Bank Supervision and Non-Performing Loan Cleansing

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Motivation

- A common feature of previous financial crises is the accumulation of non-performing loans (NPLs) on banks' balance sheets
- High levels of NPLs raise concerns about the soundness of the banking sector and might drag bank lending capacity
- Banks have discretion in their management of NPLs and may keep them at inefficiently high levels
- European authorities undertook specific supervisory initiatives to handle banks' NPLs
  - $\rightarrow$ Strengthening NPL supervision was considered crucial

Motivation

- Limited evidence on whether such policy measures were effective in reducing NPLs and improve bank lending
- We analyze how supervisory guidelines, rather than requirements, can shape banks' actions.
- We use granular loan-level data on the universe of loans to non-financial firms matched with firm-bank data
  - banks had to increase provisions on NPLs
  - "comply or explain" regarding the disposal of bad loans
- Following the policy intervention, we study whether changes in NPL oversight affect
  - NPL disposals
  - bank lending
  - firm outcomes

Previewing our Findings

- We show that
  - the introduction of the ECB policy affects banks' propensity to dispose of bad loans
  - banks more heavily exposed to the policy tighten their lending and require higher levels of collateral
  - firms borrowing from banks with older NPL vintages before the policy experience a decrease in total borrowing, sales, number of workers, investment, and size
  - the effect is stronger for risky firms

Related Literature

- Macroeconomic conditions & bank-specific characteristics are key drivers of NPLs: Jiménez and Saurina (2006); Balgova et al (2017); Ari et al (2021) and Bischof et al (2022)
- High levels of NPLs reduce bank lending: Temesvary and Banai (2017); Thornton and Tomasso (2020) and Tölö and Virén (2021). Yet, hard to identify casual relationship in the absence of a quasi-natural experiment and control for firms' loan demand
- Supervisory interventions aiming at bank asset quality affect banks' lending: Accornero et al. (2017); Bruno and Marino (2018); Abbasi et al (2023); Bonfim et al (2023); Ivanov and Wang (2023); Granja and Leuz (2024)

ECB's NPL Provisioning Expectations

- Supervisory initiatives aiming to
  - → Help banks resolve their NPLs
  - → Push for a discontinuation of "wait and see" approaches
  - → Provide transparency about the ECB's views regarding banks' treatment of NPLs
- March 2018: Prudential provisioning of NPLs depends on the time spent in a non-performing status (vintage) and collateral Table
  - → e.g., (un)secured NPLs should be fully provisioned after 7y (2y) of being in NPL status
- The guidelines encouraged banks to dispose older NPLs

ECB's NPL Provisioning Expectations (cont'd)

- The ECB guidelines were relevant for European banks, given the average NPL ratio exhibited at the onset of the policy
- The criteria in the provisioning guidelines were largely unanticipated by the market participants
- Negative abnormal returns for Spanish bank stocks around the announcement of the ECB policy Table

Data

- We use the Central Credit Register (CIR) of BdE from 2017q2 to 2019q3
  - → Spanish non-financial firms
  - → Spanish banks including rural banks + EU foreign subsidiaries
- Quarterly bank balance sheet data collected for regulatory purposes
- Annual firm balance sheets from Spanish Mercantile Register Statistics
- NPLs refer to loans more than 90 days past due
- The median vintage decreases over the sample period Figure

Methodology: NPL Disposal

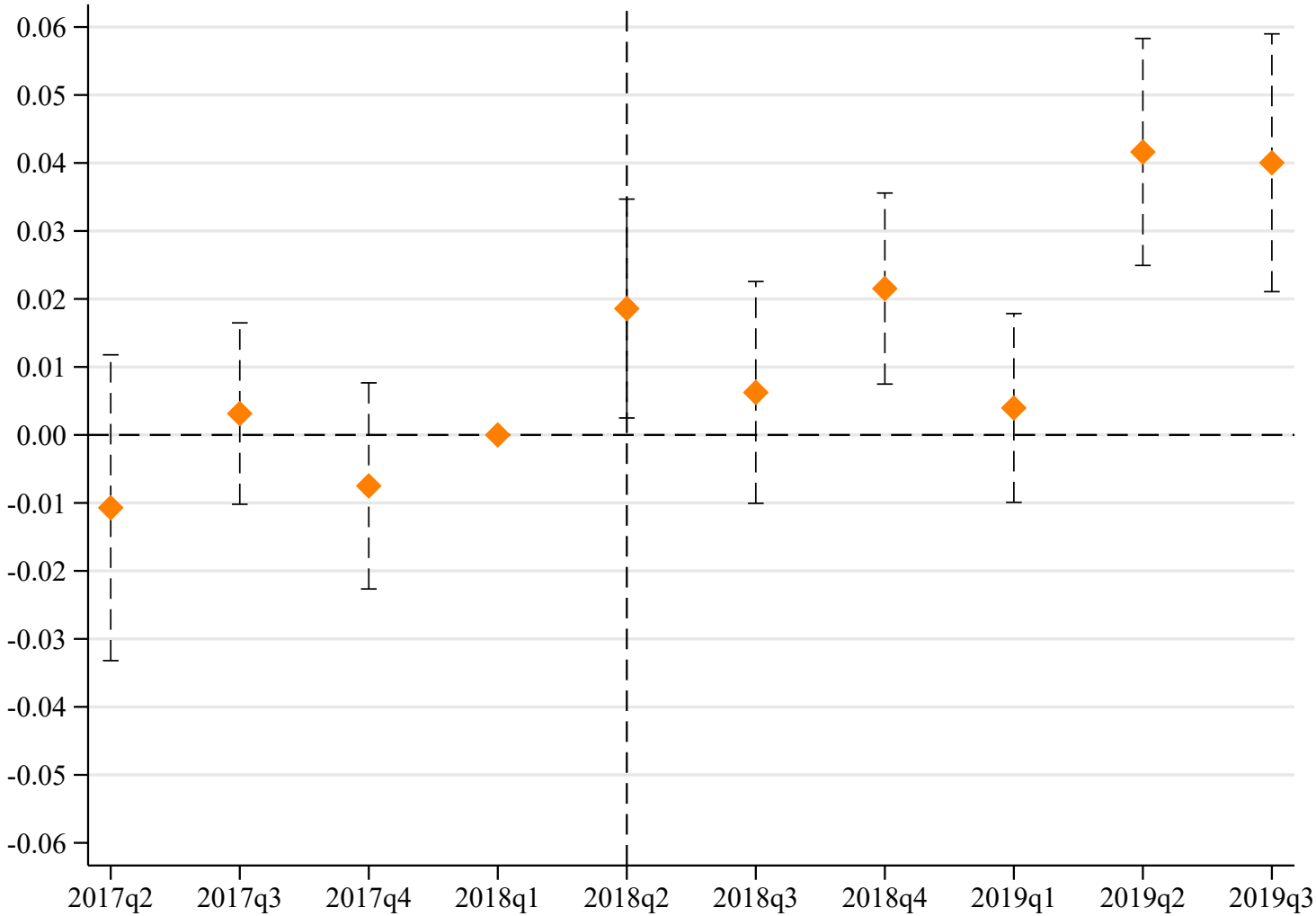
$$Disposal_{l,b,f,t+1} = \alpha Vintage_{l,f,b,t} + \beta Policy_t \times Vintage_{l,f,b,t} + \gamma_{f,t} + \gamma_{b,t} + \gamma_{f,b} + \gamma_{k(l)} + \varepsilon_{l,b,f,t+1}$$

