

Bank-Loan Growth and Private-State Fixed-Asset Investment

Evidence from China's Post-Crisis Credit Expansion

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Abstract

This essay asks whether provincial bank-credit expansion in China was associated more strongly with state-owned-economy fixed-asset investment than with private-enterprise fixed-asset investment. If, as argued in the literature, state firms had better access to formal bank credit while private firms relied more on internal funds, bank-loan growth should map more strongly into state investment. I test this using a 2007–2012 province-year panel that stacks private-enterprise and state-owned-economy fixed-asset investment as two observations per province-year. The main baseline specification includes province, year, and ownership fixed effects plus GDP growth. The key coefficient interacts a private-ownership indicator with provincial bank-loan-balance growth. The estimate is negative and statistically significant: private investment has a bank-loan-growth sensitivity 0.673 lower than state investment, while the implied private sensitivity is small and statistically insignificant. A mechanism test suggests that private investment is more sensitive to lagged private industrial profits than state investment is to lagged non-private profits. The evidence is consistent with a state-biased credit-investment pattern during the post-crisis expansion, but it is not a causal credit-supply design. The result is strongest in 2009–2010 and disappears after absorbing ownership-specific year shocks, so it should be read as suggestive stimulus-period evidence.

1 Introduction

1.1 Motivation

China's reform-era growth created a large private sector, but formal finance remained strongly connected to the state. A central argument in Song et al. (2011) is that entrepreneurial firms used more productive technologies but faced tighter credit constraints, while state-owned firms survived partly because they had better access to credit. Allen et al. (2005) describe China's private-sector growth as taking place despite weak formal financial and legal institutions, and Boyreau-Debray and Wei (2005) show that a state-dominated financial system can distort capital allocation across regions.

This essay studies that mechanism through fixed-asset investment. Fixed-asset investment is a major official measure of capital formation, and Chinese statistical data report it by ownership category. This makes it possible to ask whether provincial bank-credit growth is reflected more in private-enterprise investment or in state-owned-economy investment.

1.2 Research Question

The research question is:

When provincial bank loan balances grow, does state-owned-economy fixed-asset investment grow more strongly than private-enterprise fixed-asset investment?

The empirical design stacks two ownership categories in each province-year. One row records state-owned-economy FAI growth, and the other records private-enterprise FAI growth. I regress ownership-specific investment growth on provincial bank-loan growth and its interaction with a private-sector indicator. The interaction term asks whether private investment responds differently from state investment to the same provincial credit expansion.

1.3 Contribution And Main Findings

The contribution is narrow. This paper does not claim to discover state-biased finance in China. Several papers already document that pattern with stronger micro data. Cong et al. (2019) use loan-level data and show that the 2009–2010 stimulus favored state-owned firms. Chen et al. (2023) show that infrastructure-heavy fiscal expansion weakened monetary-stimulus transmission to private firms and reinforced lending to state-owned firms. Other work studies related crowding-out channels through local public debt or policy-bank lending (Huang et al., 2020; ?).

This essay contributes a public-data test at the province-year level. It asks whether the same private-state asymmetry appears in ownership-specific fixed-asset investment data from official statistical sources. The data are transparent and easy to reproduce, although the design is less causally sharp than loan-level work.

The main baseline estimate is straightforward. In the baseline with province, year, and ownership fixed effects plus GDP growth, the coefficient on private ownership interacted with bank-loan growth is -0.673, with a standard error of 0.231 and a p-value of 0.0037. The state-sector sensitivity is 0.765, while the implied private-sector sensitivity is only 0.093 and is not statistically significant. Bank-loan growth is therefore associated much more strongly with state investment growth than with private investment growth. A mechanism test is consistent with the internal-finance interpretation: private investment is more sensitive to lagged private industrial profits than state investment is to lagged non-private profits. The main caveat is that the credit result depends heavily on the 2009–2010 stimulus period and does not survive ownership-specific year fixed effects.

