Analysis and Prediction of Chinese Macro-economy from 2017 to 2018
(October 2017)

Chinese Economy after the 19th National Congress of the Communist Party of China
2018, 2035 and 2050

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Consumption: Consumption will grow steadily and lead the growth rate of GDP
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The report of the 19th National Congress of the Communist Party of China (the 19th National Congress) depicts the magnificent blueprint of China's construction of a modern and powerful socialist state, and boosts the momentum and confidence of the whole society and the whole nation. We believe that Chinese economy still has a high medium-and-long-term growth potential under the background of continuous increase of effective supply of labor and the further development of advantage of a big country. According to our calculation, when a well-off society is built in 2020, the per capita GDP of China will reach 30% of that of the United States based on the purchasing power parity, and China will become a high-income country. By 2035, China will become one of the top 30 developed countries in the world; by 2050, China will become one of the most developed countries in the world.

In the first three quarters of 2017, the steady growth of Chinese economy was further consolidated, investment growth decreased slightly, consumption growth maintained stable, and growth of foreign trade accelerated. We expect that the economy will grow by 6.9% in 2017. The 19th National Congress further set the goal of paying attention to quality, increasing benefits and optimizing the structure. The growth of economic aggregate is no longer the only policy consideration. It can be expected that in the future the implementation of reforms will accelerate, and the new kinetic energy represented by digital economy and high-end equipment manufacturing will promote the stable operation of the economy. Looking forward to 2018, we believe that consumption will grow steadily and rapidly, private investment will further rise and hedge the impact of growth decline of infrastructure investment and real estate investment. CCWE forecasts that in 2018 the annual GDP growth rate will be 6.8%, the economic structure will be more optimized, and the growth momentum will be more sustainable.

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (%)</td>
<td>6.9</td>
<td>6.7</td>
<td>6.9*</td>
<td>6.8*</td>
</tr>
<tr>
<td>CPI (%)</td>
<td>1.4</td>
<td>2.0</td>
<td>1.6*</td>
<td>2.2*</td>
</tr>
<tr>
<td>PPI (%)</td>
<td>-5.2</td>
<td>-1.4</td>
<td>6.5*</td>
<td>4.5*</td>
</tr>
<tr>
<td>Year-on-year growth of export(%)</td>
<td>-2.8</td>
<td>-7.7</td>
<td>11.5*</td>
<td>10.5*</td>
</tr>
<tr>
<td>Year-on-year growth of import (%)</td>
<td>-14.1</td>
<td>-5.5</td>
<td>20.5*</td>
<td>17.5*</td>
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<tr>
<td>Year-on-year growth of M2 balance (%)</td>
<td>13.3</td>
<td>11.3</td>
<td>9.2*</td>
<td>9.6*</td>
</tr>
<tr>
<td>Year-on-year growth of retail (%)</td>
<td>10.7</td>
<td>10.4</td>
<td>10.5*</td>
<td>10.6*</td>
</tr>
<tr>
<td>Year-on-year growth of fixed-asset investment (%)</td>
<td>10.0</td>
<td>8.1</td>
<td>7.6*</td>
<td>7.2*</td>
</tr>
</tbody>
</table>

I. Chinese economy: 2035 and 2050

1. Big picture of Chinese economy in 2035 and 2050

When a well-off society is built in 2020, China's per capita GDP in accordance with the current exchange rate will reach USD10,514-10,714 (constant price in 2016), and per capita GDP based on PPP will reach 18,526-18,876 international dollars (constant price in 2011). At that time, the per capita GDP level based on PPP will be roughly equal to 29%-32% of that of the United States, and closer to the threshold value of "high-income countries". Around 2025, we can become one of the high-income countries.

2020-2035 is the struggle stage of the first "15-year goal". The descriptive definition of "essentially realizing socialist modernization", the first 15-year goal, in the report of the 19th National Congress: "At that time, China's economic strength and technological strength will improve significantly, China will be an innovative country; people's equal participation and equal development rights are fully guaranteed; a legal state, a legal government and a legal society will be essentially completed, systems in all aspects will be more perfect, national governance system and governance capacity modernization will be essentially realized; the degree of social civilization will reach a new height, the national culture soft strength will significantly improve, the influence of Chinese culture will be more extensive; people will be richer, the proportion of middle-income groups will significantly increase, urban and rural regional development gap and the gap between the living standards of residents will significantly reduce, equal basic public services will be realized, all the people will move towards common prosperity; the pattern of modern social governance will be essentially formed, the society will be active, harmonious and orderly; the ecological environment will be fundamentally improved, and the goal of beautiful China will be essentially realized."

It is the second struggle stage of the "15-year goal" from 2035 to the middle of this century. The descriptive definition of "building a modern socialist country", the second 15-year goal, in the report of the 19th National Congress: "At that time, China's material civilization, political civilization, spiritual civilization, social civilization and ecological civilization will improve comprehensively, the modernization of the national governance system and governance capacity will be realized, China will become a country with leading comprehensive national strength and international influence, the common prosperity of all the people will be essentially realized, the Chinese people will have a happier and more healthy life, and the Chinese nation will be leading among nations in the world."

Next, from the perspective of long-term economic growth, with the international comparison method we will discuss about the two "100-year goals" and two "15-year goals".

First of all, based on the income classification methods of the World and previous studies, we classified the development stages of 182 countries in the world. Since 1987, according to the gross national income (GNI), the World Bank divided countries at different levels of development into four stages, including "low-income countries", "middle- and-low-income countries", "middle-and-high-income countries" and "high-income countries". According to the World Bank's latest division standard: In 2016, a country whose per capita GNI was less than or equal to USD1,005 was a low-income country, a country whose per capita GNI was USD3,955-USD1,006 was a middle-and-low-income country, a country whose per capita GNI was USD3,956-USD12,235 was a middle-and-high-income country, and a country whose per capita GNI was equal to or higher than USD12,236 was a high-income country. In 2016, China's per capita GNI was USD8,260. According to the above standard, China is a middle-and-high-income country. This level 109% higher than the lower limit (USD3,956) of middle-and-high-income countries, and 32% lower than the upper limit of middle-and-high-income countries. But the World Bank did not give the standard before 1987 and after 2016.
Based on the previous studies, in order to exclude the possible errors brought by the World Bank when calculating the per capita national income with the current exchange rate, make the cross-country comparison and calculate the future development level classification threshold of countries, according to GDPS of different countries in purchasing power parity US dollars in 2011 in WDI, we recalculated the country classification standard of four development stages, as shown in Table 1. Among them, the "middle-and-low-income country" is defined as a country whose per capita GDP is equal to or less than 2,552 constant US dollars. The "middle-income country" is defined as a country whose per capita GDP is 9,578-2,4620 constant US dollars. The "high-income country" is defined as a country whose per capita GDP is equal to or greater than 24,621 constant US dollars.

Table 1 Standards for the development stages of different countries

<table>
<thead>
<tr>
<th></th>
<th>(1) Average per capita GNI in the group</th>
<th>(2) Average per capita GDP in the group</th>
<th>(3) The World Bank’s standard (Current US dollar with Atlas method)</th>
<th>(4) New classification standard of CCWE (PPP constant US dollar in 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income stage</td>
<td>608</td>
<td>1544</td>
<td>&lt;=1005</td>
<td>&lt;=2552</td>
</tr>
<tr>
<td>Middle and low income stage</td>
<td>2398</td>
<td>5808</td>
<td>1006-3955</td>
<td>2553-9577</td>
</tr>
<tr>
<td>Middle and high income stage</td>
<td>7034</td>
<td>14156</td>
<td>3956-12235</td>
<td>9578-24620</td>
</tr>
<tr>
<td>High income stage</td>
<td>33923</td>
<td>38518</td>
<td>&gt;=12236</td>
<td>&gt;=24621</td>
</tr>
</tbody>
</table>

Source: WDI Database, CCWE’s calculation

According to the above new division standard of constant US dollars, in 174 sample countries in 2016 in WDI, there were 28 low-income countries, 49 middle-and-income countries, 56 middle-and-high-income countries and 41 high-income countries. The number of countries in each group was similar to that based on the World Bank’s classification standard. By region, low-income countries were mostly distributed in Africa, middle-and-low-income countries were mostly distributed in Asia and Africa, middle-and-high-income countries were mostly distributed in Asia Latin America and Southeast Europe, and high-income countries were mostly distributed in Western Europe, North America and East Asia. According to the new standard, calculating with the PPP constant US dollars in 2011, in 2011 China entered the "middle and high income stage", which was also consistent with the World Bank’s classification standard.

In 2016 per capita GDP of China was USD14,401 (PPP constant US dollars in 2011). If the actual future economic growth rate is assumed to be 6.5% per year, China’s per capita income level will exceed the threshold of high-income countries in 2025, and China will become a high-income country under the World Bank’s standards. If the income level which "essentially realizes socialist modernization" is interpreted as the level of high income under the World Bank’s classification standard, to achieve the goal in 2035, China only needs to maintain an average annual growth rate of 2.8% for per capita income in the next eighteen years. Obviously, this assumed growth rate is too low for Chinese economy. It can be predicted that the average annual growth rate of Chinese economy will be above 2.8% in the next twenty years even in a pessimistic situation. This means that the goal in 2035 of "essentially realizing socialist modernization" proposed by the Report of the 19th National Congress is higher than World Bank’s threshold value of high-income countries.

1 Refer to the research of Han and Wei (2017). In this report, take the calculation of the threshold value of low-income countries as an example. We grouped different countries according to the World Bank’s standards, as shown in Table 1. We calculated the mean of per capita GNI and the mean of per capita GDP of four groups of countries under the World Bank’s classification standards in the first and second column, and further calculated the ratio of the first column and the second column. The third column is the threshold value set by the World Bank for countries in the group with the Atlas method. The fourth column is the threshold value measured by PPP constant US dollars in 2011 by multiplying a ratio by the threshold value in the third column.

2 WDI has a total of 264 countries and regions. Except the countries and regions with missing data in 2016, there are 174 countries.

3 According to the classification standard of the World Bank, there are 26 "low-income countries", 47 "middle-and-low-income countries", 53 "middle-and-high-income countries" and 48 "high-income countries".

