The Distribution of Crisis Credit and Firm Indebtedness[a]

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[a]The views and opinions expressed are those of the authors alone and do not necessarily reflect those of the Central Bank of Chile, the Financial Market Commission of Chile (CMF), or the World Bank.

Motivation

- During crises, governments often seek to help firms by providing debt or equity financing
  - We call this type of financing, "crisis credit"
  - E.g., credit facilities during crises implemented through the banking sector to reach speed and scope
- These policies can save firms but also increase overall indebtedness of the private sector
  - High indebtedness can reduce repayment, create debt overhang, and macro recovery problems
- Thus, how debt is distributed across firms is critical
- **Goal:** Study distribution of crisis credit across firms and its impact on indebtedness
  - Policy incentives can influence credit allocation and thus the distribution of credit risk
  - Focus on the large public credit guarantee program called FOGAPE-COVID ($\approx$ 4% of GDP)
  - Compare to the employment protection program during COVID-19

Outline of the Paper (and Talk)

1. Data
2. Description of the Policy Response to the Crisis
3. Which Types of Firms Obtained Credit Guarantees
4. Use of Credit Guarantee and Firm Indebtedness
5. Aggregate Consequences of Credit Guarantee Program
6. Conclusion

Data

Data: Four Sources

1. Applications and approvals of credit guarantee program of 2020 (E20, D58) ⇒ New!
   - Transaction-level information, including requested and approved amount
2. Firm-level use of employment protection program (from unemployment insurance administrator)
3. Credit stock and flows from financial regulator, 2012-2020 (C11, D32)
   - Transaction-level credit flows, credit stock, interest rates, default behavior
4. Firm-level tax balance sheet and employment data from SII (2005-2020)
   - Sales, materials, total assets and liabilities, number of workers, main sector, headquarter municipality

- Samples: Basic Stats
  1. Baseline: Formal firms + positive sales + positive employment ⇒ Number of Firms: 187,955 Details
  2. Eligible: Baseline + Sales $<$ USD$40 MM + Past due days $<$ 30 ⇒ Number of Firms: 180,348

Description of the Policy Response to the Crisis

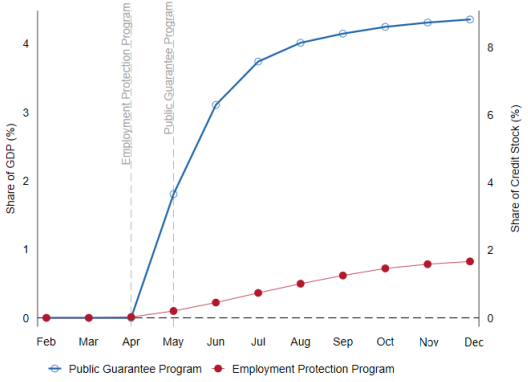
Institutional Details of the Public Credit Guarantee Program (FOGAPE-COVID)

- Expanded credit guarantee program: Fiscal injection of USD$3 billion (1.1% of GDP)
- Finance working capital up to 3 months of pre-pandemic sales
- Eligibility: Sales<US$40 million
- Attractive conditions for firms:
  - Loan could not be used to repay pre-existing debt, which had to be restructured
  - Nominal interest rate cap: Monetary policy rate (0.5%) + inflation target (3%)
  - 6-month grace period + payment horizon of 24-48 months
- To mitigate risk:
  - Past due days < 30
  - Guarantee: 85% for small, 80% for medium, 70% for medium-large and 60% for large firms
  - Group deductible
- Started on April 24th, 2020

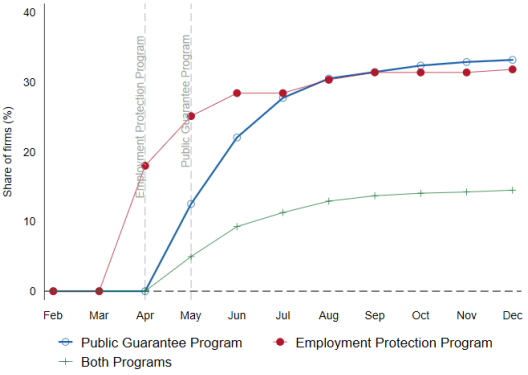
Institutional Details of the Employment Protection Program

