

# Does Relationship Lending Discipline Disclosure?

## Evidence from Bailout Loans\*

Daniel Rabetti<sup>†</sup>

January 2023

### Abstract

Assessing the Paycheck Protection Program (PPP) — a financial rescue program designed to cover firms' payroll expenses during the Covid-19 pandemic — I document that the decision of managers whether to reveal the bailout loan details to the public dominates the disclosure strategy of firms that engage in relationship lending, especially for longer and more intense relationship. Examining potential economic channels, I find that strategic disclosure is unlikely to be driven by habit formation or liquidation concerns. Instead, the evidence suggests that strategic disclosure is driven by relationship capital considerations, where firms incur the costs of disclosing unfavorable news to reduce lenders' monitoring concerns in exchange for future lending benefits. Overall, the findings highlight a novel economic channel for releasing unfavorable information in which relationship lending has a disciplinary effect on firms' strategic disclosure, especially during times of crisis when debt monitoring becomes more relevant.

**Keywords:** disclosure, relationship capital, reputation management, Covid-19 pandemic, financial crisis.

**JEL classification:** G01, G21, G38, H32, H81, M41.

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\*I am greatly indebted to Will Cong and Wayne Landsman for fruitful discussions that substantially improved this study. I am thankful to Dan Amiram, Bjørn Jørgensen, and Evgeny Lyandres for their support and encouragement throughout my PhD studies. This study benefits from invaluable comments from Viral Acharya, Alex Aleszczyk, Allen Berger, Darren Bernard, Anne Beyer, Mary Billings, Matthias Breuer, Anna Burova, Robert Bushman, Murillo Campello, Christine Cuny, Jim Fuchs, Janet Garufis (Discussant), Weili Ge, Joao Granja (Discussant), Ahmed Guecioueur, Ilan Guttman, Cam Harvey, Udi Hoitash, Shushu Jiang, Chao Jin, April Klein, Ties de Kok, Xinlei Li, Xiaojing Meng, Michael Minnis, Dino Palazzo, Jacopo Ponticelli, Eswar Prasad, Dmitrii Pugachev, Leo Pugachev, Shiva Rajgopal, Camillo Riva (Discussant), Joshua Ronen, Samuel Rosen, Steve Ryan, Lawrence Schmidt, Daniel Scott Cohen, Gurpal Sran, Phil Strahan, Regina Wittenberg Moerman, Julian Yeo, Nastia Zakolyukina, Rachel Zhang, Paul Zarowin, and discussions with participants at the 2022 Community Bank Research Conference, FMA European Conference, International Risk Management Conference, 5th Dauphine Finance Ph.D. Workshop, Tel Aviv Ph.D. Accounting Symposium, 1st International Conference on Frontiers in International Finance and Banking, and the TAU Conference on Financial Intermediation during the Covid-19 Crisis. I am grateful to the Cornell Fintech Initiative, Israel Science Foundation, and Tel Aviv University for financial support. I conducted this study during my visit to Cornell University. Any errors are my own.

<sup>†</sup>Coller School of Management, Tel Aviv University, rabetti@mail.tau.ac.il.

*“I encourage companies to get out there [and] disclose where they stand. That’s fundamental. Those companies seeking capital, whether from private sector investors or the government, should practice good hygiene.”*<sup>1</sup>

– Jay Clayton, the Securities and Exchange Commission Chairman.

## 1 Introduction

The accounting literature provides both theoretical and empirical evidence that managers tend to withhold negative news about nonproprietary information and disclose favorable news (e.g., Verrecchia, 1983; Dye, 1985; Kothari, Shu, and Wysocki, 2009).<sup>2</sup> Moreover, in dynamic settings, managers delay disclosures in general (e.g., Einhorn and Ziv, 2008; Guttman, Kremer, and Skrzypacz, 2014). Although most studies emphasize equity holders’ valuation, debt considerations may also play an important role in strategic disclosure. Debt contracts likely influence firms’ behavior through monitoring and covenants, leading to more timely loss recognition (Ball, Robin, and Sadka, 2008; Ahn and Choi, 2009; Nikolaev, 2010).<sup>3</sup> Nevertheless, despite contractual obligations suggesting lender’s monitoring effects on financial disclosure, the extant literature focuses on firms’ litigation concerns (Skinner, 1994; Kasznik and Lev, 1995; Skinner, 1997; Baginski, Hassell, and Kimbrough, 2002). Little is known about *whether* and *how* long-term relationship lending affects firms’ strategic disclosure, especially when the information is unfavorable.

This study aims to fill this research gap by investigating how lending relationship building and lender presence incentivize and discipline firms’ tendency to delay disclosing unfavorable information. I exploit the Paycheck Protection Program (PPP)—a financial rescue program designed to support firms’ payroll costs during the Covid-19 pandemic, and document that firms that rely more on relationship lending disclose

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<sup>1</sup>Excerpt from Jay Clayton’s interview with the CNBC channel about whether public companies should disclose to shareholders their prospective plans to tap Covid-19 related bailout funds from the federal government (<https://www.wsj.com/articles/secs-clayton-says-companies-should-disclose-need-for-bailout-funds-11586267434>).

<sup>2</sup>In practice, managers may withhold negative news because of information costs (Jovanovic, 1982; Dye, 1986; Lanen and Verrecchia, 1987; Verrecchia, 1990), investors’ uncertainty about managers’ information endowment (Jung and Kwon, 1988; Penno, 1997; Pae, 2002), or investors’ uncertainty about managers’ reporting objectives (Einhorn, 2007), which could be tied to the latter’s stock option compensation (Aboody and Kasznik, 2000).

<sup>3</sup>More generally, conservatism is widely practiced because it is deemed useful in mitigating agency issues, reducing litigation costs, increasing firm value through reducing the present value of taxes, and more (Watts (2003a,b)).

bailout loan information more quickly, despite its negative ramifications on the market valuation of equity. This effect is more pronounced for firms with longer and more intense relationships with the lender and unaffected by habit formation (i.e., firms' disclosure practices) and liquidation concerns.<sup>4</sup> Instead, the evidence suggests that disclosure is strategic for relationship building. Specifically, firms incur endogenous costs for disclosing information on bailout loans to mitigate lenders' monitoring liability and reputation risks in exchange for future borrowing benefits. The study, therefore, adds to the disclosure literature by demonstrating how relationship lending encourages the borrowing firm's timelier disclosure of negative news and provides new empirical evidence for theories of reputation and relationship building in accounting and relationship banking (Diamond, 1989; Beyer and Dye, 2012).

The PPP is a program designed by Congress as part of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) to help small businesses cover payroll and other costs during the Covid-19 pandemic. The CARES Act was a \$2.2 trillion economic stimulus bill passed by the 116th U.S. Congress and signed into law by President Donald Trump on March 27, 2020, in response to the economic fallout of the Covid-19 pandemic in the United States. The PPP requires firms to fill out an application request with the Small Business Administration (SBA) through a participating lender, to have fewer than 500 employees, and to indicate whether the firm intended to request loan forgiveness. As a result of overwhelming demand, roughly half of the credit was exhausted within the program's first weeks. The program allocated about 525 billion dollars between April and August 2020 and assisted over half a million small businesses across the country.<sup>5</sup>

The PPP setting is suitable for investigating how relationship lending affects strategic disclosure for several reasons. First, it helps isolate disclosure effects because all bailout loans have the same interest rate

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<sup>4</sup>The intensity of relationships is measured as the number of lender's mentions within the firm's SEC filings, and the maturity of the relationship as the distance in days between the first commercial loan and the bailout loan.

<sup>5</sup>The PPP program was due to expire at midnight on June 30, 2020, but just hours before expiration, Congress authorized an extension through August 8. See the full report at <https://www.sba.gov/funding-programs/loans/coronavirus-relief-options/paycheck-protection-program#section-header-0>.

and maturity, are fully backed by the Federal Reserve, and neither collateral nor covenants are required.<sup>6</sup> Second, since the program aimed to aid small firms, potential litigation and reputation concerns increased for loans provided to large publicly traded firms, especially following widespread public outcry leading to SBA restating guidelines.<sup>7</sup> Third, the wide variation in bailout firms' disclosure delay and relationship lending status permits a cross-sectional examination of the determinants of strategic disclosure.<sup>8</sup> Altogether, this setting provides a unique opportunity to estimate relationship lending effects on firms' strategic disclosure.

I first establish that equity holders view bailout loan disclosure as unfavorable information, as suggested in the media based on anecdotes. Early disclosure is likely to induce negative market responses for two reasons. First, the bailout loan was designed to rescue small businesses. Therefore, large, publicly traded firms face reputation damages and litigation risks by borrowing from the program. Second, wide media coverage of unethical lending triggered a public outcry that drew the attention of the loan administrators (i.e., lending banks, the SBA, and the Federal Reserve), forcing policymakers to address the issue. In contrast, equity holders are likely to be less punitive toward late disclosure because the information is likely already incorporated by the market. For instance, because the Covid-19 crisis suppresses returns when the disclosure comes out, the market may have already updated the firm's value accordingly.<sup>9</sup>

Consistent with the notion that equity holders consider bailout loan disclosure as unfavorable information, I find that market responses to early disclosures, i.e., disclosures made within two weeks of the loan disbursement, are highly negative (-4.64%) on average, while responses to late disclosures, i.e., disclosures

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<sup>6</sup>The interest rate is 1.0%, and interest accrues from the date the loan is disbursed. Full repayment must occur within two years of the loan date, and the first payment may be deferred for six months.

<sup>7</sup>For instance, several media outlets voiced public outrage when public firms borrowed funds designed to assist small businesses. See <https://www.cnbc.com/2020/04/24/public-companies-split-on-whether-to-return-small-business-loans.html>. The outcry deepened when large public firms successfully received the relief. See <https://www.cnbc.com/2020/04/23/us-issues-new-guidance-for-small-business-loans-to-make-it-harder-for-public-companies-to-get-funds.html>

<sup>8</sup>Hundreds of public firms received bailout loans, and the bailout loan providers are publicly known. I check whether the lender's name appears within the firm's SEC filings by using the Edgar Full-Text-Search tool. This approach approximates the one suggested in Bharath, Dahiya, Saunders, and Srinivasan (2011), except that while I access SEC filings for all types of loans, they restrict their analysis to syndicated loans.

<sup>9</sup>This assumption was documented as early as Ball and Brown (1968), where stock prices drift in the direction of earnings releases, likely resulting from information disseminated in the media and interim reports during the year.

made more than two weeks from the loan disbursement, are slightly negative (-1.23%) on average. This result suggests that equity holders perceive bailout loan disclosure as unfavorable. Moreover, it indicates that managers have economically significant equity incentives to delay disclosing unfavorable information. On average, the manager of a one-billion-dollar-market-capitalization firm can prevent an equity loss of about 34.1 million dollars on the disclosure day by withholding from the public the bailout loan's information by two or more weeks.

Next, I examine *whether* and *how* relationship lending affects firms' disclosure. Exploiting the setting cross-section variation on disclosure delay and firm-lender relationships, I find that "relationship firms," i.e., firms whose existing lender provides the bailout loan, disclose unfavorable information about three weeks earlier than "transaction firms," i.e., firms for which a new lender provides the bailout loan. This trend is more pronounced in firms with intense and long-term relationships. In particular, I find that a one-standard-deviation increase in the number of lender mentions on the firm's SEC filings is associated with a two-and-a-half decrease in the disclosure delay. Using relationship lending maturity—the number of days between the first loan and the bailout loan—as a proxy for relationship lending intensity yields similar inferences. Inferences are also robust to other factors likely to influence disclosure and the use of matched samples. Moreover, concurrent disclosures used to provide additional information to the market, such as accompanying conference calls, do not affect inferences.<sup>10</sup>

Overall, the results suggest that relationship lending disciplines and incentivizes managers' strategic disclosure of unfavorable information, even though this information may be unfavorable to equity holders. There are at least three reasons for this. First, relationship lending firms are more likely to employ conservative accounting practices because of the informational advantage of their lenders (Sharpe, 1990; Boot, 2000; Bolton, Freixas, Gambacorta, and Mistrulli, 2016) and their role in monitoring firms (Diamond, 1984;

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<sup>10</sup>Results of a difference-in-differences analysis across several dimensions of conference call informativeness between relationship and transaction firms and before and after the Covid-19 crisis rule out the potential concern that conference calls for transaction firms are more informative than conference calls for relationship firms.

Ramakrishnan and Thakor, 1984; Kim and Wittenberg-Moerman, 2018). This conjecture is supported by Nikolaev (2010), Khurana and Wang (2015), and Callen, Chen, Dou, and Xin (2016), which document evidence that reliance on covenants in debt contracts is positively associated with accounting conservatism, suggesting that the strength of the monitor works as a corporate governance mechanism preventing opportunistic managerial behavior. These firms' disclosure practices may also persist during times of crisis (habit formation). However, examining whether a firm's past debt with any lender affects disclosure delay results in no significant association between habit formation and strategic disclosure in the PPP setting.

Second, increasing liquidation concerns in times of crisis amplifies the relevance of timely disclosure (e.g., Barth and Landsman, 2010; Elbannan and Elbannan, 2015). For example, Lim, Lee, Kausar, and Walker (2014) demonstrates that during a crisis, banks that do not delay loss recognition increase their spreads to a lesser extent than banks that do delay loss recognition and thus exhibit more prudent and less pro-cyclical loan pricing behavior. Because the bailout loan was provided to assist firms surviving the economic downturn during the Covid-19 pandemic, firms facing liquidation may be more likely to disclose the information related to the bailout loan to their other creditors to prevent them from seizing control. To examine this alternative channel, I assess whether a firm's current debt to any lender affects disclosure delay and find that it does not. Likewise, a documented weak effect of multiple lenders on disclosure delay disappears in a more robust regression analysis (e.g., with fixed effects). These findings suggest that liquidation concerns are unlikely to affect the decision to disclose the bailout loan information to the public.

Third, managers may want to build relationship capital by disclosing earlier to reduce monitoring costs, reputation damages, and lender liability litigation risks. Moral hazard concerns may be aggravated when loans are written without standard contractual obligations (i.e., debt covenants or collateral), especially in times of financial distress (e.g., Khurana and Wang, 2015). Therefore, by disclosing the loan information, firms mitigate lenders' concerns about the misappropriation of funds and reduce their monitoring costs since the disclosure exposes the loan information also to other stakeholders' oversight. In turn, increased

transparency reduces agency problems, thereby paving the way for relationship-lending benefits.<sup>11</sup> Bailout loan providers face neither credit risks nor utilize covenants or collateral. Hence, firms' strategic decision to disclose the bailout loan information likely reflects their intention to manage relationship capital with their lenders. In particular, considering the extensive media coverage of flaws in the PPP program that resulted in the distribution of bailout funds to large public firms and the public outcry and government actions that followed, an early disclosure may mitigate lenders' shared reputation damages and litigation risks. In return, the disclosing firms may enjoy future benefits such as additional lending, credit amendments, and covenant waivers in the post-bailout lending period. The empirical findings are consistent with this channel. In particular, firms that disclose early are more likely to interact with their bailout lenders in the post-PPP lending phase and to receive more economically significant loans, covenant waivers, and credit amendments than firms that withhold disclosure.

The study's contributions are threefold. First, it adds to the extensive literature examining the disclosure of unfavorable information. Complementing earlier disclosure literature emphasizing equity holders' incentives (e.g., [Verrecchia, 1983](#); [Dye, 1985](#); [Einhorn, 2007](#)), it shows that the decision to reveal unfavorable information also depends on the firms' ties with relationship lenders. Consequently, this study joins a small number of studies documenting firms' seemingly suboptimal disclosure choices (e.g., [Kasznik and Lev, 1995](#); [Skinner, 1997](#); [Baginski et al., 2002](#)). Together with these studies, it presents a more nuanced perspective to the conclusions in [Kothari et al. \(2009\)](#) that management, on average, delays the release of bad news to investors. In addition to timing stock option grants ([Yermack, 1997](#); [Aboody and Kasznik, 2000](#)) or engaging in reputation building or signaling ([Diamond, 1989](#); [Beyer and Dye, 2012](#)), firms with strong lending relationships or in financial distress may release negative news early, trading off the immediate cost

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<sup>11</sup>Relationship lending benefits appear in the form of lower spreads, larger loans, lower collateral requirements, and relaxed covenants ([Petersen and Rajan, 1994](#); [Cole, 1998](#); [Cayseele and Degryse, 2000](#); [Bharath et al., 2011](#); [Prilmeier, 2017](#)). Moreover, these benefits are crucial for firms' avoidance of extremely negative events in times of crisis ([Bolton et al., 2016](#); [Rabetti, 2022](#)).

of equity devaluation for future benefit from building relationship capital with long-term lenders.<sup>12</sup>

Additionally, the study contributes to the emerging literature assessing firms' disclosure choices during crises. This literature focuses on bank disclosures. For instance, [Barth and Landsman \(2010\)](#) examines the role of banks' financial reporting in contributing to the 2008 financial crisis. Using a set of banks in Egypt, [Elbannan and Elbannan \(2015\)](#) document that since the 2008 financial crisis, banks that provide relatively more disclosures on assets' risk had higher operational performance and market valuation. The present study is one of the earliest to offer an accounting perspective on firms' disclosure in times of crisis.

Finally, the study provides new insights into the large accounting conservatism literature ([Basu, 1997](#); [Watts, 2003a,b](#); [Ruch and Taylor, 2015](#)). The extant literature considers information asymmetry, moral hazard, tax-based motivations, litigation risks, and more, and (with the rare exception of [Lim et al., 2014](#)) focus on the borrowing firms instead of the lenders. The present study adds to this literature by examining long-term relationships between lenders and firms and how they relate to disclosure conservatism. In particular, the study supplies empirical evidence to the literature linking lenders monitoring effects on conservative accounting practices (e.g., [Ahn and Choi, 2009](#); [Nikolaev, 2010](#)). However, unlike these empirical assessments using debt covenants and other contractual obligations, I take a systematic approach where relationship lending has a disciplinary role in the disclosure of unfavorable information through firms' efforts to build goodwill with their lenders.

## **2 Institutional Background and Hypothesis Formation**

### **2.1 Institutional Background**

The largest economic stimulus package in the history of the United States, the Paycheck Protection Program (PPP or just bailout loan), was designed by Congress as part of the CARES Act to help small

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<sup>12</sup>In practice, firms are willing to pay a higher spread in the margin than in the long run equilibrium to maintain a good relationship with relationship banks that best understand their business ([Lim et al., 2014](#)).



businesses cover payroll and other costs during the Covid-19 pandemic.<sup>13</sup> To participate in the program, firms were required to have less than 500 employees, to sign a statement of good faith indicating that the firm had no other resources in place for covering payroll costs, and to indicate whether the firm intended to request loan forgiveness.<sup>14</sup> The bailout loan was fully backed by the Federal Reserve through agreements between banks and the Small Business Administration (SBA). After a firm requested the bailout loan through a bank branch, the bank sent the documents to the SBA for approval. Neither collateral nor covenants were required from firms to access these funds.

