

ABFER 10th Annual Conference

**“Does Relationship Lending Discipline Disclosure?
Evidence from Bailout Loans”**

May 2023

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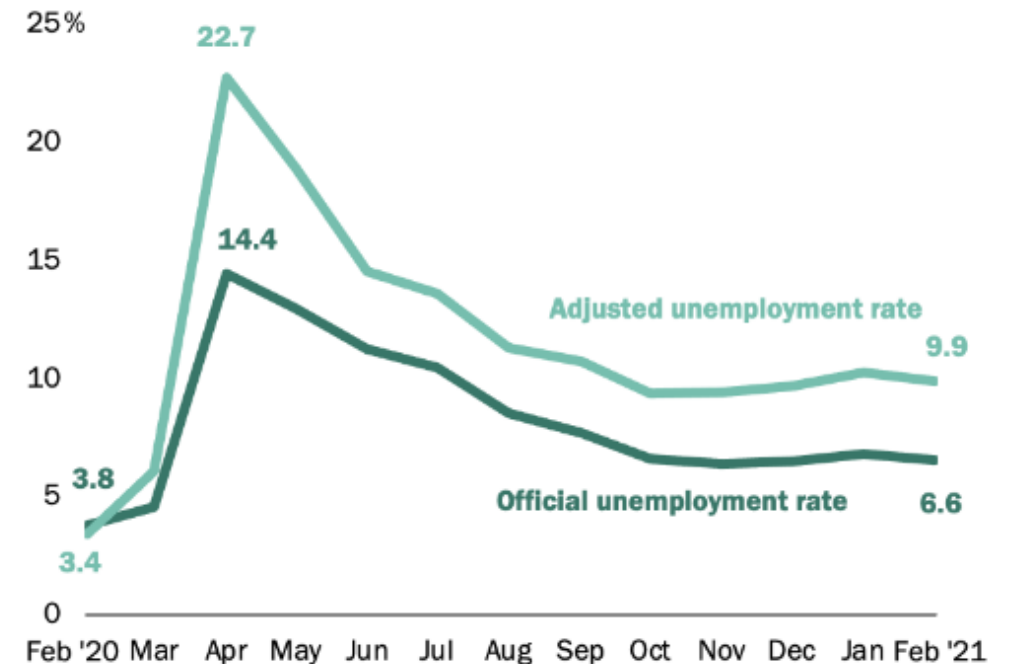


Paycheck Protection Program

- The program allocated about 525 billion dollars between April and August 2020 and assisted over half a million small businesses across the country;
 - 928 publicly traded firms disclosed receiving bailout loans in the program;

