

March 2018

Mastercard Caixin BBD China New Economy Index

Released: 10:00 am Beijing Time April-02-2018

Overview

In March 2018, the Mastercard Caixin BBD New Economy Index (NEI) reading came in at 31.3, indicating that the New Economy accounted for 31.3% of overall economic input activities that month, up 1.5 pts from February (Chart 1). The rising NEI was due to the increase of technology input. New economy is defined as following: 1) human capital intensive, technology intensive and capital light; 2) sustainable rapid growth, and 3) in line with the strategic new industries defined by the government. Please refer to our previous reports (March 2016 and March 2017) for the list of NEI sectors.

Chart1: China Monthly New Economy Index



2017.04 2017.05 2017.06 2017.07 2017.08 2017.09 2017.10 2017.11 2017.12 2018.01 2018.02 2018.03



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Primary Inputs

The NEI includes labor, capital and technology inputs that account for 40%, 35% and 25% of the total weights of the index, respectively. The rise in the March NEI reading came from the increase of technology inputs (Chart 2). Technology input index fluctuated widely since October 2017, coming in at 33.6, with 3.9 MoM increase. Capital investment showed a slow growth trend since September 2017. It continued to rise to 33.1 this month, with 1.4 MoM increase. Labor input index declined moderately since July 2017, increasing slightly to 28.3 this month, with 0.1 MoM increase.

