industry composition across 12 industries. The most highly represented industry is Business Equipment with 203 firm-year observations followed by Finance with 155 observations. First, while the industry distribution is broadly representative of the Compustat universe, there are some differences. In particular, Business Equipment and Retail are overrepresented, while Healthcare and Finance are underrepresented. While we cannot definitively state the reasons for these differences, we speculate that businesses will be overrepresented in industries in which the labor force pays special attention to this Fortune list. Second, showing that the statistics in Panel A are not driven by industry compositional effects, we see that firms in the GPTW sample are larger than the typical public firm in their industry and better performing.

**Purpose and Firm Performance**

*Empirical Specification*

We estimate the relation between our purpose measure and performance using an OLS model, clustering standard errors at the firm level to account for serial correlation within a firm over time. The model we estimate is:

$$\text{Perf}_{it} = a + b_1 \times \text{Purpose}_{it} + b_2 \times \text{ControlQ} + b_3 \times HQState + b_4 \times Industry + b_5 \times Year + \sum \text{Controls}_{it}$$

(1)

where $\text{Perf}_{it}$ is operating ROA, measured as EBIT (earnings before interest and taxes) over average total assets, or log of Tobin’s Q for firm $i$ in year $t$. Tobin’s Q is the ratio of market value of assets to book value of assets, where market value of assets is equal to market value of equity and total assets minus book value of equity. We use the log value to reduce the high skewness of the raw measure. $\text{Purpose}_{it}$ represents our measure of purpose, the arithmetic average of an employee’s answer to the four questions on the TI survey pertaining to purpose, averaged across all employees in a given firm
and year. \emph{ControlQ} is included to account for the “halo” effect: the overall happiness of the employee that may drive high scores to all questions. For this measure, we follow the approach taken by Guiso, Sapienza and Zingales (2015), and include the employee’s answer to a TI survey question that is conceptually distinct from purpose but will still be influenced by overall happiness, “This is a physically safe place to work.” \emph{HQState, Industry} and \emph{Year} represent the state of corporate headquarters, industry and year fixed effects. \emph{Controls} include the natural logarithm of total assets, firm age, and employees.

**Identification**

Given that our setting does not provide an exogenous shock to purpose that is otherwise unrelated to performance, we are unable to establish causality. As such, we discuss our results using associative, rather than causal, language. To address concerns over reverse causality and omitted variable bias, we implement the following research design choices. First, we include the lagged value of the dependent variable, which controls for past factors that have influenced the performance of the firm and tend to have a persistent impact on a firm’s performance (Wooldridge 2002). We next construct a balanced sample and introduce firm fixed effects to account for all time-invariant firm-specific unobservable characteristics. Third, we perform additional analyses that separate purpose according to the job level of the employees in the organization. This last test allows us to understand which, if any, job level is driving the association between purpose and performance and make inferences about the nature of the bias in our estimates. Last, we calculate stock returns that are forward looking, by construction, and do not suffer from reverse causality.

**Purpose and Firm Performance**

Table 3 shows our estimates of the association between purpose and firm performance. In Column (1), we use ROA as our firm performance variable. This specification includes our full set of controls, and year and industry fixed effects. We add our “halo” question in Column (2) to control for overall satisfaction at the firm, and we add a one-year lagged dependent variable in Column (3) to control for
reverse causality. In none of these specifications is purpose positively related to ROA. In fact, in Columns (2) and (3), the point estimate is negative, and statistically significant in Column (3). Columns (4)-(6) repeat these analyses with log of Tobin’s Q as our measure of firm performance. From this table we see no clear association between our measure of purpose and firm performance.

<< Insert Table 2 about here >>

In Appendix Table A2, we decompose our aggregate measure of purpose within each firm and year into purpose by job levels within firm years. We do this additional analysis in order to verify that our null finding at the firm level is not masking opposing effects by job level. We replace our firm-year measure of purpose with measures by job level within each firm and year. The results in this table show that none of the job level measures of purpose are related, either positively or negatively, to firm performance, supporting our null finding in Table 2.

**Types of High Purpose Firms and Firm Performance**

There are several potential explanations for the null association between our measure of purpose and firm performance.\(^{10}\) In this section, we explore the following possibility: that purpose alone is not associated with performance, but purpose when bundled with other beliefs is associated with performance.

We perform an exploratory factor analysis on the raw survey questions to identify bundles of beliefs that co-vary with our purpose questions. We run the analysis at the employee level using all individual survey responses for all full time employees of all for-profit firms (both public and private).\(^{11}\) We include 53 of the 57 questions, excluding four questions that we considered to be outcome

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\(^{10}\) For example, our purpose measure may not capture “purpose” in a meaningful way or there may be measurement error arising from the survey administration that we cannot observe.

\(^{11}\) The survey also includes non-profit organizations and government agencies, both of which we exclude from this analysis, along with part-time employees at for-profit firms.
measures of overall job satisfaction. The factor analysis yields four factors that seem to explain most of the variation.\textsuperscript{12}

We then apply a varimax rotation on our factors to orthogonalize, to the extent possible, our factor measures (Kaiser, 1958). The rotation of the factor axes maximizes the variance of the squared loadings of a factor on all the variables in a factor matrix. The rotation yields either large or small loadings on each survey question, which allows us to characterize each factor by the set of questions that received high factor loadings. To construct firm-year level measures we average the scores for each factor across all individuals to obtain firm-year measures.\textsuperscript{13}

\textit{Factor Descriptions}

We identify four factors that represent bundles of questions for which employees tend to answer in conjunction with each other. The combinations of these questions are best understood as an index of responses that combine additively: firms that score high on a given factor represent workplaces where employees answer the set of questions with large factor loadings together. Our data agreement with GPTW precludes us from publishing the survey instrument in totality, so in this section, we describe the nature of the questions captured by each factor in as much detail as possible in accord with our agreement.

Factor 1, which we call \textit{Management}, is dominated by questions on employee perceptions of management quality and management’s relationship with the company’s employees (the survey leaves open whether “management” refers to an employee’s direct supervisors or to firm-level management). These questions focus on whether the employee believes management is approachable, honest,

\textsuperscript{12} We use a scree test to determine the number of factors to extract (Velicer and Jackson, 1990; Costello and Osborne, 2009). Applying this test, we observe a clear reduction in the differences between eigenvalues of incremental factors by Factor 5 and therefore keep the first four factors. The difference in eigenvalues between Factors 4 and 5 is 0.111 versus 0.053 between Factors 5 and 6, and these differences thereafter remain stable or diminish only very gradually.

