

State versus Market: China's Infrastructure Investment^{*}

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Abstract

Amid growing global interest in state interventions, this paper examines the impact of Chinese government infrastructure investments on firm productivity, focusing on a policy that encourages regional governments to foster a conducive market environment for private enterprises. Our analysis shows that the effect of infrastructure investments increases with improvements in the market environment. However, despite greater gains in industries with enhanced market access, the overall impact remains neutral or negative, even in these industries. These findings highlight the complex relationship between state interventions and market mechanisms in driving productivity, raising concerns about the effectiveness of infrastructure investments in promoting broader economic growth.

Keywords: State Intervention, Infrastructure, Marketization, Complementarity

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In the wake of the 2008 financial crisis, further intensified by the unprecedented global disruptions of the COVID-19 pandemic, the world has seen a dramatic re-evaluation of the role of state interventions in economic development. These significant events have fostered a renewed interest among nations in adopting more proactive stances in guiding their economies. This sentiment has transcended traditional economic divides, with countries—whether developed or developing—becoming more receptive to the idea of industrial policies, as recently reviewed by Juhász, Lane, and Rodrik (2023). Even traditionally free-market economies like the U.S. and the European Union are adopting industrial policies to support and protect their domestic industries against external challenges. Emerging economies are increasingly focusing on expansive infrastructure projects, from enhancing transportation networks to expanding digital connectivity. These investments are justified by their established role in boosting firm productivity, catalyzing economic activity, and facilitating trade, as highlighted by Rodrik (1999), Aschauer (1989), and Stiglitz (1993). Moreover, empirical evidence from Demurger (2001), Mitra (2006), Donaldson and Hornbeck (2016), and Donaldson (2018) supports the positive link between infrastructure development and economic growth.¹

However, this optimistic view is tempered by significant concerns about large-scale public investments. A critical issue is the crowding-out effect (e.g., Aschauer (1989)), where limited capital resources reduce availability for private enterprises when governments allocate substantial funds to infrastructure. Studies by Nazmi and Ramirez (1997), Ramirez and Nazmi (2003), and Mitra (2006) support this concern. Additionally, while infrastructure may enhance overall economic efficiency, it can have significant distributional effects. Research by Baum-Snow (2006) and Baum-Snow et al. (2017) suggests that improved infrastructure can increase labor mobility, potentially boosting productivity in more developed areas at the expense of less developed ones. These countervailing effects raise a crucial question: Can state-led infrastructure initiatives effectively spur growth in developing economies?

¹ The social perspective, as discussed by Atkinson and Stiglitz (1980), suggests that government interventions, especially through State-Owned Enterprises (SOEs), are essential for addressing market failures. Stiglitz and Weiss (1981) further delve into these failures, highlighting situations like credit rationing due to imperfect information. Moreover, Greenwald and Stiglitz (1986) underscore the importance of intervention in the presence of externalities and other market inefficiencies.

This issue is particularly relevant for China, which has consistently used infrastructure investments as a counter-cyclical tool, particularly during economic downturns. For example, infrastructure was the main component of China's post-2008 economic stimulus program. As China's economic growth has slowed in recent years, the government has again turned to infrastructure investments to mitigate the slowdown.

However, the efficacy of these investments in boosting the Chinese economy remains uncertain. This issue is further complicated by substantial regional heterogeneity in growth and productivity across regions and across sectors, stemming from various distortions. These include capital market distortions (Brandt and Zhu, 2000; Allen, Qian, and Qian, 2005; Hsieh and Klenow, 2009; Song, Storesletten, and Zilibotti, 2011), labor market distortions (Tombe and Zhu, 2019), entry barriers (Brandt, Kambourov, and Storesletten, 2023), and uneven tax and subsidy distributions (Huang, 2003). Moreover, concerns have been raised about a potential reversal in the Chinese government's commitment to market mechanisms. These factors prompt a critical question: Can infrastructure investments propel China to greater economic heights without further market reforms?

To address these issues, we leverage a significant policy change in China aimed at fostering a conducive market environment to examine the relationship between state-driven infrastructure investments and economic development. In 2005, the Chinese government introduced the landmark "36 Clauses" reform, a critical step toward creating a more favorable market environment. Among these clauses, the "Market Entry Clause" is particularly noteworthy for advocating equal market access for all economic entities. This clause was implemented universally across all provinces, benefiting private firms by granting them unprecedented access to industries traditionally controlled by State-Owned Enterprises (SOEs). The effectiveness of this reform is evident in the substantial decrease in the average asset ratio of SOEs, which fell from 29.8% in 2004 to 17.6% by 2009, with a more pronounced reduction in sectors previously dominated by SOEs. This variation allows us to analyze the effectiveness of infrastructure investments in enhancing private firm productivity across different sectors.

We employ a difference-in-differences (DID) approach to examine the effects of city-level infrastructure investments on various firm efficiency measures, including Total Factor Productivity (TFP), Return on Assets (ROA), Operating Return on Assets (OROA), total sales,

and sales per worker. We analyze these metrics before and after the "36 Clauses" implementation within province-industry groups that were SOE-dominated as of 2004.

Our firm-level regression analyses reveal significant heterogeneity in productivity improvements from infrastructure investments post-policy enactment. Consistent with our hypothesis that infrastructure investments are more effective in a more conducive market environment, we find that after policy implementation, the beneficial impacts of infrastructure investment are amplified in previously SOE-dominated groups. Specifically, our analysis reveals that after the implementation of the policy, the beneficial impacts of infrastructure investment on TFP, ROA, OROA, total sales, and sales per worker are amplified by 42.5%, 66.67%, 75%, 38.5%, and 27.5%, respectively, in groups that were previously SOE-dominated. Intriguingly, despite the enhanced productivity gains observed in these sectors, the net effect of infrastructure investments on all of these productivity measures remains either neutral or negative. This unexpected outcome likely stems from the crowding-out effect of large-scale public investments. Given that the impact of infrastructure investments in other province-industry groups is even less pronounced, these findings cast doubt on the overall efficacy of infrastructure-driven growth strategies.

We also examined the impact of other clauses designed to enhance various aspects of the market environment. Each province implemented a unique set of these clauses in response to the central government's "36 Clauses." Notably, the "Arbitrary Penalty Clause," "Fiscal and Financial Clauses," "Tax Clause," and "Firm Right Clause" aim to support private enterprises by reducing arbitrary fines, improving access to financing, alleviating tax burdens, and promoting firm rights, respectively. Using a difference-in-differences (DID) approach, we confirmed the positive effects of these clauses in supporting firms. Additionally, the DID analysis reveals that in provinces adopting these clauses, the beneficial impacts of infrastructure investments on firm productivity—across measures such as TFP, ROA, OROA, sales, and sales per worker—are significantly magnified post-policy, similar to the effects observed with the "Market Entry Clause." Interestingly, the net effect of infrastructure investments on productivity gains post-policy enactment remains either neutral or negative, even in the province-industry groups that adopted these clauses.

Our analysis reveals that while infrastructure investments are more effective in boosting firm productivity in industries with an improved market environment, their overall effect on all private

firms is negative. These findings cast doubt on China's heavy reliance on infrastructure investments as a key instrument for counter-cyclical macro interventions. This concern is even more pronounced for using infrastructure investments in less-developed regions, where market environments tend to be less sophisticated. The results suggest that without complementary market reforms and targeted policies to improve market environments, infrastructure-driven growth strategies may not yield the desired economic outcomes, particularly in areas with less developed market structures.

Our study contributes to the extensive body of literature investigating the impact of government intervention on the private sector, particularly in terms of productivity, investment, financing, and other corporate activities. Several prior studies, such as Stiglitz (1993), advocate for the beneficial spillovers of government intervention, whether through public investment or fiscal policies, on the private sector. In the context of China, Ru (2018) shows that government-subsidized credit directed toward infrastructure projects can significantly boost the activities and performance of private firms. Furthermore, Banerjee, Qian, and Duflo (2020) identify moderate yet positive impacts of transportation infrastructure on China's GDP per capita, underscoring the potential for state intervention to enhance economic outcomes.³

Conversely, a segment of the academic community has highlighted the adverse crowd-out effects associated with government intervention. Aschauer (1989) voiced early concerns about the potential of public investments to crowd out private investments, a view echoed in studies of government-subsidized credit and its crowding-out effects on non-targeted sectors, as illustrated by Gale (1991) and Schwarz (1992)). Cohen, Coval, and Malloy (2011) further elucidated the crowding out effects of government spending on private sector investment and employment, using chairmanship shifts in the U.S. Congress as exogenous shocks. More recently, Ngo and Stanfield (2022) provided evidence that an increase in federal R&R spending directed towards government-dependent firms in the U.S. can result in a reduction in R&D expenditures among competing private firms.⁴

³ Lynde and Richmond (1992), Munnell (1992), Erenburg (1993), Bahmani-Oskooee (1999), Cohen and Paul (2004), Auerbach and Gorodnichenko (2012), Nakamura and Steinsson (2014), Adelino et al., (2017), Auerbach et al., (2020) provide evidence of the positive effects of government fiscal policies in other countries.

⁴ Ramey and Shapiro (1998) and Burnside, Eichenbaum, and Fisher (2004) analyze crowding out effects observed in the context of government military spending, while Cutler and Gruber (1996) in the context of public insurance.

In China, the government's expansive ability to carry out capital-intensive infrastructure projects—ranging from roads and bridges to airports and ports—is noteworthy, partly due to its distinctive financial system, as discussed by Song and Xiong (2018). A prominent example of such intervention was the 4 trillion RMB stimulus package in 2008, which, according to studies by Liu et al. (2018) and Cong et al. (2019), led to a misallocation of credit, favoring inefficient SOEs at the expense of private firms. Huang, Pagano, and Panizza (2020) further demonstrate that local public debt in China can crowd out private firm investments, particularly affecting those that are credit-constrained. However, the literature also presents a spectrum of effects: Traum and Yang (2015), Ru (2017), and Miyamoto et al. (2018) have explored both the crowd-in and crowd-out effects, suggesting that the impact of government intervention on the private sector may vary under specific conditions. In particular, Song and Xiong (2023) highlight the crowding-out effect of local government debt, induced by short-termist behaviors of local government officials. This body of research points to a more complex and nuanced understanding of the interplay between state interventions and private sector dynamics in China.

Our study also contributes to the understanding of China's productivity growth, which has emerged as the primary driver of China's economic expansion, as noted by Zhu (2012). Particularly noteworthy is the swift increase in TFP within the industrial domain (Cheremukhin et al. (2015) and Brandt and Zhu (2010)). Our finding enriches the current academic discourse by illustrating that infrastructure investments and the development of a more favorable business environment may act in a complementary fashion in boosting firm productivity and performance. This analysis becomes especially pertinent given China's recent policy shift from prioritizing market mechanisms to a stronger emphasis on assertive state interventions.

The remainder of this paper is structured as follows: Section I provides the institutional background of the “36 Clauses”. Section II outlines a conceptual framework. Section III introduces the data and provides summary statistics. Section IV discusses the empirical findings. The paper concludes with Section V.

I. Institutional Background

Over the past four decades, beginning in the early 1980s, China has made a significant transition from a centrally planned economy to a hybrid model, blending extensive state

interventions with extensive market mechanisms. A testament to these economic reforms is the meteoric rise of private firms. Encouraged and bolstered by the government, private enterprises have burgeoned and now hold a pivotal role in the Chinese economy, contributing to more than 50% of total tax revenues, 60% of GDP and fixed investment, and 80% of urban employment. Despite their significant contributions, private firms often grapple with disparities when juxtaposed with SOEs. Efforts to protect private business interests and improve their operational environment are continuously evolving.

Rooted in the historical dominance of the state-owned economy from the era before the reforms and further compounded by ingrained institutional biases against the private economy, the evolution of private enterprises faces significant challenges. Recognizing the pressing need to synchronize with the demands of China's rapidly expanding market economy, the State Council enacted a significant policy on February 25, 2005, titled "Several Opinions of the State Council on Encouraging, Supporting, and Guiding the Development of the Non-public Economies such as Individual and Private Sectors". This policy, with its 36 stipulations, has been commonly referred to as the "36 Clauses".⁵ The "36 Clauses" represent the first official document from the central government expressly intended to nurture the private sector since the founding of the People's Republic of China.

The "36 Clauses" span seven categories. The first category covers "Market Entry Clauses", which champion the integration of non-state entities into sectors historically monopolized by SOEs, spanning industries like finance, utilities, science, education, culture, health, and even national security. The second category includes the "Tax Clause", "Fiscal Clause" and "Financial Clause", which aim to reduce taxes, provide fiscal assistance, and ease external financial constraints for private sectors, respectively.⁶ The third category concentrates on "optimizing government regulation and oversight", including the "Arbitrage Penalty Clause". This clause specifically addresses the widespread issues from the early 2000s pertaining to arbitrary fines and fees imposed on firms, especially private firms, which are particularly vulnerable. The fourth category aims to

⁵ State Council [2005] No.3. See https://www.gov.cn/zwjk/2005-08/12/content_21691.htm.

