

# **An Examination of Individual Customers' Use of Earnings Benchmarks**

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## **Abstract**

While an extensive body of prior empirical research documents that a firm's ability to meet relevant earnings benchmarks is important to equity and debt investors, there is little evidence on whether meeting earnings benchmarks is important to non-investor stakeholders as theory suggests. This study examines this issue, focusing on customers. Using both levels and changes analyses on a proprietary dataset of customers' perception scores, we find that individual customers' perceptions are positively associated with a firm's ability to beat the profit benchmark. This finding suggests that, just as creditors use the profit benchmark to infer a firm's ability to meet its long-term financial obligations, customers rely on the profit benchmark to infer a firm's ability to fulfill its implied future obligations on products or services. Consistent with this interpretation, the positive association between the profit benchmark and customer perceptions is heightened for firms in durable goods industries where such obligations are most significant. Unlike investors, customers significantly downgrade their perceptions once a firm exceeds the profit benchmark by a wide margin, suggesting that customers may question a firm's business practices when its profits appear to be excessive. We further find that beating the profit benchmark is more important to customer perceptions of firms in the introduction or decline life cycle stages and of firms with high default risk. On the other hand, beating the profit benchmark is less important to customers when firms exhibit superior non-financial performance based on widely publicized ratings of product quality, corporate reputation, and corporate social responsibility. These findings highlight the contextual nature of customers' reliance on the profit benchmark. This study provides the first empirical evidence on the theoretical prediction that non-investor stakeholders rely on relevant earnings benchmarks to evaluate firms.

**Keywords:** Non-investors Stakeholders; Individual Customers; Customers' Perceptions; Implicit Claims; Earnings Benchmarks; The Profit Benchmark; Non-financial Performance

## **I. Introduction**

An extensive body of prior empirical research documents that a firm's ability to meet relevant earnings benchmarks is important to equity and debt investors' assessments, as reflected in stock returns, credit ratings, and bond yields (Barth et al., 1999; Bartov et al., 2002; Lopez and Rees, 2002; Brown and Caylor, 2005; Jiang, 2008). Economic theories and comprehensive surveys on CFOs and financial analysts suggest that the importance of beating earnings benchmarks extends beyond investors to a broader group of stakeholders (Cornell and Shapiro, 1987; Bowen et al., 1995; Burgstahler and Dichev, 1997; Degeorge et al., 1999; Matsumoto, 2002; Graham et al., 2005, De Jong et al., 2014). However, research to date has not examined whether non-investor stakeholders such as customers also consider a firm's ability to meet earnings benchmarks in forming and revising their assessments of the firm. We explore this previously unexamined theoretical and practical possibility in this study. Specifically, we examine the association between a firm's ability to meet relevant earnings benchmarks and customers' perceptions of the firm, as captured in perception scores generated from surveys of U.S. individual customers.

Given the economic significance of customers' contributions<sup>1</sup> to the firm, it is crucial to understand whether and how they use accounting information. Customers decide whether to buy a company's products or services and at what price based on their assessment of the firm's ability to fulfill its implied commitments (Bowen et al., 1995; Graham et al., 2005; Keh and Xie, 2009; De Jong et al., 2014). The conventional view of both academics and managers is that customers look to a firm's accounting performance generally and its ability to meet earnings thresholds

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<sup>1</sup> Freeman and Reed (1983) argue that, without the support of stakeholders such as customers, employees, and suppliers, "the organization would cease to exist" (p.89). "What is Customer? ... A Customer is the most important person ever in this office-in person, by mail, or by telephone. A Customer is not an outsider to our business-she is a part of it. A Customer is not dependent on us-we are dependent on her" (Vaivio, 1999, p.689). When determining a firm's valuation, investors need to examine a firm's treatment of customers and employees, the two most important stakeholder groups (Groening et al., 2016, p.61-62).

specifically when making this assessment (Titman, 1984; Bowen et al., 1995; Degeorge et al., 1999; Burgstahler and Dichev, 1997; Matsumoto, 2002; Habib and Hansen, 2008).<sup>2</sup> Although many hold this belief, there is little empirical evidence for its validity.

Although it is reasonable to assume that the importance of earnings benchmarks to investors also extends to non-investor stakeholders such as customers, it is not obvious that prior empirical findings that show the importance of earnings benchmarks to investors can be generalized to customers. Earnings is designed specifically to facilitate the cash flow forecasts and risk assessments relevant to valuing equity and debt claims. However, earnings does not directly measure a firm's performance in areas of specific concern to customers such as product quality, price fairness, and corporate social responsibility. Thus, customers may seek other more direct measures of performance on these nonfinancial dimensions. On the other hand, customers face high information search and processing costs. Because earnings is a convenient summary performance measure, customers may avoid these information costs by using earnings benchmarks as heuristics to infer a firm's broader performance (Burgstahler and Dichev, 1997; Degeorge et al., 1999; Matsumoto, 2002; Habib and Hansen, 2008). Given these contrasting possibilities, it is essential to test whether prior findings of investors' use of earnings benchmarks extend to non-investor stakeholders, especially customers.

It is important to understand not only whether customers use earnings benchmarks but, if so, which earnings benchmarks they prioritize and how they use earnings benchmarks similarly to or different from investors. Prior research suggests that the earnings increase benchmark and analyst forecast benchmark are most salient benchmarks for shareholders because of their equity

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<sup>2</sup>Survey evidence by Graham et al. (2005) and De Jong et al. (2014) reveal that about 58% of CFOs and 41.2% of financial analysts believe that the assurance of a stable business to stakeholders like customers and suppliers is an important incentive for firms to meet earnings benchmarks.

incentives, and the profit benchmark is the most crucial benchmark for creditors due to their fixed claims against the firm. (Bartov et al., 2002; Kasznik and McNichols, 2002; Lopez and Rees, 2002; Brown and Caylor, 2005; Jiang, 2008). Customer claims represent a firm's explicit and implicit warranty obligations, which are similar to debt claims (Maksimovic and Titman, 1991; Bowen et al., 1995; Jiang, 2008). Given this similarity, customers may, like creditors, prioritize the profit benchmark. At the same time, variation in the nature of customer claims may lead to cross-sectional differences in the importance of the profit benchmark to customers.

We obtain proprietary data of customers' perception scores of firms from Reputation Institute, a world's leading research and advisory firm for reputation, which "conducts the US Customer RepTrak<sup>®</sup> [survey] annually to measure the reputation of the most highly regarded customer companies in the United States" (The 2015 U.S. Customer RepTrak<sup>®</sup>). Perception scores can be used to gauge whether customers view the firm favorably in the areas most relevant to them, such as products/services, innovation, citizenship, governance. Much like stock returns (credit ratings) in the case of equity (debt) investors, information on customers' perceptions of the firm allows us to examine the importance of earnings benchmarks to customers, a key non-investor stakeholder group.

We create separate indicator variables based on whether a firm meets or exceeds the following thresholds: the profit benchmark, the earnings increase benchmark, and the analyst forecast benchmark. For each benchmark, we regress the customers' perception scores on the earnings benchmark indicator, the corresponding earnings controls, and other determinants of customers' perceptions, using both level and change (univariate and multivariate) regression analyses. To further explore the underlying mechanisms that drive customers' interest in earnings

benchmarks, we conduct the cross-sectional variation tests on the importance of the relevant earnings benchmark to customers.

We find that customers' perceptions are positively associated with a firm's ability to meet the profit benchmark. This finding suggests that, just as creditors use the profit benchmark to infer a firm's ability to meet its long-term financial obligations, customers rely on the profit benchmark to infer a firm's ability to fulfill its implied future obligations on products or services. Consistent with this interpretation, the positive association between the profit benchmark and customer perceptions is heightened for firms in durable goods industries where such obligations are most significant. Customers significantly downgrade their perceptions once a firm exceeds the profit benchmark by a wide margin, suggesting that customers may question a firm's business practices when its profits appear to be excessive. Thus, unlike creditors, customers' reliance on the profit benchmark is conditional on their concerns about the firm's performance on nonfinancial dimensions.

In additional tests of cross-sectional variation, we further find that beating the profit benchmark is more important to customers' perceptions of firms in the introduction or decline life cycle stages and of firms with high default risk. On the other hand, beating the profit benchmark is less important to customers when firms exhibit superior non-financial performance based on widely publicized ratings of product quality, corporate reputation, and corporate social responsibility. This latter finding suggests that customers rely less on the profit benchmark when there is readily available public information about the firm's performance on the nonfinancial dimensions customers care about.

This paper makes a number of contributions. First, it provides empirical evidence on the previously unexamined theoretical and practical possibility that non-investor stakeholders –

specifically, customers - use earnings benchmarks as focal points in evaluating the status of their claims.

Second, this study adds to our understanding on customers' unique use of earnings benchmarks. We show that like debtholders, customers prioritize the profit benchmark based on their debt-like claims. However, different from investors, customers' use of earnings benchmarks varies depending on the nature of their claims (e.g. whether the goods are durable), firm characteristics and on indicators of a firm's performance on nonfinancial dimensions important to consumers.

Finally, the findings of this paper highlight broader uses of accounting information than previously documented, which has significant implications for accounting research. In particular, this study demonstrates that customers' use of earnings information (particularly the profit benchmark) provides another incentive for managers to ensure that their firms beat relevant earnings benchmarks. This evidence is especially important for managers in firms where customer confidence is a critical consideration, as it highlights other key users of accounting information to which a firm must be attentive when formulating accounting policies.

The remainder of this study proceeds as follows. Section II discusses related theory, relevant literature and develops hypotheses. Section III outlines the research design. Section IV discusses the sample and descriptive statistics. Section V describes the empirical results. Section VI discusses the robustness check. Section VII concludes.

## **II. Theory and Prior Research**

### *Firm Stakeholders*

A firm's stakeholders, who include equity and debt investors, employees, customers, and suppliers, provide various forms of necessary support to the firm (Freeman and Reed, 1983; Freeman, 1984; Cornell and Shapiro 1987; Clarkson, 1995). Each type of stakeholder assesses the status of its monetary and nonmonetary claims on an ongoing basis and decides, based on this assessment, whether to continue its support of the company and on what terms. Specifically, equity investors decide their willingness to provide additional equity capital and the cost of that capital based on the expected amount and riskiness of future cash flows. Debt investors decide their willingness to extend additional credit and at what interest rate based on their assessment of the firm's ability to satisfy its obligations. Non-investor stakeholders' claims include monetary components that are similar in nature to debt and equity claims as well as nonmonetary components that represent their more qualitative and unique expectations of the company.

In this study, we focus on one key non-investor stakeholder group, individual customers. Customers decide whether to continue buying a company's products and at what price based largely on their assessment of the firm's ability to fulfill its implied commitments (Bowen et al., 1995, p.256). Like creditors who need to assure that a firm will survive and satisfy its ongoing financial obligation, customers assess a firm's reputation to honor its implicit claims over the life of the products or services (Bowen et al., 1995, Jiang, 2008).

### *Customers (Non-Investor Stakeholders) Use of Earnings-Based Heuristics*

As discussed above, stakeholders determine the amount of support they provide to a company based on their assessments of the current status of their claims (i.e. a company's ability to meet its commitments). Prior theoretical and empirical research suggests that various groups of

stakeholders will use earnings information as part of their assessments of firms. The large amount of empirical evidence that stock and bond market returns respond to earnings news highlights the importance of earnings to debt and equity investors (Skinner and Sloan, 2002; Cheng and Warfield, 2005; Graham et al., 2005; Jiang, 2008). Although there is relatively scant empirical evidence that earnings is important to non-investor stakeholders, such as customers, prior studies theorize that earnings is likely to be important to them as well (Cornell and Shapiro, 1987; Bowen et al., 1995; Burgstahler and Dichev, 1997; Degeorge et al., 1999; Graham et al., 2005). Matsumoto (2002) summarizes these theoretical arguments, stating that “[a] firm's other stakeholders—customers, employees, suppliers, and so forth—are also customers of its financial information, [and] firm's financial image influences stakeholders' assessments of its ability to fulfill its implied commitments, leading to more favorable terms of trade with these stakeholders.” (p.491)

Burgstahler and Dichev (1997) and Degeorge, Patel, and Zeckhauser (1999) point out that stakeholders, particularly non-investor stakeholders such as customers rely on heuristics to process earnings information to cope with the cost of “retriev(ing) and process(ing) detailed information about earnings for all the firms with which they transact (explicitly and implicitly)” (Burgstahler and Dichev, 1997, p.123). Specifically, Burgstahler and Dichev (1997) and Degeorge et al. (1999) theorize that stakeholders base their assessments on simple decision rules related to whether firms beat relevant earnings benchmarks such as profit, earnings growth, and analyst forecasts. Degeorge et al. (1999) additionally theorize that non-investor stakeholders like customers focus on earnings benchmarks due to a “threshold mentality,” which reflects the pervasive tendency of humans to mentally categorize what they observe.

Empirical evidence on stakeholders' use of earnings-based heuristics has focused mainly on investors since they represent the primary intended audience for accounting information. In



addition, the ready availability of stock returns and bond ratings facilitate the study of investors. Specifically, prior studies show that the stock market rewards firms for beating earnings benchmarks and that the analyst forecast benchmark is the most important to shareholders (Bartov et al., 2002; Brown and Caylor, 2005; Kasznik and McNichols, 2002; Lopez and Rees, 2002). Jiang (2008) provides additional evidence that credit ratings and bond yields are more favorable for firms that meet earnings benchmarks and that the profit benchmark appears to be most vital to debtholders.