- Use unemployment insurance funds to alleviate firms' cash flow while protecting labor contracts
- Labor contracts temporarily frozen if worker stayed at home without working
- Worker earnings paid by unemployment insurance fund up to 70% of earnings. Firms only had to pay social contributions (up to 20% of earnings)
- Eligibility: All firms
- To support the funds, government injected USD$ 2 billion (0.8% of GDP)
- Opportunity cost of using program $\rightarrow$ workers at home without working cannot produce
- Started on April 1st, 2020

Reach of the Public Programs



(a) Liquidity Provision



(b) Coverage (% of Firms from Baseline Sample)

Which Types of Firms Obtained Guaranteed Credit

Study Selection in Terms of Predicted Risk: Credit Default Probability Model

$$\textit{Baseline Sample}: \quad \Pr(\textit{Default}_{i,t} = 1) = \Phi(\alpha_s + \alpha_c + \beta \textit{Characteristics}_{i,t-1} + u_{i,t}) \tag{1}$$

	(1)	(2)
(i) Estimation results:		
Log(Annual Sales)	−0.009***	−0.015***
	(0.002)	(0.002)
Log(Wage Bill)	−0.006***	−0.006***
	(0.001)	(0.001)
Log(Value Added / Number of Workers)	−0.017***	−0.015***
	(0.002)	(0.002)
Firm Age	−0.002***	−0.002***
	(0.000)	(0.000)
Log(Net Worth)	−0.008***	−0.009***
	(0.001)	(0.001)
Log(Credit Stock)		0.022***
		(0.001)
Spread Ex-ante		0.006***
		(0.001)
Number of Observations	32,304	32,304
R^2	0.082	0.118
Industry FE and Municipality FE	✓	✓
(ii) Predicted Default Probability:		
Banked	0.082	0.082
Unbanked	0.118	

- Robustness models Details

Adverse Selection into Credit Guarantees: Demand versus Supply

$$\textit{Banked Firms} + \textit{Eligible Sample}: \ \Pr(\textit{Program Use}_i = 1) = \Phi(\alpha_s + \alpha_c + \beta_1 \textit{Risk}_i + \beta_3 X_i + u_i) \quad (2)$$

	Public Guarantee Program			Employment Protection
	(1)	(2)	(3)	(4)
	Used Guarantee Program	Applications	Approvals	Used Employment Program
(i) Ex-ante risk characteristics				
Risk	0.020***	0.030***	−0.022***	−0.004
	(0.005)	(0.004)	(0.003)	(0.003)
(ii) COVID shock characteristics				
Positive Δ Sales	0.141***	0.113***	0.017	0.062***
	(0.015)	(0.013)	(0.011)	(0.014)
Negative Δ Sales	0.145***	0.124***	0.018*	0.127***
	(0.014)	(0.012)	(0.010)	(0.014)
Used Employment Program	0.082***	0.097***	−0.012**	
	(0.008)	(0.008)	(0.005)	
Used Guarantee Program				0.055***
				(0.005)
Dep. Var. Mean	0.620	0.763	0.923	0.210
Number of Observations	21,037	20,921	13,700	22,134
R^2	0.053	0.080	0.056	0.088
Industry FE and Municipality FE	✓	✓	✓	✓

- Similar results when studying selection of unbanked firms Details

Use of Credit Guarantee and Firm Indebtedness

Credit Guarantee Increased Indebtedness, More than Employment Protection

$$\textit{Eligible Sample}: \frac{\Delta Debt_i}{Sales_{i,2019}} = \alpha_s + \alpha_c + \beta_1 \textit{Program Use}_i + \beta_2 \textit{Sales Growth}_i + u_i \quad (3)$$

	(1) Banked	(2) Unbanked	(3) Banked	(4) Unbanked
Used Guarantee Program	0.139***	0.076***	0.141***	0.077***
	(0.002)	(0.001)	(0.002)	(0.001)
Used Employment Program			0.009***	0.002**
			(0.003)	(0.001)
Used Employment Program × Used Guarantee Program			−0.012***	−0.004
			(0.004)	(0.003)
Positive Δ Sales	0.019***	0.005***	0.019***	0.005***
	(0.005)	(0.001)	(0.005)	(0.001)
Negative Δ Sales	0.016***	0.004***	0.016***	0.004***
	(0.004)	(0.001)	(0.004)	(0.001)
Dep. Var. Mean	0.057	0.018	0.057	0.018
Number of Observations	22,316	39,711	22,316	39,711
R^2	0.269	0.227	0.270	0.227
Industry FE and Municipality FE	✓	✓	✓	✓

