China Human Capital Report Series

# The Brief Report of Human Capital in China 2020

China Center for Human Capital and Labor Market Research

Central University of Finance and Economics

Beijing, China

December 2020

## Research Team Members

## Principal Investigator

Haizheng Li	Special-term Professor
	China Center for Human Capital and Labor Market Research (CHLR),
	Central University of Finance and Economics (CUFE)
	& Professor, Georgia Institute of Technology
Faculty Team Member	s
Belton Fleisher	Special-term Professor and Senior Fellow, CHLR (2008- present)
	Professor Emeritus of Economics, Ohio State University
	Scientific Editor of China Economic Review
Barbara M. Fraumeni	Special-term Professor and Senior Fellow, CHLR (2008- present)
	Professor Emerita of Public Policy, University of Southern Maine
Carsten A. Holz	Special-term Professor, CHLR (2013- present)
	Professor of Social Science
	Hong Kong University of Science & Technology
Cynthia Bansak	Special-term Professor, CHLR (2018- present)
	Professor of Economics
	St. Lawrence University
Zhiqiang Liu	Special-term Professor, CHLR (2008- present)
	Professor of Economics
	State University of New York at Buffalo
Xiaojun Wang	Special-term Professor, CHLR (2008- present)
	Associate Professor of Economics
	University of Hawaii at Manoa
Sophie Xuefei Wang	Associate Professor, CHLR (2012- present)

Fanzheng Yang	Assistant Professor, CHLR (2013- present)
Ning Jia	Assistant Professor, CHLR (2015- present)
Nina Yin	Assistant Professor, CHLR (2015- present)
Shan Li	Assistant Professor, CHLR (2016- present)
Chen Huang	Assistant Professor, CHLR (2019- present)

#### 2020 Student Team

#### Project Management Committee

Manager	Chaoqi Wang
Members	Lingyan Shi, Yiting Xu, Hanjun Wang

#### Graduate Students, CHLR

2019 students	Xiaoxue Chang, Xiaojie Gong, Xinwei Guo, Yufeng Hong, Li Li,
	Ruobing Li, Zuo Li, Ruohong Xu, Lei Shi, Rui Tong, Xiaoyu Xiang,
	Ziru Wang, Hao Zhong, Wei Zhang, Zhebin Zhang

## A Brief Introduction to the Human Capital Project

The research project, "China's Human Capital: Measurement and Index Construction," is conducted by the China Center for Human Capital and Labor Research Center (CHLR) and funded by the National Natural Science Foundation of China and the Central University of Finance and Economics. The project aims at establishing China's first scientific and systematic human capital measurement metrics, quantitatively describing China's human capital distribution, trend and dynamics. It constructs important measurements for further evaluating human capital and its contribution to economic development and provides policy-makers with important information on the nation's human capital development.

The project is part of the international effort to establish comparable national human capital measurement across nations and to eventually incorporate human capital into the National Income and Product Accounts (NIPA) system in an expanded set of accounts.

The project is led by Professor Haizheng Li (Georgia Institute of Technology). The research team includes Professor Barbara M. Fraumeni (a pioneer scholar in developing the Jorgenson-Fraumeni method of human capital calculation), all full-time and special-term professors, graduate students, and administrative staff at the CHLR. Since the inaugural issue of the China Human Capital Report 2009, the project has generated great impact both at home and abroad.

#### Notes

We estimate China's human capital stock and describe its distribution and dynamics at the national and provincial levels from 1985 through 2018. A variety of human capital indices are constructed and reported.

In addition to the traditional education-based metrics, we apply the widely used Jorgenson-Fraumeni income-based approach (hereinafter referred to as "J-F method"), which provides a more comprehensive measurement of human capital. We present both education-based and J-F measures for males and females, and by rural and urban areas.

The following notes define terms and measures used through this report:

- Unless otherwise specified, the monetary values are measured in 1985 RMB.
- Average annual growth rates across years are calculated based on the simple average of annual growth rates.
- Real provincial-level human capital is calculated by adjusting with reference to the relevant provincial living-cost-adjustment index (LCI) and the Consumer Price Index (CPI) with 1985 as base year and Beijing as base province.
- We use the term "nation" and "mainland" interchangeably to refer to the 31 provinces (autonomous regions and municipalities) of the mainland China, excluding Hong Kong, Macau, and Taiwan.
- Due to data availability, the estimates of physical capital stock are updated only to 2017.

