

DISCUSSION OF:  
DOES RELATIONSHIP LEN  
DISCIPLINE DISCLOSURE?  
EVIDENCE FROM BAILOUT

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# Motivating Research Question

- Does existing **long-term lending relationship** affect firms' strategic disclosure decision?
- If YES, how?
- Relationship firms (firms that receive bailout loan from an existing lender)
- Alternatively, new lender

# Research Setting

- **CARES (Coronavirus Aid, Relief and Economic Security) Act**
- Stimulus package signed late March 2020
- SBA (Small Business Administration)
  - Receive applications from firms with less than 500 employees
  - Must state intent to repay
- PPP (Paycheck Protection Program) offers **bailout loans** to cover salaries
  - Same interest rates and maturity
  - Backed by the Fed
  - No collateral
  - No covenants

# Hypotheses ~~4~~H1

- Majority of publicly traded firms disclose their bailout loan details (disbursement date, loan terms, lender's terms).
- H1: Equity investors react negatively to early disclosure.
- **Relationship firms** (firms that receive bailout loan from an existing lender) ..
  - H2 ..disclosure earlier than transaction firms
  - H3 ..disclosure earlier because of reputation concerns
  - H4 ..receive future lending benefits

# Tour de force of Theory / Analytical Account

- **Costly disclosure**

Jovanovic (1982), McNichols (1983),  
Verrecchia (1983, 1990)

No disclosure of bad news

- **Investors may believe that manager is uninformed**

Dye (1985), Jung and Kwon (1988), Penno (1997)

- **Managers have interval information**

Shin (2003)

- **Flip default (costly information storage without leakage)**

# More Theory

- **Debt**

- Hart and Moore (1994)

- **Debt and disclosure**

- Fischer and Verrecchia. (1997) limited liability and disclosure.
- Beyer and Dye (2011), Bertomeau, Beyer and Dye (2011)

- **Investors are unsure about precision**

- Penno (1996), Hughes and Pae (2004)

- **Disclosure Timing**

- Einhorn and Ziv (2007), Guttman, Kremer, and Skrzypacz (2014)

# Alternative Theory

- **Entry deterrence**
- Darrough and Stoughton (1990), Wagenhofer (1990)
  - Disclosure of both some good news and some bad news
- Hwang and Kirby (2000)
  
- **Predation following disclosure**
- Bernard (2016)

# Alternative Theory

- **Information sharing and imperfect product market**
- Kirby Jones (1988), Vives
  
- **Disclosure and imperfect product market**
- Darrough (1993)
- Cournot vs. Bertrand
- Substitutes vs. complements
- Common vs. firm-specific information
  
- Simi Kedia (2006) “Estimating Product Market Competition: Methodology and Application”