- $Disposal_{l,b,f,t+1}$: 1 if a bank disposes a nonperforming loan the next quarter; 0 otherwise
- $Vintage_{l,f,b,t}$: logarithm of 1 + # of months in default for loan l of firm f from bank b
- $Policy_t$: 1 if $t \geq$ 2018q1; 0 otherwise
- Controls: Loan-level characteristics
- 2017Q2 to 2019Q3 (i.e., five quarters before and after the release of the policy)
- FE: bank-firm, bank-quarter, firm-quarter, loan-category fixed effects

Summary of Results

- Banks are more likely to dispose of older NPLs following the introduction of the policy
- Using our preferred specification, a 1% increase in months classified as an NPL increases the probability of disposal by 1.9 percentage points Table
- The estimated effect for the post-policy period, measured as $\alpha + \beta$, suggests that a 1% increase in months classified as an NPL increases the disposal probability by 3.3 percentage points
- Results are qualitatively and quantitatively similar across different robustness tests Table
- Regression Discontinuity Design, around the policy-induced cut-off points, reinforces our previous results Figure

Policy and NPL Disposals: Parallel Trends



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Summary of Results (Cont'd)

- Following the policy, older vintage level is associated with a higher probability of NPL disposal, especially for more profitable, larger and more liquid banks
- A one-standard-deviation change in RoA increases the probability of an older NPL being disposed at t+1 by 3.7 percentage points in the aftermath of the ECB policy Table
- These findings support the idea that banks' financial health complements their ability to dispose of NPLs

Methodology: Credit Supply

$$y_{f,b,t+1} = \theta_1 Policy_t \times NPL\ vintage_b + Controls_{f,b,t} + \gamma_{f,t} + \gamma_{f,b} + \varepsilon_{f,b,t+1}$$