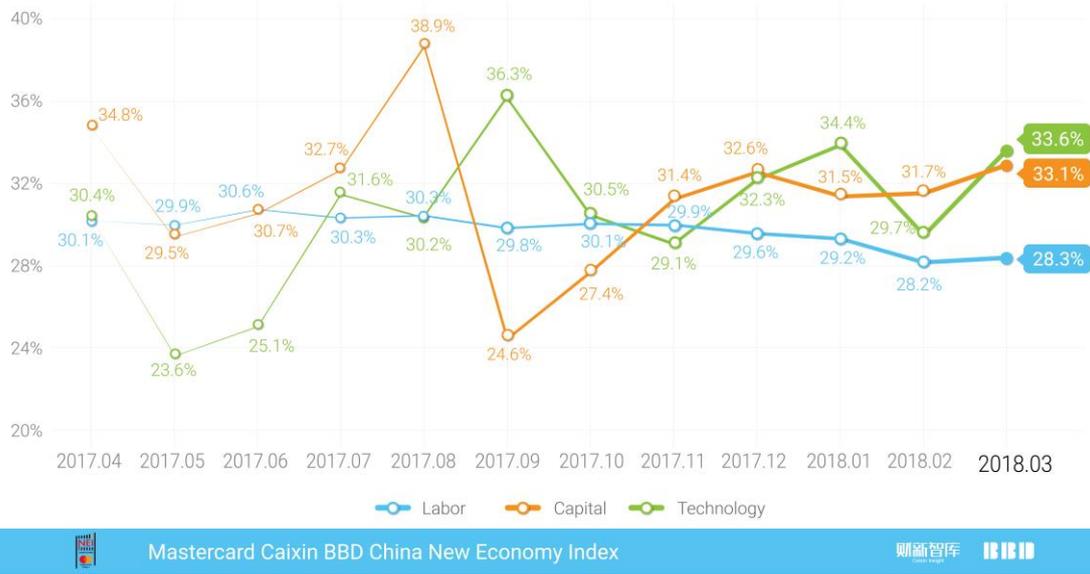


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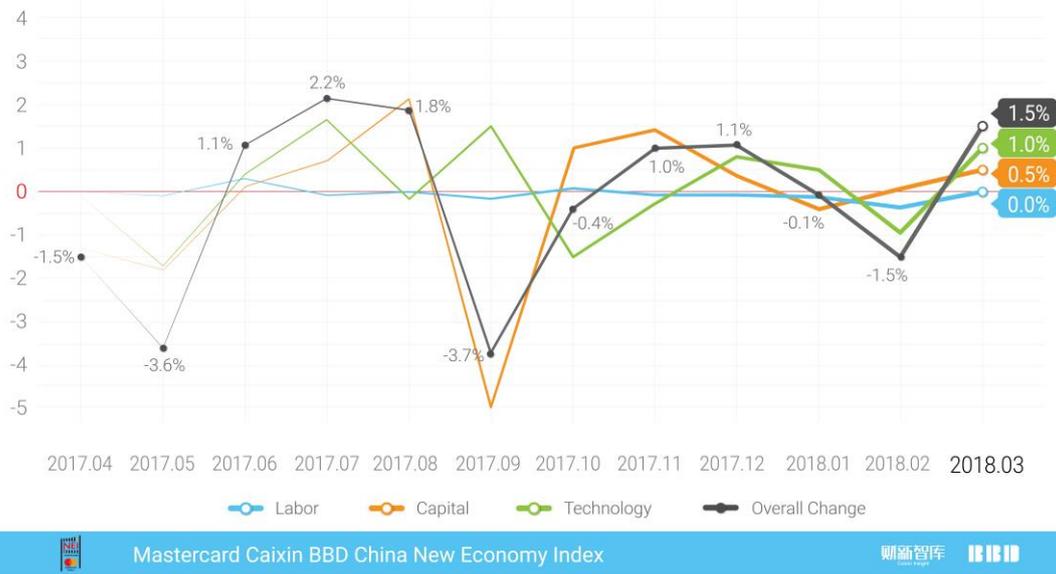


Chart2: NEI Primary Input Index



Taking the weights into account, percentage changes in labor, capital and technology inputs were 0.0, 0.5, and 1.0 pts, respectively. The net NEI change was 1.5 pts in total (Chart 3).

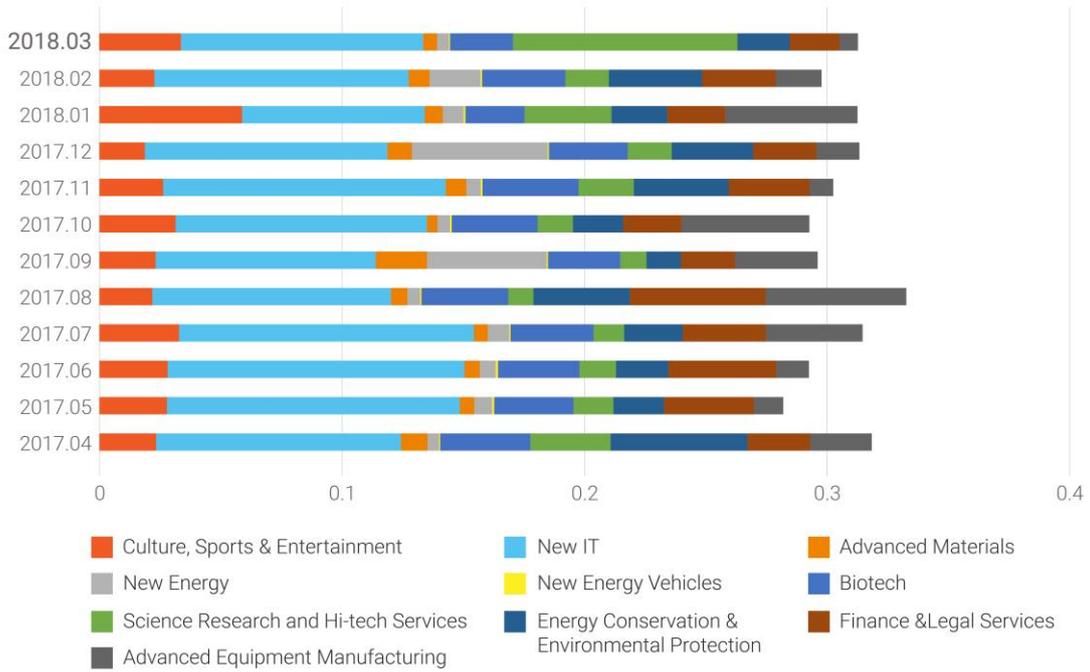
Chart3: Primary Input Contribution to NEI



Looking at the sectors, the New IT industry formed the largest proportion of the New Economy Index, contributing 10 pts to NEI. Science Research and Hi-tech Services was the industry with fastest growth in March, contributing 9.3 pts and ranking the second. New Energy came ninth from sixth, the biggest drop in ranking, contributing 0.5 pts in March (Chart 4).



