

China's Industrial Economy 2018 Q2 Report¹

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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 and presentation. Mark Dreyer provided excellent copy editing.

Executive Summary

Q2 Business Sentiment Index continued to be in a slight expansion, making the first two quarters of 2018 the first period of expansion in the past four years and since the survey began. Other signs of improvements included a slight expansion in employment, electricity consumption, and overseas orders, as well as a slight improvement in gross margins. The prevalence of overcapacity remains high, though its severity is significantly reduced compared with a year ago.

Overall, based on our industrial survey and macro data, the current market pessimism does not arise from the economic fundamentals, but rather is caused by sentiment due to the trade wars, structural problems of Chinese economy and the effort to reduce leverage. The recent proposal of monetary easing to pump up the economy is short-sighted. The vulnerability of the Chinese economy comes from its structural problems including the lack of core technologies in some areas and high level of debt due to persistently loose monetary policies.

The current situation calls for a new round of economic reform and institutional building. China still has a number of areas with great potential that, if properly developed, could sustain the country's long term growth. These areas include domestic consumption, technology innovation, urbanization, and reform of state-owned enterprises. We believe the best strategy to insure against external shocks is to enhance the system's internal strength.

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 study is now in its fourth year, having launched in the second quarter of 2014. If we exclude the agricultural, real estate and financial sectors from China's GDP, the industrial sector now accounts for 50% of non-agricultural sectors.

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 about the Chinese economy. Furthermore, our survey questions allow us to understand the underlying mechanisms behind the data and analyze the state of the economy.

There were a total of 2,033 firms surveyed for our 2018 Q2 report, of which 1,732 firms were also polled in our 2018 Q1 survey. The initial survey sample was based on a 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. 2018 Q2 Key Findings

I.1 Operating Conditions Continued to Improve

In Q2, the Business Sentiment Index² stood at 51, the same as the previous quarter, making the first two quarters in 2018 the first expansion period since the survey was launched in 2014 Q2 (Figure 1)³. The operating conditions have continued to improve and have reached a 3-year high (58). The diffusion index for investment timing also increased by one point, to a historical high of 43, staying below the turning point of 50. Other signs of improvement included a slight expansion in employment,

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 $100 * \% \text{ of firms answering “good”} + 50 * \% \text{ of firms answering “neutral”}$. 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.

electricity consumption and overseas orders, which means a slight improvement in gross margins.

This quarter's expansion was mainly driven by state-owned and foreign firms, with the diffusion indices being 59 and 55 respectively (Q1: 61 and 55). Private firms – the vast majority of industrial firms – stayed flat (50).

Investments were still weak and only 3% of the firms made expansionary investments (Q1: 4%) (Figure 2).

I.2 Costs Continued to Rise Significantly, but at a Slower Pace

Unit cost rises continued in this quarter, but to a lesser degree both in terms of its prevalence and magnitude. About 35% of the firms reported increased unit costs, slightly lower than the previous quarter, in which 39% of the firms reported increased unit costs. The diffusion index stood at 67, two points down from the previous quarter. Firms with a significant increase in costs (i.e. quarterly costs rise above 5%) accounted for 7%, slightly lower than the 9% seen in Q1 (Figure 3).

Unit cost increases are mostly related to raw material costs. The diffusion index of raw material costs was 66. The proportion of firms that saw increases in raw material costs above 3% was 11% (Q1: 13%).

I.3 The Impact of Trade War

In this survey, we asked about the impact of the Sino-US trade war on Q2 performance. Only 5% of firms indicated they were affected by the trade war and 1% reported a significant impact. Not surprisingly, affected firms are mainly those with exports, which account for 31% of our sample.

The top five most affected industries included Processing of Petroleum & Nuclear Fuel, Textile, Wood Products, Smelting & Pressing of Non-ferrous Metals, and Cultural & Sports Products. 12% to 14% of firms in these industries are affected.

In addition, the export diffusion index was unchanged from the previous quarter, both at 51.

Based on our survey analysis, the trade war currently has little impact on the manufacturing sector. But with no end in sight, the impact of the trade war will be gradual and possibly over a long period of time.

II. Challenges and Priorities

II.1 Overall Conditions and Industry & Regional Distribution

Similar to Q1, our major indices in Q2 generally remained stable. As shown in Figure 4, both the employment and electricity consumption increased slightly (51) while both the inventory and production stayed flat (50).

Due to rising costs, product prices continued to increase, with the diffusion index standing at 53. Cost rises were the driving force behind the price rises in Q2. As shown in Figure 5, among firms with product cost inflation above 5%, cost rises were the most prominent. The proportion of firms with unit cost increases above 5% was 40%, while 40% reported raw material cost rises above 5%, all much higher than the sample average. Meanwhile, these firms gave similar responses to the whole sample in terms of production expansion and overcapacity. All these patterns in the data point towards price inflation driven by cost run-ups, rather than by increased demand.

As shown in Table 2.2, the top three industries included Gas Production & Supply (65), Production & Supply of Water (63) and Power Production & Supply (60). These three industries have been on the list for five, six and nine consecutive quarters, respectively. On the other hand, the worst performing industries were Mining & Processing of Ferrous Metal Ores (41), Non-metallic Mineral Products (43), Smelting & Pressing of Ferrous Metals (43), Metal Products (45) and Repair of Metal Products, Machinery and Equipment (46). Smelting & Pressing of Ferrous Metals and Non-metallic Mineral Products have been persistently on this list for four and eight consecutive quarters, respectively.

Table 3.1 displays regional business conditions. In Q2, the BSI ranged from 40 (Ningxia) to 55 (Guizhou). Specifically, among the top-performing list of Q2, Guangxi and Guizhou appeared for three and two consecutive quarters respectively. In the fourteen quarters since 2015 Q1, this is the first time that Shanxi and Liaoning has appeared on the list. The bottom five provinces were Ningxia (40), Hebei (47), Jilin (48), Gansu (48) and Shanghai (49). Ningxia and Hebei have appeared on the list eight and nine times respectively.

II.2 Challenges and Priorities

Weak demand is still by far the biggest challenge for the industrial economy (Figure 6). 62% 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 both cited by 19% and 12% of firms, respectively. 12% of firms cited macroeconomic and industrial policies as limiting factors while another 12% 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.2.1 Overcapacity Still Prevalent

In 2018 Q2, close to two-thirds (65%) of the firms reported oversupply in the domestic market, with a diffusion index of 82 (Q1: 81), still close to historically high levels. 31% of the firms reported that their excess capacity was above 10%, down from 33% in Q1, while 11% (Q1: 12%) reported that their excess capacity was above 20% (Figure 7A). Moreover, these firms said they did not expect that overcapacity would improve in the next quarter.

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 one-third and half of the total firms respectively (14 industries and 17 regions in 2018 Q2 versus 17 industries and 17 regions in 2018 Q1) (Figure 7B). Figure 7A and 7B also show that the severity of overcapacity has significantly reduced compared with a year ago.

It is also worth noting that overcapacity in the international market was substantially better than in the domestic market, with the diffusion index 7 points lower (Figure 7A).