4 According to the division standard of the World Bank, in 2010 China changed from "a middle-and-low income country" into "a middle-and-high-income country". According to CCWE’s standards, China’s annual per capital income in 2010 was USD9,526, close to the threshold value of USD9,555. The annual per capital income in 2011 was USD10,384, exceeding the threshold value of middle- and-high-income countries.
Table 2 List of high-income countries or regions under the new classification standard (in PPP US dollars in 2011)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country or region</th>
<th>Per capita GDP</th>
<th>Rank</th>
<th>Country</th>
<th>Per capita GDP</th>
<th>Rank</th>
<th>Country or region</th>
<th>Per capita GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Luxembourg</td>
<td>97018.66</td>
<td>15</td>
<td>Austria</td>
<td>44143.7</td>
<td>29</td>
<td>Cyprus</td>
<td>31195.51</td>
</tr>
<tr>
<td>2</td>
<td>Singapore</td>
<td>81443.36</td>
<td>16</td>
<td>Germany</td>
<td>44072.39</td>
<td>30</td>
<td>Czech Republic</td>
<td>31071.75</td>
</tr>
<tr>
<td>3</td>
<td>UAE</td>
<td>67133.07</td>
<td>17</td>
<td>Canada</td>
<td>43087.76</td>
<td>31</td>
<td>Slovenia</td>
<td>29803.45</td>
</tr>
<tr>
<td>4</td>
<td>Norway</td>
<td>63810.79</td>
<td>18</td>
<td>Belgium</td>
<td>41945.69</td>
<td>32</td>
<td>Trinidad and Tobago</td>
<td>29578.96</td>
</tr>
<tr>
<td>5</td>
<td>Ireland</td>
<td>62828.34</td>
<td>19</td>
<td>Finland</td>
<td>39422.65</td>
<td>33</td>
<td>Slovakia</td>
<td>29156.09</td>
</tr>
<tr>
<td>6</td>
<td>Switzerland</td>
<td>56625.14</td>
<td>20</td>
<td>UK</td>
<td>38901.05</td>
<td>34</td>
<td>Republic of Lithuania</td>
<td>27904.1</td>
</tr>
<tr>
<td>7</td>
<td>Hong Kong, China</td>
<td>54279.18</td>
<td>21</td>
<td>Japan</td>
<td>38239.77</td>
<td>35</td>
<td>Estonia</td>
<td>27735.14</td>
</tr>
<tr>
<td>8</td>
<td>United States</td>
<td>53272.52</td>
<td>22</td>
<td>France</td>
<td>38058.87</td>
<td>36</td>
<td>Portugal</td>
<td>27006.87</td>
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<tr>
<td>9</td>
<td>Saudi Arabia</td>
<td>50458.17</td>
<td>23</td>
<td>Malta</td>
<td>35694.04</td>
<td>37</td>
<td>Seychelles</td>
<td>26319.16</td>
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<td>10</td>
<td>Netherlands</td>
<td>47128.31</td>
<td>24</td>
<td>New Zealand</td>
<td>35269.1</td>
<td>38</td>
<td>Poland</td>
<td>26003.01</td>
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<tr>
<td>11</td>
<td>Sweden</td>
<td>46441.21</td>
<td>25</td>
<td>South Korea</td>
<td>34985.85</td>
<td>39</td>
<td>Malaysia</td>
<td>25660.46</td>
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<tr>
<td>12</td>
<td>Denmark</td>
<td>45686.48</td>
<td>26</td>
<td>Italy</td>
<td>34620.13</td>
<td>40</td>
<td>Hungary</td>
<td>25381.29</td>
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<tr>
<td>13</td>
<td>Iceland</td>
<td>45276.45</td>
<td>27</td>
<td>Spain</td>
<td>33261.08</td>
<td>41</td>
<td>Saint Kitts and Nevis</td>
<td>24738.29</td>
</tr>
<tr>
<td>14</td>
<td>Australia</td>
<td>44414.03</td>
<td>28</td>
<td>Israel</td>
<td>32612.69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: WDI Database (Note: The table above does not contain any small country or urban economy whose population is less than 5 million)

Among the 174 countries and regions of the World Bank, there were 56 middle-and-high-income countries and regions in 2016, and China ranked the thirtieth among them. There were 29 high-income countries and regions whose population was more than 5 million. Among them, the United States ranked the fifth, whose per capita GDP in 2016 was USD53,273; Australia was the top 1/3 median and South Korea was the top 2/3 median, whose per capita GDP in 2016 was USD44,414 and USD34,986 (in PPP US dollars in 2011). China’s current per capita income is 27% of that of the United States, 32% of that of Australia and 41% of that of South Korea.

Figure 2 Per capita GDP level of typical high-income countries in 2016

Source: WDI Database

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If the income level of "essentially realizing socialist modernization" is interpreted as the 1/4 quantile level of the group of "high-income countries" defined by the World Bank (i.e., the current relative level of Israel, Spain and other countries), to achieve this goal in 2035, China needs to maintain the average annual growth rate of per capita GDP of approximately 5.8% in the next 18 years. In this situation, at that time China’s per capita GDP calculated based on PPP will be roughly 60% of that of the United States. If China’s annual per capita GDP growth rate reaches 6.5% in the next 18 years, then in 2035 China will be able to reach the median level of high-income countries, namely the current relative level of Finland, Britain, Japan and France.

The second "100-year goal" is to build China into a prosperous, democratic, civilized, harmonious, beautiful and powerful socialist modern country by the middle of this century. In the following three situations, we can understand the meaning of the "modern and powerful socialist country" at the income level:

Situation 1: If we want the level of per capita income to reach the 1/3 quantile level of "high-income countries" of the World Bank by the middle of this century (i.e. the current relative level of Italy, Spain and Israel), we need to maintain an annual economic growth rate of 3.4% and above in the next 33 years.

Situation 2: If we want the level of per capita income to reach the 1 median level of "high-income countries" of the World Bank by the middle of this century (i.e. the current relative level of Finland, Britain, Japan and France), we need to maintain an annual economic growth rate of 4.1% and above in the next 33 years.

Situation 3: If we want the level of per capita income to reach the 2/3 quantile level of "high-income countries" of the World Bank by the middle of this century (i.e. the current relative level of Australia, Belgium and Germany), we need to maintain an annual economic growth rate of 4.6% and above in the next 33 years.

By stages, if Chinese economy can maintain an average annual growth rate of 6% from 2017 to 2025, 4% from 2026 to 2035 and 3% from 2036 to 2050, by the middle of this century the per capita income level will essentially reach the forecast in Situation 2.

Figure 3 Assumed growth rate to go beyond the major developed countries

<table>
<thead>
<tr>
<th></th>
<th>Poland</th>
<th>Portugal</th>
<th>Czech Republic</th>
<th>Spain</th>
<th>South Korea</th>
<th>Japan</th>
<th>France</th>
<th>UK</th>
<th>Germany</th>
<th>Australia</th>
<th>Netherlands</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2035</td>
<td>3.7%</td>
<td>3.9%</td>
<td>4.3%</td>
<td>4.6%</td>
<td>5.4%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>6.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: WDI Database, PWT Database, CCWE’s calculation

Further, under the assumption that the average annual growth rate of per capita GDP in high-income countries was 2%, we calculated the required average growth rate of China’s per capita GDP in the next 33 years to go beyond the main developed countries in the world in 2050. As shown in Figure 3, to go beyond the United States, the average annual growth rate needs to be higher than 6%. To go beyond the United Kingdom, it needs to be 5%. To go beyond Portugal, it needs to be 3.9%.

An important assumption here is that high-income countries will continue to maintain their average economic growth rate in the past 10 years in the coming years. (If the countries maintain the average economic growth rate of the ten years before the economic crisis, the annual average economic growth rate of China should reach 7.3%; the average annual economic growth rate of high-income countries in the past ten years was 1.03%, and the average annual growth rate of high-income countries in the ten years before the financial crisis was 2.88%) The following figures are calculated under the assumption that high-income countries will continue to maintain the average economic growth rate of the past ten years in the following period.
It is mainly believed that the middle-and-long-term growth trend of Chinese economy is as follows. Due to the disappearance of demographic dividend, the decline of total factor productivity, the system and mechanism problem, economic structure problem and other reasons, it is difficult for the future growth rate of Chinese economy to be 7% or higher again. But we believe that in the next five years relying on the new "demographic dividend", regional development convergence effect and the quietly improving international situation, Chinese economy will have the potential to continue to maintain the average annual growth rate of nearly 7%.

Demographic dividend: From "quantity economy" to "quality economy"

Seen from the absolute number of labor, Chinese population of working age (15-64) ended the rapid growth trend in 2010, and tended to be stable; at the same time, the proportion of the aging population in the total population continuously increased. In the past 20 years, a large number of working-age workforce in China provided a low-cost labor supply to labor-intensive industries. In particular, the coastal export processing industry obtained a strong cost advantage. This is the "demographic dividend" traditionally believed, which is "quantity dividend" more accurately. As the era with a rapid growth of the number of labors ends, high labor costs, difficult recruitment and other problems will gradually emerge. According to data published by the National Bureau of Statistics, China's working-age population increased by 52.05 million from 2006 to 2011, and only 4.31 million from 2011 to 2016; and the proportion of population at the age of 15-64 in the total population decreased from 74.4% in 2011 to 72.6% in 2016, decreasing by 1.8%. In 2016, the population at the age of 65 and above accounted for 10.8% of the total population in China, increasing by 1.7% in the past five years. From this perspective, the "quantity dividend" of Chinese population has already ended.

Figure 4 The number and proportion of working-age population in China

However, the role of population in the economic development depends on not only the working population, but also the average quality of labor force, including education level, health level and other aspects of labor force. A worker with proficient skills, more knowledge and healthier body can create more values for the society.

In the past ten years, the average education level of labor force in China improved continuously. From 2006 to 2015, a total of 61,1756 million people graduated from institutions of higher learning, while from 1997 to 2006 there were only 18,5673 million graduates from institutions of higher learning. At the same time, there are still 26,958 million college students and 83,2744 million graduates from secondary schools in China. According to the estimation of most scholars, China’s return rate of output of education is 16%-20%. That is to say, if the national average length of education of labor force increases by 1 year, the output will increase by 16%-20% (Li Daokui, Shi Jinjian and Jin Xingye, 2015). That is to say, the increase of the national average length of education of labor force by 1 year has essentially the same impact with the increase of the working population by 16%-20%. The constant improvement of China’s level of education will bring work force with higher quality, more knowledge, more proficient skills and more creativity to the society. They will make contributions to the economic development with their talents in the future.
At the same time, since the Reform and Opening up, China’s average life expectancy increased from 68 years old in 1981 to 77 years old in 2016, increasing by 9 years old; the life expectancy of men increased from 66 years old in 1981 to 74 years old in 2016, and the life expectancy of women increased from 69 years old in 1981 to 79 years old in 2016, increasing by 8 years old and 10 years old, respectively. This means that workers who retire at present and in the future will be healthier than their parents when they retired, and now many retired workers are still very capable. The statutory retirement age in China is 60 years old for men and 55 years old for women. This provision was developed in 1978. In the last 40 years, there was no adjustment. Currently, the overall health conditions of Chinese have provided the potential to delay the retirement age. If we can delay the retirement age appropriately, such as delaying retirement age to 65 years old, a large amount of labor will be added to the society.

According to Analysis on Economic Growth Potential and Prospect of China in the Period of the 13th Five-Year Plan, our previous research, if we comprehensively measure the effective labor supply in China with the quantity of labor force, the average quality of labor force and the health level, the effective labor force supply will continue to rise in the next 10 years. If we think that the retirement age is the age at which the labor force cannot engage in work, the retirement age of the labor force should gradually increase, because the life expectancy of the labor force increases year by year. At the same time, even if we estimate based on 4%, a relatively low return rate of output of education in the existing literature, the average output of a worker in 2025 will be equivalent to the average output of 1.21 workers in 2004; if we estimate based on the return rate of education of 9%, the average output of a worker in 2025 will be equivalent to the average output of 1.48 workers in 2004. Therefore, although the absolute number of labor is slowly declining, the average output level of each worker is increasing year by year. Based on the above factors, we estimate that China's supply of effective labor will continue to rise in the next 10 years. In the next five years, the average annual growth rate of effective labor supply will be 0.6%-1.4%, which will bring the annual growth rate of GDP of 0.3%-0.7% (Li Daokui, Shi Jinjian and Jin Xingye, 2015). This will effectively support the rapid development of Chinese economy in the period of the 13th Five-Year Plan.

