# Are Socially Responsible Firms Really Responsible? Main Street Lending during the Great Recession

Dong Beom Choi and Seongjoon Jeong May 2021, SNU seminar

#### Friedman doctrine (1970)

- The **only** social responsibility of business is to increase its profits (i.e., shareholder value)
- With externalities, admittedly, private optimal ≠ social optimal
  - o But still, firm managers do not need to be "socially" responsible
    - 1. firms maximize returns to shareholders ("do what you're good at")
    - 2. Shareholders then take actions based on their social initiatives
    - 3. Government establishes optimal institutions to address externalities

#### Dichotomy between firms and states

#### **Criticisms and ESG consideration**

- Individuals cannot always reverse inefficiencies
  - Hart and Zingales (2017)
- States cannot always address externalities (Benabou and Tirole 2010)
  - Political issues, bureaucratic inefficiency, inter-agency coordination etc
- Shareholder value maximization may not be "sustainable"
  - Climate change, supply chain sustainability etc
- Being more socially responsible may actually increase the shareholder value
  - When investors, employees, and consumers care about social values
  - Managerial short-termism
  - Benabou and Tirole (2009), "doing well by doing good"
- → Emphasis on incorporating ESG factors into managerial decisions
  - United Nations adopted Sustainable Development Goals (SDGs) in 2015
  - Further attention with the Covid-19 pandemic
  - Shareholder capitalism to stakeholder capitalism

#### **Criticisms and ESG consideration**

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#### **Economically, what do we mean by "socially responsible" firms?**

"The firm's social responsibility is ... In a nutshell, the firm should internalize the *externalities* on the various stakeholders" Tirole 2001

- Any self-regulated firm activities to improve social welfare?
- Fundamentally speaking,
  - Socially responsible management ≈ internalizing social impacts (i.e., externalities) in making managerial decisions
    - → Private outcomes ≈ socially desirable outcomes
  - Only "material" ones should count
     (e.g., charity vs going green; Hart and Zingales 2017, Edmans 2020)

"CSR is corporate social or environmental behavior that *goes beyond the legal or regulatory requirements of the relevant* market(s) and/or economy(s)."

Kitzmueeler and Shimshack, Journal of Economic Literature 2012

#### Some more quotes, from Magill, Quinzill, and Rochet (2015 ECTA)

A sound foundation for a theory of the stakeholder corporation requires...

- (i) to identify well-defined *groups* of agents close to the firm that are affected by the externalities it creates;
  - (ii) to assign well-defined benefits to each group of stakeholders;
- (iii) to assign *relative weights* to the benefits defined in (ii) to obtain a well-defined objective for the firm;
- (iv) to provide *incentives* for the firm's management to maximize this objective.

Condition (i) implies that the set of stakeholders must be kept limited. Externalities that affect agents widely dispersed in the economy will be more effectively resolved by government intervention (regulation, taxes, or subsidies) than by the stakeholder approach.

#### In reality, assessing ESG...

- ESG performance measures do not necessarily reflect these aspects
  - Assessing universal topics when different industries have different business models
  - Mostly using "hard" (quantifiable) information
  - Hard to compare scale of social impacts among different stakeholders (Benabou and Tirole 2010)

**Tirole 2001** "it is **harder to measure** the firm's contribution to the welfare of employees, of suppliers, or of customers than to measure its profitability. For one thing, **there is no accounting measure** of this welfare... For another thing, **there is no market value** of the impact of past and current managerial decisions on the future welfare of stakeholders...In a nutshell, **ma nagement can almost always rationalize any action by invoking its impact on the welfare of <b>some** stakeholder."

- → ESG ratings also vary significantly across rating agencies (Berg et al. 2020)
- But still, those with high ratings are widely acknowledged and seemingly receiving certain benefits
  - o Lower risks (regulatory, litigation, climate etc)
  - o More loyal customers and employees
  - o Lower cost of capital

#### Q: Are "socially responsible" firms really socially responsible?

- Prior studies mostly analyze
  - Why firms engage in CSR
  - How do they change *certain* actions (e.g. carbon emission) in response to outside events
    - This action may or may not be material to their main business
  - How is their ESG engagement perceived by other stakeholders
- Our question:
  - We know it's hard to define / measure firms' CSR
  - Are "supposedly" socially responsible firms really socially responsible?
  - → i.e., better internalizing material externalities?
- Challenges
  - o hard to define material externalities a firm imposes
  - o hard to observe/measure the intangible factors
  - → lack of accountability, not clear what "society" wants
  - → let's focus on banking industries with well established, quantifiable externalities

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  - How is the ESG engagement perceived by other stakeholders
- Our question → which CSR activity
  - We know it's hard to define / measure firms' CSR
  - Are the "supposedly" socially responsible firms really socially responsible?
  - → i.e., better internalizing material externalities, beyond the level that states demand?
- Challenges
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#### Why focusing on bank lending during the Great Recession?