Interestingly, prior empirical research has not explored whether non-investor stakeholders such as customers also focus on earnings benchmarks even though Burgstahler and Dichev (1997) and Degeorge et al. (1999) raise this theoretical possibility. Practically, the idea that earnings benchmarks are important to non-investor stakeholders is widely held by managers and financial analysts. Graham et al. (2005) and De Jong et al. (2014) document that 58% of surveyed CEOs and 41.2% of financial analysts believe that beating earnings benchmarks is important to assure customers and suppliers that the firm's business is stable. Anecdotally, one customer commented on the news of Tesla's fourth quarterly loss in 2017 that "To clarify, I want Tesla to succeed. I want to be able to buy a Tesla in 10 years and not worry about whether or not the company will still be around at the end of my warranty period" (Geuss, 2018). This comment indicates that customers in the real world are very concerned when a firm loses money and want to ensure that the firm will survive long enough to honor its implicit claims related to firm's products and services.

As mentioned previously, with similar debt-like claims as creditors, customers are primarily concerned about the firm's long-term survival and its reputation to honor its future implicit claims. Therefore, just as Jiang (2008) finds that the profit benchmark is most salient to creditors, we expect customers, like creditors, will prioritize the profit benchmark to form their

perceptions when assessing a firm's stability and its commitments to implied obligations related to products or services. Therefore, we propose the following main hypothesis in the alternative form.

***H1: Ceteris paribus, beating earnings benchmarks (i.e. the profit benchmark) is positively associated with customers' perceptions of firms.***

#### *Variation in the Importance of Earnings Benchmarks to Individual Customers*

As discussed above, customer claims are similar to creditor claims, which leads us to expect that, like creditors, customers prioritize the profit benchmark. However, customers have other nonfinancial expectations of the firm that creditors do not have that may lead to differences in how customers and creditors use the earnings benchmark. Moreover, there is substantial variation in the nature of customer claims, which could lead to variation in the importance of earnings benchmarks to customers. We explore these differences below.

Customers expect the purchase price to be fair and the firm's profits to be reasonable. When customers believe that a firm has increased prices of products/services "to take advantage of surplus demand or newly obtained monopoly power" (Bolton et al., 2003, p.474) without a corresponding increase in cost, the high estimate of a firm's profit will make customers feel exploited and increase their perceptions of fair unfairness (Kahneman et al., 1986 a,b; Urbany et al., 1989; Frey and Pommerehne, 1993; Piron and Fernandez, 1995; Xia et al., 2004). Thus, customers usually have adverse perceptions of the firm that pursues obscenely high profits. Therefore, we expect customers to downgrade their perceptions when the firm pursues exceedingly high profits after beating the profit benchmark. Therefore, we propose the following hypothesis in the alternative form.

***H2: After beating earnings benchmarks, the magnitude of earnings is negatively associated with customers' perceptions of firms.***

The life cycle of a firm also influences customers' perceptions of the firm. When firms are at the life cycle stages of introduction or decline, firms normally suffer from the lack of established customers, lack of knowledge about revenues and costs, or declining growth, which may lead to concerns about the firm's viability as a going concern (Dickinson, 2011). Customers are therefore more cautious to interact with firms in those life cycle stages than other stage such as growth. Therefore, we propose the following hypothesis in the alternative form.

***H3: Beating earnings benchmarks is more positively associated with customers' perceptions of firms that are in the introduction and decline life cycle stages.***

Prior studies show that individual customers pay closer attention to a firm's ability to fulfil its implicit commitments when the firm produces long-term products or when the firm is in durable goods industries. In these situations, the useful life (quality) of the products is relatively long (important). Therefore, the continuous supply of the products or product related parts are particularly crucial to customers. (Bowen et al., 1995; Matsumoto, 2002; Bahadir et al. 2008; Chakravarthy et al., 2014). Therefore, we propose the following hypothesis in the alternative form.

***H4: Beating earnings benchmarks is more positively associated with customers' perceptions of firms that have long-term products or are in goods oriented, more specifically, durable goods industries.***

Jiang (2008) shows that the profit benchmark is more important to creditors as default risk increases. Given the previously discussed similarity between creditor and customer claims, we expect the importance of the profit benchmark to customers to also be increasing in default risk. Therefore, we propose the following hypothesis in the alternative form.

***H5: Beating earnings benchmarks has more pronounced effects on customers' perceptions of firms with high default risk (high financial distress and volatilities).***

In addition to a firm's financial stability, customers care about a firm's performance on nonfinancial dimensions such as such as product quality, price fairness, and corporate social

responsibility. Earnings does not directly measure a firm's performance in these nonfinancial areas. However, because customers may face high information search and processing costs to determine a firm's performance on nonfinancial dimensions, customers may resort to using earnings benchmarks as heuristics for this task (Burgstahler and Dichev, 1997; Degeorge et al., 1999; Matsumoto, 2002; Habib and Hansen, 2008). The need to rely on earnings benchmarks to assess a firm's performance on nonfinancial dimensions may be mitigated when other more direct non-financial measures are accessible for customers.

We expect that customers rely less on the earnings benchmarks when highly publicized ratings of a firm's product quality. Therefore, we propose the following hypothesis in the alternative form.

***H6: Beating earnings benchmarks is less positively associated with customers' perceptions of firms with superior or inferior product quality.***

Customers' confidence in management's intent and ability to fulfill its commitments is greater for firms with high reputations (Hui et al. 2012). Hence, customers may be less reliant on earnings benchmarks for firms with higher reputations. Therefore, we propose the following hypothesis in the alternative form.

***H7: Beating earnings benchmarks has less pronounced effects on customers' perceptions of firms that are highly influential or reputable.***

Similarly, customers' confidence in management's intent and ability to fulfill its commitments is greater for firms with higher CSR ratings or with greater transparency in the form of CSR reports (Ellen et al., 2000; Luo and Bhattacharya, 2006; Lev et al., 2010). Hence, customers may be less reliant on earnings benchmarks for firms with higher commitments to CSR. Therefore, we propose the following hypothesis in the alternative form.

***H8: Beating earnings benchmarks has less pronounced effects on customers' perceptions of firms that have good CSR performance and CSR disclosures.***

### **III. Research Design**

#### *Measuring earnings benchmarks*

We construct annual earnings benchmarks as three dichotomous variables: the profit benchmark (*PROFIT*), the earnings increase benchmark (*INCR*), and the analyst forecast benchmark (*SURP*), based on earnings per share (*EPS*), changes in earnings per share from previous year to the current year (*CHG\_EPS*), and the consensus of analyst forecast surprises in earnings per share (*UE\_EPS*), respectively. The terms are defined in the Appendix.

#### *Customers' perceptions of firm's reputation*

To measure customers' perceptions of a firm (*CUSTOMER\_PERCEPTION*), we obtained proprietary annual customers' perception scores (officially called *RepTrak<sup>TM</sup> Pulse Score*) from the Reputation Institute (RI hereafter) based on all the RI conducted surveys of U.S. customers between 2006 and 2015. Founded in 1997, Reputation Institute is the world's leading research and advisory firm for corporate reputation (Wang et al., 2012). The institute releases an annual reputation report for different countries, and in this study, we focus on U.S. companies. In 2015, there were 57,746 company ratings generated from 23,750 respondents who were between 18 to 64 years old. The perception data is collected from online proprietary RI questionnaires around the first quarter of each year. The respondents are required to be somewhat familiar with the rated companies (i.e. be able to rate the company on at least 4 out of 7 on the Likert familiarity scale) and need to be emotionally connected with the rated companies (i.e. be able to rate the company at least 3 out of 4 on Pulse statements) (Reputation Institute, 2015). Data is based on a representative U.S. sample balanced on Age and Gender distributions. After the data collection, RI uses a standardized approach to compute an overall reputation score ranging from 0 to 100 for each company based on a set of twenty-three key performance indicators. Those indicators are

then classified into seven dimensions that are developed from the Reputation Quotient approach (Fombrun et al., 2000, 2015): products & services, innovation, financial performance, workplace, governance, citizenship, and leadership. A higher overall RI *RepTrak*<sup>TM</sup> *Pulse* score indicates that customers perceive the firm more favorably and more reputably.

*Level and Change Regression Models for the Main Hypothesis (H1)*

We test the impact of beating relevant earnings benchmarks on the customers' perceptions by estimating both level regressions and changes analyses (univariate and multivariate) on the pooled sample of firm-years. Additionally, we further control for earnings performance and other potential determinants of customers' perceptions. We estimate equations (1) and (2) using OLS regressions with industry and year fixed effects, and standard errors are clustered by firm and year.

$$CUSTOMER\_PERCEPTION_{i,t+l} = f(\alpha_0 + \alpha_1 BENCHMARKS_{i,t} + \alpha_2 EARNINGS\_CONTROLS_{i,t} + \alpha_3 OTHER\_CONTROLS_{i,t} + \varepsilon_{i,t}) \quad (1)$$

$$\Delta CUSTOMER\_PERCEPTION_{i,t+l} = f(\theta_0 + \theta_1 \Delta BENCHMARKS_{i,t} + \theta_2 \Delta EARNINGS\_CONTROLS_{i,t} + \theta_3 \Delta OTHER\_CONTROLS_{i,t} + \varepsilon_{i,t}) \quad (2)$$

To capture customers' perceptions of a firm (*CUSTOMER\_PERCEPTION*), we use the annual *RepTrak Pulse* scores obtained from RI customer surveys, and the change in customers' perceptions (*ACUSTOMER\_PERCEPTION*) is measured by its first difference.

The earnings benchmarks (*BENCHMARKS*) take one of the following specifications: The profit benchmark (*PROFIT*) equals one if a firm's basic earnings per share before extraordinary items is no less than zero and zero otherwise; the earnings increase benchmark (*INCR*) equals one if the change in a firm's earnings per share before extraordinary items is no less than zero, and zero otherwise; and the analyst forecast benchmark (*SURP*) equals one if the consensus of analyst forecast error, defined as the difference between a firm's actual earnings per share and the most

recent earnings forecast of each analyst, is no less than zero, and zero otherwise. Change in earnings benchmarks ( $\Delta BENCHMARKS$ ) equals one if the firm missed the earnings benchmark (the profit benchmark, the earnings increase benchmark, or the analyst forecast benchmark) in the previous year but beats that earnings benchmark in the current year ( $MISS\_TO\_BEAT$ ), and equals negative one if the firm beat the earnings benchmark in the previous year but misses that benchmark in the current year ( $BEAT\_TO\_MISS$ ), and equals zero if the firm has no change in that earnings benchmark.

$EARNINGS\_CONTROLS$  takes one of the following continuous earnings variables,  $EPS$ ,  $CHG\_EPS$ , and  $UE\_EPS$ .  $EPS$  corresponds to the profit benchmark, and is defined as a firm's earnings per share before extraordinary items divided by its stock price at the end of the previous year.  $CHG\_EPS$ , corresponds to the increase benchmark, and is defined as the change in a firm's earnings per share before extraordinary items divided by its stock price at the end of the previous year.  $UE\_EPS$ , corresponds to the analyst forecast benchmark, and is defined as the consensus analyst forecast error, which is computed as a firm's actual earnings per share minus the most recent analyst's earnings forecast for the current year, divided by its stock price at the end of the previous year.  $\Delta EARNINGS\_CONTROLS_{i,t}$  takes one of the following change in earnings variables  $\Delta EPS$ ,  $\Delta CHG\_EPS$ , and  $\Delta UE\_EPS$ , which are the first differences in  $EPS$ ,  $CHG\_EPS$ , and  $UE\_EPS$ , respectively.

To test the main hypothesis  $H1$ , we use level regressions and change analyses (univariate and multivariate). For level regressions, we estimate equation (1) with both basic and complete models to test the association between firms' ability to beat earnings benchmarks and customers' perceptions of the firms. In the univariate analyses, we test the mean and median difference in change of customers' perceptions of firms between the sample that changes earnings benchmark status (i.e. from missing to beating ( $MISS\_TO\_BEAT$ ) or from beating to missing ( $BEAT\_TO\_MISS$ )) and the sample that has no change in benchmark status. To ensure the robustness and alleviate the

concern of the omitted variables with the level regression, we further apply the change regressions. By estimating equation (2) with both basic and complete models, we examine the effect of change in firm's ability to beat earnings benchmarks on the change in customers' perceptions of the firms.

For each model, we focus on one earnings benchmark. Following Jiang (2008), we also add the corresponding continuous earnings variables for each benchmark to control for a firm's financial performance. Similarly, we argue that the coefficient of each earnings benchmark represents the average effect of exceeding earnings benchmark on customers' perceptions incremental to firm performance and other potential determinants of customers' perceptions. In addition, we control for various firm's characteristics that potentially influence customers' perceptions: firm size (*SIZE*), leverage (*LEV*), book-to-market ratio (*BTM*), R&D expenses (*RD\_EXP*), expenses, firm age (*FIRM\_AGE*), additional financial performance (*ROA*), annual industry adjusted buy and hold returns (*INDUS\_ADJ\_RET*), Tobins'Q (*TOBINS\_Q*), and the number of analysts (*N\_ANALYST*).

Furthermore, we include additional variables that are unique to customers such as advertising (*ADS\_EXP*), sales growth (*SALES\_GROWTH*), number of operating and business segments (*N\_INDSEG*), Herfindahl Index (*HERF\_INDEX*), CSR performance (*CSR\_SCORE*), product quality (*PRODUCT\_QUALITY*), and firm's reputation (*FIRM\_REPUTATION*). Details of all the variables are defined in the Appendix.