Figure 5 Estimation and prediction of effective labor supply (unit: 10,000 people)

Source: National Bureau of Statistics, World Bank (Note: Nt is the number of Chinese labor in the tth year)

Advantages of economic development in great powers

Compared with South Korea and Japan, China has a larger market, so that enterprises can reduce the average cost, and the enterprises which invested heavily in the early stage can make research and development investment or infrastructure investment freely. Take railway transportation in China as an example. China has a large land area and the world's largest population, and the development of different cities is quite different, thus forming a huge demand for railway transportation. This huge market support R&D. R&D investment can rise continuously, which effectively promotes the development, upgrading and internationalization of high-speed rail technology. This logic is exactly the same in the following examples.
The construction, construction machinery, communication equipment manufacturing and other industries in China have become leading in the world. Similarly, "Internet economy" and "digital economy" with a rapid development in recent years in China have also benefited from the huge and differentiated market. Take Taobao, Jingdong and other Internet companies as examples. They learned lessons from the foreign business model and covered a huge user base with the unified and differentiated market formed in China, so that they could sell products and develop the sales network uniformly in the country, which greatly reduced the average cost of enterprises.

**China’s economic growth momentum will be released continuously when the problem of unbalanced development is solved.** Take per capita GDP of the provincial administrative units in China in 2016 as an example. The provincial areas whose per capita GDP was more than USD10,000 included Beijing, Shanghai, Tianjin, Jiangsu, Zhejiang, Fujian, Guangdong, Inner Mongolia and Shandong; and areas whose per capita GDP was less than USD6,000 included Gansu, Yunnan, Guizhou, Tibet, Shanxi, Guangxi and Anhui. It can be seen that the development levels of regions in China have a large difference; and even some neighboring provinces have a large difference. This situation usually occurs between the coastal provinces and their adjacent inland provinces.

![Figure 6 GDP and per capita GDP of different provinces in China in 2016](image)

Source: National Bureau of Statistics

Take Jiangsu and Anhui as examples. The two provinces have great differences in economic development level, industrial structure, infrastructure and other aspects. The differences are highly complementary, and the inter-provincial trade potential between the two provinces is huge. For a long time, a large number of surplus labor force in Anhui flowed to Jiangsu, and provided sufficient labor resources for the rapid economic development of Jiangsu; with Jiangsu’s industrial upgrading and higher requirement for the quality of labor force, Anhui migrant workers gradually returned home with funds and projects. Even some enterprises and industries in South Jiangsu also moved to Anhui where the factor price was relatively low partially or entirely. This is a new economic growth point for Anhui, and the inevitable result of industrial upgrading and economic transformation for Jiangsu. There is a similar situation in Beijing and Hebei, Shandong and Henan, Zhejiang and Jiangxi, Guangdong and Hunan, etc. Labor return and industrial transfer are happening quietly. Capital and labor resources are reconfigured in the whole country. The coastal traditional industries are gradually transferring to the central region, the northeast region and Sichuan and Chongqing region. In the eastern coastal areas, the high-end manufacturing industry, the service industry and strategic emerging industries are gradually rising and becoming the new economic growth points. At the same time, due to the distribution of such industries between provinces and regions, between provinces and regions there is always a huge domestic trade potential. Once formed, the domestic unified market will be able to support the development of enterprise and industries in China continuously.
With the population. We note that the global economic situation has improved continuously in a wide range. Seen from the unemployment

<table>
<thead>
<tr>
<th>Province</th>
<th>GDP in 2016 (100 billion yuan)</th>
<th>Per capita GDP in 2016 (yuan)</th>
<th>GDP of the province in 2016/Per capita GDP of Jiangsu</th>
<th>Average annual growth rate of GDP from 2017 to 2021 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gansu</td>
<td>7200.37</td>
<td>27643</td>
<td>0.29</td>
<td>10.0</td>
</tr>
<tr>
<td>Yunnan</td>
<td>14788.42</td>
<td>31093</td>
<td>0.32</td>
<td>9.6</td>
</tr>
<tr>
<td>Guizhou</td>
<td>11776.73</td>
<td>33246</td>
<td>0.34</td>
<td>9.4</td>
</tr>
<tr>
<td>Tibet</td>
<td>1151.41</td>
<td>35184</td>
<td>0.36</td>
<td>9.3</td>
</tr>
<tr>
<td>Shanxi</td>
<td>13050.41</td>
<td>35532</td>
<td>0.37</td>
<td>9.2</td>
</tr>
<tr>
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<td>18317.64</td>
<td>38027</td>
<td>0.39</td>
<td>9.1</td>
</tr>
<tr>
<td>Anhui</td>
<td>24407.62</td>
<td>39561</td>
<td>0.41</td>
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</tr>
<tr>
<td>Sichuan</td>
<td>32934.54</td>
<td>40003</td>
<td>0.41</td>
<td>9.0</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>18499</td>
<td>40400</td>
<td>0.42</td>
<td>8.9</td>
</tr>
<tr>
<td>Heilongjiang</td>
<td>15386.09</td>
<td>40432</td>
<td>0.42</td>
<td>8.9</td>
</tr>
<tr>
<td>Xinjiang</td>
<td>9649.7</td>
<td>40564</td>
<td>0.42</td>
<td>8.9</td>
</tr>
<tr>
<td>Henan</td>
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<td>42575</td>
<td>0.44</td>
<td>8.8</td>
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<tr>
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<td>43062</td>
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<td>3168.59</td>
<td>47194</td>
<td>0.49</td>
<td>8.6</td>
</tr>
</tbody>
</table>


Since the interprovincial gap in China is so big, and such a gap could be transformed into the power of economic growth, we want to know the increase of the total GDP and growth rate in China if the development level of the Chinese backward provinces can reach a certain percentage of that of the leading provinces. With the interstate gap of the United States as the standard, the per capita GDP of the richest state (without considering Washington) is about 2 times of that of the poorest state, while the per capita GDP of the richest Jiangsu Province in China (without considering Beijing, Tianjin and Shanghai, three municipalities directly under the central government) is nearly 4 times of that of the poorest Gansu Province. We will further estimate. Assume that the average annual growth rate of per capita GDP of Jiangsu Province from 2016 to 2020 is 6%, and the average annual growth rate of population is 0.5%, i.e. the average annual growth rate of GDP is 6.5% (Assume that the average annual growth rate of provinces whose per capita GDP reaches or exceeds the level of 50% of Jiangsu Province is 6.5%). There are 17 provinces in China whose per capita GDP is less than half of that of Jiangsu Province. If the above provinces keep catching and the proportion of per capita GDP in per capita GDP of Jiangsu Province increases by 5% in 2022 (the population growth rate is also 0.5%), their annual average GDP growth rate in the period of the 13th Five-Year Plan is shown in the last column of Table 1. This is Situation 1. In turn, assume that the 17 provinces are not catching up, but maintain the gap of per capita GDP in 2016 with Jiangsu Province (i.e., the 14 provinces maintain the average annual growth rate of GDP of 6.5%). This is Situation 2. From the estimate, it is found that Relative to Situation 2 Situation 1 means that in the period of the “13th Five-Year Plan” China’s GDP annual growth rate will increase by 0.8%. In other words, the regional convergence effect of major economy of China can contribute an average annual GDP growth potential of 0.8% in the period of the “13th Five-Year Plan”. Although the above assumptions are too strict, such results imply that if the backward provinces can reduce the gap with developed provinces through the catch-up growth, the GDP growth rate can increase.

**China is still in the era of international strategic opportunity**

We note that the global economic situation has improved continuously in a wide range. Seen from the unemployment
rate of major economies, since 2010 the unemployment rate of the United States began to decline gradually, and dropped to 7% and below in 2013. It has dropped to its lowest level in the past 40 years at present. The unemployment rate in the Euro area began to decline continuously since the middle of 2013, which marked that the economy in the Euro area was also in the initial recovery. Under this background, this year the International Monetary Fund continuously increased its predicted global economic growth rate. In October, the International Monetary Fund increased the predicted global economic growth rate of this year and next year to 3.6% and 3.7%, increasing by 0.1% compared to the predicted value in July. The economic growth rate of developed economies in 2017 predicted by IMF is 2.2%, increasing by 0.2% compared to that in July. It is 2.0% in 2018, increasing by 0.1% compared to that in July. For emerging markets and developing countries, IMF maintained the expected overall growth rate of 4.6% in 2017, and increased the economic growth rate in 2018 to 4.9%.

Geopolitical events which worried people in the past period of time did not translate into practical economic impact. Since Britain's Brexit vote, the negotiations between Britain and the EU progressed slowly, leaving a buffer space for the major economies in Europe. Since Brexit, the European trade was not significantly affected. Its pace of economic recovery did not slow down, but showed a trend of accelerated rebound recently. In addition, after Trump took office, the United States had frequent trade conflicts with other countries, but trade war did not appear. At the same time, since 2013 the average growth rate of American economy was above 2% again, and the unemployment rate declined continuously to the lowest point in the last forty years. It can be seen that both Brexit and Trump's "trade war" have a very limited negative impact on the world economic situation. Although the North Korea nuclear issue still exists, we believe that compared to the past five years the world economic situation will be better and good for China's export recovery, and bring the growth rate of 0.5%-1% to China's GDP growth in the next five years.

"The Belt and Road" strategy is moving forward steadily. China will have a brilliant future in the economic layout of the world. On the one hand, China actively supports the economic development of countries along "the Belt and Road". From January to September of 2017, Chinese enterprises' new investment in countries along "the Belt and Road" was USD9.6 billion, accounting for 12.3% of the total amount in the same period and 4% higher than that in the same period of last year. Countries with a fast growth of non-financial investment along "the Belt and Road" include Kampuchea, Laos, Malaysia and Russia, increasing by 82.9%, 68.8%, 68.2% and 34.1% on year-on-year basis, respectively. At the same time, Chinese enterprises continuously benefited from the Belt and Road cooperation. In the first quarters of 2017, the total amount of contracts of overseas contracted projects newly signed by Chinese enterprises with 61 countries along "the Belt and Road" was USD967.2 billion, accounted for 57.5% of the total amount in the same period and increasing by 29.7% on year-on-year basis; the business volume was USD493.8 billion, accounting for 48.2% of the total amount of contracts of overseas contracted projects in the same period and increasing by 7.9% on year-on-year basis.

We believe that Chinese economy has the potential to maintain a high growth rate in the medium and long term, but there are still some problems to be solved. Otherwise, they will affect the release of growth potential.