The typical bailout loan amount is 2.5 times larger than the borrower's average monthly payroll costs, capped at 10 million dollars. The calculation is based on the previous year's average payroll costs, excluding salaries above 100,000 dollars. Proceeds, in order to be forgiven, are allocated to payroll, rent, utilities, and interest on certain debts. There is no requirement to use a specified percentage of the funds for payroll costs. However, to be forgiven, at least 75 percent of the bailout loan proceeds should cover payroll costs. Additionally, the borrower has to keep payroll levels and not lay off employees to keep the eligibility for forgiveness. Full repayment must occur within two years of the loan date and the first payment is deferred for six months. The interest rate is 1.0%, and interest accrues from the date of loan dispersal. As a result, following overwhelming demand, roughly half of the credit was exhausted within the program's first weeks. The program allocated about 525 billion dollars from April to August 2020 and assisted over half a million small businesses across the country.<sup>15</sup>

Table 1, Panel A, shows that 928 publicly traded firms disclosed receiving bailout loans in the program. Most of these funds were distributed to firms listed in major U.S. stock exchanges: NYSE American, Nas-

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<sup>13</sup>The Coronavirus Aid, Relief, and Economic Security Act, also known as the CARES Act, was a \$2.2 trillion economic stimulus bill passed by the 116th U.S. Congress and signed into law by President Donald Trump on March 27, 2020, in response to the economic fallout of the Covid-19 pandemic in the United States.

<sup>14</sup>This paper covers bailout loans obtained in the first and second rounds of the program. The third round, authorized by the passage of the Consolidated Appropriations Act, 2021 (H.R. 133) into law on Dec. 27, 2020, is not the object of this study.

<sup>15</sup>The PPP program was due to expire at midnight on June 30, 2020, but just hours before expiration, Congress authorized an extension through August 8. See the full report at <https://www.sba.gov/funding-programs/loans/coronavirus-relief-options/paycheck-protection-program#section-header-0>.

daq, and NYSE. The remainder went to borrowers listed in smaller exchanges or traded over the counter. Panel B reports the frequencies of loan amounts in U.S. dollars and the number of deals aggregated by the firm's state and industry.<sup>16</sup> The largest portion, in dollar terms, of bailout loans, went to California, Texas, and New York State. Interestingly, California and New York State were the first two states to issue a stay-at-home order (on March 19 and 20 (2020), respectively). Also, the large distribution of funds to Texas does not come as a surprise given the slump in oil prices during the Covid-19 pandemic.<sup>17</sup> The panel also reports the distribution of funds by industry. *Retail, Health, Restaurant and Hospitality* receive almost half of the total loan amount. These industries are the most affected by the Covid-19 crisis due to restrictions on mobility and the fact that many Americans decided to postpone non-emergency medical procedures. Interestingly, firms in the high-tech sector account for 1.5% of the total borrowers. Still, they received 7.5% of the total funding—taking that into perspective, the average loan size of a high-tech company is six times larger than the average loan size of a hospitality company.

Using public firms' filings with the SEC, I identify 187 lenders that distribute the bailout loan funds. Panel C reports the percentage of funds distributed and deals originated by the top 20 lenders according to the percentage of funds distributed.<sup>18</sup> *JP Morgan* tops the list of bailout loan lenders for large public firms, accounting for 14% of dollars distributed and 8.23% of deals. Subsidiaries of foreign banks are also included among the top 20 lenders. For instance, *BMO*, a subsidiary of the *Bank of Montreal*, accounts for 3.17% of dollars distributed and 2.74% of deals.<sup>19</sup> Finally, the presence of regional banks, such as *Bank of Florida*, highlights the importance of community banks in the distribution of funds.

Despite an overall positive assessment of the program outcome, extensive media coverage revealed

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<sup>16</sup>Borrowers' state information is drawn from the firms' headquarters location, which may not reflect the firms' locality of operations. The Fama–French 49 industry classification is used to assign the frequencies for dollars and quantities of loans.

<sup>17</sup>The distribution of funds by states for publicly traded firms is similar to the SBA reported funds released in August 2020.

<sup>18</sup>For each lender, aggregated dollars and deals are reported as a percentage of the respective totals. Firms where the lender's name is not disclosed voluntarily (e.g., 8K forms), are complemented with additional information obtained from SBA database.

<sup>19</sup>Subsidiaries of banks from Chile, Spain, France, and the United Kingdom are also included in the list.

several flaws concerning the distribution of these funds, particularly during the program’s initial phase in the first weeks of April 2020.<sup>20</sup> For instance, hotels and restaurant chains helped to run the program dry, hundreds of large publicly traded firms received these loans, and even sports clubs, such as the Lakers, received millions through this program. The public outcry following media coverage on what was perceived as unethical lending—by design, the program should focus on small businesses—was such that the president of the US proposed an interference, and the administration of the program had to re-issue guidelines and updated FAQs to prevent misappropriation of these funds.<sup>21</sup> The favoritism in the distribution of bailout funds is likely rooted in relationship lending (e.g., [Granja, Makridis, Yannelis, and Zwick \(2022\)](#), [Li and Strahan \(2021\)](#), and [Rabetti \(2022\)](#)) and may lead to potential reputation and litigation damages to both borrower and lenders.

## 2.2 Fraudulent Loans

The PPP program was noble in its intentions—the goal was to quickly fund businesses to keep them in operation and have the money flow to the employees to prevent massive layoffs and furloughs. However, the emphasis on speedy delivery of funds caused a sacrifice of diligence by banks when processing and approving loan applications may have led to losses estimated to be in the tens of billions (e.g., [Griffin, Kruger, and Mahajan \(2023\)](#)). However, only recently, the government has been catching up to potential fraud by using tools like the False Claims Act, which enables the government to recover triple damages.<sup>22</sup> For instance, Prosperity Bank has agreed to pay \$18,673.50 to resolve allegations it improperly processed a bailout loan on behalf of an ineligible customer.<sup>23</sup> Additionally, the government is encouraging individuals

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<sup>20</sup>For instance, the Washington Post had a series of articles covering the misallocation of bailout funds. See <https://www.washingtonpost.com/search/?query=PPP>.

<sup>21</sup>See <https://home.treasury.gov/system/files/136/Interim-Final-Rule-on-Requirements-for-Promissory-Notes-Authorizations-Affiliation-and-Eligibility.pdf>.

<sup>22</sup>After the mortgage crisis, DOJ brought dozens of FCA suits on behalf of the US Department of Housing and Urban Development. Rather than sue based on individual mortgages, the DOJ targeted banks and lenders that certified thousands of mortgages to HUD insurance programs.

<sup>23</sup>See <https://www.justice.gov/usao-sdtx/pr/first-ever-false-claims-act-settlement-received-paycheck-protection-program-lender>.

who step forward to obtain whistleblower awards up to 30% of what the government recovers in the PPP loan fraud whistleblower action.<sup>24</sup>

The rationale behind DOJ's decisions is that lenders should already be experts in screening fraud.<sup>25</sup> Especially, borrowers applying for a loan could have had a pre-existing relationship with the lending bank, facilitating information cross-checking. The bank has access to the business's disbursements, including payroll disbursements which occurred regularly and were calendared. Thus, being able to identify and mitigate fraudulent applications involving falsified head counts and inflated payroll costs. Additionally, the lender would also know if and when the business activity ceased, whether the firm or executives faced criminal charges, and more. In contrast, if the bank received a loan application from a business entity with which the bank did not have a pre-existing relationship, red flags should have gone off about why the business's existing lender was not funding the bailout loan. In either case, the bank should have had enough information to call on suspicious fraud attempts.

However, lenders may have been lured to lift their defenses because the SBA subsequently cast doubt on lenders' responsibility by explicitly permitting PPP lenders to rely on borrowers' certifications. In an interim final rule issued in April 2020, SBA allowed "lenders to rely on specified documents provided by the borrower to determine the qualifying loan amount and eligibility for loan forgiveness."<sup>26</sup> In fact, SBA soft guidelines may have contributed to the widespread mismanagement of the Paycheck Protection Program (PPP) and Economic Injury Disaster Loan (EIDL) program, which led to nearly \$84 billion in potentially fraudulent loans.<sup>27</sup>

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<sup>24</sup>See <https://www.foxrothschild.com/publications/justice-department-settles-first-whistleblower-case-alleging-ppp-fraud-in-which-it-intervened>.

<sup>25</sup>The DOJ could take—and historically has taken an expansive view of when lenders “know” of borrower fraud, relying on the FCA’s definition of “knowing” to include deliberate ignorance and even recklessness (<https://news.bloomberglaw.com/us-law-week/false-claims-act-action-starts-against-ppp-lenders>).

<sup>26</sup>See <https://www.federalregister.gov/documents/2020/04/15/2020-07672/business-loan-program-temporary-changes-paycheck-protection-program>.

<sup>27</sup>Among other findings, an investigation by the House's Select Subcommittee on the Coronavirus Crisis documented 148,525 hotline complaints received by the SBA Office of Inspector General (OIG) relating to PPP or EIDL (a 19,500% increase over prior years). See <https://coronavirus.house.gov/news/press-releases/select-subcommittee-releases-new-findings-trump-administration-s-failure-prevent>.

## 2.3 Hypothesis Formation

There is little evidence regarding whether relationship lending affects the firm's strategic disclosure—likewise, whether incentives to build relationship capital are more accentuated during times of crisis. To address these questions, I exploit a unique setting where all debt contracts, by law and regulation, carry an identical interest rate, are fully backed by the government, and borrowers have no commitment to collateral or other covenants. Additionally, these bailout loans are designed to help firms maintain payroll during the crisis, being deemed forgivable—a year and a half after the loan disbursement if used for the intended purpose. In contrast, in other settings, the different types of debt contracts, loan specifications, purpose, and borrowers' credit quality characteristics lead to challenging empirical examinations to control for a multitude of factors that may affect relationship lending effects on disclosure. Therefore, the standard bailout loan structure facilitates identification in this setting. Moreover, because a few large commercial banks dominate bailout loan disbursement, variation in disclosure delay within the same lender, while controlling for firm characteristics likely to affect disclosure, enhances the ability to draw inferences regarding relationship lending effects on strategic disclosure.

### 2.3.1 H1: Early disclosure is punished by the equity holders

There are at least three reasons why bailout loans are relevant information and are perceived as negative to equity holders. First, over half of publicly traded firms disclose their loan details, such as disbursement date, loan terms, and lender's name, on 8K filings. Second, given that the average firm undergoes financial distress during a crisis, the bailout loan is informative to stakeholders concerned with firms' ability to maintain operations. However, because the firm discloses information regarding its liquidity needs, investors may perceive its competitive strength as relatively fragile to its peers (e.g., [Verrecchia, 1983](#)). reputation costs may be exacerbated for large publicly traded firms because of the program's design to especially assist small businesses. This concern was amplified with extensive media coverage voicing the public outcry with large

firms borrowers of the program.<sup>28</sup>

Therefore, the first hypothesis is:

*H1: Early disclosure is punished by the equity holders*

In Appendix B, I build a simple model to provide a theoretical foundation for this prediction. In the model, I allow the manager to consider both the equity holder's valuation and the payoffs she gets from the responses of debt holders. The equity valuation follows from [Dye \(1985\)](#), which predicts that sufficiently bad news should not be disclosed early. In other words, it is pushed by equity holders.

### **2.3.2 H2: Relationship firms disclose earlier than transaction firms**

Accounting theory mostly focuses on managerial strategic disclosure decisions with respect to equity holders. Theoretical models demonstrate that managers tend to withhold unfavorable news to avoid information costs ([Jovanovic, 1982](#); [Dye, 1986](#); [Lanen and Verrecchia, 1987](#); [Verrecchia, 1990](#)), investors' uncertainty about managers' information endowment ([Jung and Kwon, 1988](#); [Penno, 1997](#); [Pae, 2002](#)), or investors' uncertainty about managers' reporting objectives ([Einhorn, 2007](#)). Yet, extant empirical literature suggests that debt contracts likely influence firms' behavior through contractual obligations leading to more timely loss recognition ([Ball et al., 2008](#); [Ahn and Choi, 2009](#); [Nikolaev, 2010](#)). However, despite litigation concerns or financial disclosure related to contractual obligations, whether long-term relationship lending has a systematic effect on strategic disclosure is an open question.

Thus, assuming there is empirical validity to *hypothesis 1*, a second hypothesis naturally follows:

*H2: Relationship firms disclose earlier than transaction firms*

where 'Relationship firms' are those in which there are existing strong ties between the firm and its lenders.

'Transaction firms' are those in which there are no existing or weak ties between the and its lenders. This

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<sup>28</sup>See for instance <https://www.forbes.com/sites/brucebrumberg/2020/09/15/88-of-public-companies-that-got-ppp-loans-kept-the-funds/?sh=c528dfd316c6>.

terminology is used to facilitate the interpretability of the results where managers' credit ties are captured by whether firms' bailout loan is provided by existing lenders (or lenders with which firms have a past relationship).

To motivate this hypothesis, I build on the theoretical model in Appendix B by adding a disclosure payoff term associated with lenders' response to [Dye \(1985\)](#). [Figure 1](#) illustrates this framework. The Y-axis captures disclosure delay in days. The X-axis captures the manager's incentives to manage relationship capital. Firms' incentives to manage relationship capital are decreasing in disclosure delay. The strategic disclosure behavior translates to building relationship capital with the firm's main lenders, as it decreases monitoring costs, which converts into future lending benefits. The curve captures the average distance in days between the disclosure of unfavorable information and unfavorable information signal. Because there exists a minimum amount of time needed to disclose unfavorable information, the intercept is positive. The curve shows diminishing returns to disclosure since the equity holders are no longer punitive after some point when the information is no longer relevant.

### **2.3.3 H3 and H4: Potential economic channels and post-lending benefits**

The intuition behind the second hypothesis and the proposed framework in Appendix B admit all three economic channels described in the introduction. First, extant literature documents the influence of lenders monitoring on firms' behavior toward more conservative accounting practices. For instance, the strength of lenders monitoring is increasing in firms accounting conservatism ([Nikolaev, 2010](#); [Lim et al., 2014](#); [Callen et al., 2016](#)) and decreasing in firms' earnings management practices ([Ahn and Choi \(2009\)](#)). Thus, habit formation is a potential channel in which relationship lending is likely to affect disclosure.

Second, another potential channel derives from liquidation concerns, an issue that amplifies the relevance of timely disclosure in times of crisis. [Barth and Landsman \(2010\)](#) concludes that although fair value accounting played little or no role in the 2008 Financial Crisis, the transparency of information associated

with asset securitizations and derivatives was likely insufficient for investors to properly assess the values and riskiness of bank assets and liabilities. Assessing a sample of Egyptian banks, [Elbannan and Elbannan \(2015\)](#)) documents that banks with timely disclosure have a relatively higher performance and valuation during the 2008 Financial Crisis.

Third, moral hazard concerns may be aggravated during times of crisis due to bailout expectations ([Mailath and Mester \(1994\)](#), [Dam and Koetter \(2012\)](#), [Fischer, Hainz, Rocholl, and Steffen \(2014\)](#)). In the absence of standard contractual restrictions to prevent the misappropriation of funds (e.g., covenants and collateral), lenders are likely to rely on market oversight because full disclosure increases firms' litigation risks if the purpose of the loan is breached. Therefore, borrowers have incentives to protect their lender's reputation and litigation concerns to strengthen their relationship with their lender. The strategic disclosures signal borrowers' full commitment to the loan purposes, even though the information may be perceived as unfavorable by equity holders.<sup>29</sup> In sum, this channel suggests that firms incur disclosure costs in the short term to manage reputation capital with their lenders. In turn, these firms receive future relationship lending benefits.

The above discussion leads to the third and fourth hypotheses:

*H3: Relationship firms disclose earlier because of reputation management considerations*

*H4: Relationship lending firms receive future lending benefits*

Ex-ante is unclear whether habit formation, liquidity concerns, reputation management, or a combination of these three potentially drives managers' timely disclosure. Therefore, below I develop tests to provide empirical evidence regarding which is the most appropriate economic channel through which relationship lending affects firms' strategic disclosure.

<sup>29</sup>Incurring short-term costs in exchange of future relationship benefits is a core assumption in the relationship lending literature (e.g., [Diamond \(1984\)](#), [Ramakrishnan and Thakor \(1984\)](#), [Sharpe \(1990\)](#), and [Boot \(2000\)](#)).



## 3 Data and Sample

### 3.1 Collection

Data collection begins by identifying 928 public firms that disclosed bailout loans during the first two phases of the program in 2020, 811 (87%) of which have accounting information on Compustat that are necessary to conduct my tests.<sup>30</sup> Figure 2 shows the evolution of lending of top lenders to public firms: *Bank of America*, *JP Morgan*, *PNC Bank*, and *Silicon Valley Bank*. As indicated in the density plot, *JP Morgan* was one of the first larger banks to disburse bailout loans to public firms. Most of *JP Morgan* lending occurred in the first weeks of April, unlike *Bank of America* whose bailout lending volume reached its peak in May. *PNC Bank* bailout loan disbursement distributes over the first months of the program, but the intensity of lending is lower than *Silicon Valley Bank*, as perceived by the distribution fat tails.

Figure 3 shows the evolution of SEC filings. The first wave of disclosures (April and May) captures most of the action of public firms' participation in the program and is predominantly in 8K filings. The second wave of disclosures (June and July) suggests a slowdown in the participation of public firms in the program, perhaps driven by the negative media coverage and SBA restated guidance.<sup>31</sup> There is a spike in the third wave of disclosures (August and September) that reflects 10Q filings with retroactive information about the previous quarter. This wave is the least informative because these disclosures usually omit the name of the lender and the exact date of loan request and approval.

For each firm's disclosure, a textual analysis algorithm extracts the loan amount, approval date, disbursement date, and lender name. Bailout loan disclosures follow similar standards, which provide higher accuracy to this procedure. If no value is returned for the variables of interest, problematic disclosures are manually checked. However, not all disclosures are transparent. About a third of the firms in the sample

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<sup>30</sup>This is the largest sample of matched public firms in the PPP literature.

<sup>31</sup>Under the Treasury guidance issued in late April 2020, bailout loan borrowers must certify good faith that they need the funds to keep operating. That includes taking into account aspects such as business activity and their ability to access other sources of capital (see the updated guidance at <https://home.treasury.gov/system/files/136/Paycheck-Protection-Program-Frequently-Asked-Questions.pdf>).

did not disclose the name of the bailout lender. For these firms, a search on the SBA database provides additional information about their inclusion in the program.

### 3.2 Classification of Relationship Lending

Bailout firms vary in relationship intensity with their lenders. Some firms have an intense relationship, such as borrowing from a bank with which they already have a relationship lending. In this case, relationship lending is usually categorized by the bank being the sole creditor in a loan term or the leading agent in a syndicated loan. This group of firms is classified as ‘relationship firms.’ Other firms may have soft relationships, such as a simple deposit account, an escrow account, or no relationship. This group of firms is classified as ‘transaction firms.’