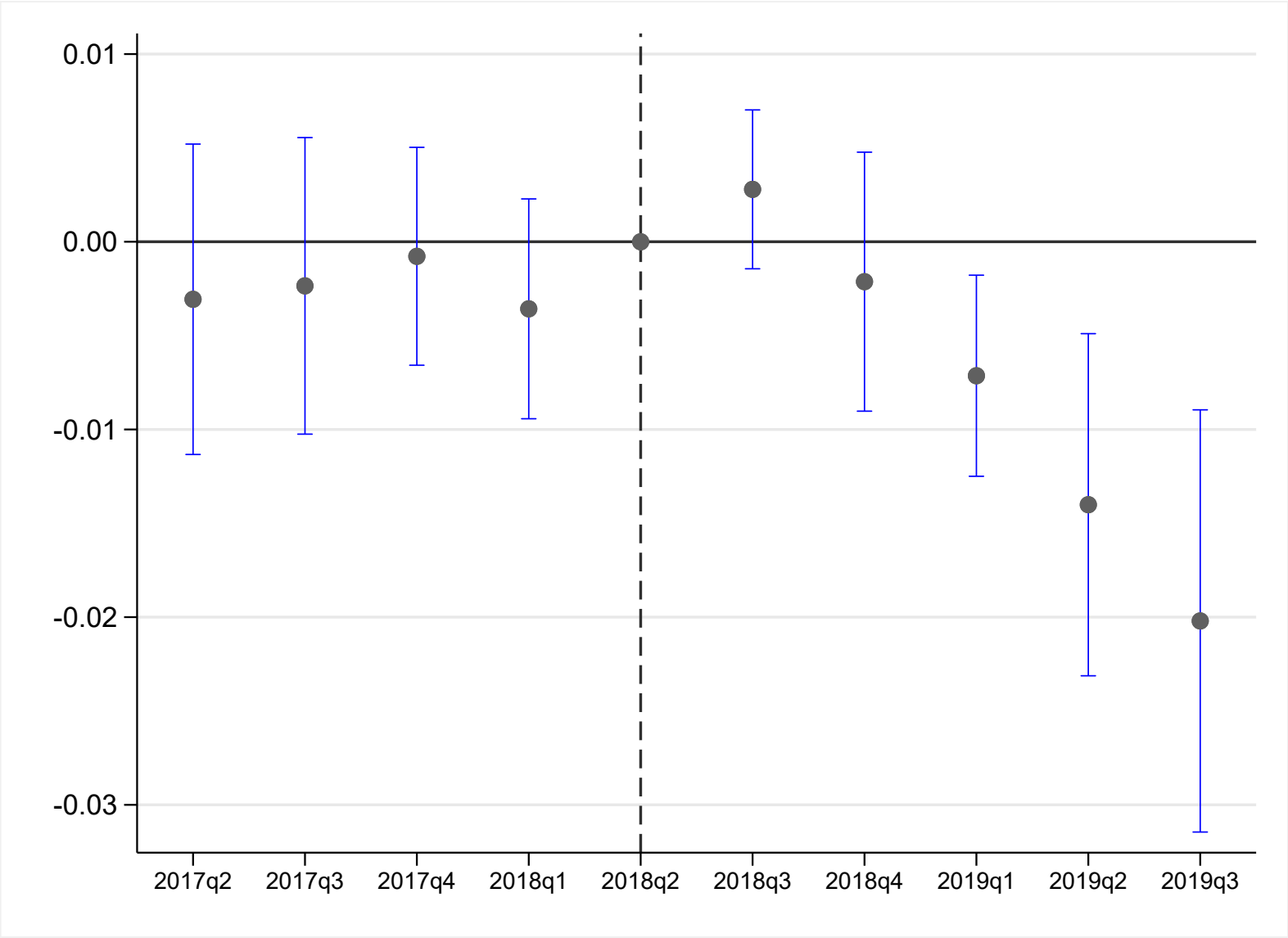
$$NPL\ vintage_b = \frac{\sum_{l=1}^{N_b} vintage_{l,b} \times C_{l,b}}{\sum_{l=1}^{N_b} C_{l,b}}$$

- $Policy_t$: 1 if $t \geq$ 2018q1; 0 otherwise
- Outcomes of Interest ($y_{f,b,t+1}$)
  - the natural log of outstanding credit from b to f
  - $= 1$ if bank b extended a new credit to firm f, $= 0$ otherwise
  - $= 1$ if b terminates the lending relationship with f, $= 0$ otherwise
  - the ratio of collateralized credit that firm f has with bank b
  - the ratio of credit with residual maturity of 3 years or above
- Controls: % of NPL, collateralized loans, forborne/refinanced loans, ROA, NPL, liquidity, and leverage ratios

Summary of Results

- Banks with higher levels of vintage NPL tighten lending standards more than other banks
- A one-standard-deviation increase in NPL vintage, which roughly corresponds to 1.9 months, reduces credit by 2.7% Table
- The probability of ending a lending relationship increases by 0.32 percentage points, and the tendency to collateralize loans increases by 0.78 percentage points in the aftermath of the ECB policy Table
- More exposed banks are forced to recognise risky loans, increase loan disposal, thereby creating pressure to their lending capacity

Parallel Trends: Log(Credit)



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Firm-Level Outcomes

$$Y_{17:19,f} = \theta_1 WNPL\ vint_{17,f} + Controls_{17,f} + \gamma_{P,I,Size} + \varepsilon_f,$$

$$WNPLvint_{17,f} = \sum_{b=1}^{N_f} w_{17,f,b} NPL\ vintage_b$$

- Y measures a firm's real variable growth between the end of 2017 and 2019, i.e. before and after the introduction of the ECB policy
- Growth in bank committed credit (drawn and undrawn amounts), total assets, number of employees, tangible fixed assets, and sales

Summary of Results

- A reduction in the growth rate of bank debt for firms that rely more heavily on exposed banks
- A one-standard-deviation increase in NPL vintage decreases the growth rate of committed loans by 2.3 percentage points Table
- More exposed firms (a one-standard-deviation increase in the weighted NPL vintage) experience 0.7% lower employment growth if they obtain loans from more affected banks
- Firms' assets and sales grew at a slower rate following the policy if their lending comes from banks with higher exposure to the policy
- The effect is stronger for risky firms Table

Final Remarks

- We use the release of the ECB NPL Provisioning Expectations in 2018 as a quasi-natural experiment to study how changes in NPL oversight affect (i) NPL dynamics and disposals, (ii) bank lending, and (iii) firm dynamics
- ECB supervisory measures trigger a reduction in NPLs
  - $\rightarrow$ Faster NPL disposals for banks with better bank fundamentals
- Banks with older vintage NPLs reduce lending in the aftermath of the policy
  - $\rightarrow$ Those w/ better fundamentals at the date of the release, were more capable to smooth the shock
- Firms exposed to older-vintage banks experience a decline in borrowing, cut employment, and reduce their investment in fixed assets
- Banks may be myopic and keep NPLs on their balance sheets. Against this backdrop, we document that supervisory oversight was critical to achieve balance-sheet repair

Appendix

Prudential Provisioning for Legacy NPL

	Unsecured part	Secured part
After two years of NPE vintage	100%	
After three years of NPE vintage		40%
After four years of NPE vintage		55%
After five years of NPE vintage		70%
After six years of NPE vintage		85%
After seven years of NPE vintage		100%