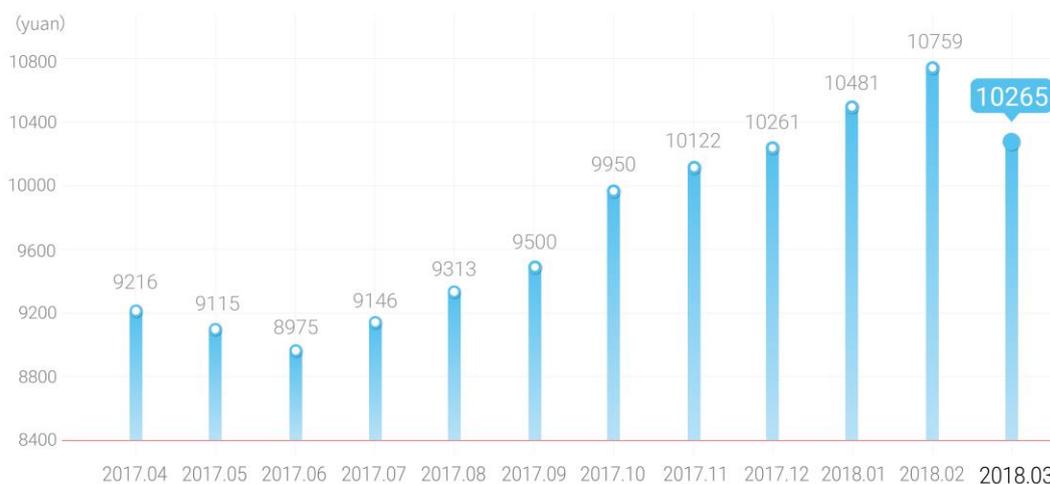
Chart4: New Economy Sector Contribution Breakdown



New Economy Employment

In March 2018, the average monthly entry level salary of the New Economy was RMB 10,265 per month, decreasing from last month’s level of RMB 10,759 (Chart 5). New Economy wage information is compiled from online websites of career platforms and recruitment services including 51job and Zhaopin, as well as other sites that list job demands.

Chart5: New Economy Avg. Monthly Entry-Level Salaries



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Hiring in the New Economy sectors accounted for 27.7% of total hiring in March, slightly higher than the previous month's 27.6%. At the same time, the total compensation share of New Economy sectors remained the same level as the previous month's 28.8%, which meant the average entry salary level of New Economy was lower than national average entry wage level. The entry level salary premium of the New Economy was 4.2% as compared to economy-wide counterparts, decreasing from 4.4% in February (Chart 6). In the recent half year, the average salary premium of the New Economy was lower than the first half of 2017 generally.

Chart6: New Economy Entry-Level Salary Premium over Economy-wide Entry Level Salaries



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Decomposition of Newly Established Enterprises

