Communicating Human Capital Information Through Employee-Related Tax Incentive Disclosures

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Abstract: I investigate whether firms with recent negative employment practices are more likely to disclose the Employee Retention Tax Credit (the Credit), which incentivized employers to retain and pay non-working employees during the COVID-19 pandemic. Employees are vital to a firm's success, and firms with negative employment practices incur costly reputational damage that could be repaired through beneficial actions toward employees. Although tax disclosures can generate tax-based reputational costs, disclosures of the Credit provide stakeholders with credible information concerning efforts to improve employee relations. I find firms that recently incurred employee-related regulatory violations are more likely to disclose the Credit. Results are consistent with managers using such disclosures to communicate firm efforts taken to improve employee relations. I further find some evidence that Credit disclosing firms obtain reputational benefits after the disclosure. I contribute to the tax literature by highlighting a setting in which the perceived benefits of tax disclosures outweigh the costs. Additionally, I contribute to the emerging literature on human capital disclosures by documenting managers' use of employee-related tax incentive disclosures to communicate human capital information to stakeholders.

Keywords: Tax Disclosures, Employee Retention Tax Credit, Corporate Reputation, Employees, Human Capital Disclosures

1. Introduction

In this paper, I examine whether firms with recent negative employment practices are more likely to disclose the Employee Retention Tax Credit ("the Credit"). Disclosures of the Credit provide information concerning employee relations because the Credit incentivized employers to retain and pay non-working employees during the COVID-19 pandemic. Managers often prefer to disclose minimal amounts of tax information given tax-based proprietary and reputational costs (Hoopes et al. 2018; Richter et al. 2023; Yost 2022). However, managers of firms with recent negative employment practices can potentially benefit from disclosing the Credit because it allows them to credibly communicate a firm action that benefits employees – retaining and paying their workforce during an economic downturn. Providing stakeholders with information regarding these efforts can be beneficial because of the negative reputational and valuation effects that can arise from misconduct towards employees (Flanagan and O'Shaughnessy 2005; Li and Raghunandan 2021). Given recent interest in firms' human capital and employment practices (e.g., Kiernan 2021; Yohn 2020), I provide timely evidence on managers' decisions to disclose a tax incentive that provides reputation-relevant human capital information.

Enacted as part of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) of 2020, the Credit is a refundable payroll tax credit available to firms that retained and paid *non-working* employees while suffering adverse economic events because of the COVID-19 pandemic. The Credit incentivizes companies to compensate their employees during a period of economic uncertainty even though the employees are not providing services. Because firms must continue to pay non-working employees to qualify, disclosures of the Credit credibly communicate information to stakeholders concerning the firm's beneficial employment practices. Furthermore, the Credit was widely advertised during 2020 and 2021, suggesting that managers could expect

some stakeholders to understand the firm took beneficial actions towards employees when disclosing the Credit.¹

Disclosures of tax information can generate tax-based proprietary and reputational costs. Proprietary costs arise from tax authorities using public tax disclosures, thereby incentivizing incomplete disclosure (Bozanic et al. 2017; Richter et al. 2023). Additionally, reputational costs arise from external stakeholders, such as the media and activist groups, using public tax disclosures to scrutinize firms' tax practices (Chen et al. 2019; Dyreng et al. 2016). Further, the Credit is a form of a government tax subsidy. Firms obtaining government tax subsidies often receive public scrutiny because of political favoritism in the subsidy granting process (Aobdia et al. 2023) and the lack of transparency and monitoring surrounding the use of subsidies, which diminishes the intended benefits of taxpayer funds (De Simone et al. 2022; Good Jobs First 2022). Scrutiny of a firms' tax disclosures, including disclosures of tax subsidies that the firm obtains, can negatively affect the public's perception of the firm, subjecting the firm to reputational costs. Regarding Credit disclosures specifically, managers potentially expected IRS scrutiny of the Credit given some uncertainty in the interpretation of the Credit's provisions (Brienza et al. 2020). Further, managers potentially expected public scrutiny from disclosures related to the CARES Act given media criticism of other CARES Act tax provisions (Drucker 2020; Wallace 2020).

Although tax disclosures can impose costs, disclosures of specific tax incentives can provide investors with credible information about value-increasing activities that give rise to tax benefits. The credibility arises because a firm must claim the tax incentive with the tax authority,

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¹ Subsequent to the sample period in this study, reports of abusive third-party Credit promoters have become common. The Credit promoters "con ineligible people to claim the [C]redit" (IRS 2023). The IRS issued its first press release of these abusive Credit promoters in October 2022 (IRS 2022) and subsequently named the Credit on its annual 2023 Dirty Dozen list of tax scams (IRS 2023). Despite this negative publicity of the Credit more recently, the Credit received favorable media coverage in 2020 (Rubin 2020) and still in early 2022 (Rubin and Simon 2022).

which subjects the firm to the possibility of a tax authority audit. Further, claiming the Credit subjects the firm to financial auditor monitoring. Together, this additional regulatory scrutiny increases the credibility of firm disclosures. As an example, Hutchens et al. (2023) find that ESG investors use firms' disclosures of the Work Opportunity Tax Credit, a tax incentive available to firms that hire from disadvantaged groups, as a credible indicator of the firm's commitment to ESG activities.

Managers of firms with recent negative employment practices (hereafter, firms with NEP) have an incentive to provide credible information to stakeholders concerning efforts taken to improve relations with employees because of the costs of poor employment practices. Employees are a strategic asset to the firm and are essential to the firm's overall success (Becker 2002; Edmans 2011). A firm's reputation is negatively affected by firms' actions that demonstrate negative employment practices (Flanagan and O'Shaughnessy 2005), which results in higher costs of attracting and retaining employees (Wei 2007) and negative valuation effects (Li and Raghunandan 2021). By disclosing the Credit, firms can credibly communicate information regarding efforts taken to improve employee relations. Despite these benefits, tax-based disclosure costs were likely salient to managers during this period. Thus, it is unclear whether the incentives to disclose the Credit for firms with NEP exceed expected tax-based disclosure costs.

I begin my empirical analysis by identifying a sample of firms that disclosed the Credit in 2020 or 2021 ("disclosing firms"). After manually reviewing 10-K, 10-Q, and 8-K filings that mention the Credit, I identify 197 unique firms that assert claiming the Credit. Next, I create a sample of non-disclosing peer firms that likely claimed the Credit but did not disclose it.² I use the

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² I assume firms that qualify for the Credit claimed the Credit. Because the Credit is claimed on a payroll tax return, which falls under the confidentiality exceptions in IRC § 6103(a), this information is protected from Freedom of Information Act requests. As such, I would need IRS data to identify the true set of firms that claimed but did not disclose the Credit. However, I use a strict methodology to identify the most likely sample of firms that claimed the

Hoberg and Phillips (2016) methodology to identify peer firms. Within the set of peer firms, I identify non-disclosing firms that likely claimed but did not voluntarily disclose the Credit as those that (1) meet the Credit's requirement related to adverse economic conditions and (2) did not reduce overall employee headcount during the year and thus were likely to have continued to pay their non-working employees during the pandemic.

I estimate a firm's propensity to disclose the Credit as a function of the firm's recent employment practices. I identify firms with NEP as those that committed at least one employee-related regulatory violation between 2017 and 2019 using *Good Jobs First's* Violation Tracker. Example violations include Occupational Safety and Health Administration violations for unsafe and hazardous working conditions and Department of Labor violations for unpaid wages. Prior research shows that firms subject to these violations suffer negative valuation consequences and subsequently increase compliance efforts (Johnson 2020; Li and Raghunandan 2021).

I find managers of firms with NEP are significantly more likely to disclose the Credit. My findings indicate a firm that committed at least one employee-related regulatory violation is 12.2 percent more likely to disclose the Credit, suggesting an economically important result. When examining the severity of employee-related regulatory violations as evidenced by the count and dollar amount of violations, I find that firms with more severe negative employment practices are significantly more likely to disclose the Credit.³

Credit by using the Credit's qualification criteria. Additionally, the Credit was widely advertised, suggesting firms should have been aware of the Credit. Further, this assumption is based on discussions with multiple practitioners and firm managers, who provide evidence that firms that met the Credit's criteria claimed the Credit. Footnote 3 discusses how this assumption could bias my results.

³ If the sample of non-disclosing firms includes firms that did not claim the Credit, my results are biased toward finding results if the decision to claim the Credit is positively associated with a firm having committed employee-related regulatory violations. I do not expect a positive association between the decision to claim the Credit and committing employee-related regulatory violations because there is not an economic rationale why a manager of a firm without employee-related regulatory violations would be unlikely to claim a tax incentive that provides economic benefits to the firm.

I conduct multiple robustness tests to address concerns relating to the inferences from my main analysis. First, I remove observations for which the Credit was above commonly cited quantitative materiality thresholds (e.g., Eilifsen and Messier 2015) to alleviate concerns that *mandatory* disclosures of a material Credit drive the results from my main analysis. After removing more material Credit disclosures, a firm that committed at least one employee-related regulatory violation is still 9.4 percent more likely to disclose the Credit. Second, I implement entropy balancing to address the concern that firms with NEP differ substantially from non-NEP firms on observable dimensions. Again, I find consistent results. Third, to triangulate results across multiple proxies for firms with NEP, I incorporate media coverage of employee layoffs as an additional measure of firms with NEP (Flanagan and O'Shaughnessy 2005). I find firms with media coverage of employee layoffs are also significantly more likely to disclose the Credit.

In a falsification test, I examine whether the decision to disclose the Credit is unique to firms that previously committed negative actions towards employees. Specifically, I examine firms that committed negative actions towards shareholders as evidenced by recent financial reporting misconduct. Disclosing the Credit is likely less relevant to shareholders of these firms given the employee-specific nature of the Credit. Thus, I predict and find firms with financial reporting misconduct are not more likely to disclose the Credit.

Lastly, I examine whether Credit firms obtain reputation benefits from Credit disclosures. I measure reputation benefits with decreases in the firm's reputational risk related to ESG issues. Using a difference-in-differences research design, I examine quarterly changes in Credit and control firms' reputational risk between 2020 and 2021. I examine changes between 2020 and 2021 as sustained public awareness of the Credit was greatest in the first quarter of 2021 per Google Trends. I find evidence that Credit firms' reputation risk decreased in 2021, subsequent to

disclosing the Credit on 2020 calendar-year filings, compared to control firms' reputation risk. Thus, I find some evidence that Credit firms received reputational benefits from Credit disclosures.

This study contributes to the literature in several ways. First, my study contributes to research that examines disclosures of tax information. Prior tax literature primarily focuses on mangers' perceived *costs* of tax disclosures (e.g., Hoopes et al. 2018; Robinson and Schmidt 2013; Richter et al. 2023; Yost 2022). I identify a setting in which the benefits of tax disclosures outweigh these costs. My study suggests firms with NEP perceived the benefits of Credit disclosures to be greater than these costs because of the incentive to provide stakeholders with credible information concerning efforts taken to improve employee relations.

Second, by focusing on the underlying aspects of firms' tax strategies, I provide a more nuanced understanding of the generally perceived negative relationship between taxes and firm reputation. This approach compliments recent research by Gillette and Stinson (2022) and Inger and Stekelberg (2022) that find investors positively value tax strategies that provide societal benefits, such as renewable energy and domestic hiring tax incentives. I extend this literature by providing new insights into firms' reputation-related motivations for disclosing employee-related tax incentives that directly benefit firms' employees.

Third, my study contributes to the emerging literature on human capital disclosures (e.g., Bourveau et al. 2022; Goldman and Zhang 2022; Reiger and Rouen 2023; Zhang 2022). As investors increasingly demand human capital information and the SEC considers additional human capital disclosures (Kiernan 2021), I provide timely evidence regarding managers' disclosure of employee-related tax incentives that communicate human capital information. Finally, my study extends Chakravarthy et al. (2014) by providing insights on managers' decisions to disclose tax information that reveals efforts taken to improve employee relations.

2. Background, Prior Literature, and Hypothesis Development

2.1 Employee Retention Tax Credit Overview and Disclosure Considerations

The Employee Retention Tax Credit is a refundable payroll tax credit available to firms that meet certain conditions. The purpose of the Credit is to incentivize firms to retain employees during the COVID-19 pandemic by providing additional funds and timely liquidity. Congress originally enacted the Credit through the end of 2020 as part of the CARES Act of 2020 (Public Law No. 116-136). The Consolidated Appropriations Act of 2021 (Public Law No. 116-260) and the American Rescue Plan Act of 2021 (Public Law No. 117-2) extended the Credit through the end of 2021 and increased the maximum Credit amounts. The Infrastructure Investment and Jobs Act (Public Law No. 117-58), signed into law by President Biden on November 15, 2021, retroactively ended the Credit on September 30, 2021. Thus, the Credit was in effect from Q1 2020 through Q3 2021.

A firm must experience adverse economic conditions to qualify for the Credit. A firm is deemed to have experienced adverse economic conditions if in a quarter (1) the firm's operations were fully or partially suspended due to a government order, or (2) the firm had a significant decline in business receipts. For 2020 (2021), a significant decline in business receipts is defined as gross receipts that are less than 50 percent (80 percent) of the firm's gross receipts in the same quarter of 2019. Large employers experiencing adverse economic conditions can claim the Credit on qualified wages paid to employees not providing services to the firm. In contrast, small employers experiencing adverse economic conditions can claim the Credit on qualified wages paid to employees regardless of whether the employee provides services to the firm. In 2020 (2021), a large employer was defined as a firm with more than 100 (500) full-time employees as of 2019.

For 2020, the amount of the Credit equals 50 percent of the first \$10,000 of qualified wages for the year, resulting in up to \$5,000 per employee. For 2021, the Credit amount equals 70 percent of the first \$10,000 of qualified wages per employee per quarter, resulting in up to \$21,000 per employee for the year. Any Credit in excess of the firm's quarterly share of employees' Social Security taxes is refunded.⁴ Generally, firms claim the Credit on payroll tax forms that are filed quarterly. Firms could amend payroll tax forms and claim the Credit retroactively, which Goodman (2023) shows was common.

Because the Credit is a payroll tax credit and not an income tax credit, accounting and disclosure considerations are not guided by ASC 740, accounting for income taxes. Practitioners advised firms to account for the Credit as a form of government assistance. Although there were no specific disclosure requirements related to government assistance during 2020 and 2021, SEC and U.S. GAAP rules require firms to disclose material information. Further, some practitioners advised firms to disclose the Credit to the extent it could be material to the financial statements (PwC 2021).

2.2 Tax Disclosure Costs

Prior tax literature examines the proprietary and reputational costs of tax disclosures. Taxbased proprietary costs arise from the use of tax information by tax authorities for tax enforcement.