First, we shall steadily promote the opening up of the financial sector, and prevent huge economic fluctuations brought by capital flows and exchange rate fluctuations. Financial opening can help us to
make use of the international financial market and push forward the reform of the domestic financial system. Since the 18th National Congress of the Communist Party of China, the opening of Chinese financial institutions and financial market has improved significantly. As of the end of 2016, 22 Chinese banks have established a total of 1,353 overseas branches; following Shanghai-Hong Kong Stock Connect and Shenzhen-Hong Kong Stock Connect, the launch of Bond Connect in 2017 further strengthened the connectivity between the financial market of Chinese mainland and Hong Kong. On October 1st, 2016, RMB formally joined IMF’s currency basket of special drawing rights (SDR). It means that RMB has become an international reserve currency. However, the history of the crisis in Latin America and the Asian financial crisis also showed the drawbacks of disorderly opening of financial markets. Steady and orderly financial opening is the foundation of macro stability. The RMB devaluation and capital outflows since 2015 remind us once again that the improper supervision of cross-border capital flows will have a huge impact on money supply, interest rate and exchange rate. Asset bubbles caused by speculative capital inflow or currency crisis caused by outflow of a large amount of capital will have a great negative impact on the economy.

Second, we shall popularize high school education comprehensively, and further improve the quality of labor force. In recent years, the emerging of Internet, big data, artificial intelligence and other digital economy greatly improved the efficiency of production process. More and more simple work is replaced by efficient machines, which has higher requirements for our education. Although the nine-year compulsory education of primary and junior high school has been popularized, the number of labor force with high school education is still limited. Therefore, we shall popularize high school education gradually, further improve the quality of labor force, and lay a solid foundation of human capital for economic growth, which is one of the goals proposed by the report of the 19th National Congress. At the same time, we shall pay attention to improving the quality of basic education, cultivating "innovative talents", and adapting to the development trend of science and technology and society.

Third, we shall explore the elder care system with Chinese characteristics and cope with the aging of the population properly. The process of aging in developed countries generally takes at least several decades, such as 60 years in the United States, 40 years in Germany, 24 years in Japan and 115 years in France. By contrast, it only took 18 years in China. Although China’s effective labor supply is still rising in the future period of time, we still need to watch out for related risks brought by the high dependency ratio and pension which cannot meet the needs. "Getting old before getting rich" will not only erode the basis of economic growth, but also bring intergenerational differences and other social contradictions. We shall strive to explore the elderly care system with Chinese characteristics. We shall both ensure providing for the elderly, but also reduce the elderly care burden of young people, let the elderly devote their remaining years to the society, and promote social harmony and stability.

2. The economic growth path to achieve the "two 100-year" grand goals

Analysis on the growth path

International experience shows that after World War II only 13 countries and regions successfully transited from middle-income countries to high-income countries. Many Latin American countries have been in the middle-income stage for decades, and their economic development stops for a long term. According to the statistics based on country samples in PWT9.0, after the Second World War II, 48 developing countries reached the developing stage of China relative to the United States. However, only 13 countries could achieve sustained economic growth after reaching the relative level. In the 20 years after that, the average growth rate of per capita GDP was 6%. Among them, the average growth rate of East Asian economies which made breakthrough in growth in the next 20 years was 6.9%; while after vast majority of developing countries reached the income level their economic growth stopped. In the 8 years after that the average growth rate of per capita GDP was only 1%.

In the process of economic development of many countries in the world, only a few less developed economies realized the convergence to the developed countries, and the economic growth of most of the economies stopped for a long time, and they even regressed. These countries can be divided into two categories by regional distribution. The first category is low-income countries represented by the Sub-Saharan African countries, whose economic growth remained at a low level for decades and was weak; the second category is the middle-income countries represented by Latin American countries and some Southeast Asian countries, which stay at the middle income level for a long term, and have frequent fluctuations of economic development. Their economic growth stopped for a long term.

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8 They are Portugal, Spain, Greece, Poland, Slovakia, Estonia, Israel, Cyprus, South Korea, Taiwan, Japan, Singapore and Hong Kong, respectively. According to estimates of PWT9.0, they are slightly different from the 13 countries of the World Bank (2012).

9 The "Latin American countries" here mainly refer to Argentina, Brazil, Chile, Columbia, Mexico, Peru, Uruguay and Venezuela.
By 2016, among low-income countries in the history, South Korea has become a high-income country; China, Georgia and Thailand have become middle-and-high-income countries; Nepal and Haiti are still low-income countries; and other countries except Africa have become middle-and-low-income countries. Among the 32 low-income countries in Africa in the history, after more than 60 years of economic development, only 12 countries have become middle-and-low-income countries. The 20 countries whose economic growth stops for a long-term are located in Sub-Saharan Africa. The total population is 410 million, accounting for 6.03% of the total population in the world. The total GDP is USD483.4 billion (constant PPP in 2011), only accounting for 0.55% of global GDP.

In middle-income economies, 64 middle-and-low-income countries have experienced economic stagnation, and 21 middle-and-high-income countries have experienced economic stagnation. Seen from the typical facts of the stopping of economic growth in these middle-income countries, they can be divided into four categories: former Soviet Union and Eastern European countries, Latin American countries, Southeast Asian countries and Sub-Saharan African countries. Seen from the economic growth after economic stagnation, the prospects of economic growth in middle-and-low-income countries are better than those in low-income countries with economic stagnation. In the 64 middle-and-low-income countries which have experienced economic stagnation, after the subsequent economic development, only 24 countries are still middle-and-low-income countries, and two countries have become low-income countries (Congo and Zimbabwe). Most of other countries have grown into middle-and-high-income countries and high-income countries. In middle-and-high-income countries which have experienced economic stagnation, only Estonia and Slovakia successfully reached the stage of high-income countries in the subsequent economic growth. Most countries still did not enter the club of high-income countries. Seen from regional distribution, the middle-and-high-income countries which have experienced economic stagnation are mainly former Soviet Union and Eastern European countries and Latin American countries. The development history of these countries has a strong reference significance for China currently.

Latin American countries moved towards the road of national independence first, and began industrialization in the late nineteenth century. After the economic boom in 1960s, most Latin American countries reached the economic development stage similar to the current stage of China in 1970s. However, the history of the subsequent economic growth tells us that most Latin American countries have fallen into a long-term stagnation, and the average annual growth rate is less than 1%, significantly lower than the world’s average rate of economic growth. The proportion of per capita GDP in that of the United States declined continuously. Since South Africa exited from the British Commonwealth in the 1960s, the internal political conflicts were intensified, and economic growth stopped. Turkey has abundant natural resources. At the end of World War II, its per capita GDP was equivalent to 20% of that of the United States. After more than 40 years of development, due to the long-term economic stagnation, by 2003 its per capita GDP was still equivalent to 24% of that of the United States. Some former Soviet Union and Eastern European countries had the phenomenon of economic stagnation in the 1980s. After the collapse of the Soviet Union in 1991, in the economic transition period more serious economic recession appeared.

Seen from the current stage of Chinese economy, China just changed from a middle-and-low-income country into a middle-and-high-income country in 2010. It still has a long way to go from high-income countries. Calculated with constant US dollar PPP in 2011, per capita GDP of China in 2016 was USD14,401, only accounting for 27% of that of the United States in the same period. Seen from the historical stage, Japan had such a proportion in 1958, Korea had such a proportion in 1980, and Taiwan had such a proportion in 1979.

We referred to the historical experience of South Korea, Taiwan and other East Asian countries and regions, and Brazil, Chile and other Latin American countries (the historical experience of change of per capita GDP relative to the United States after they reached the proportion of 27% relative to the United States). From the perspective of per capita GDP and total GDP, East Asia path and Latin America path for the future economic growth of Chinese economy were simulated and deduced.

In the East Asia path, by 2035 and 2050, China’s per capita income will be equivalent to 49.7% and 73.4% of that of the United States at that time. In the Latin America path, by 2035 and 2050 China’s per capita income will be equivalent to 33% and 28.1% of that of the United States at that time.

Combined with the World Bank’s population projections, in the East Asia path by 2035 and 2050 the total size of Chinese economy will be 191% and 253% of that of the United States. In the Latin America path, by 2035 and 2050 the total size of Chinese economy will be equivalent to 127% and 97% of that of the United States.

10 The 12 African countries which changed from low-income countries into middle-and-low-income countries: Ivory Coast, Cameroon, Congo, Egypt, Garner, Kenya, Lesotho, Mauritius, Morocco, Niger, Sultan and Zambia.
11 The above data are from the PWT9.0 database.
12 Such as Chile in the 1980s, Brazil in the 1980s and 1990s, Peru before 2006, and Argentina from 1970s to 1990s.

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For the future economic development of China, which is more likely to follow, East Asia path or Latin America path? Based on the analysis on typical facts of economic growth of middle-income countries, we further considered the transnational study of economic growth convergence as the framework, and analyzed the factors for which these countries and regions broken through the Middle Income Trap and finally joined the "high income club" while the other countries failed to do so? Through empirical analysis, we considered the effect of saving rate, openness, the level of
human capital, political stability and government efficiency, income distribution, population structure and other initial endowment on the future economic growth. The results of our study suggest that only when three conditions are met at the same time a country can break through the "middle income trap"; on the contrary, as long as one condition cannot be met, breakthrough cannot be made. Seen from the current endowment of China, the possibility of East Asia path is higher.

Specifically, these three conditions are as follows. First, a stable government supports the development of the market economy. First, the government must be stable. The government can change the term of office, such as changing from the conservative party to the labor party, but it should not bring social instability. The government should not only be stable, but also systematically carry out policies which can maintain economic growth, including basic policies to release the economic vitality of the market, such as rule of law and basic supervision, a series of intervention policies which can sustain economic growth, such as the basic medical care and housing policies which maintain social stability, and the basic welfare policies for elimination of poverty; second, high-quality human capital. To meet this condition, first we shall ensure the basic public health. Second, we shall provide a good education environment. The public health service can guarantee the health of permanent resident population and migrant population, so that they participate more in the market economy, and the labor participation rate and the labor productivity of population can be improved constantly (labor participation rate is a major factor of economic development). A more important precondition of high-quality human capital is to meet a certain level of education, which will directly affect the improvement of labor productivity, because illiterate workers cannot be hired for many basic modern jobs, and high-quality level of human capital is the precondition for smooth realization of transformation of the growth mode from primary processing of low added value to manufacturing industry and modern service industry with high added value; third, we shall be open to the developed economies. Japanese economists found the goose model of economic development. Among a group of countries, first a few countries took off, and then drove the neighbors. We studied this phenomenon more carefully, and found that this is not entirely true, because there are exceptions, such as Israel. It broke through the middle income trap, but there is no developed country in its neighboring countries. We believe that the mechanism behind this goose model is as follows. To develop, an economy must be open to the developed countries, and the neighboring countries are generally open to each other. Specifically, to break through the "middle income trap", a country must make trade and investment exchanges with developed countries. The country's technological level, business philosophy and social consciousness will consciously move closer to those of the developed countries, and its income level and production efficiency will be improved continuously. The main trade and investment partners of Israel are Europe and the United States, the main trade partner of Japan was the United States, and major trade partners of South Korea are the United States and Japan; in Europe, and the main trade partners of Ireland and Spain are other developed countries of Western Europe, so that these economies learn the concept of developed countries continuously.