2 Literature Review

2.1 State-Biased Finance And Private Financing Constraints

The theory anchor is Song et al. (2011). Their model explains China’s transition as a process in which more productive entrepreneurial firms expand despite financial constraints, while less productive state firms survive because they have better credit access. The

model predicts that private-sector expansion depends heavily on internal savings. That prediction maps directly into this essay: if private firms rely more on internal funds, aggregate bank-credit expansion should not translate into private fixed-asset investment as strongly as it translates into state investment.

This mechanism is consistent with broader evidence on Chinese finance. Allen et al. (2005) argue that private-sector growth occurred despite an underdeveloped formal financial system. Boyreau-Debray and Wei (2005) emphasize the costs of a state-dominated banking system for capital allocation. Firm-level work also links Chinese private firms to internal finance. Guariglia et al. (2011) show that internal finance matters for the growth of Chinese firms, and Ding et al. (2013) study investment under financing constraints and working-capital management. These papers support the mechanism, but they do not estimate the province-year fixed-asset-investment specification used here.

2.2 Credit Expansion, Stimulus, And Ownership Allocation

The post-2008 period matters because China responded to the global financial crisis with a large credit- and investment-led stimulus. Bai et al. (2016) describe the stimulus as infrastructure-heavy and tied to local-government financing. This context matters for the present paper because the baseline sample is 2007–2012, and the strongest credit movement occurs during the stimulus years.

The closest evidence comes from loan-level studies. Cong et al. (2019) show that stimulus credit disproportionately favored state-owned firms and lower-productivity firms, reversing earlier reallocation toward private firms. Chen et al. (2023) show that infrastructure investment changed monetary transmission: credit effects became stronger for state-owned firms and weaker for private firms. These studies explain why a province-level credit-investment association may be strongest in 2009–2010.

Other papers study related state-credit channels. Huang et al. (2020) show that local public debt crowded out private-firm investment while leaving state-owned-firm investment less affected. ? finds that China Development Bank loans to SOEs can crowd out private firms in the same industry, while infrastructure lending can crowd in downstream

firms. Firth et al. (2012) study fixed investment, government control, and financing channels among listed firms. These papers are close in mechanism, but their data and estimands differ from this essay’s province-year stacked FAI design.

2.3 Gap In The Literature

The literature already gives strong evidence that China’s formal credit system favored state-linked borrowers, especially during the post-crisis stimulus. The remaining gap is narrower. The closest papers usually use confidential loan-level data, firm-level investment, local public debt, policy-bank loans, or listed-firm balance sheets. They do not ask the public-data question studied here: in provincial statistical data, is bank-loan growth associated more strongly with state-owned-economy FAI growth than with private-enterprise FAI growth?

The value of this paper is therefore not theoretical novelty. It is an ownership-specific provincial investment test of a known mechanism. If the result appears even in public aggregate data, it provides public-data evidence consistent with the view that state-biased credit allocation was reflected not only in bank-loan microdata, but also in provincial capital formation.

3 Data and Variables

3.1 Data Sources

The data combine three sources. First, I use CNKI/NBS fixed-asset-investment data for province-year ownership categories. The two main outcome variables are private-enterprise FAI and state-owned-economy FAI. Second, I use CNKI/NBS industrial data for the mechanism variables, including private industrial profits, total industrial profits, private industrial revenue, and industrial assets. Third, I use a provincial macro-finance workbook for bank loans, bank deposits, GDP, and fiscal expenditure.

I rely on official NBS documentation for the meaning of the Chinese statistical categories (National Bureau of Statistics of China, 2023). This is necessary because CNKI ex-

ports provide indicator names, units, and source tables, but not full conceptual definitions. The NBS documentation defines registration-type categories, fixed-asset-investment scope, loan-balance concepts, and the 2011 changes in fixed-asset-investment and industrial-statistics coverage.