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⁴ See Appendix A for sample Credit calculations that provide the percentage of employee qualified wages for which the firm receives a credit.

⁵ During my sample window, U.S. GAAP did not address accounting for government assistance. As such, ASC 105-10-05-2 instructs firms to look for guidance that is similar and apply it by analogy. PwC advised firms to account for the Credit as government assistance under ASC 958-605, not-for-profit entities' grant accounting or IAS 20, accounting for government grants and disclosure of government assistance. Whereas ASC 958-605 requires firms to present grant income as part of grant revenue or other income, IAS 20 allows firms to present grant income as other income or deduction from the related expense. Per my review of Credit disclosures, some firms adopted ASC 958-605 while others adopted IAS 20. The FASB adopted ASU 2021-10 in November 2021. ASU 2021-10 is effective for annual periods beginning after December 15, 2021, and requires firms to disclose the types of government assistance received, the accounting treatment for the assistance, and significant terms and conditions of the government assistance.

Bozanic et al. (2017) show the IRS downloads firms' public financial filings, which provides evidence of tax-based proprietary costs. Recent research by Richter et al. (2023) examines how tax authorities influence managers' corporate communications. Through semi-structured interviews of tax executives, the authors provide evidence of managers' decisions to withhold tax information in public financial filings because of tax-based proprietary costs. Additionally, Robinson and Schmidt (2013) and Yost (2022) provide evidence of tax-based proprietary costs surrounding the implementation of mandatory uncertain tax benefit disclosures (FIN 48). Robinson and Schmidt (2013) provide evidence that managers of firms that avoid more tax provide less precise tax disclosures of their initial FIN 48 reserves, while Yost (2022) shows tax aggressive public firms are more likely to go private subsequent to the implementation of FIN 48. Overall, prior literature demonstrates that managers expect tax disclosures to generate tax-based proprietary costs.

Tax-based reputational costs are the focus of another stream of tax research. Firms often receive scrutiny for perceived harmful tax behavior (Chen et al. 2019; Dyreng et al. 2016). The scrutiny of firms' tax behavior can negatively affect the public's perception of these firms, which generates reputational damage. Hoopes et al. (2018) provide evidence that some Australian firms acted to avoid public disclosure of tax information in anticipation of reputational costs that the disclosure could create. Further, Dyreng et al. (2020) show firms subject to greater media scrutiny and thus higher reputational costs are more likely to provide incomplete disclosures of subsidiaries in tax havens. Additionally, Graham et al. (2014) provide survey evidence that tax executives consider the reputational costs of tax disclosures. Therefore, prior literature examining proprietary and reputational costs of tax disclosures demonstrates through multiple research methods that managers expect tax disclosures to generate proprietary and reputational costs.

2.3 Firm Reputation and Employees

I define firm reputation as stakeholders' perceptions of a firm's past actions and expectations for its ability to fulfill future commitments such as producing and delivering goods and services (Chakravarthy et al. 2014; Gallemore et al. 2014; Brown and Dacin 1997; Keller and Lehmann 2006). Firm reputation is often referred to as an intangible asset, and like other intangible assets, greater reputation "capital" allows firms to generate greater cash flows, lowers the firm's cost of capital, and creates significant value for the firm and its stakeholders (Chakravarthy et al. 2014; Fombrum and Shanley 1990). Firm reputation is also driven by stakeholders' perceptions of the firm's corporate social responsibility, such as through the "treatment of employees and impact on the environment" (Keller and Lehmann 2006).

As a key stakeholder group, employees' perceptions of their employer are important for the overall success of the firm. Prior literature finds firms with employees that more positively perceive their employer have better firm performance and higher future abnormal returns (Guiso et al. 2015; Edmans 2011). Further, Maxham III et al. (2008) find that firms with employees that more positively perceive the firm have greater customer satisfaction and firm performance. Overall, prior literature finds a positive relationship between employees' perceptions of the firm and firm success.

Given the positive relationship between employees' perceptions and firm success, prior literature also examines the consequences of firms' actions that demonstrate poor employment practices and damage employees' perceptions of the firm. Li and Raghunandan (2021) find negative stock returns and an increase in stock return volatility for firms that commit labor law violations. The results suggest that investors prefer firms with better employment records because of the reputation and financial consequences from poor employment practices. Johnson (2020)

finds firms subject to publicized labor law violations increase future compliance of labor laws, suggesting labor law violations are costly for firms. Prior literature also examines employee layoffs as another event that could damage employees' perceptions of the firm. Flanagan and O'Shaughnessy (2005) and Zyglidopoulous (2005) both find negative reputation effects when firms lay off employees. Given the negative consequences that result when firms engage in negative employment practices, it is important to understand firms' disclosure choices that provide insights into the relation between the firm and its employees subsequent to these negative actions.

2.4 Hypothesis Development

I hypothesize that firms with NEP are more likely to disclose the Credit. Negative reputation consequences occur when firms commit actions that adversely impact employees, and investors increasingly focus on firms' human capital and employment practices (Kiernan 2021). Therefore, managers of firms with NEP have an incentive to provide stakeholders with information that demonstrates the efforts the firm is taking to repair relations with employees and improve its human capital. By disclosing the Credit, managers communicate credible information to stakeholders regarding beneficial actions the firm is taking towards employees because firms are required to retain and pay non-working employees to claim the Credit with the IRS, and a firm's financial statement auditor reviews the tax position. Further, because prior research shows stakeholders positively value targeted actions towards stakeholders that were affected by the firm's past actions (e.g., Chakravarthy et al. 2014), managers could expect stakeholders to positively value efforts to retain and pay non-working employees during the pandemic to improve employee relations. Additionally, recent research finds tax incentives that provide societal benefits generate positive reputation benefits (Gillette and Stinson 2022; Inger and Stekelberg 2022), which also provides evidence that managers could expect stakeholders to positively value the underlying efforts that allow the firm to claim the Credit. Thus, I predict the following hypothesis, stated in the alternative:

Hypothesis: Firms with recent negative employment practices are more likely to disclose the Credit.

Although firms with NEP could benefit from providing information to stakeholders about the firm's relationship with employees, it is possible that these firms are no more or less likely to disclose the Credit. Prior literature finds tax-based proprietary costs can lead to managers disclosing minimal and vague tax information (e.g., Richter et al. 2023). Because criteria for the Credit took into consideration firms' economic and financial conditions, disclosures of the Credit combined with other financial statement information provide the IRS with information that could be useful in deciding whether to audit the firm. Further, given prior literature on the reputational costs of tax disclosures, managers could have expected reputational costs from disclosing additional tax information through Credit disclosures. The reputational costs were likely salient to managers during this period because large public firms that exploited the Paycheck Protection Program, another provision of the CARES Act that provided assistance to firms during the COVID-19 pandemic, incurred significant scrutiny (Wallace 2020).

Credit disclosure costs could also arise from managers' uncertainty of investors' responses to Credit disclosures and new disclosure costs. The Credit disclosure reveals the firm allocated

⁶ The Paycheck Protection Program (PPP) provided firms with a low-interest private loan that could be used for payroll and certain other costs. Total loan proceeds were typically two-and-a-half times a firm's monthly payroll, and loan forgiveness was possible if firms met certain conditions. Several key differences exist between the Credit and PPP. First, any firm that met the Credit eligibility requirements could claim the Credit whereas the PPP only provided loans to small firms and firms in the hotel and food industries. Second, no aggregate funding amount existed for the Credit whereas the PPP limited the total amount of funds that all firms could receive, which pitted recipients against each other. Third, the PPP received significant public criticism for the administration of the program because small firms, the primary intended beneficiaries of the program, missed out on funding while a few large public firms such as Potbelly, Ruth's Chris Steakhouse, and Shake Shack received funding (Wallace 2020). In contrast, the Credit did receive positive media attention as it was a "valuable lifeline" to firms (Rubin and Simon 2022).

financial resources to non-working employees. Given the economic uncertainty that existed during the COVID-19 pandemic, some stakeholders could possibly view this use of limited firm resources as inefficient, if not wasteful. Therefore, stakeholders' responses to disclosing of the Credit could be uncertain to managers, and uncertain investor responses can lead managers to withhold information (e.g., Beyer et al. 2010). Lastly, managers often state new disclosures generate additional costs (FASB 2021). Because the Credit did not exist previously, disclosing the Credit required firms to create a new disclosure, generating additional costs. Overall, the costs associated with the disclosure and the uncertainty regarding stakeholders' responses to Credit disclosures suggest it is possible firms with NEP are *not* more likely to disclose the Credit.

3. Description of Dataset and Research Design

3.1 Sample Description

I use Calcbench to identify firms that mention the Credit in their 10-K, 10-Q, and 8-K filings ("disclosing firms") using the following search terms: "employee retention tax credit," "employee retention credit," and "payroll tax credit." I then review each filing containing any of these search terms to ensure the firm claims the Credit. As some firms provide only descriptions of the provisions of the CARES Act, Consolidated Appropriations Act of 2021, or the American Rescue Plan Act of 2021 but do not positively assert that the firm claims the Credit, it is important to review each firm's filings manually. After reviewing 3,991 filings that mention the Credit, I identify 364 unique firms across 1,145 firm-quarter observations that positively assert that the firm claims the Credit. Appendix B provides examples of Credit disclosures for disclosing firms.

I next identify a matched sample of firms that are eligible for the Credit but do not disclose the Credit in their financial filings ("non-disclosing firms"). I perform a rigorous matching procedure to identify a matched sample of firms that are eligible for the Credit. I assume that all non-disclosing firms that qualify for the Credit claim the Credit. The Credit was widely advertised, suggesting firms should have been aware of the Credit. This assumption is also based on discussions with multiple practitioners and firm managers. These discussions provide evidence that firms that met the Credit's criteria claimed the Credit. Further, these discussions revealed how salient disclosure considerations were because of proprietary and reputational costs. To create the matched sample, I first identify a set of non-disclosing firms that Hoberg and Phillips (2016) identify as a product peer firm to at least one Credit firm. The COVID-19 pandemic affected firms differently and the Credit economic condition tests require a firm to be negatively impacted by the pandemic to be eligible. Therefore, retaining product peer firms of Credit firms ensures that the non-disclosing firms faced similar economic and operating conditions.

Next, I retain only those non-disclosing firms that meet the Credit's economic condition tests either through the suspension of the firm's operations due to government orders or through a significant decline in gross receipts. For quarters ending prior to December 2020, I further exclude firms identified as receiving other Paycheck Protection Program loans during 2020 per data obtained from Good Jobs First. I implement this screen because prior to December 2020 and the passage of the Consolidated Appropriations Act of 2021, firms that obtain Paycheck Protection Program loans could not also claim the Credit. As amended payroll return filings were common (Goodman 2023), I also retain observations for two quarters following the quarter in which a non-

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⁷ Because nearly all states imposed shutdown orders, I retain non-disclosing firms were more severely affected by shutdown orders and therefore more likely qualified for the Credit. To do so, I collect data on shutdown orders by state. I classify states as imposing a more severe shutdown order if the order lasted for 45 days or longer, which is the median length of all state shutdown orders. Next, I identify the states the firm operates in using mentions of states in their 10-Ks (Garcia and Norli 2012). I then determine the percentage of states a firm operates in that imposed a more severe state shutdown order. I retain non-disclosing firms if 65 percent of the states where a firm operates impose a more severe state shutdown order. I use a 65 percent threshold because this is the median percentage of states where a firm operates that imposed a more server state shutdown order for Credit disclosing firms. I also retain non-disclosing firms that experienced a significant decline in revenue, as defined by the Credit's guidelines, in any quarter of 2020 and through the third quarter of 2021.

disclosing firm is identified as qualifying for the Credit. Finally, as firms can only claim the Credit on wages paid to non-working employees (i.e., Credit qualifying wages), I retain firms that did not report a reduction in headcount during 2020 and 2021. Firms that did not report a reduction in headcount more likely had Credit qualifying wages because these firms retained their workforces and were exposed to similar economic conditions of firms that disclosed the Credit.

Through this detailed procedure of identifying non-disclosing firms, I enhance the likelihood that these firms are eligible for and claimed the Credit as they are peer firms of disclosing firms, met the Credit's economic condition tests, and likely incurred qualified wages. For tests of my hypothesis, the sample period starts in the first calendar-quarter of 2020 because Congress enacted the Credit in March 2020. The sample ends in the fourth calendar-quarter of 2021. Although Congress retroactively ended the Credit on September 30, 2021, I include observations in the fourth calendar-quarter of 2021 because firms can file amended payroll returns to claim the Credit for prior quarters in 2020 and 2021.

After identifying my initial sample of disclosing and non-disclosing firms, I remove firms that meet the definition of a small employer because these firms could claim the Credit on wages paid to working employees if one of the economic condition tests was met. I further remove firms with a market capitalization that is less than the smallest market capitalization of a firm with coverage in the *Good Jobs First's* Violation Tracker, which I use to capture negative employment practices. I also remove firms with missing data required to compute control variables. My final sample consists of 3,853 firm-calendar-quarter observations across 864 unique firms. For firms that disclose (do not disclose) the Credit, my sample consists of 703 (3,150) firm-calendar-quarter observations across 197 (667) unique firms. Table 1 describes the sample selection process.

⁸ All results are robust to ending the sample period in the third calendar-quarter of 2021.

3.2 Research Design

To investigate whether firms with NEP are more likely to disclose the Credit, I estimate the following ordinary least squares (OLS) regression:

$$ERTC\ Disclosure_{i,q} = \beta_0 + \beta_1 \cdot Employee\ Penalty_i + \beta_{2-17} \cdot Controls_{i,q} +$$
 (1)
$$\delta \cdot TimeFE + \gamma \cdot IndustryFE + \varepsilon_{i,q}$$

where subscripts i and q refer to firm and calendar-quarter. The dependent variable, ERTCDisclosure, is an indicator variable that equals one if firm i claims and discloses the Credit in calendar-quarter q, and zero otherwise. My primary independent variable of interest captures firms with recent negative employment practices. To capture firms with NEP, I identify firms that incurred employee-related regulatory agency violations between 2017 and 2019 using Good Jobs First's Violation Tracker. Li and Raghunandan (2021) show firms subject to employee-related regulatory agency violations suffer negative valuation consequences, and Johnson (2020) finds firms that commit these violations subsequently increase regulatory compliance efforts because of the negative effects on employees and the firm. Using the Violation Tracker data, I set an indicator variable, Employee Violation (Indicator), equal to one if firm i incurred at least one employeerelated agency violation between 2017 and 2019. I create two additional measures that capture the severity of the violations by measuring the count of employee-related agency violations (*Employee* Violation (Count)) and the dollar value of employee-related agency violations (Employee Violation (Dollars)). I use a log transformation of the count and dollar value of violations because of skewness in the raw values. I assume that negative employment practices are increasing in the number and dollar value of violations. A positive and significant coefficient on the three measures of Employee Violation suggests firms with NEP are more likely to disclose the Credit.

