

Wealth Taxes and Firms' Capital Structures: Credit Supply and Real Effects*

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Introduction

- Taxing wealth is a tax policy used by governments from both advanced and emerging economies.
- Taxing wealth is intended to increase revenues, substitute other taxes, or reduce wealth inequality (Piketty, 2014; Perret, 2018; Saez and Zucman, 2019)
- However, taxing wealth has effects on efficiency, investment, and economic growth (Hansson, 2010; Atkinson and Stiglitz, 2015; Scheuer and Slemrod, 2021)
- Besides of increasing tax avoidance, evasion, and risks of capital flight (OECD, 2018).
- Behavioral economics of wealth taxes focused on advanced economies (Seim, 2017; Jacobsen et al., 2020; Advani and Tarrant, 2021; Brulhart et al., 2022).
- Corporate income tax affects the **firms' capital structures** by increasing leverage (Heider and Ljungqvist, 2015)
- Corporate income taxes on **banks** increase leverage, resulting in lower credit supply to firms affecting their debt financing and investment decisions (Sobiech et al., 2021)
- **Limited evidence on the financial and real effects from wealth taxes on SMEs**

- Wealth taxes in OECD countries usually on individuals, less on corporations (i.e., Belgium, Colombia, Norway, Luxemburg)

Wealth tax revenue as % of GDP in OECD countries

Country	Taxpayers	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Belgium	Indiv&Corp	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
Canada	Corporate	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1										
Colombia*	Indiv&Corp	0,2	0,1	0,1	0,3	0,7	0,4	0,4	0,7	0,6	0,6	0,5	0,7	0,5	0,4	0,0	0,1	0,1	0,1
Finland	Individuals	0,1	0,1																
France	Individuals	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1
Germany	Corporate												0,1						
Greece	Individuals	0,5	0,5	0,5	0,5	0,5	0,5	0,6	0,6	0,6	0,6	0,6	0,6	0,7	0,7	0,7	0,7	0,7	---
Hungary	Individuals							0,5	0,5	0,5	0,4	0,4	0,4	0,2	0,1	0,1	0,1	0,2	0,1
Iceland	Individuals	0,4	0,3					0,2	0,4	0,5	0,5	0,5							
Luxemburg**	Indiv&Corp	2,0	2,3	2,3	2,3	1,8	1,8	2,0	1,9	1,9	2,0	2,1	2,4	2,5	2,6	2,8	3,0	2,9	3,0
Norway***	Indiv&Corp	0,6	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,6	0,6	0,6	0,5	0,5
Spain	Individuals	0,2	0,2	0,2	0,2	0,3	0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
Switzerland	Individuals	1,2	1,2	1,2	1,2	1,1	1,2	1,1	1,1	1,1	1,1	1,2	1,2	1,3	1,3	1,3	1,4	1,4	1,4

Source: <https://stats.oecd.org/index.aspx?DataSetCode=REV>. Notes: Level of government: Federal or Central government. Tax revenue: 4200 Recurrent taxes on net wealth. Indicator: Tax revenue as % of GDP. *The wealth tax on corporations and individuals was in place up to 2017. Since the 2018 tax reform (law 1943) only individuals are subject to it. ** The wealth tax on corporations and individuals was in place up to 2005. Since 2006 only resident companies and non-resident companies are subject to it. *** Almost all corporations are exempt from wealth tax, except some institutional holders.

- Wealth tax revenues are greater for countries with corporations as taxpayers: Colombia in the top, following Luxemburg and Switzerland.

Wealth tax revenues as % of total tax revenues in OECD countries

Country	Taxpayers	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Belgium	Indiv&Corp	0,1	0,1	0,1	0,2	0,2	0,1	0,2	0,2	0,2	0,3	0,3	0,4	0,6	0,5	0,5	0,5	0,5	0,5
Canada	Corporate	0,8	0,7	0,7	0,6	0,4	0,4	0,3	0,2										
Colombia*	Indiv&Corp	0,8	0,8	0,7	1,4	3,5	2,1	2,0	3,6	3,2	3,0	2,8	3,3	2,7	2,2	0,2	0,4	0,5	0,5
Finland	Individuals	0,2	0,2																
France	Individuals	0,4	0,4	0,5	0,5	0,5	0,4	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,2	0,2	0,2	0,2
Germany	Corporate												0,3						
Greece	Individuals	1,6	1,7	1,6	1,6	1,6	1,8	1,8	1,8	1,8	1,7	1,6	1,7	1,7	1,7		1,6	1,8	---
Hungary	Individuals							1,3	1,3	1,2	1,1	1,1	1,0	0,4	0,3	0,3	0,3	0,6	0,3
Iceland	Individuals	1,0	0,7					0,7	1,1	1,5	1,3	1,4							
Luxemburg**	Indiv&Corp	5,4	6,2	6,6	6,5	5,2	5,1	5,5	5,4	5,3	5,5	5,8	7,0	7,1	7,1	7,1	7,5	7,5	7,7
Norway***	Indiv&Corp	1,3	1,3	1,2	1,3	1,3	1,3	1,2	1,2	1,3	1,3	1,4	1,2	1,4	1,5	1,4	1,5	1,4	1,2
Spain	Individuals	0,5	0,5	0,6	0,6	0,8	0,2	0,2	0,2	0,4	0,6	0,5	0,5	0,5	0,5	0,5	0,5	0,6	0,5
Switzerland	Individuals	4,7	4,5	4,6	4,7	4,5	4,5	4,4	4,2	4,2	4,3	4,5	4,5	4,8	4,8	4,8	5,0	5,1	4,9