\textsuperscript{13} We also calculated the standard deviation for all our factors. Including in our model the standard deviation of all factors, we find that all subsequent results we document in the paper remain unaffected and that the standard deviation measures are not consistently and significantly associated with performance.
apolitical, and capable. The two questions with the highest loadings on this factor are “Management's actions match its words” and “I can ask management any reasonable question and get a straight answer.”

Factor 2, which we call Purpose-Camaraderie, includes our four purpose questions, listed in the introduction section, together with questions on the degree of camaraderie between employees in the workplace. The two items with the highest loadings on this factor question i) whether employees have fun at work and ii) whether they believe that there is a familial atmosphere among employees at work. The other questions included in this factor similarly focus on workplace collegiality.

Factor 3, which we call Fairness, focuses on whether employees believe that there is workplace discrimination based on standard protected employee classes and sexual orientation. The highest loadings are on questions such as “People here are treated fairly regardless of their sexual orientation.”

Factor 4, which we call Purpose-Clarity, includes our four purpose questions together with questions that characterize a workplace where management provides significant clarity around direction, job responsibilities, and tools that can be used to achieve the desired outcomes. The two items with the highest loadings on this factor, aside from the four purpose questions, are “Management has a clear view of where the organization is going and how to get there” and “Management makes its expectations clear.” A third question, “I am given the resources and equipment to do my job” also loads highly in this factor.

Factors and Firm Performance

Appendix Table A3 shows summary statistics and a univariate correlation matrix for the four survey factors aggregated up to the firms level, together with our other firm-year survey and financial measures. Several interesting observations emerge from these correlations. First, the correlation between the different factors is moderate and ranges between -0.31 to 0.39, allowing us to include all
four factors together in a multivariate regression. Second, our two purpose-related factors, Factor 2, *Purpose-Camaraderie*, and Factor 4, *Purpose-Clarity*, are only modestly correlated with each other (0.16), indicating that they capture conceptually different sets of worker beliefs. Third and related to this prior point, our purpose measure is most highly correlated with Factor 2, *Purpose-Camaraderie*, (0.85), and only moderately correlated with Factor 4, *Purpose-Clarity*, (0.44). This moderate correlation indicates that *Purpose-Clarity* does capture additional beliefs aside from solely a sense of purpose among employees. Lastly, the strength of beliefs in purpose is higher for younger firms, firms with lower leverage and fewer employees, and firms with higher Tobin’s Q. This overall pattern is maintained across Factors 1, 2 and 3. In contrast, the correlations for Factor 4 are the opposite: *Purpose-Clarity* is higher for larger, more established firms. One reason for this could be that while smaller and younger firms are more likely to have a strong sense of purpose, it is larger firms that are in greater need to couple a strong sense of purpose with processes that clearly communicate the job expectations and responsibilities of all employees due to their complexity and formalization of interpersonal relations.

Figure 2 shows the raw fit between the two purpose factors and ROA. The association between *Purpose-Camaraderie* and ROA is zero to negative, while the association between *Purpose-Clarity* and ROA is strongly positive. While this association in the raw data is useful, it does not account for multiple confounding factors. We now turn, therefore to multivariate models.

<< Insert Figure 2 about here >>

In Table 3, we replace purpose with our four survey factors. Given that ex-ante we do not have strong priors about which purpose factor—*Purpose-Clarity* or *Purpose-Camaraderie*—will be associated with performance, we adjust the statistical significant thresholds to account for our multiple hypothesis analysis as in Benjamini, Krieger and Yekutieli (2006). The Benjamini, Krieger and Yekutieli (2006)
(hereafter, BKY) builds upon earlier work and improves the adjustment of the p-values by incorporating a more general framework that allows for comparisons to be negatively or positively correlation. It first examines the distribution of p-values to estimate the fraction of the null hypotheses that are actually true. It then uses this information to get more power when deciding when a p-value is low enough to be called a discovery. The Bonferroni correction – as the earliest correction, dating from 1936 – is generally considered to make overly conservative assumptions, which the newer models are intended to correct. We compare our estimated p-value (in column labeled “P-value”) to these thresholds and adjust the asterisks to take into account the lower p-values required for multiple hypothesis testing. Appendix Table A6 in “Supplementary Materials” provides a summary of the p-values and BKY adjusted p-value thresholds for the relevant analyses in this study (Tables 3-5). This table also provides Wald test statistics for differences between the estimated coefficients of purpose factors within these same tables.

Column (1) measures the association between our two purpose factors and ROA. As with Figure 2, we see that Purpose-Camaraderie has no significant association with ROA, while Purpose-Clarity is strongly positive. This association is economically significant: an increase from the bottom to top decile in Purpose-Clarity is associated with an increase in ROA of 3.89 percent. In Column (2), we include the other two factors as controls and the association between Purpose-Clarity and ROA remains significant and similar in magnitude. In Column (3), we also include the lagged ROA as a dependent variable. In this specification, the association disappears, indicating potential reverse causality at this aggregated level.\footnote{An alternative explanation is that the financial benefits of purpose can be communicated and captured in stock prices faster than they flow in accounting performance. Given that most of the financial accounting transactions that are recorded are backward looking, it seems plausible to expect that the financial benefits of purpose will be detected in longer leads of ROA if one controls for lagged ROA.} However, in a subsequent analysis we separately estimate the effect of purpose on
ROA by job level and find that our result remains economically and statistically significant, even after controlling for lagged ROA.