I include a robust set of controls that prior research shows could affect the firm's ability to claim tax incentives or affect the firm's decision to disclose tax information. I include the natural log of assets (*Size (Ln)*), growth opportunities (*Book-to-Market*), and the firm's average internal information environment between 2017 and 2019 (*IIQ*) to control for firm's resource constraints and the firm's ability to gather information needed to claim and calculate the Credit. Additionally, I control for the overall importance of a firm's workforce to the firm using the count of employees (*Employee (Ln)*) and the level of a firm's disclosure related to its workforce (*Workforce Words*). To capture the level of disclosure, I follow Pawliczek et al. (2021) and identify the count of the following workforce words in the firm's 10-K/10-Q: "skill," "worker," "wage," "job," "salary," "displace," and "employ."

A firm's profitability and liquidity could also affect the firm's incentive to disclose the Credit. For profitability, I include return on assets (*Profitability*) and an indicator for a loss firm (*Loss*). I also include the amount of debt (*Leverage*) and the firm's current liquidity (*Current Ratio*). I include a firm's advertising expense (*Advertising*) to control for a firm's exposure to consumers and the media (Hanlon and Slemrod 2009). I also include the 12-month market-adjusted buy-and-hold return (*Return Momentum*), the standard deviation of monthly stock returns over the past 12 months (*Return Volatility*), firm age (*Firm Age*), and a firm's analysts following (*Analyst Following*). Additionally, I control for big four auditors (*Big Four Auditor*) and whether the firm operates in high litigation risk industry (*Litigation Industry*) following Francis et al. (1994). Lastly, I include controls for items directly related to firms' taxes including the level of prior tax avoidance (*GAAP ETR3*), tax-based disclosures costs (*UTB Indicator*), and the amount of tax services the firm receives from its auditor (*APTS*). I include calendar-quarter fixed effects to control for time trends in disclosing the Credit and Fama-French 30 industry classification fixed effects. Due to the

use of fixed effects, I choose to use a linear probability model (i.e., OLS) to avoid the incidental parameters problem per Greene (2004). Finally, I winsorize all continuous variables at the 1st and 99th percentiles, and I cluster standard errors by firm.

4. Results

4.1 Descriptive Statistics

Figure 1 provides the Google Trends search term popularity of the Credit during 2020 and 2021. The search popularity peaked briefly in March 2020 when the CARES Act passed. With the extension of the Credit in late 2020, the popularity saw a sustained peak period during the first quarter of 2021. This figure in combination with broad media and social media coverage of the Credit indicates public awareness of the Credit, which suggests that managers could expect stakeholders to understand that the firm took beneficial actions towards employees if the firm disclosed the Credit.

Figure 2 provides descriptive information on the location of firms' Credit disclosures. Firms most commonly disclose the Credit in the Management Discussion and Analysis (MD&A) section of the 10-K or 10-Q with disclosures in 8-K earnings announcements being the second most common. Income tax footnotes were the third most common location despite the Credit not being an *income* tax credit and therefore not falling within the scope of income tax items disclosed in the income tax footnote. A review of the Credit disclosures in the tax footnotes shows firms often discussed the Credit within text that described the impact from the CARES Act and subsequent pandemic-related legislation. The prevalence of Credit disclosures within the MD&A section and within 8-Ks shows the importance managers placed on these disclosures and suggests managers possibly did so to communicate employee-related information to stakeholders.

Figure 3 presents the percentages of *ERTC Disclosure* firm-calendar-quarter observations within each Fama-French 30 industry classification. Firms that disclose the Credit are most commonly classified within the retail, personal and business services, and restaurant, hotels, and motels industry classifications. The prevalence of Credit disclosing firms within these industries is not surprising given the economic impact of the COVID-19 pandemic on service-oriented firms.

Table 2, Panel A presents descriptive statistics for all variables used to estimate equation (1). In total, 18.25 percent of the firm-calendar-quarter observations disclose the Credit. Further, 17.80 percent of firms commit at least one employee-related agency violation between 2017 and 2019. The raw average number of violations per firm is 0.6346 with a raw average total violation amount of \$469,350. For firms that commit at least one violation, the average number of violations is 3.5641 with a total violation amount of \$2.64 million (untabulated). Firms in the sample are unprofitable on average with the mean of Profitability equal to -1.23 percent and 40.75 percent of firms report a year-to-date loss (*Loss*). This is not surprising as the sample period only covers the COVID-19 pandemic.

In Table 2, Panel B, I provide descriptive statistics separately for firm-calendar-quarter observations that disclose the Credit (*ERTC Disclosure* = 1) and observations that do not disclose the Credit (*ERTC Disclosure* = 0). Univariate tests of differences at the means and medians of the *Employee Violation* variables suggest firms that committed employee-related regulatory agency violations were more likely to disclose the Credit, providing preliminary support for my hypothesis. *ERTC Disclosure* firms exhibit no significant differences at the means compared to firms that do not disclose the Credit for several variables, including *Size (Ln)*, *Book-to-Market*,

Q

⁹ The means and medians of *Employee Violation (Count)* and *Employee Violation (Dollars)* are consistent with Li and Raghunandan (2021). The authors find significant market reactions to these regulatory violations despite the relatively low count and dollar value of the violations.

IIQ, Analyst Following, and APTS. However, several control variables exhibit significant differences at the means and medians. Profitability differs significantly between disclosing and non-disclosing firms: ERTC Disclosure firms are slightly profitable on average, while firms that do not disclose the Credit are unprofitable on average. Further, ERTC Disclosure firms are older (Firm Age), are less likely to be in a Litigation Industry, and are more likely to use a Big Four Auditor compared to firms that do not disclose the Credit. These significant differences in control variables provide support that controlling for other factors that could affect claiming and disclosure decisions of the Credit is important. I provide correlations in Table 2, Panel C. I find positive and significant correlations between ERTC Disclosure firms and the Employee Violation variables, again providing preliminary evidence in support of my hypothesis.

4.2 Main Test of Hypothesis

In Table 3, I report the results from estimating equation (1). Across all three measures of *Employee Violation*, I find a positive and significant coefficient. These results support my hypothesis and suggest firms that committed an employee-related regulatory violation are significantly more likely to disclose the Credit. The coefficient in column (1) of 0.122 (t-stat 2.92, p-value < 0.01) suggests firms that commit at least one employee-related regulatory violation are 12.2 percent more likely to disclose the Credit than a firm with zero employee-related regulatory violations. Further, the coefficient of 0.096 (t-stat 3.11, p-value < 0.01) in column (2) indicates a 150 percent increase in the count of violations, or approximately 1.00 violations, is associated with a 8.8 percentage point increase in the likelihood of disclosing the Credit. These results suggest an economically meaningful association between firms that committed employee-related regulatory violations and the likelihood of disclosing the Credit.

¹⁰ To obtain the increase in the likelihood of disclosing the Credit based on the count of violations, I multiple the coefficient on *Employee Violation (Count)* (0.096) by the natural log of 2.50, or 1 plus 150%.

4.3 Robustness of Main Results

I conduct a series of tests to address concerns relating to the inferences from my main analysis. First, one concern is that the firms that disclosed the Credit were required to because the Credit was material to the financial statements. In circumstances where financial information is more material, managers have less discretion in disclosure decisions (Heitzman et al. 2010). Thus, it is possible that the inferences from my main analysis are driven by mandatory disclosures of the Credit, which questions whether managers disclosed the Credit intentionally to provide information to stakeholders regarding the firm's relations with employees. I re-estimate equation (1) after removing ERTC Disclosure firms that disclosed more material amounts. I identify more material amounts as Credit amounts that exceed five percent of pre-tax book income, one-half percent of total revenue, or one-half percent of total assets, commonly cited materiality thresholds (Eilifsen and Messier 2015). 11 Results are reported in Table 4, Panel A. Even after excluding firms that disclosed more material Credits, I continue to find positive and significant coefficients on all three measures of *Employee Violation*, with minimal attenuation in the significance of the coefficients. These results suggest that when examining disclosures that are more likely to be considered voluntary, managers of firms with NEP continue to be more likely to disclose the Credit.

I next address the concern that my main results are driven by firms that disclosed the Credit later in the sample period. Firms that disclosed the Credit in later quarters benefited from larger Credit amounts per employee (e.g., a maximum Credit amount of \$5,000 per employee in 2020 compared to a maximum Credit amount of \$21,000 per employee in 2021). The increase in the

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¹¹ One limitation of this analysis is that materiality requires professional judgment and includes both quantitative and qualitative considerations. I rely on commonly used quantitative thresholds as I cannot observe managers' or auditors' qualitative materiality considerations.

Credit suggests firms' motives for disclosing the Credit later in the sample was potentially driven more by economic reasons relating to the benefits of the Credit and less driven by altruistic reasons for retaining and paying employees. Further, the economic uncertainty of the pandemic was greater in 2020 compared to 2021. Therefore, firms had less incentive to communicate to stakeholders information concerning beneficial actions towards employees later in the sample period as the economic uncertainty declined. To address this concern, I retain observations only relating to calendar-year 2020 financial filings and then re-estimate equation (1). Table 4, Panel B provide results of this analysis. Across all three measures of *Employee Violation*, I continue to find positive and significant coefficients.

Another concern with the main analysis is that firms with NEP are substantially different from control firms on observable characteristics, and these differences are driving the main results. To address this issue, I follow McMullin and Schonberger (2020) and implement entropy balancing on firms that committed at least one employee-related regulatory violation and firms that did not commit any employee-related agency using the set of control variables used in equation (1). I implement entropy balancing on the first three moments and confirm no significant differences at the means, variances, and skewness exist between these two firm groups after balancing. I then re-estimate equation (1) on the entropy balanced sample. Table 4, Panel C provides results of this analysis. I continue to find positive and significant coefficients across all three measures of *Employee Violation*, suggesting that differences in observable firm characteristics between firms with NEP and firms without NEP are not affecting inferences of the main analysis.

4.4 Cross-Sectional Tests

I conduct multiple cross-sectional tests to examine whether the likelihood of disclosing the Credit is moderated by managers incentives and the cost of the disclosure. I first examine whether the likelihood of disclosing the credit is greater for firms with NEP that derive more value from the firm's workforce and human capital. The incentive to communicate employee-related information to stakeholders is greater for these firms (Regier and Rouen 2023), and I predict the likelihood of disclosure increases for firms with NEP that derive more value from human capital.

I identify for firms that derive more value from their human capital as those firms with high amounts of workforce disclosures, *High Workforce Words* – *Lagged*, set equal to one if the firm's 10-K/10-Q in quarter *q-1* contained *Workforce Words*, following Pawliczek et al. (2021), that were above the pooled sample median. I use lagged values of *Workforce Words* to alleviate concerns that high values of *Workforce Words* are driven by the disclosures of the Credit in quarter *q*. In separate regressions, I modify equation (1) by interacting *High Workforce Words* – *Lagged* with each of the three measures of *Employee Violation*. I provide results in Table 5, Panel A. Across all columns, I find positive and significant coefficients on *Employee Violation* and the *Employee Violation* × *High Workforce Words* interaction term. These results are consistent with predictions and suggest the likelihood of disclosure increases for firms with NEP that derive more value from the firm's human capital.

Next, I examine whether the likelihood of disclosing the credit depends on tax-based disclosure costs. Prior research finds that firms that previously engaged in greater tax avoidance expect greater proprietary costs (e.g., Robinson and Schmidt 2013; Deng et al. 2021) and reputational costs (e.g., Dhaliwal et al. 2022; Dyreng et al. 2016). Therefore, I predict the

likelihood of disclosing the Credit decreases for firms with NEP that engaged in greater tax avoidance compared to firms with NEP that engaged in less tax avoidance.

I identify firms that engaged in greater amounts of past tax avoidance as those firms with the 2019 fiscal year GAAP ETRs below the median. I use fiscal year 2019 GAAP ETRs because tax-based proprietary and reputational costs are likely more salient to managers based on the most recent level of tax avoidance. In separate regressions, I then modify equation (1) by interacting Low GAAP ETR with each of the three measures of Employee Violation. I provide results in Table 5, Panel B. Across all columns, I find a positive and significant coefficient on Employee Violation, suggesting firms with NEP that engaged in less tax avoidance are more likely to disclose the Credit compared to firms without negative employment practices. Further, I find a negative and significant coefficient on the interaction term, Employee Violation × Low GAAP ETR in columns (1) and (3). The coefficient on the interaction term suggests that firms with NEP that engaged in more tax aggressive strategies are less likely to disclose the Credit compared to firms with NEP that engaged in less aggressive tax strategies.

5. Additional Tests

5.1 Alternative Proxies for Firms with Negative Employment Practices

I next reperform my main analysis when incorporating alternative proxies for firms with NEP. I do so to triangulate inferences across multiple proxies given possible measurement error between my theoretical construct and empirical proxy. First, I use a measure of a firms' reputation risk associated with its social activities. Investors and the public increasingly demand firms to engage in socially responsible behavior, as evidenced by firms' Environmental, Social, and Governance (ESG) activities. When assessing the social pillar of firms' ESG activities, stakeholders take into consideration the firm's employment practices. Firms with greater

reputational risk from its social activities are more likely to have damaged reputations with employees. Therefore, these firms could also be more likely to disclose the Credit.

To measure firms with greater reputation risk associated with its social activities, I use data from RepRisk. Screening daily over 100,000 public sources of information from a diverse set of stakeholders, including the media, Twitter, and research firms, RepRisk systematically identifies and assesses firm-specific material ESG risks (RepRisk 2022). I create the variable, *RepRisk Index – Social*, which is firm *i*'s average monthly Current RepRisk Index related to social issues between 2017 and 2019. The variable is increasing in a firm's reputational risk. I re-estimate equation (1) when using *RepRisk Index – Social* as the main variable of interest. The sample size decreases because RepRisk data are available only for a subset of firms in the sample. Table 6 presents results. Across all specifications, I find that firms with greater reputational risk from social activities are significantly more likely to disclose the Credit. In column (1), the primary test of equation (1), the coefficient of 0.009 (t-stat 2.62, p-value < 0.01) suggests a one-standard deviation increase in a firm's *RepRisk Index – Social* is associated with a 6.0 percentage increase in the likelihood of disclosing the Credit. ¹²

I next incorporate a proxy for firms with NEP that captures greater public awareness of negative employment practices that occurs through media coverage of employee layoffs. Both Flanagan and O'Shaughnessy (2005) and Zyglidopoulous (2005) find firms' reputations decrease, as evidenced by lower *Fortune's* Most Admired Companies rankings, following media coverage of firms' workforce reductions. The decrease in a firm's reputation following layoffs can be driven by both lower external perceptions of the firm (e.g., consumers) and lower internal perceptions of the firm (e.g., employees) (Zyglidopoulous 2005). Firms with recent layoff media coverage could

¹² To compute the percentage change in likelihood of disclosing the Credit, I multiply the coefficient of 0.009 by *RepRisk Index – Social*'s standard deviation of 5.9547 (untabulated).

possibly benefit from disclosing the Credit as it communicates to stakeholders and other external stakeholders that despite laying off employees previously, the firm is taking care of its employees that it could retain through the COVID-19 pandemic.

