

# Online Appendix to “Interfirm Relationships and Business Performance”\*

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This material supplements our paper “Interfirm Relationships and Business Performance”. In Sections O1 and O2 we provide additional empirical results. In Section O3 we present the survey.

## O1 Robustness and Heterogeneity of Main Effects

Here we present results that complement the analysis of Section 3.1 in the paper.

*Non-winsorized results.* We begin by confirming the robustness of our main results to not winsorizing the outcome variables. Table O1 reports non-winsorized estimates of equation (1) in the paper for all the outcomes in Tables 3 and 4 of the paper which were winsorized. The results are very similar to those reported in the paper.

*Heterogeneous effects.* We next report estimates of heterogeneous treatment effects. For each firm characteristic  $X_i$  measured at baseline, we estimate

$$y_{it} = \mu_1 \cdot Post_{it} + \mu_2 \cdot Post_{it} \times X_i + \mu_3 \cdot Post_{it} \times Meetings_{it} + \mu_4 \cdot Post_{it} \times Meetings_{it} \times X_i + Controls + Firm\ f.\ e. + \varepsilon_{it}.$$

The coefficient of interest is  $\mu_4$  which measures the heterogeneous effect of the treatment. A concern with interpreting  $\mu_4$  is that it is the result of two effects: (1) firms with a particular

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Table O1: Effect of Meetings: Non-Winzorized Specifications

VARIABLES	log Sales	Profit (10,000 RMB)	log Number of Employees	log Total Assets	log Material Cost	log Utility Cost	log Productivity	log Number of Clients	log Number of Suppliers
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Midline	0.004 (0.020)	10.490 (6.645)	0.019 (0.017)	0.018 (0.019)	0.001 (0.024)	-0.027 (0.022)	-0.002 (0.013)	0.018 (0.02)	0.024 (0.021)
Endline	0.022 (0.029)	20.813 (13.633)	0.030 (0.024)	0.131*** (0.035)	0.037 (0.029)	0.025 (0.027)	-0.009 (0.02)	-0.012 (0.032)	0.011 (0.03)
Meetings*Midline	0.079** (0.037)	40.283** (16.345)	0.052* (0.027)	0.053 (0.035)	0.061 (0.042)	0.100*** (0.039)	0.025 (0.019)	0.091*** (0.03)	0.087*** (0.031)
Meetings*Endline	0.102** (0.051)	83.708** (33.319)	0.082* (0.044)	0.090* (0.054)	0.104** (0.052)	0.123*** (0.046)	0.012 (0.031)	0.120** (0.05)	0.082* (0.043)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,849	7,664	7,857	7,841	7,792	7,676	7,857	7,912	7,865

Note: Standard errors clustered at the meeting group level for treated firms and at the firm level for control firms. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

characteristic may grow faster as a result of the treatment, and (2) firms with that characteristic may systematically be placed in groups with different peers. For example, regional variation in firm size may result in large firms being systematically placed in groups in which peers are larger. As an attempt to control for the second effect, we include in the regression the peer characteristic we found in Section 3.2 to predict firm performance: peer size at baseline, interacted with  $Post_{it}$  (only for treatment firms). Because including this and other peer characteristics did not qualitatively change the results, we believe that the effects we report are mostly due to differential effects of the meetings by firm (not by peer) characteristics.

Table O2 presents the results. For readability we only included the coefficients of the triple interactions, so each panel corresponds to a different characteristic and each coefficient to a different regression. The top panel shows that larger firm size, measured with the log of employment at baseline, is associated with larger treatment effects. Among firms which are 10 log points larger at baseline, the treatment effect of the meetings is larger by about 0.9 log points. For comparison, the standard deviation of log employment at baseline is 1.37. The fact that larger firms benefit more from the treatment may help explain why the shutdown rate was not significantly different between treatment and control firms: the treatment effects appear to be smaller for firms in the left tail of the size distribution which are more likely to shut down.

The remaining panels show heterogeneous effects by the manager's age, college education, and prior work experience with the government. We do not find significant heterogeneity by these variables. We also did not find robust heterogeneity with respect to other characteristics including industry and gender. We conclude that the main observable heterogeneity in treatment effects is driven by firm size. This result does not contradict the peer effects result documented earlier: there

Table O2: Heterogeneity of the Meetings Effect by Firm and Manager Characteristics

VARIABLES	log Sales (1)	Profit (10,000 RMB) (2)	log Number of Employees (3)	log Total Assets (4)	log Material Cost (5)	log Utility Cost (6)	log Productivity (7)
<b>Panel A. Firm Size</b>							
Meetings*Post*log Number of Employees	0.094*** (0.026)	30.110** (12.740)	-0.033 (0.022)	0.018 (0.023)	0.090*** (0.030)	0.087*** (0.027)	0.044*** (0.013)
<b>Panel B. Manager Age</b>							
Meetings*Post*Manager Age	0.003 (0.004)	1.539 (1.289)	-0.001 (0.003)	-0.005 (0.004)	0.003 (0.004)	-0.003 (0.004)	0.002 (0.002)
<b>Panel C. Manager Education</b>							
Meetings*Post*Completed College	0.022 (0.071)	41.140 (28.084)	0.055 (0.060)	-0.053 (0.073)	0.039 (0.087)	0.075 (0.074)	-0.022 (0.039)
<b>Panel D. Manager Govt Experience</b>							
Meetings*Post*Worked in Govt	0.068 (0.081)	2.035 (27.728)	0.009 (0.068)	0.125 (0.079)	0.092 (0.092)	0.059 (0.081)	-0.012 (0.043)

Note: For each dimension of heterogeneity X, regressions include Post, Post\*X, Post\*Meetings, and firm fixed effects. To control for peer compositions effects, the regressions also include Post\*Meetings\*Peersize, where Peersize is the average of log employment of other group members at baseline for treatment firms (and zero for control firms). Standard errors clustered at the meeting group level for treated firms and at the firm level for control firms. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

we found that firms with larger peers gain more, while here we show that larger firms gain more.