The lender’s level of information about the borrower is deeper for relationship firms than transaction firms because the information is acquired by screening and monitoring firms throughout time (Diamond (1984), and Ramakrishnan and Thakor (1984)). At the same time, managers of firms with more profound relationship lending have more access to their banks than transaction firms (Boot (2000)). This access may be crucial in times of crisis where receiving bailout funds faster may prevent firms from triggering negative events such as breaching covenants on debt contracts (Rabetti (2022)). This friction on relationship intensity is exploited in the paper to study the effects of relationship lending on disclosure delay.

To construct the relationship indicator (*REL*), I follow Rabetti (2022). The approach consists of searching the EDGAR database for the PPP lender’s name within the firm’s filings. For instance, on April 21, 2020, *Adma Biologics Inc* borrowed approximately \$4.6 million from *JPMorgan Chase* in the form of a PPP loan. A search for the lender’s name within the borrower’s SEC files reveals that the borrower had a past relationship with this lender. More specifically, the company opened a deposit account on October 11, 2017, and closed the account on December 2, 2019. Because these events occurred before the PPP loan, I categorize this firm as a transaction firm. To determine whether a PPP borrower is a relationship lending

firm, I check the most updated filings (five years before the PPP loan) for whether a line of credit or a term loan with its PPP lender exists.

This approach is similar to [Bharath et al. \(2011\)](#), which defines the relationship lending indicator by matching lenders and borrowers. However, I do not use the DealScan dataset to identify the relationship lending for two reasons. First, DealScan partially observes the universe of debt contracts, e.g., only firms tracked by their system. Second, non-binary dimensions of relationship lending are also examined, such as intensity, the number of debt-related disclosures between firms and their primary lender, and maturity, the length between the first debt-related disclosure date and the bailout loan disbursement date.

### 3.3 Description

[Table 1](#) reports the summary statistics. Approximately one-fifth of the firms (203) in the sample borrowed from lenders with whom they have had past relationships. Bailout loan disclosure delay, captured as the distance in days between loan disbursement date and firms' filing, is significantly different between relationship firms and transaction firms. While the former discloses in about two weeks on average, the latter discloses in more than three months on average. The number of SEC filings mentions about firms' lenders is three times larger for relationship firms. A similar pattern remains for firms' relationship maturity with their primary lender.

Although a typical bailout loan for relationship firms is 2.17 million dollars larger than for transaction firms, firms' characteristics likely to affect disclosure delays, such as the number of analysts following, size (total assets), payroll (number of employees), leverage (debt to assets), and profitability (returns on equity) are not significantly different between the two types.<sup>32</sup> However, transaction firms are less liquid than relationship firms, as suggested by lower cash to assets on average. Concerning firms' exchange listing, 75% of the relationship lending firms are listed in large stock exchanges, as opposed to only half of transaction firms. Although significantly different, the proportion of firms that borrow from Top SBA lenders (i.e.,

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<sup>32</sup>For a comprehensive analysis of relationship lending effects on loan size, see [Rabetti \(2022\)](#).

lenders with over three years of experience using the SBA platform) is slightly above one-third for relationship firms whereas slightly below one-third for transaction firms. Preferences for foreign lenders are not significantly different between the two groups.

## 4 Analysis

### 4.1 H1: Early Disclosure is Punished by the Equity Holders

The first hypothesis states that to be perceived as unfavorable information, bailout loan disclosure should be punished by equity holders (i.e., negative stock price reaction). To test this hypothesis, I examine abnormal and cumulative abnormal returns in the vicinity of the bailout loan disclosure. I employ a parsimonious procedure used in the literature (e.g., [Beaver \(1968\)](#), [Copeland \(1979\)](#), and [Bamber \(1987\)](#)). First, I estimate a firm's expected return using the market model on the firm's returns in the 180 days before the first day in the event window.

$$R_{it} = \alpha_i + \beta_i \times R_{mt} + \epsilon_{it}, \quad (1)$$

where  $R_{it}$  is the return of the stock of firm  $i$  on day  $t$ ,  $R_{mt}$  is the return of SP500 on day  $t$ ,  $\epsilon_{it}$  is the error term with expectation zero and finite variance.<sup>33</sup> Then, I estimate abnormal returns as the difference between realized returns and expected returns in the event window, defined as the period between three days before and three days after the bailout loan disclosure.

$$AR_{it} = R_{it} - (\alpha_i + \beta_i \times R_{mt}) \quad (2)$$

Finally, the sum of the abnormal returns in the event window corresponds to the measure of cumulative abnormal returns.

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<sup>33</sup>It is assumed that  $\epsilon_{it}$  is uncorrelated to the market return  $R_{mt}$  and firm return  $R_{jt}$  with  $i \neq j$ , not autocorrelated, and homoskedastic.

$$CAR_{it} = \sum_{t=1}^T AR_{it}; \quad t = 1, 2, 3. \quad (3)$$

Table 2 reports the results. Panel A shows that the abnormal and cumulative abnormal returns fall precipitously on the day of disclosure, i.e., are negative 4.64 and negative 4.38 percent. These coefficients relate to firms that provide disclosures within two weeks of the loan disbursement. The negative coefficients suggest that equity holders punish early bailout disclosures. Panel B shows that the abnormal and cumulative abnormal returns slightly fall on the day of disclosure, i.e., are negative 1.23 and negative 1.51 percent. These coefficients relate to firms whose disclosures occurred more than two weeks after the loan disbursement. Panel C concludes by showing the three-days average abnormal and cumulative returns in the vicinity of bailout loan disclosures. As expected, the market reaction for early disclosures is significantly negative (1.76 percent), while slightly negative (0.27) for late disclosure.

Results support the hypothesis that bailout loan disclosures are perceived as unfavorable information to equity holders. Moreover, the findings suggest that managers have economically significant equity considerations to delay disclosing bailout loan information. For instance, a manager of a one billion dollar firm would prevent an equity loss of about 15 million dollars by delaying in two weeks the bailout loan's disclosure. More generally, considering borrowers' average market capitalization of about 250 million dollars, managers have equity incentives, on average, about two million dollars per week of delayed disclosure.<sup>34</sup>

## 4.2 H2: Relationship Firms Disclose Earlier than Transaction Firms

The second hypothesis states that relationship firms disclose unfavorable information, i.e., bailout loan information, earlier than transaction firms. As discussed in Section 2.3, relationship lending potentially

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<sup>34</sup>That is about a percent of total market capitalization per week of delayed disclosure. The estimate in dollars is calculated as 250 million dollars  $\times$  1.5 percent (the average difference between early and late disclosures' market reactions) divided by two weeks.

reflects the effects of the underlying ties between firms and creditors. It, therefore, works as a good proxy for whether managers' disclosure choice is influenced by the potential benefits of more favorable loan terms with creditors.<sup>35</sup>

To test this hypothesis, I estimate the following model at the firm level:

$$Y = \alpha + \beta(REL) + \Lambda + \Phi + \tau + \nu + \psi + \epsilon, \quad (4)$$

where  $Y$  is disclosure delay measured as the logarithmic distance in days between the loan disclosure and the loan disbursement. I measure the key explanatory variable, relationship borrower,  $REL$ , in three ways: (i) a binary indicator switching on for relationship firms and zero for transaction firms; (ii) a logarithmic (+1) of the total unique number of bailout loan lender mentions within firm's SEC filings; and, (iii) a logarithmic (+1) of the distance in days between the first bailout loan lender mention within firm's SEC filings and the bailout loan disbursement date. The idea is also to test relationship intensity effects on disclosure, where more intense relationships are likely to have accentuated effects on disclosure delay than less intense relationships. The assumption that more interactions with existing lenders enhance the ties between firms and lenders is central to documented effects in the relationship lending literature. Alternatively, the firm-lender relationship's intensity may be measured as the relationship's maturity or the distance between the first loan and the bailout loan. The remaining explanatory variables comprise a vector of firm's controls  $\Lambda$ ; a vector of lender's controls  $\Phi$ ; an industry fixed effect  $\tau$ ; a state fixed effect  $\nu$ ; a bank fixed effect  $\psi$ ; an error term  $\epsilon$ .

Following past literature, the model includes a variety of controls for firms' characteristics likely to affect disclosure. These include the number of analysts following, size captured as the logarithmic of total assets, leverage captured as total debt to assets, profitability captured as net income to shareholder's equity (ROE), and liquidity captured as total cash to assets. By design, bailout loans are determined by the number

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<sup>35</sup>Note that relationship lending firms receive the bailout loan from banks they have a past relationship with, while transaction firms establish the first contact with a lender through a bailout loan.

of employees. Therefore, all regressions have the logarithm of the firms' payroll size. This simple control replaces standard contract-based controls used in the relationship lending literature, such as whether the type of loan is from a line of credit, revolving, or term loans. Also, there is no need to control for loan purposes because all loans are, by design, destined for payroll costs. Finally, the specification also controls for the logarithmic of bailout loan amount since discrepancies in size may also affect the relevance of disclosed information (e.g., how equity holders perceive the disclosure as unfavorable information).

Following [Rabetti \(2022\)](#), equation (4) includes controls for lender-specific characteristics, such as (i) an indicator variable that takes a value of one when the lender is an experienced SBA lender, and (ii) an indicator variable that takes a value of one when the lender parent firm is a foreign entity. While the first indicator captures the ability of a lender to use SBA systems and attends to the high demand for bailout loans during the Covid-19 crisis, the latter captures lender transparency to local markets, as foreign entities have more relaxed disclosure requirements than US-based banks.

Finally, because the severity of the Covid-19 crisis varies across industries and states arising from different timing and degrees of lockdown measures, equation (4) also includes industry and state fixed effects to mitigate the influence of time-invariant unobserved characteristics affecting the variable of interest.<sup>36</sup> Additionally, I follow [Bolton et al. \(2016\)](#) and include bank fixed effects as controls for banks' unobserved heterogeneity. The assumption that the OLS regression model errors are independent seems to hold in the empirical analysis. The reason is that each firm is surveyed only once, mitigating concerns with serial correlation at the firm level. However, the precision of the regression estimates may likely be affected by cross-section disturbances derived from errors correlated across industry or state levels. Therefore, standard errors are clustered at industry and state levels.

[Table 4](#) reports the findings from an estimation of equation (4) in which *REL* takes the form of a binary

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<sup>36</sup>States have imposed mandatory stay-at-home orders as part of U.S. state and local government responses to the 2020 Covid-19 pandemic, that came into effect in different dates: before March 22; March 29; April 5; and, April 12, and no-imposed stay-home orders.

indicator of whether a firm borrowed from an existing lender. The significantly negative *REL* coefficient, between -0.54 and -0.26, suggests that relationship firms disclose unfavorable information at least about three weeks earlier than transaction firms. The *REL* coefficient is significantly negative in the presence of industry, state, and bank fixed effects (Column IV), and when equation (4) is estimated for a partition of firms listed only in Top Exchange (Column V).<sup>37</sup> Findings in columns I to V indicate that various firm-specific factors, such as the number of analysts following, improve the speed of these disclosures, consistent with the literature's documented effects of financial analysts on disclosure quality. Likewise, results suggest weaker evidence of a firm's size, profitability, and liquidity, increasing the delay in unfavorable information disclosures. Finally, whether a lender is experienced with the SBA platform or is a subsidiary of a foreign entity has minor negative effects on firms' disclosure delay.

Table 5 reports the results for a regression of the logarithmic number of SEC lender's mentions within the firm's filings on disclosure delay. The results of this analysis support the assumption that more intense relationships are likely to have accentuated effects on disclosure delay than less intense relationships, as reflected by the significantly negative *REL* coefficient between -0.08 and -0.05. Relationship firms' number of interactions with existing lenders increases the speed in disclosing unfavorable information, as perceived by the negative coefficient across model specifications.

Table 6 reports the results for regression for which *REL* is measured as the distance between the first loan and the bailout loan. The results suggest that relationship maturity is increasing in the speed of firms disclosing unfavorable information to markets, as perceived by the negative coefficient across model specifications.

Taken together, the findings in Tables 4 through 6 suggest that relationship lending influences managers' speed in disclosing unfavorable information. Managers in firms with strong ties with their existing lenders disclose unfavorable information earlier than those with weak ties with their bailout loan provider. The

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<sup>37</sup>I include this test to mitigate the influence of firms from smaller exchanges, which may have systematic differences in the way in which relationship lending influences the disclosure decision.



choice to manage relationship lending capital is more accentuated in intense and long-term relationships.

## **4.3 Robustness**

### **4.3.1 Selection**

Although relationship and transaction firm sample characteristics are essentially balanced at the mean, the findings I document are possibly influenced by unobserved differences between the two groups of firms. To address this concern, I re-estimate the main regressions using a propensity score-matched sample design using the main characteristics likely to influence the disclosure delay decision for relationship firms.

Table 7 reports the propensity score matching results. The process successfully matches 186 firms from the control group based on the firms' characteristics likely affecting disclosure delay. Panel B shows the balanced summary and the percentage improvement in relevant firm characteristics. Variables in the control group improve the distance to the treated group by about 80 percent on average.

Table 8 reports the results of estimation of equation 4 the matched sample. Columns I and II report the results for the regression of relationship lending indicator on disclosure delay. Inferences from these regressions are the same as those based on the previous analysis. In particular, the *REL* coefficients are significantly negative of similar magnitude to those in Tables 4 to 6. Columns III and IV report results for the regression of the number of SEC mentions on disclosure delay. Likewise, the results indicate that inferences are not affected by unobserved characteristics. Finally, columns V and VI report the results for the regression of maturity on disclosure delay. Similarly, the results suggest that selection concerns derived from potential imbalances between treated and control groups are unlikely to drive documented results.

### **4.3.2 Concurrent disclosures**

Discrepancies in the type of disclosure method chosen by transaction firms could also influence the apparent disclosure delay decision. Whereas these firms mainly disclosed the bailout loan information in

10Q/K forms, relationship firms primarily disclosed in 8K forms. Because conference calls usually accompany the former type of disclosure, it could be that the less information content about bailout loans in the 10Q/K forms is compensated by a more considerable degree of information provided in the accompanying conference calls.

To mitigate the influence of differences in disclosure method on disclosure delay, I estimate a differences-in-differences analysis on the discrepancies of main conference call attributes between relationship and transaction firms and the respective quarters during and before the Covid-19 crisis. Conference call characteristics are classified into three types. The first type, *Format*, includes the conference call length, the number of executives participating and analysts participating in the call, and the number of interactions among participants (i.e., dialog between executives and analysts in the Q&A session). The second type, *Informativeness*, includes textual measures of informativeness and uncertainty extracted from the question-and-answering session of the conference call.<sup>38</sup> The last type, *Language*, includes the tone, percentage of accounting words, and forward-looking language in the Q&A session of the conference call.<sup>39</sup> Thus, I estimate the following model:

$$Y = \alpha + \beta(REL \times POST) + \Lambda + \tau + \nu + \psi + \epsilon, \quad (5)$$

where  $Y$  is the response variable taking the form of one of the variables specified above within three categories: (i) format, (ii) informativeness, and (iii) language.  $REL$  is an indicator variable that equals one for firms with relationship lending in place, and zero otherwise;  $POST$  is an indicator variable that equals one if the conference call falls in the Covid-19 period, and zero otherwise. The interaction  $REL \times POST$  is the variable of interest and reflects the difference-in-difference coefficient.  $\Lambda$  is a vector of firm's controls as in equation 4. All regressions have industry ( $\tau$ ), state ( $\nu$ ), and bank ( $\psi$ ) fixed effects.

<sup>38</sup>Where informativeness is the ratio of informative words to total words (i.e., where informative words excludes stopping words, a common procedure in natural language processing), and uncertainty is the number of uncertainty words to total words according to Loughran-McDonald dictionary (see [https://www3.nd.edu/~mcdonald/Word\\_Lists\\_files/Documentation/Documentation\\_LoughranMcDonald\\_MasterDictionary.pdf](https://www3.nd.edu/~mcdonald/Word_Lists_files/Documentation/Documentation_LoughranMcDonald_MasterDictionary.pdf)).

<sup>39</sup>Where tone is calculated as the net number of negative words to total words, and accounting and forward-looking words to total words are based on Kimbrough (2005).

Table 9 reports the results for the differences-in-differences analysis. Panel A documents that the conference call length and the number of executives participating in the call are significantly larger for relationship firms than transaction firms and. However, the number of analysts in the call and the interactions among participants are not significantly different between the two groups. Panel B documents that the informativeness and uncertainty in the Q&A session are not significantly different between the two groups. Panel C documents that language used in the Q&A session is slightly more pessimistic and uses less forward-looking words in the relationship firms' conference calls. In general, the results in Table 9 indicate that conference calls for transactions firms are not more informative than conference calls for relationship firms, and therefore discrepancies in the conference call content of the two groups are unlikely to affect inferences from my main tests.

#### **4.4 H3 & H4: Economic Channels and Post-lending Benefits**

Overall, the finding that relationship firms disclose earlier than transaction firms is consistent with the monitor's disciplinary role. However, because the bailout loan imposes no credit risk to the lender and that the loan is absent of usual monitoring features, such as debt covenants and collateral, the decision to disclose early is more likely the results of the borrower's initiative rather than the monitor's control. This plausible economic channel becomes evident given the circumstances of these bailout loans, which should not have been granted to these firms by design, exposing both borrowers and lenders to shared reputation and litigation risks.

Mounting evidence on a series of media articles documents that hotels and restaurant chains helped to run the program dry, hundreds of public firms received bailout loans while paying dividends or engaging in buybacks, and even sports clubs, such as the Lakers, received millions through the program.<sup>40</sup> The public

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<sup>40</sup>For instance, the Washington Post had a series of articles covering the misallocation of bailout funds, especially during the initial phase of the program in the first weeks of April 2020. See <https://www.washingtonpost.com/search/?query=PPP>.

outry following media coverage on what was perceived as unethical lending—by design, the program should focus on small businesses—was such that the administration of the program had to re-issue guidelines and updated FAQs to prevent misappropriation of these funds.<sup>41</sup>

The favoritism in the distribution of bailout funds is likely rooted in relationship lending (e.g., [Granja et al. \(2022\)](#), [Li and Strahan \(2021\)](#), and [Rabetti \(2022\)](#)) and may lead to potential reputation and litigation damages to both borrower and lenders. Therefore, a potential economic channel underlying the relationship firm’s faster disclosures in this setting is mitigation of potential reputation and litigation damages on the lender’s side. By opening the bailout loan details to the public’s scrutiny, relationship borrowers assume the loan was provided in good faith and according to the program rules; thus, assuming the entire responsibility for any wrongdoing—this, in turn, signals to the lender that the borrower cares for their relationship moving forward. Further empirical analysis of potential economic channels and post-bailout lending outcomes supports this assumption.