⁶ Examples of the "Tax Clause" encompasses provisions like "exemption from taxes for the next several years" and "reduced tax rates under specific conditions". The "Fiscal Clause" involves measures such as the establishment of special funds and subsidies for private companies. The "Financial Clause" includes initiatives like "encouraging the banking sector to provide more credit to private firms" and "simplifying the application process and timeline for loan applications by private companies".

“strengthen the protection of corporate and labor rights”, including the “Firm Right Clause”, “Worker Right Clause” and “Social Protection Clause”, which were introduced to safeguard corporate rights, workers’ rights, and social welfare for employees. Our analysis will specifically examine the impacts of the clauses in these categories.⁷

In response to the "36 Clauses", provincial governments drafted specialized provisions tailored to their distinct economic landscapes. These regional regulations, while echoing the broad intent of the "36 Clauses", provide a nuanced framework for regional economic activities. The provincial provisions differ from each other in the implementation time and the inclusion of specific clauses.

We plan to employ the "36 Clauses" and its staggered implementations across provinces as shocks for changes in pro-business market environments. Our analysis will delve into how this policy shift influences the efficacy of infrastructure investments in enhancing firm productivity across diverse provinces and industries.

In Table A2 of the Online Appendix, we provide the release dates and administrative order numbers across all 31 provinces after the central government's announcement of the "36 Clauses". To assess provincial responses, we have defined several indicators: “*MarketEntry*”, “*ArbitraryPenalty*”, “*Financing*”, “*FirmRight*”, “*Tax*”, “*WorkerRight*”, and “*SocialProtection*”. These indicators are designed to evaluate whether a province has adopted each of these clauses.

For example, the "*ArbitraryPenalty*" indicator assesses whether a province has implemented the "Arbitrary Penalty Clause" to address the issue of arbitrary fines through clear, actionable measures. Among the 31 provinces, 12 opted not to incorporate this clause into their regulations, whereas the others have clearly defined the activities that are regarded as arbitrary penalties and would be prohibited. Our later analysis reveals a significant reduction in fine-related revenues in provinces that adopted the "Arbitrary Penalty Clause," in contrast to those that did not.

The cornerstone of the policy, the “Market Entry Clauses”, has been adopted by every province, specifically targeting sectors historically monopolized by SOEs and facilitating market access of non-state entities. Thus, the indicator “*MarketEntry*” treats those province-industry

⁷ The other three categories aim to 1) bolster the provision of social services; 2) enhance the quality and competitiveness of non-public enterprises; 3) raise public awareness and understanding of the policy.

conglomerates that were predominantly controlled by SOEs in 2004. We expect these specific clusters to usher in significant market liberalization. As we will show later, empirical evidence unveils a notable shift post-enactment: the average SOE asset share across province-industry groups decreased from 29.8% in 2004 to 23.2% in 2006, further dwindling to 17.6% by 2009. When narrowing the lens to industries previously monopolized by SOEs, the SOE asset share was 62.8% in 2004, dropping to 48.1% in 2006 and further to 37.4% in 2009. These statistics underscore the effectiveness of the "Market Entry Clauses" in creating a more inclusive economic environment for private firms.

II. A Conceptual Framework

We present a straightforward conceptual framework to illustrate the complementarity between state-driven infrastructure investment and the cultivation of an environment conducive to businesses, all aimed at enhancing firm productivity. Consider a regional economy, region i , wherein a representative individual firm operates based on the following production function:

$$Y_i = A_i G_i^{\alpha_G} K_i^{\alpha_K} L_i^{\alpha_L},$$

where Y_i is the firm's output, A_i is the firm's inherent productivity, G_i is the infrastructure investment made by the regional government, and K_i and L_i are the firm's capital and labor inputs. The parameters α_G , α_K , and α_L are all between 0 and 1.

In this formulation, G_i acts as a multiplier, enhancing the firm's effective productivity $A_i G_i^{\alpha_G}$. This production function has been used by Barro (1990) to analyze the macroeconomic effect of government spending. Song and Xiong (2023) have also used it to analyze local governments' infrastructure investment in China's hybrid economy. It is difficult for the private sector to provide infrastructure due to its nature as a public good. In contrast, the government can overcome this limitation by financing infrastructure through tax revenue, which is collected from the aggregate output and not from the use of public goods. For simplicity, we assume that the government collects a tax at a rate τ on each firm's output: τY_i .

Suppose that this representative firm chooses capital K_i at a cost of capital R , which is given by the national capital market equilibrium, and labor L at a competitive wage ϕ to clear a given

local labor supply \bar{L} . Here, we implicitly assume that capital is mobile while labor is immobile. Alongside paying the official tax at a rate of τ , the firm also incurs an additional cost that is a fraction κ_i of the output. In the specific context of China, local governments have the discretion to impose fees on businesses to bridge their budgetary shortfalls. However, unchecked power can lead to potential abuses by local officials, who might levy excessive charges, leading to a heightened cost κ_i . The “Arbitrary Penalty Clause” of the “36 Clauses” aims to specifically curb such abuses. The other clauses may also reduce the effective operational costs faced firms.

Consequently, the representative firm’s objective becomes:

$$\max_{K_i, L_i} (1 - \tau - \kappa_i) A_i G_i^{\alpha_G} K_i^{\alpha_K} L_i^{\alpha_L} - R K_i - \phi L_i.$$

The first order condition for K_i gives

$$K_i = \left(\frac{\alpha_K (1 - \tau - \kappa_i) A_i G_i^{\alpha_G} \bar{L}^{\alpha_L}}{R} \right)^{\frac{1}{1 - \alpha_K}},$$

while the first order condition for L_i , together with labor market clearing condition $L_i = \bar{L}$, give,

$$\phi = \alpha_L (1 - \tau - \kappa_i) A_i G_i^{\alpha_G} K_i^{\alpha_K} \bar{L}^{\alpha_L - 1}.$$

Both K and ϕ increase with G_i but decrease with κ_i . That is, by boosting private firm productivity, the government’s infrastructure investment galvanizes both firm investment and labor wages. Conversely, frictions in the business environment, represented by κ_i , act as a deterrent for firm investment and labor wages.

The resulting aggregate output is

$$Y_i = \left(\frac{\alpha_K (1 - \tau - \kappa_i)}{R} \right)^{\frac{\alpha_K}{1 - \alpha_K}} A_i^{\frac{1}{1 - \alpha_K}} G_i^{\frac{\alpha_G}{1 - \alpha_K}} \bar{L}^{\frac{\alpha_L}{1 - \alpha_K}}.$$

It is easy to verify that $\frac{\partial^2 Y_i}{\partial \kappa_i \partial G_i} < 0$. This implies that a reduction in κ_i amplifies the efficacy of G_i in bolstering both firm productivity and output, forming the central hypothesis of our empirical analysis.

III. Data and Summary Statistics

In this section, we describe the data used in our analysis and present some summary statistics.

A. Firm-level data

We extracted firm-level data from the Chinese Industry Census (CIC), as compiled by the Chinese National Bureau of Statistics (NBS). Recognized for its depth and scope, the CIC provides the most comprehensive coverage of Chinese manufacturing firms with annual sales over five million yuan. This dataset has been widely used by previous studies, such as those by Hsieh and Klenow (2009), Song, Storesletten, and Zilibotti (2011), and Ru (2018). This dataset is only available from 2000 to 2013, due to restrictions imposed by the NBS. The dataset included 800,983 manufacturing firms. Our main sample was constructed following a series of selection criteria. Firstly, to ensure the robustness of our analysis, we excluded industries that were intricately linked to the infrastructure sector.⁸ Furthermore, due to concerns regarding the data quality for 2010, we omitted 2010 from our analysis. Additionally, given the Chinese government's enactment of the "New 36 Clauses" on May 13, 2010, we exclude the post-2009 period from our main sample to avoid confounding effects.⁹ Lastly, as the "36 Clauses" primarily targeted China's non-public sectors, we further drop SOEs in the CIC data.¹⁰ After these adjustments, the refined dataset encompassed 555,683 manufacturing firms, yielding 2,217,160 observations spanning from 2000 to 2009.

B. City-level Data

Our infrastructure investment data at the city level is derived from the China Urban Construction Statistical Yearbook. This source provides extensive coverage of infrastructure investments across all prefecture-level cities in China, with data starting from 2000. Furthermore, we embarked on a manual data collection exercise to obtain fine revenue at the city level, mining provincial China Statistical Yearbooks and city-level China Statistical Yearbooks for the period

⁸ We specifically filtered out observations from industries coded as 44, 45, or 46 in the first two digits, which correspond to the electronic, gas, and water sectors, respectively.

⁹ See https://www.gov.cn/zwgc/2010-05/13/content_1605218.htm. Our results remain consistent if we include the post-2009 period, namely the years 2011, 2012, and 2013.

¹⁰ From 2000 to 2009, the SOEs approximately account for 16.1% of the whole sample. Our results are consistent if we include SOEs.

2000 to 2009. Additionally, other city-specific metrics like population, GDP, and unemployment rates were sourced from CSMAR. We supplemented the missing data from CSMAR by using the CEIC dataset when feasible.

C. Summary Statistics

Table 1 presents summary statistics of our primary variables.¹¹ In Panel A, which centers on city-level variables, we observe that the mean infrastructure investment throughout our final dataset amounts to 1.52 billion yuan. The peak investment reported in this category is 21.64 billion yuan. In terms of fine revenue, averaged over all city-years, the figure stands at around 203 million yuan. The highest value recorded in this segment is nearly 1.34 billion yuan.

Panel B details firm-level attributes from the CIC dataset. On average, a firm holds assets valued at 49.51 million yuan, employs a workforce of approximately 191, and logs yearly sales nearing 62.78 million yuan. The average figures for *ROA*, *Tangibility*, and *Leverage* are 0.08, 0.35, and 0.55, respectively.

IV. Empirical Analysis

We leverage the "36 Clauses" as an impetus for fostering a pro-business market environment. We adopt a difference-in-differences approach to compare how the policy change affects the efficacy of the government's infrastructure investment in enhancing the productivity of private firms. Given the variability in the implementation of the "36 Clauses" across provinces, with each adopting a different set of clauses, we analyze the variations in productivity changes across provinces that have adopted a certain key clause and those that have not, allowing us to isolate the effects of individual clauses on how infrastructure investments boost firm productivity.

A. Improved Market Environment

Our analysis assumes that implementing the "36 Clauses" created a more favorable market environment for private firms. We explore this through four key dimensions aligned with specific policy clauses: (1) the "Market Entry Clause," which reduced SOE dominance, (2) the "Arbitrary

¹¹ Definitions for these variables can be found in Table A1 of the Online Appendix.

Penalty Clause," which constrained fines imposed by local governments, (3) the "Fiscal Clause" and the "Financial Clause," which alleviated external financing constraints for firms, and (4) the "Tax Clause," which modified corporate taxation.

As detailed in Section I, the "Market Entry Clause" stands out as the most pivotal component of the "36 Clauses". It promotes the entry of private enterprises into sectors traditionally held by monopolies or dominated mainly by SOEs. Despite its universal adoption across all provinces, there's a notable variation in their existing industry structures and the timing of implementation. With this context, we designate "*MarketEntry*" to treat those specific province-industry groups that were characterized by monopolistic industries or sectors under significant SOE dominance as of the year 2004.¹²

Traditionally monopolized industries include coal, petroleum, their manufacturing counterparts, mining, vehicle manufacturing, and the tobacco industry. Sectors dominated by SOEs are characterized as province-industry groups where the ratio of SOE assets to total assets exceeded 50% in 2004. Our dataset has 1,052 province-industry groups, of which 355 are designated as treated. Of these, 263 originate from traditionally monopolized industries. Our results remain robust whether evaluating traditionally monopolized industries or sectors dominated by SOEs.

To verify the effect of the "Market Entry Clause" on the market environment, we analyze the proportion of assets controlled by SOEs within each province-industry group. The analysis uses regressions at the province-industry-year level, structured as:

$$SOERatio_{j,p,t} = \alpha + \beta_1 \times Treat_{jp} + \beta_2 \times Post_{p,t} + \beta_3 \times Treat_{jp} \times Post_{p,t} + X \times Control_{p,t-1} + Province \times YearFE + YearFE. \quad (1)$$

Here, $SOERatio_{j,p,t}$ is the share of assets held by SOEs in industry j and province p . We examined two measures for $Treat_{jp}$:

¹² We exclude industries such as finance and utilities from our analysis for two primary reasons. First, given that infrastructure investment serves as our principal explanatory variable, we omit utilities from our primary sample to sidestep potential confounding effects. Second, the CIC data is primarily tailored to capture the manufacturing sector in China, precluding our ability to delve into other sectors like finance, culture, and the like.