Weak demand has not caused inventory problems: thanks to the “order-based” production model adopted by many Chinese firms, the finished-goods inventory stayed largely flat. In Q2, for example, as many as 47% of firms said they did not have significant levels of inventory because they started production only after receiving orders. For those carrying inventories, 84% said that they expected their inventory to be digested within three months, with a further 13% saying it would take between four to six months. This leaves only 3% of the whole sample who said they expected to carry inventory for more than six months.

II.2.2 Curtailment of Overcapacity

Each quarter, we attempt to call back all the firms that have been surveyed in the previous quarter. In Q2, about 4.3% 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 8A).

As shown in Figure 8B, employment reduction began to drop gradually from the peak in 2016. In Q2, the proportion of firms reducing workers by more than 10% was 0.7% (Q1: 0.7%), while the proportion of firms reducing workers by more than 20% was 0.7% (Q1: 0.4%). Based on the size distribution of firms with employment reduction and the number of industrial workers in 2015 being 220 million, we estimate that a total of 440,000 jobs were cut in 2018 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 proportion of firms reducing production by more than 5% and 10% was 28% and 23%, respectively, both significantly more than that of the whole sample (12% and 6%). Moreover, the proportion of firms reducing employment by more than 5% and 10% were both 1.4%, also higher than that of the whole sample (1.1% and 0.7%).

About 59% of firms reported a capacity utilization rate above 90%, up from last quarter's 57%, whereas, the proportion of firms with capacity utilization rate below 70% increased to 14% (Q1: 12%) (Figure 9). 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, 28% of firms reported difficulties in collecting trade receivables from their customers in 2018 Q2 (Q1: 28%). This problem was more prominent among private firms (30%) and firms producing capital goods and intermediate goods (38% and 33%, respectively). SOEs were disproportionately more likely to delay payment, accounting for about 11% of all firms that have done so.

II.2.3 Low Margins

Overcapacity means a lack of pricing power, which, combined with rising costs, results in low profit margins. As shown in Figure 10, as many as 21% of the firms surveyed had gross margins below 10%, while the proportion of firms with gross margins above 15% increased to 36% (Q1: 35%). Thus, overall gross margins improved slightly.

II.2.4 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 (2017: 2-3%). 22% of firms said they had sufficient funds, 76% answered "neutral", while only 2% reported insufficient funds (Figure 11A). Of those, the vast majority (96%) reported insufficient funds for production, not for expansion, while only one firm reported insufficient funds due to operating losses.

As shown in Table 6.1 and Figure 11B, only a small fraction of firms (1.5%) obtained new loans in Q2. When asked about the reasons, the vast majority of firms without new loans (99%) reported that they did not have the need for capital. Moreover, the diffusion index reflecting an “accommodating” bank lending attitude was 60 (Q1: 62), while the percentage of firms reporting a “difficult” lending attitude stayed at a low level of 13% in Q2 (Q1: 10%) (Figure 11C). In fact, none of the firms in our sample borrowed money from financial institutions, other than banks 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 94% of surveyed firms reporting this as their primary funding source. In Q2, 6% of firms reported the founder’s own capital as the primary source of funds, while 31% reported this as the second most important source of funds. 69% of firms indicated bank loans as their second most important source of funds. Sources of financing were highly concentrated in Chinese firms: in the case of internal funds, 96% 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.

III. Conclusion

In Q2, the Business Sentiment Index continued to be in a slight expansion, making the past two quarters the first expansion period in the past four years since the survey started. Other signs of improvements included a slight expansion in employment, electricity consumption and overseas orders, and a slight improvement in gross margins. The prevalence of overcapacity remains high though its severity is significantly reduced compared with a year ago.

Overall, based on our industrial survey and macro data, we note that the current market pessimism does not arise from the economic fundamentals rather, is caused by sentiment due to the trade war, structural problems of the Chinese economy and the effort to reduce leverage. The recent proposal of monetary easing to pump up the economy is short-sighted. The vulnerability of the Chinese economy comes from its structural problems including a lack of core technologies in some areas and high level of debt due to persistently loose monetary policies.

The current situation calls for a new round of economic reform and institutional building. China still has a number of areas with great potential that, if properly developed, could sustain the country's long term growth. These areas include domestic consumption, technology innovation, urbanization, and reform of

state-owned enterprises. We believe the best strategy to insure against external shocks is to enhance the system's internal strength.