In Table O3 we report treatment effects for each of the four group types: (i) small firms in the same sector; (ii) large firms in the same sector; (iii) mixed size firms in the same sector; and (iv) mixed size and mixed sector. Because group type was randomized only conditional on a set of firm demographics, to compare treated firms in a particular group type with similar control firms we include these demographics (interacted with  $Post_{it}$ ) in the regression. Doing this effectively controls for the propensity of the firm getting assigned to a particular group type, and hence the reported coefficients measure the causal effect of the different group type treatments. However, these effects are also specific to the characteristics of the firms which tended to be assigned to the particular group type, and therefore not directly comparable with each other. We find that, except for firms in the small size same sector group, the estimates are generally positive. These patterns are consistent with our results that firm size and peer size are associated with higher performance.

Table O3: Heterogeneity of the Meetings Effect by Group Type

VARIABLES	log Sales	Profit (10,000 RMB)	log Number of Employees	log Total Assets	log Material Cost	log Utility Cost	log Productivity
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Post*Group type 1	-0.021 (0.079)	-35.940 (26.420)	0.016 (0.050)	0.043 (0.061)	0.016 (0.107)	0.041 (0.086)	0.023 (0.04)
Post*Group type 2	0.193** (0.079)	68.687* (35.288)	0.055 (0.061)	0.133** (0.063)	0.202** (0.088)	0.182** (0.071)	0.013 (0.039)
Post*Group type 3	0.273*** (0.063)	75.004*** (22.039)	0.058 (0.044)	0.082 (0.075)	0.255*** (0.071)	0.210*** (0.062)	0.092*** (0.035)
post*Group type 4	0.170** (0.072)	12.555 (26.166)	0.110** (0.050)	-0.014 (0.069)	0.173* (0.092)	0.168** (0.075)	0.023 (0.034)
Post*Firm Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,857	7,664	7,857	7,857	7,857	7,676	7,857

Note: Group type 1,2,3,4 indicate the four different meeting groups: small firms in the same sector, large firms in the same sector, mixed size firms in the same sector, and mixed size firms in mixed sectors. Firm demographics are firm size category, sector, subregion, and their interactions. Standard errors clustered at the meeting group level for treated firms and at the firm level for control firms in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## O2 Additional Robustness Checks

Here we present a number of additional results that further explore the alternative explanations discussed in Section 3.3 and highlight additional patterns related to the analysis of Section 4.

*Composition effects of experience with the government (Section 3.3).* We present evidence in further support of the argument we made in Section 3.3 that improved access to the government was unlikely to drive our results. Table O4 estimates for a set of key outcomes a peer effect regression similar to that of equation (4) in the paper, but also includes the interaction of *Post* and *Peer Government Experience* where the latter is defined as the share of group members who have had experience working with the government. The coefficients of this interaction are insignificant in all columns, suggesting that peer government experience was not a major contributor to the gains from the meetings.

*Direct effects of government funding (Section 3.3).* To control for the possible confound created by the government funding opportunity discussed in Section 3.3, Table O5 extends the main regression (1) of the paper by adding the interactions between the firm winning the government grant and indicators for the midline and endline survey waves. This specification complements that of Table 8 in the paper by explicitly isolating the dynamics of winner and non-winner firms. The main effects of the meetings treatment are essentially identical to those reported in Table 3 in the

Table O4: Effect of Peer Government Experience on Performance

VARIABLES	log Sales (1)	Profit (10,000 RMB) (2)	log Number of Employees (3)	log Productivity (4)	log Number of Clients (5)	log Number of Suppliers (6)	Management Score (7)
Post*log Peer Size	0.127*** (0.043)	24.773** (12.276)	0.059* (0.032)	0.026 (0.021)	0.054 (0.036)	-0.002 (0.034)	0.148*** (0.029)
Post*Peer Govt Experience	-0.301 (0.228)	42.794 (102.795)	-0.221 (0.201)	0.031 (0.088)	0.198 (0.208)	0.006 (0.175)	0.201 (0.166)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	No
Post*Firm Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,183	4,076	4,183	4,183	4,173	4,170	2,774

Note: Table only uses data for treated firms. Log peer size is the average of log employment of other group members. Peer government experience is the share of group members who have government working experience. Standard errors clustered at the meeting group level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

paper: directly accounting for the effect of the government grant does not change our conclusions. The coefficients of the new interactions are small at midline and somewhat larger at endline, consistent with the timing of the grant. Importantly, because winning the grant is not random, directly controlling for it may bias estimates. But because better-performing firms are more likely to win the grant, this effect is likely to bias the treatment effect estimates downwards.

*Effect of information on funding on control firms' performance (Section 3.3).* As another way of excluding the possible confound created by the government funding opportunity, Table O6 estimates the effect of information on funding for control firms only. The results show that information on funding had no effect on firm performance in this sample.

