China's Industrial Economy
2019 Q2 Report[1]

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[1] This report is based on a nationwide quarterly survey of industrial firms, which is implemented by Beijing Allinfo Co., based on the questionnaire and sample provided by Professor Gan Jie, Director of the Center on Finance and Economic Growth. We thank Beijing Allinfo for its hard work and professionalism. We acknowledge the able research assistance of Harry Leung and Jessy Yao who provided support to the data analysis.

Executive Summary

Business Sentiment Index continued to be in a slight expansion in Q2, making the first six consecutive quarters the first period of expansion since the survey was launched five years ago. On the other hand, real output, as reflected in production, electricity consumption, domestic and foreign orders, contracted slightly, mainly driven by private, small and consumer goods firms. In addition, investment was still sluggish and overcapacity became more severe.

Introduction

This report is based on data collected from our quarterly surveys of around 2,000 industrial firms in China. Conducted through telephone interviews, this survey, launched in 2014 Q2, is now in its fifth year. Our results are important in understanding the Chinese economy, because, if we exclude real estate and finance, the industrial sector now accounts for about 50% of China's non-agricultural GDP.

Our survey design ensures that our sample fully represents industry, region and company size. As a result, we are able to construct business indices that are, to the best of our knowledge, the most informative ones available. Furthermore, our survey questions allow us to understand the underlying mechanisms behind the data and analyze why the economy is doing well or not.

There were a total of 2,040 firms surveyed in 2019 Q2, of which 1,753 firms were also polled in our 2019 Q1 survey. The initial survey sample was based on stratified random sampling by industry, region and size from the 2008 Economic Census. Starting from 2017 Q2, we have also surveyed additional firms from the 2013 Industrial Enterprises database, which allows us to cover firms founded after 2008. Appendix A details the sampling procedure and compares our sample with the population.

I. 2019 Q2 Key Findings

I.1 Business Sentiment Continued to Improve but Investments and Real Output were in a Slight Contraction

In Q2, the Business Sentiment Index[2] stood at 51, indicating a slight expansion. This signifies the industry's first period of expansion, which has lasted for six consecutive quarters, since the survey was launched in 2014 Q2 (Figure 1)[3].

Similarly to last quarter, this quarter's expansion was mainly driven by state-owned and foreign firms, with the diffusion indices being 61 and 55 respectively. Private firms – the vast majority of industrial firms – stayed flat (diffusion index: 50). Real output, as

[2] Our BSI is the simple average of three diffusion indices, including current operating conditions, expected change in operating conditions and investment timing. Compared with other economic indices, our BSI is more forward-looking and is a reflection of the absolute level of economic activities.

[3] Specifically, the three questions underlying our Business Sentiment Index are the following: 1. How are current operating conditions – "good", "neutral" or "difficult"? 2. What is the expected change in operating conditions during the next quarter – "up", "same" or "down"? 3. To what extent is it now a good time to invest – "good", "medium" or "bad?" The diffusion index is based on answers to multiple-choice questions, with the choices in analog to "good," "neutral" and "bad", or "up," "same" and "down." The diffusion index is computed as 100 * % of firms answering "good" + 50 * % of firms answering "neutral". The diffusion index ranges between 0 and 100. A larger value indicates better operating conditions, with 50 marking the turning point between expansion and contraction.

reflected in production, electricity consumption, and domestic and foreign orders were in a slight contraction, with diffusion indices being 46 (Q1: 45-47). Contraction was most prominent in nondurable consumer goods, private, and small to medium firms.

Investments were still weak in Q2. The proportion of firms with expansionary investments dropped significantly from 5% in Q1 to a 2-year low of 2% (Figure 2).

I.2 Impact of Trade War Continued in Q2

The impact of the Sino-US trade war increased slightly in Q2. The proportion of affected firms increased by 2 points to 19% (Figure 11), whereas the proportion of firms reporting a significant impact stayed nearly flat at 3%. Moreover, 3% of firms expected to be affected significantly by the trade war within the next two years.

Affected firms were mainly export firms, which accounted for 32% of our sample. Among these export firms, 33% were affected in Q2 and 7% reported a significant impact.

The top five most affected industries included Textile, Cultural & Sports Products, Textile Wearing and Apparel, Rubber & Plastic Products and Electric Equipment (Computers and Communications). 30% to 47% of firms in these industries were affected. Among industries with a significant impact, the two most affected ones were Textile (12%) and Cultural & Sports Products (9%).

In addition, the diffusion index for foreign orders was 46 (Q1: 45), indicating a slight contraction. This contraction is mainly concentrated in small to medium, private firms and durable consumer goods producers (43-46).

I.3 Industry & Regional Distribution

As shown in Table 2.2, the top three industries based on BSI were Production & Supply of Water (64), Gas Production & Supply (64) and Power Production & Supply (62). Production & Supply of Water and Power Production & Supply have been on the list for ten and thirteen consecutive quarters, respectively. The worst performing industries were Smelting & Pressing of Ferrous Metals (44), Non-metallic Mineral Products (45), Metal Products (46), Mining and Processing of Non-ferrous Metal (47) and Mining and Processing of Nonmetal Ores (48). Smelting & Pressing of Ferrous Metals and Non-metallic Mineral Products have been persistently on this list for eight and twelve consecutive quarters, respectively.

Table 3.1 displays regional business conditions. In Q2, the BSI ranged from 47 (Ningxia) to 56 (Xinjiang). Specifically, among the top-performing list of Q2, Shanghai appeared for four consecutive quarters. The bottom five provinces were Ningxia (47), Hebei (47),

Shanxi (49), Heilongjiang (49) and Beijing (50). Ningxia and Hebei have appeared on the list twelve and thirteen times respectively in the eighteen quarters since 2015 Q1.

II. Challenges and Priorities

Weak demand is still by far the biggest challenge for the industrial economy (Figure 5). 59% of the firms surveyed in Q2 cited a lack of orders. Costs were listed as the second largest issue, with raw material and labor costs cited by 22% and 14% of firms, respectively. 13% of firms cited macroeconomic and industrial policies as limiting factors while another 13% of firms cited environmental concerns. In addition, financing was not found to be a bottleneck, with only 1% replying that financing was a limiting factor, a finding consistent with past surveys.

II.1 Overcapacity Still Prevalent

In 2019 Q2, 71% of the firms reported oversupply in the domestic market, with a diffusion index, hitting a historical high of 86 (Q1: 83). 36% of the firms reported that their excess capacity was above 10% (Q1: 30%), while 15% (Q1: 12%) reported that their excess capacity was above 20% (Figure 6A).

We categorize an industry as having severe excess capacity if more than 10% of firms in the industry report an excess capacity of more than 20%. There are 38 industries and 31 regions in total. In Q2, the number of industries and regions with severe excess capacity accounted for about half and two-thirds of the total firms respectively (18 industries and 18 regions in 2019 Q2) (Figure 6B).

It is also worth noting that overcapacity in the international market was substantially better than in the domestic market, with the diffusion index 9 points lower (Figure 6A).

Weak demand has not caused inventory problems: thanks to the “order-based” production model adopted by many Chinese firms. In Q2, for example, as many as 44% of firms said they did not have significant levels of inventory because they started production only after receiving orders. For those carrying inventories, 83% said that they expected their inventory to be digested within three months, with a further 12% saying it would take between four to six months. This leaves only 5% of the whole sample who said they expected to carry inventory for more than six months.

II.2 Curtailment of Overcapacity

Each quarter, we attempt to call back all the firms that have been surveyed in the previous quarter. In Q2, about 2.1% of firms had suspended production or were suspected to have suspended production. Those suspected of having suspended production included cases where, after between five to nine attempts to reach them, the

phone number was either wrong, suspended or did not exist, and the line could not be connected or was busy (Figure 7A).

As shown in Figure 7B, the proportion of firms reducing workers by more than 10% was 1.5% in Q2, while the proportion of firms reducing workers by more than 20% was 1%. Based on the size distribution of firms with employment reduction and the number of industrial workers in 2017 being 218 million, we estimate that a total of 700,000 jobs were cut in 2019 Q2.

Consistent with an improved industrial structure, firms with severe overcapacity are more likely to reduce employment and production. Among those with severe overcapacity (above 20%), the proportions of firms reducing production by more than 5% and 10% were 34% and 28%, respectively, both significantly more than that of the whole sample (13% and 9%). Moreover, the proportions of firms reducing employment by more than 5% and 10% were 7% and 6% respectively, also higher than that of the whole sample (1.7% and 1.5%).

Similar to 2019 Q1, about 58% of firms reported a capacity utilization rate above 90%, whereas, the proportion of firms with capacity utilization rate below 70% was 17% (Figure 8). There is no consensus as to what level of capacity utilization should be considered healthy. However, if we take the examples of the two largest western industrial nations, the US and Germany, their monthly average capacity utilizations were 79% (1994-2015) and 83% (1992-2015), respectively. Their lowest points after the financial crisis in 2008 were 67% and 70%, respectively, both measured in June 2009. Given the low profit margin of Chinese industrial firms, their sustainable utilization rate may be higher than that of their western counterparts.

Consistent with overcapacity and the resulting lack of orders, 24% of firms reported difficulties in collecting trade receivables from their customers in 2019 Q2. This problem was more prominent among private firms (26%) and firms producing capital goods and intermediate goods (33% and 26% respectively). SOEs were disproportionally more likely to delay payment, accounting for about 15% of all firms that have done so.

II.3 Rising Costs and Low Margins

Costs continued to rise in Q2, but to a lesser extent significantly, with the diffusion index of unit costs being 56. Firms with a significant increase in costs (i.e. quarterly costs rise above 3%) continued to decrease from 13% in last quarter to 8% in Q2 (Figure 3). Unit cost increases were driven by raw material costs: the diffusion index of which was 56 (Q1:59). The labor cost index decreased by 2 points to 53.

Overcapacity means a lack of pricing power, which, combined with rising costs, results in low profit margins. As shown in Figure 9, as many as 17% of the firms surveyed had

gross margins below 10%, while the proportion of firms with gross margins above 15% was 37%. Low margins may make it difficult for firms to invest in R&D and industrial upgrading.