Unemployment rate (%), February 2020 to February 2021

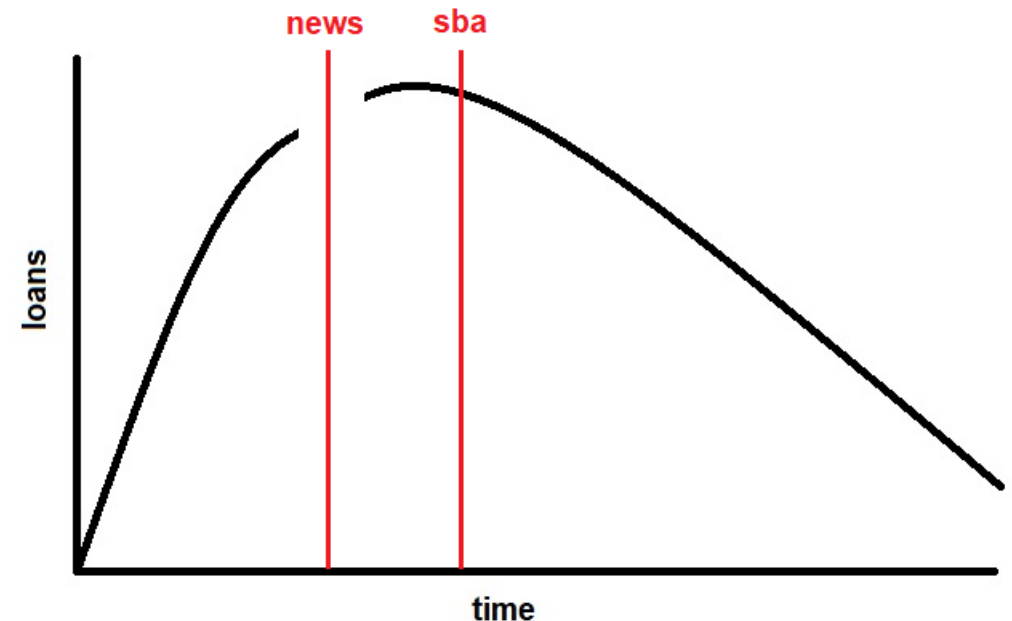
PEW RESEARCH CENTER





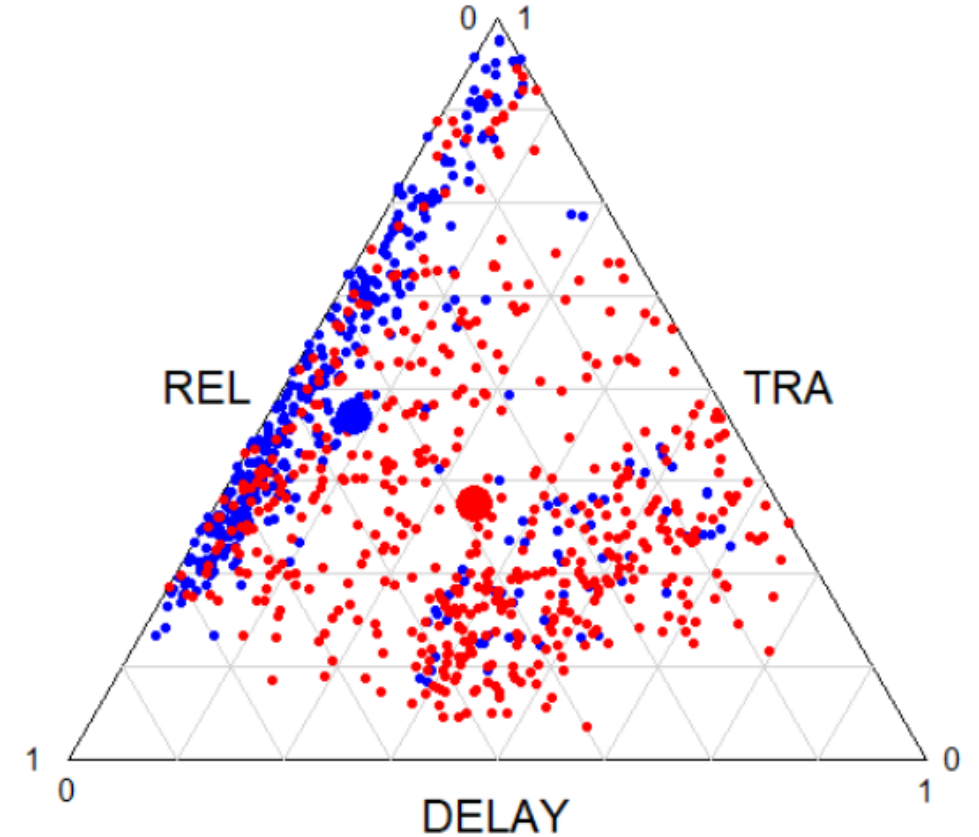
Paycheck Protection Program

- The program allocated about 525 billion dollars between April and August 2020 and assisted over half a million small businesses across the country;
 - 928 publicly traded firms disclosed receiving bailout loans in the program;
- The goal was to quickly fund businesses to keep them in operation and prevent massive layoffs;
- However, the emphasis on speedy delivery of funds caused a sacrifice of diligence by banks when processing and loan applications may have led to estimated billions in losses ([Griffin, Kruger, and Mahajan \(2023\)](#));
- Recently, the government has been using tools like the False Claims Act, which enables the government to recover triple damages (e.g., DOJ vs. Prosperity Bank).

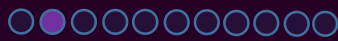


Paper in a Nutshell

- 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).
- Nevertheless, 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.
- 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;
- Economic channel: strategic disclosure is driven by relationship capital considerations.