To analyze the influence alternative economic channels on disclosure delay, I estimate the following regression:

$$Y = \alpha + \beta(DEBT \times REL) + \Lambda + \Phi + \tau + \nu + \psi + \epsilon, \quad (6)$$

where  $Y$  is the variable of interest, or the measure of disclosure delay captured as the logarithmic distance in days between the loan disclosure and the loan disbursement.  $DEBT$  is an indicator variable that takes the value of one for current debt in columns 1 and 2; past debt in columns 3 and 4; and debt with multiple lenders in columns 5 and 6, and zero otherwise.  $REL$  is an indicator variable that takes the value of one for firms with relationship lending in place, and zero otherwise; The interaction  $DEBT \times REL$  reflects the effects of  $DEBT$  for firms with relationship lending in place.  $\Lambda$  is a vector of firm’s controls.  $\Phi$  is a vector of lender’s controls. All regressions in even columns include industry ( $\tau$ ), state ( $\nu$ ), and bank ( $\psi$ ) fixed effects.

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<sup>41</sup>See <https://home.treasury.gov/system/files/136/Interim-Final-Rule-on-Requirements-for-Promissory-Notes-Authorizations-Affiliation-and-Eligibility.pdf>.

Table 10 documents the effects of alternative channels on bailout disclosure delay. This analysis is necessary to examine whether other channels than relationship lending affects disclosure delay. The results suggest that economic channels such as liquidity concerns arriving from current debt, habit formation generated from past lending relationships, or the existence of multiple lenders, which makes publicly disclosing the bailout loan a cheaper signal to all stakeholders, have no significant effects on disclosure delay. In particular, the coefficients in the most restrictive specification for the interaction  $DEBT \times REL$  on liquidity concerns (0.30), habit formation (0.30), and multiple lenders (-0.24) are not significant.

The previous analysis mitigates alternative explanations and, thus, reinforces the channel that firms incur the costs of disclosing the bailout loan early to build relationship lending capital in exchange for future lending benefits.

To complement this assessment, I analyze the effects of disclosure delay on firms' post-lending outcomes in the following logit model:

$$Y = \alpha + \beta(Delay) + \Lambda + \Phi + \tau + \nu + \psi + \epsilon, \quad (7)$$

where  $Y$  is the variable of interest and take the following values: (i) *Interactions*, an indicator variable that equals one if a firm has new SEC filings containing the lender name (excluding filings related to the bailout loan); (ii) *Loans*, an indicator variable that equals one if a firm has new loans with the bailout lender, and zero otherwise; (iii) *Covenant Waivers*, an indicator variable that equals one if a firm has covenant waivers on loans with the bailout lender, and zero otherwise; and (iv) *Credit Amendments*, an indicator variable that equals one if a firm has credit amendments with the bailout lender, and zero otherwise. The response variable, *Delay*, is the logarithmic distance in days between the bailout loan approval and the disclosure date. The extensive margin version of this variable, *Early*, is coded as a binary indicator that equals one if the disclosure happens within a week of the loan disbursement, and zero otherwise.  $\Lambda$  is a vector of the firm's controls.  $\Phi$  is a vector of lender's controls. All regressions in even columns include industry ( $\tau$ ), state ( $\nu$ ), and bank ( $\psi$ ) fixed effects.

Table 11, Panel A, documents extensive margin effects of disclosure delay on post-lending outcomes. Firms that decided to disclose the bailout loan information within the first week of disbursement are more likely to have post-PPP lending interactions with their bailout loan lenders—in the form of new loans, covenant waivers, and credit amendments—than transaction borrowers. Panel B findings indicate that at the intensive margin, a one standard deviation delay (in days) of disclosing the bailout loan information is associated with a decrease of about thirty percent in the probability of new interactions with the bailout lender. Overall, the results in this section suggest that managers are likely to disclose the bailout loan information early to build relationship lending capital with their lenders, which in turn translates into future lending benefits.

## 5 Conclusion

This paper proposes a new economic channel in which relationship lending influences managers' choice to disclose unfavorable information. Exploiting the Paycheck Protection Program, a setting suitable for testing strategic disclosure, I systematically document that equity holders respond negatively to disclosures related to bailout loans. I then demonstrate that managers in firms whose existing lender provides the bailout loan, disclose unfavorable information early. This decision is more accentuated in intense and long-term relationships. In contrast, managers of firms in which a new lender provides the bailout loan, withhold disclosing unfavorable information to the public. The strategic disclosure is unlikely driven by habit formation or liquidation concerns. Instead, the evidence points to relationship capital management, where firms incur the costs of disclosing unfavorable news to reduce lenders' potential monitoring costs, reputation damage, and litigation risks in exchange for future lending benefits.

Overall, the results suggest that relationship lending influence managers' disclosure of unfavorable information, especially when the relationship is stronger, accentuating incentives for relationship capital management. These findings bear economic implications and support practitioners' evidence. Surveying hun-

dreds of executives to determine the economic factors that drive disclosure decisions, [Graham, Harvey, and Rajgopal \(2005\)](#) finds that managers have incentives to release bad news earlier than good news to manage stakeholders' credibility and to mitigate litigation risks. Despite corroborating with practitioners' evidence, this study surfaces a novel economic channel in which relationship lending has a recurring disciplinary role in firms' strategic disclosure. Altogether, this study advances our understanding of conservative managerial decisions, especially during times of crisis when creditors' action becomes more relevant.

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## Appendix A — Variable Definitions

Table A. This table reports the definitions for all variables used in the paper.

Variable	Definition
<b>Variables of interest:</b>	
Delay	the logarithmic distance in days between the bailout loan approval and the disclosure date.
SEC Mentions	the logarithmic (+1) of the total unique number of bailout lender mentions within firm's SEC filings.
Maturity	the logarithmic (+1) of the distance in days between the first bailout lender mention within firm's SEC filings and the bailout loan disbursement date.
Early	an indicator variable that equals one if the disclosure happens within a week of the loan disbursement, and zero otherwise.
REL	an indicator variable that equals one if a firm has past relationship lending with its bailout lender, and zero otherwise.
POST	an indicator variable that equals one if the conference call period falls on the Covid-19 period, and zero otherwise.
<b>Firm:</b>	
Bailout Loan	the logarithmic total loan amount in USD.
Analysts Following	the logarithmic (+1) number of analysts covering.
Size	the logarithmic total assets.
Payroll	the logarithmic (+1) total number of employees.
Leverage	the debt to equity ratio.
Profitability	the net income to shareholder's equity.
Liquidity	the total cash to assets.
Top Exchange	an indicator variable that equals one if a firm is listed in a large exchange.
<b>Lender:</b>	
Top SBA	an indicator variable that equals one if the lender belongs to the top 100 SBA lenders in 2019, and zero otherwise.
Foreign Parent	an indicator variable that equals one if the lender's parent company is a foreign entity, and zero otherwise.
<b>Conference call:</b>	
Length	the number of words in a conference call transcript.
Executives	the number of executives in a conference call.
Analysts	the number of analysts in a conference call.
Interactions	the number of dialogues between executives and analysts the question-and-answering session.
Informativeness	the ratio of informative words to total words in the question-and-answering session.
Uncertainty	the ratio of uncertainty words to total words in the question-and-answering session.
Tone	the tone of the question-and-answering session calculated as the difference of the number of positive and negative words scaled by their sum.
Accounting	the ratio of accounting words to total words in the question-and-answering session.
Future	the ratio of forward-looking words to total words in the question-and-answering session.
<b>Alternative channels:</b>	
Habit Formation	an indicator variable that equals one if a firm has past debt with any lender, and zero otherwise.
Liquidity Concern	an indicator variable that equals one if a firm has current debt with any lender, and zero otherwise.
Multiple Lenders	an indicator variable that equals one if a firm has current debt with multiple lenders, and zero otherwise.
<b>Post-Lending:</b>	
Interactions	an indicator variable that equals one if a firm has new SEC filings containing the lender name (excluding filings related to the bailout loan), and zero otherwise.
Loans	an indicator variable that equals one if a firm has new loans with the bailout lender, and zero otherwise.
Covenant Waivers	an indicator variable that equals one if a firm has covenant waivers on loans with the bailout lender, and zero otherwise.
Credit Amendments	an indicator variable that equals one if a firm has credit amendments with the bailout lender, and zero otherwise.

## Appendix B — A Model of Disclosure and Relationship Building

Consider an extension of the setting in [Dye \(1985\)](#) and [Jung and Kwon \(1988\)](#) with investors' uncertainty about information endowment: In a two-period economy with time index  $t = \{0, 1\}$ , a manager makes a disclosure decision and has no time discounting. Prior to  $t = 0$ , the firm has issued equity and borrowed from some lenders with a promised payback amount  $D$  eventually in  $t = 1$ . In  $t = 0$ , a manager is hired with a monetary compensation tied to the market valuation of the firm's equity,  $V_E$ . For example, it could be a fixed percentage  $\alpha$  share of the firm. As is standard in disclosure models, the manager has no direct influence on  $V_E$  other than her disclosure action.

As in [Dye \(1985\)](#); [Jung and Kwon \(1988\)](#), with probability  $p \in (0, 1)$ , the manager receives information about the firm's fundamental cash flow  $\tilde{x}$  which is realized in period  $t = 1$ . The manager makes a binary decision on whether to disclose the signal early in  $t = 0$  ( $a = 1$ ,  $a$  stands for the action of early disclosure) rather than disclosing it late in  $t = 1$  ( $a = 0$ , which becomes immaterial since  $x$  is known publicly then). For simplicity, we assume the signal is fully informative, i.e., the manager learns in  $t = 0$  the realized  $x$ . Let the support of  $\tilde{x}$  be  $[\underline{x}, \bar{x}]$ , its density function continuous and differentiable, and its mean denoted by  $\mu$ .<sup>42</sup>

In  $t = 1$ , the payoff to the lenders is  $L(a; x, D)$ , which is required to be weakly increasing in  $D$  and  $x$ . Though a debt contract payoff,  $\max\{0, \min\{x, D\}\}$ , is a natural specification of  $L(0; x, D)$ , note that  $L$  can capture non-pecuniary payoffs to the creditors related to reputation and effort of monitoring. Because early disclosure is good for creditors, especially under bad states of the world,  $L$  is also required to be strictly increasing in  $a$ , with decreasing differences in  $a$  and  $x$ .<sup>43</sup>

The manager then simply maximizes the objective:

$$\Pi(\theta, a; x, D) \equiv V(a; x, D) + \theta L(a; x, D), \tag{8}$$

where  $\theta$  reflects how much the manager cares about creditors and the lending relationship relative to the equity compensation.<sup>44</sup> For example, a Higher equity-to-debt ratio or higher equity compensation for the

<sup>42</sup> $\underline{x} = -\infty$  and  $\bar{x}$  would have been fine with some standard regularity conditions. But it is easiest to think of the support as finite.

<sup>43</sup>A function  $f(y, z) : \mathbb{R}^2 \rightarrow R$  is said to have decreasing differences if for all  $y'' < y'$ , the difference  $f(y'', z) - f(y', z)$  is nondecreasing in  $z$ .

<sup>44</sup>Without loss of generality,  $\alpha$  is normalized to one. Increasing the equity compensation is equivalent to lowering  $\theta$  in shaping the relative weight of consideration for the equity compensation and the borrowing relationship. So we can

managers would correspond to a smaller  $\theta$ . A larger fraction of loans being relational or more anticipated borrowing from a relationship lender can also yield a high  $\theta$ . With disclosure, the equity-related payoff is simply  $V_E(x, D) \equiv \max\{x - D, 0\}$ ; without disclosure, the equity market participants update their beliefs on the probability of the manager's receiving the signal in a Bayesian fashion, resulting in:

$$V(0; x, D) = \frac{p \cdot \text{Prob}(\Omega_{NED})}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \mathbb{E}[V_E(\tilde{x}, D) | \tilde{x} \in \Omega_{NED}] + \frac{1 - p}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \mathbb{E}[V_E(\tilde{x}, D)], \quad (9)$$

where  $\Omega_{NED}$  is the set of cash flows that fall into the no-early-disclosure regions. When  $D = 0$ , the first term in the objective corresponds exactly to the specification in [Dye \(1985\)](#). In general,  $V$  accounts for equityholders' limited liability.

The second term captures managerial utility from the interactions with lenders. Even without considering lending relationships,  $\theta$  can reflect how much the manager value debt holders' payoff if  $L(0; x, D)$  is specified as the market valuation of the debt,  $\mathbb{E}[\min\{D, \tilde{x}\}]$ . Relationship lending enters into several dimensions. Obviously, a firm more reliant on relationship lending would have a bigger  $\theta$ . In other words,  $\theta$  can capture how relational a firm is. More pertinent to the empirical setting because the specification of  $L$  is not limited to monetary compensation tied to the debt market value or enterprise value, it directly captures how disclosure affects the lenders' payoff and the lending relationship.

We can interpret  $\theta L$  as the manager's utility of control. If  $x$  is low enough, creditors' may take over control from the manager. So the manager's control of the firm is indeed increasing in  $x$ .  $L$  should also be increasing in  $a$  because disclosure allows creditors and lenders to make more informed decisions on liquidation and restructuring. A more timely disclosure of PPP loans can then inform other lenders to avoid liquidation, so the net benefit of disclosing when such decisions are more relevant (low  $x$ ) is greater than when the firm is doing well (high  $x$ ). In other words,  $L$  should have decreasing differences in  $a$  and  $x$ .

Another interpretation of  $L$  is the intangible relationship that the firm is building with its PPP lender. While  $L$  is increasing in  $x$  because the lenders like firms that perform well, an early disclosure helps a lender to be freed from public criticism (because the monitoring is transferred to the public) or legal consequences for making the bailout loan. Thus the goodwill from an early disclosure helps build the relationship. A firm

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focus on the comparative statics in  $\theta$ .

that builds relationship capital will likely get better terms in future loans, so  $L$  is expected to be increasing in  $a$ . Moreover, the lower the  $x$ , the bigger the potential criticism and liability the PPP lender faces, so again,  $L$  should have decreasing differences in  $x$  and  $a$ .

Finally, we assume that for  $x \geq D$ ,  $\theta [L(0; x_2, D) - L(0; x_1, D)] < x_2 - x_1$  to reflect that under normal situations when the firm can pay off all the loans, the impact of a cashflow improvement on the manager's objective through lending activities has to be lower than the improvement itself because the fundamental cashflow improvement at least partially accrues to managers and shareholders.<sup>45</sup> This is natural once the exact functional forms are specified. For example, if the creditors only get the loan payoff absent any disclosure benefits, then  $\theta [L(0; x_2, D) - L(0; x_1, D)] = 0 < x_2 - x_1$  for all  $x_2 > x_1 > D$ .

**Equilibrium disclosure policy.** We now can characterize the equilibrium and the disclosure strategy for very general distributions of  $x$  and  $L$ . Most disclosure models feature a threshold strategy of disclosure, the first main finding is that disclosure follows a two-threshold strategy.

**PROPOSITION 1.** *The equilibrium disclosure,  $a^*(x)$ , follows an interval strategy and is generally non-monotone. Specifically,  $a^*(x) = 1$  if and only if  $x \in [\underline{x}, x_L] \cup [x_H, \bar{x}]$  for some  $x_L \leq x_H$ .*

*Proof.* Note that when  $x \leq D$ , the net benefit of disclosing is:

$$\theta [L(1; x, D) - L(0; x, D)] - \frac{p \cdot \text{Prob}(\Omega_{NED})}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \mathbb{E} [V_E(\tilde{x}, D) | \tilde{x} \in \Omega_{NED}] - \frac{1 - p}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \mathbb{E} [V_E(\tilde{x}, D)]$$

The first term is decreasing in  $x$  since  $L$  has decreasing differences in  $a$  and  $x$ . The other two terms are independent of  $x$ . Therefore, the manager's payoff  $P_i$  has decreasing differences in  $a$  and  $x$ . An application of robust monotone comparative statics (e.g., Edlin and Shannon, 1998; Athey, Milgrom, and Roberts, 1996) directly yields that the optimal disclosure entails more early disclosure with lower  $x$ .

When  $x \geq D$ , the difference between the net benefit of disclosing at  $x_2$  and  $x_1 \in [D, x_2]$  is:

$$\theta [L(1; x_2, D) - L(1; x_1, D)] - \theta [L(0; x_2, D) - L(0; x_1, D)] + x_2 - x_1 \tag{10}$$

<sup>45</sup>This is for tractability and in the spirit of the double-monotonicity requirement in the security design literature (e.g., Hart and Moore, 1994; DeMarzo and Duffie, 1999), for otherwise creditors and managers may have incentives to reduce cashflows.

The first term is obviously positive. The remaining terms are positive by assumption. Therefore,  $\Pi$  has increasing in  $x$  and  $a$ . An application of robust monotone comparative statics (e.g., Edlin and Shannon, 1998; Athey et al., 1996) yields in this case that the optimal disclosure entails more early disclosure with higher  $x$ .

There are two thresholds for early disclosure. Either when  $x$  is sufficiently large or when  $\theta$  is sufficiently large, but  $x$  is sufficiently small,  $a = 1$  is optimal.

**COROLLARY 1.** *The manager discloses early when the news is either sufficiently good or sufficiently bad. In particular, PPP loans may be disclosed early.*

Firms engaging in relationship lending may want to disclose during difficult times. The model innovates by generating such non-monotone results.<sup>46</sup> It can be seen that the presence of relationships or the need for future relationship building can encourage more timely disclosure, especially during bad economic situations and for a more relational firm. The model thus can rationalize why a piece of bad news (low  $x$ ) that lowers equity valuation (as documented in the case of bailout loans), may be voluntarily disclosed early due to either relationship capital building or an informational channel (informing lenders to avoid liquidation). The latter is ruled out in the empirical examination.

Also, note that  $\theta = 0$  corresponds to pure equity compensation case and  $\theta = \infty$  corresponds to all debt case. Correspondingly, the usual single threshold disclosure outcome and the full disclosure outcome are achieved.

**COROLLARY 2.** *For sufficiently large  $\theta$ , the manager always discloses early.*

*Proof.* Because  $L(1; D, D) - L(0; D, D) > 0$ , in a full-disclosure equilibrium, it suffices that  $\theta \geq \frac{\mathbb{E}[\max\{\bar{x}-D, 0\}]}{L(1; D, D) - L(0; D, D)}$ .

In other words, when  $\theta$  is no less than this value, we have an equilibrium where disclosure early is always optimal. However, this does not rule out equilibria with the non-empty no-disclosure region. Therefore, we find the condition on  $\theta$  such that full disclosure is the unique equilibrium.

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<sup>46</sup>The finding is absent in Beyer and Dye (2021) because debtholders care about the market valuation of debt in a similar way as market participants value equities, and a corresponding  $L$  would not have increasing differences in  $a$  and  $x$ .



Suppose  $\Omega_{NED} \neq \emptyset$  in an equilibrium. Given that disclosure follows a threshold strategy in the region  $x \geq D$ , i.e., it is optimal to disclose if and only if  $x \geq x_H$ , and that it follows a reverse threshold strategy in the region  $x \leq D$ , i.e., it is optimal to disclose if and only if  $x \leq x_L$ , if an early disclosure at  $x = D$  is optimal, we arrive at a contradiction. This condition boils down to:

$$\begin{aligned} \max\{D - D, 0\} + \theta L(1; D, D) &\geq \frac{p \cdot \text{Prob}(\Omega_{NED})}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \mathbb{E}[\max\{\tilde{x} - D, 0\} | \Omega_{NED}] \\ &+ \frac{1 - p}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \mathbb{E}[\max\{\tilde{x} - D, 0\}] + \theta L(0; D, D), \end{aligned} \quad (11)$$

which implies that disclosing early at  $x = D$  is weakly better.