II.4 Financing is Not a Bottleneck

Our survey has consistently found, since its inception in the second quarter of 2014, that financing is not a bottleneck for the industrial economy. In Q2, only 1% of firms cited financing as a constraining factor. 16% of firms said they had sufficient funds, 82% answered "neutral", while only 2% reported insufficient funds (Figure 10A). Of those, the vast majority (95%) reported insufficient funds for production, not for expansion.

The diffusion index of bank lending attitude increased by 4 points to 58 (Figure 10C), indicating that the overall lending attitude is accommodating. Moreover, the tightened financing for small firms observed in the previous two quarters has been relaxed significantly, with the diffusion index increasing from 46 in Q1 to 59 in Q2.

Table 6.2 provides an overview of how Chinese firms have been financed. Internally-generated funds were, by far, the most important source of financing, with 96% of surveyed firms reporting this as their primary funding source. The second most important source of funds is bank loans and the founder's own capital, reported by 70% and 30%, respectively, in Q2. Sources of financing were highly concentrated in Chinese firms: in the case of internal funds, 97% of firms reported that this largest financing source accounted for more than 50% of their total funds. These patterns have been highly consistent over time.

Taken together, against the background of overcapacity, investment opportunity has been scarce, resulting in low loan demand. Thus, financing is not a bottleneck for the industrial economy at the moment. While some easing in monetary policy may be needed to prevent a systemic meltdown, it is unwise to further stimulate the economy through leverage and money printing.

III. Conclusion

Business Sentiment Index continued to be in a slight expansion in Q2, making the first six consecutive quarters the first period of expansion since the survey was launched five years ago. On the other hand, real output, as reflected in production, electricity consumption, domestic and foreign orders, contracted slightly, mainly driven by private, small and consumer goods firms. In addition, investment was still sluggish and the proportion of firms making expansionary investments was 2%, the lowest in two years.

The biggest challenge facing the industrial economy was overcapacity, with the

diffusion index hitting a historical high. Financing was not a bottleneck for the industrial economy. Related to government policy, lending to small businesses improved significantly.

With the escalation of the trade war, there is substantial economic uncertainty going forward. Policy should focus on promoting long-term growth. Loosening of monetary policy can only be a short-term tool to prevent financial instability. The government needs to formulate systematic policies to promote technology innovation, which is the only path to long-term growth of the industrial economy.