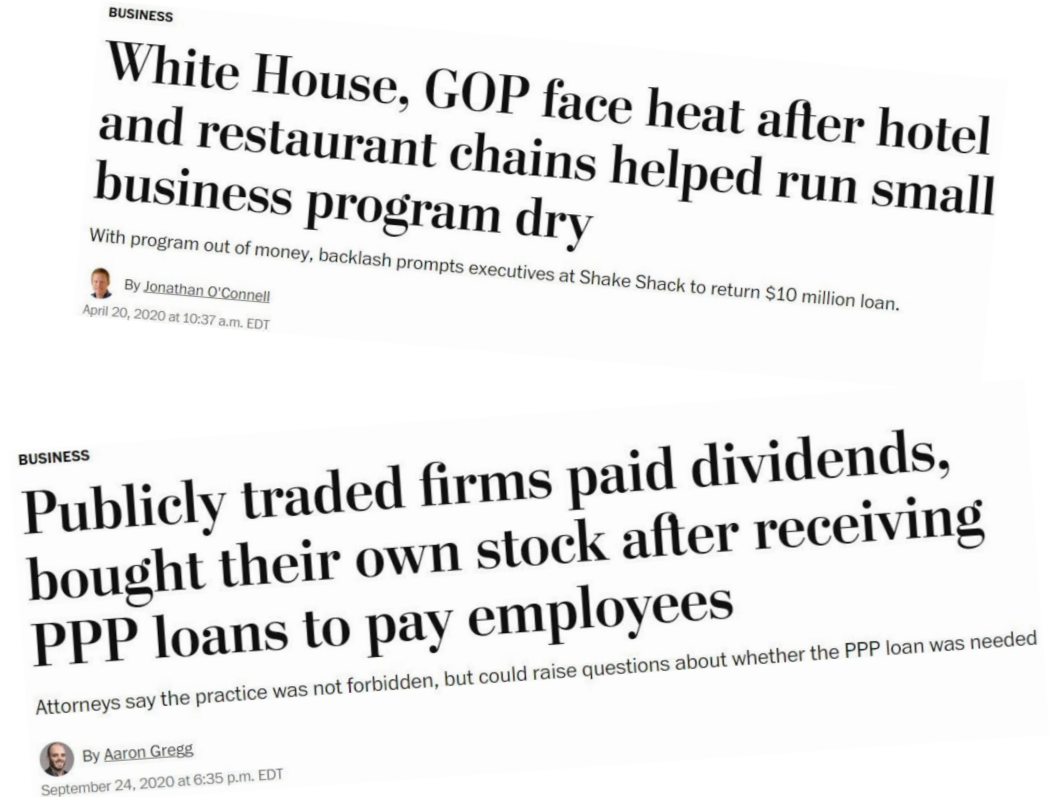


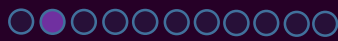
➔ Longer and intense relationships.



The setting: a great laboratory to examine disclosure

- It helps isolate disclosure effects because all bailout loans have the terms (e.g., interest rate, purpose, and maturity);
- The credit quality of the borrowers is not taken into account (e.g., loans are fully backed by the Federal Reserve, and neither collateral nor covenants are required);
- The market perceives the loan disclosure as negative (tension), creating incentives for managers to withhold such information;





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Large, Troubled Companies Got Bailout Money in Small-Business Loan Program

Companies with accounting problems or in trouble with the SBA received millions in federal loans.

SBA Announces Guidance on Lender Responsibilities in Connection with PPP Loan Eligibility and Forgiveness