# Alternative Theory

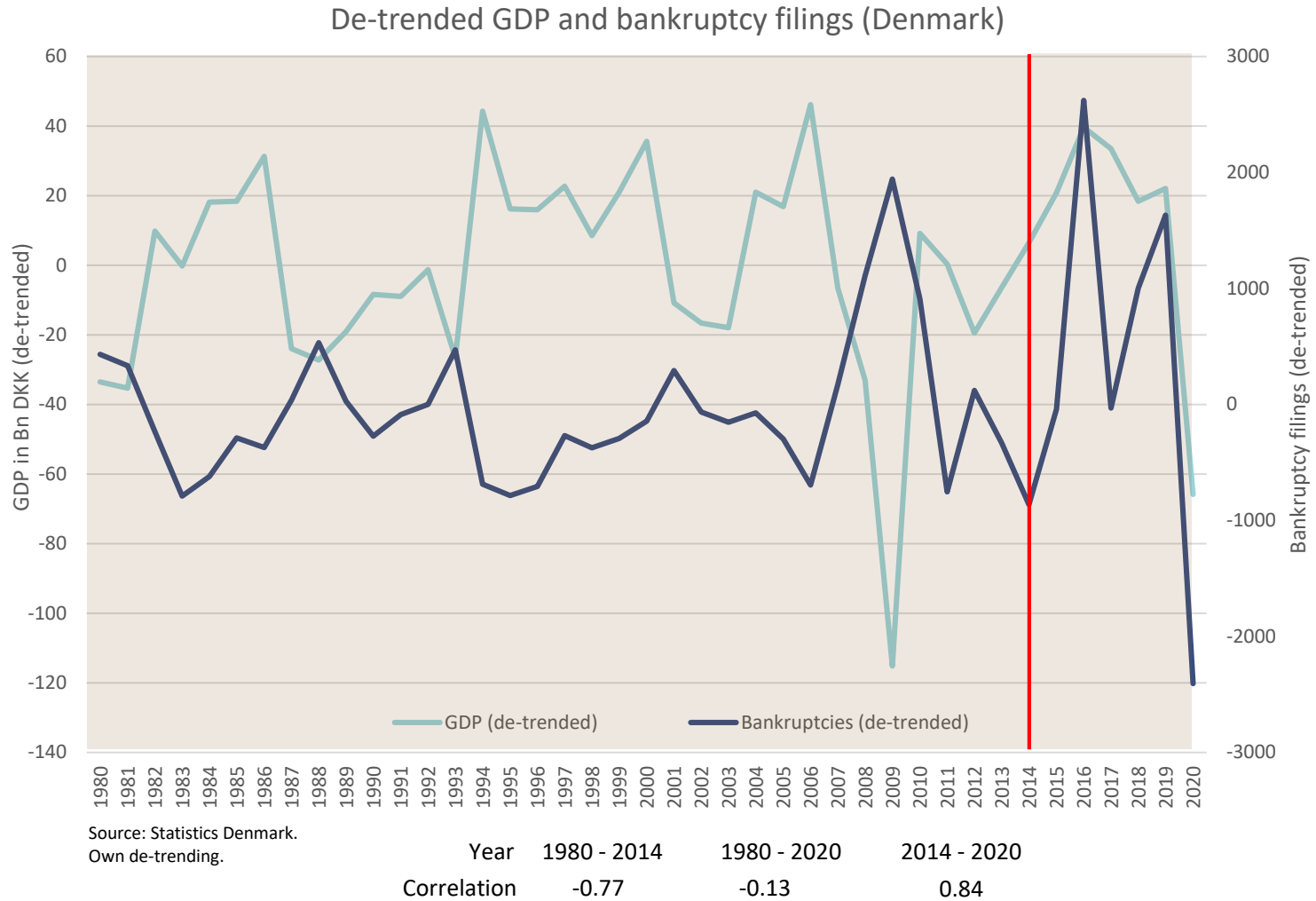
## DEBT

- Brander and Lewis (1986) Oligopoly and financial structure: The limited liability effect." *The American Economic Review*.
- Hughes, Kao, and Mukherji (1998) Oligopoly, financial structure, and resolution of uncertainty. *Journal of Economics & Management Strategy*.

# Covid is an unexpected shock

- **But each country is different during Covid....**
- Country specific policy interventions:
  - lockdowns and subsidies
  - RyanAir sued Lufhansa and SAS over gov't support programs
- **UK**
- Eat out to help out
  
- **Denmark**
- Government reimburses closed businesses FIXED costs
- But firms need to hire auditor to qualify for subsidies so auditors extracted maximum rents
- Marinovic and Sridhar (2015)

# Motivation



# What happened during COVID

- Governments' COVID-19 health responses
  - Shutdowns
  - Limiting public gatherings
  - Social distancing
  - Travel restrictions
  - Work-from-home recommendations
  - Quarantine and testing
- Potential changes in consumer behavior
  - Online shopping
  - Travel
  - Hobbies
  - Etc.
- Potential changes in firms' behavior
  - Financing
  - Investment
  - Innovation
  - Employment
  - Production

→ Distort supply and demand
- Government economic responses
  - Direct firm grants such as fixed costs-, salary-, and revenue-based support
  - Payments directly to citizens
  - State-backed loans
  - Tax payments

→ Limit losses (and risks)

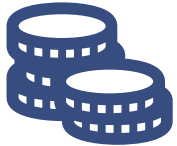
# Research question

- Does government support affect Danish firms' likelihood of bankruptcy?

- Many studies seek to answer this question

→ Hard to provide causal inferences as government support, the impact of crises on firms' performance, and the timing are endogenously related.