3.2 Outcome Variables

The private investment variable is *private-enterprise fixed-asset investment*. In the CNKI fixed-asset-investment file it is reported in ten thousand yuan, so I divide it by 10,000 to convert it to 100 million yuan. The state investment variable is *state-owned-economy fixed-asset investment*. It is already reported in 100 million yuan.

The dependent variable is annual log growth of fixed-asset investment:

$$\Delta \ln(FAI_{ipt}),$$

where i indexes ownership type, p province, and t year. For private rows, FAI_{ipt} is private-enterprise FAI. For state rows, it is state-owned-economy FAI. The stacked panel therefore has two rows per province-year.

3.3 Credit, Controls, And Mechanism Variables

The main credit variable is growth in province-level financial-institution loan balances. I define

$$C_{pt} = \Delta \ln(BankLoans_{pt}).$$

This measures growth in the stock of formal bank lending, not loans used directly for fixed-asset-investment projects. The coefficient should therefore be interpreted as an association between aggregate provincial credit expansion and investment growth, not as a direct project-finance elasticity.

The main control is provincial GDP growth, defined as $G_{pt} = \Delta \ln(GDP_{pt})$. Additional specifications add deposit growth, government expenditure growth, and government size,

measured as government expenditure divided by GDP. These controls are not meant to create a causal credit-supply shock. They check whether the private-state differential survives basic macro and fiscal controls.

The mechanism variables use industrial data. The main mechanism is lagged profit growth. For private rows, this is lagged private industrial profit growth. For state rows, it is lagged non-private industrial profit growth, constructed as total industrial profit minus private industrial profit. I also report lagged revenue growth and lagged asset growth as related checks.

Table 1: Main variables

Variable	English meaning	Construction
$\Delta \ln(FAI_{ipt})$	Ownership-specific FAI growth	Private row: $\Delta \ln(\text{private FAI})$; state row: $\Delta \ln(\text{state FAI})$
Private FAI	Private-enterprise fixed-asset investment	Original CNKI private-enterprise FAI; converted from 10,000 yuan to 100 million yuan
State FAI	State-owned-economy fixed-asset investment	Original CNKI state-owned-economy FAI; already in 100 million yuan
$\Delta \ln(BankLoans_{pt})$	Bank-loan-balance growth	First difference of log province-level financial-institution loan balance
$\Delta \ln(GDP_{pt})$	GDP growth	First difference of log provincial GDP
Profit growth	Lagged industrial profit growth	Private rows use private industrial profit; state rows use non-private industrial profit

3.4 Sample And Measurement Caveats

The main outcome sample is 2007–2012. Private-enterprise FAI is complete from 2006, so the first-differenced outcome starts in 2007. The main bank-loan series is missing Jiangsu, so the main baseline credit regressions use 30 provinces. The mechanism regressions use 31 provinces when the mechanism variables are available.

There are three measurement caveats. First, the bank-loan variable is a province-level loan-balance stock, not a direct measure of domestic loans used in fixed-asset-investment funding. Second, the outcome sample crosses the 2011 fixed-asset-investment scope change. Year fixed effects absorb national breaks, but province-specific compo-

sition changes may remain. Third, the industrial-statistics threshold changed in 2011, which affects the profit mechanism variables. For this reason, the profit result is treated as mechanism evidence, not as the main baseline.

The ownership labels also require care. *Private enterprise* is a registration-type category and is narrower than broad modern private investment. *State-owned economy* is a state-sector economic-type category and should not be treated as exactly identical to modern state-controlled investment. The paper therefore uses cautious labels: private-enterprise FAI and state-owned-economy FAI.

4 Methodology

4.1 Identification Strategy

The main comparison is within a stacked ownership panel. I ask whether private and state FAI in the same broad provincial setting respond differently to provincial bank-loan growth. Province fixed effects absorb time-invariant provincial differences. Year fixed effects absorb national shocks common to all provinces. Ownership fixed effects absorb the average private-state difference in investment growth.