- Indebtedness increase is confirmed with RD design around sales eligibility threshold Details

Demand (Supply) Forces Dominate in Guaranteed (Non-Guaranteed) Credit

$$\textit{Eligible Sample + Used Credit Guarantee}: \quad \frac{\Delta Debt_i}{Sales_{i,2019}} = \alpha_s + \alpha_c + \beta_1 Risk_i + \beta_2 Sales\ Growth_i + u_i \qquad (4)$$

	(Δ Public Guarantee) / Sales (2019)		(Δ Debt Without Public Guarantee) / Sales (2019)	
	(1)	(2)	(3)	(4)
	Banked	Unbanked	Banked	Unbanked
Risk	0.010***	0.009***	−0.014***	−0.022***
	(0.001)	(0.001)	(0.001)	(0.002)
Positive Δ Sales	0.004	0.005	0.012**	0.002
	(0.003)	(0.004)	(0.006)	(0.005)
Negative Δ Sales	−0.000	0.001	0.010*	0.002
	(0.003)	(0.003)	(0.006)	(0.005)
Dep. Var. Mean	0.135	0.121	-0.024	-0.048
Number of Observations	13,472	9,679	13,376	9,699
R^2	0.054	0.073	0.054	0.082
Industry FE and Municipality FE	✓	✓	✓	✓

Aggregate Consequences of Credit Guarantee

Decomposition of Macro Debt-to-GDP Ratio

	Debt/GDP (%)	Δ Debt/GDP (p.p.)
2019	35.5	
2020	38.9	3.4

$$\underbrace{\Delta \frac{D_t}{Y_t}}_{\textit{Macro Changes}} = \underbrace{\sum_G \sum_{i \in G} \left(\omega_{Gt} \frac{d_{it}}{Y_{Gt}} - \omega_{Gt-1} \frac{d_{it-1}}{Y_{Gt-1}} \right)}_{\textit{Group Changes}} \tag{5}$$

where $\omega_{Gt} = Y_{Gt}/Y_t$, $Y_t = \sum_G Y_{Gt}$, $Y_{Gt} = \sum_{i \in G} y_{it}$, y_{it} is firm i value-added, $D_t = \sum_i d_{it}$, and d_{it} is firm i credit stock

		Panel A: *Used Credit Guarantee*		*Panel B:* *Banked and Unbanked Status: Stay, Entry, Exit*				*Panel C:* *Risk Groups*			
		(1) Used Credit Guarantee	(2) Did Not Use Credit Guarantee	(3) Stayed Banked	(4) Stayed Unbanked	(5) Newly Banked	(6) Newly Unbanked	(7) No Risk	(8) Low Risk	(9) Medium Risk	(10) High Risk
2019	Group Changes (p.p.)			1.1	0	0.4	-0.1	0.4	0.7	0.2	0.1
2020	Group Changes (p.p.)	4.2	-0.8	3.1	0	0.8	-0.5	1.2	1.5	0.4	0.3

- Majority of indebtedness increase came from credit guarantee and banked firms
- Group changes mask heterogeneity of weights and micro-level changes

Decomposition of Macro Debt-to-GDP Ratio

$$\underbrace{\Delta \frac{D_t}{Y_t}}_{\text{Macro Changes}} = \underbrace{\sum_G \sum_{i \in G} \left(\omega_{Gt} \frac{d_{it}}{Y_{Gt}} - \omega_{Gt-1} \frac{d_{it-1}}{Y_{Gt-1}} \right)}_{\text{Group Changes}} = \sum_G \underbrace{\overline{\omega}_{Gt}}_{\text{Weights}} \underbrace{\sum_{i \in G} \left(\frac{\omega_{Gt}}{\overline{\omega}_{Gt}} \frac{d_{it}}{Y_{Gt}} - \frac{\omega_{Gt-1}}{\overline{\omega}_{Gt}} \frac{d_{it-1}}{Y_{Gt-1}} \right)}_{\text{Micro Changes}} \quad (6)$$

where $\overline{\omega}_{Gt} = (\omega_{Gt} + \omega_{Gt-1})/2$, $\omega_{Gt} = Y_{Gt}/Y_t$, $Y_t = \sum_G Y_{Gt}$, $Y_{Gt} = \sum_{i \in G} y_{it}$, y_{it} is firm i value-added, $D_t = \sum_i d_{it}$, d_{it} is firm i credit stock

