Depositors Disciplining Banks: The Impact of Scandals

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December 2018

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Depositors Disciplining Banks

Geneva Summit 1



Over 700,000 People Demand Banks Stop Financing the Dakota Access Pipeline

While Trump, Energy Transfer Partners and Sunoco Logistics race to complete the pipeline, over 700,000 people say "No!" to the banks behind the project

Over 700,000 people have signed one of six petitions demanding that the banks financing the Dakota Access Pipeline (DAPL) remove their support of the project. The figure includes individuals who collectively report having over US\$2.3 billion invested in these banks through checking, mortgage, and credit card accounts, which they are ready to divest if the banks continue financing DAPL. Thousands have already closed their accounts at those banks, removing over US\$55 million and counting.

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Motivation

- Depositors serve a monitoring and disciplining role for banks.
- They discipline banks by either withdrawing deposits or by requiring higher interest rates (Martinez Peria and Schmukler, 2001; Maechler and McDill, 2006)
- So far, the attention has concentrated on **bank fundamentals**, such as perceived solvency and probability of default.
- Does this disciplining behavior hold for **other** sources of information?

Research Questions

• Do depositors react to information beyond financial fundamentals?

- Do depositors react to bank scandals?
- If yes, is it because of financial motives or something else, such as altruism?
- Do non-scandalous banks get rewarded by depositors?

Main Findings

- Banks who financed the highly controversial Dakota Access Pipeline, had significant **decreases** in deposit growth
- Effects are greater for branches located in **pipeline states** as well as **environmentally** and **socially** conscious counties
- Savings banks were among the main beneficiaries of this depositor movement
- On a global scale, deposit growth **decreases** when banks are involved in tax evasion, corruption or environmental scandals

Related Literature

Environmental, Social & Governance (ESG) Finance

- Extensive literature Krüger (2015); Dimson et al. (2015); Ferrell et al. (2016); Lins et al. (2017); Liang and Renneboog (2017); Servaes and Tamayo (2017); Kitzmueller and Shimshack (2012)...
- Contribution: Real ESG & Real Bottomline

Purpose of the Firm

- Hart and Zingales (2017) Should corporations maximize shareholder value or welfare?
- **Contribution:** Banks should condition corporate policies on the **non-financial preferences** of their creditors

Dakota Access Pipeline (DAPL)

- Grassroots movements in reaction to an approved pipeline project
- Pipeline begins in the **Bakken** shale oil fields in northwest North Dakota
- Continues to South Dakota, Iowa and ending in Illinois.
- Pipeline intended to cross ancient burial grounds and both the Missouri and Mississippi Rivers
- Movement drew in native americans (Standing Rock Sioux tribe), environmentalists and U.S. army veterans



Dakota Access Pipeline (DAPL)

- Project Financing: 17 banks ۰
- Banks with significant US branch level presence:
 - 1) Bank of Tokyo Mitsubishi UFJ
 - 2) BBVA
 - 3) BNP Paribas
 - 4) Citigroup
 - 5) SunTrust Robinson Humphrey
 - 6) TD Bank
 - 7) Wells Fargo
 - 8) Mizuho Bank
 - 9) SMBC
- Data: FDIC Summary of Deposits ۰
- Years: 2012 2017
- Branches: Approximately 100,000

Controls Detailed Controls



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Dakota Access Pipeline - Timeline of Events

2016 · · · · ·	April - Protests begin.
2016 · · · · ·	July - FDIC Data for 2016.
2016 · · · · ·	September - Banks are targeted.
2016 · · · · •	December - 1st Signforgood petition starts targeting DAPL project financing Banks.
2017 · · · · •	February - Petitions reach 700,000 people.
2017 · · · · •	June - 2nd Signforgood petition starts further targeting DAPL corporate financing banks.
2017 · · · · •	July - FDIC Data for 2017.

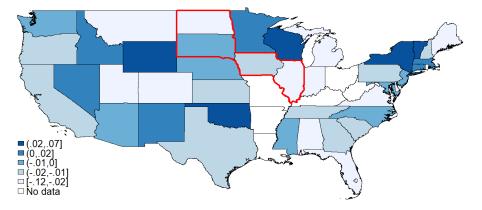
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Heat Maps - DAPL

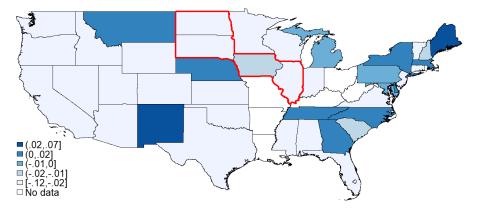
Figure: 2016 State-Average Adjusted Deposit Growth Rates for Treated Banks