#### *Hypotheses for the Cross-Sectional Variations (H2-H8)*

We test the *H2* by examining whether customers' perceptions of firms decline as the magnitude of the firm's earnings increases after passing the relevant earnings benchmarks. Specifically, we add to equation (1) an interaction term between the earnings benchmarks and the firm's actual earnings (*BENCHMARKS\*EARNINGS\_CONTROLS*), and we estimate the equation (3)



below using the OLS regressions with industry and year fixed effects, and standard errors are double clustered by firm and year.

$$CUSTOMER\_PERCEPTION_{i,t+1} = f(\alpha_0 + \alpha_1 BENCHMARKS_{i,t} + \alpha_2 EARNINGS\_CONTROLS_{i,t} + \alpha_3 BENCHMARKS_{i,t} * EARNINGS\_CONTROLS_{i,t} + \alpha_4 OTHER\_CONTROLS_{i,t} + \varepsilon_{i,t}) \quad (3)$$

Furthermore, in order to show how customers gradually change their perceptions regarding the different magnitudes of earnings after firms beat relevant earnings benchmarks, we partition the sample (in which firms beat the relevant earnings benchmarks) into four subsamples based on the quartiles of firms' actual earnings. Moreover, to further examine customers' reactions to firms' actual earnings when those earnings are exceedingly high, we then include additional subsamples where firms' actual earnings are above 80<sup>th</sup> or 90<sup>th</sup> percentiles of the whole sample. Finally, for each subsample described above, we re-estimate equation (1) with industry and year fixed effects, and standard errors are double clustered by firm and year.

To test the *H3*, we discover whether customers will depend more on the relevant earnings benchmarks when a firm is at more uncertain or risky life cycle stages. Following Dickinson (2011), we develop a firm-level life cycle proxy based on the predictive patterns of cash flows in operating, investing, and financing activities across a firm's various stages of life cycle. Specifically, we modify the equation (1) by including the life cycle variable (*LIFE\_CYCLE*), which takes one of the following individual life cycle stages: introduction (*INTRODUCTION*), growth (*GROWTH*), mature (*MATURE*), shake-out (*SHAKE\_OUT*), and decline (*DECLINE*). We further add an interaction term between the earnings benchmarks and the firm's various life cycle stages (*BENCHMARKS\* LIFE\_CYCLE*), and we estimate the following equation (4) using the OLS regressions with industry and year fixed effects, and standard errors are double clustered by firm and year.

$$CUSTOMER\_PERCEPTION_{i,t+1} = f(\alpha_0 + \alpha_1 BENCHMARKS_{i,t} + \alpha_2 EARNINGS\_CONTROLS_{i,t} + \alpha_3 LIFE\_CYCLE + \alpha_4 BENCHMARKS_{i,t} * LIFE\_CYCLE_{i,t} + \alpha_5 OTHER\_CONTROLS_{i,t} + \varepsilon_{i,t}) \quad (4)$$

We test *H4* and *H5* by investigating whether the effect of a firm's beating the relevant earnings benchmark on customers' perceptions is more pronounced when firms are in specific types of industry, and when firms have a high default risk or financial volatility.

Specifically, to test *H4*, we partition the sample into subsamples based on three types of industry: goods/service oriented industries, durable/nondurable goods industries, industries in which firms produce long-term/non-long-term products. Following Bahadir et al. (2008), we define service industries with the firms' primary four-digit SIC codes beginning with 4-9 and goods industries otherwise. Similar to Bowen et al. (1995) and Matsumoto (2002), we proxy for durable goods industries using the same SIC codes<sup>3</sup> they used. Like Chakravarthy et al. (2014), we describe industries in which firms produce long-term products by most of Fama-French 48 Industries they identified<sup>4</sup>. In addition, for the last two industry types discussed, we further include industries with certain SIC codes<sup>5</sup> that are closely related to the retail trade of durable products with individual customers.

To test *H5*, we divide the sample into high/low subsamples based on the firms' leverage, financial distress, and financial volatility. We describe high-levered firms as the firms with median or higher debt-to-assets ratio. We capture the firms' financial distress using the Altman Z-score formula (defined in the Appendix), and the firms with median or lower Z-scores are treated as financially distressed firms. Furthermore, we define financially volatile firms as the firms with median or above stock volatilities. Finally, for each subsample described above, we re-estimate the equation (1) with industry and year fixed effects, and standard errors are double clustered.

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<sup>3</sup> Membership in durable goods industries with following SIC codes: 150-179, 245, 250-259, 283, 301, and 324-399.

<sup>4</sup> Those industries are household consumers goods, healthcare, medical equipment and products, machinery, electrical equipment, automobiles and trucks, shipbuilding and railroad equipment, aircraft, communication, personal services, business services, computers, electronic equipment, banking, insurance, and real estate.

<sup>5</sup> Three-digits SIC codes: 520-527; 530-539; 550-559; 570-573; and 590-599

To test *H6-H8*, we examine whether customers rely less on a firm's ability to beat relevant earnings benchmarks when they are better informed about more direct non-financial measures, such as the firm's product quality, reputation, and CSR engagements.

Particularly, we test *H6* by partitioning the sample into subsamples conditional on firms' different quality of products: overall product quality, product with stronger quality, or product with more concerned quality. We treat the overall product quality as ordinary if the total product quality scores are between the 25<sup>th</sup> and 75<sup>th</sup> percentile of the whole sample. Otherwise, the overall product quality is treated as superior or concerned. In addition, we identify the firms' product quality as superior (not superior) when the number of product strengths is greater (less) than the median value. Similarly, we classify firms' product quality as concerned (not concerned) if the number of product concerns is greater (less) than the median value.

To test *H7*, we divide the sample into high/low subsamples based on the firms' influence (size), diversity, and reputation. We describe firms to be influential when their size is greater or equal to the median value. We define well diversified firms as firms with multiple business and operating segments (more than the median value). We further identify firms to be highly reputable if they are recognized as the American Most Admired (MA) Companies.

To test *H8*, we partition the sample into high/low subsamples conditional on the firms' CSR performance, CSR disclosures, and inclusion in the Dow Jones Sustainability Index (DJSI). We define firms with high (low) CSR scores when firms' KLD ratings are equal to or above (below) median. We create a dummy variable to indicate whether firms disclose qualified CSR information. Likewise, we have an indicator variable to identify whether the firms are included in the DJSI as good CSR performers. Finally, for each subsample described above, we re-estimate the equation (1) with industry and year fixed effects, and standard errors are double clustered.

#### IV. Sample and Descriptive Statistics

As discussed above, we obtained the proprietary annual customers' perception scores (officially called *RepTrak<sup>TM</sup> Pulse Score*) of rated U.S. companies from the Reputation Institute between 2006 and 2015. After imposing the data requirements for all the necessary customer-related control variables, we have a final sample of 2,544 firm-years for the most basic regression model and of 1,719 firm-years for the complete regression model. For all the tests of cross-sectional variation, we use the complete regression model to test relevant hypotheses.

Table 1 provides descriptive statistics for the main variables used in the complete regression analyses. Based on the 1,719 firm-year observations, customers' perception scores vary from 63.526 (P25) to 72.869 (P75) with a mean of 67.529 (out of 100), and the untabulated min and max value of customers' perception scores are 20.914 and 85.4, respectively. These statistics indicate a substantial variation among customers' perceptions of firms. In addition, many firms in the sample are relatively large and have strong abilities to beat the relevant earnings benchmarks (the mean for the profit benchmark, increase benchmark, and the analysts' forecast benchmark is 0.933, 0.640, and 0.724, respectively). This finding indicates that, consistent with the literature discussed above, managers are incentivized/ pressured to beat all the relevant earnings benchmarks. In addition, other control variables in the sample, such as book to market, CSR scores, number of business segments, Tobins'Q, and number of analysts, also have significant variations, suggesting that the sample is relatively representative.

Table 2 presents the correlation matrices for major customer-related variables<sup>6</sup>. Table 2 shows that a firm's ability to beat the profit benchmark is significantly positively correlated (with a significant level at 1%) with customers' perceptions of firms. This finding suggests that

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<sup>6</sup> Due to the space limitation, I only report the main dependent and independent variables and other control variables that are most relevant to customers. The major correlation results hold tightly when I include all the variables.

customers perceive a firm more favorably when the firm beats customers' most relevant earnings benchmark, the profit benchmark. In addition, almost all the customer-related control variables are significantly correlated to customers' perceptions with the expected signs. Specifically, Table 2 presents that, as expected, customers' perceptions of the firm are negatively related to firm size and leverage, while positively related to the firm's R&D expenses, advertising expenses, CSR scores, product quality, firm age, firm reputation, and the Tobins'Q. These findings indicate that the customers' perception scores could be reasonably good to capture customers' real perceptions of the firm.

## **V. Empirical Results**

### *Regression Results of the Main Hypothesis (H1)*

Table 3 presents the results of the main level regression analysis. By estimating equation (1), we examine the effect of a firm's ability to beat relevant earnings benchmarks on customers' perceptions. Consistent with our expectations, the coefficients of the profit benchmark are significantly positive ( $\alpha_1 > 0$ ;  $p < 0.01$ ) in both the most basic and complete regression models. This suggests that customers perceive a firm more favorably when it beats the profit benchmark, providing support for *H1*. However, we do not find similar results for other earnings benchmarks, echoing the Burgstahler and Dichev (1997)'s point that an earnings decrease may simply reflect normal business fluctuation and therefore have little adverse effect on customers' assessments of firms (p.123). Furthermore, the finding that the profit benchmark is the most salient earnings benchmark for customers to infer a firm's reputation to honor its implicit products warranty and service commitments, is similar to the argument that debtholders use the profit benchmark to assure a firm's survival to pay back future financial obligations (Jiang, 2008).

In Table 3, the  $R^2$  in the complete regression model is 0.539 which increases dramatically from 0.206 in the most basic model, indicating that the explanatory power of the complete model increases significantly from that of the basic model. In addition, many control variables have the expected signs. For example, the coefficients of (firm size), sales growth, CSR performance, product quality, number of business and operating segments, and firms' reputation are significantly (negatively) positively associated with customers' perceptions. These findings suggest that customers positively perceive firms that are socially responsible, diversified, reputable, and firms that have good product quality and high sales growth. However, customers dislike big firms which could be because big firms are poor at dealing with customers' complaints (Smith, 2015).

Table 4 reports the results of the univariate analysis, in which we examine the impact of change in a firm's ability to beat the profit benchmark on change in customers' perceptions of the firm. As Panel A shows, customers significantly improve their perceptions (with the mean of 2.262) when firms go from missing to beating the profit benchmark. Furthermore, the mean and median differences in customer perceptions between the two groups (the profit benchmark changes from missing to beating vs. no change) are significantly positive ( $p < 0.01$ ). This suggests that customers' perceptions become more favorable once a firm starts beating from missing the profit benchmark. In Panel B of Table 4, there is an obvious reduction in customers' perceptions when firms start missing the profit benchmark; however, the mean and median differences between the other two groups (the profit benchmark changes from beating to missing vs. no change) are not significant.

Table 5 presents the results of the change regression model. By estimating equation (2), we use multivariate analysis to further examine the change effect of beating the profit benchmark on the change of customers' perceptions. Consistent with our expectations, the coefficients of the change in the profit benchmark are significantly positive ( $\theta_1 > 0$ ;  $p < 0.01$ ) in both the basic and

the complete regression models with (and without) industry and year fixed effects. This evidence provides further support for *H1*. Additionally, after categorizing the change in the profit benchmark into the change from missing to beating (*MISS\_TO\_BEAT*) and the change from beating to missing (*BEAT\_TO\_MISS*), we find that the coefficients of *MISS\_TO\_BEAT* are significantly positive ( $p < 0.01$ ) in all models, consistent with univariate analysis results. These findings imply that customers' perceptions are significantly improved when a firm goes from missing to beating the profit benchmark.

Taken together, we find that like creditors, customers value the profit benchmark more than other earnings benchmarks to evaluate a firm's ability to fulfill its implied future commitments. Furthermore, customers improve their perceptions when firms start beating from missing the profit benchmark, and they are more forgiving than investors when firms start missing from beating the profit benchmark.

#### *Regression Results of Hypotheses for the Cross-Sectional Variations (H2-H8)*

We further conduct cross-sectional variation tests to examine whether the effect of beating the profit benchmark on consumers' perceptions varies among specific earnings' or firms' characteristics, such as the magnitude of earnings and firms' life cycle.

Specifically, in Table 6, by estimating equation (3), we examine the effects of firm's earnings magnitude after beating the profit benchmark on customers' perceptions. Consistent with our expectations, the coefficient of the interaction term between the profit benchmark and the firms' actual earnings in column (1) of Table 6 is significantly negative ( $\alpha_3 > 0$ ;  $p < 0.01$ ). In addition, column (2)-(7) of Table 6 show that the after firms beat the profit benchmark, the customers' perceptions monotonically decrease from significantly positive all the way to significantly negative when the level of profitability monotonically increases from low to exceedingly high (0

to 25<sup>th</sup> percentiles (low) to 90<sup>th</sup> percentiles above (very high) of the firms' actual earnings). This means that customers downgrade their perceptions of firms when the magnitude of the firm's earnings increases to very high after beating its profit benchmark, providing support for *H2*. The finding further indicates that excessive earnings, which could cause customers serious concerns about price fairness, does not enhance but instead damages customers' perceptions once the profit benchmark has been met. Thus, unlike shareholders who are profit seekers, customers appear more to be satisficers with respect to firms' accounting, and more specifically, earnings performance.