Source: <https://stats.oecd.org/index.aspx?DataSetCode=REV>

Notes: Level of government: Total (Supranational + Federal or central government + State/regional + Local government + Social security funds). Tax revenue: 4200 Recurrent taxes on net wealth. Indicator: Percentage of total tax revenues

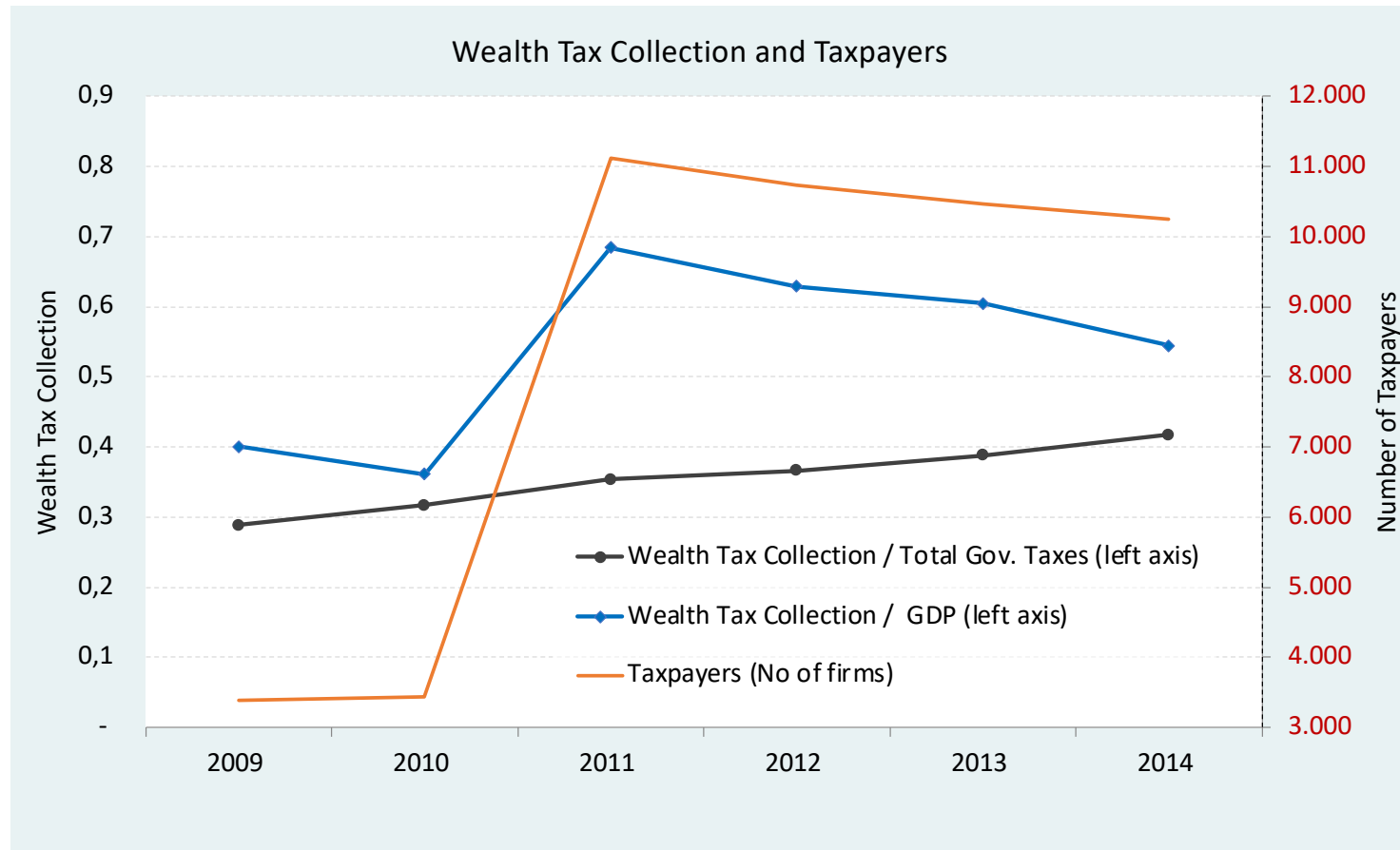
* The wealth tax on corporations and individuals was in place up to 2017. Since the 2018 tax reform (law 1943) only individuals are subject to it. ** The wealth tax on corporations and individuals was in place up to 2005. Since 2006 only resident companies and non-resident companies are subject to it. *** Almost all corporations are exempt from wealth tax, except some institutional holders.