Columns (4)-(6) repeat this analysis using logged Tobin’s Q as the performance variable.\textsuperscript{16} We continue to find no association between \textit{Purpose-Camaraderie} and Tobin’s Q and a strong, positive association with \textit{Purpose-Clarity}. In this case, the association remains when we include lagged Tobin’s Q as a control (Column 6).\textsuperscript{17} Although it is attenuated in this specification, the association is still strong: an increase from the bottom to top decile in \textit{Purpose-Clarity} is associated with an increase of 0.115 in Tobin’s Q, roughly equivalent to a 0.7% increase in enterprise value growth rate.\textsuperscript{18}

<< Insert Table 3 about here >>

Our full sample is a highly unbalanced panel: we observe two thirds of our firms only once or twice. This imbalance renders a fixed effects analysis challenging, particularly since participation in the survey is voluntary and likely related to firm performance. To explore within-firm effects, therefore, we next restrict our analysis to firms that have appeared for all 6 years in our panel, which yields a balanced subsample of 29 firms and 170 observations. We rerun our analysis of Table 3 on that restricted subsample. First, in an unreported analysis, we replicate Table 3 on that subsample using OLS and show that the point estimates and significance of this subsample is similar to the full sample. We next include firm fixed effects. Table 4 shows the results: the coefficient on \textit{Purpose-Clarity} is consistently positive and statistically significant, even with lagged performance variables. The economic effect with firm fixed effects is about 0.7% increase in ROA for a one standard deviation increase in \textit{Purpose-Clarity}. The equivalent effect on Tobin’s Q is an increase of 0.06, or 0.35% increase

\textsuperscript{16} In an untabulated analysis we replicate all analyses without log transforming Tobin’s Q. All our results remain essentially unchanged.

\textsuperscript{17} Also, as we report in Appendix Table A6, Wald tests show that the coefficient estimates of \textit{Purpose-Clarity} are consistently larger than those of \textit{Purpose-Camaraderie} across the specifications.

\textsuperscript{18} We also estimated our models using a cross-sectional specification with 429 observations, where each firm accounts for only one observation in the model. We aggregate all observations across years for each firm. To account for systematic variation across years before aggregating we mean-adjust all variables with values from that year. All our results remain unchanged.
in enterprise value annual growth rate. This analysis provides support that our results are not driven by unobservable time-invariant firm characteristics.\textsuperscript{19}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Variable & Category & Description \\
\hline
Purpose & Clarity & Higher scores indicate greater clarity in purpose. \\
\hline
Camaraderie & & Strong social cohesion among employees. \\
\hline
\end{tabular}
\caption{Surveys measures of purpose and clarity.}
\end{table}

Appendix Table A4 tests the relation between a composite index of the four questions that relate to clarity to better understand if the results documented above are driven by clarity rather than by purpose. We use a similar specification as in Table 4, where we include firm fixed effects. We find no association between clarity and financial performance suggesting that clarity alone is not driving the association between firms scoring high on dimension of purpose and clarity and financial performance.

\textit{Analysis by Job Level}

For the next analysis, we separate \textit{Purpose-Clarity} by job level to isolate which job level is driving the association with firm performance. Appendix Table A5 shows the correlations between the job level measures of \textit{Purpose-Clarity} with each other and the other survey measures. A few notable insights are apparent from this table. First, the strongest correlation between job levels occurs between middle managers and professional-technical worker beliefs (0.61), while executives and senior managers are only moderately correlated with the other job levels. Second, the other purpose factor, \textit{Purpose-Camaraderie}, remains weakly correlated with these job-level \textit{Purpose-Clarity} measures, and the strongest correlation is with hourly workers (0.17) and the weakest with middle managers (0.02) and negatively with executives (-0.13). This weak correlation is consistent with these two factors capturing fundamentally different work orientations, with \textit{Purpose-Camaraderie} workplaces putting significant

\textsuperscript{19} Appendix Table A4 tests the relation between a composite index of the four questions that relate to clarity to better understand if the results documented above are driven by clarity rather than by purpose. We use a similar specification as in Table 4, where we include firm fixed effects. We find no association between clarity and financial performance suggesting that clarity alone is not driving the association between firms scoring high on dimension of purpose and clarity and financial performance.
weight on an atmosphere of strong interpersonal camaraderie and *Purpose-Clarity* workplaces focusing on job effectiveness.

Table 5 repeats the analysis of Table 3, replacing the aggregate measure of *Purpose-Clarity* with the measures by job level. We find that two job levels drive the positive association with firm performance: middle managers and professional-technical employees. Two observations emerge from this analysis. First, our null results for senior executives or salespeople suggests that reverse causality is unlikely to explain our result, since these employees are the most infirmed about future firm prospects. Second, as we explore in the discussion section, this result provides evidence of the importance of strong, credible beliefs held by mid-level employees, particularly in the meaning of their job and clarity in how to succeed. In untabulated analysis, we also test for whether our results could be driven by higher numbers of respondents at the middle layers, and find no evidence for this alternative.\(^20\)

Future Stock Returns

Our results so far suggest that contemporaneous measure of firm performance is related to a contemporaneous measure of employee beliefs about *Purpose-Clarity*. In this section, we conduct forward looking tests of portfolio returns to understand whether *Purpose-Clarity* has predictive ability about the firm’s future financial performance. Stock returns are by construction forward looking thereby mitigating concerns about reverse causality. Table 6 shows estimates from calendar time portfolios of an investment strategy that buys the stocks of firms scored each year at the top quintile of *Purpose-Clarity* and holds the portfolio for one year at which point it is updated with the new ranking

\(^{20}\text{For this test, we include the number of responses for different seniority levels and interact also our factors with the number of respondents. If fewer responses lead to more noisy factors then we expect to find weaker relation between our factors and performance when number of responses is lower. None of the estimated coefficients on the interaction terms between number of responses and our purpose-clarity factor for a given seniority level is significant.}\)
of firms. The portfolios are formed on the 1st of January. Our objective, rather than to show that this is an implementable trading strategy (since investors do not have access to this information), is to understand whether the *Purpose-Clarity* measure can predict future stock returns. This finding would mitigate concerns about reverse causality, as well as provide some sense of the economic magnitude of the phenomenon.

Each month the returns of each firm in the portfolio are equal-weighted and aggregated thereby constructing a portfolio return. The time-series of 72 monthly stock returns is then regressed on risk premiums for the market, size, value, and momentum factors (Fama and French 1993; Carhart 1997). Column (1) uses the overall *Purpose-Clarity* measure. Columns (2) and (3) use the *Purpose-Clarity* measure for middle managers and professional stuff respectively. Across all specification we find a positive and significant alpha (i.e. abnormal stock return).