Figure 1. Business Sentiment Index

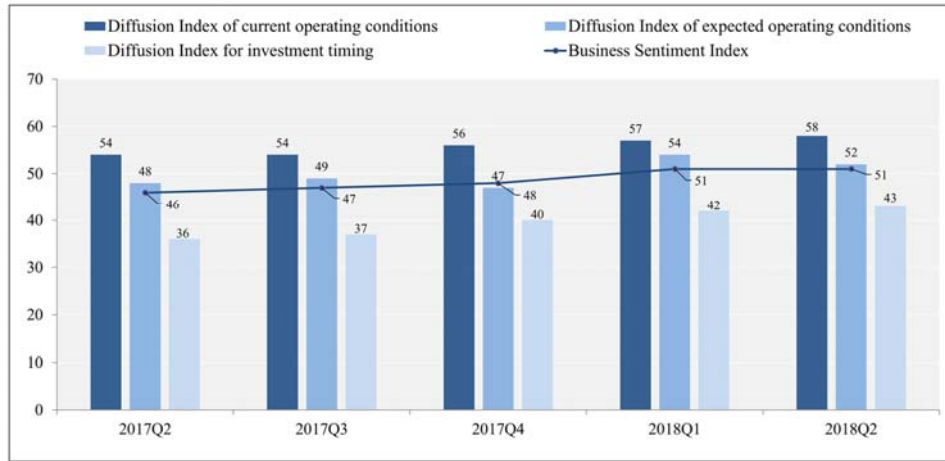


Figure 2. Investment

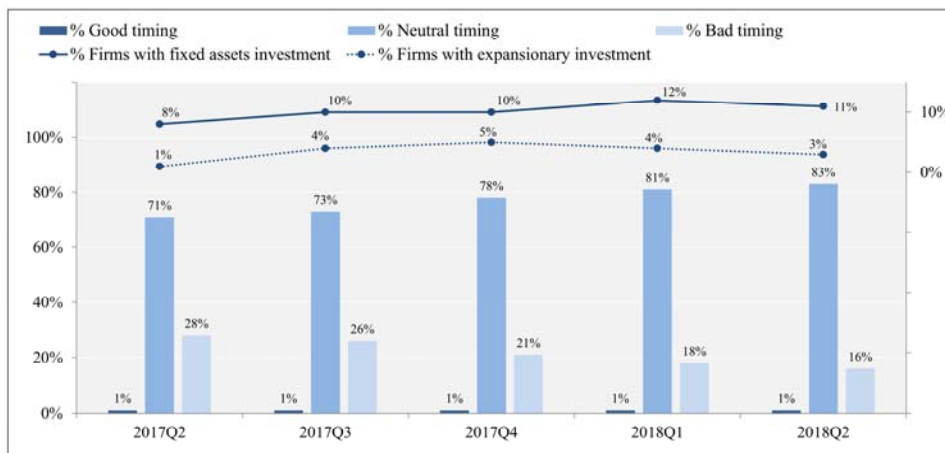


Figure 3. Costs

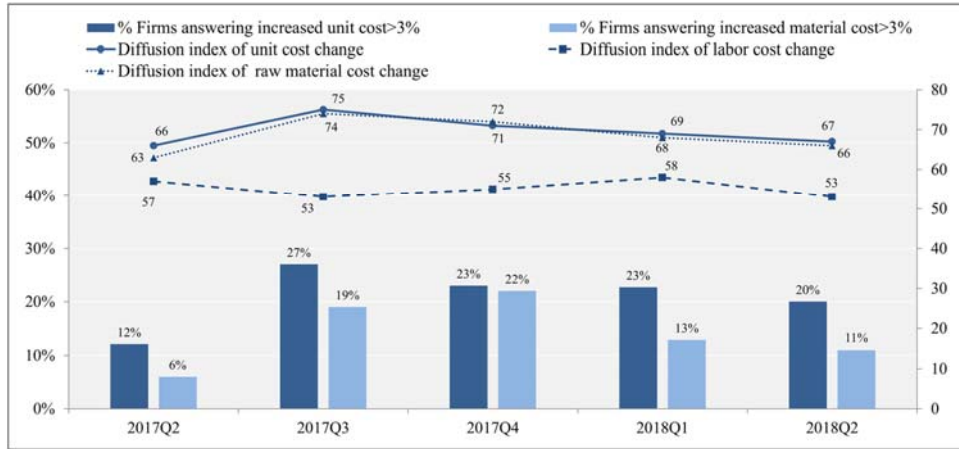


Figure 4. Other Main Economic Indices

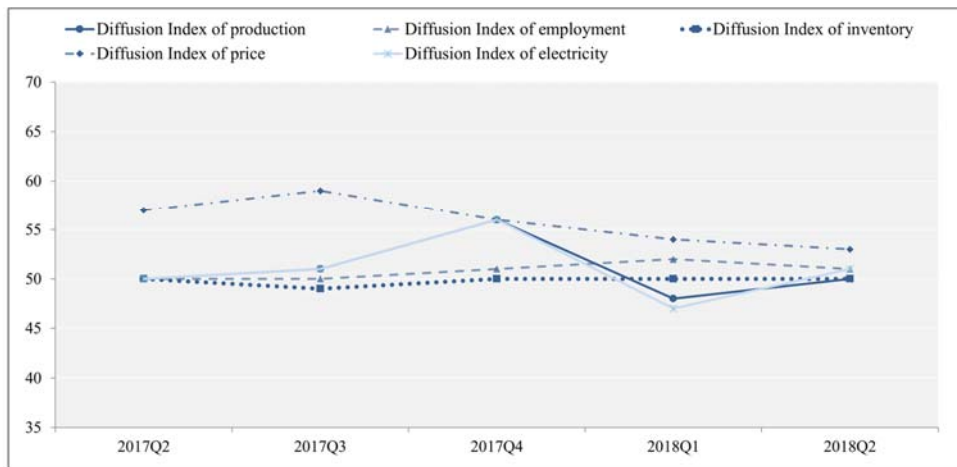


Figure 5. Cost Driven Price Increases

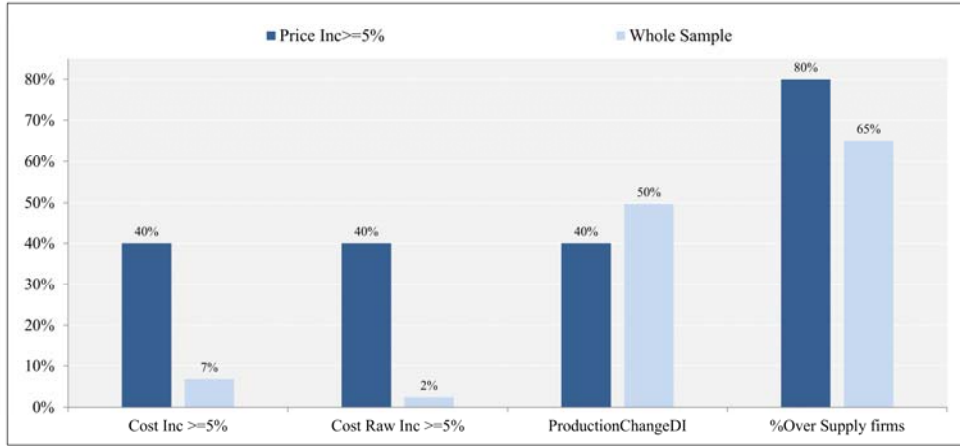


Figure 6. Factors Constraining Production of Next Quarter

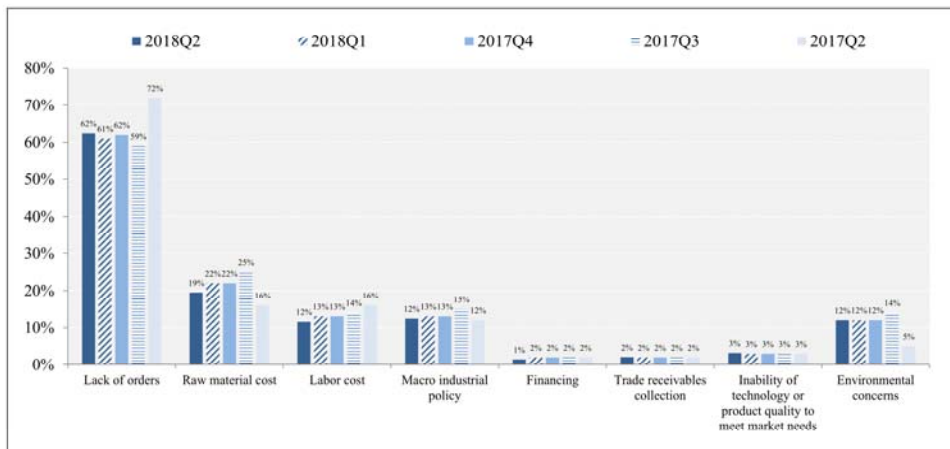


Figure 7A. Excess Capacity

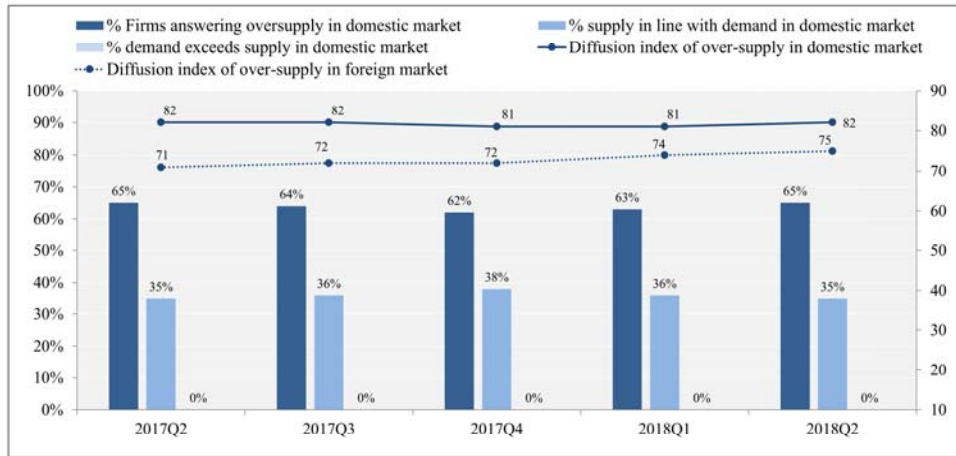


Figure 7B. Firms with Severe Excess Capacity

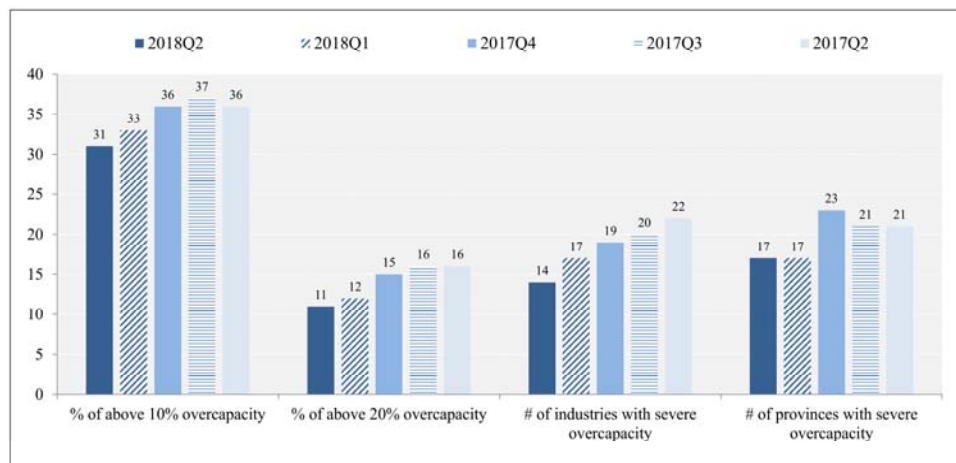


Figure 8A. Suspended Production



Figure 8B. Firms with Employment Reduction

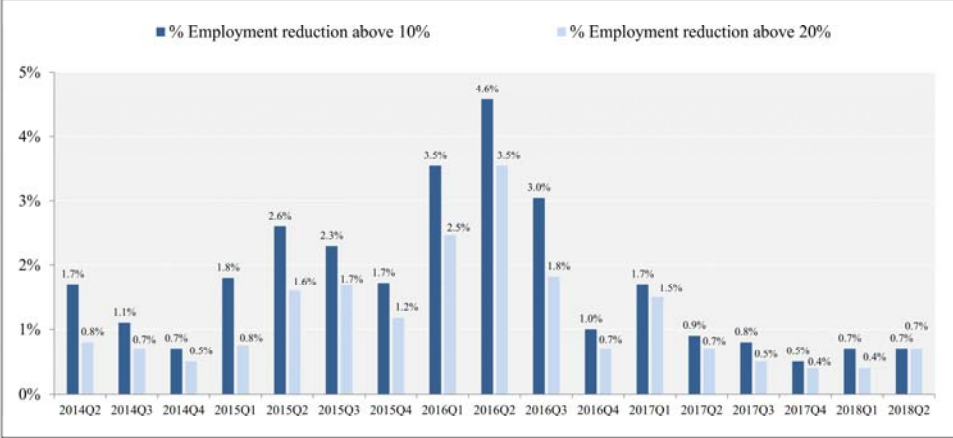


Figure 9. Capacity Utilization

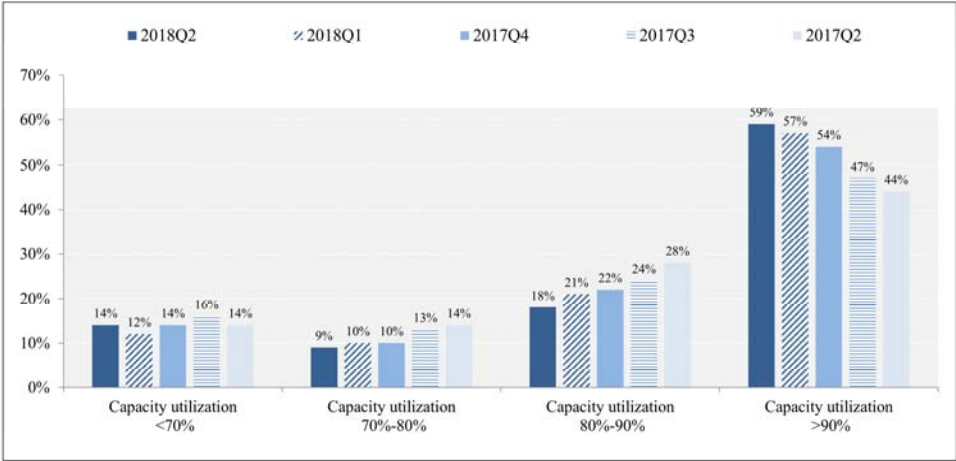


Figure 10. Gross Margins

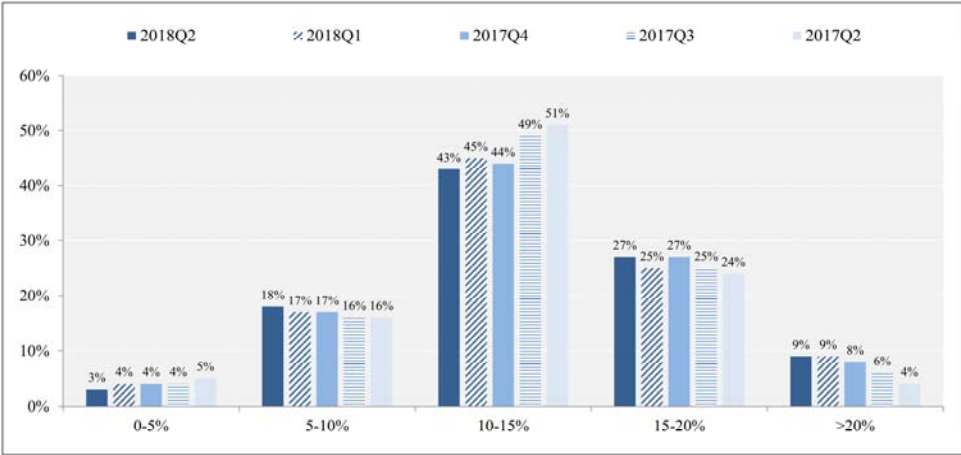


Figure 11. Financing
 Figure 11A. Sufficient Capital

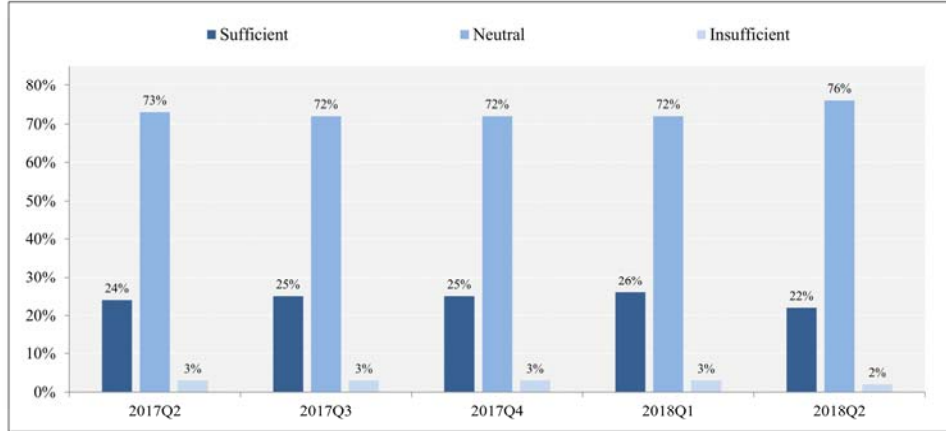


Figure 11B. New Loans

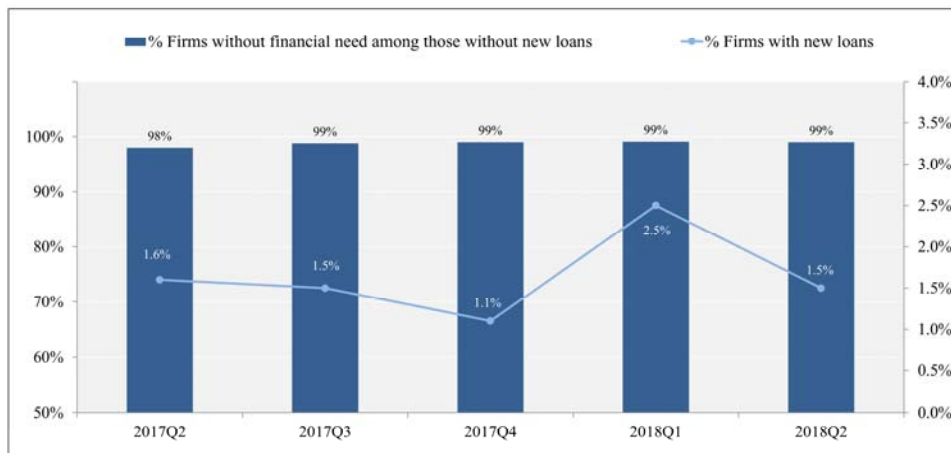


Figure 11C. Lending Attitude

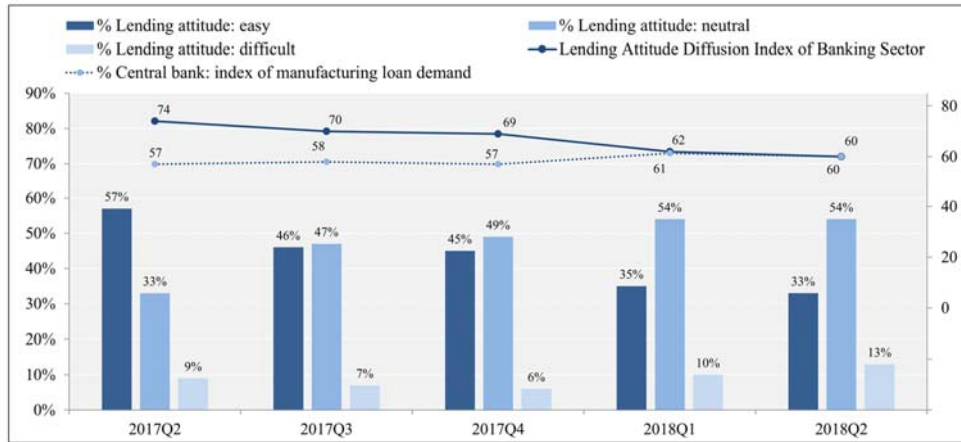


Table 1. Operating Conditions of Industrial Firms**Table 1.1**

	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	2,033	2,038	51	51	58	57	52	54	43
<i>By Size</i>										
Large	678	680	53	52	61	58	52	53	45	46
Medium	677	679	51	52	58	58	52	55	44	43
Small	678	679	49	49	55	54	53	55	39	37
<i>By Ownership</i>										
State-owned	106	110	59	61	77	75	54	60	47	46
Collectively-owned	24	23	51	51	63	61	54	54	38	37
Private	1,713	1,715	50	50	56	55	52	54	42	41
Foreign-owned	190	190	55	55	65	63	54	57	45	44
<i>By Product Type</i>										
Consumer Goods - Durable	304	335	50	50	57	56	52	52	41	42
Consumer Goods - Nondurable	670	674	53	52	62	60	53	55	43	42