This Paper

- What are the financial and real effects of wealth taxes on SMEs?
- We study the wealth tax reform (i.e., *Impuesto al Patrimonio*) implemented in Colombia in December 2010 (effective by Jan/2011)
- Reform: **one-off wealth tax** on firms and individuals with wealth between COP 1 billion (USD 285,000) and COP 3 billion (USD 860,000) (**SMEs as new taxpayers**)
- D-in-D models to evaluate the effects of the wealth tax on new taxpayers' firms relative to non-taxpayers' firms on **bank credit, trade credit and real outcomes**
- Unique administrative dataset composed by:
 - Corporate credit (bank-firm-loan level data, credit registry)
 - Firms' balance-sheet data (regulatory firm-level data)
 - Banks' balance-sheet data (regulatory bank-level data)
 - Confidential **tax reports** at the firm and bank level from Tax Authority
 - The tax information at the firm level allows us to accurately identify taxpayers and non-taxpayers of the wealth tax

- The wealth tax reform was successful in increasing the government's revenues and the tax base: Gov. Rev. \uparrow 90%, taxpayer firms \uparrow 223%

Wealth tax collection in Colombia

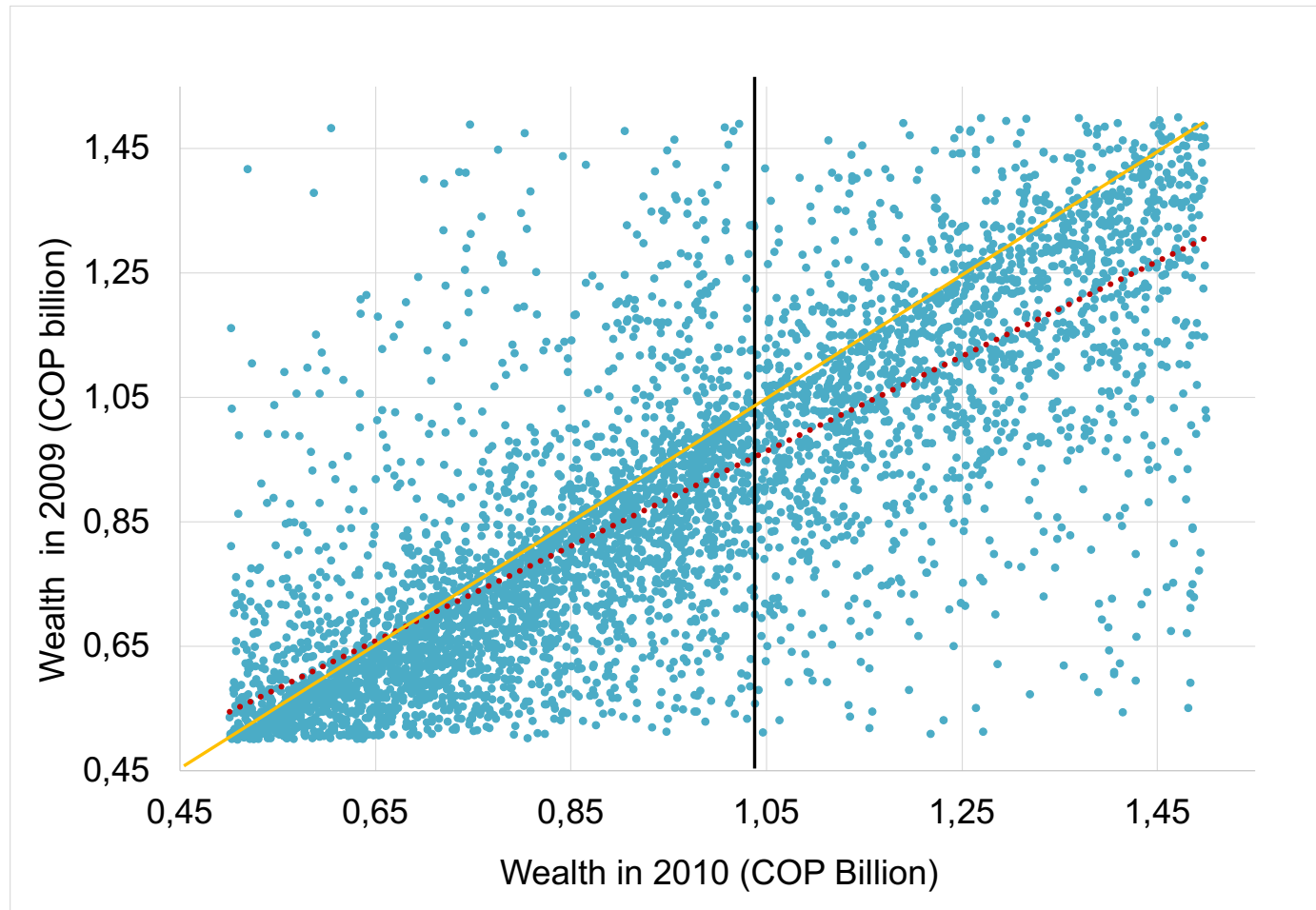


Source: DIAN and Ministry of Finance.

Background

- The **2010 wealth tax reform** is caused only once (**one off tax**) and on financial and non-financial firms' and individuals' that, on Jan/01/2011, had a net wealth equal or above COP 1 billion (b).
- The **tax base was defined as assets minus liabilities** (including debt) and discounting the value of shareholdings on national corporations.
- No tax on **dividends**
- The tax had to be paid in 8 equal installments during 2011 to 2014.
- The reform created a **progressive tax system** in which each tax bracket has a different statutory tax rate:
 - 1.0%, if COP 1 b (USD 0.5 million) \leq net wealth \leq COP 2 b (USD 1 million)
 - 1.4%, if COP 2 b < net wealth \leq COP 3 b (USD 1.6 million)
 - 2.4%, if COP 3 b < net wealth \leq COP 5 b (USD 2.6 million)
 - 4.8%, if net wealth > COP 5 b
- Introduced a 25% surcharge on the tax rate of the COP 3 b cutoff.
- **New taxpayers** are firms with net wealth between COP 1 b and COP 3 b (**SMEs**)

- Firms with wealth above the new tax threshold (COP 1,0 b) reduced their wealth in 2010 compared to the previous year (↑ dividends payout)