In Table 7, we estimate equation (4) to investigate the effects of a firm's ability to beat the profit benchmark on customers' perceptions conditional on various stages of a firm's life cycle, introduction, growth, mature, shake-out, and decline. As we expected, the coefficients of the interaction term between the profit benchmark and individual life cycle stage, introduction and decline, are significantly positive ( $\alpha_4 > 0$ ;  $p < 0.05$ ) in column (1), (5) and (6) of Table 7. Interestingly, we also find that the coefficient of the interaction term between the profit benchmark and the growth stage is significantly negative in column (2) of Table 7; however, this effect becomes insignificant when putting all the life cycle and interaction terms together. The finding indicates that customers tend to use earnings information differently at the various stages of a firm's life cycle. Specifically, they rely more (less) of the profit benchmark when the firm is at the life cycle stage of introduction or decline (growth), which provides support for *H3*. One possible explanation is that customers are more concerned about a firm when its life cycle involves greater uncertainty and are short of customers/operating experience than other stages such as growth.

In other cross-sectional tests, by re-estimating equation (1) in different subsamples, we further examine whether the effect of beating the profit benchmark on customers' perceptions is more pronounced for firms that are in specific industry types and for firms with potential financial



default risks. In Panel A of Table 8, consistent with our predictions, we find that the coefficients of the profit benchmark are significantly positive ( $\alpha_1 > 0$ ;  $p < 0.05$ ) when firms are in goods-oriented industries, durable goods industries, and industries in which firms produce long-term products. Because the useful life (quality) of the products is relatively long (important), the firms' continuous supply of the products or product related parts are particularly crucial to customers. As the findings show, customers are incentivized to rely more on the profit benchmark to imply the firm's future implied warranty and service commitments related to durable or long-term products, supporting for *H4*. This further echoes the point of made by an interviewed CFO, who worked in an industry in which confidence of retail customers is a significantly important, that "concerns about the stakeholder hypothesis is a significant determinant of the accounting and disclosure decisions" (Graham et al., 2005, p.27).

Consistent with our expectations, the coefficients of the profit benchmark in Panel B of Table 8 are significantly positive ( $\alpha_1 > 0$ ;  $p < 0.05$ ) when firms are with high leverage (high debt to assets ratio), high financial distress, and high stock volatilities. Malshe and Agarwal (2015) shows that financial leverage leads to lower customer satisfaction, and part of the reason is because like creditors, customers are more seriously concerned about a firm's survival and stability when the default risk and the financial volatility are high. Therefore, as the results show, customers are motivated to rely more heavily on the profit benchmark to infer the firm's reputation to honor its implicit claims related to products/services when the firm is at risk of these financial instabilities, which provides support for *H5*. This finding is similar to Jiang's (2008) finding that creditors use more of the profit benchmark to assess firms' ability to pay off its future financial obligations when firms have high default risk.

In contrast, we also investigate whether a firm's ability to beat the profit benchmark is less important to customers when they are better informed by other more direct non-financial measures, such as the firm's product quality, reputation, and CSR engagements.

As expected, in Panel A of Table 9, we find that the coefficients of the profit benchmark are significantly positive ( $\alpha_1 > 0$ ;  $p < 0.05$ ) when the firms' product quality is overall ordinary, not superior, or not concerned (inferior). This suggests that customers rely more on the profit benchmark to evaluate firms when the product quality is just normal or ordinary to customers; however, when customers are better aware of the product quality features, either superior or concerned, they tend to rely less on the profit benchmark to form firm perceptions. This evidence provides support for *H6*. One possible explanation is that the quality of products is one of the most important and direct factors for customer to make purchase decisions, and thus customers may pay less attention to other factors once they are better informed about the product quality features.

In Panel B of Table 9, the results are consistent with our expectations. Specifically, we find that the coefficients of the profit benchmark are significantly positive ( $\alpha_1 > 0$ ;  $p < 0.01$ ) when the firms are less influential, less diversified, or less reputable (firms are not MA companies). This finding indicates that customers rely more on the profit benchmark to assess firms if the firms are not famously known for their influence (size), diversification, or reputation. However, after customers are aware of those firms' characteristics, firms are more likely to be viewed as the respected/admired firms. Customers therefore are more forgiving and less concerned about the firms' ability to beat the profit benchmark. This finding provides support for *H7*.

Consistent with our expectations, the coefficients of the profit benchmark in Panel C of Table 9 are significantly positive ( $\alpha_1 > 0$ ;  $p < 0.01$ ) when the firms have relatively low CSR scores (KLD ratings), don't disclose qualified CSR reports, or are not included in the DJSI. This suggests

that customers rely more on the profit benchmark to evaluate firms when firms are not recognized as well-known socially responsible firms. However, when firms actively engage in CSR commitments (i.e. with high KLD ratings, disclosing CSR reports on GRI, or being included in DJSI), customers are less motivated to use the profit benchmark to assess firms' reputation to honor its implicit related claims. This provides support for *H8*. One possible reason could be because CSR active firms are normally regarded as trustful and responsible firms, and therefore customers are more likely to generate favorable product assessments and greater resilience to negative events of those firms (Ellen et al., 2000; Luo and Bhattacharya, 2006; Lev et al., 2010).

## **VI. Robustness Checks**

To ensure the robustness of the results, we exclude public utilities (two-digit SIC code 49) and financial service firms (two-digit SIC codes between 60 and 67) due to the regulatory features of these industries. After we rerun all the analyses, the results are very robust for all the main and cross-sectional tests.

As another robustness test, we use an alternative proxy, customers' satisfaction scores, to capture our main dependent variable, customers' perceptions. We hand collected the customers' satisfaction scores of each available company from the *American Customer Satisfaction Index (ACSI)*. After re-estimating the equations, we find that the coefficients of the profit benchmark are still significantly positive ( $\alpha_1 > 0$ ;  $p < 0.01$ ) for the main tests. This indicates that both customers' perception scores from RI and customers' satisfaction scores from *ACSI* are potentially good measures to proxy for customers' real perceptions of the firms.

Furthermore, we conduct several additional tests (untabulated) to examine the sensitivity of the results. For both main and cross-sectional tests, we estimate all equations and run all the

subsample tests using different measures for existing control variables (i.e. size, book to market, leverage), or replacing existing control variables with other relevant variables such as quick ratio, operating cash flow, stock volatility, with/without industry and year fixed effect. In addition, we put all the earning benchmarks and earnings controls together in one regression with firm and year fixed effects, and double clustered the standard errors. All of results hold tightly in the cases discussed above. In the future, in addition to the existing change regressions reported in the paper, we will use a two-stage least squares (2SLS) approach to further control for unobservable factors that may influence the results.

## **VII. Conclusion**

Prior academic theories, managers' beliefs, and anecdotal evidence all suggest that non-investor stakeholders also use earnings benchmarks to determine the level of support they provide to a firm. In this paper, we investigate whether a firm's ability to beat relevant earnings benchmarks influences non-investor stakeholders' and more specifically customers' perceptions of firms. We measure customers' perceptions using a proprietary dataset of customers' perception scores from the RI, and we find that individual customers' perceptions are positively associated with a firm's ability to beat the profit benchmark. More interestingly, we find that the way customers rely on the profit benchmark is contextually dependent on customers' implicit claims with the firm.

Specifically, with similar debt-like claims as creditors, customers rely on the profit benchmark to infer a firm's ability to fulfill its implied future obligations on products or services. However, unlike investors, customers significantly downgrade their perceptions once the firm's earnings largely exceeds the profit benchmark. In the tests of cross-sectional variation, we further find that customers rely more on the profit benchmark when the firm is in durable goods industries,

when the firm is in the life cycle stages of introduction or decline, and when the firm is under high default risk. On the other hand, customers have greater tolerance than investors for a firm's ability to beat the profit benchmark when the firm has more direct non-financial measures such as superior or inferior product quality, the most admired reputation, and good CSR engagements.

This study makes several contributions to the literature. First, this paper presents empirical evidence that validates the unexamined theoretical prediction that non-investor stakeholders, and individual customers in particular, use earnings benchmarks to evaluate the status of their claims. Second, this study adds to our understanding on how customers use earnings benchmarks similar to and different from investors in evaluating a firm's performance conditional on customers' unique claims. Finally, the findings of this paper highlight broader uses of accounting information than previously documented, which has significant implications for accounting research.

## Appendix. Variable Definitions<sup>7</sup>

Variables	Definitions
<i>Main Dependent Variables: Non-investor Stakeholders' Perception of Firms</i>	
<i>CUSTOMER_PERCEPTION</i>	The annual overall reputation scores of companies in the customer survey generated by the Reputation Institute
<i>ΔCUSTOMER_PERCEPTION</i>	The first difference in <i>CUSTOMER_PERCEPTION</i>
<i>Main Independent Variables: Earnings Benchmarks</i>	
<i>PROFIT</i>	A dummy variable which equals one if a firm's basic earnings per share before extraordinary items is no less than zero, and zero otherwise
<i>INCR</i>	A dummy variable which equals one if changes in a firm's earnings per share before extraordinary items is no less than zero, and zero otherwise
<i>SURP</i>	A dummy variable which equals one if the consensus of analyst forecast error, the difference between a firm's actual earnings and the most recent earnings forecast of each analyst, is no less than zero, and zero otherwise
<i>ΔPROFIT</i>	A variable which equals one if a firm missed the profit benchmark in the previous year but beats it in the current year, and equals negative one if a firm beat it in the previous year but misses it in the current year, and equals zero if a firm has no change in the profit benchmark
<i>ΔINCR</i>	A variable which equals one if a firm missed the increase benchmark in the previous year but beats it in the current year, and equals negative one if a firm beat it in the previous year but misses it in the current year, and equals zero if a firm has no change in the increase benchmark
<i>ΔSURP</i>	A variable which equals one if a firm missed the analyst forecast benchmark in the previous year but beats it in the current year, and equals negative one if a firm beat it in the previous year but misses it in the current year, and equals zero if a firm has no change in that benchmark
<i>MISS_TO_BEAT</i>	A firm missed the earnings benchmarks in the previous year but beats it in the current year
<i>BEAT_TO_MISS</i>	A firm beat the earnings benchmarks in the previous year but misses it in the current year
<i>Earnings Controls</i>	
<i>EPS</i>	A firm's earnings per share before extraordinary items in the current year divided by its stock price at the end of the previous year; corresponds to the profit benchmark
<i>CHG_EPS</i>	The changes in a firm's earnings per share before extraordinary items from the previous year to the current year, divided by its stock price at the end of the previous year; corresponds to the increase benchmark
<i>UE_EPS</i>	The consensus of analyst forecast error, defined as the difference between firm's actual earnings per share and the most recent analyst's earnings forecast for the current year; corresponds to analyst forecast benchmark
<i>ΔEPS</i>	The first difference in <i>EPS</i>

<sup>7</sup> All continuous variables are winsorized at the 1% and 99% level.

<i>ΔCHGEPS</i>	The first difference in <i>CHG_EPS</i>
<i>ΔUEEPS</i>	The first difference in <i>UE_EPS</i>
<i>Other Controls</i>	
<i>ROA</i>	A firm's income before extradentary items in the current year deflated by total assets at the beginning of the current year
<i>SIZE</i>	The natural log of a firm's total assets at the end of the current year
<i>LEV</i>	A firm's total liabilities divided by total assets at the beginning of the current year
<i>BTM</i>	The natural log of a firm's book value of equity divided by its market value of equity, both measured at the end of the current year, following Jiang (2008, 384)
<i>RD_EXP</i>	A firm's research and development expense in the current year deflated by total assets at the end of the current year
<i>ADS_EXP</i>	A firm's advertising expense in the current year deflated by total assets at the end of the current year
<i>CSR_SCORE</i>	A firm's net KLD ratings of strengths and concerns on all the six dimensions (not including the product dimension) at the end of the current year
<i>PRODUCT_QUALITY</i>	A firm's net KLD ratings of strengths and concerns only on the product dimension at the end of the current year
<i>FIRM_AGE</i>	The natural log of a firm's lifetime, defined as the number of month from the firm's IPO date (or first date listed on CRSP if IPO date is missing) to the current date
<i>N_ANALYST</i>	The number of analysts issuing earnings forecasts for a firm during the year
<i>HERF_INDEX</i>	The sum of squared market shares of a firm within the industry (two-digit SIC code) during the current year
<i>N_SEGMETNS</i>	The number of business and operational segments of a firm at the end of the current year
<i>SALES_GROWTH</i>	A firm's revenue changes from the previous year to the current year divided by its revenue in the previous year
<i>INDUS_ADJ_RET</i>	A firm's industry adjusted buy and hold returns based on monthly stock return data
<i>FIRM_REPUTATION</i>	A dummy variable which equals one if the firm is identified as the American Most Admired (MA) Company, and zero otherwise
<i>TOBINS_Q</i>	"Tobins' Q is equal to the natural log of market value of assets divided by the book value of assets (AT), where the market value of assets is computed as the market value of common stock (PRCC_F*CSHO), plus the book value of debt, which is calculated as total assets (AT) less the sum of book value of common stock (CEQ) and balance sheet deferred taxes (TXDB)," following Christensen (2016, p398)
<i>Altman Z-score</i>	Z_score model defined by Altman (1968, 2000). $Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 0.999X_5$ where $X_1$ = working capital/total assets; $X_2$ = retained earnings/total assets $X_3$ = earnings before interest and taxes/total assets; $X_4$ = market value equity/book value of total liabilities; $X_5$ = sales/total assets

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**TABLE 1****Descriptive Statistics**

Table 1 presents descriptive statistics for the main variables used in the regression analyses; All continuous variables have been winsorized by year at the 1 percent and 99 percent levels. See Appendix for variable definitions.