Source: ECB

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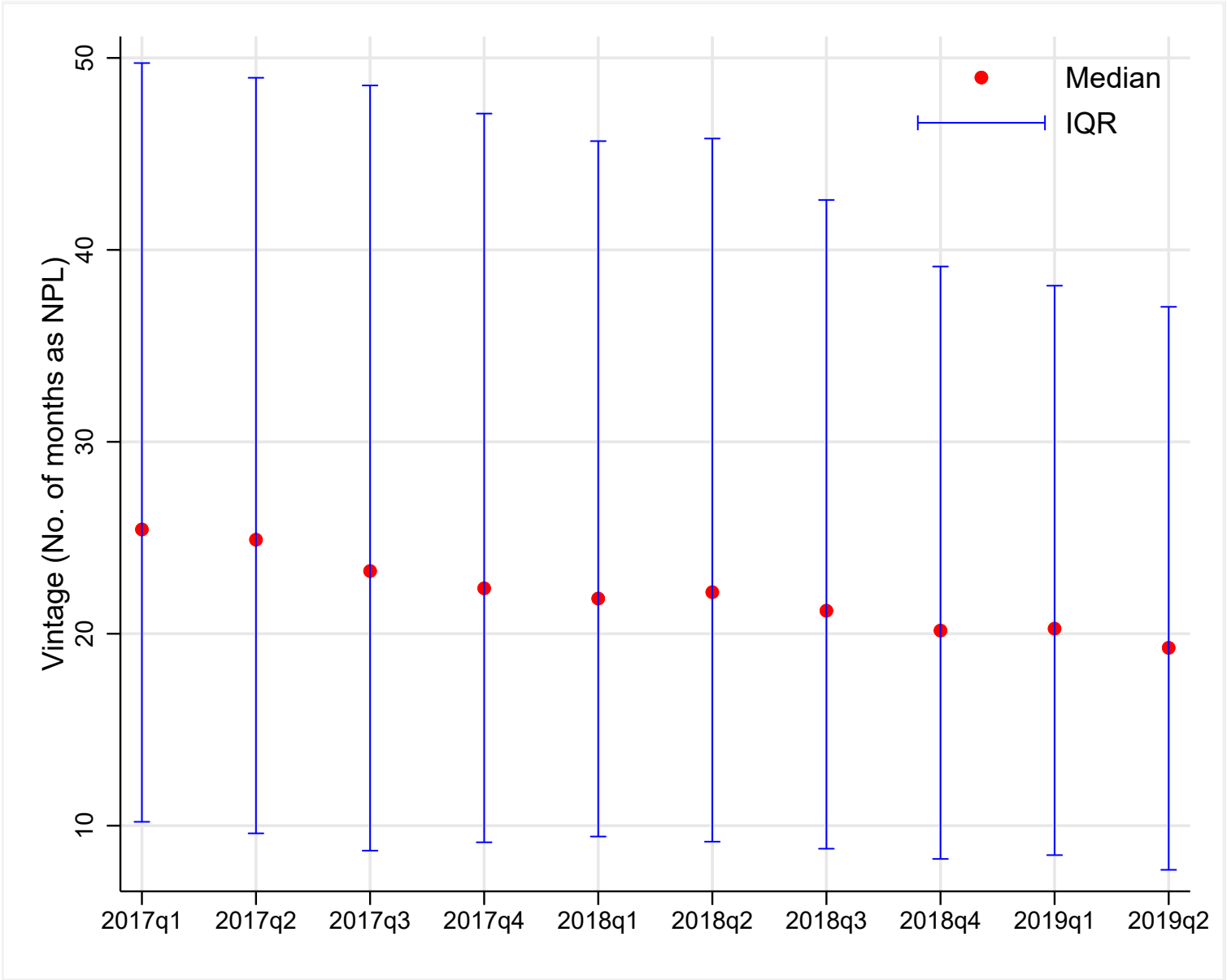
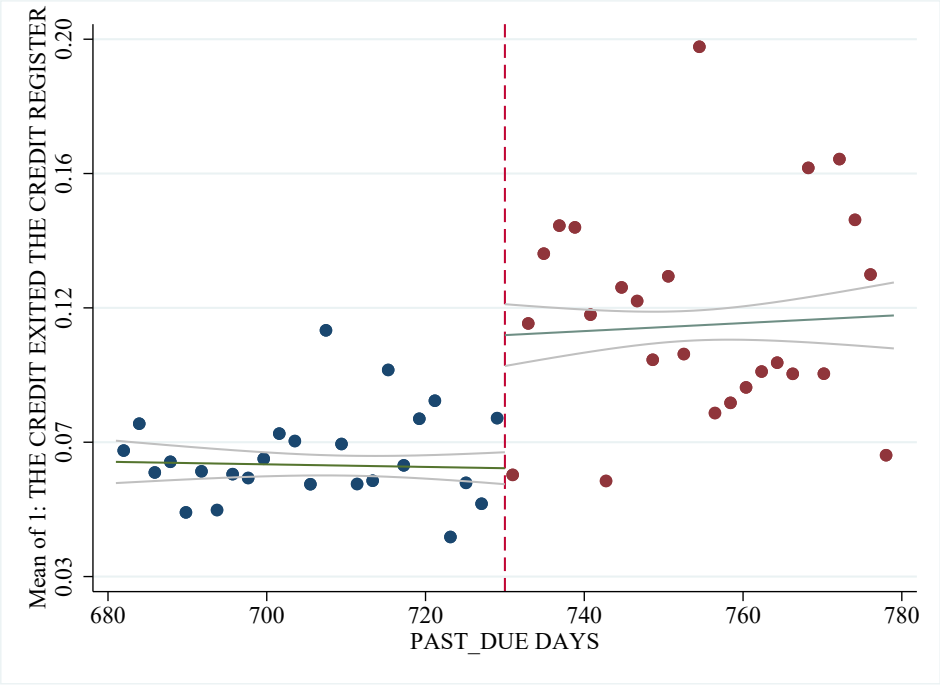
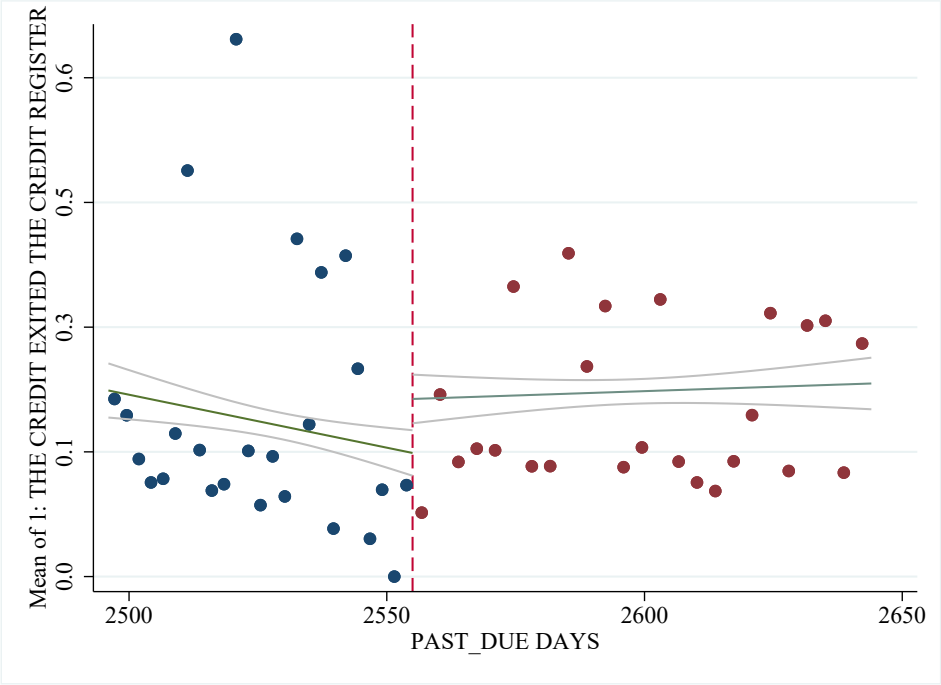
NPL Vintage Distribution Over Time