For more details, refer to the comprehensive China Huan Capital Report 2020.

All the data and results are available at the China human capital database and are free for public use. The data can be downloaded at:

http://humancapital.cufe.edu.cn/rlzbzsxm.htm;

http://cedcdata.cufe.edu.cn/cedc/metadata/list.html

## Brief Human Capital Report

## A. Human Capital at National Level

#### I) Traditional Human Capital Measures

- In 2018, the average age of the labor force at the national level was 38.4 years. The five provinces with the oldest labor force were Heilongjiang, Liaoning, Jilin, Chongqing, and Hunan, and the five provinces with youngest labor force were Guangdong, Xinjiang, Hainan, Guizhou and Tibet.
- In 2018, the average years of school of the labor force at the national level was 10.4. The five provinces with highest years of school were Beijing, Shanghai, Tianjin, Jiangsu and Liaoning, and the five provinces with the lowest years of school were Gansu, Guizhou, Yunnan, Qinghai and Tibet.
- 3. In 2018, the proportion of the labor force with high school education or higher was 39.8%, with 20.7% in rural areas and 52.7% in urban areas.
- In 2018, the proportion of the labor force with college education or above was 19.2%, with 5.4% in rural areas and 28.6% in urban areas.

#### II) The Jorgenson-Fraumeni (J-F) Based Human Capital Measures

- The J-F measure of China's nominal total human capital reached 2613.7 trillion yuan in 2018, with 2288.0 trillion yuan (87.5%) in urban areas and 325.7 trillion yuan (12.5%) in rural areas.
- 6. Nominal human capital per capita was 2286 thousand yuan in 2018, 3130 thousand yuan for urban residents and 790 thousand yuan for rural residents. Average human capital for male was 2835 thousand yuan and for female was 1660 thousand yuan.
- In 2018, the five provinces with highest human capital stock were Shandong, Guangdong, Henan, Jiangsu and Hebei, and the five provinces with lowest human capital stock were Gansu, Hainan, Ningxia, Qinghai and Tibet.
- 8. The five provinces with highest human capital per capita were Beijing, Shanghai,

Tianjin, Zhejiang and Anhui, and the five provinces with lowest level were Tibet, Xinjiang, Yunnan, Gansu and Qinghai.

- The five provinces with highest average labor force human capital were Beijing, Shanghai, Tianjin, Zhejiang and Anhui, and five provinces with the least were Hunan, Hainan, Yunnan, Gansu and Qinghai.
- 10. In 2018, the proportion of aged 0-15 among non-retired people at the national level was 22.7%, and the proportion of their human capital accounted for 51.0% of total human capital.
- In 2018, the proportion of the population aged 25-45 to the total labor force was 55.7% at the national level, and their human capital accounts for 66.1% of the total labor force human capital.
- 12. China's total real human capital in 2018 was 11.2 times its level in 1985, having grown at an average annual rate of 7.8%. The average annual growth rate during the decade 2009-2018 was 9.0%.
- 13. From 1985 to 2018, rural human capital grew at an average annual rate of 3.0%, and urban human capital grew at 10.3%; while during the decade 2009-2018, the growth rate was 10.8% for urban areas but only 1.9% for rural areas. This decline in the average annual growth of rural human capital largely reflects China's rapid urbanization.
- 14. Urban human capital surpassed the rural human capital in 1993 and has remained higher since then.
- 15. Human capital per capita grew from 43.4 thousand yuan to 448.6 thousand yuan, at an average annual rate of 7.3% over the period 1985-2018 and at a rate of 9.0% over the years 2009-2018.
- 16. The average annual growth rate of human capital per capita during the period of 1985-2018 was 6.4% for urban and 4.9% for rural areas. For the years 2009-2018 the growth rates were 8.2% and 5.0%, respectively.