1. *MarketEntry_{jp}*: It equals 1 for province-industry groups traditionally monopolized or whose SOE asset ratio is greater than 50% in 2004.
2. *Monopoly_{jp}*: It specifically pinpoints industries traditionally monopolized industries.

The variable $Post_{p,t}$ is assigned a value of 1 for years during or after a province released its provisions in response to the "36 Clauses". Control variables include logs of provincial population and GDP, and provincial unemployment rate. We also control for Province \times Industry and Year \times Industry fixed effects.

Table 2 reports the results, with Columns (1) and (2) using *MarketEntry* and *Monopoly*, respectively, as the treatment variable. The key interaction term coefficient stands at -0.035 and -0.037, both significant at the 1% level. These results convey that, in the wake of the "36 Clauses", the share of assets held by SOEs plummeted by roughly 3.6%. This underscores the substantial impact of the policy in diminishing SOE dominance within the relevant sectors.

We also expect other clauses to bring similar improvements in their respective dimensions. For instance, in the context of the "Arbitrary Penalty Clause", we anticipate that provinces that have implemented this clause will show a greater reduction in revenue from fines post-policy implementation than those provinces that did not. To test this, we conduct the following city-year-level regression:

$$CityVar_{c,p,t} = \alpha + \beta_1 \times Treat_p + \beta_2 \times Post_{p,t} + \beta_3 \times Treat_p \times Post_{p,t} + X \times Control_{p,t-1} + CityFE + YearFE. \quad (2)$$

Here, $CityVar_{c,p,t}$ represents a city-level variable that measures a particular dimension. Specifically, we use *LogFine* to measure city-level fine levied by local government. We use city-level natural logarithm of value-added tax (*LogVAT*) to measure firms' tax burden. The city-level corporate financial slack (*FinancialSlack*) is measured by the average current assets of enterprises with annual sales of more than 5 million yuan. We control for population, GDP, budget revenue, and unemployment rate in the past year, as well as city fixed effects and year fixed effects.

The results reported in Table 2, Columns (3)-(5) affirm the anticipated effects: (1) firms located in provinces that implemented the "Arbitrary Penalty Clause" experienced a significantly greater decrease in fines post-policy; (2) firms in provinces that adopted the "Fiscal Clause" and

“Financial Clause” saw a greater increase in financial slack after the policy change; 3) firms in provinces that embraced the “Tax Clause” observed a greater reduction in the value-added tax imposed on them. Specifically, the coefficient of the *ArbitraryPenalty* \times *Post* is -0.104 in Column (3), significant at the 1% level, indicating that cities in provinces that adopted the “Arbitrary Penalty Clause” experienced on average a greater reduction in fine revenue of 10.4% subsequent to implementation of the “36 Clauses.”

B. “Market Entry Clause”

We now examine how the "Market Entry Clause" affected infrastructure investments' impact on firm productivity. We posit that after a province unveiled its provincial provision in response to the "36 Clauses", the "Market Entry Clause" would make the treated sectors more competitive, enhancing the effect of infrastructure investments on firm productivity in these industries.

To test this hypothesis, we estimate the following DID regression:

$$\begin{aligned}
Y_{i,j,c,p,t} = & \alpha + \beta_1 \times Treat_{j,p} + \beta_2 \times Post_{p,t} + \beta_3 \times Treat_{j,p} \times Post_{p,t} + \beta_4 \times Pre2_{p,t} + \\
& \beta_5 \times Pre1_{p,t} + \beta_6 \times Treat_{jp} \times Pre2_{p,t} + \beta_7 \times Treat_{jp} \times Pre1_{p,t} + \\
& \beta_8 \times LogInfra_{c,t} + \beta_9 \times Treat_{jp} \times LogInfra_{c,t} + \beta_{10} \times Post_{p,t} \times LogInfra_{c,t} + \\
& \beta_{11} \times Treat_{j,p} \times Post_{p,t} \times LogInfra_{c,t} + X \times Control + FES + \epsilon_{it}. \quad (3)
\end{aligned}$$

The dependent variable $Y_{i,j,c,p,t}$ of firm i in industry j , city c , province p and in year t measures firm productivity. We have used three direct measures of firm productivity, including TFP, ROA, and OROA (i.e., operating return on assets). We have also used two less direct measures, such as the logarithm of firm sales and the logarithm of firm sales per employee.

$LogInfra_{c,t}$ is the natural logarithm of total infrastructure investment in city c and in year t . $Treat_{j,p}$ here refers to the dummy *MarketEntry*, which equals 1 for province-industry groups traditionally monopolized or whose SOE asset ratio is greater than 50% in 2004. $Post_{p,t}$ equals 1 if the year is in or after the year when the province has released its provincial provisions in response to the “36 Clauses”. $Pre2_{p,t}$ ($Pre1_{p,t}$) is a year dummy indicating two (one) years before the shock took place in each province. We include these two dummies and their interaction with $Treat_{jp}$ to test the parallel trend prior to the policy shock.

We control for macroeconomic conditions in the past year, such as the natural logarithm of the total population, city GDP, budget revenue, and province-level unemployment rate. We also control for firm-level characteristics in the past year, including logarithm of total assets, leverage, and tangibility. Besides firm fixed effects and year fixed effects, we also include Province×Industry and Year×Industry fixed effects to further alleviate concerns that unobserved factors could influence our findings. The former high-dimensional fixed effects consider the potential for firms within the same industry to experience differential treatment across provinces. For instance, an industry might receive substantial support in one province but limited backing in another. Conversely, the latter interaction fixed effects acknowledge that an industry's treatment might vary over the years. Moreover, we cluster the error terms at the city level for robustness.

In our regression analysis, we include only non-state firms because the "36 Clauses" primarily target China's non-public sector. Our findings also remain robust when we include SOEs in our regressions. We also omit data from the years after 2009 due to two primary considerations. First, in 2010, the Chinese central government introduced the "New 36 Clauses", aiming to further advance the non-public sector. To sidestep potential confounding influences, we exclude the period after 2009. Additionally, past studies, such as Ru (2017), have expressed reservations about the quality of CIC data from 2010 onwards. Nonetheless, our findings remain consistent even when including the post-2009 timeframe.

Table 3, Columns (1)-(5) report the regression results, revealing several noteworthy findings. Firstly, across the five measures of firm productivity, all coefficients of *Post* are significantly positive. This indicates a general improvement in firm efficiency following the implementation of the "36 Clauses".

Secondly, there is no pre-trend in our DID regressions. Specifically, all coefficients of $Treat_{j,p} \times Pre1_{p,t}$ and $Treat_{j,p} \times Pre2_{p,t}$ are statistically insignificant across Columns (1) through (5). This supports the parallel trend assumption crucial to our DID analysis. The absence of pre-trends strengthens the causal interpretation of our results. Importantly, as the "Market Entry Clause" was adopted by every province, the treated province-industry groups are determined by existing industry conditions rather than provincial selection.

Thirdly, across Columns (1) to (5), we observe a significantly positive coefficient for $Treat_{jp} \times Post_{p,t} \times LogInfra_{c,t}$. This implies that following the “36 Clauses”, infrastructure investment more effectively boosts firm productivity in treated province-industry groups. Taking Column (1) as an example, the coefficient is 0.017, statistically significant at the 1% level. Post-policy change, compared to untreated areas, the effect of infrastructure investment on firm TFP increases by an average of 42.5% (0.017 divided by 0.04). These statistically and economically significant interaction effects confirm that the "Market Entry Clause" substantially enhances the efficacy of infrastructure investment in boosting firm productivity in treated province-industry groups. This finding aligns with the concept that infrastructure investments and favorable market environments complement each other in enhancing firm productivity.

We have further delved into the triple interaction terms. Particularly, we replace $Post_{p,t}$ in equation (3) with time dummies that indicate i years after the pivotal event, denoted as $window_i$. For instance, $window_1$ represents one year after each province establishing its own provisions. Figure 1 illustrates the dynamics and the 95% confidence intervals of the coefficients of $Treat_{j,p} \times window_i \times LogInfra_{c,t}$, when dependent variables are TFP , ROA , $OROA$, and $LogSales$, respectively.¹⁴ The coefficients are insignificant from zero in all four years before the policy change. Commencing from the policy-change year, the coefficients increase significantly, and the effects persist for four years. These dynamics vividly demonstrate the way in which the improved market environment strengthens the positive impact of infrastructure investment on firm productivity following the “36 Clauses”.

Fourthly, across these columns, the sum of the coefficients for $LogInfra$, $Post * LogInfra$, $Treatment * LogInfra$, and $Treatment * Post * LogInfra$, which measures the net effect of infrastructure investments in treated province-industry groups post-policy change, is small and negligible. For example, in Column (2), these coefficients (0.009, -0.011, -0.004, and 0.006 respectively) sum to zero (0.009-0.011-0.004+0.006=0). This indicates that following the "36 Clauses" in treated province-industry groups, infrastructure investments have very limited

¹⁴ The sample only includes observations in the window [-4,3]. We also exclude $window_0$ as the benchmark. Other aspects of the regressions are exactly the same as equation (1).

spillover effects on Return on Assets (ROA). Other columns report similar negligible net effects for other measures of firm productivity.

This finding is unexpected, given that the "Market Entry Clause" significantly enhances the efficacy of infrastructure investment in boosting firm productivity in treated province-industry groups. The negligible net effect suggests the presence of a countervailing force, potentially the crowding-out effect of large-scale public investment. Given that capital was limited, particularly during our sample period, the extensive infrastructure investments by the government may have depleted capital available for private firms.

Finally, in the untreated province-industry groups (i.e., $Treatment = 0$), the net effect of infrastructure investments on firm productivity is negative. For example, in Column (2), it is -0.002 (i.e., $0.009 - 0.011 = -0.002$). Other columns show a similar pattern. This negative effect on the untreated province-industry groups suggests that the overall impact of infrastructure investments on private firm productivity following the "36 Clauses" is negative. This indicates a complex interplay between public infrastructure spending and private sector growth, where the positive effects of improved market conditions and infrastructure are potentially offset by broader negative effects, possibly due to crowding out of private investment or inefficient allocation of resources across the economy.

C. Other Clauses

The "36 Clauses" also contain other clauses that aim to support non-state firms. To examine these other clauses, we also conduct regressions in which the province-industry level treatment *MarketEntry* in equation (3) is replaced by other province-level treatments defined in Section I and Table A2: *ArbitraryPenalty*, *Financing*, *Tax*, *FirmRight*, *WorkerRight*, and *SocialProtection*. A treatment dummy equals 1 for provinces that include the corresponding clause in their provincial provisions. We again posit that provinces that include the clause would experience greater improvement in the relevant field after the shock, thus amplifying the effect of infrastructure investment in boosting firm productivity.

Table 3, Columns (6)-(10) report the results of the regressions in which the treatment is *ArbitraryPenalty*. *ArbitraryPenalty* is a dummy that equals 1 if the province responds to the "Arbitrary Penalty Clause" with a detailed implementation strategy to curb arbitrary fines. These

results are consistent with the earlier findings on the “Market Entry Clause”. Firstly, there is no parallel trend, evidenced by insignificant coefficients of $Treat_p \times Pre1_{p,t}$ and $Treat_p \times Pre2_{p,t}$. Furthermore, infrastructure investments exert positive effects on firm productivity before the “36 Clauses”. For example, in Column (6), the coefficient of $LogInfra$ is 0.047, which is significant at the 1% level, suggesting that a 100% increase in infrastructure investment leads to a 4.7% increase in TFP.

All coefficients of $Treat_p \times Post_{p,t} \times LogInfra_{c,t}$ are significantly positive, supporting our hypothesis that an improved market environment amplifies the efficiency of infrastructure investment in boosting firm productivity. For example, in Column (6), this coefficient is 0.046, suggesting a nearly 100% amplification in the efficiency of infrastructure investment when a province includes the “Arbitrary Penalty Clause” to discipline arbitrary penalties on private firms.

However, across all of the columns, the sum of the coefficients for $LogInfra$, $Post * LogInfra$, $Treatment * LogInfra$, and $Treatment * Post * LogInfra$, is close to zero. This indicates a negligible net effect of infrastructure investments in treated province-industry groups post-policy change, again mirroring the earlier results for the "Market Entry Clause".

Table 4 reports the results from two other treatments: *Financing* and *Tax*. negligible net effect of infrastructure investments in treated province-industry groups post-policy change, mirroring the earlier result for the "Market Entry Clause". The treatment *Financing* equals 1 if the province responds to the "Fiscal Clause" and "Financial Clause" by proposing a detailed number of special funds/subsidies or establishing detailed strategies to ease the external financial constraints for private firms. The treatment *Tax* equals 1 if the province responds to the “Tax Clause” by establishing detailed implementing strategies. The results again show a significant triple interaction term, confirming that these clauses boost the effect of infrastructure investment on firm productivity. However, mirroring our previous results, the net effect of infrastructure investment post-policy change in treated province-industry groups remains small and negligible.