The annualized abnormal returns are estimated at 6.9%, 7.6% and 5.9% across columns (1), (2) and (3) respectively. These are economically meaningful estimates. By way of comparison Edmans (2011) finds that the Fortune Best Companies Top 100 list that is derived from the overall GPTW data earns a 4% annualized stock return. It is also of the same magnitude of other studies of intangible drivers of firm success, such as 4.6% for high R&D capital (Lev and Sougiannis 1996), 6.1% for firms in the top quintile of R&D flows (Chan, Lakonishok and Sougiannis 2001) and 8.5% for firms with strong governance (Gompers, Ishii, and Metrick 2003).

Therefore, our results in Table 6 suggest that instilling mid-level employees with a sense of purpose and clarity from management is strongly associated with firm performance.

<< Insert Table 6 about here >>

*Data and Factor Validation*

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21 The intent of these comparisons is to provide a benchmark for the magnitude of our results, and not to suggest that our results are necessarily independent of these other studies. However, in unreported analyses, our results continue to hold if we control for R&D expenditures and governance quality indices.
Our results establish a robust association between the *Purpose-Clarity* factor and firm performance. In interpreting these results, one issue is the “black box” nature of the factor analysis and whether our purpose factors truly capture underlying employee beliefs in purpose combined alternately with clarity or camaraderie. In this section, we conduct three additional analyses to address this issue.

The goal of these analyses is to understand whether our two purpose factors behave in predictable ways in line with how the factors are defined. These three analyses report the relation of *Purpose-Clarity* and *Purpose-Camaraderie* with i) employee tenure and ii) industry sector, and iii) the change in both factors by industry sector around the 2008 financial crisis. We now discuss each of these tests in more detail.

In our first analysis, we examine the relation between our two purpose factors and employee turnover. Each year we classify firms into quartiles based on the level of total turnover or voluntary turnover. We expect that both *Purpose-Clarity* and *Purpose-Camaraderie* will be negatively correlated with employee turnover. Appendix Table A7 shows the two panels with this analysis. The first panel shows factor levels across total turnover while the second panel shows factor levels across voluntary turnover. Across total turnover quartiles we see a large decrease in our *Purpose-Clarity* factor (Factor 4) for the higher quartile of turnover. The decrease is even more pronounced and monotonic when we consider voluntary employee turnover. In contrast, our *Purpose-Camaraderie* factor exhibits a different behavior: it declines more sharply and monotonically across total turnover but less so for voluntary turnover. It seems that involuntary turnover (firings and layoffs) damage the strength in *Purpose-Camaraderie* but much less so the strength in *Purpose-Clarity*, which seems to be reflective more of voluntary turnover (employees voluntarily leave when *Purpose-Clarity* is low, and stay when it is high).

These relationships between voluntary and involuntary turnover and our two purpose factors are exactly as we would expect for these two constructs.
Second, we calculate the average score for *Purpose-Clarity* and *Purpose-Camaraderie* for different sectors. First, as one might expect, Appendix Figure A1 shows that *Purpose-Clarity* and *Purpose-Camaraderie* is highest within healthcare. Given the intrinsic societal value of healthcare, it gives us comfort to see result. The second corroborating piece of evidence is that finance scores in the middle of the distribution for *Purpose-Clarity* but at the bottom for *Purpose-Camaraderie*. As one might expect, finance firms are not workplaces characterized by a strong sense of camaraderie among employees.

The third analysis considers changes in our scores of *Purpose-Clarity* and *Purpose-Camaraderie* during the 2008 financial crisis. We might expect a sharp decrease in these measures during the crisis for finance firms as the industry was in the spotlight for unethical behavior as well as strategic uncertainty. Accordingly, Appendix Figure A3 shows *Purpose-Clarity* declining the most between 2006 and 2009 for financial firms. Interestingly, while *Purpose-Camaraderie* does not decline for financial firms, it remains stable, while for all other sectors, it increases during this period. This shows that overall a stronger sense of camaraderie in the economy was developed as hardship was hitting many sectors, but such was not the case within finance firms that were at the center of the crisis. One caveat to this third test is that these results may also reflect the financial strain that these firms experienced during this time. However, in conjunction with the other two tests, they are supportive of our two purpose factors capturing the relevant employee beliefs.

Overall, the analysis above increases our confidence that our factors underpin different set of beliefs about workplaces and behave in predictable ways in relation to employee turnover, sector distribution and changes over time in the presence of an exogenous shock.

**Discussion**

Our analysis suggests that high *Purpose-Clarity* organizations exhibit higher financial performance in the future, particularly when these beliefs are held by those in the middle ranks of an organization.
These results lead to the following questions: why the combination of purpose and clarity and why the middle ranks?\footnote{Perhaps equally interesting are the null results in our study: specifically, the lack of association between performance and purpose alone, purpose and camaraderie and our two other factors: management quality and fairness. However, for space reasons, we limit our discussion above to explanation of our positive results.} Before we turn to this discussion, we note that our research design is necessarily distant from the precise mechanisms within firms that drive our results. While the statistical power of a large-sample analysis across multiple industries and years is the primary advantage of our study relative to field studies of specific organizations, this distance from mechanisms is an unavoidable challenge with this approach. Consequently, in this section we speculate on several plausible mechanisms and discuss which ones are most consistent with our results. We caution, however, that we cannot observe these mechanisms directly.

\textit{Why the Combination of Purpose and Clarity?}

Our measure of \textit{Purpose-Clarity} is aligned with a construct of “meaningful work”, work that is “purposeful and significant” (Pratt and Ashforth, 2003), in ways that purpose or clarity alone are not. Literature on meaningful work has focused both on “meaningfulness at work” and “meaningfulness in work” as two important components of meaning. Research on “meaningfulness at work” practices has demonstrated the importance of visionary leadership whereby leaders articulate a clear, inspiring vision linking it to shared values (Kirkpatrick and Locke 1996; Piccolo and Colquitt 2006) and shared meaning (Podolny, Khurana and Hill-Popper 2004), and path-goal leadership where leaders define the path and enable employees to get their work done (House 1997). Research on “meaningfulness in work” practices has focused on the importance of task significance and the fact that the task has positive impact on others (Fried and Ferris 1987; Michaelson, Pratt, Grant and Dunn 2014).