#### B. Human Capital in Hong Kong and Taiwan

- 17. In 2018, the average age of labor force was 39.0 years in Hong Kong and 39.5 years in Taiwan.
- In 2018, the average years of school of the labor force were 12.4 years in Hong Kong and 13.7 years in Taiwan.
- 19. In 2018, the proportion of the labor force with high school education or above was76.1% in Hong Kong and 88.2% in Taiwan.
- 20. In 2018, the proportion of the labor force with college education or above was 43.3% in Hong Kong and 56.0% in Taiwan.
- 21. In 2018, the proportion of aged 0-15 among non-retired people was 17.9% in Hong Kong, and they human accounted for 21.6% of total human capital in Hong Kong.
- 22. In 2018, the proportion of aged 0-15 among non-retired people was 17.0% in Taiwan, and they accounted for 20.4% of total human capital in Taiwan.
- 23. In 2018, the proportion of the population aged 25-45 to the total labor force was 55.7% in Hong Kong, and they accounted for 68.1% of total labor force human capital.
- 24. In 2018, the proportion of the population aged 25-45 to the total labor force was 55.0% in Taiwan, and they accounted for 72.9% total labor force human.
- 25. In Hong Kong, the average annual growth rate of J-F based total human capital and human capital per capita between 1997 and 2018 was 6.4%. Over the years 2009-2018, the rates were 4.9% and 5.2%, respectively.
- 26. In Taiwan, during 1997-2018, the average annual growth rate of J-F based total human capital was -0.9%, and for human capital per capita it was -0.6%; while over the years 2009-2018, the rates were -1.5% and -0.7%, respectively.

## C. Human Capital at the Provincial Level

## I) Average Age of the Labor Force

Table 1.1 shows the average age of the labor force in 2018 among all provinces in China in descending order. In general, the average age of the labor force was between 35 and 40 years in 2018, and the three northeast provinces of China (Heilongjiang, Liaoning, and Jilin) ranked as the oldest, while Tibet was the youngest.

				Unit: Year (of age)
Rank	Province _		Average Age	
Канк		Sub-Total	Urban	Rural
1	Heilongjiang	40.2	40.4	39.9
2	Liaoning	40.0	40.0	39.8
3	Jilin	39.7	39.8	39.6
4	Chongqing	39.4	39.3	39.6
5	Hunan	39.1	39.3	38.9
6	Zhejiang	39.0	38.5	40.1
7	Shanghai	39.0	38.4	39.9
8	Inner Mongolia	39.0	38.6	39.6
9	Hubei	38.9	38.5	39.4
10	Jiangsu	38.8	38.5	39.4
11	Hebei	38.6	38.5	38.7
12	Sichuan	38.5	38.2	38.8
13	Tianjin	38.3	38.2	38.6
14	Jiangxi	38.2	38.4	37.9
15	Fujian	38.1	37.8	38.6
16	Shanxi	38.0	38.2	37.8
17	Shandong	38.0	38.0	38.0

Table 1.1 Average Age of the Labor Force (2018)

18	Qinghai	37.9	38.3	37.5
19	Guangxi	37.7	37.5	38.0
20	Beijing	37.7	37.5	38.8
21	Shannxi	37.7	37.1	38.5
22	Henan	37.6	37.7	37.6
23	Gansu	37.6	37.6	37.6
24	Anhui	37.6	37.2	37.9
25	Yunnan	37.4	37.7	37.1
26	Ningxia	37.2	37.7	36.7
27	Guangdong	36.7	36.8	36.6
28	Xinjiang	36.7	37.9	35.7
29	Hainan	36.5	36.5	36.6
30	Guizhou	36.3	36.5	36.2
31	Tibet	35.4	33.6	36.3
	Nation	38.4	38.4	38.4

## **II) Education Indicators**

Table 2.1 shows the provincial rankings by average years of school of the labor force in 2018. In general, the provinces with better economic development have more schooling; leading examples are Beijing, Shanghai and Tianjin; and in contrast, underdeveloped provinces, such as Yunnan, Qinghai and Tibet, rank at the bottom. Average school years of the urban labor force exceeds that of the rural labor force in each province, and the urban-rural gap is greater in the less-developed provinces. For example, the urban-rural differential in Tibet was 4.95 years while the gap in Beijing was only 2.78 years.