- "Major" externalities that banks impose (I think)
  - 1. Too much risk-taking in good times, not considering the social costs of its failure
    - → (policy interventions) regulatory + supervisory restrictions
  - 2. Too conservative in bad times, lending too little not considering the social benefits ("credit crunch")
    - → (Covid-19 policies) Paycheck Protection Program (PPP), Main Street Lending Program
    - → (Basel III) countercyclical capital buffer (CCyB); dynamic provisioning to limit procyclicality
  - Very few/no ESG issues with "supply chain"
- Prior to the Great Recession, the U.S. regulators took 1 into account to, but not 2.
  - → Totally up to private decisions, even with enormous externality
- Main Street's long-lasting complaints socially irresponsible banks during a credit crunch?

"A bank is a place where they lend you an umbrella in fair weather and ask for it back when it begins to rain."

Robert Frost

#### **Lending to Main Street**

- Main Street borrowers had a hard time obtaining credit during the Great Recession, because banks were reluctant to lend to local economies
  - o Apparent externality or spillover effect (fire-sales, business failures, consumptions etc)
    - Lorenzoni 2008, Bianchi 2011; Chodorow-Reich 2014, Jiménez et al. 2017
  - o More credit supply could actually be in line with banks' interests by making local economy more resilient (i.e., doing well by doing good)
  - o Consumers cannot rewind, that's why a bank exists (Diamond and Dybvig 1983, Diamond 1984)

- Analyze small business lending and mortgage lending by the U.S. banks
- Particular interest in small business lending
  - omortgages mostly sold to GSEs
  - Main Street did not demand "new" loans that much, than avoiding foreclosures or refinancing with the lower rates etc

#### Corporate Social Responsibility (CSR) measure

- Banks' 2006 CSR scores from the MSCI ESG KLD stats
- KLD evaluates firms' CSR performance along seven categories, (+1,0,-1)
  - environment, community, human rights, employee relations, diversity, product and governance
- We combine these scores following Deng et al. (2013) and Albuquerque et al. (2019), ranging from -1 to 1.
- 59 high CSR banks with positive scores, 107 low CSR banks with ≤ 0
  - Same groups when using median (0) as a threshold
  - 31 banks with 0

### **Decomposition by categories**

#### Category Summary

	Strength/	// <b>. 1</b> : ,	Н.	CSR	L.o	CSR
Category	Concern	#indicator -	Mean	Std.Dev.	Mean	Std.Dev.
<b>.</b>	Strength	5	0.003	0.026	0.000	0.000
Environment	Concern	7	0.000	0.000	0.000	0.000
	Strength	7	0.128	0.142	0.017	0.047
Community	Concern	4	0.038	0.091	0.065	0.116
	Strength	3	0.006	0.043	0.000	0.000
Human Rights	Concern	4	0.013	0.055	0.000	0.000
E I DIC	Strength	6	0.048	0.107	0.006	0.032
Employee Relations	Concern	5	0.027	0.069	0.052	0.088
D: :	Strength	8	0.172	0.161	0.015	0.044
Diversity	Concern	3	0.034	0.102	0.125	0.162
D 1 4	Strength	4	0.004	0.033	0.002	0.024
Product	Concern	4	0.059	0.163	0.021	0.085

### **Indicator Examples**

#### Indcator description

Category	Strength	Concern
Environment	Waste Management	Ozone Depleting Chemicals
Environment	Climate Change	Toxic Spills & Releases
Community	Charitable Giving	Investment Controversies
Community	Volunteer Programs	Community Impact
Harris Disla	Labor Rights Strength	Support for Controversial Regimes
Human Rights	Human Rights Policies & Initiatives	Indigenous Peoples Relations Concern
Employee Deletions	Employee Involvement	Employee Health & Safety
Employee Relations	Retirement Benefits Strength	Workforce Reductions
Discouries	Workforce Diversity	Board of Directors - Gender
Diversity	Non-Representation	Women and Minority Contracting
Des des d	Quality	Product Quality & Safety
Product	R&D, Innovation	Anticompetitive Practices