The design is useful but limited. It does not identify an exogenous credit-supply shock. Bank-loan growth may reflect local demand, policy priorities, and macro conditions. The coefficient should therefore be read as an ownership-asymmetric association.

4.2 Main Model

For compactness, define $C_{pt} \equiv \Delta \ln(BankLoans_{pt})$ and $G_{pt} \equiv \Delta \ln(GDP_{pt})$.

$$\Delta \ln(FAI_{ipt}) = \alpha_p + \gamma_t + \mu_i + \beta C_{pt} + \theta(Private_i \times C_{pt}) + \delta G_{pt} + \varepsilon_{ipt}. \quad (1)$$

Here α_p is a province fixed effect, γ_t is a year fixed effect, and μ_i is an ownership fixed effect. $Private_i$ equals one for private-enterprise FAI rows and zero for state-owned-economy FAI rows. Standard errors are clustered by province.

The coefficient β measures the association between bank-loan growth and state FAI growth, because the state row has $Private_i = 0$. The key coefficient is θ . It measures the additional private-sector response relative to the state-sector response. The hypothesis is $\theta < 0$: if bank lending is state-biased, private FAI should respond less than state FAI to the same provincial loan growth.

The same contrast can be written more simply as a private-minus-state equation:

$$\Delta \ln(PrivateFAI_{pt}) - \Delta \ln(StateFAI_{pt}) = a + \theta C_{pt} + u_{pt}. \quad (2)$$

This equation is useful for intuition. The stacked interaction coefficient asks whether loan growth predicts the gap between private and state FAI growth. Common province-year controls cancel in this private-state difference, which is why the main interaction changes little when common macro controls are added sequentially. This also explains an important diagnostic: if I allow fully ownership-specific year effects, the loan-growth differential disappears. That check absorbs the national private-state shock during the stimulus period. I therefore treat it as a timing diagnostic rather than as the main baseline, because the paper’s question is precisely whether the post-crisis credit expansion appears differently in private and state FAI.

4.3 Robustness Checks

The main table adds controls sequentially. The first column includes only the fixed effects and bank-loan terms. The main baseline column adds GDP growth. Later columns add deposit growth, fiscal expenditure growth, and government size. This structure documents sensitivity to basic macro and fiscal controls, while the private-state differential is mainly assessed in the targeted robustness checks.

The robustness table uses targeted checks. First, it allows each ownership type to have its own province fixed effect. Second, it uses province-year fixed effects, which compare private and state investment within the same province-year. Third, it uses an alternative CNKI all-currency loan-balance measure. Fourth, it excludes the four municipalities: Beijing, Tianjin, Shanghai, and Chongqing. Fifth, it excludes 2009–2010 to test whether

the result is mainly a stimulus-period pattern. Sixth, it excludes 2011 because that year is a statistical comparability concern. Seventh, it winsorizes growth rates to check sensitivity to outliers. I also report in the text two timing diagnostics: ownership-specific year fixed effects and lead bank-loan growth.

4.4 Mechanism

The mechanism test asks whether private investment is more tied to internal funds. Let $M_{ip,t-1}$ denote lagged ownership-specific industrial performance growth.

$$\Delta \ln(FAI_{ipt}) = \alpha_p + \gamma_t + \mu_i + \phi M_{ip,t-1} + \kappa(Private_i \times M_{ip,t-1}) + \delta G_{pt} + \varepsilon_{ipt}. \quad (3)$$

For the profit column, $M_{ip,t-1}$ is lagged private industrial profit growth for private rows and lagged non-private industrial profit growth for state rows. The coefficient κ measures whether private FAI is more sensitive to lagged profits than state FAI is. If private firms rely more on internal funds, the expected sign is $\kappa > 0$.