To conduct this analysis, I search RavenPack for media coverage of firms that laid off employees during 2020 and 2021. I set an indicator variable, *Layoff Media Coverage*, equal to one if RavenPack shows firm *I* had at least one article during quarter *q-1* where RavenPack identified the type of article as "layoff," and zero otherwise. I further require RavenPack to assign a news story relevance of 100, which indicates the firm was featured prominently in the news story. I then re-estimate equation (1) with *Layoff Media Coverage* as the main variable of interest. I modify the sample of non-disclosing firms to also include those firms that had a reduction in headcount during 2020 and 2021.¹³

Table 7 presents the results of this analysis. I find a positive and significant coefficient on *Layoff Media Coverage*. The coefficient of 0.077 (t-stat 3.79, p-value < 0.01) on *Layoff Media Coverage* suggests firms that received recent layoff media coverage are 7.7 percent more likely to disclose the Credit. The results suggest that managers who previously received negative media coverage of employee layoffs are also more likely to disclose the Credit. By incorporating alternative proxies for firms with NEP, I follow Jennings et al.'s (2020) suggestion of triangulating inferences across multiple proxies to address possible measurement error. These alternative proxies help strengthen support for my hypothesis and further suggest managers of firms with NEP

 $^{^{13}}$ In my main tests, my goal was to identify the most precise sample of control firms that likely had qualified wages and were therefore eligible for the Credit. However, if I estimate equation (1) by continuing to impose the no reduction in headcount criterion, I likely positively bias the coefficient on β_1 because firms that did not have overall reductions in headcount are possibly less likely to lay off employees, which would result in less media coverage of layoffs. I note that I also find a positive and significant coefficient on *Layoff Media Coverage* when continuing to impose the restriction of no reduction in headcount during 2020 and 2021.

possibly expected Credit disclosures to credibly communicate employee reputation information to stakeholders.

5.2 Falsification Test

I assume firms that committed negative employment practices damaged their reputation specifically with *employees* and therefore are the firms that could be most likely to benefit from disclosing the Credit. Therefore, I would not expect firms that committed actions that damaged the firm's reputation with other stakeholder groups to have a strong incentive to disclose the Credit because of the specific employee-related information provided by disclosures of the Credit. To provide evidence as to whether the decision to disclose the Credit is unique to firms that committed actions that damaged the firm's reputation with its employees, I examine firms that that committed actions that damaged the firm's reputation with stakeholders as evidenced by recent financial reporting misconduct.

I capture firms with reputation damage with stakeholders if the firm issued a financial restatement or incurred a violation from the SEC between 2017 and 2019 because prior research notes the negative reputation and shareholder effects from these events (e.g., Chakravarthy et al. 2014; Dechow, Sloan, and Sweeney 1996). I modify equation (1) by replacing *Employee Violation* with *Financial Reporting Misconduct*, an indicator variable equal to one (1) if the firm issued a restatement between 2017 and 2019 due to fraud or (2) if the firm incurred a violation from the SEC between 2017 and 2019 using *Good Jobs First's* Violation Tracker. I then re-estimate equation (1). Results are reported in Table 8. I observe firms that damaged their reputation with stakeholders are significantly *less* likely to disclose the Credit (coefficient -0.134, t-stat -2.63, p-value < 0.01). This result suggests that reputation damage incurred because of specific negative

actions towards employees is driving my main result because of the employee-related information content of Credit disclosures.

5.3 Does disclosing the Credit matter?

As my main results are consistent with managers of firms with NEP disclosing the Credit to help repair the firm's reputation with stakeholders, I next examine whether Credit disclosing firms obtain reputation benefits from Credit disclosures. Credit disclosure benefits could be evidenced through better reputation ratings. I proxy for reputation ratings using data from RepRisk. As RepRisk provides monthly measures of a firm's reputational risk, I can more precisely capture changes in a firm's reputation as compared to other reputation measures employed in research that only capture a firm's reputation annually (e.g., Fortune's Most Admired Companies ranking). To conduct this analysis, I implement a difference-in-differences research design that examines changes in Credit firms' RepRisk Indices between 2020 (i.e., pre-period) and 2021 (i.e., postperiod) compared to changes in the RepRisk Indices of a set of control firms. I select 2021 as the post-period because Figure 1 shows the greatest awareness of the Credit occurring in January 2021. Therefore, I increase the power of finding any effect of the Credit disclosures when awareness of the Credit was greatest. Further, I bias against finding results if Credit firms that disclosed earlier in 2020 receive reputation benefits in 2020. Lastly, this research design alleviates potential inference issues that can occur when implementing a staggered difference-in-differences research design (Baker et al. 2022).

The sample for this analysis includes all observations with non-missing RepRisk data. I do not restrict the control firms to the sample of non-disclosing Credit qualifying firms as used in the main analysis because I am interested in examining the effects of the Credit disclosure. Therefore, restricting the control firms to those in the main analysis restricts the sample unnecessarily as

stakeholders likely do not engage in a sophisticated process to determine whether a firm met the Credit criteria but did not disclose the Credit.¹⁴ I estimate the following OLS regression at the firm-calendar quarter level to examine any changes in reputation that occur surrounding Credit disclosures:

$$RepRisk\ Index - Qtr_{i,q} = \beta_0 + \beta_1 \cdot ERTC\ 2020_i + \beta_2 \cdot ERTC\ 2020_i \times$$

$$Post_q + \beta_{3-11} \cdot Controls_{i,q} + \delta \cdot Fixed\ Effects + \varepsilon_{i,q}$$

$$(2)$$

RepRisk Index is the three-month RepRisk Index of a firm i in quarter q.¹⁵ I measure the three-month average starting in the second month following the firm's quarter end to allow for the firm's 10-K/10-Q to be publicly available. ERTC 2020 is an indicator variable if firm i disclosed the Credit on a calendar year 2020 10-K/10-Q. Post is an indicator variable for any observation with a 10-K/10-Q disclosure occurring in calendar year 2021. The coefficient on Post is subsumed by the use of calendar-quarter fixed effects. The coefficient on the interaction term, ERTC 2020 \times Post, is the variable of interest. As RepRisk Index is increasing in a firm's reputation risk, a negative coefficient on the interaction term indicates a Credit firm's reputation risk decreased in 2021 compared to the change in control firms' reputation risk. I use a subset of equation (1) control variables that could affect a firm's reputation. I estimate multiple specifications that vary fixed effects and incorporate the use of entropy balancing between Credit firms and control firms.

Table 9 provides results of estimating equation (3). I find a negative and statistically significant coefficient on *ERTC 2020 x Post* across three of the four specifications. ¹⁶ The

¹⁴ Results are statistically similar when estimating equation (2) on the main sample of firms per Table 1.

¹⁵ In Section 5.2, I used a firm's RepRisk Index related to social issues during the 2017 to 2019 period. However, RepRisk ceased providing the individual E, S, and G components in 2021. Therefore, I use a firm's total RepRisk Index that incorporates all three components of ESG. By incorporating this broader measure, I bias against finding results as I capture of firm's reputation risk from social issues with more noise.

¹⁶ The coefficients on *Employee Violation (Indicator)* and *Financial Reporting (Indicator)* in columns (2) and (4) are subsumed by the use of firm fixed effects because these variables do not vary within firm.

coefficient on β_2 in column (1) indicates that a Credit firm's RepRisk decreases by 1.195 in the post period compared to a non-disclosing Credit firm, which is 10.8 percent of the sample mean, suggesting an economically meaningful result.¹⁷ Overall, this analysis provides some evidence that Credit firms received reputational benefits from Credit disclosures.

6. Conclusion

Motivated by stakeholders' recent focus on firms' human capital and employment practices, I examine whether firms with recent employee-related regulatory violations are more likely to disclose the Employee Retention Tax Credit ("the Credit"). Firms' employees are vital to the firm's success, and firms with negative employment practices incur costly reputational damage. Because the Credit requires firms to retain and pay non-working employees to claim the Credit, disclosures of the Credit demonstrate the firm is taking actions that directly benefit employees during the COVID-19 pandemic, a period of extreme economic uncertainty. Although managers often prefer to disclose limited information about taxes given the potential for proprietary and reputational costs, managers could use disclosures of the Credit to credibly communicate to stakeholders efforts to improve employee relations. I find firms with recent negative employment practices, as evidenced by firms that recently committed employee-related regulatory violations, are significantly more likely to disclose the Credit. I find consistent results when measuring recent negative employment practices with the firm's social pillar reputational risk (i.e., the "S" in ESG) and firms with recent media coverage of layoffs. Finally, I find some evidence that Credit firms received reputational benefits from Credit disclosures.

My study provides several contributions to the accounting literature. While the tax literature often focuses on the *costs* of tax disclosures (e.g., Hoopes et al. 2018; Robinson and

¹⁷ The sample mean of *RepRisk Index – Qtr* is 11.1037.

Schmidt 2013; Richter et al. 2023; Yost 2022), I provide evidence of a setting in which the benefits of tax disclosures outweigh these costs. Further, by focusing on the underlying aspects that give rise to reductions in tax costs, my study compliments recent research by Gillette and Stinson (2022) and Inger and Stekelberg (2022), which suggests a greater need to understand the relationship between specific tax strategies and firm reputation. Additionally, I contribute to the emerging literature on human capital disclosures by providing timely evidence on managers use of employee-related tax incentive disclosures that credibly communicate to stakeholders relevant human capital information. Finally, I extend the findings of Chakravarthy et al. (2014). Whereas Chakravarthy et al. (2014) focus on firms' actions subsequent to accounting restatements, I examine firms' disclosure decisions subsequent to committing negative actions towards employees, who are vital to a firm's success.

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Appendix A: Sample Employee Retention Tax Credit Calculations

This appendix provides example calculations of the Employee Retention Tax Credit.

Calendar-Year 2020

In 2020, the amount of the Credit is equal to 50 percent of the first \$10,000 of qualified wages per employee per year, resulting in up to \$5,000 per employee per year.

Employee Qualified Wages	Credit Amount	Percentage of Total Qualified Wages
\$5,000	\$2,500	50%
\$10,000	\$5,000	50%
\$20,000	\$5,000	25%
\$30,000	\$5,000	17%
\$40,000	\$5,000	13%
\$50,000	\$5,000	10%
\$60,000	\$5,000	8%
\$70,000	\$5,000	7%
\$80,000	\$5,000	6%
\$90,000	\$5,000	6%
\$100,000	\$5,000	5%
\$200,000	\$5,000	3%

Calendar-Year 2021

In 2021, the amount of the Credit is equal to 70 percent of the first \$10,000 of qualified wages per employee per quarter, resulting in up to \$7,000 (\$21,000) per employee per quarter (per year). The following calculation shows the total credit amount per year assuming the qualified wages over \$10,000 were earned equally over the year.

Employee Qualified Wages	Credit Amount	Percentage of Total Qualified Wages
\$5,000	\$3,700	70%
\$10,000	\$7,000	70%
\$20,000	\$14,000	70%
\$30,000	\$21,000	70%
\$40,000	\$21,000	53%
\$50,000	\$21,000	42%
\$60,000	\$21,000	35%
\$70,000	\$21,000	30%
\$80,000	\$21,000	26%
\$90,000	\$21,000	23%
\$100,000	\$21,000	21%
\$200,000	\$21,000	11%

Appendix B: Sample Employee Retention Tax Credit Disclosures

This appendix provides examples of Employee Retention Tax Credit disclosures.

Example 1: Shoe Carnival, Inc.'s 10-Q for the quarter ending August 1, 2020, Management Discussion and Analysis

We have undertaken a number of actions to mitigate the financial impact of the COVID-19 pandemic, preserve capital and keep our customers and employees safe. These actions include:

• Continuing to pay employees while our stores were closed and recording tax credits in selling, general and administrative ("SG&A") expenses that offset wage expense. This credit was associated with the Coronavirus Aid, Relief, and Economic Security ("CARES") Act, and represents an employee retention tax credit to support wages paid to employees while such employees were not working.

Example 2: Texas Roadhouse, Inc.'s 10-Q for the quarter ending March 30, 2021, Management Discussion and Analysis

COVID-19 Impact

The CARES Act also allowed for an Employee Retention Credit for companies severely impacted by the pandemic to encourage the retention of full-time employees. This refundable payroll tax credit was available for any company that had fully or partially suspended operations due to government order or experienced a significant decline in gross receipts and had employees who were paid but did not actually work. The Company provided various forms of relief pay for hourly restaurant employees that qualified for this tax credit. In our Q1 2021 fiscal quarter, we recorded \$1.0 million related to this credit which is included in labor expense in our unaudited condensed consolidated statements of income and comprehensive income.