Sub-total         Urban         Ru           Beijing         13.0         13.3         1           Shanghai         12.0         12.0         1           Tianjin         11.3         11.7         9           Jiangsu         10.9         11.5         9           Liaoning         10.9         11.8         9           Hubei         10.7         11.7         9           Shanxi         10.7         11.8         9           Shanxi         10.7         11.6         9           Shanxi         10.7         11.6         9           Inner Mongolia         10.7         11.6         9           Guangdong         10.5         10.9         9           Jilin         10.4         11.7         8           Chongqing         10.4         11.1         8           Shandong         10.3         11.6         8           Jilin         10.3         11.6         8           Jilin         10.3         11.6         8           Jilin         10.3         11.6         8           Jilin         10.3         11.6         8           Jilinan </th <th></th> <th><b>_</b> .</th> <th colspan="2"></th> <th colspan="2">Years of School</th>		<b>_</b> .			Years of School	
Shanghai       12.0       12.0         Tianjin       11.3       11.7       9         Jiangsu       10.9       11.5       9         Liaoning       10.9       11.8       9         Hubei       10.7       11.7       9         Shaanxi       10.7       11.8       9         Shaanxi       10.7       11.6       9         Shanxi       10.7       11.6       9         Inner Mongolia       10.7       11.6       9         Jilin       10.6       11.5       9         Guangdong       10.5       10.9       9         Guangdong       10.3       11.6       9         Shandong       10.3       11.6       9         Heilongjiang       10.3       11.6       9         Hebei       10.3       11.6       9         Hebei       10.3       11.6       9         Hebei       10.3       11.6       9         Hebei       10.3       11.4       9	Rank	Province _	Sub-total	Urban	Rural	
Tianjin       11.3       11.7       9         Jiangsu       10.9       11.5       9         Liaoning       10.9       11.8       9         Hubei       10.7       11.7       9         Shaanxi       10.7       11.8       9         Shaanxi       10.7       11.8       9         Shanxi       10.7       11.6       9         Shanxi       10.7       11.6       9         O       Hunan       10.6       11.5       9         O       Hunan       10.6       11.5       9         O       Hunan       10.6       11.7       8         Chongqing       10.3       10.9       9       9         S       Jilin       10.4       11.7       8         S       Chongqing       10.3       11.6       8         S       Zhejiang       10.3       11.6       8         S       Hainan       10.3       11.0       9         S       Hainan       10.3       11.4       8         Hebei       10.3       11.2       9	1	Beijing	13.0	13.3	10.6	
Jiangsu       10.9       11.5       9         Liaoning       10.9       11.8       9         Hubei       10.7       11.7       9         Shaanxi       10.7       11.8       9         Shanxi       10.7       11.6       9         Shanxi       10.7       11.6       9         Inner Mongolia       10.7       11.6       9         Munan       10.6       11.5       9         Munan       10.6       11.5       9         Jilin       10.4       11.7       8         Chongqing       10.3       11.6       8         Shandong       10.3       11.6       8         Kandong       10.3       11.4       8         Kandong       10.3       11.4       8         Kandong       10.3       11.2       9	2	Shanghai	12.0	12.0	-	
Liaoning       10.9       11.8       9         Hubei       10.7       11.7       9         Shaanxi       10.7       11.8       9         Shanxi       10.7       11.6       9         Shanxi       10.7       11.6       9         Inner Mongolia       10.7       11.6       9         Munan       10.6       11.5       9         Hunan       10.6       11.5       9         Guangdong       10.5       10.9       9         Jilin       10.4       11.7       8         Chongqing       10.3       11.6       8         Shandong       10.3       11.6       8         Heilongjiang       10.3       11.4       8	3	Tianjin	11.3	11.7	9.5	
Hubei       10.7       11.7       9         Shaanxi       10.7       11.8       9         Shanxi       10.7       11.6       9         Shanxi       10.7       11.6       9         Inner Mongolia       10.7       11.6       9         Hunan       10.6       11.5       9         Hunan       10.6       11.5       9         Guangdong       10.5       10.9       9         Jilin       10.4       11.7       8         Chongqing       10.3       11.6       8         Shandong       10.3       11.6       8         Kandong       10.3       11.6       8         Heilongjiang       10.3       11.4       8         Hebei       10.3       11.2       9	4	Jiangsu	10.9	11.5	9.7	