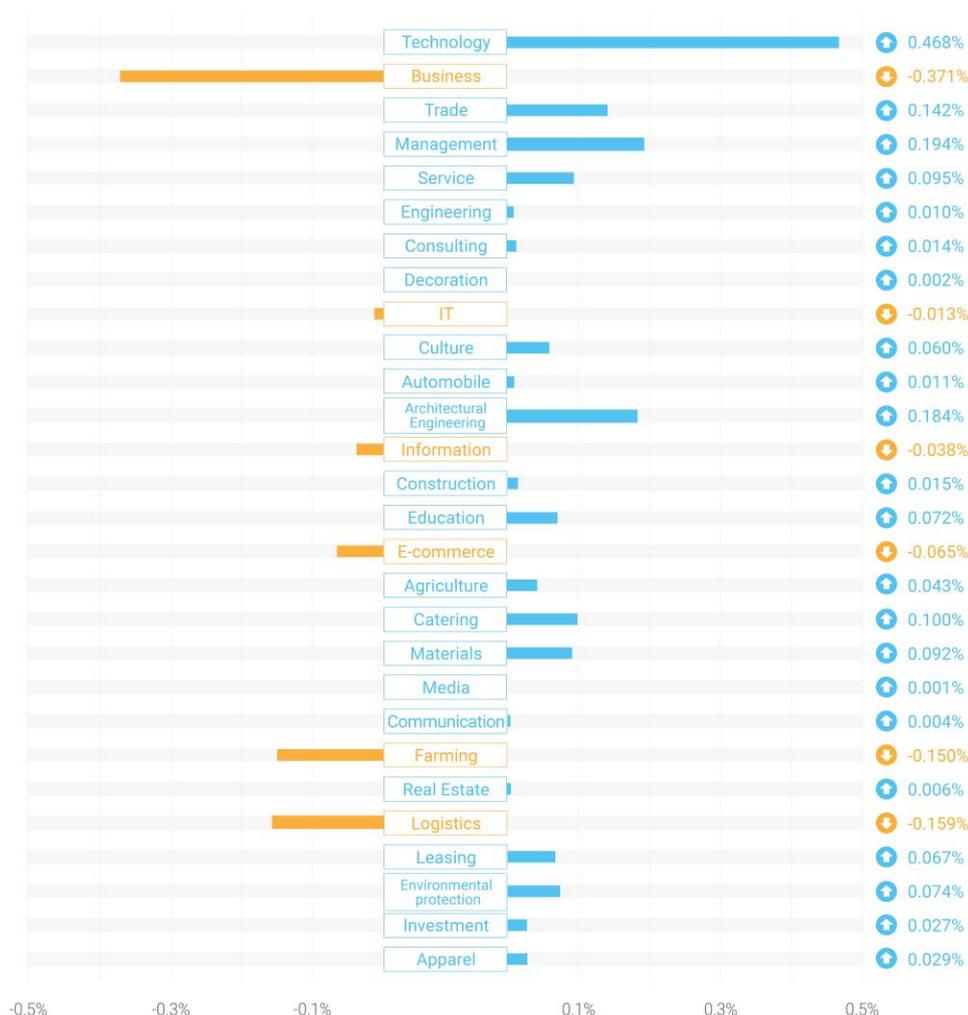


We use newly-established enterprises data to monitor new enterprises in sub-sectors (Chart 7).

Chart7-1: Newly Established Enterprises by Industry (2016 - 2018)

2016		2017			2018					
Industry	Percentage	Industry	Percentage	Change	Industry	Percentage	Change			
01	Technology	3.08%	01	Technology	3.07%	+	01	Technology	3.54%	+
02	Business	2.65%	02	Business	2.47%	+	02	Business	2.10%	+
03	Management	2.23%	03	Service	1.37%	+	03	Trade	1.49%	+
04	Trade	1.67%	04	Trade	1.35%	+	04	Management	1.47%	+
05	Environmental protection	1.45%	05	Management	1.27%	+	05	Service	1.46%	+
06	Service	1.22%	06	Engineering	1.22%	+	06	Engineering	1.23%	+
07	Consulting	0.96%	07	Consulting	1.06%	+	07	Consulting	1.08%	+
08	Engineering	0.90%	08	Decoration	0.84%	+	08	Decoration	0.84%	+
09	Culture	0.84%	09	IT	0.74%	+	09	IT	0.73%	+
10	E-commerce	0.77%	10	Culture	0.67%	+	10	Culture	0.73%	+
11	IT	0.72%	11	Information	0.61%	+	11	Automobile	0.59%	+
12	Decoration	0.67%	12	E-commerce	0.60%	+	12	Architectural Engineering	0.58%	+
13	Communication	0.65%	13	Automobile	0.58%	+	13	Information	0.57%	+
14	Automobile	0.54%	14	Farming	0.56%	+	14	Construction	0.56%	+
15	Information	0.48%	15	Construction	0.54%	+	15	Education	0.54%	+
16	Agriculture	0.47%	16	Logistics	0.51%	+	16	E-commerce	0.53%	+
17	Catering	0.46%	17	Education	0.47%	+	17	Agriculture	0.49%	+
18	Construction	0.32%	18	Media	0.45%	+	18	Catering	0.48%	+
19	Logistics	0.32%	19	Agriculture	0.45%	+	19	Materials	0.45%	+
20	Education	0.32%	20	Communication	0.43%	+	20	Media	0.45%	+
21	Real Estate	0.30%	21	Architectural Engineering	0.40%	+	21	Communication	0.43%	+
22	Media	0.28%	22	Catering	0.38%	+	22	Farming	0.41%	+
23	Materials	0.27%	23	Real Estate	0.37%	+	23	Real Estate	0.38%	+
24	Leasing	0.27%	24	Materials	0.36%	+	24	Logistics	0.35%	+
25	Architectural Engineering	0.24%	25	Investment	0.28%	+	25	Leasing	0.33%	+
26	Investment	0.23%	26	Leasing	0.27%	+	26	Environmental protection	0.33%	+
27	Apparel	0.22%	27	Apparel	0.26%	+	27	Investment	0.31%	+
28	Farming	0.08%	28	Environmental protection	0.25%	+	28	Apparel	0.29%	+