Notes: Figure shows the level of wealth at the firm-level defined as total assets minus total liabilities in 2009 (horizontal axis) and 2010. Vertical line corresponds to the wealth tax threshold (COP 1,0 billion). The sample includes firms with wealth between COP 0,5 billion and COP 1,5 billion. Yellow line is the 45-degree trend-line and the red dotted line is the observed linear relationship. Source: Authors' calculations.

Preliminary Findings

- The wealth tax on SMEs conducted to a **decline in the accumulation of wealth** (dividends payout) implying higher leverage
- We find lower bank credit and significantly higher loan rates, especially for high-leveraged taxpayers.
 - **Channel:** Reallocation of credit within the SMEs segment (i.e., preference for less leveraged-firms, **less bank risk taking**)
- Affected firms increased the reliance on trade credit as a **potential substitution of bank credit**.
- The new taxpayer firms exhibited **substantial real effects**, especially those with high leverage: lower indebtedness, income, investment, and capital accumulation
 - **Channel:** Trade credit is not a perfect substitute of bank credit: **lower amount** (inputs vs. working capital) and **less maturity** (3-6 months vs. 6-24 months)
- **Taxing wealth of SMEs has significant financial and real distortions as those firms are highly dependent on bank credit.**

Related Literature and Contributions

- Corporate taxes and firms' leverage (Miller, 1977; Gertler and Hubbard, 1990; Rajan and Zingales, 1995; Faccio and Xu, 2015, Heider and Ljungqvist, 2015).
- Corporate taxes, banks' funding cost, and firms' capital structures (Gambacorta et al., 2017; Horváth, 2020; Bremus et al., 2020)
- Bank taxation and corporate credit (Sobiech et al., 2021)
- SMEs and bank credit dependency (Berg et al., 2018; Delis et al., 2021)
- Trade credit and bank credit during bank liquidity shocks (Hardy et al., 2022; Amberg et al., 2021; García and Montoriol, 2013; Restrepo, et al., 2019)
- Wealth taxes and real effects (Piketty, 2014; Perret, 2018; Saez and Zucman, 2019; Guvenen et al., 2019; Adam and Miller, 2021; Scheuer and Slemrod, 2021).
- Personal wealth taxes in Colombia linked to the Panama Papers (i.e., the offshoring to Colombia's most relevant tax havens) (Londoño and Ávila, 2021; 2023)
- **We extend this literature by showing the financial and real effects from wealth taxes on SMEs**
 - Reallocation of bank credit and reliance on trade credit (credit substitution)
 - Higher real effects from wealth taxes on high-leveraged firms (bank dependent)