Figure 1. Business Sentiment Index

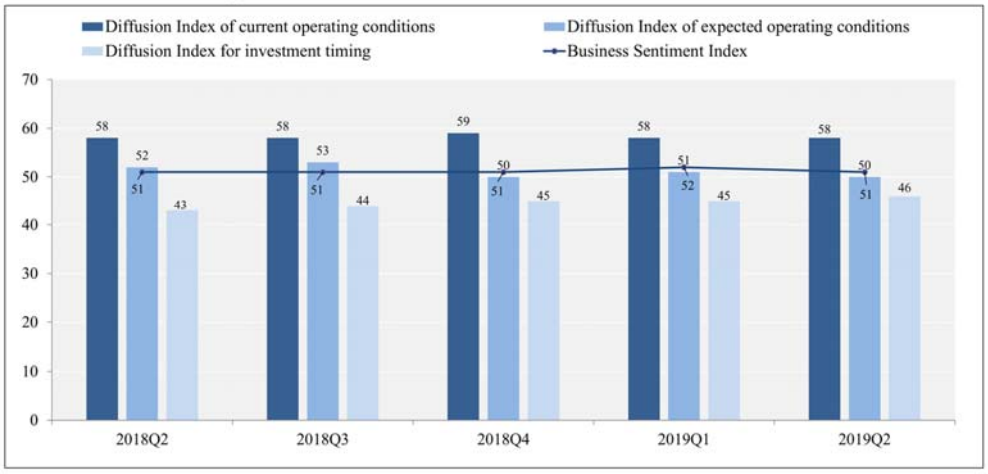

Figure 2. Investment

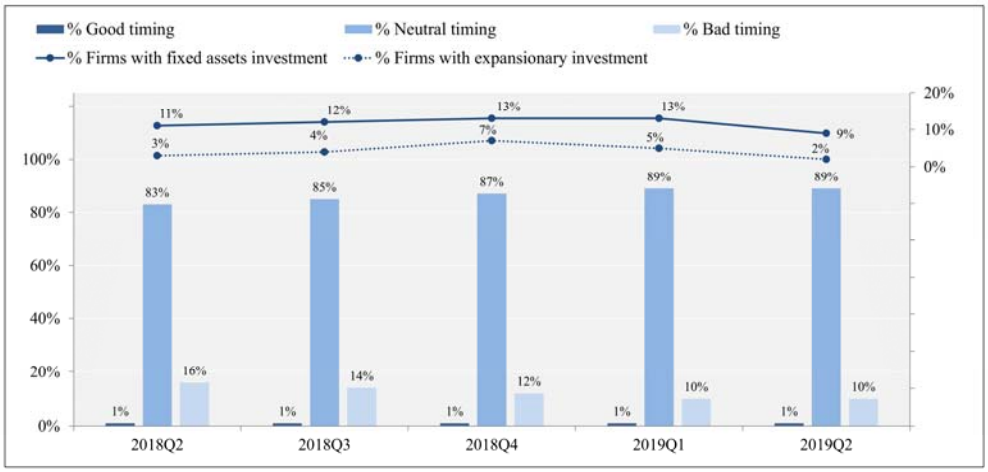

Figure 3. Costs

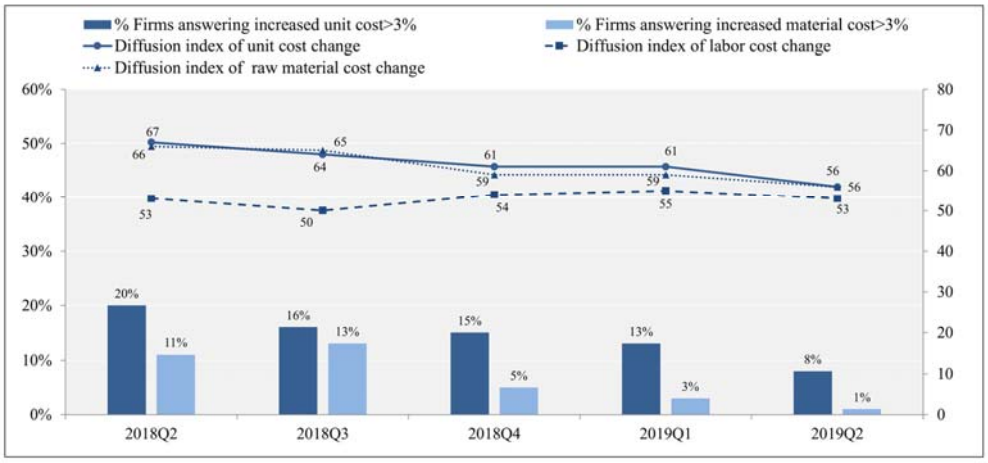

Figure 4. Other Main Economic Indices

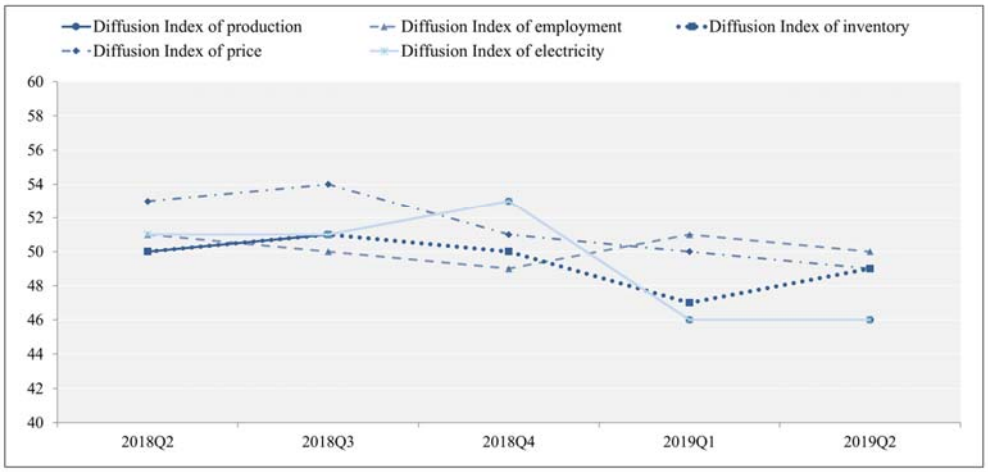

Figure 5. Factors Constraining Production of Next Quarter

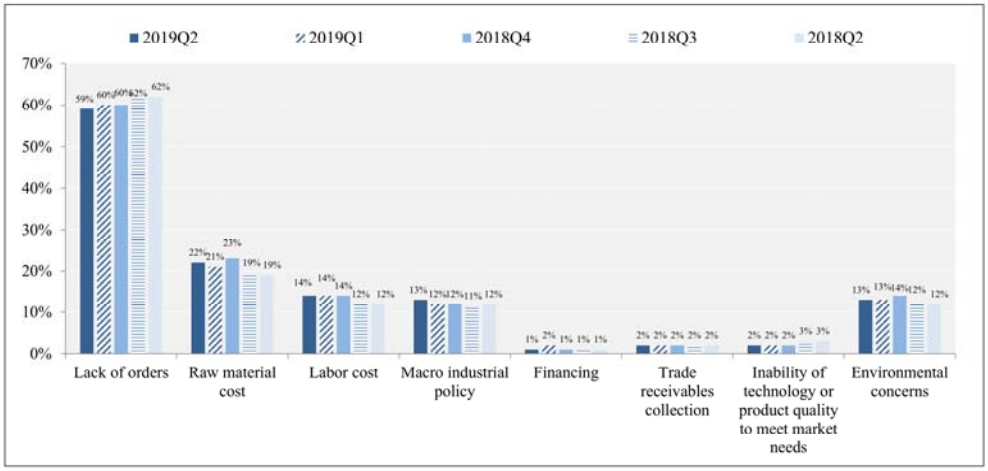

Figure 6A. Excess Capacity

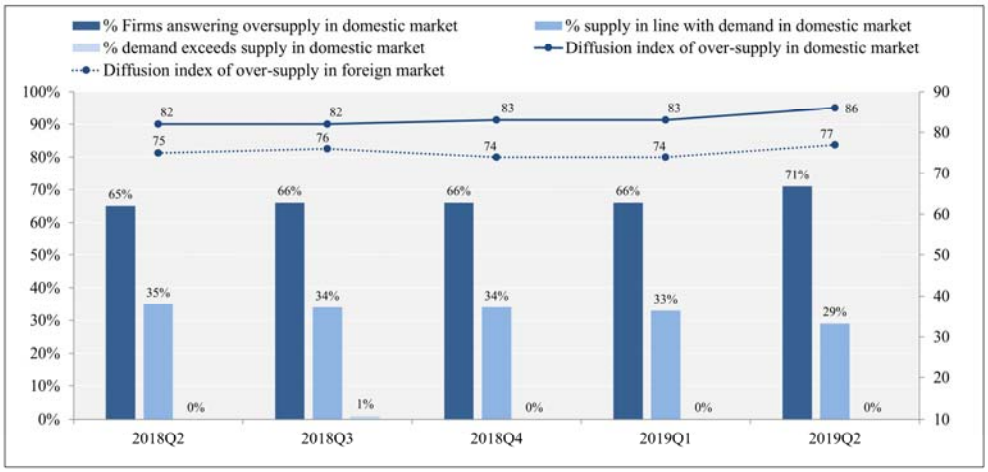

Figure 6B. Firms with Severe Excess Capacity

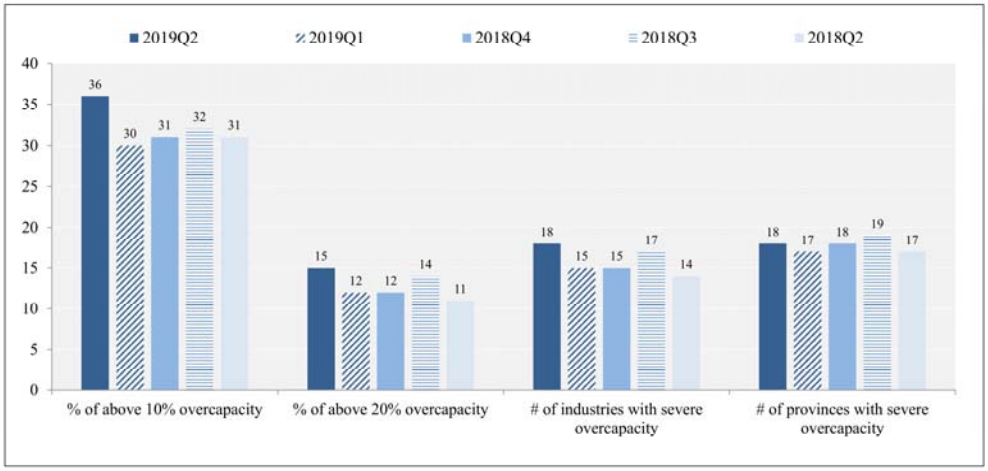

Figure 7A. Suspended Production

Figure 7B. Firms with Employment Reduction

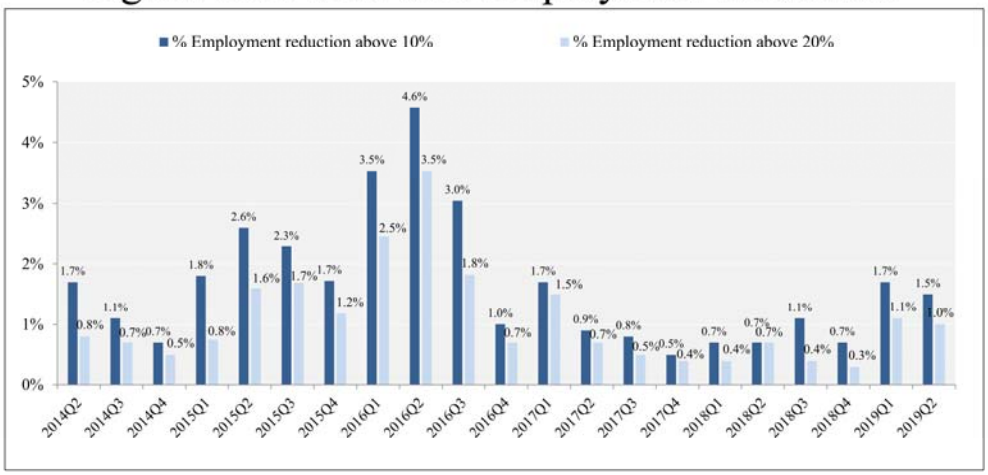

Figure 8. Capacity Utilization

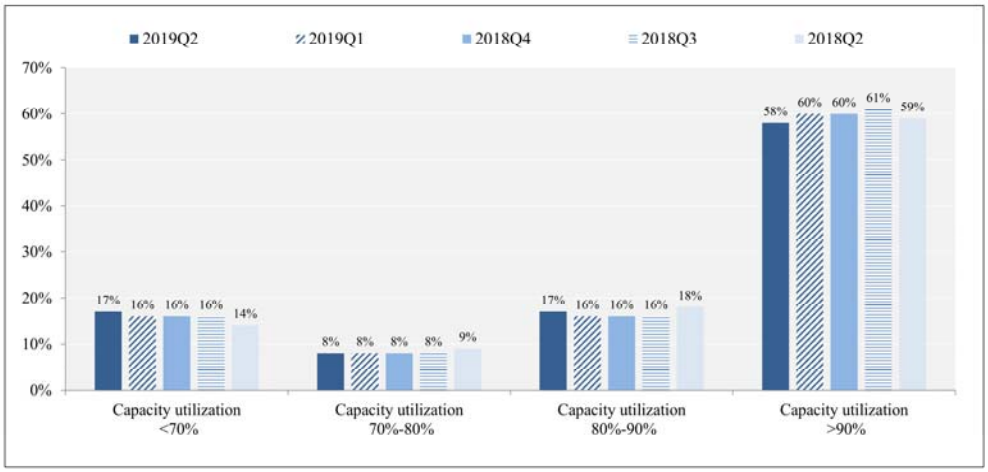

Figure 9. Gross Margins

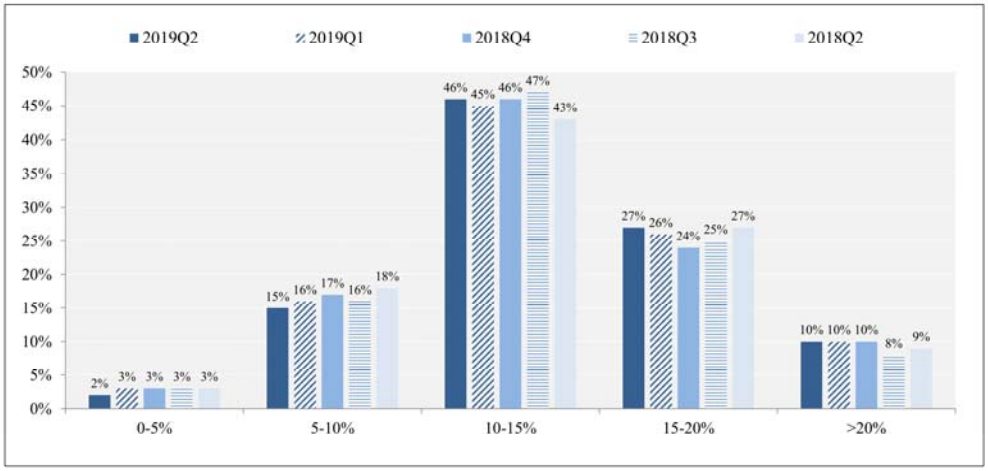

Figure 10. Financing

Figure 10A. Sufficient Capital

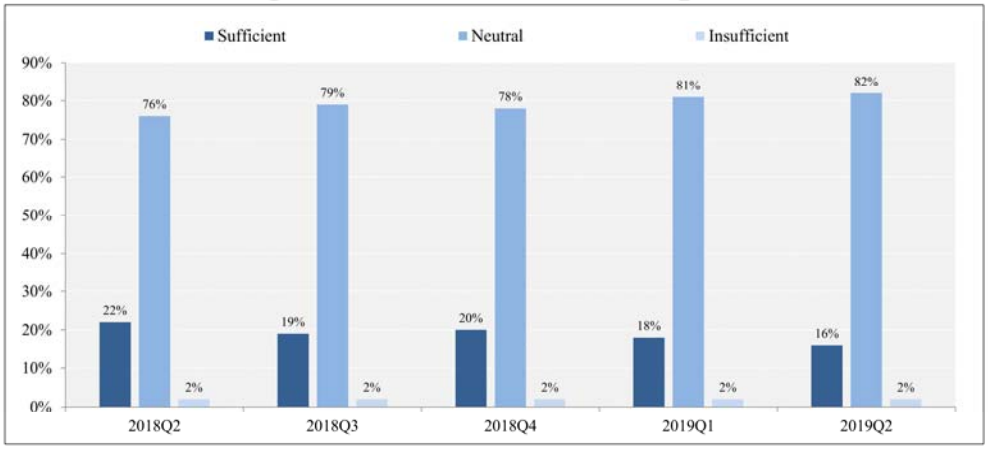

Figure 10B. New Loans

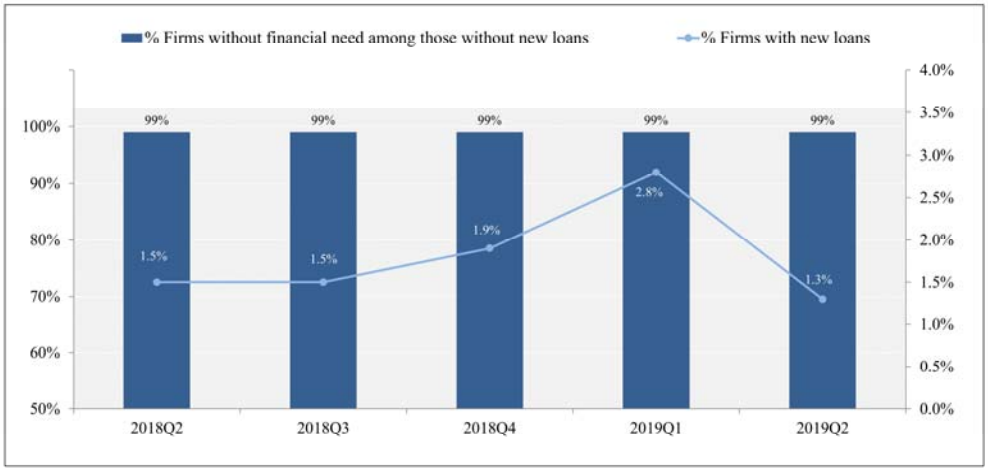

Figure 10C. Lending Attitude

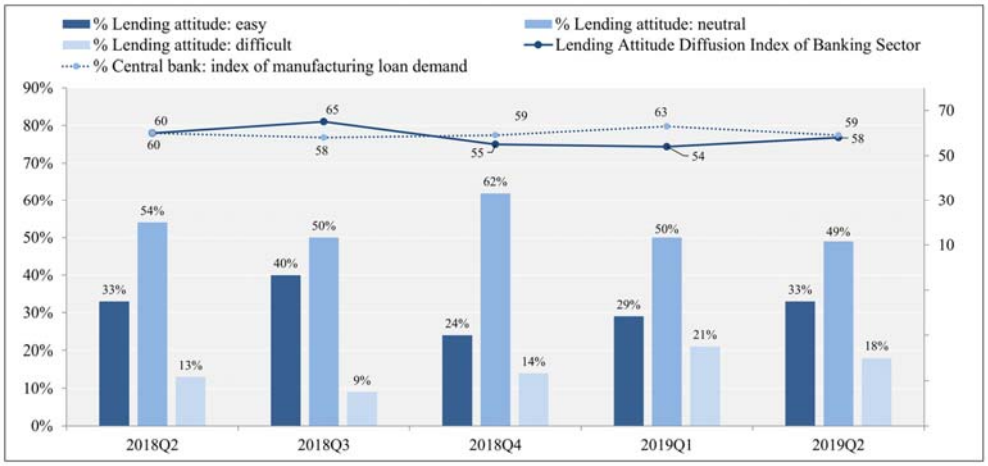

Figure 11. % of Firms Affected by Trade War

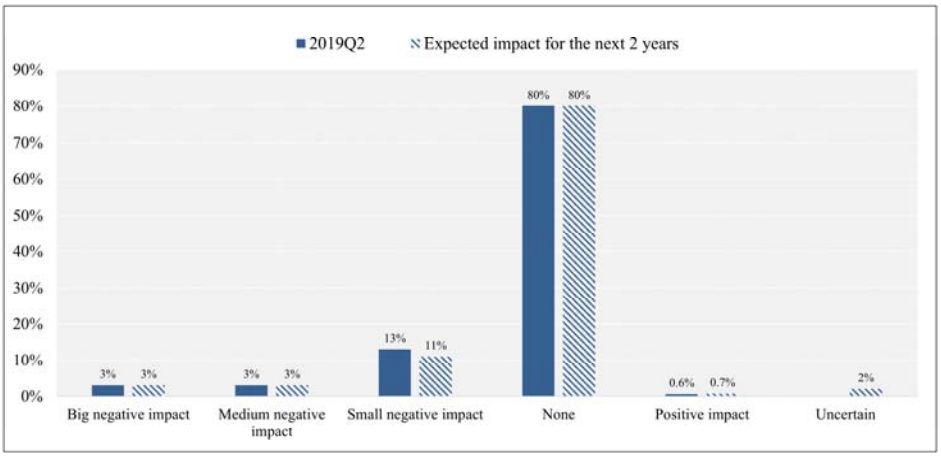

Table 1. Operating Conditions of Industrial Firms
Table 1.1

	Number of Firms		Business Sentiment Index		Diffusion Index - Operating Conditions		Diffusion Index - Expected Change in Operating Conditions		Diffusion Index - Good Timing for Investment	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	51	52	58	58	50	51	46	45
By Size										
Large	680	679	53	54	61	63	50	52	48	48
Medium	680	678	51	51	57	57	49	51	46	46
Small	680	678	49	49	55	55	49	51	43	43
By Ownership										
State-owned	108	102	61	61	80	81	55	54	48	48
Collectively-owned	15	15	49	50	60	60	50	53	37	37
Private	1,717	1,710	50	51	55	56	49	51	46	45
Foreign-owned	200	208	55	56	66	67	52	52	48	48
By Product Type										
Consumer Goods - Durable	258	281	50	51	56	58	50	51	44	43
Consumer Goods - Nondurable	610	598	53	53	62	62	51	52	46	46
Capital Goods	150	139	54	54	63	63	50	51	49	48
Intermediate Goods	1,022	1,017	50	51	55	55	49	51	45	45

Table 1.2

	% of Firms with Fixed Investment		% of Firms with Expansionary Investment		Diffusion Index - Production		Diffusion Index - Employment		Diffusion Index - Price	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	9	13	2	5	46	46	50	51	49	50
By Size										
Large	11	13	3	5	48	47	51	51	50	50
Medium	10	15	2	6	45	46	50	51	49	50
Small	7	9	1	4	45	44	49	50	49	50
By Ownership										
State-owned	8	8	0	2	50	48	50	50	50	50
Collectively-owned	7	7	0	0	50	50	47	50	50	50
Private	9	12	2	5	45	45	50	51	49	50
Foreign-owned	11	18	3	7	47	50	51	53	49	50
By Product Type										
Consumer Goods - Durable	8	13	1	4	46	42	48	51	48	49
Consumer Goods - Nondurable	12	14	2	5	44	47	49	51	50	50
Capital Goods	9	20	1	6	50	49	53	55	50	50
Intermediate Goods	9	11	2	5	46	46	50	50	49	50

Notes:

1. Diffusion Index (DI) is computed using the percentage of firms that answer "increase" (% increase) and "same" (% same) according to the formula: (% increase + 0.5 * % same). The index ranges between 0 and 100. A larger value indicates a better operating condition.

2. Business Sentiment Index is the average of DIs for Operating Conditions, Expected Operating Conditions and Good Timing for Investment.

Table 2. Operating Conditions by Industry

Table 2.1 Operating Conditions of All Industries

	Number of Firms		Business Sentiment Index		Diffusion Index - Operating Conditions		Diffusion Index - Expected Change in Operating Conditions		% of Firms with Fixed Investment		Diffusion Index - Good Timing for Investment	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	51	52	58	58	50	51	9	13	46	45
Mining												
Coal Mining and Washing	10	11	48	45	45	36	50	50	10	9	50	50