*Share of informed peers and diffusion (Section 4.1).* Table O7 refines the diffusion results reported in column 3 of Tables 9 and 10 in the paper by showing that having 50% or 80% of peers informed had similar impacts on applying. Thus there does not appear to be a major gain in diffusion from having 80% of peers being informed.

*Peer competition (Section 4.1).* Motivated by the finding in Section 4.1 that peer competition is associated with lower information diffusion, here we report peer effects by the extent of competition in the group. We estimate in the sample of treatment firms

$$y_{it} = \text{const} + \delta_1 \cdot \text{Post}_{it} + \delta_2 \cdot \text{Post}_{it} \times \text{Competition}_{it} + \text{Controls} + \text{Firm } f. e. + \varepsilon_{it}.$$

Here  $\text{Competition}_{it}$  is the indicator defined in Section 4.1 measuring whether the average number of competitors in the group is above its median value. The controls include the interaction of  $\text{Post}_{it}$  with our standard set of firm demographics. Table O8 shows the results. These reveal no significant association between the extent of competition and firm performance. This finding is initially surprising given the result in Section 4.1 that competition is associated with lower

Table O5: Effect of Meetings: Controlling for Government Funding

VARIABLES	log Sales	Profit (10,000 RMB)	log Number of Employees	log Total Assets	log Utility Cost	log Number of Clients	Management
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Midline	0.004 (0.020)	11.662** (5.438)	0.018 (0.017)	0.013 (0.017)	-0.023 (0.021)	0.015 (0.020)	
Endline	0.012 (0.029)	11.670 (8.308)	0.027 (0.024)	0.016 (0.031)	0.023 (0.027)	0.042 (0.029)	-0.009 (0.033)
Meetings*Midline	0.077** (0.036)	25.465** (12.599)	0.053** (0.027)	0.060** (0.031)	0.097*** (0.037)	0.090*** (0.030)	0.210** (0.051)
Meetings*Endline	0.097* (0.050)	31.892* (18.604)	0.074* (0.044)	0.099** (0.047)	0.115** (0.046)	0.115** (0.046)	0.216*** (0.048)
Funding*Midline	0.038 (0.121)	18.884 (38.589)	-0.028 (0.093)	0.047 (0.097)	0.126 (0.137)	-0.003 (0.107)	0.015 (0.108)
Funding*Endline	0.101 (0.146)	44.923 (41.935)	0.154 (0.111)	0.275 (0.186)	0.041 (0.170)	0.189 (0.118)	-0.048 (0.123)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	No
Observations	7,857	7,664	7,857	7,857	7,676	7,841	5,211

Note: Column (7) is based only on the midline and endline surveys. Standard errors clustered at the meeting group level for treated firms and at the firm level for control firms. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

information diffusion. It may be explained by the negative effect of competition being dominated by the overall positive effect of the meetings; or by other mechanisms through which higher competition increases benefits, such as more similar firms being better sources of advice.

Table O6: Effect of Funding Information on Performance: Control Firms

VARIABLES	log Sales (1)	Profit (10,000 RMB) (2)	log Number of Employees (3)	log Total Assets (4)	log Material Cost (5)	log Utility Cost (6)	log Productivity (7)
Midline	-0.001 (0.027)	9.630 (7.351)	0.035 (0.022)	0.011 (0.020)	0.009 (0.030)	-0.022 (0.027)	-0.020 (0.013)
Endline	0.013 (0.038)	6.047 (10.549)	0.025 (0.033)	0.012 (0.040)	0.027 (0.038)	0.032 (0.036)	0.015 (0.022)
Info on Funding*Midline	0.012 (0.039)	5.443 (10.757)	-0.042 (0.033)	0.005 (0.035)	-0.022 (0.048)	-0.001 (0.042)	0.024 (0.022)
Info on Funding*Endline	0.002 (0.057)	14.841 (16.968)	0.010 (0.048)	0.017 (0.063)	-0.009 (0.060)	-0.019 (0.054)	-0.018 (0.032)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,674	3,588	3,674	3,674	3,674	3,590	3,674

Note: Table only uses data for control firms. Standard errors clustered by firm. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table O7: Diffusion of Information: Share of Informed Peers

VARIABLES	Applied for the Firm Funding Product (1)	Applied for the Saving Product (2)
50% Informed about Funding	0.292*** (0.04)	
80% Informed about Funding	0.285*** (0.058)	
50% Informed about Saving		0.325*** (0.036)
80% Informed about Saving		0.397*** (0.043)
Firm Demographics	Yes	Yes
Observations	846	835

Note: Sample is treated firms in the midline survey, uninformed about the firm funding (column 1) or the private savings (column 2) opportunity. Firm demographics are indicators for firm size category, sector, subregion, and their interactions. Standard errors clustered at the meeting group level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table O8: Effect of Peer Composition: Role of Competitor Peers

Dependent var.:	log Sales	Profit (10,000 RMB)	log Number of Employees	log Productivity	log Number of Clients	log Number of Suppliers	Management	Sales/Profit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Post*Competition	0.011 (0.067)	28.080 (26.638)	-0.069 (0.057)	0.041 (0.030)	0.044 (0.065)	-0.012 (0.045)	0.027 (0.055)	3.829 (15.151)
Post*Firm Demographics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Observations	4,183	4,076	4,183	4,183	4,173	4,170	2,774	4,070

Note: Table only uses data for treated firms. Column (7) is based only on the midline and endline surveys. Competition is one for groups in which the average number of competitors (reported by firms) is higher than the median across groups, and is zero otherwise. Firm demographics are size category, sector, subregion, and their interactions. Standard errors clustered at the meeting group level in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

### O3 Survey

We provide below the English version of all questions used in our surveys, and also include some of the relevant instructions to surveyors from the survey manual. For presentational clarity in a few places below we changed the organization of the questions into sections relative to that used in the data collection. Three survey waves were conducted: baseline (2013 summer), midline (2014 summer) and endline (2015 summer). Because not all questions were included in all waves, we clarify below which waves contained which questions.