Data

- We employ four administrative data sources:
 1. The universe of corporate loans (credit registry data) at the **bank-firm-loan level**
 - Sample: bank-firm-quarter loans among 28 banks with 5,320 firms (SMEs)
 - 71,406 observations spanned during the period 2009-2012 (SFC)
 2. Regulatory data on **firms' balance sheet** including financial statements (SS)
 - Firm-year level financial information on: Assets, Liabilities, Capital, Debt, **Leverage**, Investments, Revenues and **Trade Credit (credit with suppliers)**
 3. **Banks' balance-sheet** data from SFC
 - Measures of capitalization, liquidity, etc., at the bank-quarter level (252 obs).
 4. Data on **tax reports** at the bank and firm-level from DIAN
 - Taxpayers and amount paid by firm id (confidential data)
- **Treatment and control groups are defined using both the firms' liquid capital (wealth) and the tax reports of the taxpayer firms**

Bank Credit

- We analyze the effects of the wealth tax reform on the **supply of bank credit**.
- These SMEs **neither** issue bonds, stocks, **nor** access to international credit markets, thereby they **depend on bank credit and trade credit**
- We use a D-in-D model to identify the effect of the change in the wealth tax on the **supply of bank credit**
 - We compare credit conditions to firms subject to the tax (treated) and those that were not subject to the tax, but have similar characteristics (control)
 - The sample is restricted to firms with **multiple banking relationships** to allow firms to substitute credit across banks ([Khwaja and Mian, 2008](#)).
 - Region-Time and Industry-Time FE are included to control for demand ([Jiménez et al., 2014](#), [Degryse et al., 2020](#))

Bank Credit and Wealth Taxes: Specification

$$Credit_{f,b,q} = \alpha + \beta_1 Post_q + \beta_2 Treated_f * Post_q + \beta_3 Treated_f * Post_q * High-Leverage_{f,q-1} + \beta_4 Firm_{f,q-1} + \gamma_b + \gamma_{b,q} + \gamma_{s,q} + \gamma_{r,q} + e_{f,b,q} \quad (1)$$

- $Credit_{f,b,q}$ are loan outcomes at the bank-firm-quarter level
 - Loan volume $_{f,b,q}$ is the log of credit amount (COP m) granted by bank b to firm f at time q
 - Loan rate $_{f,b,q}$ is the loan rate (in %) charged by bank b to firm f at time q
- $Post_q$ is 1 if the obs. is between 2011q1 and 2012q4 and 0 for 2009q1 to 2010q4
- $Treated_f$ is 1 if the firm's equity is between COP 1 b and COP 1.5 b (and subject to the wealth tax since 2011q1) and 0 if the firm's equity is between COP 500 m and COP 999 m
- $High-Leverage_{f,q-1}$ is 1 if the firm has a Debt-to-Cash ratio greater than p75, and 0 otherwise (alternative leverage measures, [Mian and Sufi, 2007](#))
- $Firm_{f,q-1}$ are firm characteristics (size, assets, income, liabilities, trade, etc.) lagged one period
- Bank FE are included to control for unobserved heterogeneity
- Bank*Firm FE are included to control for bank-firm relationships
- Region*Time FE and Sector*Time FE to control for demand at the region and industry level.

- The wealth tax on SMEs is associated with lower bank credit, especially for high-leveraged taxpayer firms.

Bank credit and the wealth tax

VARIABLES	(1)	(2)	(3)	(4)
	Log credit _{b,f,q}	Log credit _{b,f,q}	Log credit _{b,f,q}	Log credit _{b,f,q}
Post _q	0.0836 (0.0578)	0.0825 (0.0664)		
⇒ Post _q x Treated _f	-0.0794*** (0.0252)	-0.0871*** (0.0240)	-0.0783*** (0.0169)	-0.0632*** (0.0174)
Treated _f	0.1232*** (0.0263)	0.1371*** (0.0221)	0.1366*** (0.0234)	0.1372*** (0.0248)
⇒ High-Leverage _{f,q-1} x Post _q x Treated _f		-0.0243*** (0.0553)	-0.0214*** (0.0032)	-0.0207*** (0.0022)
High-Leverage _{f,q-1}	-0.0934** (0.0322)	-0.0891* (0.0312)	-0.0827* (0.0308)	-0.0973*** (0.0301)
Observations	71,406	71,406	71,406	71,406
R-squared	0.47	0.47	0.48	0.51
Firm Controls	YES	YES	YES	YES
Bank FE	NO	YES	YES	YES
Bank-Time FE	NO	YES	YES	YES
Region-Time FE	NO	NO	YES	NO
Region-Sector-Time FE	NO	NO	NO	YES

Robust standard errors clustered at the bank and quarter level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

- The wealth tax on SMEs is associated with significantly higher loan rates, especially for high-leveraged taxpayer firms.