#### **Other bank characteristics**

- Small business lending from Community Reinvestment Act (CRA)
- Mortgage lending from Home Mortgage Disclosure Act (HMDA)
- →bank-MSA-year level loan growth rate

• Bank control variables from FR Y-9C o Size, liquid assets, capital, non-performing loans, loan-to-deposits, ROA, RE loans, C&I loans

→bank-MSA-year level panel data

## **Summary Stats**

Table 1

		H.CSI	R banks			L.CSF	R banks	
Variables	Obs.	Mean	Median	Std.Dev.	Obs.	Mean	Median	Std.Dev.
Bank-level Variables								
Log (Total Assets)	430	16.014	15.532	1.694	761	15.366	15.017	1.161
Log (Liquid Asset Ratio)	430	-1.514	-1.454	0.469	761	-1.489	-1.477	0.443
Log (RE Loan to Total Loan Ratio)	430	-0.386	-0.294	0.276	761	-0.348	-0.319	0.209
Log (CI Loan to Total Loan Ratio)	430	-1.829	-1.801	0.579	761	-1.970	-1.863	0.635
Log (NPL Ratio)	430	-4.581	-4.605	1.322	761	-4.717	-4.803	1.226
Log (Tier 1 Capital Ratio)	430	-2.203	-2.198	0.259	761	-2.203	-2.199	0.266
Log (Loan to Deposit Ratio)	430	-0.087	-0.072	0.184	761	-0.079	-0.053	0.188
Log (1+ROA)	430	0.005	0.010	0.015	761	0.006	0.010	0.015
Bank-MSA-level Variables								
Small Business loan growth	18,182	-0.005	0.033	0.851	13,003	0.002	-0.020	0.986
Mortgage loan growth	18,182	0.141	0.000	1.242	13,003	0.075	0.024	1.014

#### **Identification** strategy

Q. How do the lending patterns of high CSR vs low CSR banks change during the Great Recession?

We need to identify changes in credit supply, not credit demand
 ○ Credit demand → bank A lent less because of weaker local credit demand

- We compare lending by *different* banks in the *same* local markets (MSAs)
  - o MSA-bank-year level lending
  - o Include MSA\*year fixed effects to absorb local demand changes (Khwaja and Mian, 2008)

#### **Comparing H.CSR vs L.CSR banks**

Bank-level loan growth rates



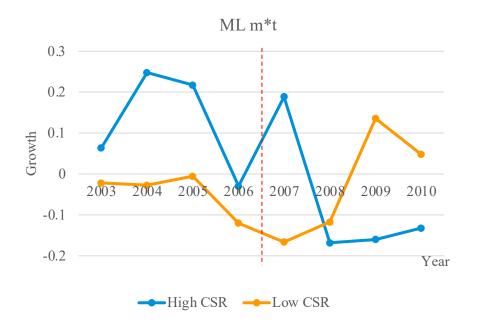
- Some deviations, but quite minor
- Not controlling the demand effects



#### **Controlling local demand differences...**

Bank-MSA level yearly loan growth, deviation from the MSA-year average





- Clear decline by H.CSR banks during the Great Recession
- Socially responsible banks were socially *irresponsible*?

#### Main regression specification

$$LoanGrowth_{i,m,t} = \alpha_i + \alpha_{m,t} + \beta CSR_i * post_t + \gamma X_{i,t-1} + \varepsilon_{i,m,t}$$

- MSA\*year FE  $(\alpha_{m,t})$ 
  - > comparing lending behaviors across banks within MSA at a given point in time
- Our focus  $\beta$ 
  - → How did H.CSR banks change their credit supply during the Great Recession, relative to L.CSR banks
  - (+) lending more to Main Street
  - ( ) lending less