Shaanxi       10.7       11.8       9         Shanxi       10.7       11.6       9         Inner Mongolia       10.7       11.6       9         Munan       10.6       11.5       9         Hunan       10.6       11.5       9         Guangdong       10.5       10.9       9         Jilin       10.4       11.7       8         Chongqing       10.3       11.6       8         Shandong       10.3       11.6       9         Heilongjiang       10.3       11.4       8	5	Liaoning	10.9	11.8	9.0	
Shanxi       10.7       11.6       9         Inner Mongolia       10.7       11.6       9         Hunan       10.6       11.5       9         Guangdong       10.5       10.9       9         Jilin       10.4       11.7       8         Chongqing       10.4       11.1       8         Chongqing       10.3       11.6       9         Shandong       10.3       11.6       9         Heilongjiang       10.3       11.4       8         Hebei       10.3       11.2       9	6	Hubei	10.7	11.7	9.3	
Inner Mongolia       10.7       11.6       9         Munan       10.6       11.5       9         Guangdong       10.5       10.9       9         Jilin       10.4       11.7       8         Chongqing       10.4       11.1       8         Chongqing       10.3       11.6       8         Shandong       10.3       11.6       9         Heilongjiang       10.3       11.4       8         Hebei       10.3       11.2       9	7	Shaanxi	10.7	11.8	9.4	
Hunan       10.6       11.5       9         Guangdong       10.5       10.9       9         Jilin       10.4       11.7       8         Chongqing       10.4       11.1       8         Chongqing       10.3       11.6       8         Shandong       10.3       11.6       8         Kandong       10.3       11.0       9         Kandong       10.3       11.4       8         Kandong       10.3       11.4       8         Kandong       10.3       11.4       8         Kandong       10.3       11.2       9	8	Shanxi	10.7	11.6	9.6	
I       Guangdong       10.5       10.9       9         2       Jilin       10.4       11.7       8         3       Chongqing       10.4       11.1       8         4       Shandong       10.3       11.6       8         5       Zhejiang       10.3       10.7       9         5       Hainan       10.3       11.0       9         7       Heilongjiang       10.3       11.4       8         8       Hebei       10.3       11.2       9	9	Inner Mongolia	10.7	11.6	9.0	
2       Jilin       10.4       11.7       8         3       Chongqing       10.4       11.1       8         4       Shandong       10.3       11.6       8         5       Zhejiang       10.3       10.7       9         5       Hainan       10.3       11.0       9         7       Heilongjiang       10.3       11.4       8         8       Hebei       10.3       11.2       9	10	Hunan	10.6	11.5	9.5	
3       Chongqing       10.4       11.1       8         4       Shandong       10.3       11.6       8         5       Zhejiang       10.3       10.7       9         5       Hainan       10.3       11.0       9         7       Heilongjiang       10.3       11.4       8         8       Hebei       10.3       11.2       9	11	Guangdong	10.5	10.9	9.5	
A       Shandong       10.3       11.6       8         5       Zhejiang       10.3       10.7       9         5       Hainan       10.3       11.0       9         6       Hainan       10.3       11.4       8         7       Heilongjiang       10.3       11.2       9	12	Jilin	10.4	11.7	8.8	
5       Zhejiang       10.3       10.7       9         5       Hainan       10.3       11.0       9         6       Heilongjiang       10.3       11.4       8         7       Hebei       10.3       11.2       9	13	Chongqing	10.4	11.1	8.9	
5     Hainan     10.3     11.0     9       7     Heilongjiang     10.3     11.4     8       8     Hebei     10.3     11.2     9	14	Shandong	10.3	11.6	8.8	
7       Heilongjiang       10.3       11.4       8         8       Hebei       10.3       11.2       9	15	Zhejiang	10.3	10.7	9.3	
B Hebei 10.3 11.2 9	16	Hainan	10.3	11.0	9.3	
	17	Heilongjiang	10.3	11.4	8.7	
) Honon $10.2$ 11.1	18	Hebei	10.3	11.2	9.2	
и пенан 10.2 11.1 S	19	Henan	10.2	11.1	9.3	
) Anhui 10.2 11.2 9	20	Anhui	10.2	11.2	9.0	
Jiangxi 10.1 11.0	21	Jiangxi	10.1	11.0	9.1	
2 Fujian 10.1 10.7 8	22	Fujian	10.1	10.7	8.9	
B Guangxi 9.9 11.1 8	23	Guangxi	9.9	11.1	8.7	
Ningxia 9.9 11.1 8	24	Ningxia	9.9	11.1	8.4	