Since  $\mathbb{E}[\max\{\tilde{x} - D, 0\} | \Omega_{NED}]$  is bounded by  $\mathbb{E}[\max\{\tilde{x} - D, 0\} | \tilde{x} \geq D]$  and  $\frac{p \cdot \text{Prob}(\Omega_{NED})}{p \cdot \text{Prob}(\Omega_{NED}) + (1 - p)} \leq p$ , we only need the sufficient condition:

$$\theta \geq \frac{p \mathbb{E}[\max\{\tilde{x} - D, 0\} | \tilde{x} \geq D] + \mathbb{E}[\max\{\tilde{x} - D, 0\}]}{L(1; D, D) - L(0; D, D)}. \quad (12)$$

Under this condition, a full disclosure equilibrium has to be the unique equilibrium because otherwise,  $\Omega_{NED}$  is contradicted when disclosure is optimal at  $\tilde{x} = D$ .

**COROLLARY 3.** *When  $p = 1$ , there is a unique equilibrium in which the manager always discloses early.*

*Proof.* If the market believes  $\Omega_{NED}$  is null, then one equilibrium under  $p = 1$  is indeed that the manager always discloses early, as observed in (11). To rule out other equilibrium such that  $\Omega_{NED}$  is non-empty given  $p = 1$ .  $x_L \leq D \leq x_H$  must satisfy that  $x_L < x_H$  and:

$$\begin{aligned} \theta [L(1; x_L, D) - L(0; x_L, D)] &= \mathbb{E}[\max\{\tilde{x} - D, 0\} | \tilde{x} \in (x_L, x_H)]; \\ &= x_H - D + \theta [L(1; x_H, D) - L(0; x_H, D)] \end{aligned}$$

The second inequality implies  $x_H = D$ , which then implies  $x_L = D$ . Therefore, when  $p = 1$ , we recover the result in [Dye \(1985\)](#) and most other disclosure studies that  $p \rightarrow 1$  leads to full disclosure.

To the extent that  $\theta$  reflects the level of relationship lending, we have the next major result:

**PROPOSITION 2.** *The manager's optimal disclosure,  $a^*(x)$ , is weakly increasing in  $\theta$ .*

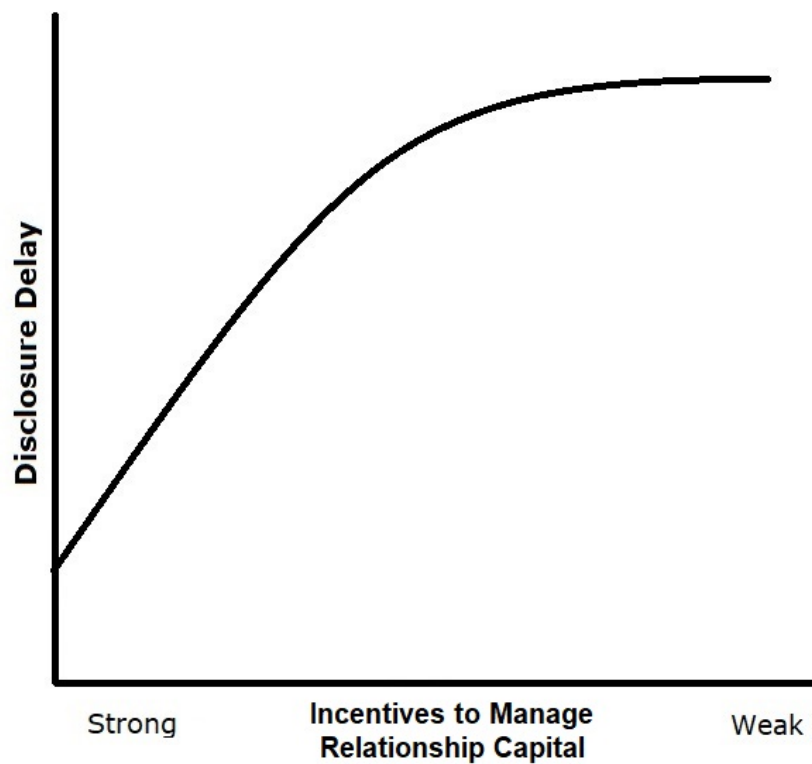
*Proof.* Note that  $\Pi$  is increasing differences in  $\theta$  and  $a$ . An application of robust monotone comparative statics (e.g., [Edlin and Shannon, 1998](#); [Athey et al., 1996](#)) directly yields that the optimal disclosure entails

more early disclosure when the manager cares more about the creditors and the lending relationship.

Therefore, more reliance on relationship lending, more debt outstanding, a higher leverage, or a higher proportion of equity compensation would all increase disclosure, given that they correspond to a higher  $\theta$ .

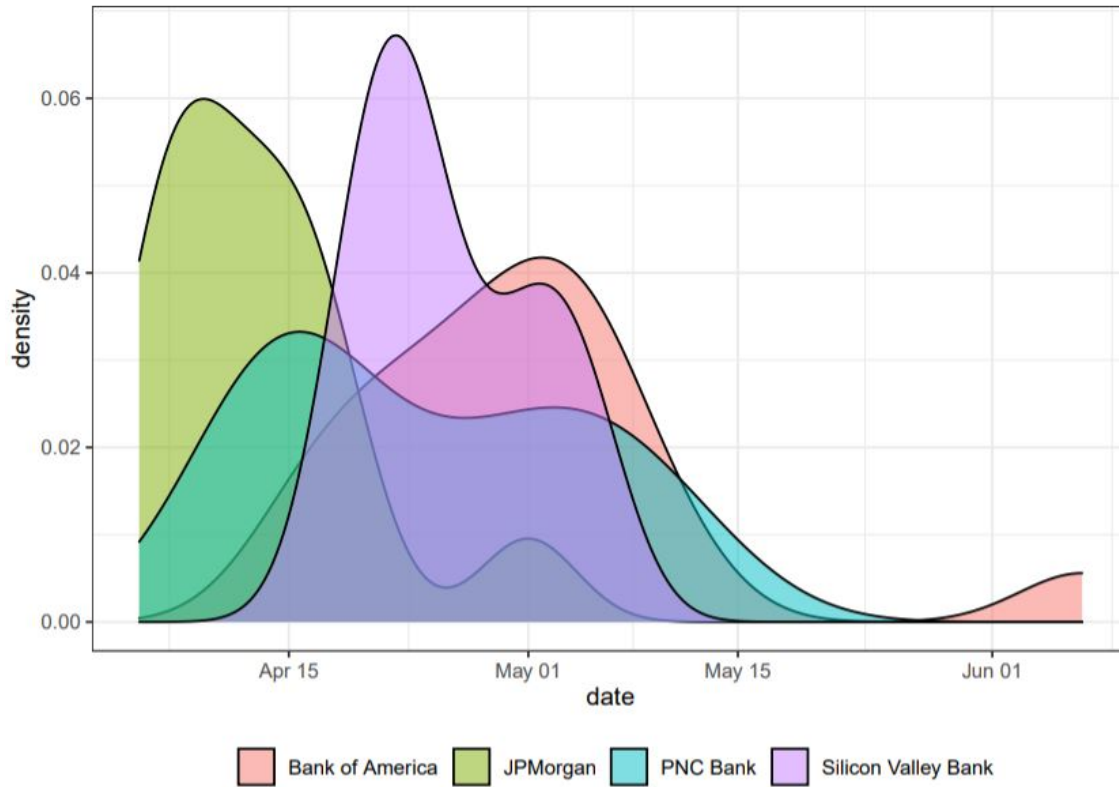
**Figure 1. The conceptual relationship between a firm’s incentives to manage relationship lending capital and disclosure delay (unfavorable information).**

The plot shows the conceptual framework between firms’ incentives to manage relationship lending capital and the disclosure of unfavorable information. Managers with strong ties with their lenders disclose negative information (i.e., bailout loans) earlier than managers with weak ties with their lenders. This strategy builds relationship capital with their lenders, as, for instance, it decreases monitoring costs and translates to future lending benefits. The curve captures the average distance in days between the disclosure of unfavorable information and unfavorable information signal (e.g., receiving a bailout loan). Since there exists a minimum amount of time needed to disclose unfavorable information, the intercept is positive. The curve shows diminishing returns to disclosure since the equity holders are no longer punitive after some point (e.g., the information is no longer relevant).



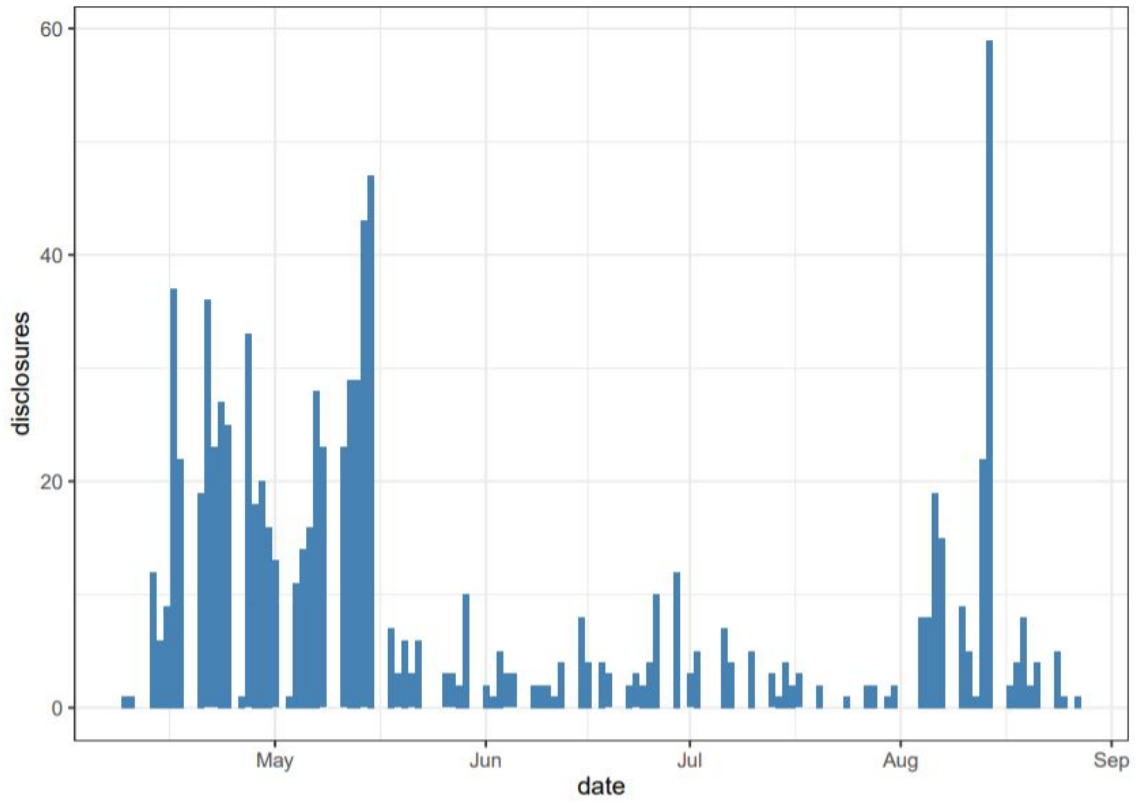
**Figure 2. Evolution of bailout lending.**

The plot shows the evolution of bailout lending to public firms across leading banks. The density of each bank is captured as the daily amount of bailout lending in millions of dollars. The density for later periods of the program is near zero, therefore the x-axis is trimmed for a better read.



**Figure 3. Evolution of bailout loan disclosures.**

The plot shows the evolution of U.S. public listed firms' bailout loan disclosures. Disclosures in 8K, 10K and 10Q filings are aggregated daily and reported throughout the program period.



**Table 1. Distribution of funds.**

This table shows the distribution of funds across borrowers (Panel A), by geographical location and industry type (Panel B), and by lenders (Panel C). The data used to construct these panels is based on bailout loans allocated to U.S. publicly traded firms for the entire program duration.

**Panel A: Distribution of borrowers**

<b>Exchange</b>	<b>Firms</b>	<b>Loans (usd)</b>	<b>Loans (%)</b>
Nasdaq	432.00	1,392.00	60.59%
NYSE	49.00	418.74	18.23%
Amex	77.00	158.93	6.92%
OTCQB	170.00	137.72	5.99%
Pink	112.00	110.32	4.80%
Others	88.00	327.88	3.47%
<b>Total</b>	<b>928.00</b>	<b>2,297.55</b>	<b>100.00%</b>

**Panel B: Flow of funds by state and industry**

<b>State</b>	<b>Dollars</b>	<b>Deals</b>	<b>Industry</b>	<b>Dollars</b>	<b>Deals</b>
California	16.80%	14.24%	Retail	14.82%	9.42%
Texas	10.47%	13.82%	Health	11.03%	17.77%
New York	8.89%	12.85%	Restaurant	10.81%	3.64%
Florida	8.10%	9.10%	Hospitality	9.27%	11.78%
Colorado	4.94%	5.14%	High-Tech	7.44%	1.50%
Others	50.79%	44.86%	Others	46.63%	55.89%

**Panel C: Top lenders**

<b>Lender</b>	<b>Dollars</b>	<b>Deals</b>	<b>Lender</b>	<b>Dollars</b>	<b>Deals</b>
JPMorgan	14.00%	8.23%	Citizens	1.64%	0.81%
Silicon Valley Bank	7.22%	9.19%	Bank of the West	1.37%	0.48%
Bank of America	5.69%	10.00%	Fifth Third	1.20%	1.61%
PNC	3.61%	4.35%	East West	1.20%	1.29%
BMO	3.17%	2.74%	Citibank	1.15%	1.13%
Keybank	3.01%	2.74%	Texas Capital	1.09%	0.97%
Pinnacle	2.95%	0.97%	Midfirst	1.04%	0.97%
Wells Fargo	2.08%	2.90%	Huntington National	0.98%	0.97%
City National	1.91%	1.13%	M&T	0.93%	1.29%
Zions Bancorporation	1.64%	1.77%	Bank of Florida	0.82%	0.81%
<b>Others</b>				<b>43.30%</b>	<b>45.65%</b>

**Table 2. Summary statistics.**

This table reports the summary statistics for all firms, a partition for relationship and transaction firms, and the differences between both groups.

	All Firms			Relationship Firms			Transaction Firms			Differences	
	Mean	Sd	Obs	Mean	Sd	Obs	Mean	Sd	Obs	Mean	T-Stat
<b>Relationship Type:</b>											
Lending	0.22	0.41	928	-	-	203	-	-	725	-	-
<b>Target Variables:</b>											
Delay	87.73	85.89	771	15.63	27.93	190	111.31	126.59	581	-95.68	-3.23
SEC Mentions	10.73	19.42	611	29.03	22.96	203	1.62	7.32	408	27.41	13.89
Maturity	398.90	526.31	595	920.35	435.09	202	130.88	332.49	393	789.47	16.66
<b>Firm Controls:</b>											
Bailout Loan	2.51	7.22	916	4.20	4.87	203	2.03	7.70	713	2.17	3.44
Analysts	1.46	2.13	504	1.57	2.28	164	1.41	2.06	340	0.16	0.56
Assets	495.77	2,092.15	866	437.59	1,631.07	200	513.24	2,212.71	666	-75.66	-0.38
Employees	947.72	8,708.03	928	1,406	12,856.74	203	819.40	7,134.25	725	586.60	0.50
Leverage	2.75	16.02	858	0.75	1.27	200	0.63	1.01	658	0.12	0.90
ROE	-0.34	8.93	829	-0.24	2.93	196	-0.37	10.09	633	0.13	0.22
Cash	0.24	0.29	858	0.19	0.23	200	0.25	0.30	658	-0.06	-2.08
<b>Lender Controls and Partition:</b>											
Top Exchange	0.60	0.49	928	0.75	0.43	203	0.56	0.50	725	0.20	4.00
Top SBA	0.17	0.38	928	0.36	0.48	203	0.12	0.32	725	0.25	5.40
Foreign Parent	0.03	0.16	928	0.05	0.22	203	0.02	0.14	725	0.03	1.39

**Table 3. Returns to disclosure.**

This table reports abnormal returns (AR) and cumulative abnormal returns (CAR) in the vicinity of bailout loan disclosure. Expected returns are estimated using a market model 180 days before the first day in the event window. Abnormal returns are estimated as the difference between realized returns and expected returns in the event window. Cumulative abnormal returns are estimated as the sum of the abnormal returns in the event window.