Table A3 in the Appendix also reports the consistent results when the treatment is *FirmRight*, a clause that promotes firm rights. However, Table A4 in the Appendix shows that the triple interaction terms for *WorkerRight* and *SocialProtection*, two clauses that require firms to offer better social protection to workers, such as pension, insurance, and housing allowances, are

insignificant or even negative. These results are reasonable, as these provisions incur direct costs to firms, thus negatively impacting firm performance. We regard these regression results reported in Table A4 as placebo tests for our main analysis.

D. Extensive versus Intensive Margins

We also analyzed how the "36 Clauses" combined with infrastructure investment affect new firm entries and the productivity of existing firms, breaking down the effects on both the extensive (entry) and intensive (productivity) margins.

Specifically, we carried out regressions at the province-industry-year (and city-industry-year) level, analyzing the annual growth in firm numbers within each province-industry (city-industry) group, as per specification (1). The findings, presented in Table A5, show a marked increase in new firm entries following infrastructure investment enhancements. This effect is further magnified by the deregulation of market entry and reductions in penalties. For instance, in Column (1), the coefficient of *LogInfra* is 12.726, significant at the 10% level, indicating that a 100% increase in infrastructure investment leads to an increase of 12.726 new entries per province-industry group. More notably, the coefficient of the triple interaction term is 10.665, significant at the 1% level, highlighting that the impact of infrastructure investment on new firm entries (the extensive margin) grows by an average of 83.8% ($10.665/12.726$) under improved market conditions.

Moreover, we assess the effects on existing firms (intensive margin). We apply the same regression analyses in Tables 3 and 4 to a sub-sample of firms that existed at least one year before and after the 2005 policy change. Tables A6 and A7 report the results. The findings, detailed in Tables A6 and A7, align with those in Tables 3 and 4, showing that infrastructure investments improve firm productivity and performance. This positive impact is significantly amplified following the implementation of the "36 Clauses." In essence, the synergy between infrastructure investments and business environment improvements, as demonstrated in Tables 3 and 4, is evident in both the entry of new firms and the enhanced performance of existing ones.

V. Conclusion

In summary, our study reveals that following China's landmark "36 Clauses" policy, the positive effects of infrastructure investment on firm productivity are significantly enhanced in province-industry groups that benefited from improved market environments. This supports a complementary relationship between infrastructure investment and institutional environments that promote market competition and protect private firms. However, despite greater productivity gains in these industries, the net effect of infrastructure on private firm productivity remains small and negligible, even in beneficiary industries. This suggests that the overall effect of infrastructure on firm productivity may be negative in the period following the "36 Clauses".

Given China's recent reliance on infrastructure investments as a key counter-cyclical macro intervention tool, our findings offer several important implications. First, while infrastructure investments can improve firm productivity, this positive effect is particularly associated with industries with conducive market environments. Therefore, infrastructure-based stimulus programs should be implemented alongside reforms supporting private firms and fostering market competition. Second, our analysis cautions against further increasing infrastructure investments in China. The spillover effect on productivity of all private firms was already negative after the 2005 implementation of the "36 Clauses", and the continued accumulation of infrastructure is likely to lead to decreasing returns to scale. Finally, as infrastructure investments are increasingly directed towards less developed areas with weaker market environments, their efficacy becomes even more questionable based on our findings.

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Figure 1 Time Series of Main Effect

This figure plots the dynamics of the coefficients and the 95% confidence interval of the triple interactions (ψ_i) in the following regression:

$$\begin{aligned}
 Y_{i,j,c,p,t} = & \alpha + \beta_1 \times Treat_{j,p} + \sum_{i=-4, i \neq -1}^3 \gamma_i \times window_i + \sum_{i=-4, i \neq -1}^3 \eta_i \times window_i \times LogInfra_{c,t} \\
 & + \sum_{i=-4, i \neq -1}^3 \phi_i \times window_i \times Treat_{j,p} + \sum_{i=-4, i \neq -1}^3 \psi_i \times window_i \times Treat_{j,p} \times LogInfra_{c,t} + X \times Control \\
 & + FEs + \epsilon_{it},
 \end{aligned}$$

where $window_i$ equals 1 if the current year minus the provincial shock year equals i . The sample excludes observations that are 4 years before and 3 years after the year when provincial shock take place. We exclude $window_{-1}$ in the regression as the benchmark. The treatment is *MarketEntry*. Dependent variables are *TFP*, *ROA*, *OROA*, *LogSales* respectively. Control variables include macro-level controls, such as *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such as *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect, and province×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1.

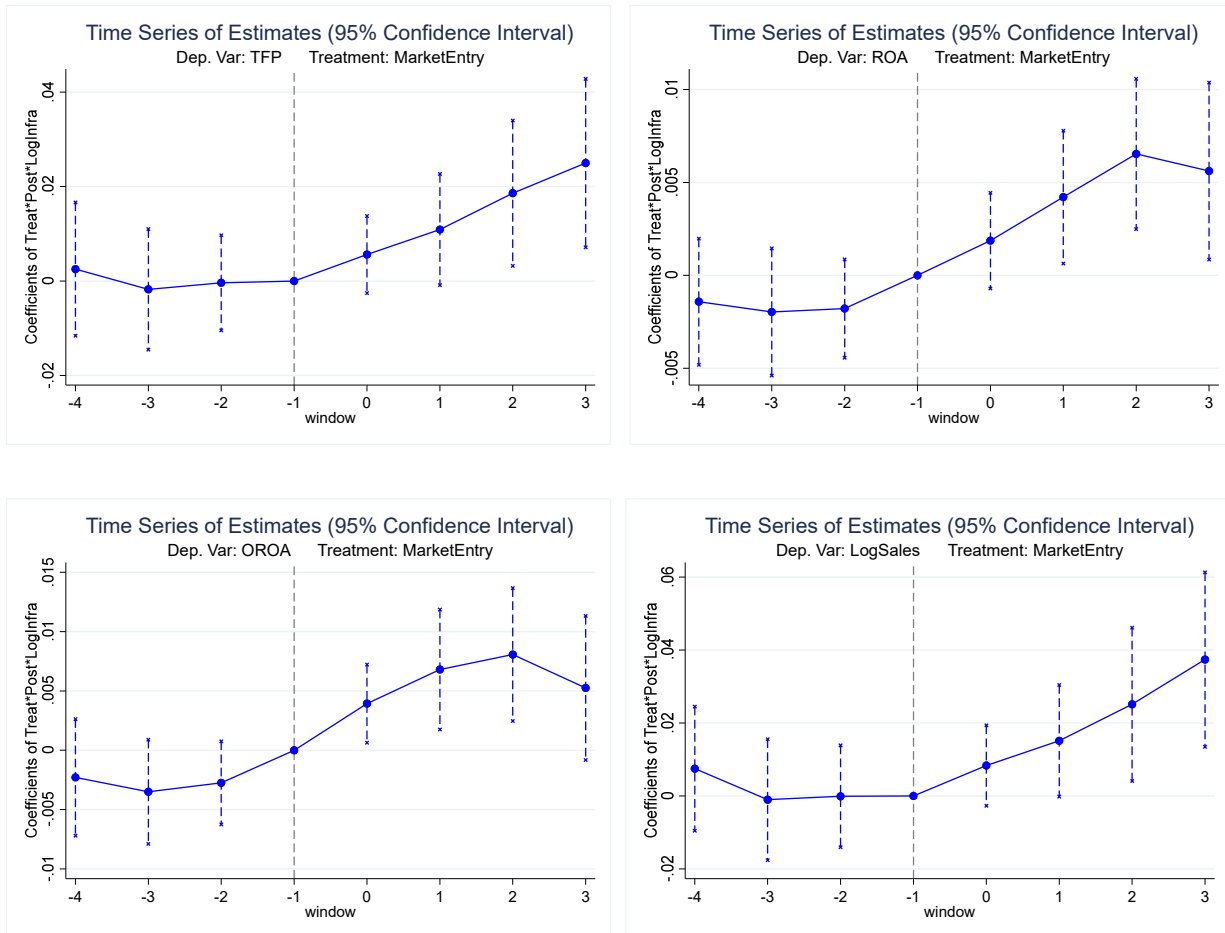


Table 1: Summary Statistics

This table reports the summary statistics. Panel A presents summary statistics of macro-level variables at the city×year level. The data cover 339 prefecture-level cities from 2000 to 2009. Panel B provides summary statistics at the firm×year level for our main CIC sample from 2000 to 2009. All variables are winsorized at 1% and 99%.

Panel A Macro-level Data					
Variable	N	Mean	SD	Min	Max
<i>Population</i>	3108	3.874766	2.448478	0.240279	11.1228
<i>GDP</i>	3276	60018.86	83890.8	1266	515422.8
<i>Revenue</i>	3303	3645.268	7055.476	56.7	49796
<i>Unemployment</i>	3271	3.761999	0.641641	2.5	6.5
<i>Fine</i>	1804	203.4809	241.0596	7.28	1339.03
<i>Infra</i>	2929	1515.642	3411.112	11.19	21640.27
Panel B Firm Characteristics					
Variables	N	Mean	SD	Min	Max
<i>TFP</i>	2217154	3.094545	0.7918586	1.003297	5.109544
<i>Assets</i>	2217160	49506.24	118112.8	1233	862795
<i>LogAssets</i>	2217158	9.71589	1.33928	7.117206	13.66793
<i>Workers</i>	2217160	190.5898	297.4992	10	2010
<i>ROA</i>	2216379	0.0841312	0.1622271	-0.2000491	0.8604706
<i>OROA</i>	2217059	0.1069304	0.1981175	-0.2046263	0.9995809
<i>Sales</i>	2217160	62778.25	133820	2819	971827
<i>LogSales</i>	2217156	10.13533	1.212421	7.944492	13.78693
<i>LogSalesPer</i>	2217156	5.510114	1.028182	3.056529	8.172986
<i>Tangibility</i>	2217154	0.3528729	0.222983	0.0063726	0.9064134
<i>Leverage</i>	2217160	0.5517336	0.2767612	0.0097804	1.243315

Table 2: Channels of Improved Marketization from “36 Clauses”

This table reports the results of our specifications (1) and (2). The sample period is from 2000 to 2009. For dependent variables, *SOERatio* is defined as the SOE-asset-to-total-asset ratio in a given province-industry category. *LogFine* is the natural logarithm of the city-level fine revenue. *FinancialSlack* is the city-level average current asset of enterprises with annual sales more than 5 million yuan. *LogVAT* is the city-level logarithm of value-added tax levied upon enterprises with annual sales more than 5 million yuan. *MarketEntry* is a dummy variable that equals 1 for treated province-industry categories that are either traditionally monopolized industries or have SOE-asset-to-total-asset ratio exceeding 50% in 2004. *Monopoly* is a dummy variable that equals 1 for traditionally monopolized industries. *ArbitraryPenalty* equals 1 if the province specifically responds to the “Arbitrary Penalty Clause” with detailed implementation strategy relevant to arbitrary fines. *Financing* equals 1 if the province responds to the "Fiscal Clause" and "Financial Clause" by proposing a detailed amount of special funds/subsidies or establishing detailed strategies to ease the external financial constraints for the private firm. The regression in Columns (1) and (2) are at the province×industry×year level, and both province×industry fixed effect and year fixed effect are added. The regressions in the rest columns are at the city×year level, both city fixed effect and year fixed effect are added. Control variables include *LogGDP*, *LogRevenue*, *LogPopulation*, and *Unemployment* in the past year. In Columns (1) and (2), control variables are measured at the province level. In Column (3), they are measured at the city level. Their definitions can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	(1) <i>SOERatio</i>	(2) <i>SOERatio</i>	(3) <i>LogFine</i>	(4) <i>FinancialSlack</i>	(5) <i>LogVAT</i>
<i>MarketEntry*Post</i>	-0.035*** (-3.90)				
<i>Monopoly*Post</i>		-0.037*** (-3.66)			
<i>ArbitraryPenalty*Post</i>			-0.104*** (-3.05)		
<i>Financing*Post</i>				2.632* (1.91)	
<i>Tax*Post</i>					-0.151*** (-6.18)
<i>Post</i>	0.017** (2.29)	0.014* (1.76)	0.005 (0.14)	1.568 (1.27)	0.057** (2.44)
Controls	YES	YES	YES	YES	
Province*Industry FE	YES	YES			
City FE			YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Observations	9,982	10,098	1,653	2,364	2,641
R-squared	0.728	0.728	0.935	0.847	0.959