25	Sichuan	9.9	11.1	8.6
26	Xinjiang	9.9	11.7	8.5
27	Gansu	9.7	11.6	8.2
28	Guizhou	9.2	10.5	8.1
29	Yunnan	9.1	10.6	7.9
30	Qinghai	8.7	10.3	6.8
31	Tibet	7.2	10.4	5.4
	Nation	10.4	11.3	9.0

Table 2.2 shows the 2018 provincial rankings for the proportion of worker with high school education and above in the labor forces. Beijing, Shanghai and Tianjin had the highest average years of school, while Yunnan and Tibet were at the bottom.

Table 2.2 The Proportion of High School Education and Above of the Labor Force (2018)	3)
Unit:	%

Rank	Province _	The proportion of high school education and above			
Кашк		Sub-total	Urban	Rural	
1	Beijing	72.3	76.8	42.8	
2	Shanghai	59.2	59.2	-	
3	Tianjin	50.2	55.6	21.5	
4	Jiangsu	47.1	54.5	29.7	
5	Hunan	44.8	58.7	28.4	
6	Hubei	44.5	58.7	23.0	
7	Shaanxi	44.1	58.0	26.1	
8	Inner Mongolia	44.1	57.2	21.0	
9	Shanxi	43.5	57.0	25.9	
10	Liaoning	43.1	56.7	13.6	
11	Guangdong	43.1	49.2	26.9	

12	Chongqing	41.1	51.4	20.8
13	Ningxia	39.4	53.0	20.4
14	Zhejiang	39.0	44.7	26.4
15	Fujian	37.9	45.9	22.4
16	Hainan	37.9	49.9	21.2
17	Jilin	37.8	57.3	12.7
18	Gansu	37.7	59.9	19.6
19	Shandong	37.2	57.4	13.6
20	Henan	36.9	51.5	21.8
21	Anhui	36.7	52.1	18.2
22	Jiangxi	36.6	49.1	21.7
23	Sichuan	36.3	52.4	18.7
24	Hebei	35.3	49.9	18.5
25	Heilongjiang	35.2	51.8	11.2
26	Xinjiang	34.6	63.1	11.3
27	Guangxi	33.0	49.8	15.3
28	Qinghai	30.9	46.3	12.5
29	Guizhou	29.2	45.6	14.8
30	Yunnan	27.5	45.2	13.2
31	Tibet	22.9	50.3	7.9
	Nation	39.8	52.7	20.7

Table 2.3 shows the provincial rankings for the proportion of workers with college education and above in the labor force in 2018. The rankings are consistent with the rankings of the proportion of workers with high school education in general. However, some provinces rank lower in their proportions of college graduates than of high-school graduates, for example, Liaoning.

D1_	Duraninaa	The proportion of college education and above		
Rank	Province _	Sub-total	Urban	Rural
1	Beijing	52.8	58.2	17.0
2	Shanghai	39.5	39.5	-
3	Tianjin	30.0	34.3	7.3
4	Liaoning	24.9	34.5	4.0
5	Jiangsu	24.2	30.7	9.0
6	Shaanxi	24.2	36.6	8.1
7	Inner Mongolia	23.8	33.4	7.0
8	Hubei	22.4	32.7	6.8
9	Zhejiang	21.1	26.5	8.8
10	Ningxia	20.5	30.5	6.7
11	Shanxi	19.6	29.6	6.6
12	Jilin	19.6	31.8	3.9
13	Chongqing	19.3	26.6	4.7
14	Fujian	19.0	25.5	6.3
15	Shandong	18.4	32.0	2.6
16	Gansu	18.2	33.4	5.9
17	Hunan	18.0	28.7	5.3
18	Heilongjiang	18.0	28.4	3.0
19	Guangdong	17.2	21.8	5.1
20	Sichuan	17.0	28.2	4.9
21	Anhui	17.0	26.8	5.2
22	Xinjiang	16.4	32.3	3.5
23	Hebei	16.3	26.9	4.3
24	Hainan	15.6	22.3	6.2

 Table 2.3 The Proportion of College Education and Above of the Labor Force (2018)

Unit: %

25	Jiangxi	15.1	23.8	4.9
26	Qinghai	15.0	23.8	4.5
27	Guangxi	14.8	25.5	3.5
28	Yunnan	13.6	25.7	3.9
29	Henan	13.4	22.6	3.9
30	Guizhou	12.6	22.1	4.2
31	Tibet	11.6	27.1	3.1
	Nation	19.2	28.6	5.4

## III) J-F Human Capital

## 3.1 Total Human Capital

Table 3.1 presents the provincial J-F human capital in 1985 prices. Real human capital is created by deflating nominal human capital with a Living Cost Index (LCI) based on Brandt and Holz (2006) as well as using provincial Consumer Price Index (CPI). Shandong has the highest real human capital, followed by Guangdong; Tibet ranks the lowest. From the comparison of cross-provincial differences, the adjustment of the cost of living index has narrowed the gap between developed and underdeveloped provinces to some extent, because the price level is generally positively correlated with the level of development.