Our \textit{Purpose-Clarity} factor maps closely with these two constructs co-existing within firms. For example, our two key clarity measures “Management has a clear view of where the organization is going and how to get there” and “Management makes its expectations clear,” as well as “I am given...
the resources and equipment to do my job” relate closely to “meaningfulness at work” practices. Similarly, our highest loaded purpose questions in constructing the factor, “My work has special meaning: this is ‘not just a job’”, “When I look at what we accomplish, I feel a sense of pride;” and “I feel good about the ways we contribute to the community,” directly relate to “meaningfulness in work” practices. As such, a reasonable interpretation of *Purpose-Clarity* is that high scores correspond to firms in which both “meaningfulness at work” and “meaningfulness in work” beliefs are strongly held by employees.

*Why the Middle Ranks of the Organization?*

The association between *Purpose-Clarity* and firm performance is driven by middle management, with no indication that such an association operates at the senior management or lower employee levels. We view this result as especially interesting in the context of frequent arguments about the obsolete nature of middle management as a layer in the organization (Huy 2001). Middle managers could play an important role in both strategy development and implementation (Wooldridge *et al.* 2008). From a top-down perspective, middle managers and professional workers are responsible for implementing the strategy of the organization, designed by senior management, influencing decision making and behaviors among lower-level employees. From a bottom-up perspective, they gather insights and information from lower-level employees that they filter and communicate to senior management as an input into strategy development. As Rouleau and Balogun (2011: 954) describe, middle managers “are a special case since they lack the formal role authority held by their seniors to act strategically. They need to influence upwards as well as laterally and downwards.”

These responsibilities of employees in the middle ranks are hard to be quantified and specified in formal legal contracts. This stands in contrast to both senior managers and lower-level employees (Baker, Jensen and Murphy 1988). In the case of senior managers, it is customary to tie compensation to organizational level performance, through stock options and earnings-per-share targets, therefore
aligning incentives between shareholders and managers (Murphy, 1999). In the case of lower-level employees, the simpler nature of the tasks undertaken repeatedly, relative to those of managers and professionals, yield more readily available quantitative metrics of the actions taken, leading for some employees to hourly compensation contracts. For the middle ranks, responsibilities such as the faithful implementation of strategy, its communication to lower level employees, the communication of the information and ideas upwards are challenging to specify in a formal contract. In such cases, where actions cannot be readily observed and quantified, firms rely on relational contracts rather than on formal legally enforceable contracts (Gibbons and Henderson, 2012).

Middle managers and professional workers perceiving their work as meaningful (both in the “purpose” sense that their tasks are significant and in the “clarity” sense that they have the means to achieve them) may overcome this contracting issue that is exacerbated in these middle ranks.23

Alternative Explanations

There are several alternative explanations for some or all of the results in the paper. We consider some of these alternatives in this section.

One class of alternatives concern the stakeholder group through which purpose operates. For example, a separate literature has focused on customers, and proposed that purpose leads to higher customer satisfaction and loyalty when customers themselves care about the firm’s purpose (Du, Bhattacharya, and Sen 2007a). This would be especially true if the firm’s purpose is pro-social (Du, Bhattacharya, and Sen 2007b; Hainmueller and Hiscox 2012). However, in unreported analyses, we

23 One potential interpretation of this role of meaning in the middle ranks is that it enables firms more likely for a firm to build and sustain relational contracts that in turn enable the firm to achieve superior financial performance. Past research has shown that employees that perceive the work as more meaningful are more likely to cooperate and trust co-workers exhibiting organizational citizenship behavior (Piccolo and Colquitt 2006; Purvanova et al. 2006). Field studies, in a few organizations, provide some evidence that these relational contracts do influence employee behavior. In one recent example, Blader et al. (2015) find evidence that changes in the relational contract between the firm and workers is associated with changes in worker productivity. Helper and Henderson (2014) ascribe the decline of General Motors partly to their inability to develop effective relational contracts, with a focus on middle managers, as in our paper.
find that our results do not differ significantly across consumer-oriented and business-oriented companies. Given that the customer loyalty and satisfaction effect should be stronger in consumer segments of the economy, we consider this evidence that this mechanism is unlikely to explain the relation between purpose and performance. Moreover, it is not clear why workplace clarity is an important factor in this mechanism, nor the mid-level employee result.

Another literature focuses on the investor community and suggests that purpose could be a mechanism to mitigate short-term pressures on business, thereby reducing managerial myopia. Prior studies have documented the sources of short-termism, such as capital market pressures and managerial monetary incentives (Brochet, Loumioti and Serafeim 2015), as well as the negative effects of short-termism on strategic orientation (Connelly et al. 2010) and future shareholder value (e.g., Bushee 1998; Bhojraj et al. 2009).

Corporate purpose could mitigate such short-term pressures by signaling to investors the type of organization and, as a result, attracting a more long-term oriented investor base. However, if short-termism were the mechanism, one would expect that the relation between purpose and performance be driven by senior executives, who are the actors that make the myopic decisions criticized in the literature (e.g. cutting research and development and other long-term investments), which is not what we find.

Another set of alternatives suggest that Purpose-Clarity is a proxy for other organizational characteristics. For example, high performance incentive workplaces could manifest as high Purpose-Clarity workplaces because of the financial incentives provided to the employees. While one of the four purpose questions (“I feel good about the ways we contribute to the community”) does not fit with this performance incentive interpretation, the other three questions could be consistent with it.

Prior studies have not found a clear relation between compensation and meaningful work. While one might expect a positive relation between the two, we have some evidence suggesting the
opposite in some cases (Bunderson and Thompson 2009; Henderson and Van den Steen 2015), as well as research where workers either give up high compensation in return for meaning (Stern, 2004; Agarwal and Ohyama 2013; Burbano, 2016) or where compensation crowds out inherent meaning in work (Gneezy, Meier, and Rey-Biel, 2011).

Given the lack of consensus in the literature, we make the following observations from our own analyses. First, this alternative is not supported by the fact that our results are driven by mid-level employees. Under a high-performance incentive workplace scenario our expectation would be to find this relation primarily with salespeople or even with senior management. Both groups tend to have much more high-powered incentives. Next, we also conduct a series of tests to better understand whether compensation is likely to be driving Purpose-Clarity. We examine the correlation between Purpose-Clarity and average levels of variable compensation and salary, and find no evidence of a correlation. We also examine Purpose-Clarity scores for lower level employees where the performance incentives tend to be less high-powered to mute the importance of financial incentives. We compare Purpose-Clarity levels for lower level employees across sectors that have naturally a higher level of purpose (i.e. healthcare) versus sectors that have naturally a lower level of purpose (i.e. consumer goods). We find significantly higher levels of Purpose-Clarity among lower level employees in healthcare. Last, we examine for nonfinancial firms the change in Purpose-Clarity for salespeople during the financial crisis. If Purpose-Clarity is driven by financial incentives then we would expect the Purpose-Clarity measure to decline sharply as for salespeople incentives are directly tied to sales. We found little change in Purpose-Clarity for salespeople during the financial crisis. In short, we find little empirical evidence that incentive compensation is driving our results.