Appendix C: Variable Definitions

Variable	Definition
Dependent Variable	•
•	An indicator variable equal to one if firm <i>i</i> discloses the
	Credit in calendar-quarter q , and zero otherwise. (Source:
ERTC Disclosure	Calcbench)
	The three-month average RepRisk Index of a firm i in quarter q .
	The three-month average is measured starting in the second
n n· l l l o	month following the firm's quarter end to allow for the firm's
Rep Risk Index – Qtr	10-K/10-Q to be publicly available.
Independent Variables of Interest	
	An indicator variable equal to one if firm i (1) incurred at
	least one regulatory violation per the Occupational Safety
	& Health Administration or (2) incurred at least one
	regulatory violation related to an "employment-related
	offense" between 2017 and 2019, and zero otherwise.
Employee Violation (Indicator)	(Source: Good Jobs First Violations Tracker)
	The natural log of one plus the count of the number of
	regulatory violations per the Occupational Safety & Health
	Administration and regulatory violations related to an
Frank Willer (Comm)	"employment-related offense" for firm <i>i</i> between 2017 and
Employee Violation (Count)	2019. (Source: <i>Good Jobs First</i> Violations Tracker)
	The natural log of one plus the dollar value of regulatory
	violations per the Occupational Safety & Health
	Administration and regulatory violations related to an
Employee Violation (Dollars)	"employment-related offense" for firm <i>i</i> between 2017 and
Employee Violation (Dollars)	2019. (Source: <i>Good Jobs First</i> Violations Tracker) An indicator variable equal to one if firm <i>i</i> 's 10-K/10-Q in
	quarter q-1 contained Workforce Words that were above
High Workforce Words - Lagged	the sample median, and zero otherwise.
The world to the stage of the s	An indicator variable equal to one if firm <i>i</i> 's <i>GAAP ETR</i>
	for the fiscal period 2019 was below the median, and zero
Low GAAP ETR	otherwise. (Source: Compustat)
	The average monthly Current RepRisk Index related to
	social issues for firm <i>i</i> between 2017 and 2019. (Source:
RepRisk Index Social	RepRisk)
•	An indicator variable equal to one if firm <i>i</i> had at least one
	article during calendar-quarter q-1 that RavenPack
	classifies a news story relevance score equal to 100 and
	type equal to "layoff," and zero otherwise. (Source:
Layoff Media Coverage	RavenPack)
	An indicator variable equal to one if (1) firm i has at least
	one SEC regulatory violation between 2017 and 2019, or
	(2) firm <i>i</i> issued a restatement between 2017 and 2019, and
	zero otherwise. (Source: Good Jobs First Violations
Financial Reporting Misconduct	Tracker, Audit Analytics)
	An indicator variable equal to one if firm <i>i</i> disclosed the
EDEC 2020	Credit on a calendar year 2020 10-K/10-Q, and zero
ERTC 2020	otherwise.

Appendix C: Variable Definitions (continued)

Variable	Definition
	An indicator variable equal to one for an observation with
	a 10-K/10-Q disclosure occurring in calendar year 2021,
Post	and zero otherwise.
Control Variables	
	The natural log of total assets (ATQ) for firm i in calendar-
Size (Ln)	quarter q . (Source: Compustat)
	The natural log of the book-to-market ratio at the end of
	calendar-quarter q , measured as the book value of equity
	(ATQ-LTQ) scaled by the market value of equity (PRCCQ
Book-to-Market	* CSHOQ). (Source: Compustat)
	The natural log of one plus the number of employees
	(EMP) reported on the firm's most recently filed 10-K.
Employees (Ln)	(Source: Compustat)
	The natural log of one plus the number of words related to
	firm i 's workforce in the firm's 10-K/10-Q filing in quarter
	q. Following Pawliczek et al. (2021), the following is the
	list of workforce words: "skill," "worker," "wage," "job,"
Workforce Words	"salary," "displace," and "employ."
	Firm i's average measure of internal information quality
	between 2017 and 2019, modeled after McGuire, Rane,
	and Weaver (2018). IIQ is measured by ranking earnings
	announcement speed (EAS) into deciles by Fama-French
	12 industry classification and year. The ranking is then divided by 10 so that EAS ranges between from 0.1 to 1.0.
	The variable is then set zero for firm-years that report an
	error-related restatement, and all other observations retain
	the decile ranking. Finally, the measure is averaged across
IIO	2017 to 2019. (Source: Compustat, Audit Analytics)
	Firm i's pretax income (PIQ) in calendar-quarter q scaled
	by total assets (ATQ) in calendar-quarter q-4. (Source:
Profitability	Compustat)
	An indicator variable set equal to one if firm i reports a
	year-to-date loss (NIY less than zero) in calendar-quarter
Loss	q, and zero otherwise. (Source: Compustat)
	Firm i's advertising expense (XAD) per the firm's most
4.1	recently filed 10-K scaled by lagged sales (SALE). Missing
Advertising	values are reset to zero. (Source: Compustat)
	Firm i's debt (DLTTQ + DLCQ) in calendar-quarter q
Lavaraga	scaled by total assets (ATQ) in calendar-quarter q-4. I
Leverage	reset missing values to zero. (Source: Compustat)
	Firm i 's current ratio for calendar-quarter q , calculated as total current assets (ACTQ) divided by total current
Current Ratio	liabilities (LCTQ). (Source: Compustat)
Cuitem Rullo	Firm <i>i</i> 's twelve-month market-adjusted buy-and-hold
	returns from calendar-quarter <i>q-4</i> through calendar-
Return Momentum	quarter q . (Source: CRSP)
1 COVII II 1110 III CIII WIII	quarter y. (Source, Sitor)

Appendix C: Variable Definitions (continued)

Variable	Definition
Return Volatility	Firm <i>i</i> 's standard deviation of monthly stock returns from calendar-quarter <i>q</i> -4 through calendar-quarter <i>q</i> . (Source: CRSP)
Firm Age	The natural log of the number of years firm <i>i</i> is publicly traded using the date of the firm's first return (BEGRET). (Source: CRSP)
Analyst Following	The natural log of one plus the number of analysts following firm i in calendar-quarter q . (Source: I/B/E/S)
Big Four Auditor	An indicator variable equal to one if firm <i>i</i> is audited by a Big Four Auditor, and zero otherwise. (Source: Audit Analytics)
Litigation Industry	An indicator variable set equal to one if firm <i>i</i> operates in the following high-litigation industries: biotechnology (SIC codes 2833–2836), computers (3570–3577 and 7370–7374), electronics (3600–3674), and retail (5200–5961). (Source: Compustat)
GAAP ETR3	Firm <i>i</i> 's three-year GAAP ETR, measured from years <i>t-4</i> to <i>t-1</i> , calculated as the sum of total tax expense (TXT) divided by the sum of pre-tax income (PI). Following Gaertner (2014), values are reset to 0 for companies with tax refunds (negative total tax expense) and to 1 for companies with positive total tax expense and negative pre-tax income. After resetting values as noted above, values are then reset to 0 (1) if the value is less than 0 (is greater than 1). (Source: Compustat)
5 51110	An indicator variable equal to one if firm <i>i</i> reports a non-missing and a non-zero of ending uncertain tax benefits (TXTUBEND) per firm <i>i</i> 's most recently filed 10-K, and
UTB Indicator	zero otherwise. (Source: Compustat)
APTS	The natural log of one plus the dollar value of tax fees paid to the firm's auditor in year <i>t</i> . (Source: Audit Analytics)

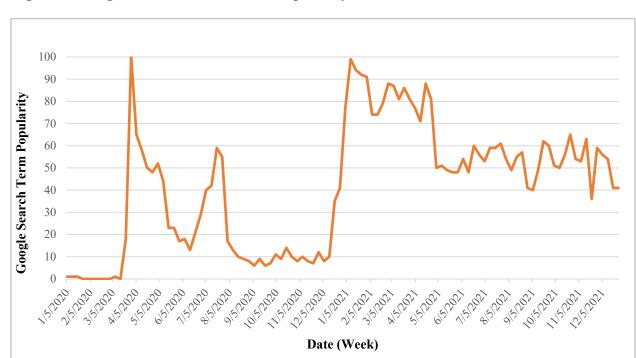
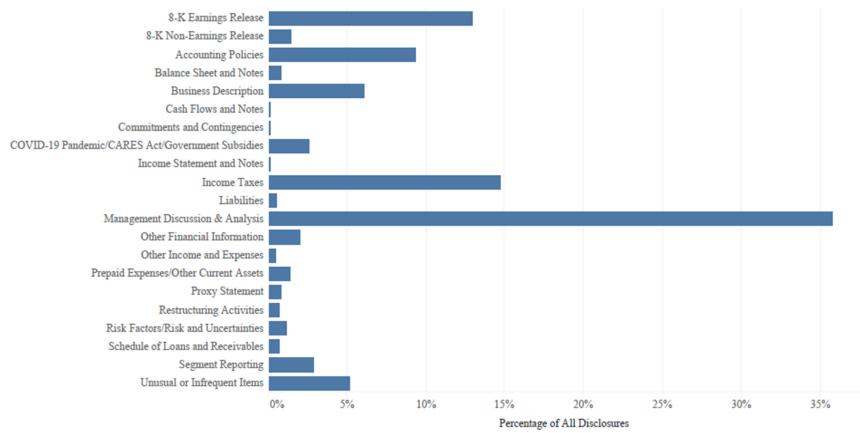


Figure 1: Google Trends Search Term Popularity of the Credit – 2020 to 2021

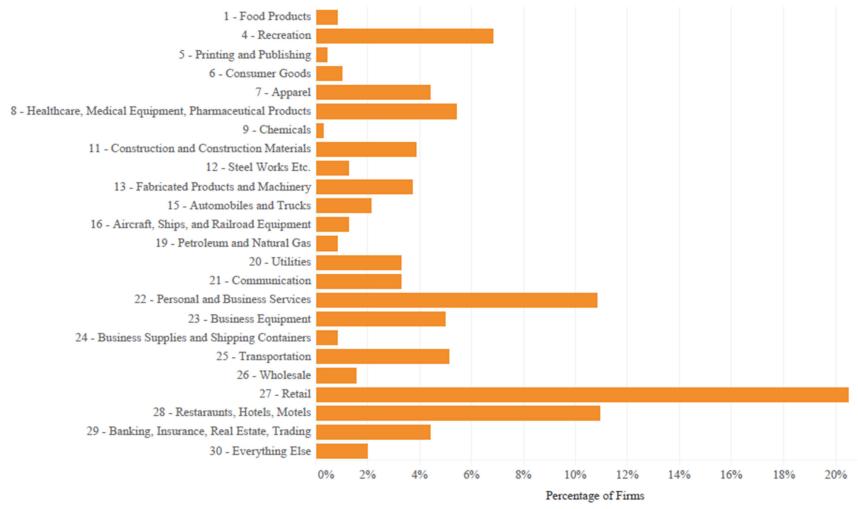
This figure shows the weekly popularity of the search terms "employee retention tax credit" and "employee retention credit" per Google Trends between the weeks of January 5, 2020 and December 26, 2021. The vertical axis shows the relative search terms popularity, and the horizontal axis shows the date by week. Google Trends provides the relative popularity of the search terms over a period of time with a value of 100 representing peak popularity.

Figure 2: Location of Credit Disclosures



This figure shows the percentage of Credit disclosures within 8-Ks and the specific location within 10-Ks and 10-Qs. Each horizontal bar shows the percentage of Credit disclosures in the specific disclosure as a total of all Credit disclosure locations. Because some firms disclosed the Credit in multiple locations within the same filing, the total number of unique Credit disclosures is 1,470.

Figure 3: Industry Classification of ERTC Disclosure Firms



This figure shows the percentage of *ERTC Disclosure* firm-calendar-quarter observations within each Fama-French 30 industry classification. The orange bar shows the percentage of Credit firm-calendar-quarter observations in the Fama-French 30 industry classification as a total all Credit firm-calendar-quarter observations. For example, the orange bar for "27 – Retail" shows that 20.5 percent of all Credit firms are located within the Retail industry classification.

Table 1: Sample Selection

		<i>ERTC</i>	ERTC
	All Companies	Disclosure = 1	Disclosure = 0
Total Observations of U.S. firms in Compustat – calendar-quarters 2020-2021	38,406	1,145	37,261
Less: Observations without Hoberg and Phillips (2016) Peer-Firm Match	(14,959)	(184)	(14,775)
Less: Non-disclosing observations not meeting Credit economic tests and not experiencing a reduction in workforce Less: Observations meeting Credit Small	(6,687)	-	(6,687)
Employer Definition and small firms with no coverage in Good Jobs First Less: Observations missing main control	(12,229)	(226)	(12,003)
variables	(652)	(32)	(620)
Less: Non-Credit Observations in a Fama- French 30 Industry with zero Credit firms	(26)		(26)
Total Firm-Calendar-Quarter Observations:	3,853	703	3,150
Unique Firm Observations:	864	197	667

This table describes the sample selection process.

Table 2: Descriptive Statistics
Panel A: All Firm-Calendar-Quarter Observations

Variable (N=3,853)	Mean	Std Dev	P25	Median	P75
Dependent Variable:					_
ERTC Disclosure	0.1825	0.3863	0.0000	0.0000	0.0000
Reputation Variables:					
Employee Violation (Indicator)	0.1780	0.3826	0.0000	0.0000	0.0000
Employee Violation (Count - Raw)	0.6346	2.5079	0.0000	0.0000	0.0000
Employee Violation (Count)	0.2258	0.5411	0.0000	0.0000	0.0000
Employee Violation (Dollars - Raw)	469,350	3,726,607	0	0	0
Employee Violation (Dollars)	2.1160	4.6578	0.0000	0.0000	0.0000
Controls:					
Size (\$M)	15,058	91,059	694	1,965	7,014
Size (Ln)	7.7068	1.7451	6.5432	7.5836	8.8558
Book-to-Market	0.3366	0.2984	0.1124	0.2574	0.5232
IIQ	0.5487	0.3034	0.3000	0.6000	0.8000
Employees (Thousands)	10.3391	22.4913	0.5990	2.1470	9.0000
Employees (Ln)	7.7814	1.7558	6.3953	7.6718	9.1050
Workforce Words	3.9308	0.9872	3.1781	3.8918	4.6347
Profitability	-0.0123	0.0735	-0.0205	0.0039	0.0214
Loss	0.4075	0.4914	0.0000	0.0000	1.0000
Advertising	0.0722	0.1791	0.0000	0.0071	0.0652
Leverage	0.3345	0.3413	0.0637	0.2618	0.4952
Current Ratio	3.4711	3.9221	1.1374	1.9881	4.0723
Return Momentum	0.0551	0.3077	-0.1329	-0.0008	0.1647
Return Volatility	0.1267	0.0988	0.0612	0.0999	0.1596
Firm Age	19.0205	16.3378	6.0000	16.0000	27.0000
Analyst Following	2.0441	0.8415	1.6094	2.0794	2.7081
Big Four Auditor	0.7807	0.4138	1.0000	1.0000	1.0000
Litigation Industry	0.4672	0.4990	0.0000	0.0000	1.0000
GAAP ETR3	0.2843	0.3355	0.0000	0.2048	0.3074
UTB Indicator	0.7877	0.4090	1.0000	1.0000	1.0000
APTS	6.1185	6.1295	0.0000	8.4521	12.1479

Table 2: Descriptive Statistics (continued)
Panel B: Firm-Calendar-Quarter Observations by *ERTC*