Mining and Processing of Ferrous Metal Ores	10	11	52	52	55	55	50	50	0	0	50	50
Mining and Processing of Non-ferrous Metal	10	9	47	48	55	56	50	50	10	33	35	39
Mining and Processing of Nonmetal Ores	16	18	48	49	50	44	44	53	13	6	50	50
Production and Supply of Electricity, Heat, Gas and Water												
Power Production and Supply	67	65	62	61	77	76	58	57	3	3	50	50
Gas Production and Supply	13	13	64	54	92	92	50	19	15	8	50	50
Production and Supply of Water	22	22	64	65	93	93	55	57	9	5	45	45
Light Manufacturing												
Processing of Agricultural and Related Products	104	94	50	50	52	54	50	48	13	15	49	48
Manufacturing of Foods	79	77	55	54	62	62	54	54	10	19	48	46
Manufacturing of Beverage	30	34	51	52	58	57	50	54	17	21	45	44
Textiles	100	110	50	55	53	60	49	56	15	15	47	47
Textile Wearing and Apparel	62	74	49	52	54	55	47	53	5	7	48	47
Leather Related Products and Footwear	41	32	50	52	55	56	46	55	2	22	49	45
Processing of Wood Products	30	32	52	52	58	56	48	52	0	13	48	48
Manufacturing of Furniture	31	34	52	54	68	71	45	49	0	0	42	43
Paper and Paper Products	54	54	50	52	62	61	47	54	4	6	42	42
Printing, Reproduction of Recording Media	49	46	52	54	60	61	51	57	6	13	46	46
Cultural and Sports Products	44	50	51	52	57	59	52	51	11	10	44	45
Manufacturing of Medicines	64	58	52	53	63	60	48	48	20	19	47	49
Manufacturing of Others	9	10	46	47	50	50	50	50	22	30	39	40
Recycling and Disposal of Wastes	2	5	50	50	50	50	50	50	0	0	50	50
Chemical Industry												
Processing of Petroleum and Nuclear Fuel	15	14	53	56	60	68	50	50	7	7	50	50
Manufacturing of Chemical Products	128	126	50	49	52	50	50	50	6	6	48	48
Manufacturing of Chemical Fibers	7	8	50	54	50	56	50	56	0	25	50	50
Rubber and Plastic Products	91	87	52	52	59	59	51	53	13	16	45	44
Equipment Manufacturing												
General-purpose Machinery	113	91	50	50	55	54	49	51	12	25	47	45
Special-purpose Machinery	126	122	56	56	68	67	50	52	11	21	50	50
Manufacturing of Automotive	75	73	50	51	57	60	51	51	11	18	44	44
Manufacturing of Railways, Ships and Other Transportation	39	36	57	56	63	63	56	54	8	14	53	53
Electric Machinery and Apparatus	116	143	51	52	65	66	50	51	2	4	38	39
Computers, Communication and Electric Equipment	82	80	51	51	53	53	50	51	15	18	50	50
Manufacturing of Measuring Instruments	26	33	53	54	60	61	52	53	19	21	48	47
Repair of Metal Products, Machinery and Equipment	3	4	50	46	67	50	50	50	0	0	33	38
Other Heavy Manufacturing												
Non-metallic Mineral Products	159	150	45	47	46	46	47	51	5	5	43	43
Smelting and Pressing of Ferrous Metals	66	66	44	45	43	44	43	45	11	12	46	45
Smelting and Pressing of Non-ferrous Metals	21	28	55	53	64	61	50	48	10	14	50	50
Metal Products	126	115	46	47	52	53	48	51	13	11	37	35

Table 2.2 Industry Ranking of Operating Conditions

	Number of Firms		Business Sentiment Index		Diffusion Index - Operating Conditions		% of Firms with Fixed Investment		Diffusion Index - Good Timing for Investment	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	51	52	58	58	9	13	46	45
Top Five										
Production and Supply of Water	22	22	64	65	93	93	9	5	45	45
Gas Production and Supply	13	13	64	54	92	92	15	8	50	50
Power Production and Supply	67	65	62	61	77	76	3	3	50	50
Manufacturing of Railways, Ships and Other Transportation	39	36	57	56	63	63	8	14	53	53
Special-purpose Machinery	126	122	56	56	68	67	11	21	50	50
Bottom Five										
Smelting and Pressing of Ferrous Metals	66	66	44	45	43	44	11	12	46	45
Non-metallic Mineral Products	159	150	45	47	46	46	5	5	43	43
Metal Products	126	115	46	47	52	53	13	11	37	35
Mining and Processing of Non-ferrous Metal	10	9	47	48	55	56	10	33	35	39
Mining and Processing of Nonmetal Ores	16	18	48	49	50	44	13	6	50	50

Notes:
1. Ranking includes industries with more than three firms.