Capital Goods	135	142	53	52	60	59	53	53	46	45
Intermediate Goods	924	887	50	50	55	54	52	55	42	41

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	11	12	3	4	50	48	51	52	53
<i>By Size</i>										
Large	12	14	3	6	51	49	51	52	52	54
Medium	12	14	3	4	50	48	51	53	52	55
Small	9	10	2	3	48	46	50	51	53	54
<i>By Ownership</i>										
State-owned	16	15	2	5	57	50	51	52	51	52
Collectively-owned	17	26	4	9	50	48	48	50	50	43
Private	10	11	3	4	49	47	51	52	53	55
Foreign-owned	14	18	5	8	54	52	52	55	54	54
<i>By Product Type</i>										
Consumer Goods - Durable	10	11	4	4	49	49	50	52	52	56
Consumer Goods - Nondurable	11	13	2	4	51	50	51	52	52	55
Capital Goods	20	17	5	4	55	49	53	54	52	53
Intermediate Goods	10	11	3	5	48	45	51	51	53	54

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	2,033	2,038	51	51	58	57	52	54	11	12	43	42
<i>Mining</i>												
Coal Mining and Washing	20	17	58	55	68	50	55	65	10	6	50	50
Mining and Processing of Ferrous Metal Ores	13	10	41	38	35	30	38	35	0	0	50	50
Mining and Processing of Non-ferrous Metal	8	7	48	48	50	50	56	64	38	14	38	29
Mining and Processing of Nonmetal Ores	20	20	47	48	43	43	53	55	0	0	45	45
<i>Production and Supply of Electricity, Heat, Gas and Water</i>												
Power Production and Supply	60	60	60	62	73	71	57	64	22	20	50	50
Gas Production and Supply	11	12	65	63	91	92	55	46	9	8	50	50
Production and Supply of Water	22	21	63	63	91	90	52	55	14	19	45	45
<i>Light Manufacturing</i>												
Processing of Agricultural and Related Products	128	135	47	45	54	51	51	49	3	6	36	36
Manufacturing of Foods	63	69	54	54	62	62	56	53	2	9	44	46
Manufacturing of Beverage	43	43	55	53	62	62	59	53	2	2	43	43
Textiles	112	116	55	56	59	55	61	67	13	13	45	45
Textile Wearing and Apparel	55	59	53	55	58	58	56	62	18	14	45	45
Leather Related Products and Footwear	37	42	47	46	53	52	49	51	3	10	39	36