#### Main regression table

Table2

	All bar	ks	10Bil. A	Above
	Small Business Loan Growth (1)	Mortgage Loan Growth (2)	Small Business Loan Growth (3)	Mortgage Loan Growth (4)
CSR Dummy x Crisis Dummy	-0.308***	-0.371***	-0.279***	-0.390**
	(-3.819)	(-2.887)	(-3.421)	(-2.269)
Log (Total Assets)	0.039	0.196	-0.067	0.204
	(0.199)	(1.524)	(-0.303)	(1.290)
Log (Liquid Asset Ratio)	-0.260*	-0.044	-0.335**	-0.196
	(-1.933)	(-0.191)	(-2.084)	(-0.562)
Log (RE Loan to Total Loan Ratio)	-0.874	1.187	-1.120	0.887
	(-1.407)	(0.965)	(-1.360)	(0.525)
Log (CI Loan to Total Loan Ratio)	-0.443*	-0.080	-0.692	-0.302
	(-1.753)	(-0.136)	(-1.633)	(-0.289)
Log (NPL Ratio)	-0.072*	-0.044	-0.081	-0.037
	(-1.793)	(-0.875)	(-1.322)	(-0.434)
Log (Tier 1 Capital Ratio)	0.185	-0.050	0.055	-0.186
	(0.974)	(-0.152)	(0.178)	(-0.346)
Log (Loan to Deposit Ratio)	0.233	1.561***	0.322	1.794***
	(0.564)	(3.078)	(0.702)	(3.446)
Log (ROA)	3.585	-0.287	1.077	-3.086
	(0.761)	(-0.069)	(0.175)	(-0.521)
Observations	31,185	31,185	24,511	24,511
R-Squared	0.0358	0.0311	0.0528	0.0423
Bank Fixed Effect	Yes	Yes	Yes	Yes
MSA x Year Fixed Effect	Yes	Yes	Yes	Yes

10 billion above excluding "community banks". # of H.CSR = 20 , # of L.CSR= 26

#### **Confounding factors?**

- Size
  - o H.CSR banks tend to be bigger.
  - o Bigger banks affected more by the crisis or faced heavier regulatory burden post-treatment

- Other soundness factors
  - o Could it be that H.CSR banks somehow
    - Suffered more during the crisis ("changes")
    - More fragile to begin with, hence with smaller slack for the credit supply ("levels")

# Were H.CSR banks affected more by the crisis? (A) Liquid asset ratio

Panel A: Liquid Asset Ratio

		All banks			10Bil. Above	
	Pre-Crisis	Crisis	Difference	Pre-Crisis	Crisis	Difference
CCD D	0.266***	0.227***	-0.039***	0.284***	0.229***	-0.055***
CSR D. = 0	(48.29)	(42.47)	(-5.11)	(24.27)	(21.92)	(-3.40)
CSD D = 1	0.251***	0.235***	-0.016	0.268***	0.261***	-0.007
CSR D. = 1	(35.11)	(32.63)	(-1.59)	(19.11)	(20.04)	(0.31)
D:00	-0.016*	0.008	0.023*	-0.016	0.032*	0.048*
Difference	(-1.71)	(0.87)	(1.82)	(-0.88)	(1.92)	(1.93)

H.CSR banks started with slightly fewer liquid assets, but L.CSR banks had a greater decrease in their liquid assets

#### Non-performing loan ratio

Panel B: NPL Ratio

		All banks			10Bil. Above	
	Pre-Crisis	Crisis	Difference	Pre-Crisis	Crisis	Difference
	0.006***	0.032***	0.026***	0.008***	0.035***	0.027***
CSR D. = 0	(27.19)	(18.70)	(15.92)	(14.16)	(8.71)	(7.51)
CCD D 1	0.008***	0.035***	0.028***	0.008***	0.043***	0.034***
CSR D. = 1	(15.45)	(16.33)	(13.08)	(10.90)	(9.42)	(7.79)
D: 00	0.002***	0.004	0.002	0.000	0.008	0.007
Difference	(3.16)	(1.29)	(0.78)	(0.48)	(1.25)	(1.25)

H.CSR banks started with marginally more non-performing loans, but the two groups had similar increases

### **Capital ratio**

Panel C: Tier 1 Capital Ratio

		All banks			10Bil. Above	
	Pre-Crisis	Crisis	Difference	Pre-Crisis	Crisis	Difference
COR D	0.113***	0.115***	0.001	0.104***	0.107***	0.003
CSR D. = 0	(95.87)	(73.44)	(0.60)	(45.98)	(46.26)	(0.92)
COR D 1	0.112***	0.116***	0.004	0.101***	0.113***	0.012***
CSR D. = 1	(79.88)	(52.43)	(1.50)	(48.69)	(35.70)	(3.18)
D: 00	-0.001	0.001	0.003	-0.003	0.006	0.009*
Difference	(-0.77)	(0.47)	(0.84)	(-0.90)	(1.55)	(1.79)