Chart7-2: Percentage Change of Newly Established Enterprises by Industry (2017 - 2018)



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Sub-sectors which were ranking up in last two consecutive years include the following: Architectural Engineering (No.25 in 2016, rising to No.21 and No.12 in 2017 and 2018, 0.16% and 0.18% increase in proportion in 2017 and 2018 respectively, the fastest growth sector in terms of ranking); Education (No. 20 in 2016, rising to No. 17 and No. 15 in 2017 and 2018, 0.15% and 0.07% increase in proportion in 2017 and 2018 respectively); Architecture (No. 18 in 2016, rising to No. 15 and No. 14 in 2017 and 2018, 0.22% and 0.01% increase in proportion in 2017 and 2018 respectively); Automobile (No. 14 in 2016, rising to No. 13 and No. 11 in 2017 and 2018, 0.04% and 0.01% increase in proportion in 2017 and 2018 respectively). Besides, Engineering, Decoration and IT's ranks rose in 2017 and remained unchanged in 2018.

Sub-sectors which were ranking down in last two years include the following: Media (No. 13 in 2016, dropping to No. 20 and No. 21 in 2017 and 2018, 0.22% and 0.00% decrease in proportion in 2017 and 2018 respectively); E-commerce (No. 10 in 2016, dropping to No. 12 and No. 16 in



2017 and 2018, 0.17% and 0.07% decrease in proportion in 2017 and 2018 respectively). Besides, Real Estate and Culture's rank dropped in 2017 and remained unchanged in 2018.

Sub-sectors fluctuating in ranking in last two years include the following: Catering (No.17 in 2017, dropped to No.22 in 2017 and rose to No 18 in 2018); Culture Media (No.22 in 2017, rose to No.18 in 2017 and dropped to No. 20 in 2018); Plantation (No.28 in 2017, rose to No.14 in 2017 and dropped to No 22 in 2018). Other subsectors with rank ups and downs were Logistics, Leasing, Agriculture, Building Materials, Environmental Protection and Management. Technology and Business Industry kept ranking No.1 and No.2 respectively in last two years.

Efficiency of Enterprises with Difference in Export Dependency

This month we explore the business efficiency change of enterprises with different export dependency based on data in new employment (Chart 8) and salary level (Chart 9) in 2017 and 2018.

In the first quarter of 2017, the enterprises which were more export oriented added more new jobs and offered higher salaries. Positive correlations were found among export dependence, new employment, and wage level. In the first quarter of 2018, it was enterprises with medium export dependence that paid higher salaries and had higher shares of new employment, whose efficiency rose the fastest.