5 Results

5.1 Main Results

Table 2 reports the main regression and sequential controls. The main baseline specification is M2, which includes province, year, and ownership fixed effects plus GDP growth. The coefficient on bank-loan growth is 0.765 and is significant at the 1 percent level. This is the state-sector association: when provincial loan balances grow faster, state-owned-economy FAI also grows faster.

Table 2: Main baseline and sequential controls

	M1	M2	M3	M4	M5
	Base	+ GDP	+ Deposits	+ Fiscal exp.	+ Gov. size
Bank-loan growth	0.730*** (0.201)	0.765*** (0.193)	0.794*** (0.270)	0.747*** (0.272)	0.521* (0.310)
Private $\times$ bank-loan growth	-0.673*** (0.231)	-0.673*** (0.231)	-0.673*** (0.232)	-0.598*** (0.219)	-0.598*** (0.219)
Implied private sensitivity	0.057 (0.154)	0.093 (0.159)	0.122 (0.150)	0.149 (0.151)	-0.077 (0.191)
Province FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Ownership FE	Yes	Yes	Yes	Yes	Yes
Observations	360	360	360	336	336
Provinces	30	30	30	28	28
R^2	0.394	0.395	0.396	0.381	0.389

Notes: The dependent variable is $\Delta \ln(FAI_{ipt})$ in a stacked ownership panel with private and state rows for each province-year. M2 is the main baseline. The implied private sensitivity is the sum of bank-loan growth and the private interaction. Because the panel stacks two ownership rows per province-year, M2 contains 180 province-year pairs and 30 province clusters. Standard errors clustered by province are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The key result is the private interaction. In M2, the coefficient on $Private_i \times C_{pt}$ is -0.673, with a standard error of 0.231 and a p-value of 0.0037. Because both variables are in log changes, the coefficient has a percentage-point interpretation in growth rates. A one-percentage-point higher loan-balance growth rate is associated with about 0.765 percentage points higher state FAI growth, but the private response is about 0.673 percentage points smaller. The implied private-sector sensitivity is therefore 0.093, with a standard error of 0.159 and a p-value of 0.559. In other words, the state association is strong, while the private association is small and statistically indistinguishable from zero. Because the panel stacks two ownership rows per province-year, the private differential is identified from 180 province-year ownership contrasts and 30 province clusters.

The result is stable across the sequential controls, but this stability should not be overread. GDP growth, deposit growth, and fiscal controls are common to both ownership rows in a province-year, so they mainly affect the state-sector level coefficient and have limited ability to change the private-state differential. The table is still useful because it shows that the main coefficient is not created by one obvious macro control, but it is not a substitute for a causal credit-supply design.

5.2 Robustness Results

Table 3 reports the main robustness checks. The private differential remains negative when the model allows ownership-specific province fixed effects. It also remains negative and significant with province-year fixed effects. This is a demanding check because it compares private and state investment within the same province-year and absorbs all province-year shocks common to both ownership rows. However, this remains a descriptive within-province-year ownership comparison and does not solve credit endogeneity.

Table 3: Robustness checks

	R1	R2	R3	R4	R5	R6	R7	R8
	Baseline	Own.-prov. FE	Prov.-year FE	Alt. loans	No munic.	No 09–10	No 2011	Winsor.
Private differential	-0.673*** (0.231)	-0.791*** (0.301)	-0.673** (0.311)	-0.837*** (0.184)	-0.602*** (0.231)	-0.044 (0.293)	-0.648*** (0.218)	-0.707*** (0.204)
Province FE	Yes	Own. type	No	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Province-year FE	No	No	Yes	No	No	No	No	No
Ownership FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	360	360	360	308	312	240	300	360
Provinces	30	30	30	31	26	30	30	30
R^2	0.395	0.435	0.652	0.410	0.358	0.459	0.345	0.415