		Panel A: *Used Credit Guarantee*		*Panel B:* *Banked and Unbanked Status: Stay, Entry, Exit*				*Panel C:* *Risk Groups*			
		(1) Used Credit Guarantee	(2) Did Not Use Credit Guarantee	(3) Stayed Banked	(4) Stayed Unbanked	(5) Newly Banked	(6) Newly Unbanked	(7) No Risk	(8) Low Risk	(9) Medium Risk	(10) High Risk
2020	Micro Changes (p.p.)	27.2	-1.0	3.9	0	31.1	-11.6	3.6	2.6	7.0	12.6
	Weights $\in [0,1]$	0.16	0.84	0.80	0.12	0.03	0.05	0.33	0.59	0.06	0.02
	Group Changes (p.p.)	4.2	-0.8	3.1	0	0.8	-0.5	1.2	1.5	0.4	0.3

- Micro changes are large (small) for newly banked (stayed banked), but their weight is small (large)
- Micro changes increase with risk, but their weights decrease with risk

Risk Allocation Between Banking Industry and Government

	(1) Guarantee (%)	(2) Deductible (%)	(3) Total Public Guarantee Program	(4) Default Probability (%)	(5) Effective Guarantee (%)	(6) Total Risk (=(3)×(4) / GDP) (%)	(7) Government Risk (=(5)×(6) / GDP) (%)	(8) Bank Risk / GDP (=(6)-(7)) (%)
Small	85	5.0	3,688	7.4	28	0.10	0.03	0.07
Medium	80	3.5	2,909	5.2	26	0.05	0.01	0.04
Medium-Large	70	2.5	3,813	3.2	15	0.04	0.01	0.03
Large	60	2.5	974	2.8	6	0.01	0.00	0.01
Total	74	5	11,815 (4.2% GDP)	4.9	9.4	0.20	0.05	0.15

- Although the size of credit guarantee program was large, macroeconomic risk seems relatively small
- Majority of expected risk is taken by banks (75%=0.15/0.20)
  - But solvency of the banking industry increased during the pandemic Details
- Tail risk is taken by the government due to the deductible of the credit guarantee program Details

Conclusions

Conclusions: Micro and Policy Implications

- Credit guarantee program reached a large fraction of firms, many of them in need of financing
- Firms: Strong and robust adverse selection from demand forces
  - Firms' incentives for credit guarantee: Get access to low-cost credit
- Banks: Which was their role?
  - Screening of credit guarantees towards lower risk firms, but not enough to prevent adverse selection
  - Allocated non-guaranteed credit towards lower risk firm
  - Shared risk with the government
  - Banks' incentives for credit guarantee: Keep and get to know new firms at low risk
- These results are consistent with the program goals: "*The success of this program requires the active and expedited participation of banks, so that [these credits] reach firms in need effectively, massively and on time.*" Program Launch Speech by Sebastián Piñera, President of Chile
- Employment protection program: Different policy incentives relative to credit guarantees

Conclusions: Macro and Policy Implications

- Although the program increased firm indebtedness, macroeconomic risk seems low
  - The guarantee program had several mitigating ingredients both in its design and incentives
  - Low aggregate bank risk: Driven by low ex-ante default rates
  - Low aggregate government risk: Driven by low ex-ante default and by expected risk shared with banks
  - These aggregate results are consistent with the financial stability report of the Central Bank of Chile

- Necessary to continue to monitor these risks as the recovery moves forward
  - Success of the program also depends on long-run effective default associated with COVID-19 crisis
  - This is a function of how transitory the crisis is, health dynamics, and other economic policies

- Credit guarantee after the pandemic and unbanked firms: Financial inclusion versus aggregate risk

Thanks!