Chart8: Share of New Employment in Enterprises Catergorized by Export Dependence

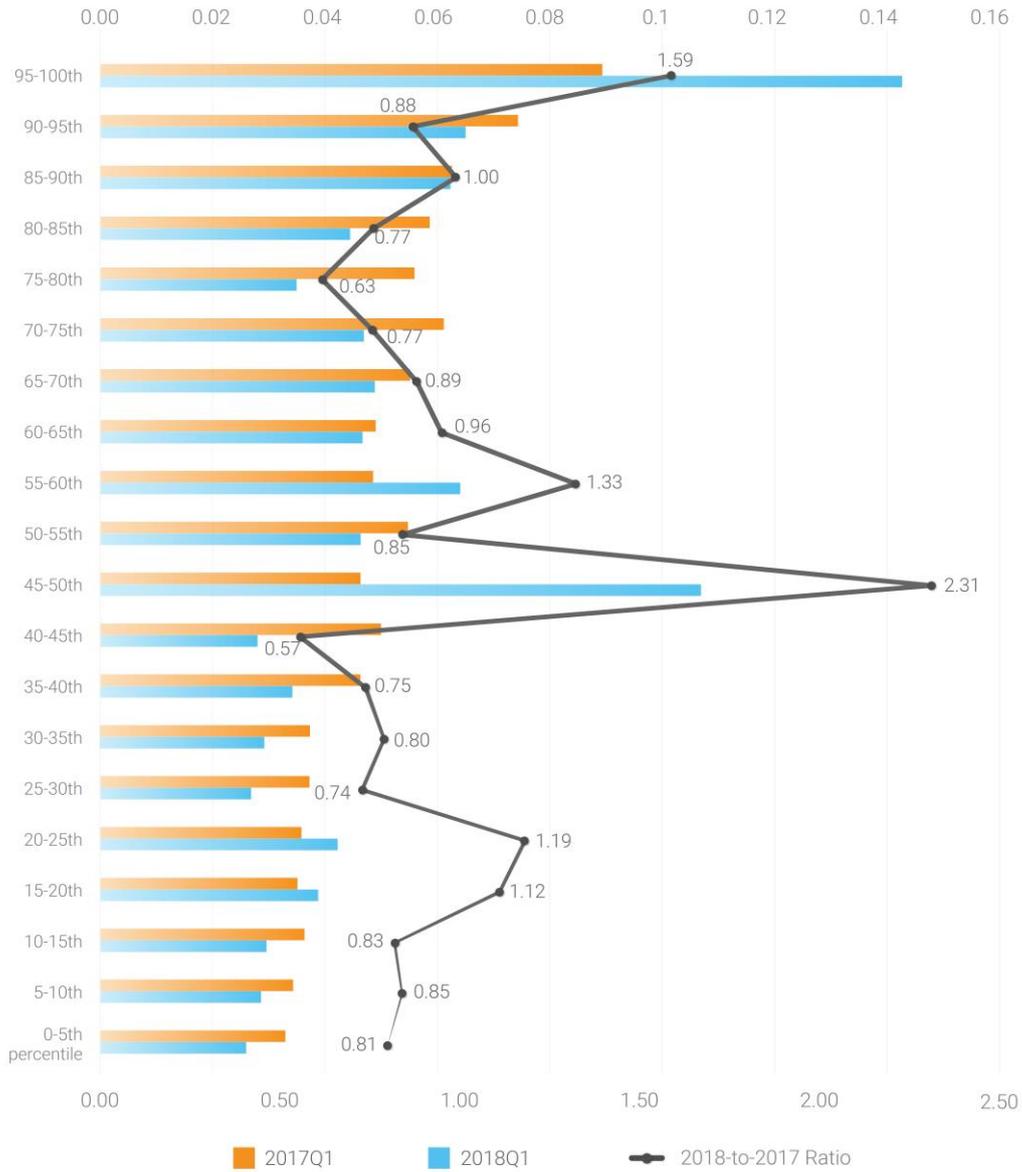
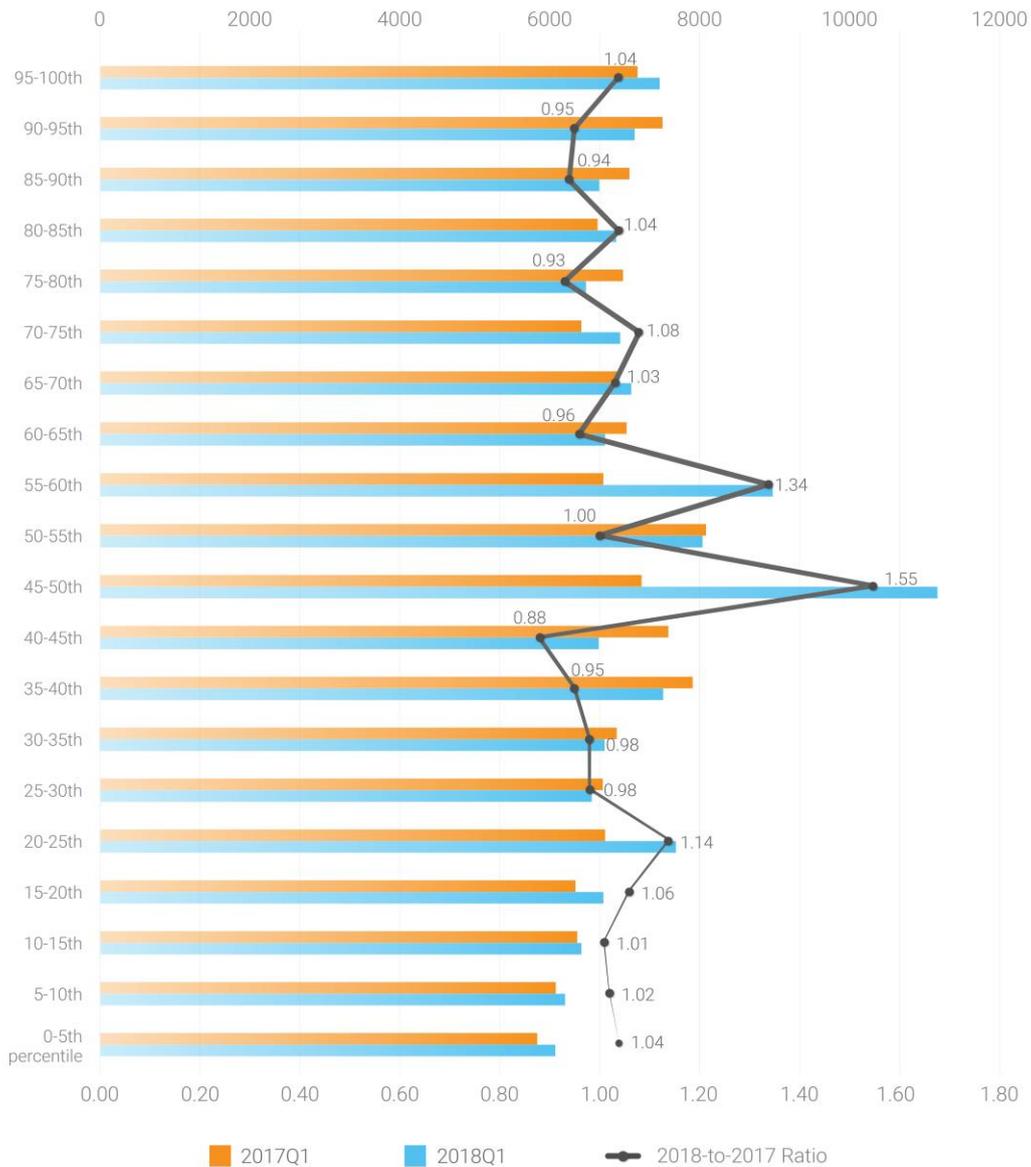