Table 3. Operating Conditions by Region

Table 3.1 Operating Conditions of All Regions

	Number of Firms		Business Sentiment Index		Diffusion Index - Operating Conditions		Diffusion Index - Expected Operating Conditions		% of Firms with Fixed Investment		Diffusion Index - Good Timing for Investment	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	51	52	58	58	50	51	9	13	46	45
North China												
Beijing	34	30	50	50	54	53	47	52	6	17	47	45
Tianjin	45	42	52	52	57	56	51	54	18	19	48	45
Hebei	100	102	47	47	51	52	50	49	9	9	41	41
Northeast												
Liaoning	87	83	51	51	56	57	50	50	6	5	47	46
Jilin	26	18	54	55	63	67	50	50	12	0	48	47
Heilongjiang	26	29	49	48	52	50	52	50	8	7	42	43
Northwest												
Inner Mongolia	25	23	51	51	54	57	50	46	12	9	50	50
Shaanxi	37	38	51	52	57	57	50	54	11	13	46	46
Gansu	12	13	53	50	58	58	50	42	17	8	50	50
Qinghai	2	2	50	50	50	50	50	50	0	0	50	50
Ningxia	5	6	47	44	50	50	50	42	0	0	40	42
Xinjiang	11	11	56	58	64	64	50	59	0	9	55	50
Central North												
Shanxi	25	18	49	50	56	56	48	53	8	11	44	42
Shandong	214	222	52	53	59	60	50	52	9	12	47	47
Henan	84	85	50	52	58	60	47	52	7	13	45	45
Southwest												
Chongqing	36	32	50	52	54	55	50	55	11	16	46	45
Sichuan	83	75	52	52	58	58	51	51	8	8	48	48
Guizhou	11	13	50	47	55	46	45	46	0	8	50	50
Yunnan	24	25	51	55	58	60	52	60	0	16	44	44
East China												
Shanghai	69	65	53	53	63	62	49	52	3	8	46	45
Jiangsu	242	246	52	52	58	58	51	51	10	15	46	46
Zhejiang	213	224	51	52	59	59	50	53	13	17	43	43
South China												
Fujian	97	94	50	51	56	58	47	50	7	15	45	45
Guangdong	224	233	51	52	57	58	49	52	9	10	46	46
Guangxi	44	43	52	53	56	58	51	52	11	19	49	49
Hainan	2	2	50	50	75	75	50	50	0	0	25	25
Central South												
Anhui	90	90	51	51	59	58	49	50	12	13	46	45
Jiangxi	50	50	50	50	55	55	49	48	16	16	47	47
Hubei	61	61	52	54	63	65	49	53	11	13	43	43
Hunan	61	60	51	53	57	60	51	53	8	17	45	47

Table 3.2 Regional Ranking of Operating Conditions

	Number of Firms		Business Sentiment Index		Diffusion Index - Operating Conditions		% of Firms with Fixed Investment		Diffusion Index - Good Timing for Investment	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	51	52	58	58	9	13	46	45
Top Five										
Xinjiang	11	11	56	58	64	64	0	9	55	50
Jilin	26	18	54	55	63	67	12	0	48	47
Gansu	12	13	53	50	58	58	17	8	50	50
Shanghai	69	65	53	53	63	62	3	8	46	45
Guangxi	44	43	52	53	56	58	11	19	49	49
Bottom Five										
Ningxia	5	6	47	44	50	50	0	0	40	42
Hebei	100	102	47	47	51	52	9	9	41	41
Shanxi	25	18	49	50	56	56	8	11	44	42
Heilongjiang	26	29	49	48	52	50	8	7	42	43
Beijing	34	30	50	50	54	53	6	17	47	45

Notes:

1. Ranking includes regions with more than three firms.

Table 4. Oversupply

Table 4.1 Overall

	Number of Firms		Diffusion Index for Oversupply in Domestic Markets		Diffusion Index for Oversupply in Overseas Markets		Diffusion Index for Finished Goods	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	86	83	77	74	49	47
By Size								
Large	680	679	83	80	77	73	49	48
Medium	680	678	86	84	76	72	49	47
Small	680	678	88	86	79	76	48	47
By Ownership								
State-owned	108	102	63	58	64	59	45	47
Collectively-owned	15	15	82	79	63	50	50	50
Private	1,717	1,710	87	85	78	74	49	47
Foreign -owned	200	208	86	82	77	73	51	49
By Product Type								
Consumer Goods - Durable	258	281	85	81	74	70	47	45
Consumer Goods - Nondurable	610	598	82	80	75	74	50	47
Capital Goods	150	139	78	77	70	66	48	47
Intermediate Goods	1,022	1,017	89	86	81	76	49	48

Table 4.2 Industries with Severe Excess Capacity

Industry	Number of Firms	% of Firms with 20% excess capacity and above	% of Firms with 10% excess capacity and above
Mining and Processing of Ferrous Metal Ores	10	60	70
Processing of Petroleum and Nuclear Fuel	15	40	60
Mining and Processing of Nonmetal Ores	16	38	44
Textiles	100	37	51
Non-metallic Mineral Products	159	33	40
Smelting and Pressing of Ferrous Metals	66	24	36
Smelting and Pressing of Non-ferrous Metals	21	24	33
Processing of Wood Products	30	23	50
Mining and Processing of Non-ferrous Metal	10	20	40
Rubber and Plastic Products	91	18	51
Metal Products	126	17	39
Manufacturing of Furniture	31	16	26
General-purpose Machinery	113	16	38
Manufacturing of Chemical Fibers	7	14	43
Cultural and Sports Products	44	14	32
Processing of Agricultural and Related Products	104	13	61
Leather Related Products and Footwear	41	12	39
Manufacturing of Others	9	11	56

Notes:

1. This table reports industries that have at least 10% of firms with 20% or above excess capacity.

2. This table includes industries with more than three firms.

Table 4.3 Regions with Severe Excess Capacity

Province	Number of Firms	% of Firms with 20% excess capacity and above	% of Firms with 10% excess capacity and above
Xinjiang	11	55	73
Ningxia	5	40	80
Gansu	12	33	42
Jilin	26	27	38
Hebei	100	22	47
Sichuan	83	22	48
Henan	84	20	42
Inner Mongolia	25	20	36
Shanxi	25	20	36
Shaanxi	37	19	49
Hubei	61	18	30
Fujian	97	18	39
Liaoning	87	17	39
Shandong	214	17	35
Jiangsu	242	15	33
Jiangxi	50	14	36
Guangxi	44	11	18
Chongqing	36	11	31

Notes:

1. This table reports regions that have at least 10% of firms with 20% or above excess capacity.
2. This table includes regions with more than three firms.

Table 5. Cost and Price

Table 5.1 Overall

	Number of Firms		Diffusion Indices							
			Unit Cost Index		Labor Cost Index		Raw Material Cost Index		Price Index	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	56	61	53	55	56	59	49	50
By Size										
Large	680	679	56	60	53	56	56	58	50	50
Medium	680	678	55	60	52	54	55	58	49	50
Small	680	678	57	62	53	54	58	61	49	50
By Ownership										
State-owned	108	102	51	52	50	51	52	53	50	50
Collectively-owned	15	15	57	60	53	53	57	61	50	50
Private	1717	1710	56	61	52	55	57	59	49	50
Foreign -owned	200	208	56	61	56	58	56	59	49	50
By Product Type										
Consumer Goods - Durable	258	281	58	65	53	57	58	64	48	49
Consumer Goods - Nondurable	610	598	55	56	52	54	56	56	50	50
Capital Goods	150	139	58	60	57	64	58	59	50	50
Intermediate Goods	1022	1017	56	62	52	53	56	59	49	50

Table 5.2 Industries with Unit Cost Increase More Significant than National Average

		Diffusion Indices			
	Number of Firms	Unit Cost Index	Labor Cost Index	Raw Material Cost Index	Price Index
Nation	2,040	56	53	56	49
Electric Machinery and Apparatus	116	69	53	69	41
Manufacturing of Beverage	30	65	57	65	52
Non-metallic Mineral Products	159	64	50	64	52
Manufacturing of Chemical Fibers	7	64	50	64	50
Manufacturing of Measuring Instruments	26	63	50	64	52
Processing of Agricultural and Related Products	104	61	53	61	52
Manufacturing of Others	9	61	61	61	56
Mining and Processing of Ferrous Metal Ores	10	60	55	60	50
Mining and Processing of Non-ferrous Metal	10	60	55	60	50
Leather Related Products and Footwear	41	59	49	59	49
Manufacturing of Automotive	75	58	51	58	50
Manufacturing of Foods	79	58	50	58	51
Textile Wearing and Apparel	62	58	56	59	44
Smelting and Pressing of Ferrous Metals	66	57	50	57	53
Special-purpose Machinery	126	57	60	57	50
Computers, Communication and Electric Equipment	82	56	53	56	49
Manufacturing of Chemical Products	128	56	50	56	50

Notes:

1. Industries are sorted by Diffusion Index for Unit Cost in descending order.
2. The table includes industries with more than three firms.