Table 3: DDD Regressions using “36 Clauses” (*MarketEntry* and *ArbitraryPenalty*)

This table presents the results of our main DID regressions, where the treatments are *MarketEntry* and *ArbitraryPenalty*. The sample covers all non-SOE manufacturing firms with non-missing variables from 2000 to 2009, excluding the utility industries (electricity, gas, and water industry). In Columns (1)-(5), treatment is *MarketEntry*, a dummy variable that equals 1 for treated province-industry categories that are either traditionally monopolized industries or have SOE-asset-to-total-asset ratio exceeding 50% in 2004. In Columns (6)-(10), treatment is *ArbitraryPenalty*, which equals 1 if the province responds to the "Arbitrary Penalty Clause" with a detailed implementation strategy relevant to arbitrary fines. The dependent variables are firm-level characteristics such as *TFP*, *ROA*, *OROA*, etc. *Pre1* (*Pre2*) is a dummy variable that indicates one (two) year(s) before the year when the local government releases their own provincial provisions in response to "36 Clauses". *Post* is a dummy variable that equals 1 for years during or after the year when the local government releases its own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the city-year level. Control variables include macro-level controls, such as *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such as *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect, and industry×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = MarketEntry</i>					<i>Treatment = ArbitraryPenalty</i>				
	(1) <i>TFP</i>	(2) <i>ROA</i>	(3) <i>OROA</i>	(4) <i>LogSales</i>	(5) <i>LogSalesPer</i>	(6) <i>TFP</i>	(7) <i>ROA</i>	(8) <i>OROA</i>	(9) <i>LogSales</i>	(10) <i>LogSalesPer</i>
<i>Post</i>	0.216*** (3.72)	0.067*** (3.54)	0.086*** (3.81)	0.342*** (4.94)	0.336*** (3.62)	0.385*** (4.31)	0.127*** (4.66)	0.135*** (4.18)	0.576*** (6.72)	0.644*** (6.19)
<i>LogInfra</i>	0.040** (2.53)	0.009*** (3.32)	0.012*** (3.44)	0.052*** (2.85)	0.051** (2.59)	0.047*** (2.82)	0.011** (2.50)	0.016*** (3.02)	0.063*** (3.14)	0.076*** (4.71)
<i>Treatment*Post*LogInfra</i>	0.017*** (2.61)	0.006*** (4.40)	0.009*** (5.00)	0.020** (2.46)	0.014* (1.88)	0.046*** (2.85)	0.014*** (4.00)	0.014*** (3.13)	0.060*** (3.42)	0.066*** (3.81)
<i>Post*LogInfra</i>	-0.034*** (-5.60)	-0.011*** (-6.49)	-0.015*** (-7.20)	-0.048*** (-6.67)	-0.046*** (-4.47)	-0.056*** (-5.28)	-0.019*** (-6.66)	-0.022*** (-6.46)	-0.078*** (-7.69)	-0.083*** (-7.45)
<i>Treatment*LogInfra</i>	-0.018 (-1.58)	-0.004* (-1.94)	-0.007** (-1.98)	-0.023* (-1.89)	-0.013 (-1.06)	-0.023 (-0.85)	-0.006 (-1.16)	-0.009 (-1.41)	-0.034 (-1.09)	-0.045 (-1.56)
<i>Treatment*Post</i>	-0.074 (-1.45)	-0.044*** (-3.62)	-0.067*** (-4.25)	-0.119* (-1.88)	-0.044 (-0.67)	-0.336*** (-2.67)	-0.110*** (-3.63)	-0.099*** (-2.62)	-0.466*** (-3.60)	-0.546*** (-4.00)
<i>Treatment*Pre1</i>	0.009 (0.48)	-0.004 (-0.68)	-0.005 (-0.72)	0.003 (0.15)	0.023 (1.06)	-0.021 (-0.57)	-0.000 (-0.01)	0.003 (0.27)	-0.037 (-0.91)	-0.027 (-0.69)
<i>Treatment*Pre2</i>	-0.018 (-1.15)	-0.005 (-1.12)	-0.008 (-1.37)	-0.022 (-1.29)	-0.013 (-0.69)	-0.010 (-0.47)	-0.000 (-0.06)	0.007 (0.95)	-0.024 (-1.03)	-0.003 (-0.12)
<i>LogPopulation</i>	-0.048 (-0.88)	0.006 (0.88)	0.004 (0.54)	-0.191** (-2.19)	-0.124 (-1.59)	-0.048 (-0.96)	0.003 (0.38)	-0.000 (-0.00)	-0.178** (-2.20)	-0.114 (-1.65)
<i>LogGDP</i>	0.115 (1.37)	-0.001 (-0.10)	-0.004 (-0.37)	0.149 (1.17)	0.086 (0.72)	0.097 (1.20)	0.001 (0.05)	-0.004 (-0.34)	0.139 (1.13)	0.070 (0.65)
<i>LogRevenue</i>	-0.073 (-1.58)	-0.003 (-0.34)	-0.003 (-0.32)	0.022 (0.34)	0.006 (0.10)	-0.061 (-1.31)	-0.003 (-0.29)	-0.001 (-0.11)	0.021 (0.33)	0.004 (0.07)
<i>Unemployment</i>	0.026 (0.96)	0.002 (0.32)	0.003 (0.46)	0.028 (0.83)	0.037 (1.55)	0.014 (0.48)	0.001 (0.12)	0.002 (0.21)	0.009 (0.24)	0.038 (1.48)
<i>LogAssets</i>	0.018*** (3.35)	-0.003** (-2.33)	-0.003** (-2.22)	0.298*** (25.43)	0.080*** (14.78)	0.016*** (3.07)	-0.003*** (-2.68)	-0.004** (-2.47)	0.296*** (24.25)	0.078*** (13.96)
<i>Tangibility</i>	-0.018 (-1.45)	0.006** (2.49)	0.005* (1.82)	0.051*** (3.58)	-0.018 (-1.50)	-0.018 (-1.41)	0.006** (2.28)	0.005* (1.68)	0.049*** (3.41)	-0.020* (-1.66)
<i>Leverage</i>	-0.023** (-2.42)	-0.007*** (-2.80)	-0.012*** (-4.59)	-0.017* (-1.76)	-0.006 (-0.59)	-0.028*** (-2.84)	-0.007*** (-2.90)	-0.013*** (-4.66)	-0.022** (-2.27)	-0.009 (-0.94)
<i>Pre1</i>	0.001 (0.02)	-0.014* (-1.80)	-0.022** (-2.28)	0.020 (0.76)	0.017 (0.60)	0.003 (0.12)	-0.017* (-1.94)	-0.026** (-2.40)	0.025 (0.84)	0.012 (0.36)
<i>Pre2</i>	0.019 (1.21)	-0.004 (-0.70)	-0.008 (-1.19)	0.032* (1.85)	0.035* (1.74)	0.017 (1.03)	-0.005 (-0.87)	-0.012 (-1.53)	0.034* (1.86)	0.026 (1.13)
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Province*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1,539,327	1,538,934	1,539,284	1,539,328	1,539,328	1,460,416	1,460,023	1,460,373	1,460,417	1,460,417
R-squared	0.777	0.671	0.672	0.872	0.826	0.780	0.678	0.678	0.873	0.827

Table 4: DDD Regressions using “36 Clauses” (*Financing* and *Tax*)

This table presents the results of our main DID regressions, where the treatment is *Financing* and *Tax*, respectively. The sample covers all non-SOE manufacturing firms with non-missing variables from 2000 to 2009, excluding the utility industries (electricity, gas, and water industry). In Columns (1)-(5), treatment is *Financing*, which equals 1 if the province responds to the "Fiscal Clause" and "Financial Clause" by proposing a detailed number of special funds/subsidies or establishing detailed strategies to ease the external financial constraints for private firms. In Columns (6)-(10), treatment is *Tax*, which equals 1 if the province responds to the “Tax Clause” by establishing detailed implementing strategies. The dependent variables are firm-level characteristics such as *TFP*, *ROA*, *OROA*, etc. *Pre1* (*Pre2*) is a dummy variable that indicates one (two) year(s) before the year when the local government releases their own provincial provisions in response to "36 Clauses". *Post* is a dummy variable that equals 1 for years during or after the year when the local government releases its own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the city-year level. Control variables include macro-level controls, such as *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such as *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect, and industry×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = Financing</i>					<i>Treatment = Tax</i>				
	(1) <i>TFP</i>	(2) <i>ROA</i>	(3) <i>OROA</i>	(4) <i>LogSales</i>	(5) <i>LogSalesPer</i>	(6) <i>TFP</i>	(7) <i>ROA</i>	(8) <i>OROA</i>	(9) <i>LogSales</i>	(10) <i>LogSalesPer</i>
<i>Post</i>	0.327*** (5.03)	0.081*** (3.53)	0.095*** (3.33)	0.487*** (6.92)	0.547*** (5.47)	0.438*** (5.17)	0.122*** (4.25)	0.146*** (4.07)	0.556*** (5.41)	0.638*** (5.22)
<i>LogInfra</i>	0.050*** (3.60)	0.008*** (2.62)	0.012** (2.26)	0.064*** (3.63)	0.079*** (5.83)	0.042*** (3.06)	0.009*** (2.96)	0.013** (2.22)	0.063*** (3.62)	0.065*** (4.48)
<i>Treatment*Post*LogInfra</i>	0.036*** (2.64)	0.006* (1.84)	0.006 (1.50)	0.044*** (2.73)	0.054*** (3.05)	0.029** (2.19)	0.007** (2.07)	0.007 (1.59)	0.033** (2.17)	0.049*** (2.70)
<i>Post*LogInfra</i>	-0.047*** (-6.78)	-0.013*** (-5.98)	-0.017*** (-6.10)	-0.064*** (-8.96)	-0.069*** (-6.37)	-0.051*** (-6.27)	-0.016*** (-5.19)	-0.019*** (-5.17)	-0.066*** (-6.74)	-0.073*** (-5.27)
<i>Treatment*LogInfra</i>	-0.024 (-0.94)	-0.001 (-0.25)	-0.003 (-0.43)	-0.031 (-1.03)	-0.049* (-1.75)	-0.005 (-0.24)	-0.002 (-0.49)	-0.003 (-0.42)	-0.022 (-0.86)	-0.025 (-1.01)
<i>Treatment*Post</i>	-0.265** (-2.51)	-0.038 (-1.49)	-0.036 (-1.04)	-0.359*** (-3.02)	-0.473*** (-3.52)	-0.352*** (-3.33)	-0.088*** (-3.16)	-0.096*** (-2.60)	-0.366*** (-2.94)	-0.512*** (-3.81)
<i>Treatment*Pre1</i>	-0.009 (-0.28)	-0.001 (-0.14)	0.003 (0.32)	-0.049 (-1.43)	-0.046 (-1.31)	-0.015 (-0.50)	-0.004 (-0.59)	-0.008 (-0.95)	0.016 (0.45)	0.005 (0.14)
<i>Treatment*Pre2</i>	-0.015 (-0.70)	0.000 (0.06)	0.008 (1.11)	-0.042* (-1.80)	-0.038 (-1.43)	-0.002 (-0.11)	0.002 (0.55)	0.002 (0.38)	0.020 (0.89)	0.021 (0.83)
<i>LogPopulation</i>	-0.045 (-0.94)	0.004 (0.50)	0.001 (0.12)	-0.176** (-2.25)	-0.115* (-1.78)	-0.037 (-0.75)	0.005 (0.80)	0.003 (0.45)	-0.166** (-2.05)	-0.106 (-1.53)
<i>LogGDP</i>	0.081 (1.09)	-0.005 (-0.51)	-0.008 (-0.78)	0.120 (1.03)	0.054 (0.53)	0.107 (1.43)	0.002 (0.25)	0.000 (0.03)	0.143 (1.22)	0.068 (0.66)
<i>LogRevenue</i>	-0.050 (-1.11)	0.001 (0.15)	0.002 (0.20)	0.036 (0.57)	0.016 (0.29)	-0.068 (-1.57)	-0.004 (-0.48)	-0.005 (-0.52)	0.020 (0.32)	0.012 (0.21)
<i>Unemployment</i>	0.032 (1.17)	0.003 (0.53)	0.005 (0.68)	0.028 (0.82)	0.046* (1.78)	0.003 (0.11)	-0.004 (-0.80)	-0.005 (-0.74)	-0.003 (-0.08)	0.016 (0.71)
<i>LogAssets</i>	0.016*** (3.15)	-0.003** (-2.47)	-0.003** (-2.32)	0.295*** (23.93)	0.077*** (13.56)	0.016*** (3.07)	-0.003*** (-2.65)	-0.004** (-2.50)	0.296*** (23.70)	0.078*** (14.04)
<i>Tangibility</i>	-0.018 (-1.45)	0.006** (2.25)	0.005* (1.66)	0.049*** (3.41)	-0.020* (-1.69)	-0.020 (-1.57)	0.006** (2.13)	0.004 (1.49)	0.047*** (3.30)	-0.022* (-1.89)
<i>Leverage</i>	-0.027*** (-2.74)	-0.007*** (-2.88)	-0.013*** (-4.59)	-0.021** (-2.18)	-0.009 (-0.94)	-0.026*** (-2.67)	-0.007*** (-2.80)	-0.012*** (-4.53)	-0.020** (-2.12)	-0.008 (-0.79)
<i>Pre1</i>	0.004 (0.17)	-0.014 (-1.63)	-0.024** (-2.22)	0.033 (1.16)	0.022 (0.68)	0.025 (0.79)	-0.008 (-1.01)	-0.013 (-1.13)	0.021 (0.60)	0.027 (0.73)
<i>Pre2</i>	0.022 (1.31)	-0.004 (-0.69)	-0.011 (-1.40)	0.041** (2.22)	0.039* (1.67)	0.026 (1.48)	-0.004 (-0.85)	-0.008 (-1.26)	0.023 (1.12)	0.024 (1.16)
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Province*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1,460,416	1,460,023	1,460,373	1,460,417	1,460,417	1,460,416	1,460,023	1,460,373	1,460,417	1,460,417
R-squared	0.780	0.677	0.678	0.873	0.827	0.780	0.678	0.679	0.873	0.827