Unbalanced development: The supply side reform promotes overall balance while regional development should focus on per capital convergence

The report of the 19th National Congress judged the transformation of the main social contradictions of China at present. After 40 years of reform and opening up, China's productivity level has been greatly improved on the whole. The main problem which we currently face is the unbalanced and inadequate production. We believe that we can at least discuss about the imbalance problem at two levels. The first level is the imbalance in the overall sense, including demand structure, industrial structure, urban and rural structure, etc. The second level is the imbalance between regions, including economy, social development, public services, etc. We believe that to solve the problem of overall imbalance efforts should be made to promote the structural reform of the supply side, increase the proportion of consumption in GDP, and promote the transformation and upgrading of enterprises. To solve the problem of imbalance between regions, the focus is to promote regional economic development and social welfare to be convergent in the per capita sense, promote the transformation of system and mechanism in the backward areas with policy support, improve the local soft environment, and attract talents to serve to talents.

Overall, Chinese macro-economic structure was improved continuously in the past ten years. According to CCWE's calculation, the proportion of consumption in GDP increased from 36% in 2007 to 46% in 2015. It is expected to rise to 50% in the next few years. At the same time, the proportion of overseas market demand in total demand gradually declined, and the proportion of current accounts in GDP dropped from 10% in 2007 to 2% and below. In the past ten years, the steady growth of consumption played a role of ballast stone, and made important contributions to maintaining the basic stability of the economy.
From 2004 to 2014, the Chinese industrial structure improved continuously. The proportion of agriculture (agriculture, forestry, animal husbandry and fishery) in GDP decreased from 13.2% to 9.4%, and the proportion of the mining industry decreased from 4.8% to 3.6%. At the same time, the proportion of the service sector accounted increased substantially, the proportion of wholesale and retail nearly doubled, and the proportion of education increased by nearly 50%. After 2012, the proportion of the third industries expanded, the proportion of the second industries decreased, and the kinetic energy of economic growth began to change. We believe that through the supply-side structural reform the economic structure of China will be further optimized.
By comparing China's industrial structure with those of developed countries, we can draw some conclusions as follows. First, the proportion of China's agriculture in the economy is still too high. The proportion of agriculture in GDP in developed countries is below 3%, which is 1/3 of the current level in China. Second, China's service industry still has a larger space for development. The proportion of science and technology, intellectual property, business services and other service industries in GDP is only 1/3 of that in developed countries. Even compared with the historical industrial structure of East Asian countries (regions), the proportion is still very low. Third, China's financial service industry has made considerable progress in the past ten years. The proportion of 7.25% has exceeded the current level of 7.2% in the United States, and is much higher than that of Japan, South Korea and Germany. The report of the Party Congress further clarified the principle of financial service entities. Focusing on the balanced development of the financial industry and the real economy is also an important aspect of industrial restructuring.

Figure 15 Industrial structure of China and developed countries

Figure 16 Historical industrial structure of Chinese mainland, Taiwan and South Korea

Source: WIND Database and CCWE’s calculation

In the past ten years, China's urbanization was steadily promoted. At present, the urbanization rate of the resident population has reached 57%, which is 2/3 higher than the level in 2000. The construction of new socialist countryside, the construction of beautiful countryside and a series of policies improved the living conditions in the countryside. The extension of new rural cooperative medical care and other public services also improved rural residents’ social security conditions. Seen from the growth rate of per capita income, after 2004 the gap between the growth rate of rural residents’ income and the growth rate of urban residents’ income narrowed substantially. After 2009, the growth rate of rural residents’ income has always been higher than the growth rate of urban residents’ income. In 2007, the income of urban residents was 3.3 times of that of rural residents, which dropped to 2.9 times in 2015.
At the same time, the Engel coefficient of rural residents (the proportion of food expenditure in total expenditure) decreased from 50% in 2000 to 32% at present. The difference with Engel coefficient of urban residents decreased from 10% to 3%. Although many achievements have been made, the gap between the quality of life of urban residents and rural residents is still obvious. The income, public service, social development and others in rural areas lag behind those of cities and towns, and the urbanization of rural migrant population has many difficulties. Therefore, in the future the task of balancing urban and rural development and improving the urbanization rate of the household population is still arduous.
Since the reform and opening up, the differences of geographical conditions, resource endowments, open policies and other aspects caused the uneven development of various regions. Since the beginning of the new century, with the support of a series of policies supporting regional development, such as the development of the western region, the revitalization of the old industrial bases in Northeast China, and the promotion of the rise of the central region, Chongqing, Guizhou and other regions have witnessed a high economic growth rate. We believe that China’s regional policies should aim at the convergence of per capita indicators in different regions. This is first determined by different geographical conditions and distribution of resource endowments in different regions of China, and then determined by the basic goal of realizing people’s desire for a better life. The difference of resource endowment determines that the total quantity convergence will inevitably lead to low economic efficiency, and the quality of people’s life depends more on the per capita index, rather than the total quantity index. Therefore, the regional policies with the goal of per capita output, per capita income and per capita public service can meet the requirements proposed by the 19th National Congress better.

In this sense, regional economic policies are closely related to policies in urbanization, population mobility and other aspects. The 19th National Congress further defined the goal of factor marketization. It means that as important factors of production labor and talents will have higher mobility. On the one hand, by improving the business environment and incentive mechanism in underdeveloped areas and other measures, labor shall be attracted to the areas which lack talents. On the other hand, the government’s public service shall also be configured in accordance with the actual situation of the local place, so as to avoid mechanical distribution of resources according to household registered population.

In the past ten years, the imbalance of regional economic development in China has been improved to some extent. In 2006, the per capita GDP of the area which ranked the first (Shanghai) was 8.5 times of that of the area which ranked last (Guizhou). This ratio dropped to 4.1 times in 2015 (Tianjin/Gansu). From the box-shaped distribution diagram, it can be seen that the per capita GDP of the area with the lowest output in China increased by 4 times in the past ten years, and the median of the distribution increased steadily, but the interquartile range of output distribution increased after 2012, and the trend of narrowing of income gap slowed down.
Comparing the national distribution of per capita output of different provinces in 2006 and 2015, we found that the eastern region, such as Beijing, Shanghai, Tianjin, Jiangsu, Zhejiang, Fujian and Guangdong, were always in the leading positions, and had a rapid growth. Inner Mongolia, Chongqing, Hubei and other provinces improved more than other provinces. Gansu's per capita income ranking fell considerably. A phenomenon which we should pay attention to is as follows. Although economic growth of Northeast China has been widely concerned about recently, the per capita output of Northeast China ranked in the middle, and the ranking of Liaoning and Jilin has risen, so the economic problem of Northeast China should not be solved with the thinking about catching up by less developed areas.

We chose the United States as a representative of the developed countries to compare with China. Per capita GDP of the state with the highest per capita GDP in the United States (Alaska, excluding Washington D.C.) is 2 times of that of the state with the lowest per capita GDP (Mississippi). In order to comprehensively consider the overall distribution, we calculated the variation coefficient of per capita income and per capita GDP of different provinces of China and different states of the United States. In 2016, the variation coefficient of per capita income of urban and rural residents in China was three times of that of the United States, and the output gap was 1.3 times of that of the United States. It can be seen that the output and income gap between different regions in China is much higher than that of the United States, and the income gap is greater than the output difference.
We totaled up education expenditure, social security and employment, and health care and family planning in the financial expenditure of local government as the government's social welfare spending, which was divided by total population of each region to obtain the per capita social welfare expenditure. In 2007, the total expenditure of the area with the highest per capita social welfare expenditure (Beijing) was 4.55 times of that of the area with the lowest per capita social welfare expenditure (Guangxi). This ratio reduced to 2.97 times in 2013, but and then increased again to 3.32 times in 2015.
Before 2009, the per capita welfare expenditure of economic backward areas was less. Since then, the expenditure of western region and northwest region increased. Tibet, Qinghai and other provinces ranked the top in China and their growth was rapid; but the expenditure of Hebei, Henan, Shandong and other provinces with a large population increased slowly and ranked down relatively.

![Figure 27 Distribution of per capita social welfare expenditure (yuan)](image1)
![Figure 28 Per capita welfare expenditure of different provinces (yuan)](image2)

Source: WIND Database and CCWE’s calculation
Source: WIND Database and CCWE’s calculation (area with no data is gray)

Education is a basic public service. We chose higher education and high school education for analysis. This is consistent with the creation of first-class universities and the popularization of high school education emphasized in the report. The discussion here focuses on considering education as a public service supply, so we chose the number of general institutes of higher education and the number of full-time teachers in high schools as reference indicators. In the past ten years, there was no obvious change in the distribution of universities across the country, the median of the number of universities per 1 million people remained stable, and the minimum increased slightly. Beijing, Shanghai and Tianjin have the largest number of universities, and Sichuan, Henan, Guangdong, Shandong and other provinces with a large population have few universities.

![Figure 29 The number of universities per 1 million people in each province](image3)
![Figure 30 The number of universities per 1 million people in each province](image4)
Source: WIND Database and CCWE’s calculation. Source: WIND Database and CCWE’s calculation (area with no data is gray).

<table>
<thead>
<tr>
<th>北京</th>
<th>Beijing</th>
</tr>
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<tbody>
<tr>
<td>河南</td>
<td>Henan</td>
</tr>
<tr>
<td>四川</td>
<td>Sichuan</td>
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<tr>
<td>广东</td>
<td>Guangdong</td>
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In terms of the number of high school teachers per 1 million people, we also drew a box plot and a distribution diagram. The pictures show that the number of teachers remained stable in ten years and the median had a slight fluctuation. The number of teachers of the western region, including Gansu, Xinjiang and Shanxi in the northwest and Guizhou in the southwest, increased greatly, while that of Shanghai, Beijing, Tianjin and other places declined relative to other regions. Although first-tier cities gather a number of high-quality educational resources, with the increase of migrant population the short slab of inclusive high school education was gradually exposed. While controlling new population and adjusting the existing functions, we shall solve the problem of education of the stock population.

Figure 31 The number of high school teachers per 100 people

Figure 32 The number of high school teachers per 100 people in each province

<table>
<thead>
<tr>
<th>Tibet</th>
<th>Guizhou</th>
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<tr>
<td>Shanghai</td>
<td>Tianjin</td>
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<td>Fujian</td>
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In terms of health care, we selected two indicators, including the number of general hospitals and the number of licensed physicians. Provinces with the largest number of general hospitals per 1 million people are concentrated in the western region. The number in Guangxi, Guangdong, Hunan, Hubei and other provinces is relatively small. Seen from distribution, the median did not change greatly in the past ten years, and the overall distribution was stable. The distribution of number of licensed physicians has different characteristics. The number of licensed physicians per 100 people of Tibet, Yunnan, Gansu and other provinces ranked low, while the number of licensed physicians of Beijing, Shanghai, Tianjin and other places ranked the highest. It is easy to build houses but difficult to retain people.” The number of public hospitals can be increased by means of financial input, but if there is no comprehensive measure, it is impossible to attract talents and retain doctors.