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Heat Maps - DAPL

Figure: 2017 State-Average Adjusted Deposit Growth Rates for Treated Banks



Total Deposit Growth - Full Sample

	(1)	(2)	(3)
	Branch Total	Branch Total	Branch Total
	Deposit Growth	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)	(Wnsor. 01)
Financed DAPL * 2017	-0.018***	-0.022***	-0.015***
	(0.002)	(0.003)	(0.003)
Financed DAPL	-0.022***		
	(0.002)		
Observations	416,594	416,513	411,930
Controls	Yes	Yes	Yes
Branch FE	No	No	Yes
Bank FE	No	Yes	No
State*Year	Yes	Yes	No
County [*] Year	No	No	Yes
Years	All	All	All
Cluster	Branch	Branch	Branch
States	All	All	All

Economic Effect: 10,902 (treated branches) x 101\$ Mil. (average deposits per branch in 2016) x -0.015 (or -0.020) = **16.5\$** Bil.(or 22.0)

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- Is this a financial story?
 - Unlikely
 - Quarterly **uninsured deposit growth** rates show no changes Uninsured Deposits
 - Quarterly **deposit growth** rates reveal differential changes Total Deposits (Yearly Interactions)
 - Bank level **analyst reports** rarely mention the DAPL incident
 - Focus on **established branches** ¹
 - Depositors are insured by the FDIC up to at least **\$250,000**

¹all entities with over 1\$ billion in deposits, less than 100,000\$ in deposits or had been recently acquired, were removed from the analysis $\Box \mapsto \langle \Box \rangle \wedge \langle \Xi \rangle = 0$

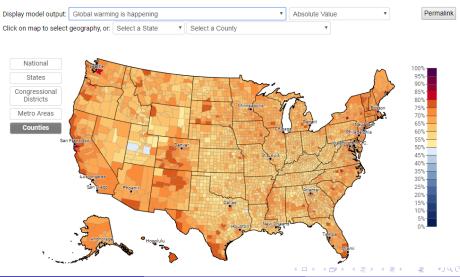
Total Deposit Growth - DAPL States

	(1)	(2)
	Branch Total	Branch Total
	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)
Financed DAPL * 2017 * DAPL State	-0.026**	-0.023*
	(0.012)	(0.012)
Observations	416,594	416,513
Controls	Yes	Yes
Bank FE	No	Yes
State*Year	Yes	Yes
Years	All	All
Cluster	Branch	Branch
States	All	All

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Estimated % of adults who think global warming is happening, 2016



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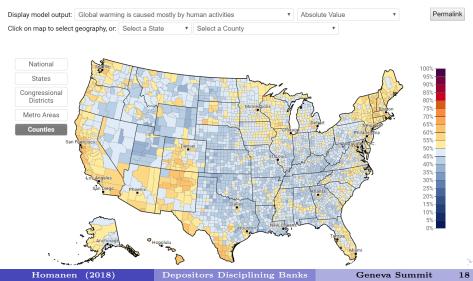
Depositors Disciplining Banks

	(1)	(2)
	Branch Total	Branch Total
	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)
Happening 70 * Financed DAPL * 2017	-0.013***	-0.019***
	(0.005)	(0.005)
Observations	$398,\!980$	395,158
Controls	Yes	Yes
Bank Fe	Yes	No
Branch FE	No	Yes
Year FE	Yes	No
State*Year	No	Yes
Cluster	Branch	Branch
States	All	All

Controls: 1) Percentage of adults with a baschelor's degree or higher, 2012-2016 2) Percentage of the county that voted for Barack Obama in the 2012 presidential elections 3) County population, 2014

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Estimated % of adults who think global warming is mostly caused by human activities, 2016



	(1)	(3)
	Branch Total	Branch Total
	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)
Human 55 * Financed DAPL * 2017	-0.010**	-0.016***
	(0.005)	(0.005)
Observations	398,980	$395,\!158$
Controls	Yes	Yes
Bank Fe	Yes	No
Branch FE	No	Yes
Year FE	Yes	No
State*Year	No	Yes
Cluster	Branch	Branch
States	All	All

Controls: 1) Percentage of adults with a baschelor's degree or higher, 2012-2016 2) Percentage of the county that voted for Barack Obama in the 2012 presidential elections 3) County population, 2014

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Social Capital

	(1)	(2)
	Branch Total	Branch Total
	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)
Ln (Number of Non-Profits) * Financed DAPL * 2017	-0.005***	-0.006***
	(0.002)	(0.002)
Observations	400,026	396,187
Controls	Yes	Yes
Bank Fe	Yes	No
Branch FE	No	Yes
Year FE	Yes	No
State*Year	No	Yes
Years	All	All
Cluster	Branch	Branch
States	All	All

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About this action



The Seeding Sovereignty Project, born at Standing Rock to fight the Dakota Access Pipeline, empowers the Indigenous youth movement for an environmentally just future everywhere.