**Descriptive Statistics of Regression Variables**

<i>Variables</i>	<b>N</b>	<b>Mean</b>	<b>Std</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>
<i>CUSTOMER_PERCEPTION</i>	1719	67.529	7.720	63.526	68.254	72.869
<i>PROFIT</i>	1719	0.933	0.250	1.000	1.000	1.000
<i>INCR</i>	1719	0.640	0.480	0.000	1.000	1.000
<i>SURP</i>	1716	0.724	0.447	0.000	1.000	1.000
<i>EPS</i>	1719	0.043	0.393	0.045	0.063	0.083
<i>CHG_EPS</i>	1719	-0.012	0.376	-0.018	0.001	0.015
<i>UE_EPS</i>	1716	0.001	0.022	0.000	0.000	0.002
<i>SIZE</i>	1719	10.170	1.385	9.190	10.163	10.981
<i>LEV</i>	1719	0.692	0.222	0.541	0.670	0.832
<i>ROA</i>	1719	0.067	0.065	0.027	0.059	0.101
<i>BTM</i>	1719	0.475	0.426	0.211	0.382	0.656
<i>RD_EXP</i>	1719	0.018	0.034	0.000	0.000	0.021
<i>ADS_EXP</i>	1719	0.019	0.031	0.000	0.003	0.025
<i>CSR_SCORE</i>	1719	2.831	4.096	0.000	2.000	5.000
<i>PRODUCT_QUALITY</i>	1719	-0.482	1.066	-1.000	0.000	0.000
<i>FIRM_AGE</i>	1719	5.874	0.854	5.384	5.974	6.594
<i>HERF_INDEX</i>	1719	0.084	0.089	0.032	0.046	0.089
<i>SALES_GROWTH</i>	1719	0.057	0.149	-0.009	0.048	0.103
<i>INDUS_ADJ_RET</i>	1719	-0.008	0.325	-0.168	-0.006	0.159
<i>N_INDSEG</i>	1719	3.387	1.920	2.000	3.000	5.000
<i>FIRM_REPUTATION</i>	1719	0.561	0.496	0.000	1.000	1.000
<i>TOBINS_Q</i>	1719	0.504	0.464	0.121	0.402	0.804
<i>NUM_ANALYSTS</i>	1719	11.759	7.931	5.000	10.000	17.000

**TABLE 2****Correlations**

Table 2 reports correlations for the major customer-related variables<sup>8</sup> in the sample. Spearman correlation coefficients (above the diagonal) and Pearson coefficients (below the diagonal) for main customer variables used in our primary analyses are reported. Correlations that are significant at the 5% level or better are presented in bold. All continuous variables have been winsorized by year at the 1 percent and 99 percent levels. See Appendix for variable definitions.

**Correlation Matrices for Major Customer-Related Variables**

<i>Variables</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) <i>CUSTOMER_PERCEPTION</i>		<b>0.08</b>	0.01	0.04	<b>-0.24</b>	<b>-0.11</b>	<b>0.28</b>	<b>0.37</b>	<b>0.24</b>	<b>0.29</b>	<b>0.14</b>	<b>0.10</b>	<b>0.40</b>	0.00
(2) <i>PROFIT</i>	<b>0.07</b>		<b>0.19</b>	<b>0.12</b>	<b>0.08</b>	<b>-0.10</b>	<b>0.06</b>	<b>-0.05</b>	<b>0.10</b>	0.01	<b>0.09</b>	<b>0.15</b>	<b>0.18</b>	<b>0.07</b>
(3) <i>INCR</i>	0.02	<b>0.19</b>		<b>0.09</b>	0.00	0.00	-0.01	0.02	0.01	0.00	0.01	0.03	<b>0.11</b>	0.00
(4) <i>SURP</i>	0.04	<b>0.12</b>	<b>0.09</b>		0.01	-0.04	<b>0.07</b>	0.02	0.03	0.00	0.04	<b>0.08</b>	<b>0.08</b>	0.01
(5) <i>SIZE</i>	<b>-0.27</b>	<b>0.06</b>	0.00	0.01		<b>0.17</b>	<b>0.06</b>	<b>-0.33</b>	<b>0.17</b>	<b>-0.36</b>	<b>0.20</b>	<b>0.37</b>	<b>-0.32</b>	<b>0.35</b>
(6) <i>LEV</i>	<b>-0.08</b>	<b>-0.12</b>	0.01	-0.04	<b>0.20</b>		<b>-0.16</b>	<b>-0.18</b>	<b>-0.07</b>	<b>-0.05</b>	<b>-0.08</b>	<b>-0.08</b>	<b>-0.23</b>	<b>0.09</b>
(7) <i>RD_EXP</i>	<b>0.20</b>	-0.01	0.00	<b>0.05</b>	0.01	<b>-0.18</b>		<b>0.11</b>	<b>0.30</b>	0.01	<b>0.29</b>	<b>0.14</b>	<b>0.42</b>	<b>0.16</b>
(8) <i>ADS_EXP</i>	<b>0.28</b>	-0.04	0.00	0.04	<b>-0.32</b>	<b>-0.12</b>	0.01		<b>0.14</b>	<b>0.07</b>	0.01	0.02	<b>0.41</b>	<b>-0.20</b>
(9) <i>CSR_SCORE</i>	<b>0.29</b>	<b>0.11</b>	0.02	0.03	<b>0.14</b>	<b>-0.10</b>	<b>0.33</b>	<b>0.11</b>		<b>0.11</b>	<b>0.16</b>	<b>0.18</b>	<b>0.17</b>	<b>0.08</b>
(10) <i>PRODUCT_QUALITY</i>	<b>0.32</b>	0.02	0.00	0.00	<b>-0.36</b>	<b>-0.06</b>	<b>-0.04</b>	<b>0.09</b>	<b>0.12</b>		<b>-0.06</b>	<b>-0.15</b>	<b>0.10</b>	<b>-0.09</b>
(11) <i>FIRM_AGE</i>	<b>0.12</b>	<b>0.09</b>	0.01	0.03	<b>0.15</b>	<b>-0.13</b>	<b>0.12</b>	0.01	<b>0.16</b>	<b>-0.06</b>		<b>0.15</b>	<b>0.06</b>	<b>0.27</b>
(12) <i>FIRM_REPUTATION</i>	<b>0.07</b>	<b>0.15</b>	0.03	<b>0.08</b>	<b>0.35</b>	<b>-0.08</b>	<b>0.08</b>	-0.03	<b>0.16</b>	<b>-0.14</b>	<b>0.14</b>		<b>0.21</b>	<b>0.12</b>
(13) <i>TOBINS_Q</i>	<b>0.31</b>	<b>0.16</b>	<b>0.10</b>	<b>0.07</b>	<b>-0.34</b>	<b>-0.17</b>	<b>0.36</b>	<b>0.37</b>	<b>0.16</b>	<b>0.09</b>	0.00	<b>0.17</b>		<b>-0.10</b>
(14) <i>N_INDSEG</i>	0.02	<b>0.05</b>	-0.01	0.01	<b>0.37</b>	<b>0.07</b>	-0.04	<b>-0.09</b>	0.04	<b>-0.09</b>	<b>0.24</b>	<b>0.12</b>	<b>-0.10</b>	

<sup>8</sup> Due to the space limitation, I only report the main dependent and independent variables and other control variables that are most relevant to customers. The major correlation results hold tightly when I include all the variables

**TABLE 3**

**The Effects of Beating Earnings Benchmarks on Customers' Perceptions of Firms**

Table 3 reports the main level regression results. By estimating equation (1), we test *HI* in both basic and more complete regression models. *CUSTOMER\_PERCEPTION* is the dependent variable. Columns (1)-(2) show results for the profit benchmark (*PROFIT*). Columns (3)-(4) show the results for increase benchmark (*INCR*). Column (5)-(6) show results for the analysts' forecast benchmark (*SURP*). Both industry and year fixed effects are included in the more complete models. All variables are defined in the Appendix. *p*-values in parentheses are calculated using standard errors clustered by firm and year. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

<i>VARIABLES</i>	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
	Profit Benchmark		Increase Benchmark		Analysts' Forecast Benchmark	
<b><i>PROFIT</i></b>	<b>1.819***</b>	<b>1.753***</b>				
	<b>(0.000)</b>	<b>(0.007)</b>				
<i>EPS</i>	2.422***	2.346***				
	(0.000)	(0.000)				
<i>INCR</i>			0.243	0.135		
			(0.411)	(0.672)		
<i>CHG_EPS</i>			1.723***	2.343***		
			(0.000)	(0.000)		
<i>SURP</i>					0.280	0.058
					(0.383)	(0.883)
<i>UE_EPS</i>					-13.877**	-14.579**
					(0.049)	(0.024)
<i>SIZE</i>	-1.256***	-0.817***	-1.234***	-0.825***	-1.159***	-0.951***
	(0.000)	(0.006)	(0.000)	(0.005)	(0.000)	(0.002)
<i>LEV</i>	0.442	0.738	-0.014	0.622	0.162	1.140
	(0.464)	(0.509)	(0.982)	(0.572)	(0.793)	(0.339)
<i>BTM</i>	-0.283	-0.273	-0.349	-0.239	-1.287***	-0.140
	(0.239)	(0.752)	(0.148)	(0.784)	(0.000)	(0.882)
<i>RD_EXP</i>	40.980***	0.387	39.569***	0.315	35.482***	3.035
	(0.000)	(0.973)	(0.000)	(0.979)	(0.000)	(0.805)
<i>ADS_EXP</i>	46.603***	14.293	45.387***	12.879	44.126***	11.780
	(0.000)	(0.126)	(0.000)	(0.159)	(0.000)	(0.187)
<i>FIRM_AGE</i>	1.035***	0.766	1.110***	0.770	0.977***	0.695
	(0.000)	(0.117)	(0.000)	(0.116)	(0.000)	(0.145)
<i>SALES_GROWTH</i>	0.638	2.671***	0.663	2.405***	0.203	0.576
	(0.454)	(0.004)	(0.440)	(0.007)	(0.819)	(0.685)

(Continued on the next page)

**TABLE 3 (Continued)**

<i>CSR_SCORE</i>		0.337*** (0.000)		0.337*** (0.000)		0.340*** (0.000)
<i>PRODUCT_QUALITY</i>		1.222*** (0.000)		1.237*** (0.000)		1.262*** (0.000)
<i>ROA</i>		-13.465*** (0.001)		-7.957** (0.015)		-3.654 (0.340)
<i>HERF_INDEX</i>		-4.804 (0.542)		-5.225 (0.503)		-5.243 (0.486)
<i>INDUS_ADJ_RET</i>		-0.433 (0.139)		-0.456 (0.105)		-0.034 (0.926)
<i>N_INDSEG</i>		0.326** (0.022)		0.327** (0.021)		0.365** (0.014)
<i>FIRM_REPUTATION</i>		0.860** (0.029)		0.989** (0.014)		1.123*** (0.009)
<i>TOBINS_Q</i>		1.817* (0.074)		1.502 (0.138)		1.124 (0.284)
<i>N_ANALYSTS</i>		0.009 (0.837)		0.012 (0.789)		0.020 (0.658)
<i>CONSTANT</i>	70.739*** (0.000)	48.074*** (0.000)	72.071*** (0.000)	49.680*** (0.000)	72.519*** (0.000)	51.067*** (0.000)
Industry and Year FE	No	Yes	No	Yes	No	Yes
Cluster by Firm & Year	No	Yes	No	Yes	No	Yes
Observations	2,544	1,719	2,544	1,719	2,436	1,716
R-squared	0.206	0.539	0.193	0.535	0.187	0.524
Adjusted R-squared	0.204	0.516	0.190	0.511	0.184	0.500

**TABLE 4****The Change Effects of Beating the Profit Benchmark on Customers' Perceptions of Firms:  
Univariate Analysis**

Table 4 presents the results for the univariate analysis, in which we examine the effects of change in the profit benchmark on the change in customers' perceptions of firms. The mean and median of change in customers' perceptions of firms ( $\Delta CUSTOMER\_PERCEPTION$ ) are reported as whether the profit benchmark goes from missing to beating ( $\Delta PROFIT=1$ ), from beating to missing ( $\Delta PROFIT=-1$ ), or no change ( $\Delta PROFIT=0$ ). Panel A shows the comparison between the profit benchmark going from missing to beating and no change. Panel B presents the comparison between the profit benchmark going from beating to missing and no change. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: Profit Benchmark Goes from Missing to Beating and No Change**

<i>VARIABLES</i>	$\Delta PROFIT = 1$	$\Delta PROFIT = 0$	Difference	<i>P</i> -Value
$\Delta CONSUMER\_PERCEPTION$ (Mean)	<b>2.262</b>	<b>0.622</b>	<b>1.640***</b>	<b>0.001</b>
$\Delta CONSUMER\_PERCEPTION$ (Median)	<b>0.662</b>	<b>0.492</b>	<b>0.170***</b>	<b>0.004</b>