Data: Basic Stats

Return

	(1) Number of firms	(2) Share of total number of firms (%)	(3) Share of employment (%)	(4) Credit stock (%)	(5) Share of Value Added (%)
Panel A: Sample Selection					
Internal Revenue Service - All	1,421,446	100	87	81	100
Internal Revenue Service - Active	187,955	13	52	45	67
Panel B: Firm Size Distribution					
Small and Medium Enterprises	179,545	96	49	26	9
Large Firms	7,187	4	26	30	18
Mega Firms	1,223	1	25	44	73
Total Number of Firms	187,955	100	100	100	100
Panel C: Ex-ante Banking Status					
Banked Firms	50,405	27	47	85	56
Unbanked Firms	137,550	73	53	15	44
Total Number of Firms	187,955	100	100	100	100

Data: Number of Firms in Different Samples

Return

	(1) Total Number of Firms	(2) Share of employment(%)	(3) Credit Stock(%)	(4) Share of Value Added(%)	(5) Banked(%)	(6) Used Guarantee Program(%)	(7) Used Employment Protection Program(%)
Internal Revenue Service	1,421,446	87	81	100	21	15	7
Internal Revenue Service - Public	602,874	80	75	95	16	18	13
Positive Sales	449,615	73	61	103	18	23	16
Positive Number of workers	228,559	73	54	85	29	33	30
Used Programs After April	187,955	52	45	67	27	30	15

Default Probability Models: Robustness

Return

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(i) Estimation results:								
Log(Net Worth)		−0.006***	−0.008***	−0.009***	−0.008***	−0.009***	−0.008***	−0.008***
		(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
Log(Wage Bill)	−0.008***	−0.005***	−0.006***	−0.006***	−0.005***	−0.006***	−0.007***	−0.007***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
Log(Value Added / Number of Workers)	−0.020***	−0.012***	−0.017***	−0.015***	−0.018***	−0.015***	−0.016***	−0.014***
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Log(Annual Sales)	−0.002***	−0.000	−0.009***	−0.015***	−0.009***	−0.017***	−0.005***	−0.011***
	(0.001)	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)
Sales Growth							−0.037***	−0.034***
							(0.004)	(0.004)
Firm Age	−0.001***	−0.001***	−0.002***	−0.002***	−0.001***	−0.002***	−0.002***	−0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Log(Credit Stock)				0.022***		0.032***		0.020***
				(0.001)		(0.002)		(0.001)
Spread Ex-ante (2012-2018)				0.006***				0.006***
				(0.000)				(0.000)
Spread Ex-ante (only 2018)						0.008***		
						(0.000)		
Dep. Var. Mean	0.082	0.057	0.082	0.082	0.085	0.085	0.082	0.082
Dep. Var. Sd.	0.275	0.232	0.275	0.275	0.279	0.279	0.275	0.275
Obs	105,407	60,067	32,304	32,304	17,409	17,409	32,015	32,015
R^2	0.054	0.062	0.082	0.118	0.079	0.131	0.091	0.126
Industry FE and Municipality FE	✓	✓	✓	✓	✓	✓	✓	✓
(ii) Predicted Default Probability:								
Banked	0.080	0.056	0.082	0.082	0.086	0.086	0.082	0.082
Unbanked	0.095	0.065	0.118		0.120		0.101	

Selection Model: Similar Behavior of Banked and Unbanked Firms

Return

	Public Guarantee Program			Employment Protection
	(1)	(2)	(3)	(4)
	Used Guarantee Program	Applications	Approvals	Used Employment Program
(i) Ex-ante risk characteristics				
Unbanked Risk (2)	0.011***	0.013***	−0.019***	−0.004
	(0.003)	(0.003)	(0.003)	(0.003)
Banked Risk (4)	0.016***	0.031***	−0.023***	−0.005*
	(0.004)	(0.005)	(0.003)	(0.003)
Banked	0.304***	0.330***	0.011*	0.031***
	(0.006)	(0.007)	(0.006)	(0.005)
Positive Δ Sales	0.127***	0.130***	0.020***	0.045***
	(0.008)	(0.007)	(0.008)	(0.007)
Negative Δ Sales	0.122***	0.128***	0.019***	0.102***
	(0.007)	(0.007)	(0.007)	(0.007)
(ii) COVID shock characteristics				
Used Employment Program	0.082***	0.113***	−0.009**	
	(0.005)	(0.005)	(0.004)	
Used Guarantee Program				0.054***
				(0.003)
Dep. Var. Mean	0.379	0.500	0.919	0.171
Dep. Var. Sd.	0.485	0.500	0.273	0.376
Obs	60,329	60,344	26,020	61,880
R^2	0.144	0.167	0.038	0.085
Industry FE and Municipality FE	✓	✓	✓	✓