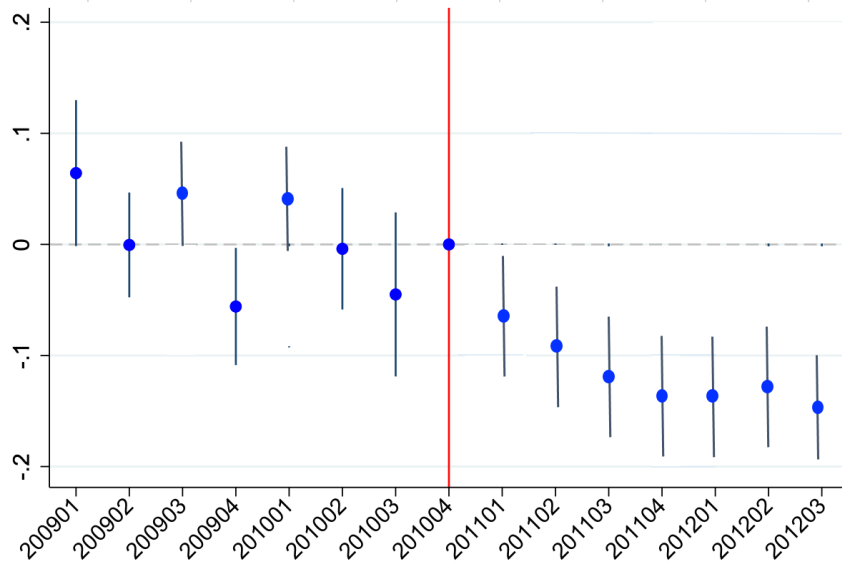
Loan rates and the wealth tax

VARIABLES	(1)	(2)	(3)	(4)
	Loan Rate _{b,f,q}	Loan Rate _{b,f,q}	Loan Rate _{b,f,q}	Loan Rate _{b,f,q}
Post _q	1.1173*** (0.0278)	1.1265*** (0.0352)		
⇒ Post _q x Treated _f	0.4722*** (0.1447)	0.4943*** (0.1530)	0.3742** (0.1418)	0.3481*** (0.1161)
Treated _f	-1.1394*** (0.3424)	-1.1436*** (0.3824)	-1.5812*** (0.3002)	-1.5941*** (0.2210)
⇒ High-Leverage _{f,q-1} x Post _q x Treated _f		0.3631*** (0.0724)	0.3114*** (0.0917)	0.3385*** (0.0902)
High-Leverage _{f,q-1}		0.1631* (0.0823)	0.1745* (0.0804)	0.1831** (0.0912)
Observations	71,406	71,406	71,406	71,406
R-squared	0.41	0.41	0.42	0.43
Firm Controls	YES	YES	YES	YES
Bank FE	NO	YES	YES	YES
Bank-Time FE	NO	NO	YES	YES
Region-Time FE	NO	NO	YES	NO
Region-Sector-Time FE	NO	NO	NO	YES

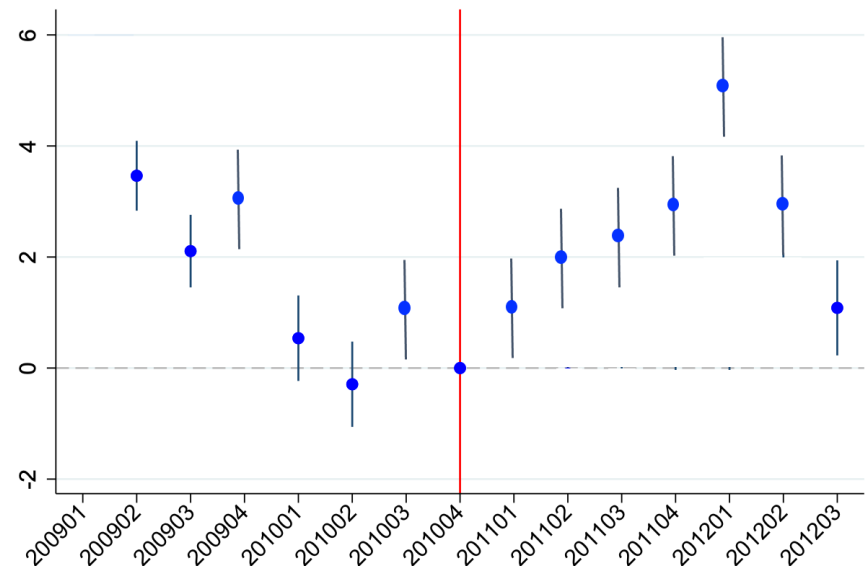
Robust standard errors clustered at the bank and quarter level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