Internet Appendix

Table A1: Variable Definitions

Variables	Definition	Unit	Data Source
<i>Population</i>	Annual resident population at the city level.	1 million	CSMAR
<i>LogPopulation</i>	Natural logarithm of <i>Population</i> .		CSMAR
<i>GDP</i>	Annual regional gross domestic product (GDP) at the city level. The unit is in 1 million yuan.	1 million yuan	CSMAR
<i>LogGDP</i>	Natural logarithm of <i>GDP</i> .		CSMAR
<i>Revenue</i>	Annual regional budget revenue at the city level. The unit is 1 million yuan.	1 million yuan	CSMAR
<i>LogRevenue</i>	Natural logarithm of <i>Revenue</i> .		
<i>Unemployment</i>	Annual unemployment rate (total number of the unemployed divided by the total labor force in the province) at the province level.		CSMAR
<i>Fine</i>	Annual fine revenue (fine or confiscation revenue reported by municipal Finance Bureau as part of the non-tax revenue) at the city level. The unit is in 1 million yuan.	1 million yuan	Provincial China Statistical Yearbooks and city-level China Statistical Yearbooks
<i>LogFine</i>	Natural logarithm of <i>Fine</i> .		Same as <i>Fine</i>
<i>Infra</i>	Annual infrastructure investment (infrastructure include water, gas, central heat, road and bridge, public transportation, landscaping, environmental sanitation, and waste recycled and reused) at the city level. The unit is in 1 million yuan.	1 million yuan	China Urban Construction Statistical Yearbooks
<i>LogInfra</i>	Natural logarithm of <i>Infra</i> .		Same as <i>Infra</i>
<i>TFP</i>	(Natural logarithm of) Total factor productivity of the firm. It is calculated as the residual of the regression of log(output) on log(capital) and log(labor). We use total sales, total assets and total workers to measure firm's output, capital and labor, respectively.		CIC
<i>Assets</i>	Firm's annual total assets, measured at the year end.	1 thousand yuan	CIC
<i>LogAssets</i>	Natural logarithm of <i>Assets</i> .		CIC
<i>ROA</i>	Return on assets. It is calculated as the ratio of firm's net income over its total assets in the same year.		CIC
<i>OROA</i>	Operating return on assets. It is calculated as the ratio of firm's operating income over its total assets in the same year.		CIC
<i>Sales</i>	Firm's annual total sales, measured at the year end.	1 thousand yuan	CIC
<i>LogSales</i>	Natural logarithm of <i>Sales</i> .		CIC
<i>LogSalesPer</i>	Natural logarithm of firm's total sales per employee.		CIC
<i>Tangibility</i>	The ratio of firm's fixed assets over its total assets in the same year.		CIC
<i>Leverage</i>	Firm's total debt divided by its total assets in the same year.		CIC

Table A2: Provincial Response to “36 Clauses”

This table presents provincial responses to “36 Clauses” for all 31 provinces.¹ *Province* denotes province names. *Y/M* denotes the specific year and month when province responded to the “36 Clauses”. *The decree* refers to the specific order of the provincial provisions. *ArbitraryPenalty* equals 1 (Y) if the province specifically responds to the "Arbitrary Penalty Clause" with a detailed implementation strategy relevant to arbitrary fines. *Financing* equals 1(Y) if the province responds to the "Fiscal Clause" and "Financial Clause" by proposing a detailed amount of special funds/subsidies or establishing detailed strategies to ease the external financial constraints for the private firm. *Tax* equals 1 (Y) if the province responds to the “Tax Clause” by establishing detailed implementing strategies. *FirmRight*, *WorkerRight*, and *SocialProtection* equal 1 (Y) if the provincial provision includes a certain clause.

<i>Province</i>	<i>Y/M</i>	<i>Decree</i>	<i>ArbitraryPenalty</i>	<i>Financing</i>	<i>Tax</i>	<i>FirmRight</i>	<i>WorkerRight</i>	<i>SocialProtection</i>
Zhejiang	2006/1	No.1	N	N	Y	Y	Y	Y
Henan	2006/6	No.32	N	N	N	N	N	N
Liaoning	2006/3	No.13	Y	Y	Y	Y	Y	N
Anhui	2007/2	No.1	Y	N	N	Y	Y	N
Fujian	2005/11	.						
Beijing	2006/3	No.7	Y	N	N	Y	Y	Y
Yunnan	2006/12	No.24	Y	Y	Y	Y	Y	Y
Jiangxi	2006/5	No.10	Y	Y	Y	Y	Y	Y
Xinjiang	2011/7	No.126	N	Y	Y	N	N	N
Jiangsu	2005	No.7	N	Y	N	N	N	N
Guangxi	2009/12	No.103	N	N	Y	N	N	N
Guizhou	2006/6	No.14	Y	Y	Y	Y	Y	Y
Neimenggu	2006/4	No.31	N	N	Y	Y	Y	N
Sichuan	2005/8	No.21	Y	N	N	Y	Y	Y
Shan'xi	2005/9	No.27	Y	Y	Y	Y	Y	Y
Hebei	2005/5	No.39	Y	Y	N	Y	N	N
Ningxia	2005/10	No.43	Y	N	N	Y	Y	Y
Tianjin	2005/7	No.55	N	Y	Y	Y	Y	Y
Hubei	2005/8	No.15	Y	Y	N	Y	Y	N
Shandong	2010/8	No.76	N	N	Y	Y	N	Y
Gansu	2005/12	No.62	Y	N	Y	Y	Y	N
Qinghai	2005/8	No.47	Y	N	Y	Y	Y	Y
Jilin	2005/2	No.4	N	N	Y	Y	N	N
Chongqing	2005/9	No.85	Y	N	Y	Y	Y	N
Hunan	2005/7	No.12	Y	N	N	Y	Y	Y
Shanghai	2005/5	No.16	N	N	N	Y	Y	N
Xizang	2005/8	No.37	N	Y	Y	Y	Y	N
Guangdong	2005	No.4	Y	Y	Y	Y	Y	N
Heilongjiang	2005/10	No.20	Y	Y	Y	Y	N	N
Hainan	2005/12	No.66	N	Y	Y	N	N	N
Shanxi	2005/9	No.73	Y	N	N	Y	Y	N

¹ There are two special cases that we would like to clarify here. Firstly, although it was mentioned in other articles that the provincial response of Fujian province was released in Nov 2005, we were not able to find the detailed provincial provision. See https://xueshu.baidu.com/usercenter/paper/show?paperid=1b6e0r205j7w0vs02u2m0ga02s656640&site=xueshu_se. As a result, we exclude Fujian province in our main analysis. Our results remain robust if we include Fujian province and assign values of all indicators as “N”. Secondly, Jiangsu and Guangdong had announced similar provisions prior to “36 Clauses” in 2005 with the “Market Entry Clause”, as such they did not respond to the “36 Clauses” after 2005. We hypothesized that these two provinces are shocked as soon as the central government released the national “36 Clauses” in Feb 2005, under the assumption that the provincial provision were more effective after the national shock, before which provinces only implemented the provision with great scrutiny to avoid deviating from the guide of the central government. Our results remain robust if we consider the shock year for these two provinces as prior to 2005, namely 2004 and 2003, respectively.

Table A3: DDD Regressions using “36 Clauses” (Indicator: *FirmRight*)

This table presents results of our DID regressions, where treatment is *FirmRight*. The sample covers all non-SOE manufacturing firms with non-missing variables from 2000 to 2009, excluding the utility industries (electricity, gas, and water industry). The treatment is *Tax*, which equals 1 if the province responds to the “Tax Clause” by establishing detailed implementing strategies. The dependent variables are firm-level characteristics such like *TFP*, *ROA*, *OROA*, etc. *Pre1* (*Pre2*) is a dummy variable that indicate one (two) year(s) before the year when the local government release their own provincial provisions in respond to “36 Clauses”. *Post* is a dummy variable which equals 1 for years during or after the year when the local government releases their own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the city-year level. Control variables include macro-level controls, such like *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such like *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect and industry×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = FirmRight</i>				
	(1)	(2)	(3)	(4)	(5)
	<i>TFP</i>	<i>ROA</i>	<i>OROA</i>	<i>LogSales</i>	<i>LogSalesPer</i>
<i>Post</i>	0.458*** (3.47)	0.180*** (4.59)	0.185*** (4.13)	0.566*** (3.94)	0.615*** (4.14)
<i>LogInfra</i>	0.046** (2.49)	0.013*** (2.74)	0.017*** (2.77)	0.067*** (3.19)	0.062*** (3.08)
<i>Treatment*Post*LogInfra</i>	0.027 (1.62)	0.013*** (2.77)	0.011** (2.02)	0.027 (1.47)	0.030 (1.44)
<i>Treatment*LogInfra</i>	-0.056*** (-3.65)	-0.022*** (-4.92)	-0.024*** (-4.51)	-0.069*** (-4.31)	-0.070*** (-3.96)
<i>Treatment*LogInfra</i>	-0.006 (-0.28)	-0.006 (-1.20)	-0.007 (-1.02)	-0.019 (-0.77)	-0.011 (-0.45)
<i>Treatment*Post</i>	-0.304** (-2.14)	-0.143*** (-3.49)	-0.132*** (-2.78)	-0.294* (-1.84)	-0.343** (-2.09)
<i>Treatment*Pre1</i>	-0.009 (-0.23)	-0.002 (-0.33)	-0.008 (-0.77)	0.027 (0.60)	0.003 (0.07)
<i>Treatment*Pre2</i>	0.009 (0.37)	0.004 (0.76)	0.005 (0.74)	0.033 (1.17)	0.032 (1.06)
<i>LogPopulation</i>	-0.039 (-0.78)	0.005 (0.75)	0.003 (0.38)	-0.166** (-2.05)	-0.106 (-1.50)
<i>LogGDP</i>	0.095 (1.21)	-0.001 (-0.15)	-0.004 (-0.42)	0.128 (1.06)	0.049 (0.46)
<i>LogRevenue</i>	-0.064 (-1.39)	-0.003 (-0.37)	-0.004 (-0.38)	0.028 (0.44)	0.020 (0.34)
<i>Unemployment</i>	0.026 (0.93)	0.001 (0.23)	0.004 (0.51)	0.024 (0.66)	0.045* (1.76)
<i>LogAssets</i>	0.016*** (3.02)	-0.003*** (-2.70)	-0.004** (-2.52)	0.296*** (23.83)	0.078*** (14.00)
<i>Tangibility</i>	-0.019 (-1.44)	0.006** (2.11)	0.004 (1.54)	0.048*** (3.26)	-0.021* (-1.72)
<i>Leverage</i>	-0.026*** (-2.70)	-0.007*** (-2.73)	-0.012*** (-4.54)	-0.020** (-2.12)	-0.008 (-0.81)
<i>Pre1</i>	0.007 (0.19)	-0.013 (-1.37)	-0.016 (-1.33)	-0.004 (-0.08)	0.013 (0.30)
<i>Pre2</i>	0.009 (0.39)	-0.008 (-1.45)	-0.014* (-1.90)	0.001 (0.05)	0.005 (0.18)
Firm FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Province*Industry FE	YES	YES	YES	YES	YES
Year*Industry FE	YES	YES	YES	YES	YES
Observations	1,460,416	1,460,023	1,460,373	1,460,417	1,460,417
R-squared	0.780	0.678	0.679	0.873	0.827

Table A4: DDD Regressions using “36 Clauses” (*WorkerRight* and *SocialProtection*)