Table 5.3 Regions with Unit Cost Increase More Significant than National Average

		Diffusion Indices			
	Number of Firms	Unit Cost Index	Labor Cost Index	Raw Material Cost Index	Price Index
Nation	2,040	56	53	56	49
Gansu	12	71	54	73	63
Shanxi	25	60	50	60	50
Hubei	61	60	55	60	51
Guangdong	224	59	53	60	49
Henan	84	59	53	59	52
Fujian	97	58	54	59	49
Guangxi	44	58	53	59	50
Chongqing	36	56	54	56	50
Tianjin	45	56	52	56	51
Jilin	26	56	54	56	46
Jiangsu	242	56	54	56	49
Hunan	61	56	50	56	47
Liaoning	87	56	51	57	48

Notes:

1. Provinces are sorted by Diffusion Index for Unit Cost in descending order.
2. The table includes provinces with more than three firms.

Table 6. Financing Environment
Table 6.1 Overall

	Number of Firms		% Firms with Loans		% Firms with New Loans		Diffusion Index - Lending Attitude		Diffusion Index - Interest Rate	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	28	29	1	3	58	54	52	51
With or Without Investment										
Firms with Investment	193	255	35	36	3	6	75	61	50	53
Firms without Investment	1,847	1,780	27	27	1	2	54	52	53	51
By Size										
Large	680	679	30	30	0	2	55	63	50	50
Medium	680	678	26	28	1	4	59	55	53	53
Small	680	678	28	27	2	3	59	46	53	50
By Ownership										
State-owned	108	102	19	20	0	1	NA	50	NA	50
Collectively-owned	15	15	33	20	0	0	67	100	50	50
Private	1,717	1,710	29	29	2	3	57	53	53	51
Foreign -owned	200	208	23	26	0	3	83	56	50	50
By Product Type										
Consumer Goods - Durable	258	281	32	32	2	4	65	50	50	50
Consumer Goods - Nondurable	610	598	27	28	1	1	61	56	58	53
Capital Goods	150	139	36	42	2	5	50	42	50	50
Intermediate Goods	1,022	1,017	26	26	1	3	56	57	50	51

Notes:
1. A higher Diffusion Index for lending attitude reflects easier lending.
2. A higher Diffusion Index for interest rate reflects higher interest rate.

Table 6.2 Sources of Financing

The most important source of financing

Sources	Number of Firms	% of Firms
Internal Funds	1957	96
Founder	86	4
Relatives and friends	0	0
Bank	9	0
Stock market	1	0
Non-official finance institution	0	0
Others	0	0

The second most important source of financing

Sources	Number of Firms	% of Firms
Bank	559	70
Founder	243	30
Internal Funds	1	0
Stock market	1	0
Non-official finance institution	0	0
Others	0	0
Relatives and friends	0	0

Appendix 1. Industry and Regional Ranking of Excess Capacity

Table A1.1 Industry Ranking of Excess Capacity

Industry	Number of Firms		% of Firms with 20% excess capacity and above		% of Firms with 10% excess capacity and above	
	Q2	Q1	Q2	Q1	Q2	Q1
Mining and Processing of Ferrous Metal Ores	10	11	60	55	70	64
Processing of Petroleum and Nuclear Fuel	15	14	40	36	60	36
Mining and Processing of Nonmetal Ores	16	18	38	44	44	56
Textiles	100	110	37	4	51	19
Non-metallic Mineral Products	159	150	33	34	40	39
Smelting and Pressing of Ferrous Metals	66	66	24	32	36	47
Smelting and Pressing of Non-ferrous Metals	21	28	24	21	33	29
Processing of Wood Products	30	32	23	25	50	47
Mining and Processing of Non-ferrous Metal	10	9	20	22	40	44
Rubber and Plastic Products	91	87	18	7	51	36
Metal Products	126	115	17	17	39	39
Manufacturing of Furniture	31	34	16	15	26	24
General-purpose Machinery	113	91	16	8	38	30
Manufacturing of Chemical Fibers	7	8	14	0	43	38
Cultural and Sports Products	44	50	14	6	32	12
Processing of Agricultural and Related Products	104	94	13	7	61	48
Leather Related Products and Footwear	41	32	12	3	39	28
Manufacturing of Others	9	10	11	10	56	50
Manufacturing of Medicines	64	58	9	12	23	26
Manufacturing of Automotive	75	73	9	11	51	38
Manufacturing of Foods	79	77	9	6	27	19
Electric Machinery and Apparatus	116	143	9	11	21	24
Printing, Reproduction of Recording Media	49	46	8	13	31	33
Manufacturing of Chemical Products	128	126	8	4	48	47
Manufacturing of Beverage	30	34	7	0	27	12
Paper and Paper Products	54	54	6	4	28	26
Textile Wearing and Apparel	62	74	5	7	10	12
Special-purpose Machinery	126	122	5	4	13	13
Manufacturing of Measuring Instruments	26	33	4	0	8	3
Power Production and Supply	67	65	3	3	3	3
Manufacturing of Railways, Ships and Other Transportation	39	36	3	3	23	22
Computers, Communication and Electric Equipment	82	80	1	4	23	21
Coal Mining and Washing	10	11	0	9	10	9
Production and Supply of Water	22	22	0	0	5	5
Gas Production and Supply	13	13	0	0	0	0

Table A1.2 Regional Ranking of Excess Capacity

Province	Number of Firms		% of Firms with 20% excess capacity and above		% of Firms with 10% excess capacity and above	
	Q2	Q1	Q2	Q1	Q2	Q1
Xinjiang	11	11	55	36	73	45
Ningxia	5	6	40	33	80	50
Gansu	12	13	33	8	42	31
Jilin	26	18	27	17	38	33
Hebei	100	102	22	21	47	44
Sichuan	83	75	22	19	48	39
Henan	84	85	20	20	42	39
Inner Mongolia	25	23	20	17	36	30
Shanxi	25	18	20	17	36	33
Shaanxi	37	38	19	13	49	34
Hubei	61	61	18	10	30	20
Fujian	97	94	18	15	39	29
Liaoning	87	83	17	16	39	36
Shandong	214	222	17	15	35	31
Jiangsu	242	246	15	7	33	25
Jiangxi	50	50	14	12	36	28
Guangxi	44	43	11	9	18	16
Chongqing	36	32	11	9	31	28
Hunan	61	60	10	5	26	25
Guangdong	224	233	9	6	31	25
Beijing	34	30	9	7	24	20
Yunnan	24	25	8	12	25	20
Zhejiang	213	224	8	5	27	19
Anhui	90	90	8	8	28	24
Shanghai	69	65	7	3	25	29
Tianjin	45	42	7	12	22	33
Heilongjiang	26	29	4	10	35	41
Guizhou	11	13	0	23	27	46

Appendix 2. Industry and Regional Diffusion Index for Cost and Price

Table A2.1 Industry Diffusion Index for Cost and Price

	Diffusion Indices									
	Number of Firms		Unit Cost Index		Labor Cost Index		Raw Material Cost Index		Price Index	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2040	2035	56	61	53	55	56	59	49	50
Mining										
Coal Mining and Washing	10	11	45	45	55	55	45	45	45	41
Mining and Processing of Ferrous Metal Ores	10	11	60	55	55	55	60	55	50	50
Mining and Processing of Non-ferrous Metal	10	9	60	61	55	67	60	61	50	50
Mining and Processing of Nonmetal Ores	16	18	53	58	53	50	53	53	53	53
Production and Supply of Electricity, Heat, Gas and Water										
Power Production and Supply	67	65	50	50	50	50	50	50	50	50
Gas Production and Supply	13	13	50	54	50	54	50	50	50	50
Production and Supply of Water	22	22	50	52	50	52	NA	NA	50	50
Light Manufacturing										
Processing of Agricultural and Related Products	104	94	61	61	53	56	61	59	52	49
Manufacturing of Foods	79	77	58	56	50	58	58	57	51	51
Manufacturing of Beverage	30	34	65	56	57	54	65	54	52	49
Textiles	100	110	48	57	51	49	48	58	45	51
Textile Wearing and Apparel	62	74	58	68	56	55	59	63	44	49
Leather Related Products and Footwear	41	32	59	64	49	48	59	65	49	50
Processing of Wood Products	30	32	55	72	55	56	55	66	43	47
Manufacturing of Furniture	31	34	50	56	48	50	50	56	48	53
Paper and Paper Products	54	54	48	56	55	61	48	56	46	47

Table A2.1 Industry Diffusion Index for Cost and Price（Continued）

	Diffusion Indices									
	Number of Firms		Unit Cost Index		Labor Cost Index		Raw Material Cost Index		Price Index	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Printing, Reproduction of Recording Media	49	46	51	57	51	45	51	56	50	49
Cultural and Sports Products	44	50	53	69	55	60	53	65	52	48
Manufacturing of Medicines	64	58	55	54	53	53	55	54	51	50
Manufacturing of Others	9	10	61	60	61	50	61	60	56	55
Recycling and Disposal of Wastes	2	5	75	50	50	40	75	50	25	50
Chemical Industry										
Processing of Petroleum and Nuclear Fuel	15	14	53	54	47	46	53	54	53	50
Manufacturing of Chemical Products	128	126	56	59	50	52	56	58	50	52
Manufacturing of Chemical Fibers	7	8	64	63	50	50	64	63	50	50
Rubber and Plastic Products	91	87	52	51	54	52	52	51	48	48
Equipment Manufacturing										
General-purpose Machinery	113	91	54	69	52	54	54	64	50	51
Special-purpose Machinery	126	122	57	59	60	71	57	59	50	50
Manufacturing of Automotive	75	73	58	55	51	53	58	55	50	51
Manufacturing of Railways, Ships and Other Transportation	39	36	51	51	53	58	51	51	50	49
Electric Machinery and Apparatus	116	143	69	68	53	56	69	64	41	43
Computers, Communication and Electric Equipment	82	80	56	71	53	56	56	64	49	45
Manufacturing of Measuring Instruments	26	33	63	80	50	59	64	73	52	50
Repair of Metal Products, Machinery and Equipment	3	4	50	63	67	63	50	63	50	50
Other Heavy Manufacturing										
Non-metallic Mineral Products	159	150	64	67	50	50	64	65	52	53
Smelting and Pressing of Ferrous Metals	66	66	57	58	50	50	57	59	53	55
Smelting and Pressing of Non-ferrous Metals	21	28	52	55	52	50	52	55	48	50
Metal Products	126	115	51	60	56	58	51	55	50	50

Notes: The table includes industries with more than three firms.

