

Overview

In November 2020, the Mastercard Caixin BBD New Economy Index (NEI) reading came in at 30.2, indicating that the New Economy accounted for 30.2% of overall economic input activities that month, up 0.7 ppts from October (Chart 1). The rising NEI was attributed to the increase in technology inputs. 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.



Chart 1: China Monthly New Economy Index

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 rising NEI was attributed to the increase in technology inputs (Chart 2). Technology input index was on a downtrend since April 2020, coming in at 29.7 this month, with 1.5 MoM increase. Capital input fluctuated widely in recent year, increasing to 37.1 this month, with 0.2 MoM increase. Labor input index declined moderately in recent two years, increasing to 24.4 this month, with 0.5 MoM increase.





Taking the weights into account, percentage changes in labor, capital and technology inputs were 0.2, 0.1, and 0.4 ppts, respectively. The net NEI change was 0.6 ppts in total (Chart 3).



Chart 3: Primary Input Contribution to NEI

As for sectors, the New IT industry formed the largest proportion of the New Economy Index, contributing 10.8 ppts to NEI. Energy Conservation & Environmental Protection was the industry with fastest growth in November, contributing 5.0 ppts and ranking the Second. Advanced



Equipment Manufacturing came fourth from second, the biggest drop in ranking, contributing 3.0 ppts in November (Chart 4).



Chart 4: New Economy Sector Contribution Breakdown

New Economy Employment

In November 2020, the average monthly entry-level salary of the New Economy was RMB 12,431, increasing from last month's level of RMB 11,874 (Chart 5), and the entry-level salary premium of the New Economy which is the ratio of average entry salary level of New Economy to that of the whole economy, decreased to 5.5%, compared to 8.0% in October (Chart 6). The wages are compiled from online websites of career platforms and recruitment services including 51job and Zhaopin, as well as other sites that list job openings.









Chart 6: New Economy Entry-Level Salary Premium over Economy-wide Entry Level Salaries



Economic Trend Based on Enterprise Registration Data

Enterprise hazard rate and migration data by industry and region from 2010 to 2020 were analyzed in this section. Hazard rates of different enterprises by industry and region were plotted in Chart 7 and Chart 8. Enterprises in Manufacturing, Wholesale and Retail Trades, IT and Leasing and Business Services all faced higher risks of dissolution around 1000 days and 1500 days since they were established, namely, 3-4 years of existence of a company. The hazard rates of the wholesale and retail trades and leasing and business services peaked again at 4000





days, when these enterprises have been established for about 11 years. The second wave of jeopardy for IT companies came in 15 years since their establishment. For manufacturing enterprises, the hazard rates remained low after the first peak and were significantly lower than their counterparts in other industries.



Chart 7: Hazard Rate by Industry

Hazard rates of enterprises located in Beijing, Shanghai, Guangdong and Sichuan are of difference as well (Chart 8). The hazard rates of Shanghai and Beijing reached its peak at about 3 years after establishment and declined after that. However, the hazard rate of enterprises in Guangdong and Sichuan would not reach the peak until 10 years later. In contrast to higher hazard rates of Shanghai enterprises, Sichuan enterprises were safer at the initial stage but the hazard rates after 8 years of existence were higher. The patterns of enterprise lifecycle across industry and province are suggestive for macroeconomic research.







The establishment of an enterprise's subsidiary in other provinces could somehow be viewed as corporate migration. The directions of migration were shown in Chart 9, which in principle was a transition matrix. For instance, 11.8% of emigrating enterprises in Tianjin would set up its subsidiary at Hebei. For elements in the matrix, the higher the percentage was, the more attractive a specific province would be. In northern provinces, Beijing was the first choice of migration destination and enterprises in eastern and mid-western provinces preferred Shanghai and Guangdong respectively. The provinces with the lowest attraction rate were Ningxia and Qinghai, followed by Heilongjiang. The transition was justified by factors of economic activity and local business environments.





Chart 9: Enterprises Migration Matrix



City Rankings of the New Economy

Overall New Economy Rankings are based on a weighted average of the percentile ranks of indicators for the city in the past six months. The top twenty cities were shown in Chart 10. In November, the top five cities were Beijing, Shanghai, Shenzhen, Guangzhou and Hangzhou.





Chart 10: China's Top 20 Cities Ranked by New Economy Sector Output

Chart 11 showed the average NEI city rankings between May 2020 and November 2020. The top five cities were Beijing, Nanjing, Changsha, Guangzhou and Jinan.





Chart 11: China's Top 20 Cities Ranked by Average NEI

In addition, we showed the city rankings adjusted by living cost by taking housing price, minimum wage and disposable income per capita into account (Chart 12). After the adjustment, the top five cities were Beijing, Chengdu, Shanghai, Hangzhou and Chongqing, following by Shenzhen and Nanjing.





Chart 12: China's Top 20 Cities Ranked by New Economy Sector Output Adjusted by Living Cost

Average Percentiles for Aggregate New Economy Inputs Adjusted by Living Cost (May 2020 – Nov 2020) 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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