There is a related alternative, independent of incentive pay. One could make the argument that we need not appeal to a definition of purpose as beyond profit-maximization, but instead that purpose may comprise a singular focus on profit-maximization itself. In this case, employees may feel a strong
sense of purpose when their effort contributes to those firm profits, even without a financial incentive. We note that, while possible, this argumentation would be inconsistent with the spirit of agency theory where exactly the opposite is assumed to be the behavior of an individual (Jensen and Meckling 1976). Incentive schemes are needed to align incentives because agents are not motivated in their own to make other people rich. Therefore, while we cannot definitively rule out this possibility, we believe this interpretation is unlikely.

Another alternative relates to the literature on the role of management practices in determining firm performance (e.g., Bloom and Van Reenen 2007). This research shows performance differences across firms as a function of management practices, such as setting ambitious and clearly communicated targets, tying pay to performance, and hiring and promoting people based on performance considerations. In contrast to our study that considers employee beliefs and, as a result, “soft” organizational characteristics, these management practices are “hard” in the sense of being policies that are objectively adopted or not by an organization. In this alternative, our measure of Purpose-Clarity is correlated with the (un-measured) degree to which management practices are adopted within the organization.

This is a plausible alternative that we cannot definitively rule out, given the low degree of overlap between firms within our dataset and firms with management practice information. However, it is not clear how Purpose-Clarity and management practices might be related, or their causal direction. It could be that the beliefs in our study drive the adoption of the hard management practices or, alternately, that the beliefs are a manifestation of the hard management practices. If the latter is the case, then our results should be interpreted with caution because of the threat of omitted variable

24 The overlap between our firms and the WMS dataset is too small to be meaningful. The WMS focuses on medium-sized firms globally – a small sample exists in the US, which does not cover the same size firms as ours. The other option for the merge was MOPS data, the census data covering management practices in US establishment (not firms) and discussed in Bloom, Sandun and Van Reenen (2012), but that plant-level data is limited to manufacturing firms, so the overlap is also extremely small (we estimated less than 30 firms in our discussions with the census).
bias. Conversely, if the former is the case, then our results suggest a caveat to the studies of management practices, that underlying “soft” factors are an important omitted factor, a conclusion corroborated by Blader, Gartenberg and Prat (2017). Moreover, we note that the two are unlikely to be fully interchangeable. If our association was driven mainly by these hard practices, then our Factor 1 (Management, which comprises questions on driven by performance tracking and review, rewarding performance, and other style questions most closely related to management practices) would plausibly be the factor most highly correlated with performance. All our regressions control for the Management factor, and in none of our specifications is this factor statistically or economically significant.25

There is a final question whether survey response bias is driving our results. In this case, employees view a successful application to the “Great Places to Work” list as enhancing their own human capital value and hence inflate their survey response to achieve this result. To explain our results, this bias would need to be higher for firms with better performance, only among middle management, and only along the dimension of Purpose-Clarity. Given that firms are not judged on Purpose-Clarity but on the full survey score, as well as these other requirements, we believe this bias is unlikely to be driving our results.

Conclusion

We view our paper as a first attempt to provide empirical evidence on the value relevance of corporate purpose. We develop a new measurement technology that could help us systematically study corporate purpose and relate it to other firm characteristics. We find that an overall measure of purpose is not related to financial performance. However, we uncover that high purpose firms come in different

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25 A potential explanation for this finding is that the sample that we examine is very different from the one that Bloom and Van Reenen (2007) examine. We concentrate on much larger firms and size is well-documented to be associated with more of these hard management practices. Therefore, a lower variation in hard management practices among firms might lead to smaller performance differentials.
types. Our data reveal two types: high camaraderie and high clarity workplaces. We find that the latter exhibits superior future performance. This result cannot be explained by time-invariant firm-specific characteristics or by observable time-varying firm-specific characteristics. Moreover, it is unlikely to be caused simply by reverse causality as our measure is able to predict future stock returns. Interestingly, we find that the significant association between high purpose high clarity and financial performance is driven by the middle ranks of the organization.

Our study leaves many questions unanswered and opens up significant opportunities for future research. What are the determinants of high purpose/clarity, and do those differ across job levels? How is purpose/clarity built and diffused inside an organization? How is purpose/clarity related to building relational contracts, enabling decentralization, or increasing employee engagement and productivity? Shedding light on the mechanisms would be an important step forward, and begin to address Bartlett and Ghoshal’s call for placing studies of purpose into the center of strategy research.

References


Levitt, Arthur “Renewing the covenant with investors” Speech by Chairman Arthur Levitt, U.S. Securities and Exchange Commission at New York University’s Center for Law and Business, 2000


Figure 1: Purpose by Job Level

Figure 2: Purpose and Survey Factors and Firm Performance
Table 1: Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financial information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage ratio</td>
<td>0.62</td>
<td>0.31</td>
<td>0.09</td>
<td>4.07</td>
</tr>
<tr>
<td>Total assets</td>
<td>50,996</td>
<td>193,772</td>
<td>30</td>
<td>3,221,972</td>
</tr>
<tr>
<td>Return on assets</td>
<td>0.10</td>
<td>0.10</td>
<td>-0.52</td>
<td>0.58</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>1.96</td>
<td>1.22</td>
<td>0.74</td>
<td>8.40</td>
</tr>
<tr>
<td><strong>Survey information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># responses</td>
<td>498</td>
<td>3,026</td>
<td>43</td>
<td>56,747</td>
</tr>
<tr>
<td>Purpose index</td>
<td>4.31</td>
<td>0.19</td>
<td>3.40</td>
<td>4.79</td>
</tr>
<tr>
<td>Firm age</td>
<td>59</td>
<td>46</td>
<td>2</td>
<td>228</td>
</tr>
<tr>
<td>Full time employees</td>
<td>14,915</td>
<td>24,000</td>
<td>584</td>
<td>285,609</td>
</tr>
</tbody>
</table>

This is a physically safe place to work... 4.66 0.19 3.66 4.96

The table presents summary statistics for key variables. Leverage ratio is total debt over total assets. Firm age is the number of years since incorporation. Return on Assets is EBIT over average total assets. Tobin’s Q is total assets plus market value of equity minus book value of equity at calendar year end over total assets.