Processing of Wood Products	24	36	53	53	65	64	48	51	25	42	46	44
Manufacturing of Furniture	32	32	48	49	55	55	50	52	6	6	41	41
Paper and Paper Products	52	51	50	49	59	59	52	51	17	8	38	38
Printing, Reproduction of Recording Media	43	38	53	53	63	57	55	62	9	11	42	39
Cultural and Sports Products	49	42	51	51	54	56	51	51	2	5	49	46
Manufacturing of Medicines	70	74	55	56	65	67	51	50	20	28	50	51
Manufacturing of Others	8	8	35	42	31	44	50	44	0	31	25	38
Recycling and Disposal of Wastes	4	5	46	50	50	50	38	50	0	0	50	50
<i>Chemical Industry</i>												
Processing of Petroleum and Nuclear Fuel	14	13	49	49	54	54	46	46	0	0	46	46
Manufacturing of Chemical Products	118	118	49	50	51	52	50	52	6	3	47	46
Manufacturing of Chemical Fibers	10	10	50	50	50	50	55	55	0	10	45	45
Rubber and Plastic Products	112	100	52	50	62	53	53	57	8	17	42	39
<i>Equipment Manufacturing</i>												
General-purpose Machinery	102	112	49	50	53	54	50	51	11	9	45	45
Special-purpose Machinery	116	106	55	54	64	62	52	51	20	25	49	49
Manufacturing of Automotive	78	95	48	49	58	58	47	49	12	20	38	38
Manufacturing of Railways, Ships and Other Transportation	31	26	58	58	69	71	53	50	13	12	50	52
Electric Machinery and Apparatus	144	137	56	57	70	65	60	70	15	16	36	35
Computers, Communication and Electric Equipment	70	60	51	52	54	56	50	50	9	12	50	49
Manufacturing of Measuring Instruments	37	43	50	51	61	60	50	51	0	2	41	42
Repair of Metal Products, Machinery and Equipment	4	4	46	46	50	50	50	50	25	0	38	38
<i>Other Heavy Manufacturing</i>												
Non-metallic Mineral Products	102	98	43	43	41	39	50	55	3	5	37	34
Smelting and Pressing of Ferrous Metals	68	66	43	42	40	37	46	47	1	6	43	43
Smelting and Pressing of Non-ferrous Metals	32	35	49	47	55	54	50	46	25	6	44	41
Metal Products	121	118	45	47	55	57	50	53	21	20	31	30