RDD


Mean of 1: THE CREDIT EXITED THE CREDIT REGISTER
0.03
0.07
0.12
0.16
0.20
680
700
720
740
760
780
PAST_DUE DAYS


Mean of 1: THE CREDIT EXITED THE CREDIT REGISTER
0.0
0.1
0.3
0.5
0.6
2500
2550
2600
2650
PAST_DUE DAYS

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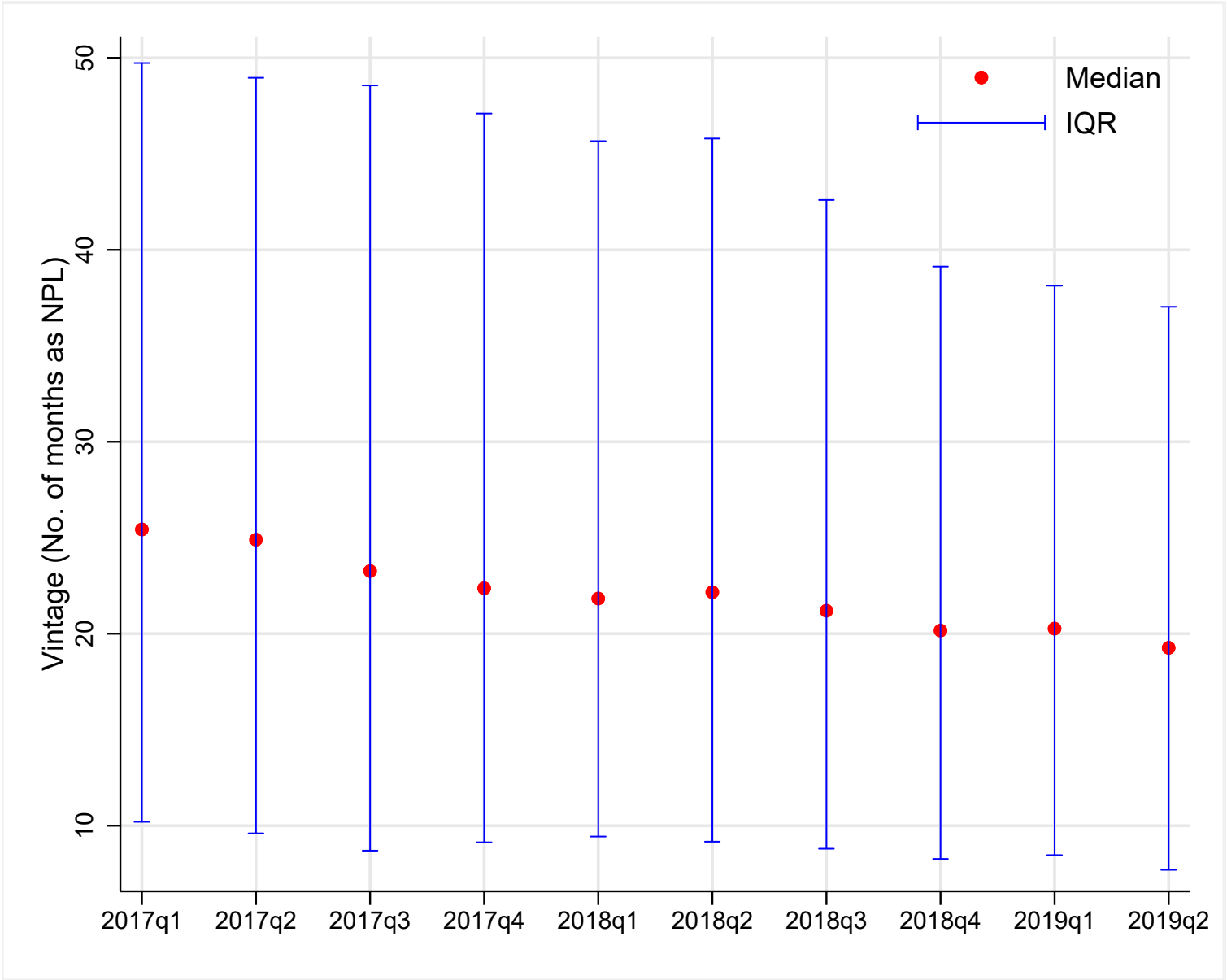
NPL Vintage Distribution Over Time