- After the implementation of the wealth tax reform, banks reduced the supply of credit to affected firms and increased loan rates

Panel A. Loan Volume



Panel B. Loan Rates



Notes: The figure displays the coefficients of the interaction of Post*Treated at each quarter around the wealth tax reform using a similar specification than Eq. (1). Loan value (measured in COP) (Panel A) and loan rates (measured in percent) (Panel B). We exclude the quarter prior to the implementation of wealth tax reform—2010Q4—so that all coefficients of interest are estimated relative to that quarter. The vertical bar in all panels includes the quarters around the implementation of the wealth tax reform. Standard errors are double clustered at the firm-bank and quarter level. The vertical bars display the 95 percent confidence levels. Source: Authors' estimates.

Trade credit

- We evaluate whether **trade credit** (non-financial firm-to-firm credit) increased as a source of financing among affected firms
 - SMEs tend to rely on trade credit, especially those financially constrained firms
 - In trade credit, goods (inputs) act as collateral and there are less information asymmetries than in bank credit ([Klapper, Laeven and Rajan, 2011](#))
 - Trade credit is used for firms to cope with bank liquidity shocks ([García and Montoriol, 2013](#); [Restrepo, et al., 2019](#))
 - **However, trade credit has lower maturity and is subject to inputs (no working capital)**

Trade credit: Specification

$$\text{Trade Credit}_{f,y} = \alpha + \beta_1 \text{Post}_y + \beta_2 \text{Treated}_f * \text{Post}_y + \beta_3 \text{Treated}_{f,y} * \text{Post}_y * \text{High-Leverage}_{f,y-1} + \gamma_f + \gamma_{s,y} + \gamma_{r,y} + e_{f,s,y} \quad (2)$$

- $\text{Trade Credit}_{f,y}$ is the amount of credit contracted by firm f with firms at year y
- Post_y is 1 if the obs. is between 2011 and 2012 and 0 during 2009 and 2010
- $\text{Treated}_{f,y}$ is 1 if the firm's wealth is between COP 1 b and COP 1.5 b (and subject to the wealth tax since 2011) and 0 if the firm's wealth is between COP 500 m and COP 999 m
- $\text{High-Leverage}_{f,q-1}$ is 1 if the firm has a Debt-to-Cash ratio greater than p75, and 0 otherwise
- The model includes Firm Controls, Sector-Time FE, and Region-Time FE.

- Affected firms increased the reliance on trade credit (i.e., bank credit substitution). However, this is not the case for high-leveraged taxpayers.

Trade credit among firms and the wealth tax

VARIABLES	(1)	(2)	(3)
	Log(Trade Credit _{f,y})	Log(Trade Credit _{f,y})	Log(Trade Credit _{f,y})
Post _y	-0.0237*** (0.0021)		
⇒ Post _y x Treated _f	0.1593*** (0.046)	0.1512*** (0.0519)	0.1587*** (0.0582)
Treated _f	-0.0508*** (0.0186)	-0.0551*** (0.0172)	-0.0571** (0.0242)
⇒ High-Leverage _{f,y-1} x Post _y x Treated _f	-0.0484*** (0.0212)	-0.0423** (0.0272)	-0.0416** (0.0278)
Observations	27,866	27,866	27,866
R-squared	0.27	0.28	0.32
Firm Controls	YES	YES	YES
Sector-Time FE	NO	YES	YES
Region-Time FE	NO	NO	YES

Robust standard errors clustered at the firm and year level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Real Effects

- We evaluate whether the financial changes associated to the wealth tax reform had **real effects** on the new taxpayers
 - We employ firm-level outcomes: $\text{Income}_{f,y}$, $\text{Investment}_{f,y}$, $\text{Total Debt}_{f,y}$, and capital accumulation ($\Delta\text{Capital}_{f,y}$).
 - First, analyze whether the wealth tax reform affected the **firms' performance** of the new taxpayers relative to non-taxpayers
 - Second, study whether the effects were more pronounced on **high-leveraged** firms
 - We employ a similar specification than Eq (2), but using the firm-level outcomes

- The new taxpayer firms exhibited lower income and investments relative to non-taxpayers.