<b>Panel A - Early Disclosure (within two weeks)</b>				
<b>Days to Disclosure</b>	<b>AR</b>	<b>t-stat</b>	<b>CAR</b>	<b>t-stat</b>
-2	-	-	0.00	-
-1	0.26	0.42	0.26	0.46
0	-4.64	-2.70	-4.38	-2.11
1	-0.89	0.29	-5.27	-2.34
2	1.01	1.24	-4.26	-2.06
3	0.86	0.83	-3.40	-1.98

<b>Panel B - Late Disclosure (more than two weeks)</b>				
<b>Days to Disclosure</b>	<b>AR</b>	<b>t-stat</b>	<b>CAR</b>	<b>t-stat</b>
-2	-	-	0.00	-
-1	-0.28	-1.54	-0.28	-1.74
0	-1.23	-1.91	-1.51	-2.26
1	0.69	1.64	-0.82	-1.28
2	0.22	0.76	-0.60	-0.92
3	-0.07	-0.79	-0.67	-1.19

<b>Panel C - Three Days Average Returns</b>			
<b>Early Disclosure:</b>		<b>Late Disclosure:</b>	
<b>Average</b>	<b>t-stat</b>	<b>Average</b>	<b>t-stat</b>
-1.76	-2.16	-0.27	-1.31



**Table 4. Determinants of disclosure delay (extensive margin).**

This table reports regression results for the relationship effects on disclosure delay. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. The variable of interest *REL* is an indicator variable that equals one if a firm has a past relationship lending with its bailout lender. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

	I	II	III	IV	V
REL	-0.54 *** (0.11)	-0.54 *** (0.12)	-0.51 *** (0.12)	-0.26 * (0.13)	-0.52 *** (0.15)
<b>Firm controls:</b>					
Bailout Loan	-0.21 *** (0.05)	-0.20 ** (0.07)	-0.23 ** (0.07)	-0.17 * (0.07)	-0.09 (0.10)
Analysts Following	-0.54 *** (0.08)	-0.53 *** (0.08)	-0.56 *** (0.09)	-0.58 *** (0.09)	-0.67 *** (0.10)
Size	0.12 ** (0.04)	0.09 * (0.05)	0.08 (0.05)	0.10 * (0.05)	0.22 ** (0.07)
Payroll	0.00 (0.04)	0.02 (0.05)	0.06 (0.06)	-0.01 (0.06)	-0.04 (0.08)
Leverage	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.08 (0.04)
Profitability	0.01 * (0.00)	0.01 * (0.01)	0.01 * (0.01)	0.01 * (0.01)	0.01 * (0.01)
Liquidity	0.00 (0.17)	0.03 (0.20)	0.13 (0.21)	0.13 (0.21)	0.57 * (0.28)
<b>Lender controls:</b>					
Top SBA	-0.06 *** (0.01)	-0.06 *** (0.01)	-0.05 *** (0.01)	-	-0.03 (0.02)
Foreign Parent	-0.09 *** (0.03)	-0.08 ** (0.03)	-0.09 ** (0.03)	-	-0.07 * (0.03)
<b>Fixed effects <math>\times</math> Partitions:</b>					
Industry	No	Yes	Yes	Yes	Yes
State	No	No	Yes	Yes	Yes
Bank	No	No	No	Yes	No
Top Exchange Partition	No	No	No	No	Yes
Obs.	811	724	719	719	485
Adjusted R <sup>2</sup>	0.24	0.22	0.21	0.28	0.22

**Table 5. Determinants of disclosure delay (SEC mentions).**

This table reports regression results for the relationship effects on disclosure delay. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. The variable of interest *SEC Mentions* is logarithmic (+1) of the total unique number of bailout lender mentions within the firm's SEC filings. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

	I	II	III	IV	V
SEC Mentions	-0.17 *** (0.03)	-0.17 *** (0.04)	-0.16 *** (0.04)	-0.07* (0.03)	-0.15 ** (0.05)
<b>Firm controls:</b>					
Bailout Loan	-0.20 *** (0.05)	-0.20 ** (0.07)	-0.22 ** (0.07)	-0.17 * (0.07)	-0.08 (0.10)
Analysts Following	-0.54 *** (0.08)	-0.53 *** (0.08)	-0.56 *** (0.09)	-0.58 *** (0.09)	-0.67 *** (0.10)
Size	0.12 ** (0.04)	0.10 * (0.05)	0.08 (0.05)	0.10 * (0.05)	0.22 ** (0.07)
Payroll	0.00 (0.04)	0.02 (0.05)	0.06 (0.06)	-0.01 (0.06)	-0.04 (0.08)
Leverage	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.08 (0.04)
Profitability	0.01 * (0.00)	0.01 * (0.01)	0.01 * (0.01)	0.01 * (0.01)	0.01 * (0.01)
Liquidity	0.03 (0.17)	0.05 (0.20)	0.15 (0.21)	0.14 (0.21)	0.61 * (0.28)
<b>Lender controls:</b>					
Top SBA	-0.06 *** (0.01)	-0.06 *** (0.01)	-0.05 *** (0.01)	-	-0.03 (0.02)
Foreign Parent	-0.09 *** (0.03)	-0.08 ** (0.03)	-0.09 ** (0.03)	-	-0.07 * (0.03)
<b>Fixed effects <math>\times</math> Partitions:</b>					
Industry	No	Yes	Yes	Yes	Yes
State	No	No	Yes	Yes	Yes
Bank	No	No	No	Yes	No
Top Exchange Partition	No	No	No	No	Yes
Obs.	811	724	719	719	485
Adjusted R <sup>2</sup>	0.25	0.22	0.21	0.28	0.22

**Table 6. Determinants of disclosure delay (Maturity).**

This table reports regression results for the relationship effects on disclosure delay. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. The variable of interest *Maturity* is logarithmic (+1) of the distance in days between the first bailout lender mentioned within the firm's SEC filings and the bailout loan disbursement date. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05.

	I	II	III	IV	V
Maturity	-0.08 *** (0.02)	-0.07 *** (0.02)	-0.07 *** (0.02)	-0.05 * (0.02)	-0.07 ** (0.02)
<b>Firm controls:</b>					
Bailout Loan	-0.20 *** (0.05)	-0.20 ** (0.07)	-0.22 ** (0.07)	-0.17 * (0.07)	-0.07 (0.10)
Analysts Following	-0.52 *** (0.08)	-0.51 *** (0.08)	-0.55 *** (0.09)	-0.57 *** (0.09)	-0.65 *** (0.10)
Size	0.12 ** (0.04)	0.09 * (0.05)	0.08 (0.05)	0.10 * (0.05)	0.22 ** (0.07)
Payroll	0.00 (0.04)	0.02 (0.05)	0.06 (0.06)	-0.01 (0.06)	-0.04 (0.08)
Leverage	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.08 (0.04)
Profitability	0.01 * (0.00)	0.01 * (0.01)	0.01 * (0.01)	0.01 * (0.01)	0.01 * (0.01)
Liquidity	0.03 (0.17)	0.05 (0.20)	0.15 (0.21)	0.15 (0.21)	0.62 * (0.28)
<b>Lender controls:</b>					
Top SBA	-0.06 *** (0.01)	-0.06 *** (0.01)	-0.05 *** (0.01)	-	-0.03 (0.02)
Foreign Parent	-0.09 *** (0.03)	-0.08 ** (0.03)	-0.09 ** (0.03)	-	-0.07 * (0.03)
<b>Fixed effects <math>\times</math> Partitions:</b>					
Industry	No	Yes	Yes	Yes	Yes
State	No	No	Yes	Yes	Yes
Bank	No	No	No	Yes	No
Top Exchange Partition	No	No	No	No	Yes
Obs.	811	724	719	719	485
Adjusted R <sup>2</sup>	0.25	0.22	0.21	0.28	0.21

**Table 7. Propensity score matching (PSM) results.**

This table reports the results for the propensity score matching (PSM) procedure. The first panel shows the number of matched and unmatched firms where relationship firms are the treated group while transaction firms are the control group. The panel also reports the percentage improvement and the distance between the two groups. The second panel shows the mean differences in the main variables used in the propensity score matching procedure.

<b>Panel A: PSM Sample</b>				
	<b>Control</b>	<b>Treated</b>		
All	608	203		
Matched	203	203		

<b>Panel B: Balanced Summary</b>				
	<b>Treated</b>	<b>Control</b>	<b>Difference</b>	<b>Improvement</b>
Distance	0.33	0.31	0.02	85.63
Bailout Loan	4.38	4.04	0.34	85.63
Analysts Following	1.37	1.47	-0.10	82.50
Size (Assets)	213.58	225.91	-12.33	87.86
Profitability (ROE)	-0.19	-0.18	-0.01	83.37
Liquidity (Cash to Assets)	0.19	0.18	0.01	98.60

**Table 8. Determinants of disclosure delay (matched sample).**

This table reports regression results for the relationship effects on disclosure delay. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. The variables of interest are: *REL*, an indicator variable that equals one if a firm has a past relationship lending with its bailout lender, columns I and II; *SEC Mentions*, the logarithmic (+1) of the total unique number of bailout lender mentions within the firm's SEC filings, in columns III and IV; and, *Maturity*, the logarithmic (+1) of the distance in days between the first bailout lender mentioned within the firm's SEC filings and the bailout loan disbursement date, in columns V and VI. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

	I	II	III	IV	V	VI
REL	-0.55 *** (0.15)	-0.29 * (0.12)	-	-	-	-
SEC Mentions	-	-	-0.19 *** (0.05)	-0.07 * (0.03)	-	-
Maturity	-	-	-	-	-0.10 *** (0.02)	-0.03 * (0.01)
<b>Firm controls:</b>						
Bailout Loan	-0.13 (0.12)	-0.10 (0.11)	-0.12 (0.12)	-0.10 (0.11)	-0.08 (0.12)	-0.08 (0.12)
Analysts Following	-0.57 *** (0.12)	-0.53 *** (0.12)	-0.57 *** (0.12)	-0.53 *** (0.12)	-0.54 *** (0.11)	-0.52 *** (0.11)
Size	0.11 (0.08)	0.12 (0.08)	0.12 (0.08)	0.12 (0.08)	0.09 (0.08)	0.11 (0.08)
Payroll	0.01 (0.08)	-0.07 (0.08)	0.01 (0.08)	-0.07 (0.08)	0.01 (0.08)	-0.07 (0.08)
Leverage	-0.01 (0.01)	-0.02 (0.01)	0.00 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.01)
Profitability	0.01 (0.01)	0.00 (0.01)	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
Liquidity	-0.01 (0.38)	-0.14 (0.39)	-0.01 (0.38)	-0.15 (0.39)	0.00 (0.37)	-0.14 (0.39)
<b>Lender controls:</b>						
Top SBA	-0.05 ** (0.02)	-	-0.05 ** (0.02)	-	-0.04 * (0.02)	-
Foreign Parent	-0.08 * (0.03)	-	-0.09 * (0.03)	-	-0.08 * (0.03)	-
<b>Fixed effects:</b>						
Industry	Yes	Yes	Yes	Yes	Yes	Yes
State	Yes	Yes	Yes	Yes	Yes	Yes
Bank	No	Yes	No	Yes	No	Yes
Obs.	406	406	406	406	406	406
Adjusted R <sup>2</sup>	0.15	0.22	0.16	0.22	0.16	0.22

**Table 9. Differences-in-differences analysis for conference call content.**

This table reports regression results for conference call content differences between relationship and transaction firms and between Covid-19 periods. The indicator variables: *REL* equals one if a firm lends from an existing lender and zero otherwise, and *POST* equals one if the conference call period falls on the Covid-19 period and zero otherwise. The interaction *REL* × *POST* captures the difference-in-difference coefficient. All regressions have firm’s controls composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder’s equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). All regressions have industry, state, and bank fixed effects. All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the firm × quarter level. \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05.

<b>Panel A: Format</b>				
	<b>Length</b>	<b>Executives</b>	<b>Analysts</b>	<b>Interactions</b>
REL	0.25 (2.09)	-4.03 (6.37)	-0.67 (0.90)	2.75 (1.69)
POST	-2.92 * (1.36)	-0.81 (4.16)	-0.11 (0.59)	1.22 (1.10)
REL × POST	4.41 * (2.16)	14.61 * (6.60)	0.33 (0.93)	-2.87 (1.75)
Obs.	887	887	887	887
Adjusted R <sup>2</sup>	0.13	0.19	0.19	0.09

<b>Panel B: Informativeness</b>		
	<b>Informativeness</b>	<b>Uncertainty</b>
REL	-0.45 (0.50)	-0.73 * (0.34)
POST	0.31 (0.32)	0.49 * (0.22)
REL × POST	0.07 (0.51)	-0.27 (0.35)
Obs.	887	887
Adjusted R <sup>2</sup>	0.20	0.25

<b>Panel C: Language</b>			
	<b>Tone</b>	<b>Accounting</b>	<b>Future</b>
REL	-1.45 (3.33)	1.17 (1.18)	-0.41 (0.80)
POST	-4.60 * (2.17)	-2.26 ** (0.77)	0.80 (0.52)
REL × POST	-6.98 * (3.45)	1.30 (1.22)	-1.82 * (0.83)
Obs.	887	887	887
Adjusted R <sup>2</sup>	0.10	0.35	0.32

**Table 10. Alternative economic channels.**

This table reports the effects of alternative channels on bailout loan disclosure delay. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. *DEBT* is an indicator variable that takes the following forms. In columns I and II, *DEBT* equals to one if a firm has current debt with any lender. In columns III and IV, *DEBT* equals to one as past debt with any lender. In columns V and VI, *DEBT* equals to one if a firm has current debt with multiple lenders. *REL* equals one if a firm lends from an existing lender and zero otherwise. All even columns have industry, state, and bank fixed effects. All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the firm  $\times$  state level. I allow less restrictive t-statistics in this table to increase confidence in ruling out alternative economic channels. \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$ .

	I	II	III	IV	V	VI
	Liquidity Concerns		Habit Formation		Multiple Lenders	
DEBT	-0.21 (0.86)	0.25 (0.92)	0.21 (0.86)	-0.25 (0.92)	-0.32 ** (0.15)	-0.26 (0.17)
REL	-0.59 *** (0.18)	-0.22 (0.20)	-0.30 (0.87)	-0.52 (0.92)	-0.63 *** (0.13)	-0.31 ** (0.15)
DEBT $\times$ REL	0.30 (0.88)	0.30 (0.95)	0.30 (0.88)	0.30 (0.95)	-0.42 * (0.24)	-0.24 (0.26)
<b>Firm controls:</b>						
Bailout Loan	-0.21 *** (0.05)	-0.17 ** (0.07)	-0.21 *** (0.05)	-0.17 ** (0.07)	-0.20 *** (0.05)	-0.16 ** (0.07)
Analysts Following	-0.54 *** (0.08)	-0.57 *** (0.09)	-0.54 *** (0.08)	-0.57 *** (0.09)	-0.55 *** (0.08)	-0.59 *** (0.09)
Size	0.12 *** (0.04)	0.10 ** (0.05)	0.12 *** (0.04)	0.10 ** (0.05)	0.12 *** (0.04)	0.10 ** (0.05)
Payroll	0.00 (0.04)	-0.01 (0.06)	0.00 (0.04)	-0.01 (0.06)	0.01 (0.04)	0.00 (0.06)
Leverage	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Profitability	0.01 ** (0.00)	0.01 ** (0.01)	0.01 ** (0.00)	0.01 ** (0.01)	0.01 ** (0.00)	0.01 ** (0.01)
Liquidity	0.01 (0.17)	0.13 (0.21)	0.01 (0.17)	0.13 (0.21)	0.00 (0.17)	0.14 (0.21)
<b>Lender controls:</b>						
Top SBA	-0.63 *** (0.12)	-	-0.63 *** (0.12)	-	-0.65 *** (0.12)	-
Foreign Parent	-0.88 *** (0.26)	-	-0.88 *** (0.26)	-	-0.87 *** (0.26)	-
<b>Fixed effects:</b>						
Industry	No	Yes	No	Yes	No	Yes
State	No	Yes	No	Yes	No	Yes
Bank	No	Yes	No	Yes	No	Yes
Obs.	811	719	811	719	811	719
Adjusted R <sup>2</sup>	0.24	0.28	0.24	0.28	0.25	0.28

**Table 11. Post-lending outcomes.**

This table reports the effects of bailout loan disclosure delay on post-bailout lending outcomes. In Panel A, the variable of interest, *Early*, is a binary indicator that equals one if the disclosure happens within a week of the loan disbursement, zero otherwise. In Panel B, the variable of interest, *Delay*, is the logarithmic distance in days between the bailout loan approval and the disclosure date. The response variable is reported as follows. Columns I and V report the effects of new interactions with the bailout loan lender, where *Interactions* is an indicator variable that equals one if the firm has new SEC filings containing the lender name (excluding filings related to the bailout loan). Similarly, columns II and VI report the effects of new loans; columns III and VII report the effects of covenant waivers; and, columns IV and VIII report the effects of credit amendments. All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the firm  $\times$  state level. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

	Panel A (extensive margin)				Panel B (intensive margin)			
	I	II	III	IV	V	VI	VII	VIII
	Interactions	Loans	Covenant Waivers	Credit Amendments	Interactions	Loans	Covenant Waivers	Credit Amendments
Early	1.79 *** (0.23)	1.38 *** (0.33)	1.73 *** (0.41)	1.41 *** (0.27)	- -	- -	- -	- -
Delay	- -	- -	- -	- -	-0.87 *** (0.10)	-0.59 *** (0.13)	-0.75 *** (0.16)	-0.76 *** (0.11)
<b>Firm controls:</b>								
Bailout Loan	0.17 (0.13)	0.15 (0.18)	0.29 (0.21)	0.26 (0.15)	0.17 (0.14)	0.13 (0.18)	0.29 (0.21)	0.26 (0.15)
Analysts Following	-0.07 (0.17)	0.14 (0.21)	-0.61 * (0.27)	-0.16 (0.19)	-0.15 (0.17)	0.12 (0.21)	-0.67 * (0.28)	-0.26 (0.19)
Size	0.20 * (0.09)	0.14 (0.12)	0.30 * (0.14)	0.08 (0.10)	0.22 * (0.10)	0.15 (0.13)	0.33 * (0.15)	0.11 (0.11)
Payroll	-0.01 (0.10)	0.03 (0.13)	-0.21 (0.15)	-0.03 (0.11)	-0.02 (0.11)	0.03 (0.13)	-0.22 (0.16)	-0.06 (0.12)
Leverage	0.00 (0.01)	0.01 (0.01)	0.00 (0.02)	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	0.00 (0.02)	0.00 (0.01)
Profitability	0.01 (0.01)	0.00 (0.01)	0.02 (0.02)	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	0.02 (0.02)	0.01 (0.01)
Liquidity	-0.43 (0.44)	0.22 (0.57)	-1.74 * (0.83)	-0.37 (0.49)	-0.33 (0.45)	0.32 (0.58)	-1.55 (0.84)	-0.27 (0.50)
<b>Lender controls:</b>								
Top SBA	0.52 (0.29)	0.05 (0.39)	0.17 (0.47)	0.48 (0.32)	0.49 (0.30)	0.05 (0.39)	0.18 (0.47)	0.43 (0.33)
Foreign Parent	0.87 (0.59)	0.03 (0.76)	0.41 (0.84)	0.98 (0.60)	0.64 (0.61)	-0.20 (0.78)	0.30 (0.83)	0.77 (0.61)
<b>Fixed effects:</b>								
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	719	719	719	719	719	719	719	719
Pseudo R <sup>2</sup>	0.35	0.24	0.24	0.22	0.39	0.25	0.26	0.27



# Online Appendices

## Does Relationship Lending Discipline Disclosure? Evidence from Bailout Loans

Daniel Rabetti - January 2023

### Online Appendix A: Forms, Lenders, and Large Borrowers

The Online Appendix A contains the following content. Figures (A1), (A2), (A3), and (A4), show related forms firms use in the Paycheck Protection Program. (Table A1) lists the top 80 lenders by aggregated loan size. (Table A2) lists Ashford's loans broken down by affiliated hotels.

### Online Appendix B: Additional Tests

The Online Appendix B contains the following content. Figure (B1) depicts a ternary plot between firms' relationship lending status and disclosure delay. Figure (B2) depicts examples of media coverage on the distribution of bailout loans to larger firms. (Table B1) regression results for the relationship effects on disclosure delay on firms partitioned by market capitalization. Panel A reports results for a sample of firms whose market capitalization is less than \$250 million. Panel B reports results for a sample of firms whose market capitalization is more than \$250 million. (Table B2) reports regression results for the relationship effects on disclosure delay on firms partitioned by bailout loan phase. Panel A reports results for a sample of firms whose bailout loan was disbursed in the program's first phase. Panel B reports results for a sample of firms whose bailout loan was disbursed in the program's second phase. (Table B3) reports regression results for disclosure (Panel A) and relationship lending (Panel B) effects on disclosure quality, where quality is an indicator variable that values one when the disclosure is on an 8-K form, and zero for a 10-k form.