Table 2: Purpose and Firm Performance

<table>
<thead>
<tr>
<th>Dependent variable:</th>
<th>Return on Assets</th>
<th>Log(Tobin’s Q)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Purpose</td>
<td>0.0073</td>
<td>-0.0284</td>
</tr>
<tr>
<td>This is a physically safe place to work</td>
<td>0.0775**</td>
<td>0.0115</td>
</tr>
<tr>
<td>Lagged Return on Assets</td>
<td></td>
<td>0.8308***</td>
</tr>
<tr>
<td>Lagged Log(Tobin's Q)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.1973</td>
<td>0.0219</td>
</tr>
<tr>
<td>Year FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Industry FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Controls</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>917</td>
<td>917</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.217</td>
<td>0.227</td>
</tr>
</tbody>
</table>

OLS regressions. Purpose is the equally-weighted average of four questions related to purpose from the GPTW Institute survey. This is a physically safe place to work is a question from the GPTW Institute survey. Return on Assets is EBIT over average total assets. Tobin’s Q is total assets plus market value of equity minus book value of equity at calendar year end over total assets. Standard errors are clustered at the firm-level and robust to heteroskedasticity. ***, **, * signify statistical significance at the 1, 5, and 10% level respectively based on two-tailed tests.
### Table 3: Survey Factors and Firm Performance

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Return on Assets</th>
<th>Log(Tobin's Q)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Factor 4 (Purpose-Clarity)</td>
<td>0.0861***</td>
<td>0.0805**</td>
</tr>
<tr>
<td></td>
<td>(0.0282)</td>
<td>(0.0332)</td>
</tr>
<tr>
<td>Factor 3 (Fairness)</td>
<td>-0.0408</td>
<td>-0.0168</td>
</tr>
<tr>
<td></td>
<td>(0.0389)</td>
<td>(0.0177)</td>
</tr>
<tr>
<td>Factor 2 (Purpose-Camaraderie)</td>
<td>-0.0339</td>
<td>-0.0309</td>
</tr>
<tr>
<td></td>
<td>(0.0251)</td>
<td>(0.0261)</td>
</tr>
<tr>
<td>Factor 1 (Management)</td>
<td>-0.0201</td>
<td>-0.0087</td>
</tr>
<tr>
<td></td>
<td>(0.0267)</td>
<td>(0.0100)</td>
</tr>
<tr>
<td>This is a physically safe place to work</td>
<td>0.0612**</td>
<td>0.0964**</td>
</tr>
<tr>
<td></td>
<td>(0.0310)</td>
<td>(0.0421)</td>
</tr>
<tr>
<td>Lagged Return on Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Log(Tobin's Q)</td>
<td>0.0277</td>
<td>-0.1924</td>
</tr>
<tr>
<td></td>
<td>(0.1528)</td>
<td>(0.1879)</td>
</tr>
<tr>
<td>Year FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Industry FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Controls</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>917</td>
<td>917</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.245</td>
<td>0.246</td>
</tr>
</tbody>
</table>

OLS regressions. Factors 1-4 are the outcomes of the factor analysis across 53 questions in the GPTW data. Leverage ratio is total debt over total assets. Firm age is the number of years since incorporation. *This is a physically safe place to work* is a question from the GPTW Institute survey. Return on Assets is EBIT over average total assets. Tobin's Q is total assets plus market value of equity minus book value of equity at calendar year end over total assets. Standard errors are clustered at the firm-level and robust to heteroskedasticity. ***, **, * signify statistical significance at the 1, 5, and 10% level respectively based on two-tailed tests, after correcting for multiple-hypothesis test bias, via Benjamini-Krieger-Yekutieli (2006) (BKY). See Appendix Table A6 for the p-values, amended BKY significance thresholds, and Wald test statistics for equality between the purpose measures.
### Table 4: Survey Factors and Firm Performance, Balanced Panel and Firm Fixed Effects

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Return on Assets</th>
<th>Log(Tobin's Q)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Factor 4 (Purpose-Clarity)</td>
<td>0.0988** (0.0404)</td>
<td>0.1103** (0.0522)</td>
</tr>
<tr>
<td>Factor 3 (Fairness)</td>
<td>0.0630 (0.0913)</td>
<td>0.0819 (0.0935)</td>
</tr>
<tr>
<td>Factor 2 (Purpose-Camaraderie)</td>
<td>0.0126 (0.0291)</td>
<td>0.0152 (0.0333)</td>
</tr>
<tr>
<td>Factor 1 (Management)</td>
<td>0.0157 (0.0467)</td>
<td>0.0112 (0.0483)</td>
</tr>
<tr>
<td>This is a physically safe place to work</td>
<td>-0.0843 (0.1101)</td>
<td>-0.1500 (0.1623)</td>
</tr>
<tr>
<td>Lagged Return on Assets</td>
<td>0.1491** (0.1101)</td>
<td>0.1491** (0.1623)</td>
</tr>
<tr>
<td>Lagged Log(Tobin's Q)</td>
<td>0.1124 (0.1039)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.5804 (0.6274)</td>
<td>0.8759 (0.8411)</td>
</tr>
<tr>
<td>Year FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Firm FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Controls</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.069</td>
<td>0.064</td>
</tr>
</tbody>
</table>

Fixed effects regressions. Sample includes firms that appear in all 6 years of the survey in our sample. Factors 1-4 are the outcomes of the factor analysis across 53 questions in the GPTW data. This is a physically safe place to work is a question from the GPTW Institute survey. Return on Assets is EBIT over average total assets. Tobin’s Q is total assets plus market value of equity minus book value of equity at calendar year end over total assets. Standard errors are clustered at the firm-level and robust to heteroskedasticity. ***, **, * signify statistical significance at the 1, 5, and 10% level respectively based on two-tailed tests, after correcting for multiple-hypothesis test bias, via Benjamini-Krieger-Yekutieli (2006) (BKY). See Appendix Table A6 for the p-values and amended BKY significance thresholds, and Wald test statistics for equality between the purpose measures.
Table 5: Survey Factors by Job Level and Firm Performance