CARs

Table 1: Stock market reactions around NPL guidance announcements on March 15, 2018, and July 11, 2018

Estimation window: $[T-75, T-6]$	Cumulative abnormal return (CAR)					
Event window	(-5,5)	(-2,2)	(-1,1)	(0,0)	(-1,0)	(-1,2)
Policy Announcements on March 15, 2018						
CAR	-0.0340**	-0.0185*	-0.0137*	-0.0018	-0.0160***	-0.0174**
t-stat.	-2.3830	-1.9361	-1.8430	-0.4159	-2.6537	-2.0369
Policy Announcements on July 11, 2018						
CAR	-0.0188	-0.0115	-0.0179**	-0.0062	-0.0131**	-0.0166*
t-stat.	-1.2760	-1.1548	-2.3173	-1.3722	-2.0618	-1.8539
Number of banks	8	8	8	8	8	8

The table presents the estimation results for cumulative abnormal returns in different event windows. The estimation window is from 75 days before to 6 days before the events. *, **, and *** indicate significance at 10 percent, 5 percent, and 1 percent, respectively.

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Policy and NPL Disposals

	(1)	(2)	(3)	(4)	(5)	(6)
log(1+Vintage)	0.0160***	0.0159***	0.0155***	0.0109**	0.0138***	0.0168***
	(0.0059)	(0.0048)	(0.0036)	(0.0050)	(0.0052)	(0.0061)
Policy×log(1+Vintage)	0.0230	0.0214	0.0022	0.0221***	0.0189***	0.0169***
	(0.0157)	(0.0136)	(0.0055)	(0.0059)	(0.0059)	(0.0062)
Secured×log(1+Vintage)						-0.0188**
						(0.0089)
Policy×Secured×log(1+Vintage)						0.0075
						(0.0074)
Loan Controls	N	N	N	N	Y	Y
Bank-Time FE	N	Y	Y	Y	Y	Y
Firm-Time FE	N	N	Y	Y	Y	Y
Firm-Bank FE	N	N	N	Y	Y	Y
Observations	1,243,548	1,243,548	1,243,548	1,243,548	1,243,548	1,243,548
R-squared	0.01	0.07	0.64	0.70	0.70	0.70

Notes: The table presents regressions results of a linear probability model at the NPL level, where the dependent variable is a dummy variable that equals 1 if the loan exists the CIR the next quarter as NPL, and 0 otherwise. *Policy* is a dummy variable that equals 1 for observations in the post-policy period ($t >$2018q1) and 0 otherwise. *Vintage* is the number of months the NPL has been classified as such. The fixed effects that are included in each regression are noted in the lower part of the table. Standard errors are clustered at the bank-quarter level and reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Policy and NPL Disposals - Robustness tests

	Drop NPLs > 10% decline	Drop low-NPL banks	Drop Rural&foreign banks	Drop Construct.&real est. ind.
	(1)	(2)	(3)	(4)
log(1+vintage)	0.0130**	0.0157***	0.0149**	0.0090*
	(0.0055)	(0.0056)	(0.0061)	(0.0052)
Policy × log(1+vintage)	0.0240***	0.0174***	0.0166**	0.0151**
	(0.0064)	(0.0065)	(0.0067)	(0.0059)
Loan Controls	Y	Y	Y	Y
Bank-Time FE	Y	Y	Y	Y
Firm-Time FE	Y	Y	Y	Y
Firm-Bank FE	Y	Y	Y	Y
Observations	1,075,989	1,128,903	1,084,394	813,613
R-squared	0.72	0.71	0.71	0.65

Notes: This table presents robustness tests for the estimation results of the specification in column (5) of **??**. The dependent variable is a dummy variable that equals 1 if the loan exists the CIR the next quarter as NPL, and 0 otherwise. *Policy* is a dummy variable that equals 1 for observations in the post-policy period (t >2018q1) and 0 otherwise. *Vintage* is the number of months the NPL has been classified as such. Column (1) excludes NPLs whose outstanding debt decreased by more than 10% of the last outstanding debt (at its final quarter in the CIR) at any moment before their exit. Column (2) presents results with a sample of banks with NPL ratios above 5%. Column (3) presents results where rural banks and foreign credit institutions operating in Spain are excluded from the sample. Column (4) presents results without NPLs belonging to construction or real estate firms. The fixed effects that are included in each regression are noted in the lower part of the table. Standard errors are clustered at the bank-quarter level and reported in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Effect of Policy on NPL Exits - Bank Heterogeneity