#### FIRM SURVEY

##### A - CONTROL INFORMATION - To be completed before the interview

County/District: \_\_\_\_\_

Town/Street: \_\_\_\_\_

Firm address: \_\_\_\_\_

Firm name: \_\_\_\_\_

Firm ID: \_\_\_\_\_

Name of firm owner: \_\_\_\_\_ Cellphone: \_\_\_\_\_

Position/job title of the INTERVIEWEE within firm: \_\_\_\_\_

(1-Owner 2-Spouse of owner 3-Parents of owner 4-Children of owner 5-Manager 6-Worker 7-Other  
(Specify \_\_\_\_\_ ))

Name of the INTERVIEWEE: \_\_\_\_\_ Cellphone: \_\_\_\_\_

Name of the INTERVIEWER: \_\_\_\_\_

Date of the interview: \_\_\_\_\_

## MAIN SURVEY QUESTIONS

### B - GENERAL INFORMATION

1. Year the company was established (USE FOUR DIGITS): \_\_\_\_\_
2. Address of company headquarters when established: \_\_\_\_\_
3. Headquarters location when established was the same? (1=Yes; 0=No)\_\_\_\_\_, if NO skip to Q6.
4. If moved, standardized address of headquarters before moving here: \_\_\_\_\_
5. Year of move: \_\_\_\_\_
6. What is this firm's current legal status? (1=Private; 2= State-owned; 3= Other - specify \_\_\_\_\_)
7. What is your ownership share in the company? \_\_\_\_\_
8. Are you the largest owner? (1=Yes; 0=No) \_\_\_\_\_
9. Main business \_\_\_\_\_
10. Is the firm a high-tech company? (1=Yes; 0=No) \_\_\_\_\_
11. Last year, what percent of your sales were:

	Percent
Sales into this county / district	
Sales into this province	
Sales into other provinces	
Exports	

12. **Endline only:** From 2012 until now, what percent of firm revenue came from the government (%)? For example, selling products or services to a government office or government agency. 2014-2015 \_\_\_\_\_ (%) ; 2013-2014 \_\_\_\_\_ (%) ; 2012-2013 \_\_\_\_\_ (%)

13. **Endline only:** From 2012 until now, what percent of firm revenue came from contracts established through a connection with government officials? Include here both business with the government and business with private firms and individuals.

2014-2015 \_\_\_\_\_ (%) ; 2013-2014 \_\_\_\_\_ (%) ; 2012-2013 \_\_\_\_\_ (%)

14. Labor:

	Number	Relatives (%)	Female (%)	Education (%)				Monthly Salary (RMB)	Number of months work in a year
				>=Master	College	High school	<= Middle School		
Full time									
Part time									

### C - MANAGER INFORMATION

1. Gender (1=Male; 2=Female) \_\_\_\_\_
2. Year of birth \_\_\_\_\_
3. Highest level of education (00=Below primary school; 01-Primary school; 02-Secondary school; 03-High school; 04-College; 05-Master; 06-Doctor)\_\_\_\_\_
4. Are you a member of the Communist Party of China? (1=Yes; 0=No)\_\_\_\_\_
5. Are you a member of Renda or Zhengxie? (1=Yes; 0=No)\_\_\_\_\_
6. Which year did you start working? \_\_\_\_\_
7. Which year did you start working in this industry? \_\_\_\_\_
8. Which year did you start working for this company? \_\_\_\_\_
9. Do you have working experience in government or state-owned enterprises? (1=Yes; 0=No)\_\_\_\_\_

10. Are you a member of any business association? (1=Yes; 0=No)\_\_\_\_\_

**Questions 11-15 were asked in the midline and endline surveys only.**

11. How many hours do you work every day during working day? \_\_\_\_\_

12. How many hours do you work every day during weekends? \_\_\_\_\_

13. Time spend on different categories (1=All 2=A lot 3=Average 4=Not much 5=Never)

1)Work alone\_\_\_\_\_

2)Meeting with insiders - finance, employment, production, sales \_\_\_\_\_

3)Meeting with outsiders - suppliers, clients, partners, banks \_\_\_\_\_

4)Meeting with government or bank officials \_\_\_\_\_

5)Travel \_\_\_\_\_

6)Private time: non-business related \_\_\_\_\_

14. How many times do you contact or meet with government officials every month \_\_\_\_\_

15. 1) How often do you meet with managers in the same city to discuss business?