This table presents the results of our main DID regressions, where the treatments are *WorkerRight* and *SocialProtection*, respectively. The sample covers all non-SOE manufacturing firms with non-missing variables from 2000 to 2009, excluding the utility industries (electricity, gas, and water industry). In Columns (1)-(5), treatment is *WorkerRight*, which equals 1 if the province responds to the “Worker Right Clause”. In Columns (6)-(10), treatment is *SocialProtection*, which equals 1 if the province responds to the “Social Protection Clause”. The dependent variables are firm-level characteristics such as *TFP*, *ROA*, *OROA*, etc. *Pre1* (*Pre2*) is a dummy variable that indicates one (two) year(s) before the year when the local government releases their own provincial provisions in response to "36 Clauses". *Post* is a dummy variable that equals 1 for years during or after the year when the local government releases its own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the city-year level. Control variables include macro-level controls, such as *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such as *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect, and industry×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = WorkerRight</i>					<i>Treatment = SocialProtection</i>				
	(1) <i>TFP</i>	(2) <i>ROA</i>	(3) <i>OROA</i>	(4) <i>LogSales</i>	(5) <i>LogSalesPer</i>	(6) <i>TFP</i>	(7) <i>ROA</i>	(8) <i>OROA</i>	(9) <i>LogSales</i>	(10) <i>LogSalesPer</i>
<i>Post</i>	0.428*** (3.65)	0.136*** (3.81)	0.140*** (3.35)	0.538*** (4.03)	0.587*** (4.57)	0.193** (2.15)	0.084*** (3.34)	0.104*** (3.39)	0.291*** (2.78)	0.292** (2.36)
<i>LogInfra</i>	0.040*** (3.30)	0.008** (2.10)	0.012** (2.42)	0.057*** (3.68)	0.063*** (4.26)	0.026 (1.34)	0.008** (2.28)	0.009** (2.22)	0.034 (1.52)	0.040* (1.66)
<i>Treatment*Post*LogInfra</i>	0.024 (1.38)	0.008 (1.57)	0.006 (0.97)	0.022 (1.06)	0.028 (1.33)	-0.029** (-1.97)	0.004 (1.07)	0.001 (0.33)	-0.034** (-2.05)	-0.023 (-1.23)
<i>Post*LogInfra</i>	-0.050*** (-3.21)	-0.017*** (-3.70)	-0.018*** (-3.38)	-0.061*** (-3.41)	-0.065*** (-3.77)	-0.024** (-2.28)	-0.012*** (-4.10)	-0.015*** (-4.09)	-0.036*** (-2.92)	-0.039** (-2.50)
<i>Treatment*LogInfra</i>	-0.003 (-0.16)	-0.000 (-0.10)	-0.001 (-0.20)	-0.013 (-0.53)	-0.018 (-0.75)	0.051** (2.37)	0.002 (0.41)	0.007 (1.04)	0.064** (2.53)	0.056** (2.26)
<i>Treatment*Post</i>	-0.353*** (-2.69)	-0.104*** (-2.81)	-0.094** (-2.15)	-0.350** (-2.29)	-0.406*** (-2.62)	0.156 (1.36)	-0.053** (-2.14)	-0.050 (-1.39)	0.219* (1.75)	0.190 (1.38)
<i>Treatment*Pre1</i>	-0.132*** (-3.81)	-0.019** (-2.27)	-0.025** (-2.49)	-0.139*** (-3.44)	-0.141*** (-3.57)	-0.014 (-0.53)	-0.003 (-0.54)	-0.016* (-1.92)	0.009 (0.29)	0.030 (0.90)
<i>Treatment*Pre2</i>	-0.059*** (-2.87)	-0.005 (-0.97)	-0.001 (-0.12)	-0.068*** (-3.00)	-0.054** (-2.02)	-0.008 (-0.38)	-0.001 (-0.20)	-0.010 (-1.47)	0.015 (0.67)	0.022 (0.77)
<i>LogPopulation</i>	-0.038 (-0.79)	0.005 (0.74)	0.003 (0.37)	-0.167** (-2.12)	-0.105 (-1.57)	-0.044 (-0.93)	0.005 (0.73)	0.002 (0.25)	-0.175** (-2.24)	-0.114 (-1.64)
<i>LogGDP</i>	0.098 (1.32)	-0.001 (-0.17)	-0.005 (-0.54)	0.135 (1.15)	0.057 (0.55)	0.085 (1.09)	-0.006 (-0.65)	-0.010 (-0.98)	0.125 (1.03)	0.059 (0.54)
<i>LogRevenue</i>	-0.066 (-1.49)	-0.002 (-0.19)	-0.002 (-0.17)	0.021 (0.34)	0.013 (0.23)	-0.053 (-1.20)	0.001 (0.15)	0.003 (0.29)	0.034 (0.55)	0.016 (0.29)
<i>Unemployment</i>	0.013 (0.48)	-0.001 (-0.27)	-0.000 (-0.00)	0.008 (0.24)	0.027 (1.17)	0.029 (1.05)	0.001 (0.19)	0.003 (0.35)	0.027 (0.77)	0.048* (1.84)
<i>LogAssets</i>	0.017*** (3.16)	-0.003*** (-2.65)	-0.004** (-2.51)	0.296*** (24.05)	0.079*** (14.41)	0.018*** (3.32)	-0.003** (-2.25)	-0.003** (-2.07)	0.297*** (23.86)	0.078*** (14.26)
<i>Tangibility</i>	-0.020 (-1.55)	0.005** (2.04)	0.004 (1.45)	0.047*** (3.21)	-0.022* (-1.84)	-0.018 (-1.43)	0.006** (2.21)	0.005 (1.65)	0.049*** (3.36)	-0.020 (-1.63)
<i>Leverage</i>	-0.025*** (-2.62)	-0.007*** (-2.69)	-0.012*** (-4.46)	-0.019** (-2.02)	-0.007 (-0.68)	-0.027*** (-2.82)	-0.007*** (-2.95)	-0.013*** (-4.69)	-0.021** (-2.25)	-0.010 (-1.04)
<i>Pre1</i>	0.055** (2.05)	-0.006 (-0.60)	-0.011 (-0.95)	0.077** (2.43)	0.075** (2.16)	0.017 (0.62)	-0.011 (-1.40)	-0.011 (-1.09)	0.022 (0.70)	-0.003 (-0.08)
<i>Pre2</i>	0.038** (2.18)	-0.002 (-0.35)	-0.009 (-1.15)	0.057*** (2.91)	0.051** (2.00)	0.029 (1.60)	-0.002 (-0.54)	0.000 (0.04)	0.028 (1.34)	0.019 (0.96)
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Province*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1,460,416	1,460,023	1,460,373	1,460,417	1,460,417	1,460,416	1,460,023	1,460,373	1,460,417	1,460,417
R-squared	0.780	0.678	0.679	0.874	0.827	0.780	0.678	0.678	0.873	0.827

Table A5: Entry of New Firms

This table presents results of regressions on the extensive margin. The regression specification is similar to equation (1), while the dependent variables are replaced by *NewFirm*, which is defined as the annual increase in the numbers of firms in each province-industry (or city-industry) group. In Columns (1) and (3), the regressions are at the province-industry-year level, while in Columns (2) and (4), the regressions are at the city-industry-year level. In Columns (1)-(2), treatment is *MarketEntry*, which is a dummy variable which equals 1 for treated province-industry categories that are either traditionally monopolized industries or have SOE-asset-to-total-asset ratio exceeding 50% in 2004. In Columns (3)-(4), treatment is *ArbitraryPenalty*, which equals 1 if the province responds to the “Arbitrary Penalty Clause” with detailed implementation strategy relevant to arbitrary fines. *Post* is a dummy variable which equals 1 for years during or after the year when the local government releases their own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the province-year (or city-year) level. Control variables include *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*. Control variables are measured in the past year, at province level in Columns (1) and (3), and at city level in Columns (2) and (4). The regression also controls for year fixed effect, province×industry fixed effect (or city×industry fixed effect) and industry×year fixed effect. Standard errors are clustered at the province level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = MarketEntry</i>		<i>Treatment = ArbitragePenalty</i>	
	(1) <i>NewFirm</i>	(2) <i>NewFirm</i>	(3) <i>NewFirm</i>	(4) <i>NewFirm</i>
<i>Post</i>	109.209** (2.29)	10.418*** (3.25)	193.828*** (3.52)	17.524*** (3.23)
<i>LogInfra</i>	12.726* (1.86)	1.528*** (4.15)	6.786 (0.50)	1.542*** (4.97)
<i>Treatment*Post*LogInfra</i>	10.665*** (2.96)	1.253*** (3.65)	17.664** (2.40)	2.049** (2.42)
<i>Post*LogInfra</i>	-12.895** (-2.67)	-1.628*** (-3.63)	-21.986*** (-4.27)	-2.671*** (-3.43)
<i>Treatment*LogInfra</i>	-4.097 (-0.87)	-0.920*** (-3.44)	0.902 (0.06)	-0.624 (-1.55)
<i>Treatment*Post</i>	-96.933** (-2.63)	-7.649*** (-3.48)	-158.817* (-1.99)	-13.185** (-2.36)
<i>Treatment*Pre1</i>	2.677 (0.16)	0.570 (0.48)	12.833 (0.49)	1.255 (0.58)
<i>Treatment*Pre2</i>	-11.213 (-1.48)	-0.670 (-0.82)	-13.812 (-0.83)	-0.576 (-0.34)
<i>LogPopulation_lag</i>	-22.825** (-2.67)	-1.836 (-1.66)	-24.355** (-2.64)	-1.676 (-1.31)
<i>LogGDP_lag</i>	33.775 (0.93)	0.386 (0.27)	65.653 (1.50)	-0.296 (-0.23)
<i>LogRevenue_lag</i>	26.076** (2.50)	1.291 (0.95)	19.699 (1.52)	1.635 (1.32)
<i>Unemployment_lag</i>	8.668** (2.45)	0.502 (1.44)	5.245 (0.85)	0.143 (0.23)
<i>Pre_1</i>	-17.033 (-0.73)	-1.438 (-0.73)	-23.384 (-0.87)	-2.034 (-1.05)
<i>Pre_2</i>	8.370 (0.68)	0.682 (0.50)	13.224 (0.76)	0.900 (0.47)
Observations	8,738	60,397	8,485	58,115
R-squared	0.645	0.502	0.648	0.505
City*IndustryFE	No	YES	No	YES
Province*Industry FE	YES	No	YES	No
Year*Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Table A6: DDD Regressions on Existing Firms (*MarketEntry* and *ArbitraryPenalty*)