	(1)	(2)	(3)	(4)	(5)
Policy×log(1+Vintage)	0.0300**	0.0396***	0.0302***	0.0254**	0.0392***
	(0.0116)	(0.0121)	(0.0117)	(0.0116)	(0.0121)
Policy×log(1+Vintage)×Size	-0.0065	-0.0109**	-0.0067	-0.0041	-0.0100*
	(0.0053)	(0.0054)	(0.0053)	(0.0051)	(0.0052)
Policy×log(1+Vintage)×ROA		0.0373***			0.0366**
		(0.0135)			(0.0152)
Policy×log(1+Vintage)×Capital			0.0115		-0.0008
			(0.0187)		(0.0201)
Policy×log(1+Vintage)×NPL ratio				-0.0239*	-0.0022
				(0.0143)	(0.0168)
Bank-Time FE	Y	Y	Y	Y	Y
Firm-Time FE	Y	Y	Y	Y	Y
Firm-Bank FE	Y	Y	Y	Y	Y
Loan Type FE	Y	Y	Y	Y	Y
Observations	1,654,107	1,654,107	1,654,107	1,654,107	1,654,107
R-squared	0.66	0.66	0.66	0.66	0.66

The table presents regression results, where the dependent variable is the natural logarithm of outstanding credit from bank b to firm f. *Policy* is a dummy variable that equals 1 for observations in the post-policy period ($t >$ 2018Q1) and 0 otherwise. *NPL vintage* is a bank's weighted average vintage of the loan portfolio to non-financial firms as of the end of 2017. We include controls and fixed effects, as noted in the lower part of the table, to control for different levels of (un)observed heterogeneity. Standard errors are double clustered at the bank and firm levels and reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Policy and Bank Lending standards

	Logt credit	New credit dummy	Termination dummy	Collateralized loan ratio	Long-term loan ratio
	(1)	(2)	(3)	(4)	(5)
Policy×NPL vintage	-0.0061***	0.0002	0.0007*	0.0017***	0.0002
	(0.0019)	(0.0011)	(0.0004)	(0.0003)	(0.0019)
Bank controls	Y	Y	Y	Y	Y
Relationship controls	Y	Y	Y	Y	Y
Bank-Firm FE	Y	Y	Y	Y	Y
Firm-Time FE	Y	Y	Y	Y	Y
Bank Type-Time FE	Y	Y	Y	Y	Y
Observations	6,776,491	6,776,491	8,284,342	6,776,491	6,776,491
R-squared	0.95	0.65	0.57	0.97	0.86

This table contains a set of regressions in which the dependent variables are the natural logarithm of outstanding credit from bank b to firm f (column 1), a dummy that equals 1 if bank b extended a new credit to firm f (column 2), a dummy that equals 1 if bank b terminates the lending relationship with firm f (column 3), the ratio of collateralized credit that firm f has with bank b (column 4), and the ratio of bank debt with residual maturity above three years that firm f has with bank b (column 5). *Policy* is a dummy variable that equals 1 for observations in the post-policy period ($t >$ 2018Q1) and 0 otherwise. *NPL vintage* is a bank's weighted average vintage of the loan portfolio to non-financial firms as of the end of 2017. We include controls and fixed effects, as noted in the lower part of the table, to control for different levels of (un)observed heterogeneity. Standard errors are double clustered at the bank and firm levels and reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Policy and Bank Lending - Robustness Tests

	Bank gr. times quarter FE	Controls quarter FE	Drop low NPL banks	Drop rural banks & foreign credit inst.	Drop constr. & real est. sector
	(1)	(2)	(3)	(4)	(5)
Policy × NPL vintage	-0.0059***	-0.0085***	-0.0060***	-0.0075***	-0.0061***
	(0.0017)	(0.0020)	(0.0011)	(0.0019)	(0.0018)
Bank controls	Y	Y	Y	Y	Y
Relationship controls	Y	Y	Y	Y	Y
Bank x Firm FE	Y	Y	Y	Y	Y
Firm x Quarter FE	Y	Y	Y	Y	Y
Bank Type x Quarter FE	Y	Y	Y	Y	Y
Observations	6,776,491	6,776,491	5,180,135	5,012,521	5,688,858
R-squared	0.95	0.95	0.95	0.95	0.95

Notes: This table presents robustness tests for the estimation results of the specification in column (1) of **??**. The dependent variable is the logarithm of total credit granted to firm f by bank b. *Policy* is a dummy variable that equals 1 for observations in the post-policy period ($t >$2018q1) and 0 otherwise. *NPL vintage* is a bank's weighted average vintage of the loan portfolio to non-financial firms as of the end of 2017. In column (1), we include a bank group dummy interacted with quarter dummies, where the bank group dummy takes the value 1 if the banking group participated in the 2018 EU-wide stress test and 0 otherwise. In column (2), we interact all bank controls with quarter dummies. In column (3), we drop from the sample banks with NPL ratios below 5% (*Low-NPL* banks). In column (4), we drop from the sample rural banks and foreign credit institutions operating in Spain. Finally, in column (5), we drop firms belonging to the construction or real estate sectors. The fixed effects that are included in each regression are noted in the lower part of the table. Standard errors are double clustered at the bank and firm levels and reported in parentheses.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Firm-Level Outcomes