Every\_\_\_\_\_weeks

2) If yes, how many other managers do you regularly talk with\_\_\_\_\_

3) If yes, do you talk about

\_\_\_\_\_ hiring and retaining employees

\_\_\_\_\_ operation

\_\_\_\_\_ financing

\_\_\_\_\_ marketing

\_\_\_\_\_ partners

\_\_\_\_\_ innovation

\_\_\_\_\_ market

\_\_\_\_\_ government policy

\_\_\_\_\_ private

\_\_\_\_\_ others (specify: \_\_\_\_\_)

**Questions 16-17 were asked in the midline survey only.**

16. 1) Do you know that CIIT provides the “Grant for young enterprizes” every year? (1=Yes; 0=No) \_\_\_\_\_

- 2) If yes, where did you get this information (1=Government officials; 2=Government website; 3=Government message; 4=Employees 5=Other managers; 6=Relatives/Friends; 7=Media; 8=Others(specify)\_\_\_\_\_)
- 3) Have you applied for the government grant this year? (1=Yes; 0=No) \_\_\_\_\_
17. 1) Do you know that RCC is providing a saving product called Bai Fu? (1=Yes; 0=No) \_\_\_\_\_
- 2) If yes, where did you get this information (1=Bank officials; 2=Bank website; 3=Government message; 4=Employees 5=Other managers; 6=Relatives/Friends; 7=Media; 8=Others(specify)\_\_\_\_\_)
- 3) Have you bought this savings product this year? (1=Yes; 0=No) \_\_\_\_\_

#### **D - BUSINESS ENVIRONMENT AND BUSINESS PRACTICES**

1. Please describe the impact of the following factors on the growth of your firm (1=Big impact; 2=Moderate impact; 3=Small impact; 4=No impact):
- \_\_\_\_\_ financing;
- \_\_\_\_\_ hiring;
- \_\_\_\_\_ market;
- \_\_\_\_\_ technology;
- \_\_\_\_\_ local government support;
- \_\_\_\_\_ other government support;
- \_\_\_\_\_ property right protection;
- \_\_\_\_\_ infrastructure
2. Baseline only: Is it difficult to get the operation license? (1=Very difficult; 2=Moderately difficult; 3=Difficult; 4=Not very difficult; 5=Not difficult at all) \_\_\_\_\_
3. Is it difficult to buy/rent the factory/store? (1=Very difficult; 2=Moderately difficult; 3=Difficult; 4=Not very difficult; 5=Not difficult at all) \_\_\_\_\_
4. Endline only: How much time do you spend on communicating with government officials? (1=All; 2=A lot; 3=Average; 4=Not much; 5=Never) \_\_\_\_\_
5. Please evaluate the work efficiency of government officials? (1=Very efficient; 2=Moderately efficient; 3=Average; 4=Not very efficient; 5=Not efficient at all) \_\_\_\_\_

6. Are you enjoying any favorable tax policies? (1=Yes; 0=No) \_\_\_\_\_

7. How many clients does your company have? \_\_\_\_\_

8. How many suppliers does your company have? \_\_\_\_\_

**Questions 9-12 were asked in the midline and endline survey only.**

9. How do you establish connection with new business partners, clients, and suppliers? (1=Referral of current partners; 2=Referral of friends; 3=Referral of relatives; 4=Referral of government officials; 5=Referral of employees; 6=Participating in business associations; 7=Participating in meetings; 8=Others specify \_\_\_\_\_) \_\_\_\_\_

10. Trade credit: Do any of your suppliers allow you to pay for the materials more than one week after the delivery(1=Yes; 0=No) \_\_\_\_\_ If no, skip to 10.c. What percent of your inputs or materials do you pay your suppliers at least one week after delivery \_\_\_\_\_ Do you allow your clients to pay you for your products more than one week after delivery? \_\_\_\_\_ If no, skip to Section E. What percent of your products do you allow your clients to pay you after delivery \_\_\_\_\_

11. Inventory: Does your firm keep inventory (1=Yes; 0=No) \_\_\_\_\_ If no, skip to Section E. How do you keep track of the inventory of your business? (1= By hand; 2=On the computer; 3=Don't keep track; 4=Other (specify): \_\_\_\_\_) \_\_\_\_\_ How often do you update the inventory of your business? (1=Daily; 2=Weekly; 3=Every two weeks; 4=Monthly; 5=Biannually; 6=Annually; 7=Other (specify): \_\_\_\_\_) \_\_\_\_\_

12. In the last fiscal year what best describes the time frame of production targets? (1=Main focus was on short term (less than one year) targets; 2=Main focus was on long term (more than one year) targets; 3=Combination of short term and long term targets; 4=No targets) \_\_\_\_\_

## **E - FINANCING**

1. Baseline only: During the last fiscal year how much did this firm receive in subsidies and grants from the national or regional government and from other governmental sources?

All values in RMB	Subsidies	Grants
Amount from national government		
Amount from regional government		
Amount from other governmental sources		

2. Have you borrowed from a formal bank to finance operations or investments in this company during the last fiscal year? (1=Yes; 0=No) \_\_\_\_\_
3. Have you borrowed from informal sources to finance operations or investments in this company during the last fiscal year? (1=Yes; 0=No) \_\_\_\_\_
4. Please tell us about each loan your have used to finance operations or investments in this company during the last fiscal year.