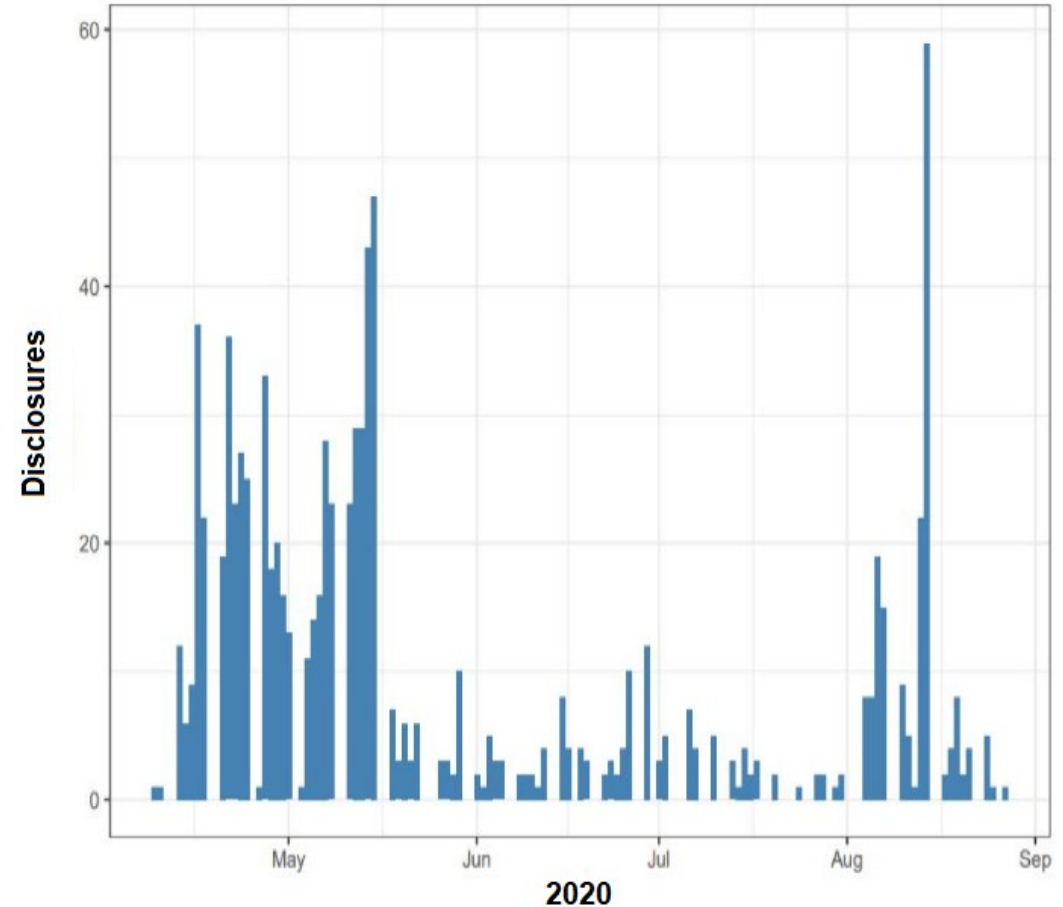
Steven Mnuchin calls Lakers' \$4.6 million federal coronavirus loan 'outrageous'

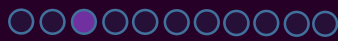
 By Cindy Boren

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

The setting: a great laboratory to examine disclosure

- It helps isolate disclosure effects because all bailout loans have the terms (e.g., interest rate, purpose, and maturity);
- The credit quality of the borrowers is not taken into account (e.g., loans are fully backed by the Federal Reserve, and neither collateral nor covenants are required);
- A large pool of public firms participated in the program providing an opportunity to access firms' characteristics, including relationship lending;
- A large pool of public firms participated in the program providing an opportunity to access firms' characteristics, including relationship lending;
- A large variation in loan disclosure timing permits the test of factors associated with firms' strategic disclosures;





Data Collection

- Data collection begins by identifying 928 public firms that disclosed bailout loans during the first two phases of the program in 2020;
- 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 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.

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.



Distribution of Bailout Loans

- Data collection begins by identifying 928 public firms (mostly listed in large stock exchanges) that disclosed bailout loans during the first two phases of the program in 2020;

Panel A: Distribution of borrowers

| Exchange | Firms | Loans (usd) | Loans (%) |
|----------|--------|-------------|-----------|
| 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% |
| Total | 928.00 | 2,297.55 | 100.00% |



Distribution of Bailout Loans

- Data collection begins by identifying 928 public firms (mostly listed in large stock exchanges) that disclosed bailout loans during the first two phases of the program in 2020;

Panel B: Flow of funds by state and industry

| State | Dollars | Deals | Industry | Dollars | Deals |
|------------|---------|--------|-------------|---------|--------|
| 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% |



Distribution of Bailout Loans

- Data collection begins by identifying 928 public firms (mostly listed in large stock exchanges) that disclosed bailout loans during the first two phases of the program in 2020;

Panel C: Top lenders

| Lender | Dollars | Deals | Lender | Dollars | Deals |
|----------------------|---------|--------|---------------------|---------|--------|
| 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% |
| Others | | | | 43.30% | 45.65% |



Classification

- Approach: searching the EDGAR database for the bailout loan lender's name within the firm's filings;
- 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 ([Bharath et al. \(2011\)](#));
- 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**.