Table A2.2 Regional Diffusion Index for Cost and Price

	Diffusion Indices									
	Number of Firms		Unit Cost Index		Labor Cost Index		Raw Material Cost Index		Price Index	
	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1
Nation	2,040	2,035	56	61	53	55	56	59	49	50
North China										
Beijing	34	30	53	60	54	58	53	60	50	48
Tianjin	45	42	56	55	52	56	56	54	51	48
Hebei	100	102	54	58	51	51	54	56	50	49
Northeast										
Liaoning	87	83	56	60	51	53	57	59	48	49
Jilin	26	18	56	50	54	50	56	47	46	42
Heilongjiang	26	29	54	62	50	55	54	63	50	48
Northwest										
Inner Mongolia	25	23	50	52	50	52	50	53	46	43
Shaanxi	37	38	54	61	51	51	54	60	47	49
Gansu	12	13	71	73	54	50	73	75	63	58
Ningxia	5	6	50	42	50	50	50	42	50	50
Xinjiang	11	11	55	55	55	55	55	55	50	50
Central North										
Shanxi	25	18	60	56	50	61	60	56	50	47
Shandong	214	222	55	60	52	53	55	59	48	52
Henan	84	85	59	66	53	53	59	64	52	51
Southwest										
Chongqing	36	32	56	59	54	59	56	58	50	50
Sichuan	83	75	55	57	52	54	56	55	51	51
Guizhou	11	13	55	58	55	54	56	55	50	50
Yunnan	24	25	54	58	52	54	55	60	52	48
East China										
Shanghai	69	65	53	58	53	55	53	56	48	50
Jiangsu	242	246	56	64	54	58	56	62	49	48
Zhejiang	213	224	55	59	52	53	56	58	49	49
South China										
Fujian	97	94	58	63	54	60	59	60	49	49
Guangdong	224	233	59	63	53	55	60	61	49	50
Guangxi	44	43	58	59	53	56	59	57	50	52
Central South										
Anhui	90	90	54	61	53	56	55	58	49	51
Jiangxi	50	50	55	60	52	56	56	57	49	49
Hubei	61	61	60	63	55	56	60	62	51	50
Hunan	61	60	56	63	50	52	56	63	47	50

Appendix 3. Survey Sampling

3.1 The Population

Staring from 2017Q2, we have included firms in the 2013 Industrial Enterprises database in our sampling. This is the most complete and reliable economic census data available.

Although the 2013 Industrial Enterprises database is our best option, it was still compiled six years ago. A firm's core characteristics, such as industry, might have changed significantly in that time. Thus, we also surveyed firms about their main products and product types.

3.2 Sampling Procedure

Previously, our sampling was based on the population of sizable industrial firms (with sales above 5 million RMB) in the 2008 Economic Census. In order to ensure the comparability of this quarter's survey with those in the previous quarters, we used a sampling procedure as described below:

1. We started from the 2035 firms in our last response sample, which was the result of a random sampling stratified by industry, region and size (see our previous reports for details). Of those, we obtained responses from 1753 firms. Steps 2-3 below describe how we obtain a supplement sample of 1235 firms from the 2013 Industrial Enterprise database, which, assuming a 20% response rate, would yield an additional 247 firms so that the total size of the survey sample is 2,000 firms.

2. We stratified by three size categories, 41 industries and 31 provinces to obtain 3,813 strata in both the 2008 Economic Census and 2013 Industrial Enterprises database populations. Then we compute, in each stratum, the percentage of new firms founded after 2008.

3. Assuming random responses across the above 3,813 strata, we compute the number of firms across strata and the proportion of new firms (founded after 2008) in each stratum, so that the final response sample could match (or approach) the population in terms of industry, region and size, as well as the proportion of new firms. Out of the 1235 firms in our supplementary sample, we obtained 287 responses, resulting in a total of 2040 firms in our final survey sample.

However, we note that to ensure a smooth transition across quarters, this quarter's sample does not match well with the 2013 Industrial Enterprise database population in two dimensions. First, the weight of new firms founded after 2008 is lower. Second, given that the National Bureau of Statistics changed its definition of sizable firms between 2008 and 2013, from sales totaling 5 million RMB up to 20 million RMB, the average firm size is between the two databases. We will resolve these discrepancies gradually in the coming surveys. Moreover, in our data analysis, we have cross-checked that the results relative to those of the last quarter have not been driven by the new sample.

3.3 Survey Process

The survey is conducted through phone interviews. Figure A1 reports the distribution of the number of phone calls, duration of the calls and the interviewees' positions in their companies.

3.4. Sample Representativeness

Tables A3.1-A3.3 show the distribution of the population and the Q2 response sample, as well as the 1753 firms that were also in the Q1 sample, in terms of industry, region and size. Note that as we are sampling 2.1% of the population, some small strata may not be sampled. Specifically, Tibet is a region that has not been sampled, while Mining of other Ores, Extraction of Petroleum & Natural Gas and Manufacture of Tobacco are three industries not sampled. Overall, however, we feel our response sample represents the population quite well.

3.5 Seasonality

Theoretically, there are no obvious ways to adjust for seasonality, especially given the relatively small number of surveys we have conducted. We deal with this issue by directly asking the firms about seasonality and its impact. As shown in Figure A1.4, the majority of firms (81%) reported no seasonality, while for 8% of the firms, the seasonality impact was below 5%. Most importantly, the impact of seasonality has been distributed symmetrically around zero in the past. Thus, in aggregate, seasonality is not likely to bias our results and we do not adjust for seasonality.