Policy Design Mitigated Adverse Selection: Including Non-Eligible Firms

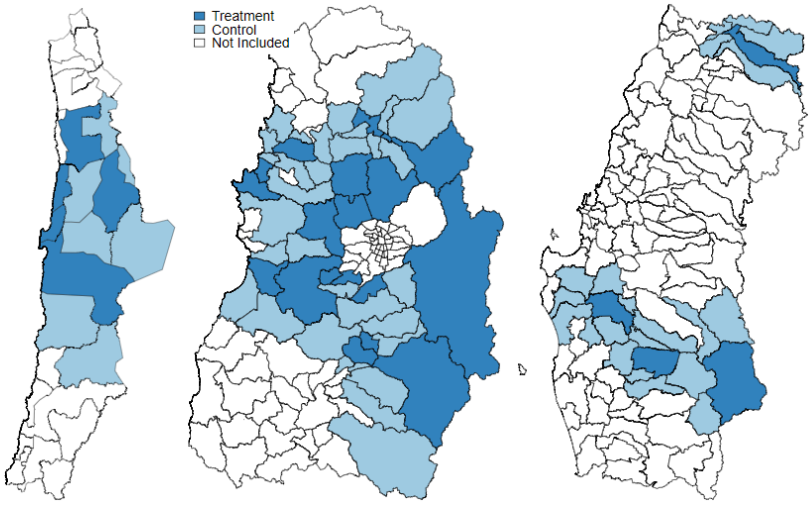
Return

$$\textit{Banked Firms} + \textit{Different Samples}: \ \Pr(\textit{Program Use}_i = 1) = \Phi(\alpha_s + \alpha_c + \beta_1 \textit{Risk}_i + \beta_3 X_i + u_i) \tag{7}$$

	Used Guarantee Program			
	(1) Eligible Firms	(2) Eligible Firms + Past Due Days Firms	(3) Eligible Firms + Mega Firms	(4) All Firms
(i) Ex-ante risk characteristics				
Risk	0.020***	−0.005	0.030***	0.003
	(0.005)	(0.004)	(0.005)	(0.004)
(ii) COVID shock characteristics				
Positive Δ Sales	0.141***	0.154***	0.142***	0.157***
	(0.015)	(0.014)	(0.014)	(0.014)
Negative Δ Sales	0.145***	0.163***	0.144***	0.164***
	(0.014)	(0.014)	(0.014)	(0.013)
Used Employment Program	0.082***	0.071***	0.088***	0.082***
	(0.008)	(0.008)	(0.008)	(0.008)
Dep. Var. Mean	0.620	0.584	0.609	0.594
Number of Observations	21,037	22,413	21,429	22,767
R^2	0.053	0.044	0.056	0.050
Industry FE and Municipality FE	✓	✓	✓	✓

Dynamics Lockdowns and Spatial RD Design: Maps

Return



(c) Northern (d) Central (e) Southern

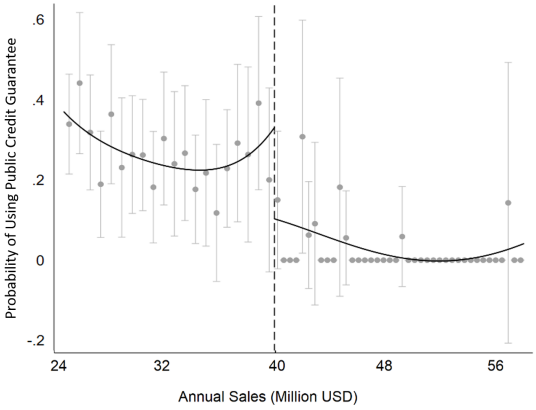
Dynamics Lockdowns and Spatial RD Design: Results