Not very different, neither levels nor changes

#### **Return on assets**

Panel D: ROA

		All banks				
	Pre-Crisis	Crisis	Difference	Pre-Crisis	Crisis	Difference
	0.012***	-0.001	-0.012***	0.013***	0.000	-0.013***
CSR D. = 0	(61.80)	(-0.92)	(-13.07)	(30.51)	(-0.11)	(-7.83)
	0.012***	-0.002	-0.013***	0.013***	0.001	-0.012***
CSR D. = 1	(48.28)	(-1.22)	(-11.01)	(31.50)	(0.56)	(-7.24)
D:00	0.000	-0.001	-0.001	0.000	0.001	0.002
Difference	(1.22)	(-0.39)	(-0.64)	(-0.81)	(0.45)	(0.67)

Not very different, neither levels nor changes

#### Regressions adding control\*post

Panel A: All banks	Total A	Total Assets		set Ratio	NPL I	NPL Ratio		ital Ratio	RO	A
	Small Business Loan Growth (1)	Mortgage Loan Growth (2)	Small Business Loan Growth (3)	Mortgage Loan Growth (4)	Small Business Loan Growth (5)	Mortgage Loan Growth (6)	Small Business Loan Growth (7)	Mortgage Loan Growth (8)	Small Business Loan Growth (9)	Mortgage Loan Growth (10)
CSR Dummy x Crisis Dummy	-0.308*	-0.136	-0.343***	-0.252*	-0.345***	-0.266*	-0.328**	-0.198	-0.402***	-0.310**
	(-1.961)	(-0.901)	(-2.810)	(-1.854)	(-3.065)	(-1.857)	(-2.384)	(-1.398)	(-3.533)	(-2.247)
Log (Control) x Crisis Dummy	0.001	-0.016**	-0.034	0.160**	-0.012	0.046**	-0.015	0.135**	12.347	-8.838
	(0.065)	(-2.115)	(-0.434)	(2.562)	(-0.463)	(2.331)	(-0.216)	(2.525)	(1.443)	(-1.212)
Bank-Level Controls	Yes	Yes								
Observations	31,185	31,185	31,185	31,185	31,185	31,185	31,185	31,185	31,185	31,185
R-Squared	0.0358	0.0334	0.0345	0.0340	0.0347	0.0329	0.0355	0.0350	0.0375	0.0318
Bank Fixed Effect	Yes	Yes								
MSA x Year Fixed Effect	Yes	Yes								

Panel B: 10Bil. Above	Total A	Assets	Liquid As	set Ratio	NPL Ratio		Tier 1 Cap	ital Ratio	ROA	
	Small Business Loan Growth (1)	Mortgage Loan Growth (2)	Small Business Loan Growth (3)	Mortgage Loan Growth (4)	Small Business Loan Growth (5)	Mortgage Loan Growth (6)	Small Business Loan Growth (7)	Mortgage Loan Growth (8)	Small Business Loan Growth (9)	Mortgage Loan Growth (10)
CSR Dummy x Crisis Dummy	-0.336	-0.062	-0.347**	-0.257	-0.366**	-0.255	-0.334*	-0.156	-0.415***	-0.316*
	(-1.678)	(-0.293)	(-2.506)	(-1.459)	(-2.530)	(-1.253)	(-1.958)	(-0.797)	(-3.773)	(-1.732)
Log (Control) x Crisis Dummy	0.003	-0.020**	-0.077	0.175**	-0.032	0.055*	-0.042	0.177**	19.288**	-9.782
	(0.246)	(-2.094)	(-0.725)	(2.075)	(-0.831)	(1.906)	(-0.463)	(2.570)	(2.486)	(-1.307)
Bank-Level Controls	Yes	Yes								
Observations	24,511	24,511	24,511	24,511	24,511	24,511	24,511	24,511	24,511	24,511
R-Squared	0.0528	0.0463	0.0515	0.0449	0.0528	0.0445	0.0534	0.0480	0.0592	0.0430
Bank Fixed Effect	Yes	Yes								
MSA x Year Fixed Effect	Yes	Yes								