Figure 33 The number of general hospitals per 1 million people

Figure 34 The number of general hospitals per 1 million people in each province
Source: WIND Database and CCWE’s calculation

Source: WIND Database and CCWE’s calculation (area with no data is gray)
To sum up, over the past period of time, the overall imbalance and regional imbalance were improved to some extent. In the future, we should strive to increase the proportion of consumption in economy, reduce the proportion of agriculture, improve the level of service industry, promote the rural construction and urbanization of migrant population, and promote the convergence of income, public service and social development at per capita level with financial policies and regional development policies.
II. Chinese economy: 2018

In the first three quarters of this year, China’s economic growth rate was 6.9%, slightly exceeding the market expectation. The steady and good situation continued to consolidate. Chinese economy operated in the rapid growth interval of 6.7%-6.9% for nine consecutive quarters, indicating that economic resilience improved continuously. The bottom of the downward cycle since 2010 was formed and became strong gradually. Seen from the production, the industry and the service industry maintained a steady growth. In the first three quarters, industrial added value above state designated scale increased by 6.7% on year-on-year basis, increasing by 0.7% compared with that in the same period of last year. The growth rate of industrial added value was more than 6% for 19 consecutive months; among them, the added value of manufacturing sector, a most important part of industrial production, increased by 7.3%, increasing by 0.4% compared with that in the same period of last year; in September, PMI, a pilot index reflecting the development of the manufacturing industry, was 52.4%, which continued to maintain in the expansion zone and reached its highest point since May 2012. In the first three quarters, the service industry production index increased by 8.3% on year-on-year basis, and continued to maintain steady and rapid growth. Among them, the growth rate of the added value of information transmission, software and information technology service industry was 23.5%, and the growth momentum was swift and violent. From the perspective of demand, the growth rate of investment was steady and decreased slightly, the growth rate of consumption remained stable, and the growth rate of foreign trade maintained the trend of getting warm. In the first three quarters, fixed assets investment grew by 7.5% on year-on-year basis, which fell slightly compared with that in the same period of last year, mainly due to the decreasing of private investment and investment of the manufacturing industry. Infrastructure investment continued to play an important role of stabilizing investment, and maintained at the high level of growth of about 20%; and real estate investment grew by 8.1% on year-on-year basis, better than market expectation, mainly because this year the land supply of key cities increased significantly. Consumption kept the steady growth and continued to play the role of the first motive force of economic growth. In the first three quarters, the total retail of social consumer goods increased by 10.4% on year-on-year basis. The growth rate was unchanged from the same period of last year. The contribution of final consumption to GDP growth reached 64.5%, increasing by 1% compared with that in the same period of last year. Import and export growth rate kept increasing. In the first three quarters, export grew by 12.4%, and import grew by 22.3% on year-on-year basis. Relative to the negative growth of import and export for two consecutive years, the foreign trade situation significantly improved, which was one of the highlights of Chinese economy this year. Micro data also confirms the stable and good situation of Chinese economy. From January to September, the railway freight volume increased by 14.6% on year-on-year basis, and electricity generation increased by 6.4% on year-on-year basis; from January to September, the profits of industrial enterprises above state designated scale grew by 22.8% on year-on-year basis, increasing by 14.4% compared with that in the same period of last year. The improvement of corporate profits greatly improved and directly drove the recovery of financial taxation. From January to September, the national fiscal revenue increased by nearly 10% on year-on-year basis, up by 3.8% compared with that in the same period of last year.

About Chinese economy in 2018, international organizations and market organizations mainly believe that the growth rate of Chinese economy will drop to about 6.5% or below. An important basis is the unsustainable economic growth driven by high credit growth. We do not agree with this point of view for three reasons: First, China’s high credit and high leverage is closely related to the high savings rate, financial structure and other factors. Relatively high credit balance and faster growth does not necessarily mean high risks. In fact, in five major tasks of the supply-side structural reform, "deleveraging" effect has emerged. According to the latest data of Bank for International Settlements, the rising rate of China's total leverage ratio slowed down obviously and tended to be stable. In particular, the leverage ratio of non-financial enterprises has begun to decline, and the potential debt pressure is reduced. Second, the Chinese economic structure is optimized continuously, and the transformation of old and new energy is accelerated. The contribution of high investment driven by high credit to economic growth is gradually declining, and consumption has become the main driving force of economic growth. In the first three quarters of this year, the contribution of consumption and investment to economic growth was 64.5% and 32.8%. The former was close to two times of the latter. It is expected that with the further increase of the proportion of expected labor income and disposable income in GDP the contribution of consumption to economic growth will further expand. The new economy and the new momentum grow rapidly, and innovation driving is popular, and the transformation of energy is accelerating. The dependence of new economy and new energy on traditional credit financing is significantly lower. Third, the financing structure of Chinese economy has been continuously optimized. In 2016, the proportion of direct financing in total social financing was more than 23%. The report of the 19th National Congress and the financial work conference both proposed to develop direct financing vigorously. With the continuous improvement of multi-level capital market and the improvement of economy capability of service entities, the proportion of direct financing will be further expanded. In particular, it’s worth noting that the proportion of private investment in the total investment is more than 60%, and some private sector investment comes from free capital, rather than bank credit. The financial report of listed companies shows that the proportion of operating cash flow of private listed companies in the total
assets has a rising trend in recent years, which means that if the government can effectively mobilize private investment, even if the growth rate of social financing or credit slows down, investment of private enterprises still will rise, which will increase the total investment steadily.

Our analysis shows that through the supply side structural reform of the last two years since 2016 excessive capacity has been eliminated gradually, zombie companies have been cleared gradually, the high leverage of non-financial enterprises has gradually stabilized and decreased, the long-term mechanism of real estate is being established, funds changed from "separating from the real economy and turning to the virtual economy" to "separating from the virtual economy and turning to the real economy", and the transformation of old and new energy accelerated. In 2018, China economy is expected to have a rare period of strategic opportunities. 2018 is the beginning of the full implementation of the spirit of the 19th National Congress. The report of the 19th National Congress depicts a clear grand blueprint for the future development of Chinese economy. A large number of heads of provincial, municipal and county party and government changed the term of office before and after the 19th National Congress. The in-depth study of organizations and departments at all levels shows that these cadres have abilities and spirit of working in earnest. Under the guidance of the spirit of the 19th National Congress, they do not have too much burden and go all out. Their posting is expected to promote a new round of investment attracting and the upsurge of local economic development.
In this context, private investment with sluggish recovery currently and the manufacturing investment closely related to it are expected to rise steadily, which will greatly hedge the decline of the growth rate of real estate and infrastructure investment. Benefiting from disposable income of residents continuously higher than the growth rate of GDP, consumption upgrading and other factors, in 2018 consumption is expected to maintain a steady and rapid growth, and continue to play an important role of “stabilizer” and "ballast stone" in economic growth. In 2018, the economic and trade recovery trend of major economies is expected to continue, but considering trade protection policies of some countries and the change of relatively high contrast base of this year, the growth rate of export will face a slight downward pressure next year. According to the comprehensive judgment, although economic growth rate of next year will be almost the same to or slightly lower than that of this year, next year the quality of economic growth will be higher, which is mainly reflected in the continuous increase of proportion of consumption, optimized structure of the tertiary industry, more endogenous dynamic force, more obvious transformation of kinetic energy, etc.

Combining the above judgments, CCWE expects that China's GDP growth rate will be 6.9% in 2017 and about 6.8% in 2018.

1. Fixed assets investment: From government-led investment to spontaneous investment

**In the first three quarters of 2017, the total fixed assets investment was RMB458,478 trillion, increasing by 7.5% on year-on-year basis.** Affected by the decrease of private investment and investment of the manufacturing industry, the third quarter the growth rate of fixed assets investment was steady and decreased slightly. First, infrastructure investment was still the main force for steady investment. Benefiting from the increase of demands of traffic infrastructure and city pipe network construction, in the first three quarters of 2017 the year-on-year growth rate of infrastructure investment was 19.8%, equivalent to that from January to August and increasing by 0.4% compared with that in the same period of last year. Infrastructure investment contributed the investment growth of 51.7% with the investment proportion of 21.7%; second, in the first three quarters the investment in the manufacturing industry was USD1,40819 billion. The year-on-year growth rate decreased by 0.3%- 4.2% compared with that from January to August. In general, the increase of PPI, PMI and the profits of industrial enterprises can support the slow recovery of investment in the manufacturing industry; third, as land supply in key cities increased significantly, and home with joint property rights, rent and sale and other policies were implemented, the real estate investment data was higher than the market expectation. The accumulative year-on-year growth rate was 8.1%, increasing by 0.2% compared with that of last month. It is worth mentioning that the sharp dropping of the growth rate of investment in the Northeast was relieved. In the first three quarters, the accumulative investment was RMB2.2324 trillion, decreasing by 2.1% on year-on-year basis. The decline reduced by 3.9%.

**In 2018, the key to maintaining a steady and good situation of Chinese economy is whether private investment can rise steadily.** First, seen from the volume of private investment, the proportion of private investment in the national fixed assets investment was more than 60%, higher than the share of state-owned holding investment. **In the first three quarters of 2017, the total private fixed assets investment was RMB27.752 trillion, increasing by 6% on year-on-year basis and decreasing by 0.4% compared with that from January to August.** The growth rate was 1.5% lower than the growth rate of fixed assets investment. Private investment declined for 4 consecutive months, which directly compromised the growth rate of fixed assets investment. **Second, CCWE expects that next year the growth rate of infrastructure investment in China will drop to 17-18%.** The reasons are as follows. First, according to CCWE’s estimates, next year the PPI index will drop slightly, so that the nominal fiscal income will decline, financial revenue and expenditure will be under pressure, and infrastructure investment funds will be restricted; second, the local government pushed the PPP project in recent years, and some of them have the implicit debt risk. Considering the increased debt burden, next year PPP project expansion will slow down. The data of PPP Center of Ministry of Finance shows that as of June 2017 a total of 13,554 projects entered the database of PPP Center of Ministry of Finance, and the accumulative investment was RMB16.4 trillion; third, infrastructure construction investment projects led by the government have a low rate of return and a long return cycle. It is expected that after the 19th National Congress the situation in which the infrastructure investment supports the growth of fixed assets investment will change, and the high growth rate of about 20% of infrastructure investment will reduce.

According to the analysis of CCWE, private investment is expected to rebound in 2018. The judgment basis includes the following aspects:

**First, the private investment not necessarily faces external financing constraints, especially investment constraints from the financial system.** According to CCWE’s estimates, in 2016 China's total capital formation was approximately RMB28.1 trillion, and in the same period the increase of social financing scale was RMB17.8 trillion. The enterprises still greatly relied on their own capital and other funds for fixed assets investment.