Effects of the wealth tax on firms' performance

VARIABLES	(1) Income _{f,y}	(2) Income _{f,y}	(3) Income _{f,y}	(4) Investment _{f,y}	(5) Investment _{f,y}	(6) Investment _{f,y}
Post _y	0.0012 (0.0083)	0.0012 (0.0081)		0.0421 (0.0318)	0.0513 (0.0322)	
Treated _f	0.1102*** (0.0383)	0.1133*** (0.0310)	0.1212*** (0.0352)	0.1624*** (0.0399)	0.1733*** (0.0571)	0.1681*** (0.0412)
⇒ Post _y x Treated _f	-0.0617** (0.0322)	-0.0640*** (0.0289)	-0.0784** (0.0405)	-0.1132** (0.0523)	-0.1241** (0.0670)	-0.1135*** (0.0418)
Observations	27,866	27,866	27,866	27,866	27,866	27,866
R-squared	0.31	0.32	0.36	0.41	0.44	0.46
Firm Controls	YES	YES	YES	YES	YES	YES
Sector FE	NO	YES	YES	NO	YES	YES
Region*Time FE	NO	NO	YES	NO	NO	YES
Sector-Time FE	NO	NO	YES	NO	NO	YES

Robust standard errors clustered at the firm and year level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

- New taxpayer firms exhibited lower indebtedness and capital accumulation relative to non-taxpayers.

Effects of the wealth tax on firms with high leverage

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	Total Debt _{f,y}	Total Debt _{f,y}	Total Debt _{f,y}	Δ Capital _{f,y}	Δ Capital _{f,y}	Δ Capital _{f,y}
Post _y	0.0406 (0.0518)			0.1106** (0.0457)		
Treated _{f,y}	0.0823*** (0.0312)	0.0756*** (0.0240)	0.0691** (0.0376)	0.1826*** (0.0512)	0.1762*** (0.0440)	0.1691** (0.0403)
➡ Post _y x Treated _f	-0.1180*** (0.0421)	-0.1173*** (0.0418)	-0.1253*** (0.0389)	-0.0574** (0.0205)	-0.0587** (0.0274)	-0.0731*** (0.0304)
High_leverage _{f,y-1}	0.0230** (0.0108)	0.0217** (0.0103)	0.0221** (0.0106)	-0.0430*** (0.0358)	-0.0346*** (0.0349)	-0.0324*** (0.0379)
High_leverage _{f,y-1} x Post _y	0.0150 (0.0140)	0.0141 (0.0128)	0.0145 (0.0134)	0.1180 (0.0910)	0.0931 (0.0511)	0.1193 (0.0851)
➡ High_leverage _{f,y-1} x Post _y x Treated _f	-0.0469*** (0.0212)	-0.0482** (0.0229)	-0.0513*** (0.0198)	-0.0324** (0.0156)	-0.0382* (0.0164)	-0.0418*** (0.0179)
Observations	27,866	27,866	27,866	27,866	27,866	27,866
R-squared	0.34	0.34	0.36	0.26	0.26	0.32
Firm Controls	YES	YES	YES	YES	YES	YES
Sector FE	YES	YES	NO	YES	YES	NO
Region*Time FE	NO	YES	YES	NO	YES	YES
Sector*Time FE	NO	NO	YES	NO	NO	YES

Robust standard errors clustered at the firm and year level in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Conclusions

- **Wealth taxes create financial and real distortions when they are imposed on SMEs (bank dependent firms, highly leveraged firms, react to fiscal shocks)**
- Taxing wealth should target the richest individuals (i.e., owners of corporations)
 - The change in the wealth tax base is associated with less capitalization, mainly in the segment of firms around the new tax threshold (dividends payout)
 - We find a significant decline in bank credit and increased loan rates, especially for taxpayers with high leverage.
 - This is consistent with a reallocation of credit in the segment of firms affected by the tax reform (i.e., lower bank risk taking).
 - Affected firms increased the reliance on trade credit (potential substitution of bank credit) except for high-leveraged firms.
 - The taxpayers' firms exhibited substantial real effects (i.e., lower indebtedness, income, investment, and capital accumulation), especially those with high leverage.

Extensions and Robustness

- Analyzing the behavior of firms with liquid capital between COP 1,5 b and COP 4,5 b (i.e., firms closer to the previous wealth tax threshold of 3,0 b)
- Testing for potential risk-taking: use of firm's credit ratings
- Bank characteristics: low capital and high nonperforming loan ratios
- Real effects: employment, productivity, etc.

Thanks!