	Type of source	Original loan amount (RMB)	Amount outstanding today (RMB)	Average monthly interest (in percentage points)	Year and month of borrowing	Year and month of expiration	Type of loan	Type of collateral	Frequency of payments
1									
2									
3									
4									
5									
CODES	1 formal bank 2 informal sources						1 credit 2 collateral 3 guarantor 4 subsidized 5 other-specify	1 land 2 building 3 machine 4 other 5 none	1 monthly 2 quarterly 3 annually 4 pay on the expiration date 5 other specify

5. What is the share of credit demand that you have managed to borrow? \_\_\_\_\_%
6. If no bank loan, have you applied for one (1=Yes; 0=No) \_\_\_\_\_ If no, skip to 8.
7. If yes, what are the reasons of rejection (1=No collateral; 2=No guarantor; 3=Credit line not high enough; 4= Others) \_\_\_\_\_

8. Why didn't you apply for bank loan? (1= No need for a loan; 2= Interest rates are too high; 3= Application procedures for loans or lines of credit are complex; 4=application cost too high (time, connection, etc.); 5= Collateral requirements are too high; 6= Size of loan and maturity are insufficient) \_\_\_\_\_

**F - ACCOUNTING (LAST FISCAL YEAR)**

Surveyor was instructed to ask the manager the value corresponding to each row in this table, and enter the reported value in the table.

1 Sales	
2 Total operation cost	
2a Inputs and materials	
2b Utility cost	
3 Total profit	
4 Tax	
5 Net profit	
6 Current assets	
7 Fixed assets	

**G - MANAGEMENT (MIDLINE AND ENDLINE ONLY)**

**G.1. Employee performance: measurement and communication**

1. On average, how often do you evaluate the performance of your employees?  
(9999=never)\_\_\_\_\_months. If never, skip to G.4.
2. Do you track employee performance using numerical performance indicators (e.g., number of items sold)? (1=Yes; 0=No) \_\_\_\_\_
3. After the evaluation do you tell employees how they performed?  
(1=Yes; 0=No) \_\_\_\_\_

4. Do you adopt a follow-up plan with an underperforming employee?  
(1=Yes; 0=No) \_\_\_\_\_
5. Do you make performance measures and rankings public to all employees?  
(1=Yes; 0=No) \_\_\_\_\_

**G.2. Targets and responsibilities**

1. Do employees know what are the targets of the company? (1=Yes; 0=No) \_\_\_\_\_
2. Does each employee have a clearly assigned responsibility in the firm? (1=Yes; 0=No)  
\_\_\_\_\_
3. Do employees find it demanding to complete their targets? (1=Yes; 0=No) \_\_\_\_\_

**G.3. Attracting, retaining and incentivizing workers**

1. Do you recognize good employee performance with rewards or bonuses?  
(1=Yes; 0=No) \_\_\_\_\_
2. Do you fire or move to a non-critical role a poor performing worker within six months?  
(1=Fire or move; 0=No consequence) \_\_\_\_\_
3. What are the main factors influencing employee promotion? (1=Only determined by performance; 2=Partially determined by performance, and also by family background or years worked in the firm; 3=Mainly determined by family background and years worked in the firm; 4=Rarely promote employees) \_\_\_\_\_
4. Do senior managers get rewards for bringing in and keeping talented people in the company?  
(1=Yes; 0=No) \_\_\_\_\_
5. Does your firm have lower turnover of employees than most of your competitors?
6. Do you offer the following benefits to retain your best workers? (1=Yes; 0=No)  
\_\_\_\_\_ higher salary  
\_\_\_\_\_ flexible hours  
\_\_\_\_\_ better living condition

\_\_\_\_\_ offer education opportunities to workers' children  
\_\_\_\_\_ matching assignments with employees' interests

#### **G.4. Process documentation and development**

1. Are there regular meetings in the firm to discuss problems arising in firm operation (production, sales, etc.)? (1=Yes; 0=No) \_\_\_\_\_
2. Do you experience that the same problem comes up every few months? (1=Yes; 0=No) \_\_\_\_\_
3. Do you reorganize processes to avoid future occurrence of the same problem? (1=Yes; 0=No)

#### **G.5. Delegation**

1. Do you make most of the decisions in the firm? (1=Yes; 0=No) \_\_\_\_\_
2. Do you feel like you spend too much time making small decisions, and have little time for more important tasks in the firm? (1=Yes; 0=No) \_\_\_\_\_

#### **H - INNOVATION (ENDLINE ONLY)**

Did your company introduce any of the following after Aug 2013?

1. New or significantly improved goods (excluding the simple resale of new goods purchased from others and changes of a solely aesthetic nature) (1=Yes; 0=No) \_\_\_\_\_
2. New or significantly improved services (1=Yes; 0=No) \_\_\_\_\_
3. If you answered "yes" to either 1 or 2 in the previous question, were any of those new or significantly improved goods or services:
  - 3.1) New to one of your markets? (1=Yes; 0=No) \_\_\_\_\_; If yes, share in sales \_\_\_\_\_
  - 3.2) Only new to your company but already present in your markets (sold by your competitors)? (1=Yes; 0=No) \_\_\_\_\_; If yes, share in sales \_\_\_\_\_