**Panel B: Profit Benchmark Goes from Beating to Missing and No Change**

<i>VARIABLES</i>	$\Delta PROFIT = -1$	$\Delta PROFIT = 0$	Difference	<i>P</i> -Value
$\Delta CONSUMER\_PERCEPTION$ (Mean)	0.452	0.707	0.255	0.602
$\Delta CONSUMER\_PERCEPTION$ (Median)	0.497	0.550	0.053	0.357

**TABLE 5**

**The Change Effects of Beating the Profit Benchmark on Customers' Perceptions of Firms:  
Multivariate Analysis**

Table 5 reports the results for the multivariate analysis. By estimating equation (2), we examine the change effects of beating the profit benchmark on customers' perceptions of firms in both basic and more complete regression models. This analysis further tests *H1* by alleviating the concern of the omitted variables associated with level regressions.  $\Delta$ CUSTOMER\_PERCEPTION is the dependent variable. Columns (1)-(3) show the results when the profit benchmark changes ( $\Delta$ PROFIT). Column (4)-(6) show the results when the profit benchmark goes from missing to beating (*MISS\_TO\_BEAT*) and from beating to missing (*BEAT\_TO\_MISS*). *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	$\Delta$ CUSTOMER PERCEPTION			$\Delta$ CUSTOMER PERCEPTION		
	Change Status on the Profit Benchmark			Change from Miss to Beat or Beat to Miss		
$\Delta$ PROFIT	<b>0.875***</b> (0.008)	<b>1.025***</b> (0.004)	<b>1.056***</b> (0.010)			
<i>MISS_TO_BEAT</i>				<b>1.707***</b> (0.000)	<b>1.929***</b> (0.000)	<b>2.211***</b> (0.000)
<i>BEAT_TO_MISS</i>				<b>-0.085</b> (0.857)	<b>-0.193</b> (0.704)	<b>-0.005</b> (0.991)
$\Delta$ EPS	-0.104 (0.654)	-0.051 (0.834)	-1.124 (0.476)	-0.114 (0.623)	-0.062 (0.799)	-1.365 (0.419)
$\Delta$ SIZE	0.280 (0.723)	0.552 (0.533)	0.522 (0.215)	0.655 (0.416)	0.988 (0.274)	1.032*** (0.002)
$\Delta$ LEV	-0.080 (0.915)	-0.470 (0.559)	-0.828 (0.383)	-0.338 (0.655)	-0.734 (0.366)	-1.209 (0.189)
$\Delta$ BTM	-0.710** (0.013)	-0.663** (0.035)	-0.558 (0.212)	-0.745*** (0.009)	-0.730** (0.021)	-0.600 (0.197)
$\Delta$ RD_EXP	-21.871 (0.127)	-22.934 (0.118)	-25.884 (0.147)	-21.802 (0.127)	-22.569 (0.124)	-26.069 (0.129)
$\Delta$ ADS_EXP	12.030 (0.476)	14.807 (0.395)	23.516*** (0.001)	11.797 (0.484)	14.493 (0.404)	23.921*** (0.001)
$\Delta$ FIRM_AGE	-0.820 (0.381)	-0.155 (0.936)	-2.000 (0.123)	-0.927 (0.322)	-0.397 (0.837)	-2.531** (0.042)
$\Delta$ SALES_GROWTH	0.226 (0.651)	0.309 (0.571)	0.063 (0.930)	0.248 (0.620)	0.348 (0.523)	0.135 (0.853)

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**TABLE 5 (Continued)**

<i>ΔINDUS_ADJ_RET</i>		-0.277 (0.212)	-0.177 (0.588)		-0.297 (0.179)	-0.222 (0.481)
<i>ΔN_INDSEG</i>		0.307* (0.051)	0.310 (0.172)		0.301* (0.056)	0.315 (0.153)
<i>ΔHERF_INDEX</i>		-7.214 (0.187)	-13.721 (0.429)		-7.226 (0.186)	-13.699 (0.431)
<i>ΔCSR_SCORE</i>			0.119* (0.086)			0.119* (0.087)
<i>ΔPRODUCT_QUALITY</i>			0.182* (0.076)			0.196* (0.069)
<i>ΔROA</i>			-0.363 (0.944)			0.159 (0.974)
<i>ΔFIRM_REPUTATION</i>			-0.063 (0.820)			-0.023 (0.932)
<i>ΔTOBINS_Q</i>			0.719 (0.449)			0.678 (0.442)
<i>ΔN_ANALYSTS</i>			-0.004 (0.862)			-0.002 (0.923)
Constant	0.698*** (0.000)	-1.560 (0.505)	-2.305*** (0.000)	0.614*** (0.000)	-1.832 (0.434)	-2.246*** (0.000)
Industry FE	No	Yes	Yes	No	Yes	Yes
Year FE	No	No	Yes	No	No	Yes
Cluster by Firm & Year	No	No	Yes	No	No	Yes
Observations	1,643	1,496	1,104	1,643	1,496	1,104
R-squared	0.010	0.038	0.091	0.014	0.041	0.096
Adjusted R-squared	0.0050	-0.0024	0.0304	0.0078	0.0005	0.0348



**TABLE 6**

**The Effects of Beating the Profit Benchmark on Customers' Perceptions of Firms  
Conditional on the Firms' Magnitude of Earnings**

Table 6 reports the results for the cross-sectional variation tests based on firms' earnings magnitude. To test *H2*, we estimate equation (3) to examine the effects of firm's earnings magnitude after beating the profit benchmark on customers' perceptions. *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1) shows the regression results with the interaction term between the profit benchmark and actual earnings (*PROFIT \*EPS*). Column (2)-(5) show the results for each subsample based on the quartiles of actual earnings after beating the profit benchmark (from *EPS\_0\_25<sup>TH</sup>* to *EPS\_75TH\_ABOVE*). Column (6) and (7) report the regression results for the subsamples when firms' actual earnings are above 80<sup>th</sup> and 90<sup>th</sup> percentiles (*EPS\_80TH\_ABOVE* and *EPS\_90TH\_ABOVE*) after the profit benchmark. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>CUSTOMER_PERCEPTION</i>						
	Interaction Term	Level of Profitability					
		Low	Moderate	Moderate to High	Relatively High	High	Very High
<i>PROFIT</i>	2.567*** (0.000)						
<i>EPS</i>	2.552*** (0.000)						
<i>PROFIT *EPS</i>	-21.395*** (0.001)						
<i>EPS_0_25TH</i>		53.668** (0.048)					
<i>EPS_25TH_50TH</i>			13.184 (0.784)				
<i>EPS_50TH_75TH</i>				3.460 (0.905)			
<i>EPS_75TH_ABOVE</i>					-21.266*** (0.000)		
<i>EPS_80TH_ABOVE</i>						-22.659*** (0.000)	
<i>EPS_90TH_ABOVE</i>							-25.085*** (0.001)
<i>SIZE</i>	-0.797*** (0.006)	-0.591 (0.348)	-1.020* (0.053)	-0.713 (0.108)	-1.602*** (0.000)	-1.494*** (0.000)	-1.338** (0.015)
<i>LEV</i>	1.263 (0.261)	2.977* (0.082)	-0.774 (0.625)	0.824 (0.601)	4.134** (0.019)	2.908 (0.114)	3.888 (0.140)

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**TABLE 6 (Continued)**

<i>BTM</i>	-0.393 (0.632)	-0.527 (0.542)	0.764 (0.503)	3.911** (0.028)	-1.266 (0.385)	-1.501 (0.288)	-2.357 (0.206)
<i>RD_EXP</i>	2.485 (0.828)	26.030*** (0.002)	-5.997 (0.713)	5.933 (0.777)	-19.080 (0.114)	-19.901 (0.200)	-13.267 (0.617)
<i>ADS_EXP</i>	14.593 (0.128)	24.186*** (0.000)	-0.448 (0.969)	41.925*** (0.007)	8.170 (0.712)	-5.824 (0.849)	-15.411 (0.780)
<i>FIRM_AGE</i>	0.767 (0.106)	0.988** (0.041)	1.417** (0.021)	1.652** (0.018)	-0.072 (0.878)	-0.402 (0.458)	-1.075 (0.239)
<i>SALES_GROWTH</i>	2.567*** (0.008)	1.198 (0.675)	4.600 (0.116)	0.404 (0.910)	7.806** (0.028)	7.220** (0.037)	6.834** (0.036)
<i>CSR_SCORE</i>	0.336*** (0.000)	0.153 (0.157)	0.262*** (0.004)	0.356*** (0.000)	0.449*** (0.000)	0.403*** (0.000)	0.182 (0.186)
<i>PRODUCT_QUALITY</i>	1.202*** (0.000)	1.822*** (0.000)	1.316*** (0.000)	1.552*** (0.000)	0.589* (0.075)	1.145** (0.031)	1.220* (0.083)
<i>ROA</i>	-5.771 (0.258)	-36.151** (0.021)	-12.599 (0.468)	-14.149 (0.423)	0.200 (0.986)	-3.779 (0.754)	-13.001 (0.268)
<i>HERF_INDEX</i>	-3.937 (0.604)	-18.353 (0.163)	-3.001 (0.704)	8.731 (0.269)	-0.866 (0.975)	68.232*** (0.003)	247.110 (0.107)
<i>INDUS_ADJ_RET</i>	0.353 (0.237)	-0.456 (0.743)	0.847 (0.428)	-1.339** (0.039)	0.669 (0.312)	0.316 (0.664)	-0.299 (0.807)
<i>N_INDSEG</i>	0.315** (0.027)	0.568* (0.052)	0.353 (0.189)	0.467** (0.048)	0.355 (0.157)	0.166 (0.561)	0.108 (0.820)
<i>FIRM_REPUTATION</i>	0.818** (0.031)	1.524* (0.076)	2.232*** (0.006)	-0.232 (0.643)	0.665 (0.195)	0.563 (0.312)	0.209 (0.855)
<i>TOBINS_Q</i>	0.627 (0.584)	3.246** (0.016)	2.221 (0.408)	5.036** (0.025)	-6.164** (0.018)	-6.576*** (0.008)	-4.142 (0.115)
<i>N_ANALYSTS</i>	0.004 (0.924)	-0.009 (0.885)	0.075 (0.131)	-0.045 (0.496)	0.084** (0.035)	0.108* (0.098)	0.160 (0.102)
Constant	47.881*** (0.000)	55.780*** (0.000)	48.434*** (0.000)	60.674*** (0.000)	42.761*** (0.000)	32.789*** (0.000)	75.601* (0.089)
Industry and Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,719	305	432	437	430	345	174
R-squared	0.546	0.657	0.595	0.598	0.675	0.700	0.735
Adjusted R-squared	0.523	0.563	0.511	0.523	0.619	0.637	0.622

**TABLE 7**

**The Effects of Beating Earnings Benchmark on Customers' Perceptions of Firms  
Conditional on the Firms' Life Cycle**

Table 7 presents the results for the cross-sectional variation tests based on firms' life cycle. To test *H3*, we estimate equation (4) to discover the effects of beating the profit benchmark on customers' perceptions in various stages of firms' life cycle. *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1)-(5) shows the regression results with each individual life cycle of firms: Introduction (*INTRODUCTION*), Growth (*GROWTH*), Mature (*MATURE*), Shake-out (*SHAKE\_OUT*), and Decline (*DECLINE*), and their respective interaction terms with the profit benchmark. Column (6) shows the overall regression results which put together of all the life cycle and interactions. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
	Business Life Cycle					
	Introduction	Growth	Mature	Shake-out	Decline	All of Them
<i>PROFIT</i>	1.605** (0.013)	2.708*** (0.001)	1.912** (0.044)	1.762*** (0.008)	1.361** (0.011)	1.848*** (0.006)
<i>EPS</i>	2.347*** (0.000)	2.170*** (0.000)	2.337*** (0.000)	2.272*** (0.000)	2.150*** (0.000)	1.941*** (0.000)
<i>INTRODUCTION</i>	<b>-2.203***</b> <b>(0.000)</b>					<b>-1.890**</b> <b>(0.030)</b>
<i>INTRODUCTION*PROFIT</i>	<b>1.941*</b> <b>(0.053)</b>					<b>2.118**</b> <b>(0.015)</b>
<i>GROWTH</i>		<b>3.722***</b> <b>(0.003)</b>				<b>2.706**</b> <b>(0.047)</b>
<i>GROWTH*PROFIT</i>		<b>-2.716**</b> <b>(0.025)</b>				<b>-1.791</b> <b>(0.164)</b>
<i>MATURE</i>			-0.042 (0.967)			
<i>MATURE*PROFIT</i>			-0.284 (0.788)			
<i>SHAKE_OUT</i>				-1.694 (0.487)		-1.915 (0.419)
<i>SHAKE_OUT*PROFIT</i>				0.523 (0.825)		0.974 (0.674)
<i>DECLINE</i>					<b>-4.375**</b> <b>(0.027)</b>	<b>-4.136**</b> <b>(0.044)</b>
<i>DECLINE*PROFIT</i>					<b>11.155***</b> <b>(0.001)</b>	<b>10.976***</b> <b>(0.002)</b>

(Continued on the next page)