We interact these variables with crisis, including as an additional control Weaker results with mortgage lending, but robust small business lending results

#### Then, what caused this difference?

- Could it be that CSR ratings were simply uninformative
  - → mostly capturing something "irrelevant"

    Berg et al. (2020): large divergence among rating agencies
- Material vs Immaterial CSR
  - o Hart and Zingales (2017)
    - Only focus on externalities not separable from firms' projection decisions
  - o Edmans (2020), the principle of materiality
    - Address issues that are most material to the company's business
  - o Sustainability Accounting Standard Board (SASB)
    - Classify material vs immaterial topics from an investor viewpoint
  - o Khan et al. (2016)
    - Stocks evaluated based on "material" CSR performed better, but immaterial CSR not so
- Possible, but it still doesn't explain why they lent less

SASB Materiality
Map

#### SASB Materiality Map®

SASB's Materiality Map® identifies sustainability issues that are likely to affect the financial condition or operating performance of issues, or General Issue Categories, which encompass a range of Disclosure Topics and their associated Accounting Metrics that we Health and Nutrition topic in the Processed Foods industry and the Counterfeit Drugs topic in the Health Care Distributors industry

The SASB Materiality Map® does not contain all guidance necessary for use of the standards. To download

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		Consumer Goods	Extractives & Minerals Processing			
Dimension	General Issue Category <sup>®</sup>	Click to expand	Click to expand	Asset Management & Custody Activities	Commercial Banks	Consur Finan
	GHG Emissions					
	Air Quality					-
Environment	Energy Management					-
Environment	Water & Wastewater Management					-
	Waste & Hazardous Materials Management					-
	Ecological Impacts					-
	Human Rights & Community Relations					-
	Customer Privacy					
	Data Security					
Social Capital	Access & Affordability					1
Capital	Product Quality & Safety					1
	Customer Welfare					-
	Selling Practices & Product Labeling					
	Labor Practices					
Human Capital	Employee Health & Safety					
Capitai	Employee Engagement, Diversity & Inclusion					-
	Product Design & Lifecycle Management					
Business	Business Model Resilience					1
Model &	Supply Chain Management					-
Innovation	Materials Sourcing & Efficiency					
	Physical Impacts of Climate Change					-
	Business Ethics					
	Competitive Behavior					1
Leadership & Governance	Management of the Legal & Regulatory Environment					-
Governance	Critical Incident Risk Management					-
	Systemic Risk Management					

#### Material vs immaterial ratings

• Comparing our L.CSR vs H. CSR banks, using Khan et al. (2016) method

			a	ll sample(#ot	f banks = 160	5)		
		n=107			n=59	1:00		
variable	CSR low				CSR high	diff		
	mean	t	std	mean	t	std	mean	t
material	0.000	0.00	0.137	0.373	3.46	0.828	0.373	4.55
immaterial	-0.682	-8.86	0.796	1.610	12.58	0.983	2.292	16.31

- H. CSR banks have significantly higher scores in both dimensions
  - o But the difference is bigger for immaterial CSR
  - o Note, many banks just have 0 for the material topics
- Possibly the assessment was problematic, but still why lending less?

#### Regression using material factors only, or immaterial only

- For immaterial scores, largely similar results
- Still have the qualitatively similar results with the material scores
  - o Only 16 banks belong to H. group
- We cannot conclude that (material) CSR banks did NOT lend less
  - → Still need to know why lent less

Panel A: Material score

	All bar	nks	10Bil. Above			
	Small Business Loan Growth (1)	Mortgage Loan Growth (2)	Small Business Loan Growth (3)	Mortgage Loan Growth (4)		
CSR Dummy x Crisis Dummy	-0.185**	-0.321*	-0.102	-0.324		
	(-2.098)	(-1.831)	(-0.817)	(-1.437)		
Bank-Level Controls	Yes	Yes	Yes	Yes		
Observations	31,185	31,185	24,511	24,511		
R-Squared	0.0297	0.0277	0.0473	0.0396		
Bank Fixed Effect	Yes	Yes	Yes	Yes		
MSA x Year Fixed Effect	Yes	Yes	Yes	Yes		