<table>
<thead>
<tr>
<th>Factor 4 (Purpose-Clarity)</th>
<th>Return on Assets</th>
<th>Log(Tobin's Q)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Sales</td>
<td>-0.0157</td>
<td>-0.0161</td>
</tr>
<tr>
<td>(0.0093)</td>
<td>(0.0091)</td>
<td>(0.0050)</td>
</tr>
<tr>
<td>Hourly Employees</td>
<td>-0.0177</td>
<td>-0.0227</td>
</tr>
<tr>
<td>(0.0231)</td>
<td>(0.0229)</td>
<td>(0.0127)</td>
</tr>
<tr>
<td>Middle Managers</td>
<td>0.0491**</td>
<td>0.0455*</td>
</tr>
<tr>
<td>(0.0215)</td>
<td>(0.0219)</td>
<td>(0.0105)</td>
</tr>
<tr>
<td>Professionals</td>
<td>0.0656***</td>
<td>0.0624***</td>
</tr>
<tr>
<td>(0.0184)</td>
<td>(0.0189)</td>
<td>(0.0106)</td>
</tr>
<tr>
<td>Executives</td>
<td>0.0151</td>
<td>0.0154</td>
</tr>
<tr>
<td>(0.0119)</td>
<td>(0.0119)</td>
<td>(0.0072)</td>
</tr>
<tr>
<td>Factor 3 (Fairness)</td>
<td>0.0416</td>
<td>-0.0128</td>
</tr>
<tr>
<td></td>
<td>(0.0362)</td>
<td>(0.0169)</td>
</tr>
<tr>
<td>Factor 2 (Purpose-Camaraderie)</td>
<td>-0.0126</td>
<td>-0.0134</td>
</tr>
<tr>
<td>(0.0239)</td>
<td>(0.0245)</td>
<td>(0.0096)</td>
</tr>
<tr>
<td>Factor 1 (Management)</td>
<td>-0.0032</td>
<td>-0.0077</td>
</tr>
<tr>
<td>(0.0253)</td>
<td>(0.0108)</td>
<td></td>
</tr>
<tr>
<td>This is a physically safe place to work</td>
<td>0.0361</td>
<td>0.0642</td>
</tr>
<tr>
<td>(0.0326)</td>
<td>(0.0407)</td>
<td>(0.0195)</td>
</tr>
<tr>
<td>Lagged Return on Assets</td>
<td>0.8147***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0351)</td>
<td></td>
</tr>
<tr>
<td>Lagged Log(Tobin's Q)</td>
<td>0.8193***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0240)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.1082</td>
<td>-0.0276</td>
</tr>
<tr>
<td>(0.1692)</td>
<td>(0.1919)</td>
<td>(0.0900)</td>
</tr>
<tr>
<td>Year FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Industry FE</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Controls</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>917</td>
<td>917</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.290</td>
<td>0.290</td>
</tr>
</tbody>
</table>

OLS regressions. Factors 1-4 are the outcomes of the factor analysis across 53 questions in the GPTW data. Leverage ratio is total debt over total assets. Firm age is the number of years since incorporation. This is a physically safe place to work is a question from the GPTW Institute survey. Return on Assets is EBIT over average total assets. Tobin's Q is total assets plus market value of equity minus book value of equity at calendar year end over total assets. Standard errors are clustered at the firm-level and robust to heteroskedasticity. ***,**,* signify statistical significance at the 1, 5, and 10% level respectively based on two-tailed tests, after correcting for multiple-hypothesis test bias, via Benjamini-Krieger-Yekutieli (2006) (BKY). See Appendix Table A6 for the p-values and amended BKY significance thresholds, and Wald test statistics for equality between the purpose measures.
Table 6: Purpose and Future Stock Returns

<table>
<thead>
<tr>
<th>Portfolio definition:</th>
<th>High Purpose-Clarity (1)</th>
<th>High Purpose-Clarity: Middle Managers (2)</th>
<th>High Purpose-Clarity: Prof/Tech (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>0.0056*</td>
<td>0.0061**</td>
<td>0.0048*</td>
</tr>
<tr>
<td></td>
<td>(0.0029)</td>
<td>(0.0029)</td>
<td>(0.0026)</td>
</tr>
<tr>
<td>Market</td>
<td>0.8756****</td>
<td>0.8406***</td>
<td>0.8288***</td>
</tr>
<tr>
<td></td>
<td>(0.1478)</td>
<td>(0.1448)</td>
<td>(0.1273)</td>
</tr>
<tr>
<td>SMB</td>
<td>0.4492***</td>
<td>0.4543***</td>
<td>0.5007***</td>
</tr>
<tr>
<td></td>
<td>(0.1476)</td>
<td>(0.1447)</td>
<td>(0.1237)</td>
</tr>
<tr>
<td>HML</td>
<td>0.1657</td>
<td>0.1405</td>
<td>0.1787*</td>
</tr>
<tr>
<td></td>
<td>(0.1324)</td>
<td>(0.1378)</td>
<td>(0.1016)</td>
</tr>
<tr>
<td>UMD</td>
<td>-0.3267****</td>
<td>-0.3444***</td>
<td>-0.3135***</td>
</tr>
<tr>
<td></td>
<td>(0.1074)</td>
<td>(0.1058)</td>
<td>(0.0902)</td>
</tr>
<tr>
<td>Observations</td>
<td>72</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.854</td>
<td>0.851</td>
<td>0.876</td>
</tr>
</tbody>
</table>

Table shows estimates from calendar time portfolios of an investment strategy that buys the stocks of firms scored each year at the top quintile of Purpose-Clarity and holds the portfolio for one year at which point it is updated with the new ranking of firms. The portfolios are formed on the 1st of January. Each month the returns of each firm in the portfolio are equally-weighted and aggregated thereby constructing a portfolio return. The time-series of 72 monthly stock returns is then regressed on risk premiums for the market, size (SMB), value (HML), and momentum (UMD) factors (Fama and French 1993; Carhart 1997). Column (1) uses the overall Purpose-Clarity measure. Columns (2) and (3) use the Purpose-Clarity measure for middle managers and professional stuff respectively. ***, **, * signify statistical significant at the 1, 5, and 10% level respectively based on two-tailed tests.