**TABLE 7 (Continued)**

<i>SIZE</i>	-0.823*** (0.006)	-0.839*** (0.005)	-0.817*** (0.006)	-0.825*** (0.005)	-0.818*** (0.005)	-0.848*** (0.004)
<i>LEV</i>	0.852 (0.457)	0.100 (0.933)	0.583 (0.621)	0.634 (0.573)	0.785 (0.482)	0.221 (0.857)
<i>BTM</i>	-0.261 (0.767)	-0.375 (0.655)	-0.287 (0.741)	-0.261 (0.754)	-0.266 (0.761)	-0.323 (0.698)
<i>RD_EXP</i>	0.993 (0.931)	0.040 (0.997)	0.487 (0.967)	0.898 (0.937)	0.185 (0.987)	0.997 (0.930)
<i>ADS_EXP</i>	14.419 (0.124)	14.885 (0.122)	14.358 (0.127)	14.268 (0.129)	14.932 (0.102)	15.437 (0.102)
<i>FIRM_AGE</i>	0.772 (0.115)	0.800* (0.079)	0.770 (0.110)	0.775 (0.109)	0.757 (0.118)	0.799* (0.078)
<i>SALES_GROWTH</i>	2.664*** (0.003)	2.320** (0.015)	2.647*** (0.004)	2.449** (0.011)	2.486*** (0.004)	1.985** (0.019)
<i>CSR_SCORE</i>	0.337*** (0.000)	0.342*** (0.000)	0.337*** (0.000)	0.336*** (0.000)	0.341*** (0.000)	0.344*** (0.000)
<i>PRODUCT_QUALITY</i>	1.221*** (0.000)	1.234*** (0.000)	1.233*** (0.000)	1.189*** (0.000)	1.242*** (0.000)	1.223*** (0.000)
<i>ROA</i>	-14.062*** (0.000)	-14.198*** (0.001)	-13.254*** (0.001)	-13.534*** (0.001)	-13.364*** (0.001)	-14.302*** (0.001)
<i>HERF_INDEX</i>	-4.723 (0.548)	-4.028 (0.612)	-4.620 (0.558)	-5.145 (0.534)	-5.282 (0.497)	-4.839 (0.554)
<i>INDUS_ADJ_RET</i>	-0.444 (0.134)	-0.372 (0.220)	-0.444 (0.123)	-0.392 (0.173)	-0.372 (0.239)	-0.304 (0.333)
<i>N_INDSEG</i>	0.323** (0.022)	0.333** (0.017)	0.327** (0.021)	0.331** (0.019)	0.323** (0.019)	0.332** (0.015)
<i>FIRM_REPUTATION</i>	0.856** (0.029)	0.867** (0.029)	0.887** (0.026)	0.798** (0.042)	0.863** (0.029)	0.819** (0.041)
<i>TOBINS_Q</i>	1.861* (0.068)	1.881* (0.066)	1.837* (0.071)	1.778* (0.084)	1.819* (0.078)	1.876* (0.073)
<i>N_ANALYST</i>	0.010 (0.816)	0.005 (0.897)	0.007 (0.872)	0.012 (0.789)	0.006 (0.901)	0.006 (0.895)
<i>CONSTANT</i>	48.143*** (0.000)	47.468*** (0.000)	48.196*** (0.000)	48.263*** (0.000)	48.853*** (0.000)	48.698*** (0.000)
Industry and Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,719	1,719	1,719	1,719	1,719	1,719
R-squared	0.540	0.544	0.539	0.541	0.543	0.548
Adjusted R-squared	0.516	0.520	0.515	0.517	0.519	0.523

**TABLE 8**

**The Effects of Beating Earnings Benchmark on Customers' Perceptions of Firms  
Conditional on the Firms' Industry Characteristics and Financial Default Risk**

Table 8 Panel A presents the results for the cross-sectional variation tests which focus on the firms' industry characteristics. To test *H4*, we divide the sample into industry-type subsamples to examine whether the effect of beating earnings benchmark on customers' perceptions of firms differs among three industry characteristics. Specifically, *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1)-(2), Column (3)-(4), Column (5)-(6) show the subsample regression results based on whether a firm is in the durable goods industries, the goods-oriented (vs. service-oriented) industries, or industries in which firms produce long-term products, respectively. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: The Perception Effect Conditional on Firms' Industry Types**

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
<i>VARIABLES</i>	Durable Goods Industries	Non-Durable Goods Industries	Goods-Oriented Industries	Service-Oriented Industries	Long-Term Product (LTP) Industries	Non LTP Industries
<i>PROFIT</i>	<b>3.126***</b> (0.009)	<b>1.039</b> (0.188)	<b>2.517**</b> (0.030)	<b>0.928</b> (0.357)	<b>2.062**</b> (0.048)	<b>1.640</b> (0.117)
<i>EPS</i>	-2.688 (0.357)	2.299*** (0.000)	-4.743 (0.350)	2.441*** (0.000)	2.412*** (0.000)	0.178 (0.968)
<i>SIZE</i>	-0.254 (0.586)	-1.158*** (0.001)	-1.041** (0.014)	-0.722* (0.052)	-0.607 (0.159)	-1.157*** (0.002)
<i>LEV</i>	1.676 (0.224)	0.530 (0.709)	2.368 (0.144)	-0.353 (0.825)	-0.486 (0.796)	1.258 (0.294)
<i>BTM</i>	1.221 (0.257)	-0.351 (0.755)	2.306* (0.068)	-1.119 (0.309)	-0.522 (0.658)	-0.226 (0.843)
<i>RD_EXP</i>	-1.234 (0.911)	14.092 (0.580)	-19.043 (0.120)	37.763*** (0.004)	-1.392 (0.931)	7.861 (0.562)
<i>ADS_EXP</i>	8.057 (0.724)	25.072* (0.057)	14.990 (0.194)	6.283 (0.677)	0.127 (0.994)	33.422** (0.014)
<i>FIRM_AGE</i>	0.980** (0.013)	0.690 (0.269)	-0.008 (0.990)	1.580*** (0.004)	1.028* (0.095)	0.456 (0.462)
<i>SALES_GROWTH</i>	3.011 (0.180)	2.043* (0.091)	2.049 (0.268)	3.052*** (0.004)	3.449** (0.015)	1.714 (0.338)

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**TABLE 8**  
**Panel A (Continued)**

<i>CSR_SCORE</i>	0.156*	0.463***	0.527***	0.140	0.194**	0.440***
	(0.088)	(0.000)	(0.000)	(0.144)	(0.042)	(0.000)
<i>ROA</i>	-7.580	-14.546***	-8.948	-9.295	-19.993***	-6.380
	(0.263)	(0.007)	(0.283)	(0.106)	(0.000)	(0.354)
<i>HERF_INDEX</i>	-4.653	-3.650	-34.988***	7.185	2.826	-10.591
	(0.664)	(0.787)	(0.003)	(0.270)	(0.703)	(0.505)
<i>INDUS_ADJ_RET</i>	-0.067	-0.759	0.649	-1.001*	-0.819	0.233
	(0.897)	(0.338)	(0.269)	(0.054)	(0.121)	(0.700)
<i>N_INDSEG</i>	0.021	0.509***	0.327	0.460*	0.381	0.410**
	(0.923)	(0.004)	(0.107)	(0.055)	(0.123)	(0.017)
<i>FIRM_REPUTATION</i>	1.105*	0.565	0.581	0.939	1.177	0.753
	(0.061)	(0.281)	(0.248)	(0.143)	(0.125)	(0.154)
<i>TOBINS_Q</i>	3.351***	0.687	1.380	1.411	3.188**	0.146
	(0.003)	(0.599)	(0.236)	(0.326)	(0.029)	(0.896)
<i>N_ANALYST</i>	0.006	0.005	-0.038	0.045	0.043	-0.022
	(0.901)	(0.930)	(0.570)	(0.267)	(0.240)	(0.746)
<i>CONSTANT</i>	41.770***	52.897***	65.032***	60.521***	54.643***	56.135***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Industry & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	568	1,151	729	990	755	964
R-squared	0.457	0.556	0.603	0.501	0.550	0.556
Adjusted R-squared	0.411	0.528	0.573	0.469	0.518	0.533

**TABLE 8 (Continued)**

Table 8 Panel B presents the results for the cross-sectional variation tests which focus on the firms' financial default risk. To test *H5*, we examine whether the effect of beating earnings benchmark on customers' perceptions varies among firms' financial leverage, distress and volatility conditions, and we partition the sample accordingly. Specifically, *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1)-(2), Column (3)-(4), Column (5)-(6) show the subsample regression results based on firms' level of the debt to assets ratio, the financial distress, or the stock volatility, respectively. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel B: The Perception Effect Conditional on Firm's Financial Default Risk**

<i>VARIABLES</i>	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
	High Debt to Assets	Low Debt to Assets	High Financial Distress	Low Financial Distress	High Stock Volatility	Low Stock Volatility
<b><i>PROFIT</i></b>	<b>2.165**</b> <b>(0.019)</b>	<b>0.818</b> <b>(0.480)</b>	<b>1.908**</b> <b>(0.021)</b>	<b>1.051</b> <b>(0.481)</b>	<b>2.276***</b> <b>(0.004)</b>	<b>1.403</b> <b>(0.221)</b>
<i>EPS</i>	2.777*** (0.000)	-16.921** (0.032)	-1.573 (0.579)	2.553*** (0.000)	2.162*** (0.000)	-15.883* (0.060)
<i>SIZE</i>	-0.315 (0.376)	-0.942*** (0.007)	-0.496 (0.322)	-0.999*** (0.008)	-1.027*** (0.003)	-0.805** (0.016)
<i>LEV</i>	0.211 (0.901)	-0.495 (0.800)	-0.196 (0.934)	3.233*** (0.002)	1.245 (0.313)	0.780 (0.624)
<i>BTM</i>	-0.843 (0.385)	1.940 (0.393)	2.904*** (0.010)	-2.126** (0.023)	-0.610 (0.494)	1.120 (0.453)
<i>RD_EXP</i>	-5.574 (0.644)	-11.044 (0.375)	-30.899*** (0.003)	17.272 (0.199)	-1.070 (0.935)	-7.756 (0.536)
<i>ADS_EXP</i>	23.016** (0.012)	7.529 (0.493)	43.394** (0.031)	9.575 (0.342)	22.862*** (0.003)	8.456 (0.567)
<i>FIRM_AGE</i>	0.820* (0.069)	0.556 (0.475)	1.133* (0.082)	0.295 (0.506)	0.486 (0.338)	0.771 (0.160)
<i>SALES_GROWTH</i>	4.361*** (0.008)	0.982 (0.600)	2.383* (0.061)	3.606*** (0.002)	3.064** (0.031)	3.251* (0.056)
<i>CSR_SCORE</i>	0.150* (0.062)	0.517*** (0.000)	0.257*** (0.000)	0.320*** (0.002)	0.290*** (0.001)	0.381*** (0.000)
<i>PRODUCT_QUALITY</i>	1.328*** (0.000)	1.029*** (0.002)	1.007*** (0.000)	0.983*** (0.006)	1.496*** (0.000)	0.899** (0.035)
<i>ROA</i>	-18.313*** (0.000)	5.578 (0.503)	-10.532 (0.205)	-6.117 (0.441)	-17.972*** (0.000)	4.821 (0.576)

*(Continued on the next page)*

**TABLE 8**  
**Panel B (Continued)**

<i>HERF_INDEX</i>	0.389 (0.930)	-13.503* (0.090)	-12.690 (0.229)	-3.384 (0.747)	5.174 (0.749)	-6.112 (0.440)
<i>INDUS_ADJ_RET</i>	-0.868*** (0.009)	0.740 (0.187)	0.919*** (0.009)	-1.308** (0.023)	-0.410 (0.164)	1.061 (0.195)
<i>N_INDSEG</i>	0.126 (0.447)	0.447** (0.033)	0.081 (0.667)	0.404*** (0.007)	0.325 (0.142)	0.297* (0.098)
<i>FIRM_REPUTATION</i>	0.678 (0.214)	0.539 (0.302)	0.860 (0.129)	0.919 (0.111)	1.416** (0.014)	0.303 (0.563)
<i>TOBINS_Q</i>	3.257*** (0.006)	0.467 (0.783)	6.149*** (0.000)	0.358 (0.739)	0.834 (0.527)	1.257 (0.332)
<i>N_ANALYST</i>	-0.054 (0.124)	0.030 (0.575)	-0.038 (0.308)	-0.014 (0.750)	0.088* (0.077)	-0.088** (0.031)
<i>CONSTANT</i>	67.885*** (0.000)	54.185*** (0.000)	56.723*** (0.000)	49.630*** (0.000)	58.431*** (0.000)	49.527*** (0.000)
Industry and Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	860	859	734	985	857	862
R-squared	0.643	0.541	0.539	0.652	0.548	0.599
Adjusted R-squared	0.609	0.498	0.492	0.623	0.502	0.562



**TABLE 9**

**The Effects of Beating Earnings Benchmark on Customers' Perceptions of Firms  
Conditional on the Firms' Product Quality, Influence (Reputation) and CSR Engagements**

Table 9 Panel A reports the results for the cross-sectional variation tests conditional on the firms' product quality. To test *H6*, we examine whether the effect of beating earnings benchmark on customers' perceptions differs among the various quality of firms' products, based on which we use to divide the sample into subsamples. *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1)-(2), Column (3)-(4), Column (5)-(6) show the subsample regression results based on whether firms' product quality is overall relatively ordinary, superior, or concerned, respectively. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel A: Perception Effect Conditional on Firms' Product Quality**