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	2,033	2,038	51	51	58	57	11	12	43	42	
<i>Top Five</i>											
Gas Production and Supply	11	12	65	63	91	92	9	8	50	50	
Production and Supply of Water	22	21	63	63	91	90	14	19	45	45	
Power Production and Supply	60	60	60	62	73	71	22	20	50	50	
Coal Mining and Washing	20	17	58	55	68	50	10	6	50	50	
Manufacturing of Railways, Ships and Other Transportation	31	26	58	58	69	71	13	12	50	52	
<i>Bottom Five</i>											
Mining and Processing of Ferrous Metal Ores	13	10	41	38	35	30	0	0	50	50	
Non-metallic Mineral Products	102	98	43	43	41	39	3	5	37	34	
Smelting and Pressing of Ferrous Metals	68	66	43	42	40	37	1	6	43	43	
Metal Products	121	118	45	47	55	57	21	20	31	30	
Repair of Metal Products, Machinery and Equipment	4	4	46	46	50	50	25	0	38	38	

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	2,033	2,038	51	51	58	57	52	54	11	12	43	42
<i>North China</i>												
Beijing	33	30	50	51	56	53	52	58	6	7	42	40
Tianjin	48	46	49	50	56	58	51	51	19	11	41	40
Hebei	93	91	47	47	51	52	52	52	9	13	37	36
<i>Northeast</i>												
Liaoning	85	100	52	50	56	54	55	54	2	7	45	43
Jilin	29	31	48	49	57	58	48	50	10	16	40	39
Heilongjiang	25	25	50	48	56	52	54	56	24	24	40	36
<i>Northwest</i>												
Inner Mongolia	23	24	51	53	54	56	48	50	4	0	50	52
Shaanxi	28	29	52	51	57	53	57	59	7	7	41	41
Gansu	7	9	48	52	50	61	50	50	29	11	43	44
Qinghai	2	1	50	67	50	50	50	100	0	0	50	50
Ningxia	5	5	40	40	40	40	50	50	20	0	30	30
Xinjiang	12	9	49	54	54	50	46	61	0	0	46	50
<i>Central North</i>												
Shanxi	22	18	53	50	59	53	57	53	18	17	43	44
Shandong	221	218	52	52	61	59	52	55	8	13	43	44
Henan	92	88	51	50	59	57	52	53	11	10	42	40
<i>Southwest</i>												
Chongqing	31	33	49	48	53	52	52	50	10	9	44	42
Sichuan	70	63	50	50	53	52	51	54	3	6	45	44
Guizhou	13	12	55	57	58	58	58	67	8	0	50	46
Yunnan	27	26	53	51	63	56	54	52	15	19	43	44
<i>East China</i>												
Shanghai	65	65	49	52	59	61	49	57	9	17	40	39
Jiangsu	243	263	51	52	58	58	52	54	13	13	44	44
Zhejiang	236	239	51	52	59	58	54	56	15	18	42	41
<i>South China</i>												
Fujian	102	103	49	51	57	56	50	57	11	12	41	41
Guangdong	214	198	52	51	60	57	53	53	13	13	45	43
Guangxi	36	39	54	53	61	59	56	58	11	13	44	44
Hainan	2	1	58	50	100	100	50	50	0	0	25	0
<i>Central South</i>												
Anhui	87	88	50	50	57	55	50	53	10	9	42	43
Jiangxi	54	53	52	52	57	57	56	58	9	15	44	42
Hubei	68	69	51	50	59	56	53	52	7	10	41	41
Hunan	60	62	52	52	60	58	55	58	10	13	41	40

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	2,033	2,038	51	51	58	57	11	12	43	42
<i>Top Five</i>										
Guizhou	13	12	55	57	58	58	8	0	50	46
Guangxi	36	39	54	53	61	59	11	13	44	44
Yunnan	27	26	53	51	63	56	15	19	43	44
Shanxi	22	18	53	50	59	53	18	17	43	44
Liaoning	85	100	52	50	56	54	2	7	45	43
<i>Bottom Five</i>										
Ningxia	5	5	40	40	40	40	20	0	30	30
Hebei	93	91	47	47	51	52	9	13	37	36
Jilin	29	31	48	49	57	58	10	16	40	39
Gansu	7	9	48	52	50	61	29	11	43	44
Shanghai	65	65	49	52	59	61	9	17	40	39

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	2,033	2,038	82	81	75	74	50	50	
<i>By Size</i>									
Large	678	680	79	79	72	72	50	49	
Medium	677	679	83	81	75	74	51	51	
Small	678	679	85	84	78	75	49	49	
<i>By Ownership</i>									
State-owned	106	110	60	62	63	63	48	54	
Collectively-owned	24	23	85	82	67	63	46	46	
Private	1,713	1,715	84	83	76	74	50	50	
Foreign -owned	190	190	82	80	75	73	52	50	
<i>By Product Type</i>									
Consumer Goods - Durable	304	335	77	77	65	68	53	53	
Consumer Goods - Nondurable	670	674	77	76	75	72	49	48	
Capital Goods	135	142	80	79	69	71	52	50	
Intermediate Goods	924	887	88	87	81	79	49	50	

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	13	77	85
Processing of Petroleum and Nuclear Fuel	14	57	57
Mining and Processing of Nonmetal Ores	20	50	60
Smelting and Pressing of Ferrous Metals	68	37	47
Non-metallic Mineral Products	102	36	47
Processing of Wood Products	24	25	50
Manufacturing of Furniture	32	19	25
Manufacturing of Medicines	70	13	23
Manufacturing of Others	8	13	38
Smelting and Pressing of Non-ferrous Metals	32	13	25
Metal Products	121	12	54
Electric Machinery and Apparatus	144	11	31
Manufacturing of Foods	63	11	24
Coal Mining and Washing	20	10	40