Summary Statistics

| | All Firms | | | Relationship Firms | | | Transaction Firms | | | Differences | |
|---------------------------------------|-----------|----------|-----|--------------------|-----------|-----|-------------------|----------|-----|-------------|--------|
| | Mean | Sd | Obs | Mean | Sd | Obs | Mean | Sd | Obs | Mean | T-Stat |
| Relationship Type: | | | | | | | | | | | |
| Lending | 0.22 | 0.41 | 928 | - | - | 203 | - | - | 725 | - | - |
| Target Variables: | | | | | | | | | | | |
| 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 |
| Firm Controls: | | | | | | | | | | | |
| 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 |
| Lender Controls and Partition: | | | | | | | | | | | |
| 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 |



Does the market punish early disclosure?

- The abnormal and cumulative abnormal returns fall precipitously on the day of disclosure (**-4.64%** and **-4.38%**);
- The abnormal and cumulative abnormal returns slightly fall on the day of disclosure (-1.23% and -1.51%);
- As expected, the market reaction for early disclosures is significantly negative (**1.76%**), while slightly negative (0.27%) for late disclosure;
- A 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.

Panel A - Early Disclosure (within two weeks)

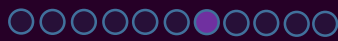
| Days to Disclosure | AR | t-stat | CAR | t-stat |
|--------------------|--------------|--------|--------------|--------|
| -2 | - | - | 0.00 | - |
| -1 | 0.26 | 0.42 | 0.26 | 0.46 |
| 0 | -4.64 | -2.70 | -4.38 | -2.11 |
| 1 | -0.89 | 0.29 | -5.27 | -2.34 |
| 2 | 1.01 | 1.24 | -4.26 | -2.06 |
| 3 | 0.86 | 0.83 | -3.40 | -1.98 |

Panel B - Late Disclosure (more than two weeks)

| Days to Disclosure | AR | t-stat | CAR | t-stat |
|--------------------|--------------|--------|--------------|--------|
| -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 |

Panel C - Three Days Average Returns

| Early Disclosure: | | Late Disclosure: | |
|-------------------|--------------|------------------|--------------|
| Average | t-stat | Average | t-stat |
| -1.76 | -2.16 | -0.27 | -1.31 |



Do relationship firms disclose earlier than transaction firms?

- Exploiting the setting cross-section variation on disclosure delay and firm-lender relationships, I find that *relationship firms* disclose unfavorable information about *three weeks earlier* than *transaction firms*;

| | 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) |
| Firm controls: | | | | | |
| 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) |
| Lender controls: | | | | | |
| 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) |
| Fixed effects × Partitions: | | | | | |
| 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 ² | 0.24 | 0.22 | 0.21 | 0.28 | 0.22 |

Do relationship firms disclose earlier than transaction firms?

- Exploiting the setting cross-section variation on disclosure delay and firm-lender relationships, I find that relationship firms disclose unfavorable information about three weeks earlier than transaction firms;
- This trend is more pronounced in firms with **long-term** relationships;

| | 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) |
| Fixed effects × Partitions: | | | | | |
| 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 ² | 0.25 | 0.22 | 0.21 | 0.28 | 0.21 |



Do relationship firms disclose earlier than transaction firms?

- Exploiting the setting cross-section variation on disclosure delay and firm-lender relationships, I find that relationship firms disclose unfavorable information about three weeks earlier than transaction firms;
- This trend is more pronounced in firms with long-term and *intense relationships*;
- 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 weeks decrease in the disclosure delay*.

| | 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) |
| Fixed effects × Partitions: | | | | | |
| 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 ² | 0.25 | 0.22 | 0.21 | 0.28 | 0.21 |
| | 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) |
| Fixed effects × Partitions: | | | | | |
| 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 ² | 0.25 | 0.22 | 0.21 | 0.28 | 0.22 |

Do relationship firms disclose earlier than transaction firms?

- Concern 1: transaction and relationship lending firms are not comparable;

➔ Matched samples;

Panel A: PSM Sample

| | Control | Treated |
|---------|---------|---------|
| All | 608 | 203 |
| Matched | 203 | 203 |

Panel B: Balanced Summary

| | Treated | Control | Difference | Improvement |
|----------------------------|---------|---------|------------|-------------|
| 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 |

Do relationship firms disclose earlier than transaction firms?