Panel B: Immaterial score

	All bar	nks	10Bil. Above			
	Small Business Loan Growth (1)	Mortgage Loan Growth (2)	Small Business Loan Growth (3)	Mortgage Loan Growth (4)		
CSR Dummy x Crisis Dummy	-0.302***	-0.377***	-0.270***	-0.398**		
	(-3.736)	(-2.951)	(-3.334)	(-2.347)		
Bank-Level Controls	Yes	Yes	Yes	Yes		
Observations	31,185	31,185	24,511	24,511		
R-Squared	0.0355	0.0313	0.0525	0.0426		
Bank Fixed Effect	Yes	Yes	Yes	Yes		
MSA x Year Fixed Effect	Yes	Yes	Yes	Yes		

#### Tradeoff between operational slack and financial slack

- Rampini and Viswanathan (2010), Rampini, Sufi, and Viswanathan (2014)
  - o Tradeoff between risk management and financing for new investment
  - o CSR as a risk management tool (strategic CSR)?
  - → More costly when financially constrained (Xu and Kim 2021)

- Acharya, Almeida, Amihud, and Liu (2021)
  - o Tradeoff between financial risk management and operational resiliency
  - o Operational resiliency: avoid a failure to deliver on obligations to customers
- → After the crisis, financial risk management became critical for all banks
- → More pronounced trade-off between obligations to stakeholders and new investment

#### Spending more operating expenses, no slack for bad times?

Panel A: Non-Interest Expense / Total Assets

	All banks				10Bil. Above			
	Pre-Crisis	Crisis	Difference	_	Pre-Crisis	Crisis	Difference	
	0.028***	0.031***	0.004***	_	0.027***	0.031***	0.004***	
CSR D. = 0	(77.67)	(51.56)	(5.61)		0.027*** 0.031***  (29.19) (27.30)  0.032*** 0.031***  (20.77) (24.69)	(2.93)		
CCD D 1	0.030***	0.031***	0.001	_	0.032***	0.031***	-0.001	
CSR D. = 1	(40.32)	(39.01)	(0.72)		(20.77)	(24.69)	(-0.40)	
D:00	0.003***	-0.001	-0.003**	_	0.005***	0.000	-0.005**	
Difference	(3.46)	(-0.52)	(-2.50)		(2.82)	(-0.13)	(-2.09)	

Non-interest expenses divided by total assets

- H. CSR banks needed to spend more to be the "CSR" banks ex ante?
- Did not have slack ex-post?

#### **Excluding the write-offs of intangible assets**

Panel D: a + b + d / Total Assets

	All banks			10Bil. Above			
	Pre-Crisis	Crisis	Difference	Pre-Crisis	Crisis	Difference	
CCD D	0.028***	0.027***	0.000	0.027***	0.028***	0.001	
CSR D. = 0	(76.69)	(73.36)	(-0.44)	(28.36)	(32.85)	(0.39)	
COD D. 1	0.030***	0.028***	-0.002**	0.033***	0.030***	-0.003	
CSR D. = 1	(40.77)	(46.21)	(-2.47)	(19.76)	(23.01)	(-1.44)	
D:00	0.003***	0.000	-0.002**	0.005***	0.002	-0.004	
Difference	(3.48)	(0.58)	(-2.16)	(2.96)	(1.21)	(-1.47)	

- Intangible write-offs are from past business decisions
- H. CSR banks had a greater decrease in operating expenses, possibly more constrained

#### Looking at just salaries and benefits

Panel B: Salaries&employee benefits / Total Assets

	All banks			10Bil. Above			
	Pre-Crisis	Crisis	Difference	Pre-Crisis	Crisis	Difference	
CCD D	0.015***	0.015***	0.000	0.014***	0.015***	0.000	
CSR D. = 0	(74.98)	(73.15)	(-0.85)	(27.53) (28.82)	(0.31)		
CCR D = 1	0.016***	0.015***	-0.002***	0.017***	0.015***	-0.002*	
CSR D. = 1	(42.18)	(45.45)	(-3.40)	(20.95)	(22.80)	(-1.67)	
Difference	0.001***	0.000	-0.001***	0.002**	0.000	-0.002	
Difference	(3.79)	(-0.02)	(-2.79)	(2.44)	(0.34)	(-1.57)	

Seems to be the major factor of higher operating leverage Operational inflexibility → less lending? Conflicts among stakeholders?

Expenses squeezed more, but CSR ratings did not change much.