Return

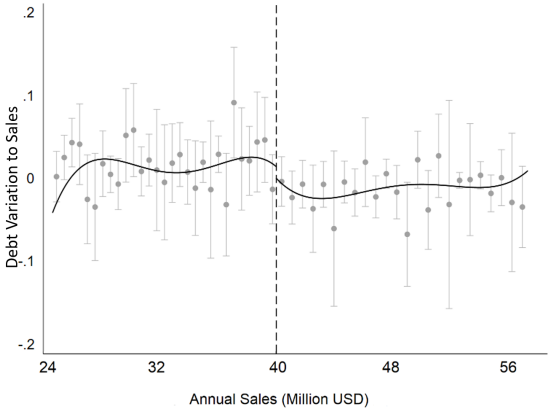
	Public Guarantee Program			Employment Protection
	(1) Used Guarantee Program	(2) Program Application	(3) Program Approval	(4) Used Employment Program
Panel A: County Border - Region FE				
Post	0.062	0.050	0.224	0.031
	(0.000)	(0.000)	(0.000)	(.)
Lockdown	0.007	0.013*	−0.056*	−0.010*
	(0.001)	(0.002)	(0.005)	(0.001)
Lockdown × Post	0.008	0.027*	0.015	0.028**
	(0.002)	(0.003)	(0.008)	(0.002)
Obs	16,440	14,910	4,420	19,080
No. of Firms	1,644	1,491	442	1,908
R^2	0.007	0.006	0.066	0.005
Panel B: County Border - Pair of Neighbors FE				
Post	0.062***	0.050***	0.224***	0.031***
	(0.002)	(0.002)	(0.006)	(0.001)
Lockdown	0.096***	0.041***	−0.109***	0.072***
	(0.006)	(0.006)	(0.010)	(0.003)
Lockdown × Post	0.008	0.027**	0.015	0.028***
	(0.010)	(0.009)	(0.017)	(0.005)
Obs	16,440	14,910	4,420	19,080
No. of Firms	1,644	1,491	442	1,908
R^2	0.013	0.014	0.077	0.012

RDD: Positive Effect of Credit Guarantee on Indebtedness

Return



(f) Used Credit Guarantee



(g) Leverage: Debt-to-Sales

Banked (Unbanked): Non-Guarantee Credit is Complement (Substitute)

Return

$$\textit{Eligible Sample}: \frac{\Delta Debt_i}{Sales_{i,2019}} = \alpha_s + \alpha_c + \beta_1 Program\ Use_i + \beta_2 Sales\ Growth_i + u_i \quad (8)$$

	(Δ Public Guarantee) / Sales (2019)		(Δ Debt Without Public Guarantee) / Sales (2019)	
	(1)	(2)	(3)	(4)
	Banked	Unbanked	Banked	Unbanked
Used Guarantee Program	0.136***	0.122***	0.008***	−0.047***
	(0.001)	(0.001)	(0.002)	(0.001)
Used Employment Program	0.001	0.001	0.012***	0.001
	(0.000)	(0.000)	(0.003)	(0.001)
Used Employment Program × Used Guarantee Program	−0.002	−0.003	−0.012***	0.000
	(0.002)	(0.002)	(0.004)	(0.002)
Positive Δ Sales	0.003***	0.001	0.022***	0.003**
	(0.001)	(0.001)	(0.005)	(0.001)
Negative Δ Sales	−0.000	0.000	0.021***	0.004***
	(0.001)	(0.001)	(0.005)	(0.001)
Dep. Var. Mean	0.080	0.029	-0.028	-0.013
Number of Observations	22,767	39,792	22,328	39,695
R^2	0.603	0.705	0.048	0.111
Industry FE and Municipality FE	✓	✓	✓	✓

Solvency of the Banking Industry Increased During the Pandemic

Return

	2019	2020	Change
Capital/Total RWA	12.8%	14.7%	1.8%
Capital (MM USD) =	37,514	41,275	3,761
Common Equity Tier 1	28,645	30,163	1,519
+ Subordinated Bonds	8,050	9,423	1,373
+ Additional Provisions	820	1,689	869
Total RWA (MM USD) =	292,292	281,554	-10,738
RWA 1 (0%)	0	0	0
+ RWA 2 (10%)	1,969	4,562	2,592
+ RWA 3 (20%)	4,867	3,849	-1,018
+ RWA 4 (60%)	66,675	68,726	2,052
+ RWA 5 (100%)	218,781	204,417	-14,364

- Capital adequacy ratio increased by 1.8 p.p. during 2020
  - Due to: (i) increase in bank's capital, (ii) decrease in risk-weighted assets

Effective Guarantee Simulation

Return