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
Inner Mongolia	23	26	39
Hebei	93	22	51
Sichuan	70	21	37
Ningxia	5	20	40
Shaanxi	28	18	29
Henan	92	17	35
Xinjiang	12	17	33
Chongqing	31	16	23
Shanxi	22	14	23
Hunan	60	13	32
Jiangxi	54	13	31
Beijing	33	12	30
Heilongjiang	25	12	20
Liaoning	85	12	34
Fujian	102	12	30
Jilin	29	10	28
Jiangsu	243	10	30

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**

		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
<i>Nation</i>		2,033	2,038	67	69	53	58	66	68	53	54
<i>By Size</i>											
	Large	678	680	66	68	53	57	65	67	52	54
	Medium	677	679	66	67	52	58	65	67	52	55
	Small	678	679	69	71	53	58	67	68	53	54
<i>By Ownership</i>											
	State-owned	106	110	56	56	52	55	59	58	51	52
	Collectively-owned	24	23	73	67	58	74	71	67	50	43
	Private	1713	1715	68	70	53	57	66	68	53	55
	Foreign-owned	190	190	68	66	55	62	67	64	54	54
<i>By Product Type</i>											
	Consumer Goods - Durable	304	335	72	77	55	63	70	75	52	56
	Consumer Goods - Nondurable	670	674	67	69	53	57	65	68	52	55
	Capital Goods	135	142	66	68	56	66	66	67	52	53
	Intermediate Goods	924	887	66	66	52	55	65	65	53	54

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

	Number of Firms	Diffusion Indices			Price Index
		Unit Cost Index	Labor Cost Index	Raw Material Cost Index	
Nation	2,033	67	53	66	53
Manufacturing of Foods	63	89	53	75	52
Printing, Reproduction of Recording Media	43	84	60	84	56
Manufacturing of Automotive	78	83	54	81	50
Mining and Processing of Non-ferrous Metal	8	81	63	81	50
Manufacturing of Others	8	81	50	88	50
Manufacturing of Furniture	32	80	50	80	61
Leather Related Products and Footwear	37	77	53	74	53
Textiles	112	75	54	74	58
Paper and Paper Products	52	75	62	77	55
Non-metallic Mineral Products	102	73	52	72	58
Manufacturing of Railways, Ships and Other Transportation	31	73	60	73	50
Electric Machinery and Apparatus	144	72	54	72	53
Rubber and Plastic Products	112	69	53	68	53
Manufacturing of Measuring Instruments	37	69	51	68	54
Cultural and Sports Products	49	69	53	65	59
Processing of Agricultural and Related Products	128	68	52	55	45
Manufacturing of Beverage	43	67	52	62	62

Notes:

1. Industries are sorted by Diffusion Index for Unit Cost in descending order. 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	2,033	67	53	66	53
Shaanxi	28	71	52	68	48
Fujian	102	71	54	70	55
Gansu	7	71	50	75	57
Beijing	33	70	55	67	55
Jiangxi	54	70	53	72	55
Hubei	68	70	54	67	54
Guangxi	36	69	50	68	58
Hebei	93	68	52	64	52
Zhejiang	236	68	52	68	54
Henan	92	68	52	68	53
Liaoning	85	68	52	67	49
Anhui	87	67	52	63	49
Jiangsu	243	67	53	66	52
Yunnan	27	67	52	63	52
Guangdong	214	67	52	68	53
Shanghai	65	67	55	67	54

Notes:

1. Provinces are sorted by Diffusion Index for Unit Cost in descending order. 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	2,033	2,038	25	25	2	2	60	62	51	50	
<i>With or Without Investment</i>											
Firms with Investment	218	253	37	33	4	5	63	64	50	50	
Firms without Investment	1,815	1,785	24	24	1	2	59	62	52	50	
<i>By Size</i>											
Large	678	680	26	25	2	2	60	63	50	50	
Medium	677	679	25	25	1	3	64	62	54	50	
Small	678	679	25	24	1	2	58	61	50	50	
<i>By Ownership</i>											
State-owned	106	110	22	20	1	1	50	50	50	50	
Collectively-owned	24	23	17	13	0	0	NA	NA	NA	NA	
Private	1,713	1,715	26	25	2	3	60	64	51	50	
Foreign -owned	190	190	22	24	2	3	67	59	50	50	
<i>By Product Type</i>											
Consumer Goods - Durable	304	335	26	26	2	3	67	74	50	50	
Consumer Goods - Nondurable	670	674	27	27	2	3	52	53	53	50	
Capital Goods	135	142	39	36	2	2	38	33	50	50	
Intermediate Goods	924	887	22	21	1	2	70	69	50	50	

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	1917	94
Founder	121	6
Relatives and friends	0	0
Bank	5	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	508	69
Founder	229	31
Internal Funds	2	0
Others	1	0
Stock market	1	0
Non-official finance institution	0	0
Relatives and friends	0	0

Appendix

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	13	10	77	80	85	80
Processing of Petroleum and Nuclear Fuel	14	13	57	46	57	46
Mining and Processing of Nonmetal Ores	20	20	50	45	60	50
Smelting and Pressing of Ferrous Metals	68	66	37	32	47	42
Non-metallic Mineral Products	102	98	36	46	47	54
Processing of Wood Products	24	36	25	25	50	50
Manufacturing of Furniture	32	32	19	16	25	22
Manufacturing of Medicines	70	74	13	12	23	20
Manufacturing of Others	8	8	13	13	38	38
Smelting and Pressing of Non-ferrous Metals	32	35	13	14	25	23
Metal Products	121	118	12	18	54	54
Electric Machinery and Apparatus	144	137	11	13	31	36
Manufacturing of Foods	63	69	11	13	24	28
Coal Mining and Washing	20	17	10	12	40	53
Paper and Paper Products	52	51	10	12	33	35
Textile Wearing and Apparel	55	59	9	14	18	32
Leather Related Products and Footwear	37	42	8	12	32	36
Manufacturing of Measuring Instruments	37	43	8	9	8	12
Manufacturing of Chemical Products	118	118	6	3	42	36
General-purpose Machinery	102	112	6	6	40	41
Special-purpose Machinery	116	106	5	6	16	12
Manufacturing of Beverage	43	43	5	9	5	21
Rubber and Plastic Products	112	100	4	6	38	43
Manufacturing of Railways, Ships and Other Transportation	31	26	3	4	19	19
Computers, Communication and Electric Equipment	70	60	3	3	34	30
Processing of Agricultural and Related Products	128	135	2	3	22	21
Printing, Reproduction of Recording Media	43	38	2	5	21	24
Textiles	112	116	2	3	21	24
Power Production and Supply	60	60	2	3	2	3
Manufacturing of Automotive	78	95	1	4	21	24
Manufacturing of Chemical Fibers	10	10	0	0	40	40
Repair of Metal Products, Machinery and Equipment	4	4	0	0	25	25
Mining and Processing of Non-ferrous Metal	8	7	0	0	25	14
Cultural and Sports Products	49	42	0	2	8	10
Gas Production and Supply	11	12	0	0	0	0
Recycling and Disposal of Wastes	4	5	0	0	0	0
Production and Supply of Water	22	21	0	0	0	0

Notes:

Industries are sorted based on the percentage of firms with over 20% excess capacity in descending order. The ranking includes industries with more than three firms.