	ER	TC Disclosui	re=1		El	RTC Disclosu	re = 0	
		(N=703)	(N=3,150))		
Variable					Diff. in		Diff. in	
v at table	Mean	Median	Std Dev	Mean	Means	Median	Medians	Std Dev
Reputation Variables:								
Employee Violation (Indicator)	0.4595	0.0000	0.4987	0.1152	***	0.0000	###	0.3194
Employee Violation (Count - Raw)	1.9886	0.0000	4.8748	0.3324	***	0.0000	###	1.3768
Employee Violation (Count)	0.6376	0.0000	0.8009	0.1339	***	0.0000	###	0.4109
Employee Violation (Dollars - Raw)	1,443,991	0	7,481,071	251,835	***	0	###	2,062,054
Employee Violation (Dollars)	5.5666	0.0000	6.2381	1.3459	***	0.0000	###	3.8226
Controls:								
Size (\$M)	8,535	2,427	18,910	16,514	**	1,872	###	100,257
Size (Ln)	7.9002	7.7948	1.5116	7.6636	***	7.5355	###	1.7904
Book-to-Market	0.3474	0.2962	0.3069	0.3341		0.2483	##	0.2964
IIQ	0.5589	0.6000	0.2457	0.5464		0.5000		0.3148
Employees (Thousands)	23.7405	9.8400	36.7385	7.3482	***	1.5410	###	16.3968
Employees (Ln)	9.0289	9.1942	1.5868	7.5030	***	7.3402	###	1.6688
Workforce Words	4.0404	3.9318	1.0674	3.9063	***	3.8712	###	0.9669
Profitability	0.0023	0.0054	0.0459	-0.0155	***	0.0037	###	0.0780
Loss	0.4580	0.0000	0.4986	0.3962	***	0.0000	###	0.4892
Advertising	0.0835	0.0262	0.1673	0.0696	*	0.0024	###	0.1815
Leverage	0.4567	0.4397	0.3181	0.3072	***	0.1999	###	0.3403
Current Ratio	2.3576	1.6603	2.7062	3.7196	***	2.1559	###	4.1044
Return Momentum	0.0589	-0.0006	0.3292	0.0543		-0.0009		0.3028
Return Volatility	0.1362	0.1035	0.1084	0.1246	***	0.0995	##	0.0965
Firm Age	24.7084	20.0000	19.8195	17.7511	***	15.0000	###	15.1693
Analyst Following	2.0021	2.0794	0.8320	2.0535		2.0794	##	0.8434
Big Four Auditor	0.8834	1.0000	0.3212	0.7578	***	1.0000	###	0.4285
Litigation Industry	0.3556	0.0000	0.4790	0.4921	***	0.0000	###	0.5000
GAAP ETR3	0.2598	0.2096	0.2927	0.2897	**	0.2039		0.3442
UTB Indicator	0.8890	1.0000	0.3143	0.7651	***	1.0000	###	0.4240
APTS	5.3304	0.0000	6.1161	6.2944	***	8.9873	###	6.1196

Table 2: Descriptive Statistics (continued)
Panel C: Pairwise Correlations

Paner C: Pairwise C												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) ERTC Disclosure	1											
(2) Emp Violation (Indicato		1										
(3) Emp Violation (Count)	0.3596*	0.8967*	1									
(4) Emp Violation (Dollars)		0.9762*	0.9128*	1								
(5) Size (Ln)	0.0524*	0.3029*	0.2843*	0.3217*	1							
(6) Book-to-Market	0.0172	-0.0451*	-0.0289	-0.0514*	0.2332*	1						
(7) IIQ	0.0159	0.1469*	0.1152*	0.1565*	0.5588*	0.2331*	1					
(8) Employees (Ln)	0.3357*		0.4983*	0.5276*	0.6577*	-0.1012*	0.3143*	1				
(9) Workforce Words	0.0524*		-0.0183	-0.0079	-0.0158	-0.1872*	-0.0780*	0.0148	1			
(10) Profitability	0.0939*		0.1371*	0.1542*	0.3264*	0.1167*	0.3251*	0.3758*	-0.1527*			
(11) Loss Firm	0.0486*	-0.1126*	-0.0766*	-0.1048*	-0.3669*	-0.1930*	-0.3976*	-0.2519*	0.1803*	-0.5821*		
(12) Advertising	0.0299	-0.0249	-0.0306	-0.0215	-0.0377*	-0.1373*	-0.0656*	0.0359*	0.0051	0.0007	0.1173*	1
(13) Leverage	0.1692*	0.1556*	0.1551*	0.1668*	0.0141	-0.3623*	-0.1434*	0.2243*	0.0767*	-0.1465*	0.1934*	0.0701*
(14) Current Ratio	-0.1341*		-0.1597*	-0.1739*	-0.2341*	-0.1367*	-0.3235*	-0.3337*	0.0771*		0.3017*	-0.0431*
(15) Return Momentum	0.0058	-0.013	-0.0083	-0.0168	-0.1102*	-0.1858*	-0.1080*	-0.016	0.0803*		0.0904*	-0.011
(16) Return Volatility	0.0452*	-0.0699*	-0.0519*	-0.0713*	-0.2972*	-0.1005*	-0.2754*	-0.1705*	0.0946*		0.3480*	0.0127
(17) Firm Age	0.1645*	0.3327*	0.3036*	0.3188*	0.3187*	0.1311*	0.3272*	0.3631*	-0.1123*		-0.3036*	-0.0891*
(18) Analyst Following	-0.0236	0.1909*	0.1757*	0.2125*	0.4152*	-0.3859*	0.1345*	0.4268*	0.1779*		0.0622*	0.0484*
(19) Big Four Auditor	0.1172*		0.1624*	0.1754*	0.2693*	-0.2821*	-0.0243	0.3948*	0.1684*		0.1191*	0.0319*
(20) Litigation Industry	-0.1056*		-0.1212*	-0.1103*	-0.2587*	-0.3947*	-0.2209*	-0.0445*	0.1843*		0.2864*	0.0621*
(21) GAAP ETR3	-0.0344*		-0.0608*	-0.0670*	-0.1647*	-0.0898*	-0.1206*	-0.0796*	0.0302	-0.0815*	0.1794*	0.0253
(22) UTB Indicator	0.1171*	0.1288*	0.1093*	0.1209*	-0.1404*	-0.4301*	-0.3016*	0.2812*	0.1362*	-0.0356*	0.2394*	0.0664*
(23) APTS	-0.0607*	0.0904*	0.0631*	0.0832*	0.1551*	-0.0229	0.0673*	0.1773*	0.0935*	0.0728*	-0.0507*	-0.0195
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20))	(21)	(22)	(23)
(13) Leverage	1											
(14) Current Ratio	-0.0481*	1										
(15) Return												
	0.0367*	0.0519*	1									
	0.1171*	0.1306*	0.3403*	1								
	-0.0587*	-0.2151*	-0.0491*	-0.1753*	1							
(18) Analyst				012,00	_							
	0.1834*	0.0755*	0.0022	-0.0650*	-0.0039	1						
2	0.2043*	0.1289*	0.0232	0.0053	0.0460*	0.4223*	1					
(20) Litigation	0.2013	0.1209	0.0232	0.0022	0.0100	0.1223	1					
Industry	0.1271*	0.1913*	0.0579*	0.1905*	-0.2600*	0.2879*	0.1920)* 1				
(21) GAAP ETR3	0.0316	0.0335*	0.0353*	0.0584*	-0.0587*	-0.0143	-0.020		14*	1		
(22) UTB Indicator	0.0310	0.2078*	0.0951*	0.0364	-0.0387	0.3123*				0.0462*	1	
(23) APTS											1 0 1290*	1
(23) AI IS	-0.0088	-0.0078	0.0265	-0.0455*	0.0866*	0.1401*	0.204	8* 0.07	U4 ^{-r}	0.0073	0.1380*	1

Table 2: Descriptive Statistics (continued)

This table presents descriptive statistics for variables used in equation (1), which estimates the likelihood of disclosing the Credit. Panel A provides statistics for the full sample. Panel B provides statistics separately for observations where ERTC Disclosure equals one or zero. ERTC is an indicator variable equal to one if firm i discloses the Credit in calendar-quarter q, and zero otherwise. Panel C provides pairwise correlations for all variables used in equation (1). I define all variables in Appendix C. In Panel B, ***, **, and * indicate t-tests of mean differences across groups are significant at the one-, five-, and ten-percent level, respectively, using two-tailed tests. ###, ##, and # indicate Wilcoxon signed-rank tests of median differences across groups are significant at the one-, five-, and ten-percent level, respectively, using two-tailed tests. In Panel C, * indicates a significant correlation coefficient at the five-percent level.

Table 3: Likelihood of Disclosing the Credit – Main Specification

Table 5: Likelinood of Disc	(1)	(2)	(3)
Dependent variable:	ERTC Disclosure	ERTC Disclosure	ERTC Disclosure
		EKIC Disclosure	EKIC Disclosure
Employee Violation (Indicator)	0.122***		
Employee Violation (Count)	(2.92)	0.096***	
Employee Violation (Count)		(3.11)	
Employee Violation (Dollars)		(8.11)	0.010***
Employee violation (Bollars)			
			(3.17)
Size (Ln)	-0.035***	-0.035***	-0.036***
	(-2.76)	(-2.77)	(-2.82)
Book-to-Market	0.122*	0.121*	0.122*
	(1.94)	(1.91)	(1.94)
IIQ	0.099**	0.104**	0.099**
	(2.15)	(2.28)	(2.16)
Employees (Ln)	0.050***	0.049***	0.050***
	(3.22)	(3.16)	(3.22)
Workforce Words	0.027***	0.027***	0.027***
	(3.75)	(3.73)	(3.70)
Profitability	-0.008	0.001	-0.004
	(-0.07)	(0.01)	(-0.03)
Loss	0.090***	0.086***	0.090***
	(3.72)	(3.54)	(3.69)
Advertising	-0.073	-0.070	-0.073
	(-1.12)	(-1.07)	(-1.12)
Leverage	-0.010	-0.008	-0.010
	(-0.30)	(-0.24)	(-0.30)
Current Ratio	0.003	0.003	0.003
	(1.13)	(1.17)	(1.17)
Return Momentum	-0.007	-0.008	-0.007
	(-0.42)	(-0.44)	(-0.41)
Return Volatility	0.145*	0.145*	0.145*
	(1.96)	(1.96)	(1.96)
Firm Age	-0.000	-0.000	-0.000
	(-0.17)	(-0.16)	(-0.17)
Analyst Following	-0.029	-0.029*	-0.029*
	(-1.62)	(-1.67)	(-1.67)
Big Four Auditor	0.060**	0.060**	0.060**
	(2.24)	(2.26)	(2.26)
Litigation Industry	-0.092***	-0.091***	-0.091***
CAAR EMPA	(-2.80)	(-2.75)	(-2.76)
GAAP ETR3	-0.016	-0.015	-0.016
LITED I. 1'	(-0.63)	(-0.60)	(-0.64)
UTB Indicator	-1.030***	-1.002***	-1.026***
A DTC	(-2.96)	(-2.93)	(-2.97)
APTS	-0.002	-0.002	-0.002
T . 1 11 01	(-1.35)	(-1.25)	(-1.31)
Total # Observations	3,853	3,853	3,853
# of Obs. <i>ERTC</i> = 1 Time/Industry FE	703 Yes/Yes	703 Yes/Yes	703 Yes/Yes
R ²	0.476	0.477	0.476
IV	U.T/U	υ.τ//	U.T/U

Table 3: Likelihood of Disclosing the Credit – Main Specification (continued)

This table presents results of estimating equation (1). In all columns, the dependent variable is *ERTC Disclosure*, an indicator variable equal to one if firm *i* discloses the Credit in calendar-quarter *q*, and zero otherwise. Columns (1), (2), and (3) provide the estimation of equation (1) when the main variable of interest is *Employee Violation (Indicator)*, *Employee Violation (Count)*, *Employee Violation (Dollars)*, respectively. *Employee Violation (Indicator)* indicator variable equal to one if firm *i* (1) incurred at least one regulatory violation per the Occupational Safety & Health Administration or (2) incurred at least one regulatory violation related to an "employment-related offense" between 2017 and 2019, and zero otherwise. *Employee Violation (Count)* is the natural log of one plus the count of the number of regulatory violations per the Occupational Safety & Health Administration and regulatory violations related to an "employment-related offense" for firm *i* between 2017 and 2019. *Employee Violation (Dollars)* is the natural log of one plus the dollar value of regulatory violations per the Occupational Safety & Health Administration and regulatory violations related to an "employment-related offense" for firm *i* between 2017 and 2019. I define all variables in Appendix C. All specifications are estimated using a linear probability model. In all columns, I cluster standard errors at the firm level and include Fama-French 30 industry classification and calendar-quarter fixed effects, untabulated for parsimony. Values in parentheses represent t-statistics. ***, **, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.