Notes: The reported coefficient is the private-sector differential relative to state FAI. R2 allows each ownership type to have a separate province fixed effect. R3 uses province-year fixed effects. R4 uses the alternative CNKI all-currency loan-balance measure. R5 excludes Beijing, Tianjin, Shanghai, and Chongqing. R6 excludes 2009–2010. R7 excludes the 2011 statistical break year. R8 winsorizes growth rates at the 1st and 99th percentiles. Standard errors clustered by province are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The result is also stronger when using the alternative CNKI all-currency loan measure. Excluding Beijing, Tianjin, Shanghai, and Chongqing leaves the coefficient negative and significant. Excluding 2011 gives a similar coefficient, so the baseline is not mechanically driven by the 2011 statistical break. Winsorizing growth rates also leaves the private differential negative and significant. A leave-one-province-out check gives coefficients from -0.871 to -0.583, and all are significant at the 1 percent level.

R6 is the important exception. When 2009–2010 are excluded, the private differential falls to -0.044 and becomes statistically insignificant. Two further timing diagnostics weaken a causal interpretation. With ownership-specific year fixed effects, the coefficient is -0.002 with a p-value of 0.996. Appendix Table A2 reports the current, lagged, and lead loan-growth diagnostics. Because the lead coefficient is negative, statistically significant, and similar in magnitude to the baseline coefficient, the timing diagnostics strongly caution against interpreting the baseline as a contemporaneous lending-investment response. The result is better read as a stimulus-period ownership-composition pattern. It is strongest during the post-crisis credit expansion. That pattern is consistent with the stimulus literature, especially Cong et al. (2019) and Chen et al. (2023), but it sharply limits causal interpretation.

5.3 Mechanism Results

Table 4 reports the mechanism tests. The strongest result is in K1, which uses lagged profit growth. The coefficient on $Private_i \times M_{ip,t-1}$ is 0.095, with a standard error of 0.043 and a p-value of 0.026. This means private FAI is more sensitive to lagged private industrial profit growth than state FAI is to lagged non-private profit growth.

Table 4: Mechanism: lagged industrial performance and ownership-specific investment

	K1 Profit	K2 Revenue	K3 Assets
Lagged mechanism variable	-0.042 (0.035)	-0.020 (0.024)	-0.040 (0.045)
Private $\times$ lagged variable	0.095** (0.043)	0.081 (0.072)	0.143 (0.103)
Province FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Ownership FE	Yes	Yes	Yes
GDP growth control	Yes	Yes	Yes
Observations	372	372	328
Provinces	31	31	31
R^2	0.376	0.366	0.396

Notes: The dependent variable is stacked ownership-specific FAI growth. Each column uses a different lagged ownership-specific industrial variable. For private rows the lagged variable is measured for private industrial firms; for state rows it is measured for non-private industrial firms, constructed as total industry minus private industry. Standard errors clustered by province are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

This result is consistent with the internal-finance mechanism in Song et al. (2011) and Guariglia et al. (2011). If private firms face tighter access to bank credit, their investment should depend more on retained earnings and profits. Because the comparison group is non-private rather than pure state-owned industrial profit, the mechanism test is less clean than the main ownership-specific FAI comparison. The revenue and asset columns point in the same positive direction, but they are not statistically significant. The mechanism evidence is therefore suggestive rather than decisive. It suggests that private investment may be more tied to internal funds, but it cannot distinguish financing constraints from stronger private investment opportunities after high-profit years.

6 Policy Implications

The results suggest that the quantity of credit is not enough. If aggregate credit expansion is transmitted mainly through state-linked borrowers and projects, it may raise state investment without easing private-sector financing constraints. This matters for China because investment-led stabilization often works through banks, local governments, and state-linked projects.

The policy implication is modest. Better private access to formal credit would require attention to allocation channels, not only aggregate loan growth. During downturns, credit programs that rely mainly on state-linked borrowers may stabilize investment quickly, but they can also reinforce the gap between state and private capital formation.