# Online Appendix A

**Figure A1: Example of promissory PPP note**

EX-10.1 [REDACTED] UNSECURED NOTE

EXHIBIT 10.1



U.S. Small Business Administration

**Unsecured NOTE "Note"**

SBA Loan #	[REDACTED]
SBA Loan Name	N/A
Date	May 15, 2020
Loan Amount	\$10,000,000.00
Interest Rate	1.00%
Borrower	[REDACTED]
Operating Company	N/A
Lender	TEXAS CHAMPION BANK 6124 S. Staples, Corpus Christi, Texas 78413

Terms of the Note:

1. **PROMISE TO PAY:** In return for the Loan, Borrower promises to pay to the order of Lender the amount of Ten Million Dollars, interest on the unpaid principal balance, and all other amounts required by this Note.
2. **DEFINITIONS:** "Collateral" means any property taken as security for payment of this Note or any guarantee of the Note. "Guarantor" means each person or entity that signs a guarantee of the payment of this Note. "Loan" means the loan evidenced by this Note. "Loan Documents" means the documents related to this loan signed by Borrower and/or Guarantor. "SBA" means the Small Business Administration, an Agency of the United States of America. "Unsecured" means this note is unsecured. All References to Collateral shall not be applicable to this loan.
3. **PAYMENT TERMS:** Borrower must make all payments at the place Lender designates. The payment terms for this Note are: The interest rate is 1% per year. Borrower must pay principal and interest payments of \$562,774.99 every month beginning seven (7) months from the date of the note. Payments must be made on the 15th calendar day in the month they are due. Loan Prepayment: Notwithstanding any provision of this Note to the Contrary, Borrower may prepay this Note at any time without penalty. All remaining principal and accrued interest is due and payable 2 years from the date of the Note. Late Charge: If a payment of this Note is more than 10 days late, Lender may charge Borrower a late fee of up to 5% of the unpaid portion of the regularly scheduled payment.
4. **DEFAULT:** Borrower is in default under this Note if Borrower does not make a payment when due under this Note, or if Borrower or Operating Company: A. Fails to do anything required by this Note and other Loan Documents: (i) with respect to payments, following a 10-day grace period, and (ii) with respect to all other requirements, following a 30-day grace period; B. Defaults on any other loan with Lender; C. Does not preserve, or account to Lender's satisfaction for, any of the Collateral or its proceeds; D. Does not disclose, or anyone acting on their behalf does not disclose, any material fact to Lender or SBA; E. Makes, or anyone acting on their behalf makes, a materially false or misleading representation to Lender or SBA; F. Defaults on any loan or other indebtedness with another creditor with an aggregate principal amount in excess of \$2,500,000, and such creditor has the right (following any grace period to cure such default) to accelerate such loan; G. Fails to pay any federal, state or other material taxes when due, unless: (i) such taxes are being properly contested in good faith by appropriate proceedings timely instituted and diligently pursued, and (ii) appropriate reserves in regard thereto have been established in accordance with GAAP; H. Becomes the subject of a proceeding under any bankruptcy or insolvency law; I. Has a receiver or liquidator appointed for any substantial part of their business or property; J. Makes an assignment for the benefit of creditors; K. Reorganizes, merges, consolidates, or otherwise changes ownership resulting in any person (other than an existing equity owner) becoming the beneficial owner of 35% or more of Borrower's equity without Lender's prior written consent; or L. Becomes the subject of a civil or criminal action resulting in a monetary judgment in excess of the greater of the insurance coverage therefor and \$1,000,000 or a nonmonetary judgment that could reasonably be expected to materially affect Borrower's ability to pay this Note, which in each case remains undischarged, unvacated, unbounded or unstayed for a period of 60 days.

5. LENDER'S RIGHTS IF THERE IS A DEFAULT: Without notice or demand and without giving up any of its rights, Lender may: A. Require immediate payment of all amounts owing under this Note; B. Collect all amounts owing from any Borrower or Guarantor; C. File suit and obtain judgment; D. Take possession of any Collateral; or E. Sell, lease, or otherwise dispose of, any Collateral at public or private sale, with or without advertisement.

6. LENDER'S GENERAL POWERS: Without notice and without Borrower's consent, Lender may: A. Bid on or buy the Collateral at its sale or the sale of another lienholder, at any price it chooses; B. Incur expenses to collect amounts due under this Note, enforce the terms of this Note or any other Loan Document, and preserve or dispose of the Collateral. Among other things, the expenses may include payments for property taxes, prior liens, insurance, appraisals, environmental remediation costs, and reasonable attorney's fees and costs. If Lender incurs such expenses, it may demand immediate repayment from Borrower or add the expenses to the principal balance; C. Release anyone obligated to pay this Note; D. Compromise, release, renew, extend or substitute any of the Collateral; and E. Take any action necessary to protect the Collateral or collect amounts owing on this Note.

7. WHEN FEDERAL LAW APPLIES: When SBA is the holder, this Note will be interpreted and enforced under federal law, including SBA regulations. Lender or SBA may use state or local procedures for filing papers, recording documents, giving notice, foreclosing liens, and other purposes. By using such procedures, SBA does not waive any federal immunity from state or local control, penalty, tax, or liability. As to this Note, Borrower may not claim or assert against SBA any local or state law to deny any obligation, defeat any claim of SBA, or preempt federal law.

8. SUCCESSORS AND ASSIGNS: Under this Note, Borrower and Operating Company include the successors of each, and Lender includes its successors and assigns

9. GENERAL PROVISIONS: A. All individuals and entities signing this Note are jointly and severally liable. B. Borrower waives all suretyship defenses. C. Borrower must sign all documents necessary at any time to comply with the Loan Documents. D. Lender may exercise any of its rights separately or together, as many times and in any order it chooses. Lender may delay or forgo enforcing any of its rights without giving up any of them. E. Borrower may not use an oral statement of Lender or SBA to contradict or alter the written terms of this Note. F. If any part of this Note is unenforceable, all other parts remain in effect. G. To the extent allowed by law, Borrower waives all demands and notices in connection with this Note, including presentment, demand, protest, and notice of dishonor. Borrower also waives any defenses based upon any claim that Lender did not obtain any guarantee; did not obtain, perfect, or maintain a lien upon Collateral; impaired Collateral; or did not obtain the fair market value of Collateral at a sale.

10. ADDITIONAL PROVISIONS: This loan was made under a United States Small Business Administration (SBA) nationwide program which uses tax dollars to assist small business owners. Payment Protection Program: Loan Forgiveness. This loan has been made under the Small Business Administration Paycheck Protection Program (PPP). Up to the full amount of principal and accrued interest may qualify for forgiveness under the PPP. Any loan forgiveness is subject to the terms and any limitations under the PPP and will be granted at the sole discretion of the Small Business Administration. Lender's right to enforce any default remedies including changes in interest rate are subject to the terms of the PPP. Dishonored Item Fee: Borrower will pay a fee to Lender of \$30.00 if Borrower makes a payment on Borrower's loan and the check or preauthorized charge with which Borrower pays is later dishonored. Governing Law: This note will be governed by federal law applicable to Lender and, to the extent not preempted by federal laws, the laws of the State of Texas without regard to its conflicts of law provisions. This Note has been accepted by Lender in the State of Texas. Agreement to Use Electronic Documents. The Lender and Borrower(s) hereby (i) agree that for all purposes, including, without limitation, in connection with any workout, restructuring, enforcement of remedies, bankruptcy proceedings or litigation, electronic images (facsimile or PDF) of these documents signed by any party to this loan transaction shall have the same legal effect, validity, and enforceability as any paper original and (ii) waiver any argument, defense, or right to contest the validity or enforceability of these documents based solely on the lack of paper original copies, including with respect to any signatory pages thereto. Borrower acknowledges receipt of a completed copy of this Note.

11. BORROWER'S NAME(S) AND SIGNATURE(S): By signing below, each individual or entity becomes obligated under this Note as Borrower.

## Figure A2: Example of PPP loan disclosure

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### Item 1.01 Entry into a Material Definitive Agreement.

On April 14, 2020, [REDACTED] Inc. (the "Company") entered into a promissory note (the "Note") evidencing an unsecured loan (the "Loan") in the amount of \$4,780,600 made to the Company under the Paycheck Protection Program (the "PPP"). The PPP was established under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and is administered by the U.S. Small Business Administration. The Loan to the Company is being made through Zions Bancorporation, N.A. dba National Bank of Arizona (the "Lender").

The Note matures on April 14, 2022 and bears interest at a rate of 1% per annum. Beginning November 14, 2020, the Company is required to make 18 monthly payments of principal and interest in the amount of \$269,037.75. The Loan may be prepaid by the Company at any time prior to maturity with no prepayment penalties. The proceeds from the Loan may only be used for payroll costs (including benefits), interest on mortgage obligations, rent, utilities and interest on certain other debt obligations.

The Note contains customary events of default relating to, among other things, payment defaults, making materially false and misleading representations to the Lender or breaching the terms of the Loan documents. The occurrence of an event of default will result in an increase in the interest rate to 18% per annum and provides the Lender with customary remedies, including the right to require immediate payment of all amounts owed under the Note.

Pursuant to the terms of the CARES Act and the PPP, the Company may apply to the Lender for forgiveness for the amount due on the Loan. The amount eligible for forgiveness is based on the amount of Loan proceeds used by the Company (during the eight-week period after the Lender makes the first disbursement of Loan proceeds) for the payment of certain covered costs, including payroll costs (including benefits), interest on mortgage obligations, rent and utilities, subject to certain limitations and reductions in accordance with the CARES Act and the PPP. No assurance can be given that the Company will obtain forgiveness of the Loan in whole or in part.

The foregoing description of the Note is not complete and is qualified in its entirety by reference to the full text of the Note, which is filed herewith as Exhibit 10.1, and incorporated herein by reference in its entirety.

### Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The information set forth in Item 1.01 above is incorporated by reference into this Item 2.03.

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**Figure A3: Example of PPP loan payback disclosure**

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**Item 8.01 Other Events**

On April 22, 2020, [REDACTED] (the "Company") received proceeds from a loan in the amount of \$5,911,000 (the "PPP Loan") from Silicon Valley Bank as the lender (the "Lender"), pursuant to the Small Business Association (the "SBA") Paycheck Protection Program (the "PPP") of the Coronavirus Aid, Relief, and Economic Security Act. At the time when the Company applied for the PPP Loan, it had qualified to receive the funds pursuant to the then published qualification requirements.

On April 23, 2020, the SBA, in consultation with the Department of Treasury, issued new guidance regarding qualification requirements for public companies. Based on the Company's assessment of the new guidance, on May 1, 2020, it has determined to repay the principal and interest on the PPP Loan on or before May 7, 2020.

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

[REDACTED], INC.

May 1, 2020

By:

Name: [REDACTED]

Title:

Chief Financial Officer

**Figure A4: PPP loan forgiveness application**



**Paycheck Protection Program  
Loan Forgiveness Application Revised June 16, 2020**

OMB Control Number 3245-0407  
Expiration Date: 10/31/2020

**PPP Loan Forgiveness Calculation Form**

Business Legal Name ("Borrower")		DBA or Tradename, if applicable	
Business Address		Business TIN (EIN, SSN)	Business Phone
		Primary Contact	( ) - E-mail Address

SBA PPP Loan Number: \_\_\_\_\_ Lender PPP Loan Number: \_\_\_\_\_

PPP Loan Amount: \_\_\_\_\_ PPP Loan Disbursement Date: \_\_\_\_\_

Employees at Time of Loan Application: \_\_\_\_\_ Employees at Time of Forgiveness Application: \_\_\_\_\_

EIDL Advance Amount: \_\_\_\_\_ EIDL Application Number: \_\_\_\_\_

**Payroll Schedule:** The frequency with which payroll is paid to employees is:

Weekly     Biweekly (every other week)     Twice a month     Monthly     Other \_\_\_\_\_

Covered Period: \_\_\_\_\_ to \_\_\_\_\_

Alternative Payroll Covered Period, if applicable: \_\_\_\_\_ to \_\_\_\_\_

If Borrower (together with affiliates, if applicable) received PPP loans in excess of \$2 million, check here:

**Forgiveness Amount Calculation:**

Payroll and Nonpayroll Costs

Line 1. Payroll Costs (enter the amount from PPP Schedule A, line 10): \_\_\_\_\_

Line 2. Business Mortgage Interest Payments: \_\_\_\_\_

Line 3. Business Rent or Lease Payments: \_\_\_\_\_

Line 4. Business Utility Payments: \_\_\_\_\_

Adjustments for Full-Time Equivalency (FTE) and Salary/Hourly Wage Reductions

Line 5. Total Salary/Hourly Wage Reduction (enter the amount from PPP Schedule A, line 3): \_\_\_\_\_

Line 6. Add the amounts on lines 1, 2, 3, and 4, then subtract the amount entered in line 5: \_\_\_\_\_

Line 7. FTE Reduction Quotient (enter the number from PPP Schedule A, line 13): \_\_\_\_\_

Potential Forgiveness Amounts

Line 8. Modified Total (multiply line 6 by line 7): \_\_\_\_\_

Line 9. PPP Loan Amount: \_\_\_\_\_

Line 10. Payroll Cost 60% Requirement (divide line 1 by 0.60): \_\_\_\_\_

Forgiveness Amount

Line 11. Forgiveness Amount (enter the smallest of lines 8, 9, and 10): \_\_\_\_\_

**Table A1: TOP 80 Lenders (to Publicly Listed Firms).**

This table lists the top 80 lenders by aggregated loan size. The variables *Loan*, *Market.Cap* and *Revenue* are in millions of dollars.

Lender Name	Loan (sum)	Loan (avg)	Loan (count)	Market.Cap	Revenue	Employees	Time to file
JP MORGAN	194.03	3.80	51.00	456.38	108.84	1138.34	25.71
SILICON VALLEY BANK	136.46	2.39	57.00	102.00	48.35	130.28	20.25
BANK OF AMERICA	118.50	1.91	62.00	331.83	244.39	5569.32	26.11
KEYBANK NATIONAL ASSOCIATION	110.67	6.51	17.00	100.38	264.40	282.00	18.56
PNC BANK	72.91	2.70	27.00	82.13	83.63	304.95	24.58
BANK OF MONTREAL	45.86	2.70	17.00	37.46	82.46	331.91	20.69
PINCLE BANK	40.45	6.74	6.00	56.30	123.50	1557.25	14.00
WELLS FARGO BANK	32.24	1.90	17.00	49.19	121.29	1863.64	14.53
FIFTH THIRD BANCORP	28.17	2.82	10.00	54.16	95.50	139.00	3.90
CIBC BANK	27.83	5.57	5.00	146.79	106.83	518.50	56.60
HANCOCK WHITNEY BANK	27.25	9.08	3.00	75.70	379.80	875.00	16.33
BANK OF OKLAHOMA	24.15	3.02	8.00	97.08	31.83	61.50	31.25
CITIZENS BANK	23.89	4.78	5.00	63.34	126.41	954.67	41.00
TEXAS CAPITAL BANK	23.50	3.92	6.00	21.38	102.37	1944.80	8.80
M&T BANK	22.75	2.84	8.00	81.91	121.68	289.40	20.13
BBVA USA	21.97	3.66	6.00	120.12	23.98	424.60	21.00
ZIONS BANCORPORATION	20.44	1.86	11.00	89.39	51.82	267.11	12.40
BANK OF THE WEST	19.46	6.49	3.00	228.74	100.50	330.00	9.67
EAST WEST BANK	19.06	2.38	8.00	101.17	73.66	353.00	26.57
TD BANK	18.94	3.79	5.00	63.96	390.89	574.33	4.00
HARVEST SMALL BUSINESS FINCE	18.17	3.63	5.00	13.94	32.10	183.00	16.25
CITIBANK	17.68	2.53	7.00	95.80	114.47	257.80	36.14
CROSS RIVER BANK	17.52	4.38	4.00	35.32	56.70	472.00	38.00
FROST BANK	17.40	4.35	4.00	66.40	172.18	200.00	6.00
TEXAS CHAMPION BANK	16.80	8.40	2.00	4.30	221.83	786.00	5.50
CITY NATIONAL BANK OF FLORIDA	15.55	3.11	5.00	43.79	52.55	348.75	5.50
HSBC BANK USA	13.83	2.77	5.00	83.12	73.26	258.50	8.80
CADENCE BANK	13.48	3.37	4.00	9.09	58.11	2368.00	37.00
WESTERN ALLIANCE BANK	13.17	1.46	9.00	20.98	22.75	93.63	3.78
UNITED BANK	13.14	13.14	1.00	11.34	151.27	464.00	14.00
CHOICE FINICAL GROUP	13.04	13.04	1.00	23.58	82.27	440.00	1.00
TRUIST BANK	12.30	1.76	7.00	67.76	76.50	1031.33	30.29
THE HUNTINGTON NATIONAL BANK	12.07	2.01	6.00	159.07	52.54	177.67	41.00
US BANK NATIONAL	10.90	1.56	7.00	60.51	80.22	1027.67	31.83
BLUE RIDGE BANK	10.00	10.00	1.00	0.85	171.29		7.00
CITY BANK	10.00	10.00	1.00	22.86	203.60	900.00	4.00
FIRST FINICAL BANK	10.00	10.00	1.00	20.86	317.44	848.00	1.00
CITY NATIONAL BANK	9.88	1.41	7.00	138.83	55.29	108.80	8.43
MINNESOTA BANK & TRUST	9.58	4.79	2.00	50.99	150.95	427.50	6.00
STAR FINICAL BANK	9.51	4.75	2.00	17.83	112.51	323.00	4.00
NEWTON FEDERAL BANK	9.40	9.40	1.00	4.93	288.74	270.00	3.00
BNB BANK	9.01	2.25	4.00	14.03	43.28	155.00	32.00
STEARNS BANK	8.73	4.37	2.00	190.35	54.32	219.00	4.00
BROADWAY NATIONAL BANK	8.45	8.45	1.00	0.00	0.00		6.00
SAINT LOUIS BANK	8.18	8.18	1.00	529.29	186.37		28.00
IBERIA BANK	8.05	2.68	3.00	460.33	489.39		109.00
LIBERTY CAPITAL BANK	7.80	3.90	2.00	284.43	35.00	277.00	3.00
MIDFIRST BANK	7.63	1.27	6.00	65.62	51.87	100.67	30.17
AXOS BANK	7.38	2.46	3.00	52.46	73.50	12.00	40.00
PEOPLES BANK	6.55	6.55	1.00	256.29	168.96	800.00	5.00
SUNWEST BANK	6.49	6.49	1.00	108.34	49.65	321.00	5.00
BERKSHIRE BANK	6.49	2.16	3.00	29.83	35.31	100.67	2.50
FIRST INTERSTATE BANK	6.02	3.01	2.00	15.68	260.64	1300.00	6.00
FIRST REPUBLIC BANK	5.87	1.17	5.00	36.08	44.19	146.25	38.67
TBK BANK	5.87	2.93	2.00	31.79	30.59	20.00	5.00
WOOD & HUSTON BANK	5.18	5.18	1.00	14.09	840.63	329.00	6.00
COMERICA BANK	5.08	0.73	7.00	16.72	6.10	49.25	19.71
IDAHO FIRST BANK	4.93	4.93	1.00	39.58	114.29	540.00	2.00
ORIGIN BANK	4.92	4.92	1.00	25.47	56.45	238.00	3.00
GREENWOOD CREDIT UNION	4.40	4.40	1.00	44.92	133.45	365.00	8.00
CIT BANK	4.37	1.46	3.00	43.25	47.16	102.50	43.67
TEXAS CITIZENS BANK	4.22	4.22	1.00	28.24	163.37	215.00	2.00
SANTANDER BANK	3.86	1.29	3.00	10.92	28.15	91.33	5.33
AMERICAN AGCREDIT	3.82	3.82	1.00	146.04	67.14	185.00	4.00
NORTHEAST BANK	3.69	3.69	1.00	228.19	134.99		93.00
ARVEST BANK	3.19	3.19	1.00	29.99	22.11	192.00	2.00
UNIVERSITY BANK	3.17	3.17	1.00	23.00	62.55	294.00	2.00
INTERNATIONAL BANK OF COMMERCE	3.03	3.03	1.00	22.69	78.82		136.00
HERITAGE BANK OF COMMERCE	3.02	1.01	3.00	15.59	11.42	66.50	5.50
PACIFIC MERCANTILE BANK	2.98	2.98	1.00	13.36	37.80	190.00	2.00
RESANT BANK	2.96	1.48	2.00	61.02	31.38	134.00	19.00
CITIZENS BANK MINNESOTA	2.90	2.90	1.00	82.88	64.94		25.00
TRI COUNTIES BANK	2.85	2.85	1.00	7.15	59.83	208.00	2.00
FIRST-CITIZENS BANK & TRUST COMPANY	2.84	1.42	2.00	14.91	10.44	95.00	39.00
SUMMIT COMMUNITY BANK	2.70	2.70	1.00	23.40	46.69	195.00	0.00
MERCHANTS BANK FO INDIA	2.70	2.70	1.00	24.81	26.32		2.00
WEBSTER BANK	2.66	1.33	2.00	15.54	18.28	69.50	0.50
TCF NATIONAL BANK	2.55	2.55	1.00	26.01	70.81	337.00	5.00
LIVE OAK BANKING	2.44	1.22	2.00	17.08	20.05	70.50	2.00
EVOLVE BANK & TRUST	2.37	2.37	1.00	0.99	17.75	105.00	5.00
TOTAL	2297.55	2.51	916.00	147.58	124.36	872.86	87.73