	Growth between the end of 2017 and 2019				
	Bank debt (1)	Employment (2)	Investment (3)	Assets (4)	Sales (5)
Weighted NPL vintage	-0.0153*	-0.0040***	-0.0074***	-0.0021**	-0.0035***
	(0.0083)	(0.0007)	(0.0020)	(0.0010)	(0.0009)
Province-Industry-Size FE	Y	Y	Y	Y	Y
Firm controls	Y	Y	Y	Y	Y
Bank controls	Y	Y	Y	Y	Y
Firm-Bank controls	Y	Y	Y	Y	Y
Observations	113,081	113,081	113,081	113,081	113,081
R-squared	0.12	0.09	0.09	0.17	0.12

Notes: The table presents regression results, where the dependent variable is the growth between the end of 2017 and 2019 (pre and post policy) of a firm's real variable, presented in columns (1) to (5): bank debt, employment (measured as the number of workers), investment (measured as tangible fixed assets), assets, and sales. The variable of interest is *Weighted NPL vintage*, which is measured as the weighted average NPL vintage of banks lending to firm f in 2017, taking as weights the amount granted by each bank to firm f. We include province-industry-size fixed effects and controls. Standard errors are clustered at the main bank level and reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Firm-Level Outcomes, Heterogeneous Effects Based on Firm Riskiness

	Growth between the end of 2017 and 2019				
	Bank debt (1)	Employment (2)	Investment (3)	Assets (4)	Sales (5)
Weighted NPL vintage	-0.0102	-0.0023**	-0.0053**	-0.0015	-0.0033***
	(0.0088)	(0.0010)	(0.0023)	(0.0012)	(0.0010)
Risky	0.0313***	-0.0116	-0.0011	-0.0207***	0.0011
	(0.0116)	(0.0093)	(0.0063)	(0.0045)	(0.0073)
Weighted NPL vintage × Risky	-0.0110***	-0.0030**	-0.0043**	-0.0010	-0.0005
	(0.0034)	(0.0014)	(0.0018)	(0.0008)	(0.0015)
Province x Industry x Size FE	Y	Y	Y	Y	Y
Firm controls	Y	Y	Y	Y	Y
Bank controls	Y	Y	Y	Y	Y
Firm x Bank controls	Y	Y	Y	Y	Y
Observations	113,078	113,078	113,078	113,078	113,078
R-squared	0.1266	0.0917	0.0907	0.1709	0.1192

Notes: The table presents regression results, where the dependent variable is the growth between the end of 2017 and 2019 (pre and post policy) of a firm's real variable, presented in columns (1) to (5): bank debt, employment (measured as the number of workers), investment (measured as tangible fixed assets), assets, and sales. The variable of interest is *Weighted NPL* vintage, which is measured as the weighted average NPL vintage of banks lending to firm f in 2017, taking as weights the amount granted by each bank to firm f. Moreover, we interact the variable of interest with a firm risk measure. *Risky* takes value 1 if the firm's interest coverage ratio is above the median of the distribution as of the end of 2017 and 0 otherwise. The interaction allows us to test whether such firms were more affected by the policy. We include province-industry-size fixed effects and controls. Standard errors are clustered at the main bank level and reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

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Summary Statistics

Panel A: NPL-level variables

	Obs.	Mean	sd	p25	Median	p75
Disposal	1,654,107	0.108	0.311	0.000	0.000	0.000
Policy	1,654,107	0.501	0.500	0.000	1.000	1.000
Loan size	1,654,107	8.463	2.905	6.265	8.798	10.784
Log(1+Vintage)	1,654,107	2.969	1.064	2.303	3.105	3.804
Real estate collateral	1,654,107	0.253	0.435	0.000	0.000	1.000
Financial asset collateral	1,654,107	0.006	0.078	0.000	0.000	0.000
Movable collateral	1,654,107	0.004	0.062	0.000	0.000	0.000
Uncollateralized	1,654,107	0.737	0.440	0.000	1.000	1.000
Commercial loan	1,654,107	0.046	0.210	0.000	0.000	0.000
Leasing	1,654,107	0.039	0.193	0.000	0.000	0.000
Credit line	1,654,107	0.469	0.499	0.000	0.000	1.000
Term loans	1,654,107	0.446	0.497	0.000	0.000	1.000

Notes: The table presents summary statistics at the NPL level.

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Summary statistics II

Panel A: Bank-firm-level variables

	Obs.	Mean	sd	p25	Median	p75
Log(Credit)	6,776,491	10.897	2.014	9.703	10.988	12.164
New credit dummy	6,776,491	0.217	0.412	0.000	0.000	0.000
Termination dummy	8,284,342	0.039	0.195	0.000	0.000	0.000
Collateralized loan share	6,776,491	0.189	0.372	0.000	0.000	0.000
Long-term loan share	6,776,491	0.644	0.418	0.161	0.928	1.000
NPL share	6,776,491	0.007	0.080	0.000	0.000	0.000
Forborne loan share	6,776,491	0.021	0.133	0.000	0.000	0.000
Credit share	6,776,491	0.331	0.285	0.089	0.249	0.522

Notes: The table presents summary statistics at the bank-firm level.

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Summary statistics III

Panel A: Bank-level variables

	Obs.	Mean	sd	p25	Median	p75
Log(Assets)	1,051	14.296	2.150	12.625	14.135	15.309
Capital ratio	1,051	0.070	0.147	0.057	0.077	0.097
NPL ratio	1,051	6.879	7.185	2.734	5.473	8.151
Liquidity ratio	1,051	10.478	13.189	2.793	6.604	11.876
ROA	1,051	0.477	1.080	0.282	0.512	0.771
NPL vintage	106	2.743	4.503	0.260	1.325	3.739

Notes: The table presents summary statistics at the bank level.

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