- Concern 1: transaction and relationship lending firms are not comparable;

➔ Matched samples;

| | 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) |
| Fixed effects: | | | | | | |
| 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 ² | 0.15 | 0.22 | 0.16 | 0.22 | 0.16 | 0.22 |

Do relationship firms disclose earlier than transaction firms?

- Concern 2A: concurrent disclosures are more informative for transaction firms;

➔ Conference call format;

Panel A: Format

| | Length | Executives | Analysts | Interactions |
|-------------------------|-------------------|-------------------|-----------------|-----------------|
| 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 ² | 0.13 | 0.19 | 0.19 | 0.09 |

Do relationship firms disclose earlier than transaction firms?

- Concern 2B: concurrent disclosures are more informative for transaction firms;
 → Conference call informativeness;

Panel B: Informativeness

| | Informativeness | Uncertainty |
|-------------------------|-----------------|-------------------|
| 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 ² | 0.20 | 0.25 |

Do relationship firms disclose earlier than transaction firms?

- Concern 2C: concurrent disclosures are more informative for transaction firms;

➔ Conference call language;

Panel C: Language

| | Tone | Accounting | Future |
|-------------------------|-------------------|--------------------|-------------------|
| 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 ² | 0.10 | 0.35 | 0.32 |

Do relationship firms disclose earlier than transaction firms?

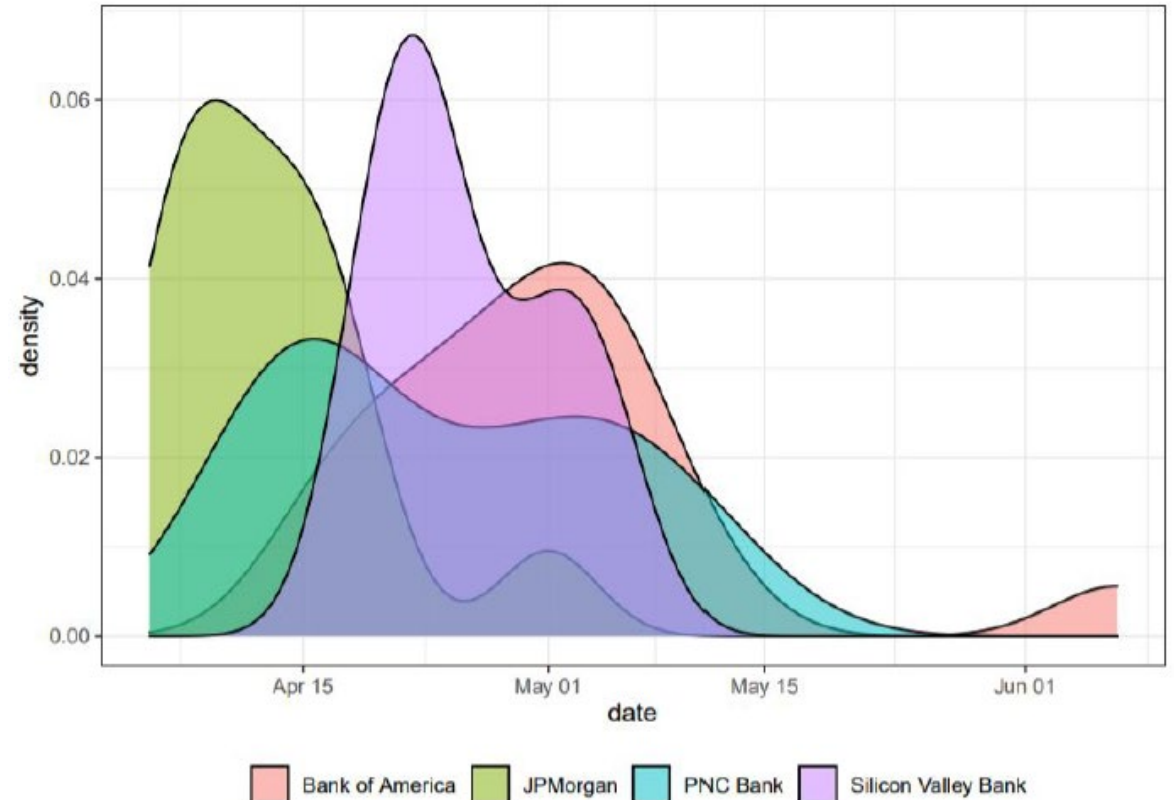
- Concern 3: small firms are more likely to be affected (e.g., opaque environment, survival rate);