This table presents results of our main DID regressions, where the treatments are *MarketEntry* and *ArbitraryPenalty*. The initial sample covers all non-SOE manufacturing firms with non-missing variables from 2000 to 2009, excluding the utility industries (electricity, gas, and water industry). Further, the sample in this table only include “existing firms”, which are established in at least one year before the national shock and survive at least one year after the national shock. In Columns (1)-(5), treatment is *MarketEntry*, which is a dummy variable which equals 1 for treated province-industry categories that are either traditionally monopolized industries or have SOE-asset-to-total-asset ratio exceeding 50% in 2004. In Columns (6)-(10), treatment is *ArbitraryPenalty*, which equals 1 if the province responds to the “Arbitrary Penalty Clause” with detailed implementation strategy relevant to arbitrary fines. The dependent variables are firm-level characteristics such like *TFP*, *ROA*, *OROA*, etc. *Pre1* (*Pre2*) is a dummy variable that indicate one (two) year(s) before the year when the local government release their own provincial provisions in respond to “36 Clauses”. *Post* is a dummy variable which equals 1 for years during or after the year when the local government releases their own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the city-year level. Control variables include macro-level controls, such like *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such like *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect and industry×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = MarketEntry</i>					<i>Treatment = ArbitraryPenalty</i>				
	(1) <i>TFP</i>	(2) <i>ROA</i>	(3) <i>OROA</i>	(4) <i>LogSales</i>	(5) <i>LogSalesPer</i>	(6) <i>TFP</i>	(7) <i>ROA</i>	(8) <i>OROA</i>	(9) <i>LogSales</i>	(10) <i>LogSalesPer</i>
<i>Post</i>	0.209*** (3.51)	0.069*** (3.62)	0.084*** (3.74)	0.319*** (4.69)	0.328*** (3.47)	0.375*** (4.35)	0.129*** (4.80)	0.134*** (4.20)	0.536*** (6.53)	0.643*** (6.16)
<i>LogInfra</i>	0.041** (2.55)	0.010*** (3.23)	0.013*** (3.35)	0.054*** (2.88)	0.054** (2.58)	0.059*** (3.34)	0.014*** (2.94)	0.019*** (3.28)	0.075*** (3.59)	0.089*** (5.35)
<i>Treatment*Post*LogInfra</i>	0.015** (2.35)	0.006*** (4.09)	0.008*** (4.78)	0.019** (2.27)	0.012 (1.56)	0.044*** (2.83)	0.013*** (4.02)	0.013*** (3.16)	0.055*** (3.32)	0.065*** (3.84)
<i>Post*LogInfra</i>	-0.036*** (-5.88)	-0.012*** (-6.81)	-0.015*** (-7.53)	-0.049*** (-7.02)	-0.047*** (-4.60)	-0.057*** (-5.79)	-0.019*** (-6.90)	-0.022*** (-6.65)	-0.076*** (-8.08)	-0.085*** (-7.65)
<i>Treatment*LogInfra</i>	-0.021* (-1.85)	-0.006** (-2.45)	-0.009** (-2.39)	-0.028** (-2.21)	-0.020 (-1.54)	-0.036 (-1.28)	-0.009 (-1.57)	-0.012 (-1.62)	-0.046 (-1.45)	-0.057* (-1.94)
<i>Treatment*Post</i>	-0.055 (-1.07)	-0.039*** (-3.23)	-0.061*** (-3.92)	-0.091 (-1.47)	-0.010 (-0.16)	-0.318*** (-2.60)	-0.107*** (-3.63)	-0.098*** (-2.65)	-0.418*** (-3.36)	-0.540*** (-4.00)
<i>Treatment*Pre1</i>	0.019 (0.91)	-0.004 (-0.78)	-0.005 (-0.82)	0.019 (0.77)	0.041* (1.84)	-0.004 (-0.10)	0.002 (0.32)	0.004 (0.45)	-0.010 (-0.24)	-0.007 (-0.17)
<i>Treatment*Pre2</i>	-0.022 (-1.31)	-0.006 (-1.32)	-0.009 (-1.62)	-0.022 (-1.22)	-0.013 (-0.68)	-0.009 (-0.39)	-0.001 (-0.10)	0.006 (0.71)	-0.017 (-0.67)	-0.001 (-0.04)
<i>LogPopulation</i>	-0.065 (-1.09)	0.000 (0.06)	-0.003 (-0.32)	-0.200** (-2.17)	-0.133 (-1.65)	-0.062 (-1.20)	-0.002 (-0.28)	-0.006 (-0.70)	-0.185** (-2.19)	-0.120* (-1.77)
<i>LogGDP</i>	0.093 (1.10)	-0.002 (-0.18)	-0.005 (-0.41)	0.127 (1.02)	0.061 (0.52)	0.069 (0.86)	-0.000 (-0.05)	-0.005 (-0.41)	0.108 (0.90)	0.034 (0.33)
<i>LogRevenue</i>	-0.064 (-1.43)	-0.001 (-0.13)	-0.002 (-0.16)	0.031 (0.51)	0.013 (0.21)	-0.052 (-1.13)	-0.001 (-0.16)	-0.000 (-0.00)	0.035 (0.57)	0.012 (0.21)
<i>Unemployment</i>	0.042 (1.59)	0.005 (0.88)	0.007 (0.97)	0.046 (1.44)	0.053** (2.06)	0.033 (1.12)	0.004 (0.64)	0.005 (0.67)	0.029 (0.82)	0.059** (2.08)
<i>LogAssets</i>	0.004 (0.73)	-0.005*** (-3.64)	-0.006*** (-3.57)	0.345*** (31.96)	0.094*** (19.07)	0.002 (0.43)	-0.005*** (-3.99)	-0.006*** (-3.81)	0.342*** (30.40)	0.092*** (17.96)
<i>Tangibility</i>	-0.017 (-1.18)	0.007** (2.51)	0.006* (1.92)	0.068*** (3.93)	-0.024* (-1.75)	-0.017 (-1.18)	0.007** (2.37)	0.007* (1.91)	0.067*** (3.78)	-0.027* (-1.96)
<i>Leverage</i>	-0.027** (-2.50)	-0.011*** (-4.40)	-0.018*** (-5.99)	-0.025** (-2.35)	-0.016 (-1.46)	-0.032*** (-2.89)	-0.012*** (-4.51)	-0.019*** (-6.10)	-0.030*** (-2.85)	-0.019* (-1.76)
<i>Pre1</i>	-0.023 (-0.93)	-0.017** (-2.24)	-0.027*** (-2.77)	-0.016 (-0.62)	-0.008 (-0.26)	-0.025 (-0.91)	-0.020** (-2.46)	-0.030*** (-2.87)	-0.017 (-0.57)	-0.019 (-0.57)
<i>Pre2</i>	0.012 (0.74)	-0.004 (-0.77)	-0.009 (-1.35)	0.017 (0.98)	0.032 (1.59)	0.011 (0.61)	-0.006 (-0.88)	-0.012 (-1.57)	0.019 (1.03)	0.021 (0.96)
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Province*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1,112,488	1,112,250	1,112,460	1,112,489	1,112,489	1,051,963	1,051,725	1,051,935	1,051,964	1,051,964
R-squared	0.750	0.628	0.634	0.867	0.810	0.753	0.636	0.642	0.869	0.812

Table A7: DDD Regressions on Existing Firms (*Financing* and *Tax*)

This table presents results of our main DID regressions, where the treatment is *Financing* and *Tax*, respectively. The initial sample covers all non-SOE manufacturing firms with non-missing variables from 2000 to 2009, excluding the utility industries (electricity, gas, and water industry). Further, the sample in this table only include “existing firms”, which are established in at least one year before the national shock and survive at least one year after the national shock. In Columns (1)-(5), treatment is *Financing*, which equals 1 if the province responds to the “Fiscal Clause” and “Financial Clause” by proposing detailed number of special funds/subsidies or establishing detailed strategies to ease the external financial constraints for the private firm. In Columns (6)-(10), treatment is *Tax*, which equals 1 if the province responds to the “Tax Clause” by establishing detailed implementing strategies.. The dependent variables are firm-level characteristics such like *TFP*, *ROA*, *OROA*, etc. *Pre1* (*Pre2*) is a dummy variable that indicate one (two) year(s) before the year when the local government release their own provincial provisions in respond to “36 Clauses”. *Post* is a dummy variable which equals 1 for years during or after the year when the local government releases their own provincial provisions. *LogInfra* is the natural logarithm of total infrastructure investment at the city-year level. Control variables include macro-level controls, such like *LogPopulation*, *LogGDP*, *LogRevenue*, and *Unemployment*, and micro-level controls, such like *LogAssets*, *Tangibility*, and *Leverage*. Control variables are measured in the past year. The regression also controls for firm fixed effect, year fixed effect, province×industry fixed effect and industry×year fixed effect. Standard errors are clustered at the city level. Definitions of dependent variables and control variables can be found in Appendix A1. T-statistics of the coefficient estimates are reported in parentheses. ***, **, * indicate statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dep.Var</i>	<i>Treatment = Financing</i>					<i>Treatment = Tax</i>				
	(1) <i>TFP</i>	(2) <i>ROA</i>	(3) <i>OROA</i>	(4) <i>LogSales</i>	(5) <i>LogSalesPer</i>	(6) <i>TFP</i>	(7) <i>ROA</i>	(8) <i>OROA</i>	(9) <i>LogSales</i>	(10) <i>LogSalesPer</i>
<i>Post</i>	0.325*** (5.11)	0.085*** (3.77)	0.096*** (3.48)	0.461*** (7.02)	0.544*** (5.55)	0.432*** (5.03)	0.123*** (4.31)	0.144*** (4.06)	0.532*** (5.28)	0.633*** (5.18)
<i>LogInfra</i>	0.058*** (3.90)	0.009*** (2.87)	0.014*** (2.62)	0.069*** (3.76)	0.089*** (6.50)	0.042*** (2.94)	0.010*** (2.89)	0.015** (2.57)	0.063*** (3.50)	0.068*** (4.49)
<i>Treatment*Post*LogInfra</i>	0.037*** (2.75)	0.006* (1.93)	0.006 (1.60)	0.043*** (2.76)	0.055*** (3.13)	0.027** (2.11)	0.007** (2.00)	0.007 (1.59)	0.030** (2.03)	0.048*** (2.65)
<i>Post*LogInfra</i>	-0.050*** (-7.64)	-0.014*** (-6.43)	-0.017*** (-6.62)	-0.065*** (-9.91)	-0.071*** (-6.90)	-0.052*** (-6.36)	-0.016*** (-5.40)	-0.019*** (-5.41)	-0.066*** (-6.90)	-0.074*** (-5.40)
<i>Treatment*LogInfra</i>	-0.032 (-1.22)	-0.002 (-0.36)	-0.005 (-0.62)	-0.033 (-1.08)	-0.057** (-1.99)	-0.003 (-0.13)	-0.002 (-0.49)	-0.004 (-0.64)	-0.018 (-0.64)	-0.024 (-0.90)
<i>Treatment*Post</i>	-0.267** (-2.53)	-0.040 (-1.58)	-0.037 (-1.12)	-0.341*** (-2.92)	-0.470*** (-3.49)	-0.343*** (-3.28)	-0.084*** (-3.07)	-0.093** (-2.58)	-0.347*** (-2.88)	-0.509*** (-3.77)
<i>Treatment*Pre1</i>	0.006 (0.17)	0.000 (0.02)	0.005 (0.56)	-0.027 (-0.78)	-0.025 (-0.73)	-0.027 (-0.88)	-0.005 (-0.80)	-0.009 (-1.05)	-0.003 (-0.08)	-0.008 (-0.22)
<i>Treatment*Pre2</i>	-0.012 (-0.55)	-0.001 (-0.28)	0.006 (0.82)	-0.033 (-1.40)	-0.033 (-1.25)	0.000 (0.01)	0.004 (0.94)	0.006 (0.92)	0.019 (0.83)	0.026 (1.02)
<i>LogPopulation</i>	-0.062 (-1.22)	-0.002 (-0.18)	-0.006 (-0.59)	-0.185** (-2.22)	-0.124* (-1.90)	-0.049 (-0.92)	0.001 (0.19)	-0.002 (-0.20)	-0.170** (-1.98)	-0.110 (-1.58)
<i>LogGDP</i>	0.050 (0.67)	-0.006 (-0.65)	-0.010 (-0.90)	0.088 (0.77)	0.016 (0.16)	0.081 (1.09)	0.001 (0.16)	-0.000 (-0.01)	0.117 (1.03)	0.034 (0.35)
<i>LogRevenue</i>	-0.038 (-0.84)	0.003 (0.37)	0.004 (0.38)	0.051 (0.82)	0.026 (0.47)	-0.060 (-1.40)	-0.003 (-0.33)	-0.005 (-0.46)	0.029 (0.48)	0.018 (0.33)
<i>Unemployment</i>	0.051* (1.89)	0.007 (1.11)	0.009 (1.17)	0.049 (1.52)	0.064** (2.39)	0.017 (0.69)	-0.002 (-0.39)	-0.002 (-0.38)	0.013 (0.44)	0.028 (1.24)
<i>LogAssets</i>	0.002 (0.45)	-0.005*** (-3.74)	-0.006*** (-3.65)	0.342*** (30.05)	0.091*** (17.47)	0.002 (0.43)	-0.005*** (-3.92)	-0.006*** (-3.81)	0.342*** (29.67)	0.093*** (18.38)
<i>Tangibility</i>	-0.018 (-1.24)	0.007** (2.33)	0.006* (1.87)	0.066*** (3.80)	-0.027** (-2.01)	-0.020 (-1.33)	0.006** (2.20)	0.006* (1.70)	0.064*** (3.67)	-0.029** (-2.17)
<i>Leverage</i>	-0.031*** (-2.81)	-0.012*** (-4.46)	-0.019*** (-5.99)	-0.030*** (-2.75)	-0.020* (-1.76)	-0.030*** (-2.72)	-0.012*** (-4.44)	-0.018*** (-6.00)	-0.028*** (-2.69)	-0.018 (-1.60)
<i>Pre1</i>	-0.022 (-0.82)	-0.016** (-2.05)	-0.028*** (-2.67)	-0.005 (-0.20)	-0.006 (-0.20)	0.011 (0.35)	-0.010 (-1.12)	-0.016 (-1.36)	0.002 (0.05)	0.013 (0.34)
<i>Pre2</i>	0.016 (0.96)	-0.004 (-0.61)	-0.011 (-1.39)	0.026 (1.45)	0.036 (1.61)	0.021 (1.16)	-0.005 (-0.96)	-0.010 (-1.50)	0.013 (0.61)	0.020 (0.95)
Firm FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Province*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year*Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Observations	1,051,963	1,051,725	1,051,935	1,051,964	1,051,964	1,051,963	1,051,725	1,051,935	1,051,964	1,051,964
R-squared	0.753	0.636	0.641	0.869	0.811	0.754	0.637	0.642	0.869	0.812