Figure A1. Phone Interviews – number of calls, duration and interviewees

Figure A1.1 Number of Calls

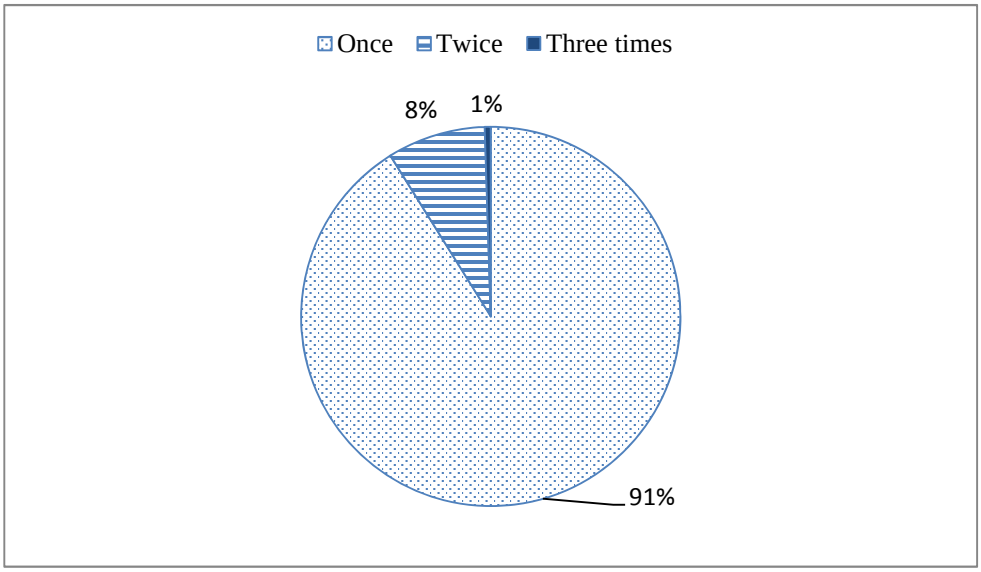

Figure A1.2 Duration of Calls

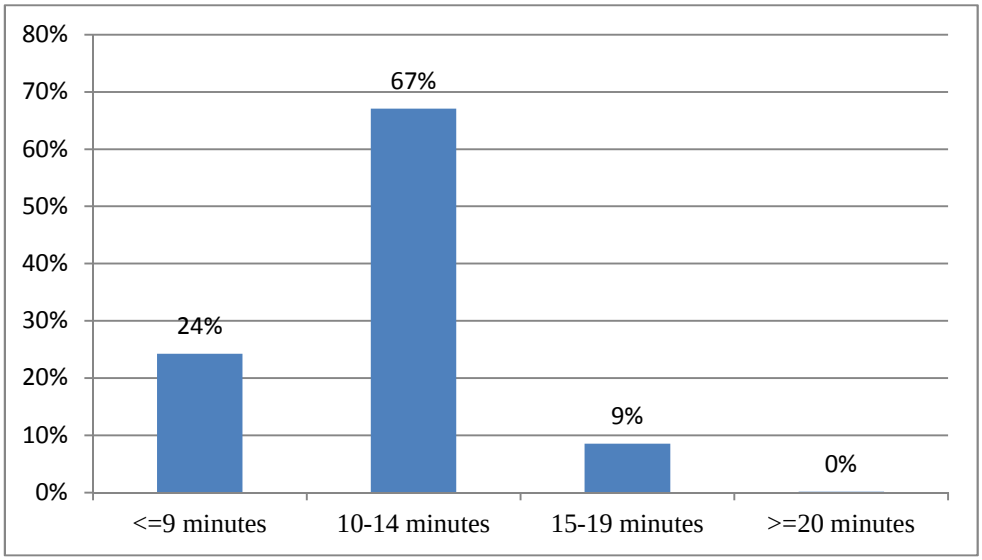

Figure A1.3 Interviewees' Positions

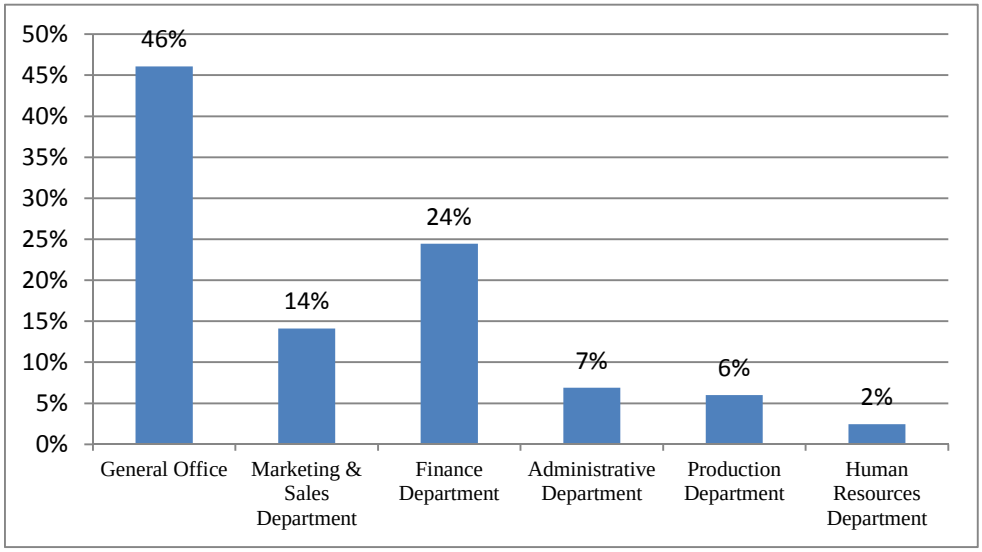

Figure A1.4 Seasonality

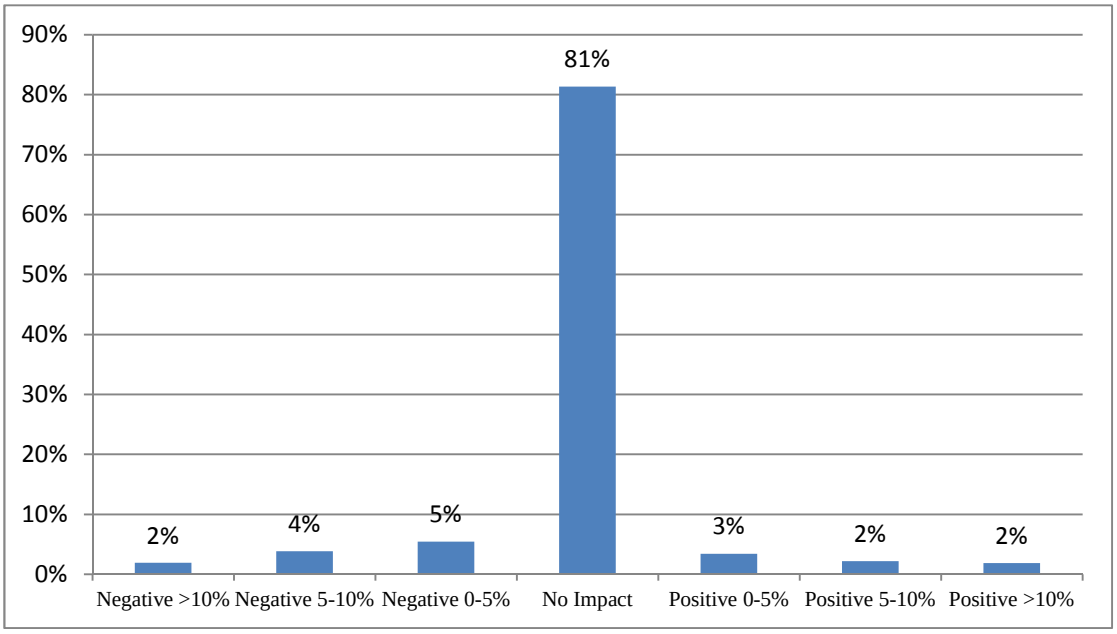

Table A3. Comparisons between Survey Sample and the Population

Table A3.1 Industry Distribution

Industry	Population		1753 Firms From Q1 Survey		Final Q2 Response Sample	
	Number of Firms	Percent	Number of Firms	Percent	Number of Firms	Percent
Power Production and Supply	5,701	1.7	65	3.7	67	3.3
Electric Machinery and Apparatus	21,012	6.2	106	6.1	116	5.7
Textile Wearing and Apparel	14,147	4.2	53	3.0	62	3.0
Textiles	19,591	5.8	92	5.3	100	4.9
Mining and Processing of Nonmetal Ores	3,363	1.0	15	0.9	16	0.8
Non-metallic Mineral Products	29,429	8.7	141	8.0	159	7.8
Recycling and Disposal of Wastes	1,256	0.4	2	0.1	2	0.1
Mining and Processing of Ferrous Metal Ores	3,100	0.9	10	0.6	10	0.5
Smelting and Pressing of Ferrous Metals	10,190	3.0	59	3.4	66	3.2
Manufacturing of Chemical Fibers	1,859	0.6	6	0.3	7	0.3
Manufacturing of Chemical Products	23,402	6.9	107	6.1	128	6.3
Computers, Communication and Electric Equipment	12,540	3.7	60	3.4	82	4.0
Manufacturing of Furniture	4,656	1.4	29	1.7	31	1.5
Repair of Metal Products, Machinery and Equipment	381	0.1	3	0.2	3	0.2
Metal Products	18,498	5.5	113	6.5	126	6.2
Manufacturing of Beverage	5,496	1.6	28	1.6	30	1.5
Other Ancillary Activities of Mining	153	0.1	0	0.0	0	0.0
Coal Mining and Washing	6,680	2.0	9	0.5	10	0.5
Processing of Wood Products	8,154	2.4	25	1.4	30	1.5
Processing of Agricultural and Related Products	22,485	6.7	78	4.5	104	5.1
Leather Related Products and Footwear	7,714	2.3	24	1.4	41	2.0
Mining of other Ores	17	0.0	0	0.0	0	0.0
Manufacturing of Others	1,527	0.5	8	0.5	9	0.4
Manufacturing of Automotive	11,733	3.5	58	3.3	75	3.7
Gas Production and Supply	1,095	0.3	13	0.7	13	0.6
Extraction of Petroleum and Natural Gas	135	0.0	0	0.0	0	0.0
Processing of Petroleum and Nuclear Fuel	1,941	0.6	11	0.6	15	0.7
Manufacturing of Foods	7,388	2.2	65	3.7	79	3.9
Production and Supply of Water	1,310	0.4	22	1.3	22	1.1
Manufacturing of Railways, Ships and Other Transportation	4,277	1.3	34	1.9	39	1.9
General-purpose Machinery	22,163	6.6	82	4.7	113	5.5
Cultural and Sports Products	7,513	2.2	41	2.3	44	2.2
Rubber and Plastic Products	16,327	4.8	79	4.5	91	4.5
Manufacture of Tobacco	122	0.0	0	0.0	0	0.0
Manufacturing of Medicines	6,483	1.9	47	2.7	64	3.1
Manufacturing of Measuring Instruments	3,805	1.1	24	1.4	26	1.3
Printing, Reproduction of Recording Media	4,734	1.4	44	2.5	49	2.4
Mining and Processing of Non-ferrous Metal	1,552	0.5	9	0.5	10	0.5
Smelting and Pressing of Non-ferrous Metals	3,728	1.1	21	1.2	21	1.0
Paper and Paper Products	6,580	2.0	51	2.9	54	2.7
Special-purpose Machinery	15,443	4.6	119	6.8	126	6.2
Total	337,680	100	1,753	100	2,040	100

Table A3.2 Regional Distribution

Province	Population		1753 Firms From Q1 Survey		Final Q2 Response Sample	
	Number of Firms	Percent	Number of Firms	Percent	Number of Firms	Percent
Anhui	14,533	4.3	78	4.5	90	4.4
Beijing	3,506	1.0	29	1.7	34	1.7
Fujian	15,206	4.5	80	4.6	97	4.8
Gansu	1,723	0.5	12	0.7	12	0.6
Guangdong	37,831	11.2	191	10.9	224	11.0
Guangxi	4,919	1.5	39	2.2	44	2.2
Guizhou	2,901	0.9	10	0.6	11	0.5
Hainan	358	0.1	2	0.1	2	0.1
Hebei	12,818	3.8	94	5.4	100	4.9
Henan	18,410	5.5	71	4.1	84	4.1
Heilongjiang	3,882	1.2	25	1.4	26	1.3
Hubei	13,520	4.0	51	2.9	61	3.0
Hunan	12,170	3.6	53	3.0	61	3.0
Jilin	5,136	1.5	17	1.0	26	1.3
Jiangsu	45,138	13.4	207	11.8	242	11.9
Jiangxi	7,424	2.2	45	2.6	50	2.5
Liaoning	15,591	4.6	75	4.3	87	4.3
Inner Mongolia	3,975	1.2	21	1.2	25	1.2
Ningxia	940	0.3	5	0.3	5	0.3
Qinghai	448	0.1	2	0.1	2	0.1
Shandong	37,272	11.0	186	10.6	214	10.5
Shanxi	3,433	1.0	18	1.0	25	1.2
Shaanxi	4,103	1.2	32	1.8	37	1.8
Shanghai	9,101	2.7	53	3.0	69	3.4
Sichuan	11,753	3.5	67	3.8	83	4.1
Tianjin	4,972	1.5	36	2.1	45	2.2
Tibet	54	0.0	0	0.0	0	0.0
Xinjiang	2,031	0.6	9	0.5	11	0.5
Yunnan	3,147	0.9	21	1.2	24	1.2
Zhejiang	36,363	10.8	194	11.1	213	10.4
Chongqing	5,022	1.5	30	1.7	36	1.8
Total	337,680	100	1,753	100	2,040	100

Table A3.3 Comparison of Company Characteristics

	Population 2008		Population 2013		1753 Firms From Q1 Survey		Final Q2 Response Sample	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Assets	90,050	12,920	243,118	45,165	246,684	57,404	234,673	56,086
Sales	104,697	20,072	295,142	85,344	248,792	77,996	239,907	79,545
Total	488,017		337,680		1,753		2,040	