**Second, the cash and its equivalents held by Chinese enterprises are growing rapidly, but the debt burden has declined.** There is potential to support the expansion of private investment. According to CCWE’s estimates, from 2014 to 2016 China had a total of 2,440 non-financial listed enterprises which existed continuously. By the end of 2016, the value of cash and cash equivalents held by them was about RMB5.34 trillion, increasing by RMB1.17 trillion compared with that in 2015 and increasing by 28% on year-on-year basis; among them, cash and cash equivalents held by private enterprises increased by RMB900 billion, increasing by 31% on year-on-year basis.
Third, the rapid development of venture capital fund and private equity investment fund also improve the financing condition of private investment, and give a large amount of financial support to start-ups and small-and medium-sized enterprises. According to the latest report published by China Fund Industry Association, as of August 2017 the paid-in Chinese private equity funds were up to RMB10.21 trillion. Private equity funds and venture capital funds accounted for 62%, and there were up to 11,950 registered private equity funds and venture capital funds, increasing by 2,744 compared with that in the same period of last year.

Seen from the investment demands, after the 19th National Congress the local political ecology will have a new look. For consideration of investment performance evaluation goal, the new local officials will vigorously promote a new round of investment, and introduce the measures which will help with private investment, so as to stimulate investment demands of private enterprises, and promote the growth rate of the current weak private investment and the investment in manufacturing industry closely related to it to increase. According to the latest survey data, in the third quarter of 2017 the entrepreneur confidence index was 68.7%, increasing by 3.3% compared with that in the previous quarter and 17.5% compared with that in the same period of last year.

Seen from technology driving, the scale of fixed assets investment of medium-and high-end industry and technological transformation shows a good upward trend, which will promote the recovery of private investment in turn. From January to September of 2017, the investment in the high-tech industry was RMB3.0716 trillion, increasing by 16.4% on year-on-year basis. The growth rate increased by 0.8% compared with that in the same period of last year. The rate of contribution to the overall investment growth was 13.6%. From January to September of 2017, the accumulative investment in industrial technology upgrading was RMB7.4069 trillion, in which the accumulative investment in technological upgrading in the manufacturing industry was RMB6.7591 trillion, increasing by 12.1% on year-on-year basis and accounting for 46.7% of the proportion of overall investment in the manufacturing sector.

Figure 37 Year-on-year growth rate of fixed assets investment and its component
According to CCWE’s forecast, if the private investment can increase from the current growth rate of 6% to the growth range of 8~10%, it will drive the growth rate of the investment in the manufacturing industry closely related to it to increase from the current 4.2% to 6-8%. Considering that infrastructure investment and real estate investment will slow down next year and decrease to 17-18% and 5-6%, respectively, according to CCWE’s forecast, if the growth rate of other investment increases by 1%, in 2018 the annual growth rate of fixed assets investment will be stable and decrease slightly to 7.2%.

2. Real estate: By accelerating the establishment of multi-channel housing security, real estate enters a new era of development

From January to September of 2017, the sales area of commercial housing was 1.16006 billion square meters, increasing by 10.3% on year-on-year basis, and the growth rate reduced by 2.4% compared with that from January to August.
The sales volume of commercial housing was RMB 9.1904 trillion, increasing by 14.6%. The growth rate decreased by 2.6%. From January to September, the national real estate development investment was RMB 8.0644 trillion, increasing by 8.1% nominally on year-on-year basis. The growth rate increased by 0.2% compared with that from January to August.

From January to September, the housing construction area of real estate development enterprises was 73,806.5 billion square meters, increasing by 3.1% on year-on-year basis. The growth rate was equivalent with that from January to August. The new housing construction area was 1,310.33 billion square meters, increasing by 6.8%. The growth rate decreased by 0.8%. The area of housing completed was 576.94 million square meters, increasing by 1%. The growth rate decreased by 2.4%. As shown in Figure 38, compared with the first half of 2017, real estate development investment and sales both had a declining trend.

Figure 38  Accumulative year-on-year growth rate of real estate investment and real estate sales (%)  

![Graph showing the growth rate of real estate investment and sales](image)

Source: National Bureau of Statistics and WIN Database

Since the second half of 2017, the sales of commercial housing further declined compared with that in the first half of this year, but the growth rate of real estate investment did not decline in the same degree. **We believe that this is still because real estate enterprises purchased a large amount of land.** As shown in Figure 39, in the second half of 2017 the growth rate of the construction area of real estate development enterprises was equivalent to that in the first half of the year, but relatively low. From January to September, area of land purchased by real estate development enterprises was 167.33 million square meters, increasing by 12.2% on year-on-year basis. The growth rate increased by 2.1% compared with that from January to August. The land transaction price was RMB 814.9 billion, increasing by 46.3%. The growth rate increased by 3.6%. The growth rate of area of land purchased by real estate development enterprises further increased on the basis of that in the first half of 2017. As the cost of land purchase and construction cost constitute the real estate investment, the growth rate of real estate investment kept a high level in the year when
the sales and construction were not good continuously.

As shown in Figure 40, in the third quarter of 2017, the premium rate of land transactions remained at a high level, and land price reached a new high in the past two years. Because the land market was hot, the government actively increased land supply, so as to enhance the activity of real estate enterprises which purchased land. In addition, the current real estate inventory is still at a low level (Figure 41), and real estate developers tend to purchase land to supplement the land reserve.

With the transformation of growth pattern, real estate development has entered a new era
The report of the 19th National Congress proposed to adhere to the positioning of “house are used to live but not to speculate”, and speed up the establishment of the housing system of multi-agent supply, multi-channel guarantee and rent and sales, so that all the people have somewhere to live. This means that since the reform of the real estate market in China the mode of "purchasing land and selling houses" of land agents will gradually come to an end, and transform to the mode of "selling and holding operation". The land grant system of local government the pursuit of economic growth rate in the past will change. In terms of transfer of right to use residential land, the simple one-time 70-year transfer in the past will be changed, and more flexibility will be incorporated to meet the social housing demands of different levels.

Under the local land transfer system with the pursuit of the economic growth rate, the proportion of industrial and commercial land in urban construction land is high, and the supply of residential land is seriously insufficient. This greatly promoted the rapid development of Chinese economy at the expense of a large amount of land consumption and the high price of housing land. Seen from the increase, as shown in Figure 42 and Figure 43, in the annual supply of land the proportion of residential land is less than 30%, and the residential land supply of first-tier cities is always below 20%. Seen from the stock, in early 2010 China International Finance Corporation issued an analysis report on the supply potential of construction land in China. According to the data listed by the report, 76% of Japanese urban land is residential land. In New York, residential land accounts for 42.2% of construction land. It is 62.5% in Seoul and 46.7% in London. In cities in China, the index is only 30%. Insufficient supply of residential land is one of the important reasons why the housing price in cities rises rapidly and is always high.

After 40 years of rapid development of Chinese economy, the structural contradiction between supply and demand of the real estate market has become increasingly apparent. On the one hand, due to the continuous rise of housing prices, the housing demand of middle-and-low-income groups cannot be met; on the other hand, the current land system formed in the period of abundant land resources cannot adapt to the reality of increasingly scarce land resources in China.

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13 CCWE used the generalized stock-to-sales ratio of commercial housing sales to reflect the stock of commercial housing and the time required to resolve the stock. The stock-to-sales ratio of commercial housing is the ratio of stock of commercial housing and sales volume in a certain period of time (usually one month). The calculation formula is as follows: generalized stock-to-sales ratio of commercial housing = (area of commercial housing to be sold + area of commercial housing under construction) / average monthly sales area of commercial housing. In which, the average monthly sales area of commercial housing is calculated with the moving mean of sales area in the last 3 months; area of commercial housing under construction includes residential construction area, construction area of office buildings, construction area of commercial housing, etc.
Establish the housing system of multi-agent supply, multi-channel guarantee and rent/sales

Behind the high housing prices in China’s real estate market is the structural contradiction between the single commercial housing supply and multi-level housing demands. In the new era of development of the real estate market, in addition to improving the use efficiency of industrial and commercial stock land, China should also focus on reform of the housing market, build a “rent and sales” housing market, realize multi-agent supply and multi-channel guarantee, and provide different types of housing to different consumer groups, including commercial housing, shared-ownership housing, public rental housing, commercial rental housing on the market, low-rent housing of the government, etc.

First, the housing supply system of shared-ownership housing and commercial housing shall be promoted in first-tier and second-tier cities. Shared ownership means that the government (developers) and buyer jointly have the property right. The buyer has the property right, and can choose to buy the property right according to his/her payment ability; through the adjustment of property share of the buyer and the government, the house purchasing demands of groups with different income can be met. On October 20th, Beijing issued Interim Measures for the Management of Shared-ownership Housing in Beijing, and proposed that the shared-ownership housing belongs
to housing with property right, and the policies for settlement and entrance of school are consistent with those of other commercial housing. The implementation of guarantee of rights and interests of shared-ownership housing will greatly reduce the supply pressure of commercial housing, and alleviate the imbalance between supply and demand in the housing market in the first-tier and second-tier cities.

Second, through the “rental and sales with the same rights” and other reforms, the development of Chinese rental housing market shall be vigorously promoted. In China’s housing market, the ratio of “purchasing and renting” has serious imbalance. At present, there is an immigrant population of more than 200 million in Chinese cities. About 200 million newly employed college students and some white-collar workers need to rent houses. Compared with the world’s major cities, China’s rental market is seriously inadequate.

In order to promote the development of China’s housing rental market, we should make efforts from supply and demand. At present, the multi-channel supply in different cities has been gradually launched. Beijing and Shanghai launched 100% holding of land for 70 years. The new land supply significantly increased the proportion of rental housing construction. In addition, Pilot Program about the Use of Collective Construction Land for the Construction of Rental Housing was released on the morning of August 28th. It was determined that rental housing would be constructed with collective construction land in 13 cities in the first batch for pilot, including Beijing, Shanghai, Shenyang, Nanjing, Hangzhou, Hefei, Xiamen, Zhengzhou, Wuhan, Guangzhou, Foshan, Zhaoqing and Chengdu.

"Rental and sales with the same rights" cultivate the housing rental market at the demand level. Purchasing of house is better than renting. Such a pattern seriously restricts the development of China’s housing rental market. At the end of 2015, a report issued by the Chinese Academy of Social Sciences Research showed that the homeownership rate of urban households rose to 91.2%. However, according to statistics, in 2012 the world’s average homeownership rate was 63%, it was 65% in the United States, and it was 60% in Japan. Purchasing of house is better than renting for two reasons. First, housing prices continue to rise rapidly, and the value-added income of a family buying housing is much higher than their labor income. Therefore, to suppress the rapid growth of housing prices, the key is to make housing have residential property again. Second, because the lessee cannot enjoy the same rights and interests of buyer, the residents prefer to buy rather than rent. "Rental and sales with the same rights” is an important measure to build a housing market focusing both on “purchasing and rental”. On July 17th, 2017, the General Office of the Guangzhou municipal government issued the Work Plan for Accelerating the Development of the Housing Rental Market in Guangzhou, and gave children of the eligible lessees the right to enjoy the public services such as enrollment in a nearby school. By improving and protecting the lessee's rights and interests, the purchasing of commercial housing is no longer the only choice for urban residents, so as to solve the housing problem of middle-and-low-income groups.