Table 4: Robustness Tests
Panel A: Removal of Mandatory Credit Disclosures

Panel A: Removal of Man	datory Credit Di	sclosures	
	(1)	(2)	(3)
Dependent variable:	ERTC Disclosure	ERTC Disclosure	ERTC Disclosure
Employee Violation (Indicator)	0.094**		
` ` `	(2.26)		
Employee Violation (Count)	` '	0.078**	
		(2.39)	
Employee Violation (Dollars)			0.008**
			(2.44)
Size (Ln)	-0.025**	-0.025**	-0.026**
	(-2.11)	(-2.08)	(-2.17)
Book-to-Market	0.075	0.074	0.075
	(1.27)	(1.26)	(1.27)
IIQ	0.086**	0.090**	0.086**
	(2.08)	(2.19)	(2.10)
Employees (Ln)	0.036**	0.035**	0.036**
	(2.56)	(2.48)	(2.55)
Workforce Words	0.017**	0.016**	0.017**
	(2.52)	(2.50)	(2.48)
Profitability	0.009	0.014	0.012
	(0.09)	(0.14)	(0.11)
Loss	0.068***	0.065***	0.068***
	(2.94)	(2.83)	(2.94)
Advertising	-0.082*	-0.079*	-0.082*
	(-1.74)	(-1.68)	(-1.74)
Leverage	-0.006	-0.006	-0.007
	(-0.21)	(-0.20)	(-0.23)
Current Ratio	0.001	0.002	0.002
	(0.66)	(0.67)	(0.70)
Return Momentum	-0.015	-0.015	-0.015
	(-0.86)	(-0.88)	(-0.86)
Return Volatility	0.120	0.119	0.119
	(1.63)	(1.62)	(1.62)
Firm Age	-0.000	-0.000	-0.000
	(-0.34)	(-0.36)	(-0.34)
Analyst Following	-0.026	-0.027*	-0.026*
	(-1.61)	(-1.72)	(-1.65)
Big Four Auditor	0.051**	0.051**	0.051**
	(2.09)	(2.08)	(2.10)
Litigation Industry	-0.086***	-0.085***	-0.085***
	(-2.75)	(-2.73)	(-2.72)
GAAP ETR3	-0.034	-0.032	-0.034
	(-1.56)	(-1.50)	(-1.57)
UTB Indicator	0.013	0.017	0.014
	(0.39)	(0.51)	(0.41)
APTS	-0.001	-0.001	-0.001
	(-0.59)	(-0.51)	(-0.56)
Total # Observations	3,597	3,597	3,597
# of Obs. <i>ERTC</i> = 1	447	447	447
Time/Industry FE	Yes/Yes	Yes/Yes	Yes/Yes
\mathbb{R}^2	0.408	0.410	0.409

Table 4: Robustness Tests (continued)
Panel B: Calendar-Year 2020 Filings Only

Panel B: Calendar-Year 20		(2)	(2)
D 1	(1)	(2)	(3)
Dependent variable:	ERTC Disclosure	ERTC Disclosure	ERTC Disclosure
Employee Violation (Indicator)	0.117***		
E 1 W11 C (C)	(2.59)	0. 1. 0. 0 also also also	
Employee Violation (Count)		0.100***	
E 1 (D . 11)		(2.81)	0.010***
Employee Violation (Dollars)			0.010***
Size (Ln)	-0.030**	-0.030**	(2.74) -0.031**
Size (Lii)	(-2.24)	(-2.22)	(-2.30)
Book-to-Market	0.112*	0.110*	0.112*
Book to Warket	(1.67)	(1.65)	(1.67)
IIQ	0.059	0.063	0.059
	(1.33)	(1.46)	(1.34)
Employees (Ln)	0.050***	0.049***	0.050***
1 2 /	(3.17)	(3.10)	(3.19)
Workforce Words	0.014	0.014*	0.014
	(1.64)	(1.66)	(1.63)
Profitability	0.102	0.111	0.106
•	(1.08)	(1.17)	(1.12)
Loss	0.094***	0.090***	0.093***
	(3.47)	(3.33)	(3.46)
Advertising	-0.097	-0.094	-0.097
	(-1.19)	(-1.16)	(-1.19)
Leverage	0.033	0.035	0.033
	(1.15)	(1.20)	(1.13)
Current Ratio	0.006**	0.006**	0.006**
	(1.98)	(1.99)	(2.00)
Return Momentum	-0.036*	-0.038*	-0.036*
	(-1.78)	(-1.84)	(-1.77)
Return Volatility	0.150*	0.153**	0.149*
F	(1.96)	(2.01)	(1.95)
Firm Age	-0.000	-0.000	-0.000
Auglost Eallassin	(-0.05)	(-0.09)	(-0.04)
Analyst Following	-0.032*	-0.033*	-0.032*
Big Four Auditor	(-1.79) 0.043	(-1.91) 0.043	(-1.81) 0.043
Big Four Auditor		(1.59)	
Litigation Industry	(1.59) -0.081**	-0.081**	(1.60) -0.081**
Lingation industry	(-2.50)	(-2.48)	(-2.47)
GAAP ETR3	-0.015	-0.014	-0.015
CILII LIIC	(-0.59)	(-0.57)	(-0.61)
UTB Indicator	0.008	0.013	0.009
	(0.24)	(0.36)	(0.26)
APTS	-0.030**	-0.002	-0.002
-	(-2.24)	(-1.23)	(-1.30)
Total # Observations	2,610	2,610	2,610
# of Obs. ERTC = 1	350	350	350
Time/Industry FE	Yes/Yes	Yes/Yes	Yes/Yes
R ²			
K-	0.413	0.416	0.413

Table 4: Robustness Tests (continued)
Panel C: Entropy Balanced Sample

Panel C: Entropy Balanced Sample					
	(1) (2)		(3)		
Dependent variable:	ERTC Disclosure	ERTC Disclosure	ERTC Disclosure		
Employee Violation (Indicator)	0.104**				
` ,					
Employee Violation (Count)		0.069*			
		(1.83)			
Employee Violation (Dollars)			0.008**		
			(2.03)		
Size (Ln)	(2.05)	-0.027	-0.028		
	-0.027	(-1.17)	(-1.22)		
Book-to-Market	(-1.16)	0.172*	0.177*		
	0.178*	(1.72)	(1.77)		
IIQ	(1.79)	0.216*	0.198		
	0.201	(1.74)	(1.57)		
Employees (Ln)	(1.59)	0.027	0.032		
	0.032	(0.92)	(1.09)		
Workforce Words	(1.10)	0.025**	0.025**		
	0.025**	(2.02)	(2.00)		
Profitability	(2.04)	-0.751*	-0.750*		
	-0.761*	(-1.76)	(-1.78)		
Loss	(-1.82)	0.070	0.077*		
	0.078*	(1.64)	(1.82)		
Advertising	(1.86)	-0.266*	-0.276**		
	-0.274**	(-1.94)	(-1.99)		
Leverage	(-1.96)	0.008	0.008		
	0.010	(0.10)	(0.10)		
Current Ratio	(0.13)	-0.005	-0.005		
	-0.006	(-0.81)	(-0.77)		
Return Momentum	(-0.83)	0.004	0.004		
	0.004	(0.11)	(0.12)		
Return Volatility	(0.11)	0.244	0.248		
	0.247	(1.49)	(1.52)		
Firm Age	(1.51)	-0.000	-0.000		
	-0.000	(-0.21)	(-0.15)		
Analyst Following	(-0.16)	-0.001	-0.002		
	-0.000	(-0.03)	(-0.05)		
Big Four Auditor	(-0.01)	0.229***	0.229***		
	0.231***	(3.32)	(3.28)		
Litigation Industry	(3.27)	-0.174***	-0.179***		
	-0.183***	(-3.12)	(-3.22)		
GAAP ETR3	(-3.30)	-0.010	-0.016		
	-0.013	(-0.14)	(-0.22)		
UTB Indicator	(-0.18)	-0.183**	-0.186**		
	-0.190**	(-2.23)	(-2.30)		
APTS	(-2.39)	-0.006*	-0.006*		
	-0.007*	(-1.72)	(-1.81)		
Total # Observations	3,853	3,853	3,853		
# of Obs. $ERTC = 1$	703	703	703		
Time/Industry FE	Yes/Yes	Yes/Yes	Yes/Yes		
R^2	0.523	0.522	0.522		

Table 4: Robustness Tests (continued)

This table presents results of estimating equation (1). In all panels and columns, the dependent variable is ERTC Disclosure, an indicator variable equal to one if firm i discloses the Credit in calendar-quarter q, and zero otherwise. Columns (1), (2), and (3) of each panel provide the estimation of equation (1) when the main variable of interest is Employee Violation (Indicator), Employee Violation (Count), Employee Violation (Dollars), respectively. Employee Violation (Indicator) indicator variable equal to one if firm i (1) incurred at least one regulatory violation per the Occupational Safety & Health Administration or (2) incurred at least one regulatory violation related to an "employment-related offense" between 2017 and 2019, and zero otherwise. Employee Violation (Count) is the natural log of one plus the count of the number of regulatory violations per the Occupational Safety & Health Administration and regulatory violations related to an "employment-related offense" for firm i between 2017 and 2019. Employee Violation (Dollars) is the natural log of one plus the dollar value of regulatory violations per the Occupational Safety & Health Administration and regulatory violations related to an "employment-related offense" for firm i between 2017 and 2019. In Panel A, I remove ERTC observations equal to one if the Credit amount is above five percent of pre-tax book income or above one-half percent of total assets or total revenue. In Panel B, I retain observations for calendaryear 2020. In Panel C, I estimate equation (1) after implementing entropy balancing between firms with *Employee* Violation (Indicator) equal to one and zero on the first three moments (McMullin and Schonberger 2020) using the control variables in equation (1). I define all variables in Appendix C. All specifications are estimated using a linear probability model. In all panels and columns, I cluster standard errors at the firm level and include Fama-French 30 industry classification and calendar-quarter fixed effects, untabulated for parsimony. Values in parentheses represent t-statistics. ***, **, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.

Table 5: Cross-Sectional Tests
Panel A: Human Capital Disclosure Incentives

Tanci A. Human Capitai Disclosure ince	(1)	(2)	(3)
Dependent Variable:	ERTC Disclosure	ERTC Disclosure	ERTC Disclosure
High Workforce Words – Lagged	-0.013	-0.014	-0.013
	(-0.99)	(-1.10)	(-1.02)
Employee Violation (Indicator)	0.094**		
	(2.08)		
Employee Violation (Indicator) × High	0.069**		
Workforce Words – Lagged	(1.96)		
Employee Violation (Count)		0.074**	
		(2.17)	
Employee Violation (Count) × High Workforce		0.056**	
Words – Lagged		(2.22)	
Employee Violation (Dollars)			0.008**
			(2.21)
Employee Violation (Dollars) × High Workforce			0.006*
Words – Lagged			(1.96)
Total # Observations	3,853	3,853	3,853
# of Obs. $ERTC = 1$	703	703	703
Controls	Yes	Yes	Yes
Time/Industry FE	Yes/No	Yes/No	Yes/No
R^2	0.471	0.473	0.471

Table 5: Cross-Sectional Tests (continued)

Panel B: Tax-Based Proprietary Disclosure Costs

	(1)	(2)	(3)
Dependent Variable:	ERTC Disclosure	ERTC Disclosure	ERTC Disclosure
Low GAAP ETR	-0.003	-0.011	-0.001
	(-0.18)	(-0.54)	(-0.05)
Employee Violation (Indicator)	0.188***		
	(3.16)		
Employee Violation (Indicator) × Low GAAP	-0.126*		
ETR	(-1.94)		
Employee Violation (Count)		0.125***	
		(3.04)	
Employee Violation (Count) × Low GAAP ETR		-0.060	
		(-1.25)	
Employee Violation (Dollars)			0.016***
			(3.56)
Employee Violation (Dollars) × Low GAAP			-0.012**
ETR			(-2.27)
Total # Observations	3,853	3,853	3,853
# of Obs. $ERTC = 1$	703	703	703
Controls	Yes	Yes	Yes
Time/Industry FE	Yes/No	Yes/No	Yes/No
\mathbb{R}^2	0.477	0.477	0.479

This table presents results of estimating equation (1) when incorporating an interaction with High Workforce Words in Panel A and Low GAAP ETR in Panel B. In each panel and in all columns, the dependent variable is ERTC Disclosure, an indicator variable equal to one if firm i discloses the Credit in calendar-quarter q, and zero otherwise. In both panels, Column (1) uses Employee Violation (Indicator) as the measure of Employee Violation, Column (2) uses Employee Violation (Count) as the measure of Employee Violation, and Column (3) uses Employee Violation (Dollars) as the measure of Employee Violation. Employee Violation (Indicator) indicator variable equal to one if firm i (1) incurred at least one regulatory violation per the Occupational Safety & Health Administration or (2) incurred at least one regulatory violation related to an "employment-related offense" between 2017 and 2019, and zero otherwise. Employee Violation (Count) is the natural log of one plus the count of the number of regulatory violations per the Occupational Safety & Health Administration and regulatory violations related to an "employment-related offense" for firm i between 2017 and 2019. Employee Violation (Dollars) is the natural log of one plus the dollar value of regulatory violations per the Occupational Safety & Health Administration and regulatory violations related to an "employment-related offense" for firm i between 2017 and 2019. High Workforce Words - Lagged is an indicator variable equal to one if firm i's 10-K/10-Q in quarter q-1 contained Workforce Words that were above the sample median, and zero otherwise. Low GAAP ETR is an indicator variable equal to one if firm i's GAAP ETR for the fiscal period 2019 was below the median, and zero otherwise.. I define all variables in Appendix C. All specifications are estimated using a linear probability model. In each panel and in all columns, I cluster standard errors at the firm level and include calendar-quarter fixed effects and Fama-French 30, untabulated for parsimony. Values in parentheses represent t-statistics. ***, **, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.

Table 6: Alternative Proxy – Rep Risk Index - Social

Table 6: Alternative Fr	· · · · · · · · · · · · · · · · · · ·		(2)
	(1)	(2)	(3)
Dependent Variable:	Main	Less Material	Calendar-Year
ERTC Disclosure	Specification	Credits	2020 Filings
RepRisk Index - Social	0.009***	0.007**	0.008**
	(2.62)	(2.06)	(2.15)
Size (Ln)	-0.052***	-0.028	-0.040**
	(-2.79)	(-1.59)	(-2.05)
Book-to-Market	0.136	0.049	0.110
	(1.60)	(0.57)	(1.16)
IIQ	0.150**	0.145**	0.125*
	(2.12)	(2.28)	(1.69)
Employees (Ln)	0.056***	0.033*	0.049**
	(2.68)	(1.73)	(2.18)
Workforce Words	0.022**	0.013	0.015
	(2.37)	(1.47)	(1.34)
Profitability	-0.116	-0.049	-0.028
	(-0.53)	(-0.24)	(-0.15)
Loss	0.111***	0.095***	0.088**
	(3.47)	(3.01)	(2.43)
Advertising	-0.048	-0.069	-0.061
	(-0.45)	(-0.87)	(-0.46)
Leverage	0.007	-0.001	0.076
	(0.12)	(-0.01)	(1.57)
Current Ratio	0.000	0.000	0.006
	(0.11)	(0.11)	(1.20)
Return Momentum	0.010	-0.007	-0.021
	(0.36)	(-0.25)	(-0.64)
Return Volatility	0.263**	0.230*	0.257**
	(2.35)	(1.90)	(2.18)
Firm Age	0.001	0.000	0.001
	(0.54)	(0.30)	(1.00)
Analyst Following	-0.013	-0.024	-0.026
	(-0.53)	(-1.05)	(-0.98)
Big Four Auditor	0.113***	0.087**	0.134***
	(2.78)	(2.30)	(3.09)
Litigation Industry	-0.124***	-0.098**	-0.086**
	(-2.71)	(-2.36)	(-1.97)
GAAP ETR3	-0.089**	-0.076**	-0.068
	(-2.22)	(-2.20)	(-1.60)
UTB Indicator	-0.025	-0.005	-0.051
	(-0.47)	(-0.09)	(-0.85)
APTS	-0.002	-0.001	-0.004
	(-0.91)	(-0.68)	(-1.17)
Total # Observations	1,989	1,810	1,228
# of Obs. <i>ERTC</i> = 1	499	320	246
Time/Industry FE	Yes/Yes	Yes/Yes	Yes/Yes
\mathbb{R}^2	0.515	0.453	0.467

Table 6: Alternative Proxy – Rep Risk Index – Social (continued)

This table presents results of estimating equation (1) on the subsample of firms with non-missing RepRisk data. In all columns, the dependent variable is *ERTC Disclosure*, an indicator variable equal to one if firm *i* discloses the Credit in calendar-quarter *q*, and zero otherwise. In all columns, the main variable of interest is *RepRisk Index – Social*, which is the average monthly Current RepRisk Index related to social issues for firm i between 2017 and 2019. In Column (1), I estimate equation (1) without any modifications. In Column (2), I estimate equation (1) after removing *ERTC* observations equal to one if the Credit amount is above five percent of pre-tax book income or above one-half percent of total assets or total revenue. In Column (3), I estimate equation (1) after retaining observations for calendar-year 2020 financial filings. I define all variables in Appendix C. All specifications are estimated using a linear probability model. In all columns, I cluster standard errors at the firm level and include Fama-French 30 industry classification and calendar-quarter fixed effects, untabulated for parsimony. Values in parentheses represent t-statistics. ****, ***, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.