Appendix

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
Inner Mongolia	23	24	26	17	39	38
Hebei	93	91	22	24	51	51
Sichuan	70	63	21	22	37	37
Ningxia	5	5	20	20	40	40
Shaanxi	28	29	18	21	29	34
Henan	92	88	17	14	35	30
Xinjiang	12	9	17	11	33	33
Chongqing	31	33	16	15	23	24
Shanxi	22	18	14	28	23	39
Hunan	60	62	13	11	32	34
Jiangxi	54	53	13	13	31	36
Beijing	33	30	12	20	30	33
Heilongjiang	25	25	12	16	20	24
Liaoning	85	100	12	16	34	34
Fujian	102	103	12	10	30	31
Jilin	29	31	10	13	28	29
Jiangsu	243	263	10	10	30	30
Shandong	221	218	9	15	28	31
Tianjin	48	46	8	7	38	37
Guizhou	13	12	8	8	46	33
Guangdong	214	198	7	8	24	26
Shanghai	65	65	6	8	28	26
Hubei	68	69	6	9	22	23
Anhui	87	88	6	9	34	33
Zhejiang	236	239	4	4	25	27
Yunnan	27	26	4	8	15	19
Guangxi	36	39	3	5	28	31
Gansu	7	9	0	0	14	22

Notes:

Provinces are sorted based on the percentage of firms with over 20% excess capacity in descending order.

Appendix

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		2033	2038	67	69	53	58	66	68	53	54
<i>Mining</i>											
	Coal Mining and Washing	20	17	48	41	53	56	48	41	45	41
	Mining and Processing of Ferrous Metal Ores	13	10	54	55	50	50	54	55	42	35
	Mining and Processing of Non-ferrous Metal	8	7	81	71	63	64	81	71	50	50
	Mining and Processing of Nonmetal Ores	20	20	53	53	50	50	53	53	55	55
<i>Production and Supply of Electricity, Heat, Gas and Water</i>											
	Power Production and Supply	60	60	50	50	50	50	50	50	50	50
	Gas Production and Supply	11	12	50	50	50	50	NA	NA	50	50
	Production and Supply of Water	22	21	50	50	50	50	50	NA	50	50
<i>Light Manufacturing</i>											
	Processing of Agricultural and Related Products	128	135	68	76	52	57	55	65	45	55
	Manufacturing of Foods	63	69	89	95	53	59	75	91	52	60
	Manufacturing of Beverage	43	43	67	70	52	52	62	65	62	62
	Textiles	112	116	75	68	54	54	74	67	58	54
	Textile Wearing and Apparel	55	59	55	60	53	52	55	61	49	52
	Leather Related Products and Footwear	37	42	77	86	53	65	74	85	53	57
	Processing of Wood Products	24	36	50	53	50	51	50	53	50	53
	Manufacturing of Furniture	32	32	80	83	50	50	80	81	61	63
	Paper and Paper Products	52	51	75	74	62	80	77	74	55	52

Appendix

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	43	38	84	84	60	70	84	83	56	58
Cultural and Sports Products	49	42	69	75	53	54	65	73	59	61
Manufacturing of Medicines	70	74	59	60	50	52	59	59	51	55
Manufacturing of Others	8	8	81	81	50	56	88	94	50	50
Recycling and Disposal of Wastes	4	5	50	60	50	50	50	60	50	50
<i>Chemical Industry</i>										
Processing of Petroleum and Nuclear Fuel	14	13	61	65	50	50	61	62	39	42
Manufacturing of Chemical Products	118	118	63	68	51	53	62	64	55	57
Manufacturing of Chemical Fibers	10	10	65	80	50	50	65	75	60	60
Rubber and Plastic Products	112	100	69	67	53	65	68	66	53	55
<i>Equipment Manufacturing</i>										
General-purpose Machinery	102	112	63	63	50	54	63	60	53	55
Special-purpose Machinery	116	106	66	73	58	78	66	73	49	51
Manufacturing of Automotive	78	95	83	81	54	75	81	81	50	51
Manufacturing of Railways, Ships and Other Transportation	31	26	73	65	60	81	73	65	50	50
Electric Machinery and Apparatus	144	137	72	73	54	55	72	73	53	59
Computers, Communication and Electric Equipment	70	60	63	61	50	50	64	61	52	52
Manufacturing of Measuring Instruments	37	43	69	67	51	52	68	67	54	49
Repair of Metal Products, Machinery and Equipment	4	4	50	75	63	75	50	75	50	50
<i>Other Heavy Manufacturing</i>										
Non-metallic Mineral Products	102	98	73	72	52	52	72	69	58	58
Smelting and Pressing of Ferrous Metals	68	66	65	65	51	52	64	62	54	52
Smelting and Pressing of Non-ferrous Metals	32	35	56	71	50	56	58	66	52	49
Metal Products	121	118	56	56	52	51	57	56	52	52

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

Appendix

Table A.2.2 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		2,033	2,038	67	69	53	58	66	68	53	54
<i>North China</i>											
	Beijing	33	30	70	73	55	68	67	73	55	53
	Tianjin	48	46	64	65	52	55	62	64	52	53
	Hebei	93	91	68	69	52	56	64	65	52	54
<i>Northeast</i>											
	Liaoning	85	100	68	68	52	56	67	65	49	52
	Jilin	29	31	66	65	59	60	61	62	53	50
	Heilongjiang	25	25	60	70	54	58	56	60	52	52
<i>Northwest</i>											
	Inner Mongolia	23	24	59	60	52	58	53	60	46	52
	Shaanxi	28	29	71	64	52	57	68	59	48	48
	Gansu	7	9	71	61	50	50	75	64	57	56
	Ningxia	5	5	60	50	50	50	60	50	60	40
	Xinjiang	12	9	58	72	50	61	55	72	50	61
<i>Central North</i>											
	Shanxi	22	18	61	67	48	56	59	64	50	53
	Shandong	221	218	66	68	54	59	65	67	53	56
	Henan	92	88	68	73	52	57	68	72	53	59
<i>Southwest</i>											
	Chongqing	31	33	65	71	55	58	65	70	50	50
	Sichuan	70	63	65	71	52	56	66	73	55	56
	Guizhou	13	12	62	67	50	50	54	64	50	54
	Yunnan	27	26	67	69	52	58	63	74	52	54
<i>East China</i>											
	Shanghai	65	65	67	70	55	61	67	69	54	55
	Jiangsu	243	263	67	67	53	58	66	65	52	53
	Zhejiang	236	239	68	70	52	58	68	71	54	56
<i>South China</i>											
	Fujian	102	103	71	72	54	58	70	72	55	60
	Guangdong	214	198	67	68	52	59	68	69	53	56
	Guangxi	36	39	69	71	50	54	68	68	58	55
<i>Central South</i>											
	Anhui	87	88	67	67	52	59	63	62	49	49
	Jiangxi	54	53	70	71	53	56	72	69	55	57
	Hubei	68	69	70	70	54	58	67	68	54	51
	Hunan	60	62	66	71	53	58	67	72	53	52

Notes:

The table includes provinces with more than three firms.