# Danish Setting

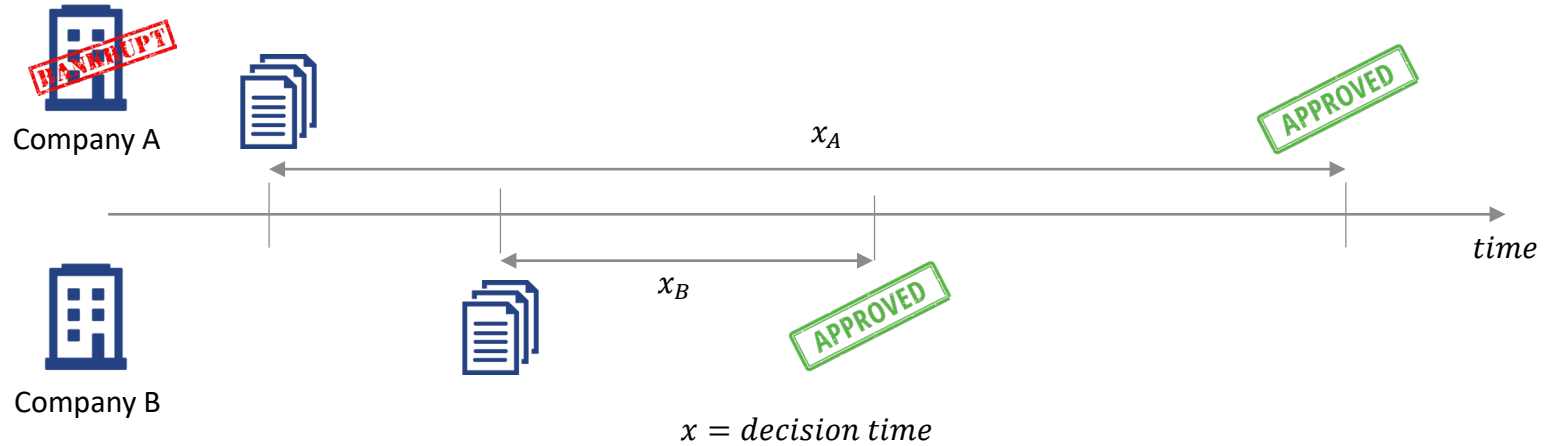


- Danish government support during the COVID-19 health crisis
  - Three largest support types: To cover fixed costs, salary, and lost revenue
  - ~DKK 50bn in payouts, ~2% GDP in Denmark
    - The U.S. spent ~4% of their GDP



- Sample of support applications
  - 160,442 approved applications
    - Of those 68,699 are from limited liability firms and have financial statement available

# What I do



I investigate  
decision time  $\rightarrow$  bankruptcy

# Economic mechanisms

## Two channels (for how decision time → bankruptcy):

### 1. Short-term (before receiving support):

- Not enough cash to pay for credit obligations (i.e., short-term debt, taxes, employees, and account payables etc.).

### 2. Long-term (after receiving supports):

- Forego investment opportunities (Campello et al., 2010 JFE; Fakos et al., 2022 JFE)
  - E.g., cannot hire new employees, marketing spendings, and investments in new assets
- Obtain unfavorable financing
  - Forbearances may harm future credit terms.



# Main findings

**Yes, the decision time affects the likelihood of bankruptcy**

**In the full sample:**

- When the decision time increases by 15.18 days (the standard deviation) the likelihood of bankruptcy increases by 0.46 percentage points (or 29.34%!)

**In the financial statement sample (using the Ohlson model):**

- When the decision time increases by 15.95 days (the standard deviation) the likelihood of bankruptcy increases by 0.49 percentage points (or 19.15%!)

\* The standard deviation, the percentage point, and percent changes depend on the model specification.

# Additional tests

Results are largely robust in additional tests

- Across different bankruptcy models
- Across types of support
- Across decision times split by 10-days intervals
- Across support size quartiles
- When splitting firms by whether they agree with government about the support size

→ But when sample size deflates, the power of the tests decreases.

# Contributions

- Provides causal evidence on the effectiveness of government support
  - The delay that firms experience when applying for government support has adverse effects on their survival.