4. New or significantly improved methods of manufacturing or producing goods or services (1=Yes; 0=No) \_\_\_\_\_
5. New or significantly improved logistics, delivery, or distribution methods for your inputs, goods, or services (1=Yes; 0=No) \_\_\_\_\_
6. New or significantly improved support activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing (1=Yes; 0=No) \_\_\_\_\_
7. If you answered yes to any of the parts in questions 1-6, pick the most important innovation. Where did you get the idea for this innovation? (0=Self; 1=Consultants; 2=Competitors; 3= Suppliers/clients; 4=Trade associations or conferences; 5= Employees; 6=Headquarters; 7=Relatives/friends; 8=Others, please specify: \_\_\_\_\_) \_\_\_\_\_
8. Are you actively planning a major change in the operations of the company in the next five years that you expect will substantially increase firm revenue? Examples: reorganizing production, creating or introducing a new product, entering a new market. (1=Yes; 0=No) \_\_\_\_\_
9. Where did you get the idea for this change? (0=Self; 1=Consultants; 2=Competitors; 3= Suppliers/clients; 4=Trade associations or conferences; 5= Employees; 6=Headquarters; 7=Relatives/friends; 8=Others, please specify: \_\_\_\_\_) \_\_\_\_\_
10. Have you learned any new management strategies from the following sources? (1=Consultants; 2=competitors; 3= suppliers/clients; 4=trade associations or conferences; 5= employees; 6=headquarters; 7=relatives/friends; 8=others, please specify: \_\_\_\_\_; 99=did not learn any new management strategies) \_\_\_\_\_

**I - CORRUPTION (ENDLINE ONLY)**

1. Please take a look at the following list of common activities that firms engage in to reduce the burden of taxes and streamline the tax paying process. How many of the activities did you engage in when paying taxes for your firm most recently? \_\_\_\_\_
  - 1) I employ a tax accountant in the firm who is responsible for filing taxes.
  - 2) I hire an external tax advisor or consulting firm to do the firm's taxes.

- 3) Randomly selected sample only: I report numbers which are below my actual revenue to reduce the tax burden.
  - 4) I carefully check the instructions myself for any tax break that my firm may be eligible for.
2. Please take a look at the following list of common activities that firms engage in to get government grants. How many of the activities did you engage in when you most recently applied for government funding?
- 1) I followed the application procedure on website.
  - 2) Randomly selected sample only: I paid informal charge to improve the chance.
  - 3) I made extra effort in improving firm performance to increase the chance.
  - 4) I contacted people whom I know in the government and asked them to help me obtain the grant.

**J - PRESENT BIAS and RISK PREFERENCE (BASELINE ONLY)**

1. Imagine that you have just won 10,000 RMB in a lottery. You can take the 10,000 RMB today. However, if you are willing to accept wait for one or two months, you will get more than 10,000 RMB. I am going to describe some situations and you tell me which you would accept.

Surveyor: start with the first option and only continue with the following if they reject the option you offer.

Option 1	Option 2	Choice	Option 1	Option 2	Choice
Take10000 today	Take 11,000 after one month		Take10000 today	Take 11,000 after two months	
Take10000 today	Take 12,000 after one month		Take10000 today	Take 12,000 after two months	
Take10000 today	Take 13,000 after one month		Take10000 today	Take 13,000 after two months	
Take10000 today	Take 14,000 after one month		Take10000 today	Take 14,000 after two months	
Take10000 today	Take 15,000 after one month		Take10000 today	Take 15,000 after two months	
Take10000 today	Take 16,000 after one month		Take10000 today	Take 16,000 after two months	
Take10000 today	Take 17,000 after one month		Take10000 today	Take 17,000 after two months	
Take10000 today	Take 18,000 after one month		Take10000 today	Take 18,000 after two months	

2. Imagine that you have just won 10,000 RMB in a lottery. You can take the 10,000 RMB after one month. However, if you are willing to accept wait for two or three months, you will get

more than 10,000 RMB. I am going to describe some situations and you tell me which you would accept.

Surveyor: start with the first option and only continue with the following if they reject the option you offer.

Option 1	Option 2	Choice	Option 1	Option 2	Choice
Take10000 after 1 month	Take 11,000 after 2 months		Take10000 after 1 month	Take 11,000 after 3 months	
Take10000 after 1 month	Take 12,000 after 2 months		Take10000 after 1 month	Take 12,000 after 3 months	
Take10000 after 1 month	Take 13,000 after 2 months		Take10000 after 1 month	Take 13,000 after 3 months	
Take10000 after 1 month	Take 14,000 after 2 months		Take10000 after 1 month	Take 14,000 after 3 months	
Take10000 after 1 month	Take 15,000 after 2 months		Take10000 after 1 month	Take 15,000 after 3 months	
Take10000 after 1 month	Take 16,000 after 2 months		Take10000 after 1 month	Take 16,000 after 3 months	
Take10000 after 1 month	Take 17,000 after 2 months		Take10000 after 1 month	Take 17,000 after 3 months	
Take10000 after 1 month	Take 18,000 after 2 months		Take10000 after 1 month	Take 18,000 after 3 months	

3. Would you take the following lottery? We flip a fair coin, and you win 800 RMB if heads, lose 500 RMB if tails (1=yes, 0=no) \_\_\_\_\_
4. Now we ask you to make some hypothetical risky decisions. Each decision is a paired choice between Option 1 and Option 2. Options themselves are lotteries in which you can gain varying amounts of money. The outcomes of these lotteries are determined by the roll of a ten-sided die.