➔ partition by market capitalization size;

| | 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) |
| 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 ² | 0.20 | 0.19 | 0.19 | 0.20 | 0.22 | 0.24 |

Do relationship firms disclose earlier than transaction firms?

- Concern 4: time trends (e.g., access to information, market learning, pandemic shocks);
 → partition by bailout loan disbursement phase;



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- Concern 4: time trends (e.g., access to information, market learning, pandemic shocks);
 → partition by bailout loan disbursement phase;

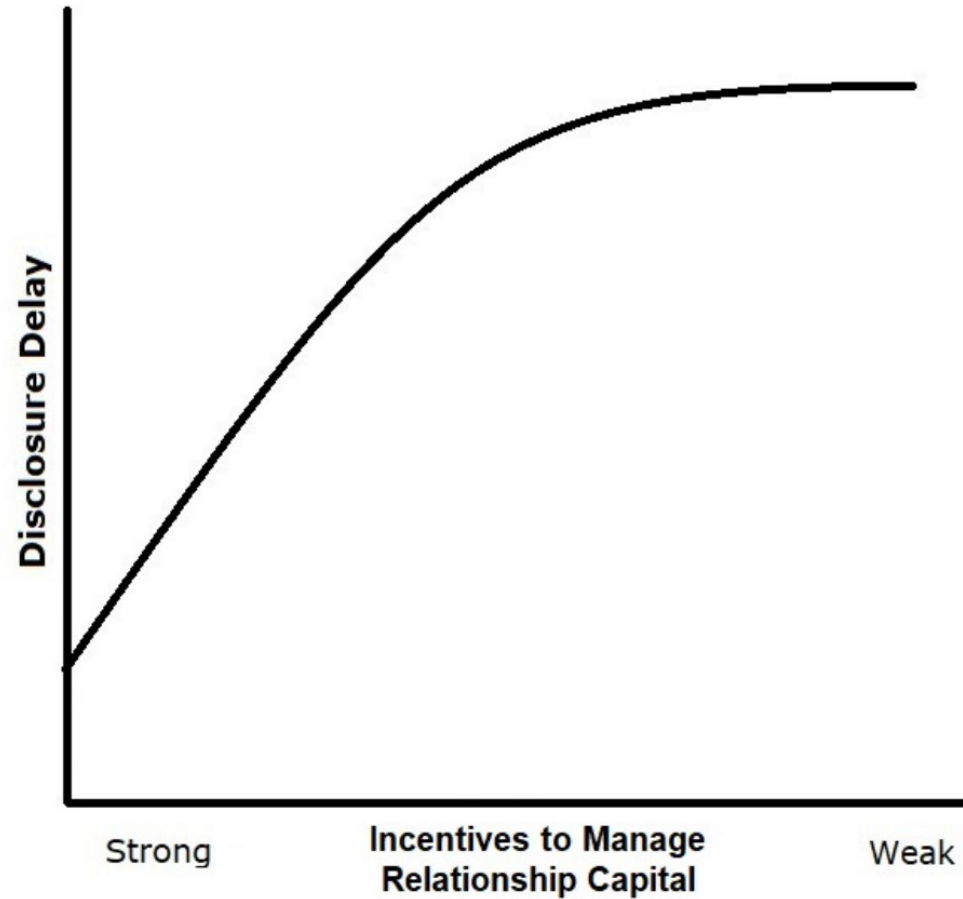
| | I | II | III | IV | V | VI |
|-------------------------|----------------------|---------------------|--------------------|-----------------------|-----------------|-----------------|
| | Panel A: First Phase | | | Panel B: Second Phase | | |
| REL | -0.39 ** (0.14) | - | - | -0.52 (0.30) | - | - |
| SEC Mentions | - | -0.15 *** (0.04) | - | - | -0.14 (0.08) | - |
| Maturity | - | - | -0.06 ** (0.02) | - | - | -0.06 (0.04) |
| Fixed effects: | | | | | | |
| Industry | Yes | Yes | Yes | Yes | Yes | Yes |
| State | Yes | Yes | Yes | Yes | Yes | Yes |
| Obs. | 441 | 441 | 441 | 278 | 278 | 278 |
| Adjusted R ² | 0.28 | 0.29 | 0.28 | 0.07 | 0.07 | 0.07 |

Do relationship firms disclose earlier than transaction firms?