Chart9: Average Salary in Enterprises Categorized by Export Dependence



Empirical economic studies show that exporters’ productivity is relatively higher than that of non-exporters. While in China the opposite is true: the productivity of exporting enterprises is relatively lower, which is so-called *productivity paradox of Chinese exporters*.

Our data indicates that enterprises partly reliant on exports (i.e. enterprises with medium export dependence) had the largest efficiency growth in the first quarter of 2018. In other words, enterprises with the lowest export dependency were mediocre new job and competitive salary providers and it is hard to improve business efficiency in autarky. At the same time, enterprises with the highest export dependency didn’t perform well in new employment creation and labor productivity and the previous “Large Import and Export, Processing Trade” mode has become

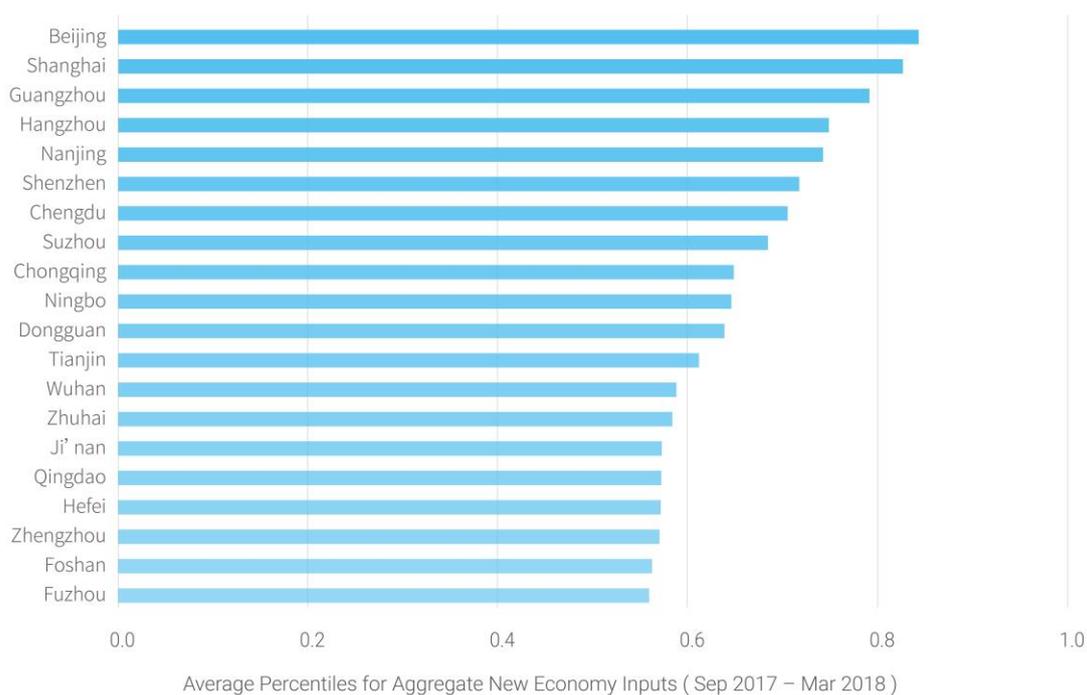


outdated. Our findings might be helpful in trade policy constructions and response to current Sino-US Trade Frictions. China government should avoid harming enterprises with medium export dependency who are main drivers of business efficiency improvement.

City Rankings of the New Economy

Based on overall New Economy rankings, the top twenty cities were shown in Chart 10. The top five cities were Beijing, Shanghai, Guangzhou, Hangzhou, and Nanjing. Rankings are based on a weighted average of the percentile rank of indicators for the city in the past 6 months.

Chart10: China's Top 20 Cities Ranked by New Economy Sector Output

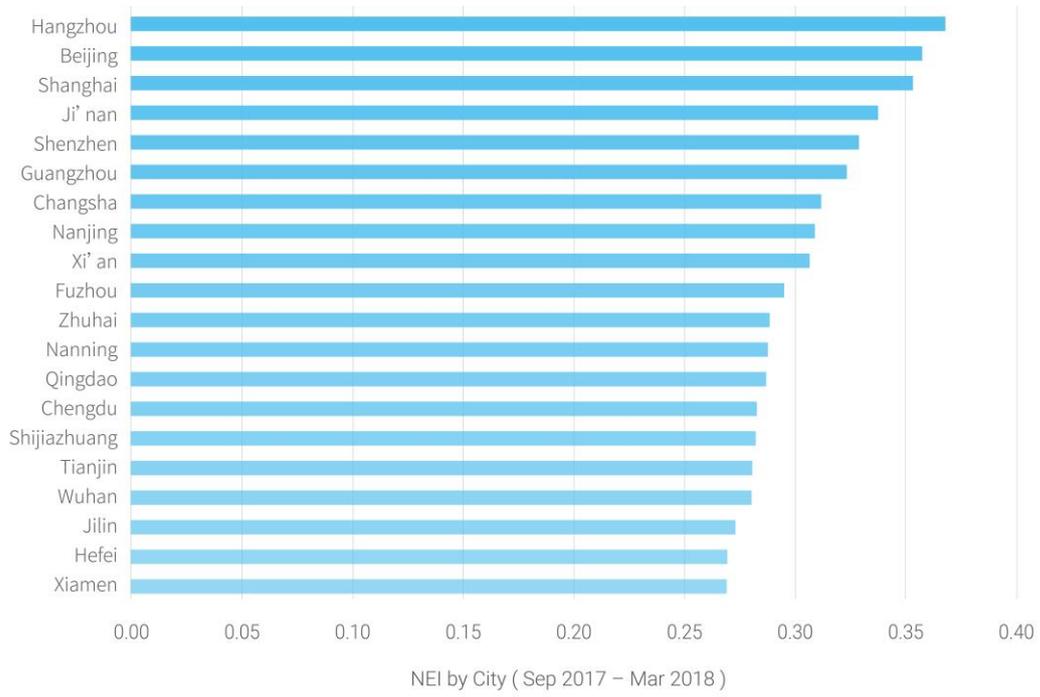


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Chart 11 showed the average NEI city rankings between September 2017 and March 2018. The top five cities were Hangzhou, Beijing, Shanghai, Ji'nan and Shenzhen.



Chart11: China's Top 20 Cities Ranked by Average NEI



Data Visualization Design by Wu Yi

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The Mastercard Caixin BBD China New Economy Index is the fruit of a research partnership between Caixin Insight Group and BBD, in collaboration with the National Development School, Peking University. The subject of a year of research, the NEI was first publically released on March 2, 2016 and will be issued the 2nd of every month at 10:00am China Standard Time.

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