The Seeding Sovereignty Project is launching the "Own It" Campaign:

- Water is scarce
- Money is scarce
- Climate change is real and time is running out.

If you care about the planet you have to ask yourself:

What do you stand for?

Who do you stand with?

The Own It Campaign empowers young people everywhere to use their green capital to drive the change from fossil fuel to clean energy.



PLEDGE TO DIVEST

The banks below are currently investing in the Dakota Access Pipeline. Is your bank on the list?

Your	Bank	
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MAKE THE PLEDGE

PREPARE TO TRANSFER YOUR MONEY

Find a bank or local credit union that will use your money for causes you can be proud of.

Find a Credit Union

Zip Code 5 Miles • SEARCH

Or

Move your money to one of these ethical financial institutions:

- List of Ethical Banks
- Better World Handbook Socially Responsible Banks - US
- Green America Guide to Socially Responsible Investing
- Ethical Bank Comparison UK
- Ethical Banking Advice UK

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Savings Banks

	(1) Branch Total	(2) Branch Total	(3) Branch Total
VARIABLES	Deposit Growth (Wnsor. 01)	Deposit Growth (Wnsor. 01)	Deposit Growth (Wnsor. 01)
Savings Bank * 2017 * Proportion of DAPL Banks	0.077*	0.135***	0.140**
	(0.042)	(0.051)	(0.071)
Observations	416,513	411,930	408,123
Controls	Yes	Yes	Yes
Branch FE	No	Yes	No
Bank FE	Yes	No	No
State*Year	Yes	No	No
Year*County	No	Yes	Yes
Bank*Year	No	No	Yes
Years	All	All	All
Cluster	Branch	Branch	Branch
States	All	All	All

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Credit Unions

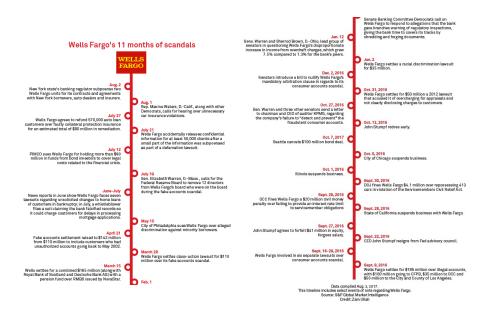
	(1)	(2)	(3)	(4)
	Branch Total	Branch Total	Branch Total	Branch Total
	Deposit Growth	Deposit Growth	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)	(Wnsor. 01)	(Wnsor. 01)
	With Cree	dit Unions	Without Cr	edit Unions
Financed DAPL * 2017	-0.014***	-0.013***	-0.012***	-0.011***
	(0.003)	(0.003)	(0.003)	(0.003)
Financed DAPL	0.002	-0.032	0.000	-0.035
	(0.043)	(0.048)	(0.043)	(0.048)
Observations	443,145	442,521	412,562	411,935
Branch FE	Yes	Yes	Yes	Yes
State*Year	Yes	No	Yes	No
County*Year	No	Yes	No	Yes
Years	All	All	All	All
Cluster	Branch	Branch	Branch	Branch
States	All	All	All	All

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Wells Fargo

• Wells Fargo - Wells Fargo was going through a series of corruption scandals unrelated to the DAPL incident. The bank had created (without customer's permission) millions of fraudulent accounts as sales staff desperately tried to hit unreasonable sales targets. Furthermore, thousands of auto loan customers were charged for car insurance that they did not need (Fox and Duren, 2017).



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No Wells Fargo

	(1)	(2)
	Branch Total	Branch Total
	Deposit Growth	Deposit Growth
VARIABLES	(Wnsor. 01)	(Wnsor. 01)
Financed DAPL * 2017	-0.031***	-0.021***
	(0.004)	(0.005)
Observations	386,975	382,411
Controls	Yes	Yes
Branch FE	No	Yes
Bank FE	Yes	No
State*Year	Yes	No
County*Year	No	Yes
Years	All	All
Cluster	Branch	Branch
States	All	All

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Defund DAPL - Inclusion of Corporate Financing Banks

Banks Funding DAPL

The oil companies behind the pipeline are rich, but they aren't rich enough to shell out the whole amount needed to build the pipeline at once.