- Concern 5: relationship lending effects on disclosure quality;
 - ➔ quality proxied as the informativeness of content disclosed;

| | 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) |
| Fixed Effects: | | | | | | | | |
| 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 ² | 0.41 | 0.55 | 0.69 | 0.74 | 0.80 | 0.82 | 0.72 | 0.76 |

Observed empirical patterns suggest the following relationship





Economic channels: Empirical Evidence

- 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))
-> **habit formation**;
- Another potential channel derives from **liquidation concerns**, an issue that amplifies the relevance of timely disclosure in times of crisis (Barth and Landsman (2010), and Elbannan and Elbannan (2015));
- 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;
 - Moreover, 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));
 - Therefore, borrowers have incentives to incur disclosure costs in the short term to **manage reputation capital** with their lenders. In turn, these firms receive future relationship lending benefits.

Economic channels: liquidity concerns

- Liquidity Concerns;

➔ DEBT = current debt with any lender;

| | 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 × 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) |
| Fixed effects: | | | | | | |
| 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 ² | 0.24 | 0.28 | 0.24 | 0.28 | 0.25 | 0.28 |

Economic channels: habit formation

- **Liquidity Concerns;**

DEBT = current debt with any lender;

- **Habit Formation;**

➔ DEBT = past debt with any lender;

| | 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 × 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) |
| Fixed effects: | | | | | | |
| 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 ² | 0.24 | 0.28 | 0.24 | 0.28 | 0.25 | 0.28 |



Economic channels: multiple lenders

- **Liquidity Concerns;**

DEBT = current debt with any lender;

- **Habit Formation;**

DEBT = past debt with any lender;

- **Multiple Lenders;**

 DEBT = presence of multiple lenders;

| | 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 × 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) |
| Fixed effects: | | | | | | |
| 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 ² | 0.24 | 0.28 | 0.24 | 0.28 | 0.25 | 0.28 |



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 A (extensive margin) | | | | |
|----------------------------|--------------------|--------------------|--------------------|--------------------|
| | I | II | III | IV |
| | Interactions | Loans | Covenant Waivers | Credit Amendments |
| Early | 1.79 *** (0.23) | 1.38 *** (0.33) | 1.73 *** (0.41) | 1.41 *** (0.27) |
| Delay | - | - | - | - |
| Fixed effects: | | | | |
| Industry | Yes | Yes | Yes | Yes |
| State | Yes | Yes | Yes | Yes |
| Bank | Yes | Yes | Yes | Yes |
| Obs. | 719 | 719 | 719 | 719 |
| Pseudo R ² | 0.35 | 0.24 | 0.24 | 0.22 |



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.
- 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.

| Panel B (intensive margin) | | | | |
|----------------------------|---------------------|---------------------|---------------------|---------------------|
| | V | VI | VII | VIII |
| | Interactions | Loans | Covenant Waivers | Credit Amendments |
| Early | - | - | - | - |
| Delay | -0.87 *** (0.10) | -0.59 *** (0.13) | -0.75 *** (0.16) | -0.76 *** (0.11) |
| Fixed effects: | | | | |
| Industry | Yes | Yes | Yes | Yes |
| State | Yes | Yes | Yes | Yes |
| Bank | Yes | Yes | Yes | Yes |
| Obs. | 719 | 719 | 719 | 719 |
| Pseudo R ² | 0.39 | 0.25 | 0.26 | 0.27 |

Conclusion

- Relationship lending firms disclose unfavorable information early;
 - This decision is more accentuated in intense and long-term relationships;
- 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 in exchange for future lending benefits;
- This study surfaces a novel economic channel in which relationship lending has a recurring disciplinary role in firms' strategic disclosure.
 - Firm's strategic disclosure;
 - Especially, during times of crisis when debt monitoring becomes more relevant.

Thank you very much!

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