Option 1	Option 2	Choice
RMB 1800	10% of RMB 3850, 90% of RMB 100	
RMB 1800	20% of RMB 3850, 80% of RMB 100	
RMB 1800	30% of RMB 3850, 70% of RMB 100	
RMB 1800	40% of RMB 3850, 60% of RMB 100	
RMB 1800	50% of RMB 3850, 50% of RMB 100	
RMB 1800	60% of RMB 3850, 40% of RMB 100	
RMB 1800	70% of RMB 3850, 30% of RMB 100	
RMB 1800	80% of RMB 3850, 20% of RMB 100	
RMB 1800	90% of RMB 3850, 10% of RMB 100	

## K - CONFIDENCE AND STRESS

1. Please estimate the probability of the following situation (1=For sure; 2=Very likely; 3=Likely; 4=Not very likely; 5=Impossible; 99=Don't know):
  - 1) Your profit in the last fiscal year is in the top half of the profits of firms in your industry and in this province that employ approximately the same number of workers \_\_\_\_\_
  - 2) Your profit growth between the last two fiscal years is in the top half of the profit growth rates between the last two fiscal years of firms in your industry and in this province that employ approximately the same number of workers \_\_\_\_\_
  - 3) The profits of your company are going to increase between this and the last fiscal year \_\_\_\_\_
  - 4) The profits of your company are going to increase by more than 10% between this and the last fiscal year \_\_\_\_\_
  - 5) The total output of your industry in your province in this calendar year will decrease \_\_\_\_\_
  - 6) The GDP growth in China in this calendar year will decrease \_\_\_\_\_
  
2. I would like to ask questions about your feelings and thoughts during last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt in a particular way, but rather indicate the alternative that seems like a reasonable estimate. For each question choose from the following alternatives: 0=Never; 1=Almost never; 2= Sometimes; 3=Fairly often; 4=Very often.
  - 1) In the last 30 days, how often have you been upset because of something that happened unexpectedly? \_\_\_\_\_
  - 2) In the last 30 days, how often have you felt that you were unable to control the important things in your life? \_\_\_\_\_
  - 3) In the last 30 days, how often have you felt nervous and "stressed"? \_\_\_\_\_
  - 4) In the last 30 days, how often have you felt difficulties were piling up so high that you could not overcome them? \_\_\_\_\_
  - 5) In the last 30 days, how often have you felt confident about your ability to handle your

personal problems? \_\_\_\_\_

6) In the last 30 days, how often have you felt that things were going your way? \_\_\_\_\_

7) In the last 30 days, how often have you found that you could not cope with all the things that you had to do? \_\_\_\_\_

8) In the last 30 days, how often have you been angered because of things that were outside of your control? \_\_\_\_\_

9) In the last 30 days, how often have you felt you cannot sleep well? \_\_\_\_\_

### **L - MEETINGS (TREATED FIRMS in MIDLINE and ENDLINE ONLY)**

Surveyor had the list of all group members of the subject. Surveyor was instructed to make it clear that the question refers to the past year, i.e., at the endline survey it refers to the period after the conclusion of the meetings.

1. Please describe your relationships with each of your regular group members:

	Firm ID	Is this firm a competitor (1=yes, 0=no)	How often do you meet with the manager (weeks)	Is this firm your business partner: (1=yes, 0=no)	Did the manager refer any business partner to you: (1=yes, 0=no)	Did the manager refer any employee to you: (1=yes, 0=no)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

2. **Only for sample who participated in cross-group meetings.** Please describe your relationships with each of your cross group members:

	Firm ID	How often do you meet with the manager (weeks)	Is this firm your business partner: (1=yes, 0=no)	Did the manager refer any business partner to you: (1=yes, 0=no)	Did the manager refer any employee to you: (1=yes, 0=no)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

3. **Only for sample who participated in cross-group meetings.** Surveyor was instructed to randomly pick one member from the regular group and one from the cross group of the manager, and then ask the following question. Imagine the following situation. You are given RMB 100K. Out of this, you can choose to give as much as you want for a business project which is controlled by person X. This project is very successful and triples the money you give. All the proceeds go to person X. Person X can then choose to return to you as much of the money the project earns as he wishes. For example, if you give 10, then you keep the remainder 90, the project generates 30 to person X, and he/she can choose to give you any amount (between 0 and 30) out of this. As another example, if you choose to give 90, you keep 10, person X receives 270, and he/she can choose to give you any amount (between 0 and 270) out of this. How much (between 0 and 100) do you give to person X?

1) Regular group member: \_\_\_\_\_

2) Cross group member: \_\_\_\_\_

4. How much would you like to pay for a certificate which proves your firm is in the database of micro, small, and medium enterprises of Nanchang city, which will in turn allow for improved

access to CIIT services, including government funding and admission to local entrepreneur training programs? \_\_\_\_\_ RMB

**M - EMPLOYEE SURVEY (ENDLINE, SELECTED SUBSAMPLE, ONE WORKER PER FIRM)**

1. I feel that I earn a fair amount of salary and benefits for the work I do at this company (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
2. The company regularly evaluate employee performance (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
3. The company communicates with employees on how they performed after each evaluation. (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
4. The company designs follow-up plans with underperforming employees? (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
5. Employees have good knowledge of co-workers' performance and evaluation results (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
6. Poor performed worker can be fired or moved to non-critical tasks (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
7. When I do a good job, I receive the promotion, salary increase, bonus, or other type of recognition for it that I should receive (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
8. My supervisor is competent in doing her job and treats her subordinates fairly (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
9. Middle management usually make the decisions in their domain of expertise (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_
10. Overall, I am satisfied and happy with my job (1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree) \_\_\_\_\_