<i>VARIABLES</i>	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
	Product Quality					
	Overall Ordinary	Overall Superior/ Concerned	Not Superior	Superior	Not Concerned	Concerned
<i>PROFIT</i>	<b>2.153**</b> <b>(0.015)</b>	<b>1.046</b> <b>(0.408)</b>	<b>1.573**</b> <b>(0.043)</b>	<b>1.173</b> <b>(0.472)</b>	<b>3.388***</b> <b>(0.010)</b>	<b>1.084</b> <b>(0.467)</b>
<i>EPS</i>	1.720*** (0.000)	2.935*** (0.000)	3.076*** (0.000)	2.090*** (0.000)	2.082 (0.436)	2.748*** (0.000)
<i>SIZE</i>	-0.849*** (0.005)	-1.281** (0.033)	-1.195*** (0.000)	-0.153 (0.764)	-0.776*** (0.003)	-0.503 (0.260)
<i>LEV</i>	0.449 (0.751)	1.961 (0.289)	0.475 (0.723)	0.583 (0.809)	1.313 (0.172)	0.277 (0.853)
<i>BTM</i>	0.936 (0.329)	-0.950 (0.492)	-0.348 (0.690)	1.305 (0.469)	1.648** (0.020)	-1.335 (0.199)
<i>RD_EXP</i>	10.674 (0.433)	-27.310** (0.013)	-4.660 (0.730)	5.116 (0.706)	1.105 (0.910)	10.997 (0.394)
<i>ADS_EXP</i>	9.443 (0.383)	27.718** (0.034)	4.421 (0.631)	49.939*** (0.007)	4.401 (0.504)	49.299** (0.027)
<i>FIRM_AGE</i>	1.037* (0.060)	0.303 (0.430)	0.397 (0.416)	1.478*** (0.003)	0.579 (0.143)	1.561*** (0.006)
<i>SALES_GROWTH</i>	2.278** (0.037)	4.502** (0.047)	4.387*** (0.000)	0.490 (0.790)	1.795*** (0.007)	3.628** (0.011)
<i>CSR_SCORE</i>	0.308*** (0.001)	0.394*** (0.000)	0.353*** (0.000)	0.262*** (0.006)	0.274*** (0.005)	0.369*** (0.000)

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**TABLE 9**  
**Panel A (Continued)**

<i>ROA</i>	-15.637*** (0.001)	-9.039* (0.092)	-20.455*** (0.000)	-2.579 (0.719)	-15.021** (0.037)	-12.926* (0.064)
<i>HERF_INDEX</i>	0.525 (0.926)	-25.131 (0.196)	-11.582 (0.243)	-11.712 (0.608)	-1.796 (0.516)	-26.433 (0.137)
<i>INDUS_ADJ_RET</i>	-0.614 (0.283)	-0.032 (0.967)	-0.780** (0.050)	0.349 (0.616)	-0.250 (0.620)	-1.283*** (0.002)
<i>N_INDSEG</i>	0.311* (0.054)	0.313* (0.073)	0.246 (0.145)	0.110 (0.580)	0.097 (0.482)	0.294 (0.129)
<i>FIRM_REPUTATION</i>	0.885** (0.032)	0.945 (0.117)	0.961* (0.076)	0.217 (0.806)	0.876** (0.044)	1.058 (0.125)
<i>TOBINS_Q</i>	3.303*** (0.005)	-0.313 (0.842)	2.882** (0.028)	2.108 (0.132)	2.979*** (0.001)	1.889 (0.181)
<i>N_ANALYST</i>	-0.023 (0.548)	0.025 (0.685)	0.038 (0.508)	-0.100* (0.053)	-0.031 (0.358)	-0.044 (0.352)
<i>CONSTANT</i>	60.192*** (0.000)	62.627*** (0.000)	50.805*** (0.000)	56.167*** (0.000)	69.823*** (0.000)	44.378*** (0.000)
Industry & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,233	486	1,231	488	879	840
R-squared	0.473	0.724	0.525	0.660	0.549	0.639
Adjusted R-squared	0.436	0.681	0.492	0.608	0.504	0.607

**TABLE 9 (Continued)**

Table 9 Panel B presents the results for the cross-sectional variation tests based on the firms' influence (size), diversity, and reputation. To test *H7*, we partition the sample into corresponding subsamples, and we examine whether the effect of beating earnings benchmark on customers' perceptions of firms depends on those mentioned firms' features. Specifically, *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1)-(2), Column (3)-(4), Column (5)-(6) show the subsample regression results conditional on whether a firm is influential (with large-size), a firm is diversified with multiple business segments, or a firm is highly reputable (i.e. being recognized as the American Most Admired (MA) company), respectively. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel B: Perception Effect Conditional on Firms' Influence, Diversity, and Reputation**

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
<i>VARIABLES</i>	Less Influential Firms	Influential Firms	Less Diversified Firms	Diversified Firms	Non-MA Firms	MA Firms
<i>PROFIT</i>	<b>3.201***</b> (0.000)	<b>0.709</b> (0.565)	<b>1.947***</b> (0.009)	<b>0.978</b> (0.327)	<b>2.250***</b> (0.003)	<b>1.822</b> (0.217)
<i>EPS</i>	-0.154 (0.971)	2.323*** (0.000)	2.123*** (0.000)	3.033*** (0.000)	2.235*** (0.000)	-8.143 (0.263)
<i>SIZE</i>	-1.012** (0.023)	-1.556** (0.047)	-0.592* (0.087)	-0.543 (0.106)	-1.139*** (0.001)	-0.526 (0.214)
<i>LEV</i>	1.163 (0.330)	2.320 (0.203)	2.877** (0.027)	1.095 (0.488)	0.896 (0.433)	1.739 (0.282)
<i>BTM</i>	-0.019 (0.981)	-0.337 (0.738)	0.761 (0.459)	-0.263 (0.797)	0.103 (0.926)	-1.332 (0.435)
<i>RD_EXP</i>	1.924 (0.837)	-19.018* (0.099)	1.121 (0.932)	20.234 (0.278)	-14.054 (0.100)	20.459 (0.147)
<i>ADS_EXP</i>	8.311 (0.265)	90.048*** (0.002)	-19.300 (0.105)	23.677** (0.037)	5.449 (0.555)	25.473** (0.049)
<i>FIRM_AGE</i>	0.762* (0.098)	0.689 (0.261)	0.808* (0.083)	0.196 (0.726)	0.035 (0.941)	1.393** (0.022)
<i>SALES_GROWTH</i>	3.465*** (0.000)	1.595 (0.206)	2.155 (0.236)	3.798*** (0.006)	2.166*** (0.004)	1.933 (0.315)
<i>CSR_SCORE</i>	0.211** (0.023)	0.420*** (0.000)	0.321*** (0.003)	0.323*** (0.000)	0.305*** (0.003)	0.310*** (0.000)
<i>PRODUCT_QUALITY</i>	1.662*** (0.000)	1.171*** (0.001)	0.762*** (0.003)	1.142*** (0.001)	1.280*** (0.000)	1.080*** (0.001)

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**TABLE 9**  
**Panel B (Continued)**

<i>ROA</i>	-16.103*** (0.000)	-11.625** (0.049)	-16.705*** (0.000)	-5.293 (0.358)	-20.221*** (0.001)	-0.699 (0.928)
<i>HERF_INDEX</i>	-3.813 (0.668)	1.330 (0.957)	2.310 (0.821)	-19.858 (0.105)	-1.824 (0.755)	2.643 (0.822)
<i>INDUS_ADJ_RET</i>	0.026 (0.947)	-1.492** (0.036)	-0.020 (0.962)	-1.130*** (0.007)	-0.662 (0.166)	-0.128 (0.859)
<i>N_INDSEG</i>	0.071 (0.649)	0.457** (0.041)	-2.859*** (0.004)	0.228 (0.261)	0.099 (0.579)	0.360* (0.065)
<i>TOBINS_Q</i>	1.084 (0.303)	3.957** (0.019)	1.266 (0.285)	2.317** (0.046)	0.633 (0.596)	0.694 (0.606)
<i>N_ANALYST</i>	0.025 (0.533)	-0.003 (0.954)	-0.010 (0.843)	-0.015 (0.723)	-0.041 (0.572)	-0.006 (0.878)
<i>FIRM_REPUTATION</i>	1.710*** (0.000)	0.105 (0.859)	0.860 (0.165)	0.508 (0.401)		
Constant	47.307*** (0.000)	68.295*** (0.000)	46.255*** (0.000)	56.405*** (0.000)	65.332*** (0.000)	35.293*** (0.000)
Industry & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	856	863	602	1,117	755	964
R-squared	0.520	0.598	0.637	0.597	0.555	0.627
Adjusted R-squared	0.471	0.569	0.593	0.567	0.507	0.597

**TABLE 9 (Continued)**

Table 9 Panel C reports the results for the cross-sectional variation tests based on the firms' corporate social responsibility (CSR) engagements. To test *H8*, we examine whether the effect of beating earnings benchmark on customers' perceptions of firms varies among firms' different level of commitments to CSR activities, and we divide the sample into subsamples accordingly. *CUSTOMER\_PERCEPTION* is the dependent variable. Column (1)-(2), Column (3)-(4), Column (5)-(6) show the subsample regression results based on whether a firm has good CSR ratings (KLD scores), discloses separate CSR reports, or has been included in the Dow Jones Sustainability Index (DJSI), respectively. *p*-values in parentheses are calculated using standard errors clustered by firm and year. All variables are defined in the Appendix. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, and 1% level, respectively.

**Panel C: Perception Effect Conditional on Firms' CSR Engagements**

<i>VARIABLES</i>	(1)	(2)	(3)	(4)	(5)	(6)
	<i>CUSTOMER_PERCEPTION</i>					
	Low CSR Score	High CSR Score	Non-CSR Disclosures	CSR Disclosure	Not included in DJSI	Included in DJSI
<i>PROFIT</i>	<b>2.688***</b> (0.003)	<b>0.723</b> (0.532)	<b>3.443***</b> (0.000)	<b>0.203</b> (0.844)	<b>2.129***</b> (0.008)	<b>1.383</b> (0.358)
<i>EPS</i>	2.502*** (0.000)	2.012*** (0.000)	2.097*** (0.000)	-3.484*** (0.003)	2.330*** (0.000)	1.463 (0.752)
<i>SIZE</i>	-1.215*** (0.000)	-0.237 (0.564)	-0.794* (0.068)	-0.452 (0.214)	-1.026*** (0.002)	0.297 (0.598)
<i>LEV</i>	1.318 (0.323)	-0.230 (0.861)	0.933 (0.484)	0.445 (0.795)	1.545 (0.166)	-1.071 (0.627)
<i>BTM</i>	-0.179 (0.838)	0.279 (0.672)	-0.487 (0.633)	1.585** (0.046)	-0.129 (0.906)	0.275 (0.792)
<i>RD_EXP</i>	9.316 (0.667)	-9.104 (0.364)	9.607 (0.395)	-23.751** (0.033)	-6.516 (0.591)	-4.048 (0.827)
<i>ADS_EXP</i>	16.566 (0.283)	15.661* (0.082)	3.909 (0.733)	21.102 (0.110)	5.243 (0.594)	42.667*** (0.003)
<i>FIRM_AGE</i>	0.555 (0.271)	1.132** (0.018)	0.934* (0.082)	0.880* (0.054)	0.415 (0.296)	1.835** (0.014)
<i>SALES_GROWTH</i>	3.018*** (0.001)	3.691** (0.047)	1.073 (0.263)	3.833 (0.130)	3.180*** (0.010)	1.781 (0.633)
<i>CSR_SCORE</i>	0.534*** (0.001)	0.294*** (0.001)	0.300*** (0.002)	0.463*** (0.000)	0.355*** (0.001)	0.328*** (0.000)
<i>PRODUCT_QUALITY</i>	1.478*** (0.000)	1.026*** (0.006)	1.123*** (0.000)	1.145*** (0.000)	1.052*** (0.002)	1.314*** (0.000)
<i>ROA</i>	-28.413*** (0.000)	1.414 (0.736)	-23.795*** (0.000)	9.515* (0.077)	-21.220*** (0.000)	1.769 (0.606)

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**TABLE 9**  
**Panel C (Continued)**

<i>HERF_INDEX</i>	-1.011 (0.904)	-13.682 (0.119)	-3.903 (0.615)	-29.052*** (0.008)	1.405 (0.863)	-16.845 (0.393)
<i>INDUS_ADJ_RET</i>	-0.276 (0.521)	-1.178** (0.025)	-0.612 (0.207)	0.255 (0.617)	-0.390 (0.470)	-0.678* (0.064)
<i>N_INDSEG</i>	0.307 (0.125)	0.403** (0.020)	0.402* (0.051)	0.038 (0.845)	0.260* (0.069)	0.474* (0.077)
<i>FIRM_REPUTATION</i>	1.625*** (0.005)	0.636 (0.208)	1.185** (0.044)	0.528 (0.146)	1.205** (0.011)	-0.658 (0.325)
<i>TOBINS_Q</i>	2.435** (0.027)	1.721* (0.097)	2.830** (0.013)	0.538 (0.639)	2.050* (0.077)	2.562* (0.062)
<i>N_ANALYST</i>	0.063 (0.364)	-0.036 (0.284)	0.017 (0.742)	-0.000 (0.998)	0.015 (0.775)	-0.022 (0.682)
Constant	48.426*** (0.000)	46.722*** (0.000)	40.300*** (0.000)	58.120*** (0.000)	48.561*** (0.000)	43.940*** (0.000)
Industry & Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Firm & Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	870	849	952	767	1,200	519
R-squared	0.560	0.575	0.558	0.636	0.567	0.668
Adjusted R-squared	0.516	0.536	0.520	0.598	0.535	0.623