Table 7: Alternative Proxy – Layoff Media Coverage
(1)

Dependent Variable:	ERTC Disclosure	
Layoff Media Coverage	0.077***	
	(3.79)	
Size (Ln)	-0.031***	
	(-3.76)	
Book-to-Market	0.019	
	(0.65)	
IIQ	0.045*	
- · · · · · · · · · · · · · · · · · · ·	(1.77)	
Employees (Ln)	0.042***	
10 1	(5.18)	
Workforce Words	0.003	
	(0.62)	
Profitability	0.054	
_	(0.80)	
Loss	0.039**	
	(2.52)	
Advertising	-0.017	
_	(-0.35)	
Leverage	0.069***	
~ -	(3.16)	
Current Ratio	0.004**	
	(2.35)	
Return Momentum	-0.021	
	(-1.61)	
Return Volatility	0.036	
	(0.83)	
Firm Age	-0.000	
	(-0.55)	
Analyst Following	-0.008	
D. D	(-0.77)	
Big Four Auditor	0.005	
	(0.30)	
Litigation Industry	-0.005	
G D	(-0.25)	
GAAP ETR3	-0.021	
	(-1.29)	
UTB Indicator	0.014	
A PATE	(0.70)	
APTS	-0.001	
	(-0.89)	
Total # Observations	5,056	
# of Obs. $ERTC = 1$	703	
Time/Industry FE	Yes/Yes	
\mathbb{R}^2	0.609	

Table 7: Alternative Proxy – Layoff Media Coverage (continued)

This table presents results of estimating equation (1). The dependent variable is ERTC Disclosure, an indicator variable equal to one if firm i discloses the Credit in calendar-quarter q, and zero otherwise. The main variable of interest is Layoff Media Coverage, which is an indicator variable equal to one if firm i had at least one article during quarter q-l that RavenPack classifies a news story relevance score equal to 100 and type equal to "layoff," and zero otherwise. I define all variables in Appendix C. I estimate equation (1) using a linear probability model. I cluster standard errors at the firm level and include Fama-French 30 industry classification and calendar-quarter fixed effects, untabulated for parsimony. Values in parentheses represent t-statistics. ***, **, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.

Table 8: Falsification Test – Financial Reporting Misconduct

	(1)
Dependent Variable:	ERTC
Financial Reporting Misconduct (Indicator)	-0.134***
	(-2.63)
Size (Ln)	-0.034***
	(-2.68)
Book-to-Market	0.128**
но	(2.02)
IIQ	0.092**
	(2.01)
Employees (Ln)	0.063***
4.0 4	(4.08)
Workforce Words	0.026***
T 0 1 111	(3.55)
Profitability	-0.030
1	(-0.28)
Loss	0.092***
Advortising	(3.80)
Advertising	-0.081
Leverage	(-1.26)
Levelage	-0.009
Current Ratio	(-0.28) 0.002
Current Russe	(0.91)
Return Momentum	-0.011
	(-0.60)
Return Volatility	0.138*
	(1.82)
Firm Age	0.000
	(0.20)
Analyst Following	-0.027
	(-1.47)
Big Four Auditor	0.051*
	(1.90)
Litigation Industry	-0.099***
0.117.77774	(-2.92)
GAAP ETR3	-0.023
LITTO I 1'	(-0.93)
UTB Indicator	0.015
APTS	(0.42)
AF15	-0.002
T-4-1 # Ob4:	(-1.32) 3,853
Total # Observations # of Obs. FRTC = 1	5,833 703
# of Obs. ERTC = 1 Time/Industry FE	Yes/Yes
R ²	0.466

Table 8: Falsification Test – Financial Reporting Misconduct (continued)

This table presents results of estimating equation (1). The dependent variable is *ERTC Disclosure*, an indicator variable equal to one if firm *i* discloses the Credit in calendar-quarter *q*, and zero otherwise. The main variable of interest is *Financial Reporting Misconduct*, which is an indicator variable equal to one if (1) firm *i* has at least one SEC regulatory violation between 2017 and 2019, or (2) firm *i* issued a restatement between 2017 and 2019, and zero otherwise. I define all variables in Appendix C. I estimate equation (1) using a linear probability model. I cluster standard errors at the firm level and include Fama-French 30 industry classification and calendar-quarter fixed effects, untabulated for parsimony. Values in parentheses represent t-statistics. ***, ***, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.

Table 9: Change in Reputation Risk

Dependent Variable: Rep Risk Index − Qtr Main Specification Main Specification Entropy Balance Entropy Balance ERTC 2020 -0.646 (-0.70) 0.640 (0.71) ERTC 2020 × Post -1.195* (-1.67) -1.555** (-2.21) -0.865 (-0.107) -1.387* (-1.197) Size (Ln) 2.434*** (12.45) 0.043 (0.05) 3.466*** (8.06) 1.490 (0.90) Profitability -7.499** (-2.18) 1.504 (0.62) 2.052 (0.32) 14.096** (2.39) Workforce Words 0.198 (1.37) -0.092 (1.37) 0.152 (0.06) -0.162 (-0.99) Firm Age 0.004 (0.36) -0.092 (-1.05) 0.089 (0.08) (-0.19) Analyst Following 0.935*** (0.36) 1.551** (-0.29) 0.937 (0.08) 1.063 (0.98) Litigation Industry 1.846*** (2.77) -0.810 (-0.29) 0.802 (0.77) 0.611 (0.31) Employee Violation (Indicator) 1.808*** (3.31) 1.321 (1.49) 0.285 (0.61) Layoff Media Coverage 4.723*** (7.09) 0.483 (0.43) 3.176*** (2.85) 0.285 (0.61) Financial Reporting (Indicator)Misconduct (3.10) (3.10) (2.85) (2.85) <td< th=""><th>Table 9: Change in Ke</th><th>(1)</th><th>(2)</th><th>(3)</th><th>(4)</th></td<>	Table 9: Change in Ke	(1)	(2)	(3)	(4)
Rep Risk Index – Qtr Specification Specification ERTC 2020 -0.646 0.640 (-0.70) (0.71) ERTC 2020 × Post -1.195* -1.555** -0.865 -1.387* (-1.67) (-2.21) (-1.17) (-1.92) Size (Ln) 2.434*** 0.043 3.466*** 1.490 (12.45) (0.05) (8.06) (0.90) Profitability -7.499** 1.504 2.052 14.096** (-2.18) (0.62) (0.32) (2.39) Workforce Words 0.198 -0.092 0.152 -0.162 (1.37) (-1.00) (0.69) (-0.99) Firm Age 0.004 -0.425 0.001 -0.116 Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 (2.77) (-0.29) (0.77) (0.31) Employee Vi	D 1 4 W 111	` ′		` '	` ′
ERTC 2020				Entropy Balance	Entropy Balance
ERTC 2020 × Post			Specification	0.640	
ERTC 2020 × Post	LK1C 2020				
Size (Ln) (-1.67) (-2.21) (-1.17) (-1.92) Size (Ln) 2.434*** 0.043 3.466*** 1.490 (12.45) (0.05) (8.06) (0.90) Profitability -7.499** 1.504 2.052 14.096** (-2.18) (0.62) (0.32) (2.39) Workforce Words 0.198 -0.092 0.152 -0.162 (1.37) (-1.00) (0.69) (-0.99) Firm Age 0.004 -0.425 0.001 -0.116 (0.36) (-1.05) (0.08) (-0.19) Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 (2.77) (-0.29) (0.77) (0.31) Employee Violation 1.808*** 1.321 (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09)	FRTC 2020 × Post	* *	1 555**	` '	1 207*
Size (Ln) 2.434*** 0.043 3.466*** 1.490 (12.45) (0.05) (8.06) (0.90) Profitability -7.499** 1.504 2.052 14.096** (-2.18) (0.62) (0.32) (2.39) Workforce Words 0.198 -0.092 0.152 -0.162 (1.37) (-1.00) (0.69) (-0.99) Firm Age 0.004 -0.425 0.001 -0.116 (0.36) (-1.05) (0.08) (-0.19) Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 (2.77) (-0.29) (0.77) (0.31) Employee Violation 1.808*** 1.321 (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85)	LRTC 2020 A Tost				
Profitability	Size (I n)	, ,	` /	` /	` /
Profitability -7.499** 1.504 2.052 14.096** (-2.18) (0.62) (0.32) (2.39) Workforce Words 0.198 -0.092 0.152 -0.162 (1.37) (-1.00) (0.69) (-0.99) Firm Age 0.004 -0.425 0.001 -0.116 (0.36) (-1.05) (0.08) (-0.19) Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 Employee Violation 1.808*** 1.321 (1.49) (0.31) Employee Violation 1.808*** 1.321 (1.49) (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations	Size (Lii)				
Workforce Words (-2.18) (0.62) (0.32) (2.39) Workforce Words 0.198 -0.092 0.152 -0.162 (1.37) (-1.00) (0.69) (-0.99) Firm Age 0.004 -0.425 0.001 -0.116 (0.36) (-1.05) (0.08) (-0.19) Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 (2.77) (-0.29) (0.77) (0.31) Employee Violation 1.808*** 1.321 (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 11,197 Time FE Yes Yes	Duafitability		` /		` /
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Firm Age	W. 1.C. W. 1	, ,	` /		
Firm Age 0.004 -0.425 0.001 -0.116 (0.36) (-1.05) (0.08) (-0.19) Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 (2.77) (-0.29) (0.77) (0.31) Employee Violation (Indicator) 1.808*** 1.321 (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 11,197 Time FE Yes Yes Yes Yes Industry FE Yes Yes Yes Yes Firm FE No Yes No Yes	Workforce Words				
Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) 0.802 0.661 (2.77) (-0.29) 0.77) 0.31) Employee Violation (Indicator) (3.31) (3.31) (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting (Indicator)Misconduct (3.10) Total # Observations 11,197 11,197 Time FE Yes Yes Yes Yes Firm FE No Yes No Yes	F	` /	` /	, ,	` /
Analyst Following 0.935*** 1.551** 0.937 1.063 (3.12) (2.46) (1.36) (0.98) Litigation Industry 1.846*** -0.810 0.802 0.661 (2.77) (-0.29) (0.77) (0.31) Employee Violation 1.808*** 1.321 (Indicator) (3.31) (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 11,197 Time FE Yes Yes Yes Yes Yes Industry FE Yes Yes Yes Yes Firm FE No Yes No Yes	Firm Age				
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Employee Violation (Indicator) 1.808*** 1.321 (Indicator) (3.31) (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 Time FE Yes Yes Yes Industry FE Yes Yes Yes Firm FE No Yes No Yes	Litigation Industry	1.846***	-0.810	0.802	0.661
(Indicator) (3.31) (1.49) Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 Time FE Yes Yes Yes Industry FE Yes Yes Yes Firm FE No Yes No Yes		(2.77)	(-0.29)	(0.77)	(0.31)
Layoff Media Coverage 4.723*** 0.483 3.176*** 0.285 (7.09) (1.62) (4.36) (0.61) Financial Reporting 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 Time FE Yes Yes Yes Industry FE Yes Yes Yes Firm FE No Yes No Yes		1.808***		1.321	
(7.09) (1.62) (4.36) (0.61) Financial Reporting (Indicator)Misconduct 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 Time FE Yes Yes Yes Industry FE Yes Yes Yes Firm FE No Yes No Yes	(Indicator)	(3.31)		(1.49)	
Financial Reporting (Indicator)Misconduct 4.413*** 7.899*** (Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 Time FE Yes Yes Yes Industry FE Yes Yes Yes Firm FE No Yes No Yes	Layoff Media Coverage	4.723***	0.483	3.176***	0.285
(Indicator)Misconduct (3.10) (2.85) Total # Observations 11,197 11,197 11,197 Time FE Yes Yes Yes Industry FE Yes Yes Yes Firm FE No Yes No Yes		(7.09)	(1.62)	(4.36)	(0.61)
Total # Observations 11,197 11,197 11,197 11,197 Time FE Yes Yes Yes Yes Industry FE Yes Yes Yes Yes Firm FE No Yes No Yes		4.413***		7.899***	
Time FEYesYesYesYesIndustry FEYesYesYesYesFirm FENoYesNoYes	(Indicator)Misconduct	(3.10)		(2.85)	
Time FEYesYesYesYesIndustry FEYesYesYesYesFirm FENoYesNoYes	Total # Observations	11,197	11,197	11,197	11,197
Firm FE No Yes No Yes	Time FE	Yes	Yes	Yes	Yes
Firm FE No Yes No Yes	Industry FE	Yes	Yes	Yes	Yes
R^2 0.304 0.763 0.330 0.762	•	No	Yes	No	Yes
0.702	\mathbb{R}^2	0.304	0.763	0.330	0.762

This table presents results of estimating equation (2). The dependent variable is Rep Risk Index - Qtr, the three-month average RepRisk Index of a firm i in quarter q. The three-month average is measured starting in the second month following the firm's quarter end to allow for the firm's 10-K/10-Q to be publicly available. ERTC 2020 is an indicator variable equal to one if firm i disclosed the Credit on a calendar year $2020 \ 10-K/10-Q$, and zero otherwise. Post is an indicator variable equal to one for an observation with a 10-K/10-Q disclosure occurring in calendar year 2021, and zero otherwise. The main variable of interest is $ERTC \ 2020 \ x \ Post$. I define all variables in Appendix C. I estimate equation (1) using ordinary least squares regression. In all columns, I cluster standard errors at the firm level and include Fama-French 30 industry classification and calendar-quarter fixed effects, untabulated for parsimony. Columns (2) and (4) also include firm fixed effects, untabulated for parsimony. Columns (3) and (4) entropy balance between $ERTC \ 2020$ and control firms on the covariates in equation (2). Values in parentheses represent t-statistics. ***, ***, and * denote significance at the one-, five-, and ten-percent level using two-tailed tests of significance.