Unit: 100 Billion Yuan

Rank	Province	Real Human Capital
1	Shandong	407.5
2	Guangdong	364.2
3	Henan	354.7
4	Jiangsu	349.4

5	Hebei	302.3
6	Zhejiang	286.7
7	Sichuan	272.2
8	Anhui	259.2
9	Hubei	232.9
10	Hunan	187.3
11	Jiangxi	177.8
12	Guangxi	175.8
13	Fujian	168.8
14	Beijing	166.6
15	Shanghai	151.1
16	Liaoning	129.5
17	Shaanxi	126.1
18	Guizhou	124.0
19	Chongqing	121.0
20	Yunnan	115.4
21	Shanxi	103.1
22	Tianjin	98.6
23	Inner Mongolia	91.7
24	Heilongjiang	89.8
25	Jilin	85.8
26	Xinjiang	69.0
27	Gansu	55.7
28	Hainan	26.7
29	Ningxia	23.7
30	Qinghai	11.2
31	Tibet	10.4

## 3.2 Human Capital Per Capita

Table 3.2 shows the provincial human capital per capita in real value (1985 RMB and Beijing as the base). The provincial ranking of real human capital per capita shows Beijing, Shanghai and Tianjin as the top three and Qinghai at the bottom. The per capita human capital ranking presents a good picture of the inequality of the development stage of the provinces. The ranking is influenced by education level and population structure.

Table 3.2 Real Human Capital Per Capital Comparison (2018)

		Onit: Thousand Taun
Rank	Province	Real Human Capital Per Capita
1	Beijing	949.0
2	Shanghai	849.2
3	Tianjin	813.6
4	Zhejiang	626.6
5	Anhui	550.3
6	Jiangsu	542.0
7	Chongqing	521.1
8	Hubei	501.6
9	Shandong	492.4
10	Fujian	492.0
11	Hebei	492.0
12	Jiangxi	458.7
13	Inner Mongolia	444.5
14	Henan	438.7
15	Shaanxi	417.3
16	Sichuan	416.9
17	Guangxi	409.3

Unit: Thousand Yuan

18	Jilin	405.7
19	Liaoning	400.7
20	Ningxia	388.2
21	Guizhou	378.3
22	Guangdong	372.0
23	Shanxi	343.2
24	Hunan	341.3
25	Hainan	320.4
26	Heilongjiang	319.0
27	Tibet	315.7
28	Xinjiang	305.4
29	Yunnan	277.1
30	Gansu	249.3
31	Qinghai	215.6

## 3.3 Real Labor Force Human Capital

Provincial real labor force human capital is displayed in table 3.3. Overall, Shandong has the highest real labor force human capital, followed by Guangdong and Jiangsu; Tibet has the least. The provincial rankings by real labor force human capital can differ from their ranking based on total human capital because of the different sizes of the provincial labor forces.

Table 3.3 Real Labor Force Human Capital Comparison (2018)

Rank	Province	Real Labor Force Human Capital
1	Shandong	158.6
2	Guangdong	155.1
3	Jiangsu	132.1

4	Henan	126.9
5	Zhejiang	110.1
6	Sichuan	107.1
7	Hebei	98.7
8	Anhui	94.8
9	Hubei	81.0
10	Beijing	73.1
11	Hunan	69.2
12	Jiangxi	61.9
13	Fujian	61.6
14	Liaoning	57.5
15	Shanghai	57.3
16	Guangxi	56.0
17	Shaanxi	47.6
18	Yunnan	46.8
19	Shanxi	46.1
20	Heilongjiang	45.7
21	Guizhou	42.2
22	Inner Mongolia	41.7
23	Chongqing	41.0
24	Tianjin	38.7
25	Jilin	37.3
26	Xinjiang	28.5
27	Gansu	24.9
28	Hainan	10.0
29	Ningxia	9.4
30	Qinghai	5.3
31	Tibet	4.1

## 3.4 Labor Force Human Capital Per Capita

Table 3.4 shows the provincial comparison for real labor force human capital per member of the labor force. Beijing remains at the top, Shanghai and Tianjin follow; Qinghai remains at the bottom.