The evidence does not justify strong causal policy claims. The regressions use province-year associations, not an exogenous lending shock. The safer conclusion is that public provincial data show a pattern consistent with state-biased credit allocation during the post-crisis expansion: bank-loan growth is associated mainly with state-owned-economy FAI, while private-enterprise FAI is more tied to lagged profits.

7 Conclusions

This essay asked whether provincial bank-loan-balance growth in China was reflected more strongly in state-owned-economy FAI than in private-enterprise FAI. Using a stacked province-year panel for 2007–2012, I find that provincial bank-loan-balance growth is associated much more strongly with state-owned-economy fixed-asset investment growth than with private-enterprise fixed-asset investment growth. The main baseline estimate of the private differential is -0.673 and is statistically significant at the 1 percent level. The implied private sensitivity is small and not statistically significant.

The mechanism results are consistent with the interpretation that private investment relied more on internal funds. Private FAI is more sensitive to lagged private industrial profit growth than state FAI is to lagged non-private profit growth. This is consistent with, but does not independently identify, tighter formal credit constraints among private firms.

The main limitation is that the credit result depends heavily on 2009–2010 and disappears with ownership-specific year fixed effects. This does not make the result unimportant; the stimulus years are exactly when the literature expects state-biased credit allocation to be strongest. But it means the paper should be read as suggestive stimulus-period evidence, not as proof of a stable causal elasticity. The contribution is a public-data test showing that a pattern consistent with state-biased credit allocation is visible in provincial ownership-specific investment data.

Appendix

Table A1: Stimulus-period diagnostics

	S1	S2
Private $\times$ stimulus 2009–2010	-0.134*** (0.043)	-0.043 (0.166)
Private $\times$ bank-loan growth		-0.044 (0.386)
Triple interaction		-0.352 (0.643)
Province-year FE	Yes	Yes
Observations	372	360
Provinces	31	30
R^2	0.667	0.669

Notes: The stimulus indicator equals one in 2009–2010. S1 is a simple private-state difference during the stimulus years with province-year FE. S2 adds the loan-growth triple interaction. The triple interaction is imprecise, so this diagnostic should be read as evidence that the ownership gap is stimulus-period concentrated, not as a precise estimate of a different loan-growth slope in stimulus years. Standard errors clustered by province are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A2: Timing diagnostics for bank-loan growth

Specification	Coefficient	SE	p-value	N
Current loan growth	-0.673***	(0.231)	0.0037	360
Lagged loan growth	0.184	(0.242)	0.4458	360
Lead loan growth	-0.783***	(0.232)	0.0007	300

Notes: The reported coefficient is the private-sector differential relative to state FAI. Current loan growth is the main baseline. Lagged loan growth uses $\Delta \ln(BankLoans_{p,t-1})$. Lead loan growth uses $\Delta \ln(BankLoans_{p,t+1})$ as a placebo timing diagnostic. The significant lead coefficient weakens a causal timing interpretation of the baseline. Standard errors clustered by province are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table A3: Summary statistics for main variables

Variable	N	Mean	SD	Min	Median	Max
Private FAI growth	180	0.286	0.160	-0.302	0.269	0.826
State FAI growth	180	0.183	0.154	-0.476	0.199	0.547
Private-state FAI growth gap	180	0.103	0.201	-0.450	0.112	0.820
Bank-loan growth	180	0.181	0.071	-0.020	0.168	0.485
GDP growth	180	0.157	0.052	-0.009	0.165	0.262
Lagged private profit growth	180	0.393	0.428	-1.613	0.369	2.275
Lagged non-private profit growth	180	0.233	0.474	-2.916	0.265	1.979

Notes: Statistics use the main 2007–2012 credit-regression sample with nonmissing bank-loan growth and GDP growth. FAI, bank-loan, GDP, and profit variables are log growth rates. The main regression stacks private and state FAI rows, but this table reports province-year variables once per province-year where appropriate.

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