#### **Conclusion**

- CSR banks weren't socially responsible, actually the opposite.
- Note, CSR ratings were based on hard, quantifiable information, distorting managerial incentives (Edmans 2020)
- Erroneously measured CSR scores?
  - O Did not capture what's meant to do
  - Olt could be worse if these firms spend more to meet the standards to have higher ratings
- Tension between serving different stakeholders (Benabou and Tirole 2010)
  - O Employees vs borrowers?
  - O Ex-ante vs ex-post / observables vs non-observables?
  - O Harder to induce voluntary efforts on intangible, unquantifiable, unrealized factors?

The right metric should pin down the relevant stakeholders and reflect the scale of social impacts

- → Charitable giving volunteering activities
- → Q. Lower carbon emissions for everyone?

# Thank you

Panel B : By CSR1									
CSR1 = 1	Obs.	Mean	Median	Std.Dev.	p1	p25	p50	p75	p99
Bank-level Variables									
CSR1	59	0.03	0.02	0.02	0.02	0.02	0.02	0.05	0.11
CSR2	59	0.05	0.03	0.04	0.01	0.03	0.03	0.08	0.17
Total Assets (\$ bil.)	430	83.6	5.6	273.9	0.9	2.9	5.6	16.2	1351.5
Liquid Asset Ratio	430	0.24	0.23	0.11	0.06	0.17	0.23	0.30	0.57
RE Loan to Total Loan Ratio	430	0.70	0.75	0.16	0.26	0.62	0.75	0.80	0.97
CI Loan to Total Loan Ratio	430	0.19	0.17	0.11	0.02	0.12	0.17	0.21	0.56
NPL Ratio	430	0.02	0.01	0.03	0.00	0.00	0.01	0.03	0.14
Tier 1 Capital Ratio	430	0.11	0.11	0.03	0.03	0.10	0.11	0.13	0.20
Loan to Deposit Ratio	430	0.93	0.93	0.17	0.49	0.83	0.93	1.03	1.45
Bank-MSA-level Variables									
Small Business loan(\$ thousand)	18,182	26,912.0	5,088.0	60,540.6	25.0	1,457.0	5,088.0	21,996.0	376,009.0
Mortgage loan(\$ thousand)	18,182	74,465.0	8,698.5	201,106.6	31.0	1,502.0	8,698.5	43,386.0	1,251,354.0
Small Business loan growth	18,182	-0.01	0.03	0.85	-3.00	-0.28	0.03	0.30	2.65
Mortgage loan growth	18,182	0.14	0.00	1.24	-2.93	-0.45	0.00	0.51	4.63
CSR1 = 0	Obs.	Mean	Median	Std.Dev.	p1	p25	p50	p75	p99
Bank-level Variables							Pr-	P'-	Pro
CSR1	107	-0.01	-0.02	0.01	-0.05	-0.02	-0.02	0.00	0.00
CSR2	107	-0.03	-0.04	0.03	-0.11	-0.04	-0.04	0.00	0.00
Total Assets (\$ bil.)	761	13.3	3.3	34.9	0.9	2.1	3.3	8.7	189.3
Liquid Asset Ratio	761	0.25	0.23	0.11	0.07	0.17	0.23	0.30	0.58
RE Loan to Total Loan Ratio	761	0.72	0.73	0.14	0.38	0.63	0.73	0.83	0.98
CI Loan to Total Loan Ratio	761	0.17	0.16	0.09	0.02	0.09	0.16	0.21	0.43
NPL Ratio	761	0.02	0.01	0.03	0.00	0.00	0.01	0.02	0.15
Tier 1 Capital Ratio									0.20
*	761	0.11	0.11	0.03	0.03	0.10	0.11	0.13	
Loan to Deposit Ratio	761 761	0.11 0.94	0.11 0.95	0.03 0.16	0.03 0.47	0.10 0.85	0.11 0.95	1.03	1.44
Loan to Deposit Ratio  Bank-MSA-level Variables									1.44
									1.44 279,609.0
Bank-MSA-level Variables Small Business loan(\$ thousand)	761 13,003	0.94	0.95	0.16	0.47	0.85	0.95	1.03	
Bank-MSA-level Variables	761	0.94 25,439.5	0.95 4,556.0	0.16 52,221.0	0.47	0.85 702.0	0.95 4,556.0	1.03 23,986.0	279,609.0