If Citibank, the Bank of Tokyo-Mitsubishi, Mizuho Bank and TD Securities were to hold back remaining \$1.4 billion the cash for the pipeline could dry up and the project could come grinding to a potentially permanent halt.

Please contact these banks today.

Citibank (Citigroup)* TD Securities* The Bank of Tokyo-Mitsubishi UFJ* Mizuho Bank*

Wells Fargo BNP Paribas DNB Capital SunTrust Sumtrust Sumtrust ABN Amro Capital Intesa SanPaolo ING Bank Natixis CagarnLB ICBC London Societe General

Scotiabank Citizens Bank Comerica Bank U.S. Bank PNC Bank Barclays JPMorgan Chase Bank of America Deutsche Bank Compass Bank

Credit Suisse DNB Capital/ASA Royal Bank of Canada UBS Goldman Sachs Morgan Stanley Origin Bank (formerly Community Trust) HSBC Bank

*primary leaders of the key DAPL loan

Further Protests - Corporate Financing Banks

	(1)	(2)	-		
	Branch Total	Branch Total		(1)	(2)
	Deposit Growth	Deposit Growth		Branch Total	Branch Total
VARIABLES	(Wnsor. 01)	(Wnsor. 01)		Deposit Growth	Deposit Growth
VARIADLES	(wilsor. 01)	(winsor. 01)	VARIABLES	(Wnsor. 01)	(Wnsor. 01)
Financed DAPL * 2017	-0.008***	-0.008***	Happening 70 * Financed DAPL * 2017	-0.002	-0.001
Thianeed Diff E 2011	(0.002)	(0.002)	happening to Thanced Diff 2011	(0.004)	(0.004)
	(0.002)	(0.002)		(0.00-)	(0100-1)
Observations	410 504	410 519	Observations	395,158	395,158
	416,594	416,513	Controls	Yes	Yes
Controls	Yes	Yes	Bank Fe	No	No
Bank FE	No	Yes	Branch FE	Yes	Yes
State*Year	Yes	Yes	Year FE	Yes	Yes
State Ital	105	165	State*Year	No	Yes
	(1)	(2)		(1)	(2)
	Branch To	tal Branch Total		Branch Tota	l Branch Total
	Deposit Gro	owth Deposit Growth		Deposit Grow	
VARIABLES	(Wnsor. 0		VARIABLES	(Wnsor. 01)	(Wnsor. 01)
			Ln(Number of Non-Profits) * Financed DAPL *	2017 -0.003**	-0.003**
Financed DAPL * 2017 * DAPL				(0.001)	(0.002)
	(0.007)	(0.009)	Observations	400.026	392.560
Financed DAPL * 2016 * DAPL		0.000	Controls	400,020 Yes	392,300 Yes
	(0.007)	(0.009)	Bank Fe	Yes	No
			State FE	No	No
Observations	416,513		State [*] Year	No	Yes
Controls	Yes	Yes	Bank*Year	No	Yes
Branch FE	No	Yes			
Bank FE	Yes	No			
State*Year	Yes	No			
County*Year	No	Yes			

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Aftermath

2017 · · · · •	February - Seattle cuts ties with Wells Fargo PanksTalking.org
2017 · · · · ·	February - ABN Amro and ING re-evaluate commitment.
2017 · · · · •	February - Nordea excludes three companies behind DAPL.
2017 · · · · ·	March - ING sells stake in the DAPL loan.
2017 · · · · ·	March - DNB & BNP Paribas sell their stakes.
2017 · · · · ·	March - San Francisco moves to divest from DAPL companies.
2017	March - Norwegian pension funds divested from DAPL companies.
2017	May - U.S. Bank stops financing pipeline construction (later retracts)
2017	June - L.A. moves to divest from Wells Fargo.
2017	November - Norway's Wealth fund begins divesting from oil shares.
2018 · · · · •	March - Citizens Bank sell their stakes.
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Global Scandals



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Data - Quarterly

Scandals

- ▶ Tax Evasion Tax Justice Network, ICIJ
- ▶ Environment BankTrack, Global Witness, Greenpeace, Oxfam
- ▶ Corruption BankTrack, Global Witness

2 Banks

▶ Deposits and Controls - SNL Financial

Data - Quarterly

Scandals

- ▶ Tax Evasion Tax Justice Network, ICIJ
- ▶ Environment BankTrack, Global Witness, Greenpeace, Oxfam
- ▶ Corruption BankTrack, Global Witness