		Unit: Thousand Yuan
Rank	Province	Real Labor Force Human Capital Per Capital
1	Beijing	518.3
2	Shanghai	403.6
3	Tianjin	400.6
4	Zhejiang	323.8
5	Anhui	290.1
6	Jiangsu	280.8
7	Shandong	267.8
8	Inner Mongolia	259.6
9	Fujian	259.0
10	Chongqing	248.3
11	Hubei	242.2
12	Henan	238.6
13	Hebei	237.0
14	Jiangxi	235.5
15	Liaoning	227.7
16	Sichuan	226.0
17	Ningxia	223.5
18	Shaanxi	222.3
19	Jilin	222.0

#### Table 3.4 Real Labor Force Human Capital Per Capital Comparison (2018)

20	Guangdong	221.2
21	Shanxi	206.0
22	Guangxi	204.4
23	Tibet	197.8
24	Heilongjiang	197.2
25	Guizhou	196.7
26	Xinjiang	184.0
27	Hunan	179.7
28	Hainan	174.7
29	Yunnan	158.6
30	Gansu	153.9
31	Qinghai	141.2

# IV) Other Important Human Capital Indicators

Table 4.1 The Proportion of Aged 0-15 Among Non-retired People

and Their Share of Total Human Capital (2018)

Unit: %

Province	<b>Proportion of Population</b>		Proportion of Human Capital	
	Proportion	Rank	Proportion	Rank
Guangxi	29.0	1	55.7	1
Guizhou	27.3	2	51.8	9
Henan	27.3	3	52.5	8
Jiangxi	25.8	4	52.6	7
Xinjiang	25.7	5	45.5	22
Hainan	25.6	6	52.7	6
Hebei	25.4	7	55.0	2
Fujian	25.3	8	54.7	3

Tibet	25.3	9	41.7	29
Ningxia	23.5	10	48.5	16
Yunnan	23.5	11	47.1	21
Anhui	23.5	12	49.3	15
Hunan	23.2	13	49.5	14
Guangdong	22.8	14	47.3	19
Shandong	22.6	15	50.2	13
Qinghai	22.4	16	40.7	30
Hubei	21.8	17	53.5	4
Shannxi	21.8	18	48.2	17
Gansu	20.9	19	42.4	27
Jiangsu	20.9	20	50.7	12
Sichuan	20.8	21	47.6	18
Chongqing	20.7	22	50.7	11
Zhejiang	20.0	23	51.7	10
Shanxi	19.5	24	43.5	25
Inner Mongolia	16.9	25	44.3	24
Liaoning	15.4	26	42.0	28
Shanghai	15.1	27	52.8	5
Jilin	14.2	28	42.5	26
Beijing	14.0	29	45.5	23
Tianjin	13.3	30	47.2	20
Heilongjiang	11.9	31	35.1	31

Province	Proportion of Population		Proportion of Hun	Ur nan Capital
	Proportion	Rank	Proportion	Rank
Shanghai	65.4	1	79.5	1
Beijing	64.4	2	76.2	2
Fujian	59.2	3	67.4	7
Hainan	59.1	4	63.2	16
Guangdong	59.1	5	65.7	12
Tianjin	57.6	6	67.4	8
Hebei	57.1	7	69.3	5
Jiangsu	56.7	8	72.5	3
Guangxi	56.6	9	61.8	20
Zhejiang	56.2	10	66.6	9
Tibet	55.9	11	53.0	30
Yunnan	55.3	12	60.4	23
Liaoning	54.8	13	70.3	4
Qinghai	54.7	14	62.8	18
Jiangxi	54.4	15	59.5	26
Shaanxi	54.2	16	62.5	19
Shandong	54.1	17	64.6	14
Xinjiang	54.1	18	59.9	24
Shanxi	54.0	19	63.4	15
Hunan	53.9	20	66.3	10
Jilin	53.8	21	67.5	6
Ningxia	53.7	22	63.1	17
Hubei	53.4	23	65.5	13

## Table 4.2 The Proportion of Aged 25-45 in the Labor Force

## and Their Share of Total Labor Force Human Capital (2018)

Heilongjiang	53.2	24	66.0	11
Inner Mongolia	53.2	25	60.5	22
Henan	53.0	26	59.8	25
Guizhou	51.4	27	51.7	31
Anhui	50.5	28	54.3	29
Chongqing	50.2	29	61.3	21
Gansu	49.8	30	57.8	27
Sichuan	49.7	31	56.2	28