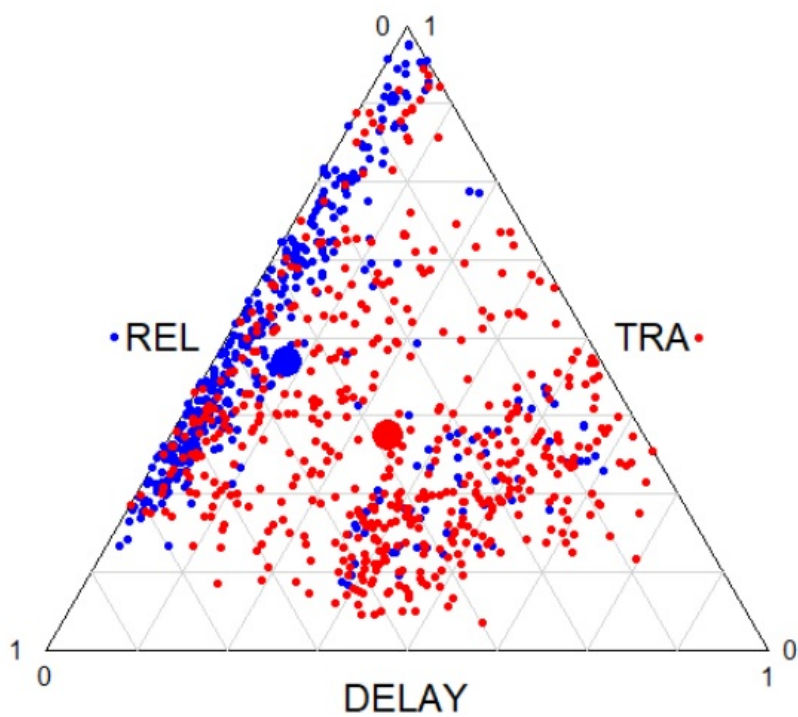
**Table A2: Ashford’s PPP loans broken down by affiliated hotels.**

<b>Hotel Name</b>	<b>Loan Size</b>	<b>Hotel Name</b>	<b>Loan Size</b>
One Ocean Atlantic Beach	1,412,300	Silversmith Chicago	540,925
Embassy Suites Santa Clara	953,400	Courtyard Gaithersburg	453,408
Hilton Alexandria	343,315	Courtyard Basking Ridge	452,440
Courtyard Plano	232,903	Annapolis Inn Annapolis	440,453
Courtyard Bloomington	144,533	Courtyard Oakland	439,380
Marriott Fremont	1,248,500	Embassy Suites West Palm Beach	404,025
Marriott Sugarland	934,630	Courtyard Newark	390,865
Residence Inn Newark	230,673	Embassy Suites Houston	283,975
SpringHill Suites Plymouth Meeting	206,605	Residence Inn Phoenix	265,255
SpringHill Suites Baltimore	172,413	Embassy Suites Flagstaff	256,668
Hampton Inn Evansville	127,228	Marriott Arlington	3,853,988
SpringHill Suites Buford	121,363	Renaissance Palm Springs	1,478,560
Fairfield Inn Kennesaw	104,900	Hyatt Regency Savannah	1,456,848
Hilton Boston	1,702,778	Hilton Parsippany	1,293,633
W Hotel Atlanta	1,450,960	Hyatt Regency Hauppauge	1,212,788
Hilton Saint Petersburg	992,100	Embassy Suites Portland	1,048,248
SpringHill Suites Kennesaw	113,493	Hilton Fort Worth	941,715
Sheraton Hotel San Diego	651,500	Hilton Bloomington	920,095
Sheraton Hotel Minneapolis	558,573	Embassy Suites Philadelphia	779,375
Residence Inn Las Vegas	431,068	Le Pavillon	669,553
Residence Inn Lake Buena Vista	407,438	Crowne Plaza Key West	589,225
Courtyard Denver	376,665	Courtyard Fort Lauderdale	311,950
Courtyard Scottsdale	318,470	Hilton Garden Inn Baltimore	298,485
SpringHill Suites Manhattan Beach	298,553	Hilton Garden Inn Virginia Beach	250,285
Courtyard Louisville	269,418	Hampton Inn Phoenix	181,608
Marriott Bridgewater	1,426,000	Hampton Inn Parsippany	154,723
Courtyard Crystal City	749,383	Embassy Suites New York Midtown Manhattan	1,240,595
WorldQuest Resort Orlando	350,203	W Hotel Minneapolis	883,843
Residence Inn Fairfax Merrifield	305,828	Hilton Scotts Valley/Santa Cruz	634,010
Embassy Suites Austin	291,513	Residence Inn Orlando	474,938
Residence Inn San Diego	264,205	Courtyard Manchester	188,893
Embassy Suites Herndon	335,908	Residence Inn Jacksonville	182,805
Courtyard Billerica Boston	395,105	Residence Inn Salt Lake City	175,748
La Posada de Santa Fe	1,201,873	Courtyard Overland Park	174,935
Sheraton Hotel Indianapolis	989,373	SpringHill Suites Durham	171,920
Westin Princeton	938,282	Residence Inn Manchester	168,263
Sheraton Hotel Langhorne	544,695	SpringHill Suites Charlotte	163,878
<b>Total</b>	<b>45,424,448</b>		
<b>Hotels</b>	<b>74</b>		
<b>Avg Loan</b>	<b>613,844</b>		



## Online Appendix B

**Figure B1: Ternary Plot.** The ternary plot depicts the coordinates in the triangular area between the firm's relationship lending status and disclosure delay. Each dot represents a firm coordinate in the relationship lending status (diagonal axis) against its disclosure delay measure (base). While relationship lending firms appear in blue, transaction firms appear in red. The large dots represent the mean disclosure delay measure giving relationship lending status. The binary indicator for relationship lending status is uniformized; thus, the vertical distance is just for illustration purposes. The original disclosure delay measure is capped at 60 days from loan disbursement, so each small triangle at the base roughly corresponds to a week. All measures are normalized between 0 and 1.



**Figure B2: Washington Post Headlines**

**BUSINESS**

## White House, GOP face heat after hotel and restaurant chains helped run small business program dry

With program out of money, backlash prompts executives at Shake Shack to return \$10 million loan.



By Jonathan O'Connell

April 20, 2020 at 10:37 a.m. EDT

**NBA**

## Steven Mnuchin calls Lakers' \$4.6 million federal coronavirus loan 'outrageous'



By Cindy Boren

April 28, 2020 at 10:20 a.m. EDT

**BUSINESS**

## Vague rules for Paycheck Protection Program complicate Treasury effort to claw back money

Trump administration wants public companies to give back loans, but the rules didn't bar them from applying



By Jeanne Whalen

May 5, 2020 at 2:38 p.m. EDT

**BUSINESS**

## Publicly traded firms paid dividends, bought their own stock after receiving PPP loans to pay employees

Attorneys say the practice was not forbidden, but could raise questions about whether the PPP loan was needed



By Aaron Gregg

September 24, 2020 at 6:35 p.m. EDT

**Table B1: Determinants of disclosure delay partitioned by size.**

This table reports regression results for the relationship effects on disclosure delay. Panel A (B) reports results for a sample of firms whose market capitalization is less (more) than \$250 million. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. The variables of interest are: *REL*, an indicator variable that equals one if a firm has a past relationship lending with its bailout lender, columns I and IV; *SEC Mentions*, the logarithmic (+1) of the total unique number of bailout lender mentions within the firm's SEC filings, in columns II and V; and, *Maturity*, the logarithmic (+1) of the distance in days between the first bailout lender mentioned within the firm's SEC filings and the bailout loan disbursement date, in columns III and VI. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

	I	II	III	IV	V	VI
	Panel A: Small Caps			Panel B: Large Caps		
REL	-0.56 *** (0.15)	-	-	-0.23 (0.35)	-	-
SEC Mentions	-	-0.16 *** (0.04)	-	-	-0.17 (0.10)	-
Maturity	-	-	-0.07 ** (0.02)	-	-	-0.10 (0.08)
Firm controls:						
Bailout Loan	-0.27 ** (0.08)	-0.27 ** (0.08)	-0.27 *** (0.08)	-0.12 (0.22)	-0.10 (0.22)	-0.03 (0.22)
Analysts Following	-0.50 *** (0.12)	-0.52 *** (0.12)	-0.51 *** (0.12)	-0.81 *** (0.21)	-0.79 *** (0.20)	-0.77 *** (0.20)
Size	0.03 (0.05)	0.03 (0.05)	0.03 (0.05)	0.14 (0.17)	0.14 (0.16)	0.13 (0.16)
Payroll	0.05 (0.07)	0.06 (0.07)	0.06 (0.07)	-0.05 (0.15)	-0.06 (0.15)	-0.06 (0.14)
Leverage	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.04)	0.01 (0.04)	0.02 (0.04)
Profitability	0.01 ** (0.01)	0.01 * (0.01)	0.01 * (0.01)	-0.02 (0.04)	-0.02 (0.04)	-0.03 (0.04)
Liquidity	-0.09 (0.25)	-0.06 (0.25)	-0.05 (0.25)	1.18 * (0.58)	1.18 * (0.57)	1.15 * (0.57)
Lender controls:						
Top SBA	-0.44 ** (0.15)	-0.43 ** (0.15)	-0.42 ** (0.16)	-0.59 (0.38)	-0.55 (0.37)	-0.47 (0.37)
Foreign Parent	-0.75 * (0.32)	-0.74 * (0.32)	-0.76 * (0.32)	-1.22 (0.73)	-1.40 (0.73)	-1.24 (0.71)
Fixed effects:						
Industry	Yes	Yes	Yes	Yes	Yes	Yes
State	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	575	575	575	144	144	144
Adjusted R <sup>2</sup>	0.20	0.19	0.19	0.20	0.22	0.24

**Table B2: Determinants of disclosure delay partitioned by program phase.**

This table reports regression results for the relationship effects on disclosure delay. Panel A (B) reports results for a sample of firms whose bailout loan was disbursed in the program's first (second) phase. The response variable is the logarithmic distance in days between the bailout loan approval and the disclosure date. The variables of interest are: *REL*, an indicator variable that equals one if a firm has a past relationship lending with its bailout lender, columns I and IV; *SEC Mentions*, the logarithmic (+1) of the total unique number of bailout lender mentions within the firm's SEC filings, in columns II and V; and, *Maturity*, the logarithmic (+1) of the distance in days between the first bailout lender mentioned within the firm's SEC filings and the bailout loan disbursement date, in columns III and VI. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

	I	II	III	IV	V	VI
	Panel A: First Phase			Panel B: Second Phase		
REL	-0.39 ** (0.14)	-	-	-0.52 (0.30)	-	-
SEC Mentions	-	-0.15 *** (0.04)	-	-	-0.14 (0.08)	-
Maturity	-	-	-0.06 ** (0.02)	-	-	-0.06 (0.04)
<b>Firm controls:</b>						
Bailout Loan	-0.20 * (0.09)	-0.19 * (0.09)	-0.19 * (0.09)	-0.25 (0.13)	-0.24 (0.13)	-0.23 (0.13)
Analysts Following	-0.63 *** (0.10)	-0.63 *** (0.10)	-0.62 *** (0.10)	-0.23 (0.18)	-0.24 (0.18)	-0.22 (0.18)
Size	0.08 (0.06)	0.09 (0.06)	0.08 (0.06)	0.13 (0.09)	0.12 (0.09)	0.12 (0.09)
Payroll	0.04 (0.07)	0.04 (0.07)	0.04 (0.07)	0.09 (0.11)	0.10 (0.11)	0.11 (0.11)
Leverage	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Profitability	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 ** (0.01)	0.02 ** (0.01)	0.02 ** (0.01)
Liquidity	0.28 (0.26)	0.31 (0.25)	0.30 (0.26)	0.27 (0.40)	0.27 (0.40)	0.28 (0.40)
<b>Lender controls:</b>						
Top SBA	-0.48 *** (0.14)	-0.46 ** (0.14)	-0.44 ** (0.15)	-0.15 (0.31)	-0.13 (0.31)	-0.14 (0.31)
Foreign Parent	-0.58 * (0.28)	-0.62 * (0.28)	-0.58 * (0.28)	-1.78 * (0.76)	-1.63 * (0.76)	-1.66 * (0.76)
<b>Fixed effects:</b>						
Industry	Yes	Yes	Yes	Yes	Yes	Yes
State	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	441	441	441	278	278	278
Adjusted R <sup>2</sup>	0.28	0.29	0.28	0.07	0.07	0.07

**Table B3: Determinants of disclosure quality.**

This table reports regression results for the relationship effects on disclosure quality. The response variable is an indicator variable that values one when the disclosure is on an 8-K form, and zero for a 10-k form. The variable of interest in Panel A, columns I and II, is *Delay*, the logarithmic distance in days between the bailout loan approval and the disclosure date. The variables of interest in Panel B are: *REL*, an indicator variable that equals one if a firm has a past relationship lending with its bailout lender, in columns III and IV; *SEC Mentions*, the logarithmic (+1) of the total unique number of bailout lender mentions within the firm's SEC filings, in columns V and VI; and, *Maturity*, the logarithmic (+1) of the distance in days between the first bailout lender mentioned within the firm's SEC filings and the bailout loan disbursement date, in columns VII and VIII. The firm vector of controls is composed of the following variables: *Bailout Loan* is the logarithmic total loan amount in USD; *Analysts Following* is the logarithmic (+1) number of analysts covering; *Size* is the logarithmic total assets; *Payroll* is the logarithmic (+1) total number of employees; *Leverage* is the debt to equity ratio; *Profitability* is the net income to shareholder's equity; and, *Liquidity* is the total cash to assets. All firm controls are measured as the latest annual report before the Covid-19 crisis (usually December 2019). The lender vector of controls is composed of the following variables: *Top SBA* is an indicator variable that equals one if the lender is part of the top 100 SBA lenders and proxies for the lender's familiarity with the lending platform and *Foreign Parent* is an indicator variable that equals one if the lender's parent company is a foreign entity and proxies for lender's disclosure environment. All lender controls are measured as the latest SBA disclosure and reports before the Covid-19 crisis (usually December 2019). All continuous predictors are mean-centered and scaled by one standard deviation. Standard errors are heteroskedasticity robust and clustered at the industry  $\times$  state level. \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05.

	I	II	III	IV	V	VI	VII	VIII
	Panel A: Disclosure		Panel B: Relationship Lending					
Delay	-0.51 *** (0.07)	-0.35 *** (0.08)	-	-	-	-	-	-
REL	-	-	5.37 *** (0.53)	5.34 *** (0.65)	-	-	-	-
SEC Mentions	-	-	-	-	3.35 *** (0.40)	3.52 *** (0.49)	-	-
Maturity	-	-	-	-	-	-	0.66 *** (0.05)	0.66 *** (0.06)
<b>Firm Controls:</b>								
Bailout Loan	0.48 *** (0.12)	0.54 *** (0.14)	0.47 ** (0.16)	0.54 ** (0.18)	0.43 * (0.19)	0.46 * (0.21)	0.38 * (0.16)	0.39 * (0.17)
Analysts Following	0.34 * (0.15)	0.40 * (0.18)	0.95 *** (0.19)	1.10 *** (0.21)	1.13 *** (0.23)	1.42 *** (0.26)	0.87 *** (0.21)	1.08 *** (0.23)
Size	0.05 (0.08)	0.09 (0.10)	-0.10 (0.11)	-0.11 (0.13)	-0.19 (0.14)	-0.26 (0.16)	-0.06 (0.12)	-0.08 (0.13)
Payroll	-0.08 (0.10)	-0.05 (0.10)	-0.09 (0.13)	-0.06 (0.15)	-0.15 (0.16)	-0.11 (0.18)	-0.14 (0.13)	-0.11 (0.14)
Leverage	-0.06 (0.04)	-0.04 (0.04)	-0.05 (0.05)	-0.03 (0.04)	-0.06 (0.06)	-0.04 (0.05)	-0.05 (0.05)	-0.03 (0.05)
Profitability	0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Liquidity	-0.14 (0.37)	-0.21 (0.43)	0.02 (0.48)	0.09 (0.53)	-0.39 (0.59)	-0.20 (0.63)	-0.20 (0.51)	0.05 (0.55)
<b>Lender Controls:</b>								
Top SBA	1.25 *** (0.23)	-	1.54 *** (0.28)	-	1.49 *** (0.33)	-	1.23 *** (0.31)	-
Foreign Parent	-0.15 (0.48)	-	-0.38 (0.69)	-	-0.41 (0.79)	-	-0.25 (0.66)	-
<b>Fixed Effects:</b>								
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank	No	Yes	No	Yes	No	Yes	No	Yes
Obs.	719	719	719	719	719	719	719	719
Pseudo R <sup>2</sup>	0.41	0.55	0.69	0.74	0.80	0.82	0.72	0.76