Globally significant scandals

- ▶ 26 unique scandals
- Approximately 140 bank-scandals
- ▶ 150 quarter-bank-scandals

Methodology

• Baseline regression

 $Deposits_{it} = \alpha_0 + \beta Scandal_{it} + \gamma_1 Controls_{it} + \gamma_2 FixedEffects$

• **RE & FE** model with varying fixed effects (Year, Country, Country*Year, Bank, Quarter Number). Standard Errors clustered at the bank level

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max	(6) p25	(7) p50	(8) p75
Total Deposit Growth (Winsor .01)	36.431	0.0139	0.0672	-0.196	0.486	-0.0156	0.00753	0.0339
Total Assets (Winsor .01)	36,431	$2.102\mathrm{e}{+07}$	$7.271\mathrm{e}{+07}$	36,885	4.717e + 08	$301,\!862$	$856,\!106$	4.824e + 06
Total Equity / Total Assets (Winsor .01)	36,431	10.12	3.865	2.510	35.14	8.029	9.805	11.76
NPLS / Total Loans (Winsor .01) ROAA (Winsor .01)	$36,431 \\ 36,431$	3.500 0.469	3.648 1.176	0 -6.183	17.62 3.897	$1.106 \\ 0.261$	2.334 0.633	4.470 0.963

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Main Results - Total Deposit Growth

	(1)	(2)	(3)	(4)	(5)	(6)
	Total Deposit	Total Deposit	Total Deposit	Total Deposit	Total Deposit	Total Deposit
	Growth	Growth	Growth	Growth	Growth	Growth
VARIABLES	(Winsor .01)	(Winsor .01)	(Winsor .01)	(Winsor .01)	(Winsor .01)	(Winsor .01)
Scandal Start	-0.003 (0.007)	-0.004 (0.007)				
L. Scandal Start			-0.021*** (0.007)	-0.015** (0.006)		
L2. Scandal Start			· · · ·	· · · ·	-0.005	-0.002
					(0.009)	(0.010)
Observations	36,431	36,431	36,431	36,431	36,087	36.087
Number of Banks	2,110	2,110	2,110	2,110	2,102	2,102
Country	OECD	OECD	OECD	OECD	OECD	OECD
Bank Controls	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	No	Yes	No	Yes	No
Year FE	Yes	No	Yes	No	Yes	No
Country x Year	No	Yes	No	Yes	No	Yes
Quarter Num FE	Yes	Yes	Yes	Yes	Yes	Yes
Years	>2009	>2009	>2009	>2009	>2009	>2009
Cluster	Bank	Bank	Bank	Bank	Bank	Bank
Standard errors are in parentheses and clustered at the bank level *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$						
		p<0.	01, ~ p<0.05, *	p<0.1 ∢ □ ▶		≣। ≡ • ० ०
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Main Results - Total Deposit Growth

	(1)	(2)	(3)	(4)
	Total Deposit Growth	Total Deposit Growth	Total Deposit Growth	Total Deposit Growth
VARIABLES	(Winsor .01)	(Winsor .01)	(Winsor .01)	(Winsor .01)
L. Tax Evasion Start	-0.018*			-0.022**
	(0.010)			(0.011)
L. Corruption Start	(0.020)	0.014		0.016
		(0.011)		(0.012)
L. Environment Start			-0.027***	-0.026***
			(0.010)	(0.010)
Observations	36,431	36,431	36,431	36,431
Number of Banks	2,110	2,110	2,110	2,110
Country	OECD	OECD	OECD	OECD
Bank Controls	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Quarter Num FE	Yes	Yes	Yes	Yes
Years	>2009	>2009	>2009	>2009
Cluster	Bank	Bank	Bank	Bank

Standard errors are in parentheses and clustered at the bank level

*** p<0.01, ** p<0.05, * p<0.1

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Conclusion

- Banks who financed the DAPL, had significant **decreases** in deposit growth for branches located closest to the pipeline.
- Effects are greater for branches located in **environmentally and socially conscious** counties and **savings banks** were among the main beneficiaries of this depositor movement
- On a global scale, deposit growth **decreases** when banks are involved in tax evasion, corruption or environmental scandals
- This is consistent with the disciplining and monitoring role of depositors, while extending to **non-financial** conditions
- The results show new and surprising, yet important disciplinary channel for bank behavior

Conclusion

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- The results show new and surprising, yet important disciplinary channel for bank behavior

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Thank You

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