To accelerate the development of China's housing rental market, we should ensure the sustainable and healthy
development of the rental market from the perspective of funds. On October 23rd, REITs (real estate investment trust fund), China's first rental housing of a real estate enterprise, was approved by Shanghai Stock Exchange, which created a new chapter of asset securitization of rental housing and had a positive demonstration effect for the acceleration of the construction of rental housing market.

In summary, we believe that in the third quarter of 2017 the growth rate of real estate investment remained at a high level still due to the hot land market and developers’ replenishing of land reserve. China's real estate market will gradually enter the new era of improving use efficiency of land and building stocks. "Purchasing land and selling houses" will no longer be the main growth mode. In the new stage of development, we will focus on the development of shared-ownership housing, residential rental market and other supply channels, in order to effectively solve the housing demands of different income groups. CCWE expects that the accumulative year-on-year growth rate of the real estate investment will drop to 6% in 2017, and it will operate at a low level in 2018. The accumulative year-on-year growth rate of real estate investment in 2018 is expected to be 5%.
3. Consumption: Maintaining steady growth while leading GDP growth

In the first three quarters of 2017, consumption maintained steady growth. The total retail sales of social consumer goods was RMB26.3178 trillion, increasing by 10.4% on year-on-year basis. In September the total retail sales of social consumer goods was RMB3.087 trillion, increasing by 10.3% on year-on-year basis. Among them, from January to September the accumulative national online retail sales was RMB4.87869 trillion, increasing by up to 34.2% on year-on-year basis. The accumulative online retail sales of physical goods was RMB 3.6826 trillion, increasing by 26.1% on year-on-year basis. It continued to maintain a high growth rate. In September 2017, the month-on-month growth rate of total retail sales of consumer goods was 0.90%, rebounding significantly compared with that in the previous two months.

Seen from the contribution to GDP, the contribution rate of final consumption to economic growth in the first three quarters was 64.5%, 31.7% higher than the contribution rate of gross capital formation in the same period and 1% higher than that in the first half of the year. Since 2010, the growth rate of consumption is significantly higher than the growth rate of GDP. In a long term, consumption will continue to lead the growth of GDP for the following reasons:

First, the growth of disposable income of residents is faster than the growth of GDP. In the first three quarters, the per capita disposable income of the national residents was RMB19,342, increasing nominally by 9.1% compared with that in the same period of last year and much higher than the growth rate of GDP of 6.9% over the same period. According to the study results of Professor Bai Chongen of Tsinghua University, social security income is the fastest growing part in the disposable income of residents. In 2016 the Ministry of Human Resources and Social Security and the Ministry of Finance jointly issued a document to reduce basic old-age insurance for enterprise employees, unemployment insurance and other payment rates, and reduce the payment proportion of housing fund, so as to increase the net income of social security of residents in China and help to promote the consumption growth and the transformation of economic structure.

Second, the upgrading of consumption structure is accelerating. According to the data of UBS, since the beginning of this century the total consumption of Chinese households increased rapidly, the consumption structure improved significantly, and the proportion of food in consumption reduced significantly. In the first three quarters of 2017, the national per capita cultural entertainment service expenditure increased by 9.9%. According to statistics of the Film Bureau of the State Administration of Radio Film and Television, the year-on-year growth rate of box office of cinemas in cities throughout the country in the summer was more than 30%,
470 million person-times watched movies in cinemas, increasing by 26.7% on year-on-year basis. According to 2017 China Report of Articles of Luxury released by McKinsey, in 2016 about 7.6 million Chinese families became consumers of articles of luxury, the rate of contribution to the global luxury market was up to 36%, and the average annual cost of articles of luxury is RMB71 thousand. Another concern is the consumption of automobiles. In the past five years, China contributed about 78% of the world's auto sales growth. In 2016, the number of cars owned by Chinese families reached 165 million. From January to September of 2017, the retail sales of cars reached RMB3.0262 trillion, increasing by 6.2% accumulatively and increasing by 0.2% compared with that of the previous month. Among them, the retail sales of automobiles in September was RMB391 billion, increasing by 7.9% on year-on-year basis and unchanged from the previous month. It can be seen that fluctuation in sales caused by the increase of purchase tax at the beginning of the year has stabilized.

Finally, the rapid development of consumer finance and the promotion of introduction of consumption policies will help to improve the mechanism of consumption promotion, and enhance the basic role of consumption in economic development. The consumer finance companies such as Ant Check Later, Jingdong Baitiao, BOC Consumer Finance and Fenqile are developing rapidly, which greatly improves the credit population permeability in China. According to Trustdata’s estimates, in September 2017 the scale of consumer financial lending under the mobile Internet industry reached RMB110 billion, increasing by 148.2% on year-on-year basis.
According to the above analysis, CCWE predicts that the growth rate of total retail sales of social consumer goods in 2017 will be 10.5%, and the growth rate of total retail sales of social consumer goods in 2018 will increase be 10.6%.

4. Price index: The growth rate of CPI maintained stable, and the increase of PPI continued to expand

The year-on-year growth rate of CPI fell slightly, and the month-on-month growth rate continued to rebound. In September, CPI increased by 1.6% on year-on-year basis, dropped by 0.2% compared with that in August. The situation was inflation deceleration. Core CPI (excluding food and energy items) rose by 2.3 on year-on-year basis, increasing by 0.1% compared with that in August. It indicates that residents’ current demands of services and general consumption is relatively stable. By category, non-food items and service items were the main factors of CPI’s year-on-year growth. In September, non-food prices rose by 2.4%, food prices dropped by 1.4%; service prices rose by 3.3%, and prices of consumer goods rose by 0.7%. Similar to the situation from January to August of this year, in September prices of health care, housing, other goods and services, education and culture and entertainment led the growth of CPI, increasing by 7.6%, 2.8%, 2.6 and 2.3% on year-on-year basis, respectively. It indicated that the advance of medical reform, the rising of housing rental prices and the increase of service consumer demands continued to push up CPI.

Food prices continued to pull down the rising of CPI. Among them, in September the year-on-year growth rate of fresh vegetable prices decreased from 9.7% in August to -1.0% in September. Due to the item of fresh vegetables, the year-on-year growth rate CPI in September decreased by about 0.2% compared with that in August. It became the main reason for decrease of year-on-year growth rate of CPI in September (decreased from 1.8% to 1.6%). In September, pork and fresh fruit prices continued to fall, pork prices decreased by 12.4% on year-on-year basis, fresh fruit prices decreased by 3%, for which CPI decreased by about 0.36 % and 0.05%, respectively. Seen from the new and old price rising factors, in September CPI grew by 1.6% on year-on-year basis, in which the contribution rate of new price-rising factors was about 1.4%, and the contribution rate of tail-raising factors was only 0.2%. In September, the contribution rate of tail-raising factors decreased by 0.7% compared with 0.9% in August, so that CPI decreased on year-on-year basis.

CPI rose by 0.5% in September on month-on-month basis, increasing by 0.1% relative to that in August. Seen from the eight categories of CPI, food and non-food prices rose by 0.5% on month-on-month basis. The rises of two categories were the same. The prices of eggs, meat and fresh fruits in food increased by 5.3%, 1.9% and 0.9% on month-on-month basis, respectively. The increase was mainly due to the increased demands of two festivals and the influence of seasonal factors. The month-on-month growth rates of prices of health care, education, culture and entertainment, and clothing item in non-food category was 2%, 0.9% and 0.9%, respectively, which were leading. The increase of labor costs and service demands supported the continuous rising of prices.

In the first three quarters, the year-on-year growth rate of CPI was 1.5%, and the price in the consumer sector was stable. Because tail-raising factors were high in the middle of the year and gradually fall, the central bank
adhered to the neutral and tight monetary policies. According to CCWE’s forecast, in the fourth quarter the year-on-year growth rate of CPI will be about 1.7, the annual growth rate will maintain at around 1.6, and there will be no worry about inflation throughout the year.

The month-on-month growth of PPI continued to expand, and the month-on-month growth increased slightly. In September, PPI rose by 6.9% on year-on-year basis. The increase expanded by 0.6% compared with that in the previous month. Judging by the growth rate of industrial added value and the growth rate of enterprise profit in September, the overall trend of the industrial economy operation was good. By category, the prices of means of production rose by 9.1% on year-on-year basis, expanding by 0.8% compared with that in the previous month. The rate of its contribution to rise in PPI was about 6.7%. It was the most important factor of the expansion of the year-on-year growth of PPI. The prices of means of living rose by 0.7% on year-on-year basis, expanding by 0.1% compared with that of last month. It was relatively stable. The rate of its contribution to rise in PPI was only 0.2%.

Seen from the three major items of means of production of PPI, the price rise in the upper, middle and lower reaches of PPI showed a weakening trend, and the price rise mainly came from the upper and middle reaches. Among them, prices of the mining industry rose by 17.2% on year-on-year basis (18.2% in the previous month), prices of the raw material industry rose by 11.9% on year-on-year basis (11% in the previous month), and prices of the processing industry rose by 7.3% (6.4% in the previous month). PPI’s transmission along the chain of mining industry→raw material processing industry processing industry was not sufficient. Seen from the specific industry segments, the growth of the ferrous metal smelting and rolling processing industry (31.5%), the coal mining and washing industry (28.6%), the non-ferrous metal smelting and rolling processing industry (20.2%), the petroleum processing, coking and nuclear fuel industry (16.4%), the oil and gas mining industry (14.2%), the non-ferrous metal mining and washing industry (14.1%), and the papermaking and paper products industry (13.8%), and the year-on-year growth of the ferrous metal mining and washing industry (13.7%) were leading. They were all concentrated in coal, petroleum, iron and steel, nonferrous metal and other upstream industries and the papermaking industry greatly influenced by the environment supervision. Coal, iron and steel, papermaking and other industries were affected by the overcapacity cutting and limited production of environment supervision. The supply reduction supported the product prices in the upstream and downstream industries or industries polluting the environment. The month-on-month increase of prices of downstream automotive manufacturing industry (0%), medicine manufacturing industry (1.8%), general equipment manufacturing (1%) and other manufacturing industries was less, indicating that the cost transmission capacity of upper and middle reaches to the downstream manufacturing industry is limited. On the one hand, the growth rate of the demand of fixed assets investment declined continuously, and the increase of demands for machinery and equipment and other downstream industries of the manufacturing industry was less, reducing the upstream price transmission ability. On the other hand, the innovation accelerated the technological progress in some industries, absorbed the cost pressure brought by the upstream industries, and even decreased the price on year-on-year basis. For
example, in September the year-on-year growth rate of computer, communication and other electronic equipment manufacturing industries was -0.7%.

PPI rose by 1% on month-on-month basis. The increase expanded by 0.1% compared with that in the previous year. The industries with the biggest month-on-month growth included coal (2.6%), petroleum (2.6%), ferrous mining and washing industry (2.2%), non-ferrous mining and washing industry (2.3%), oil processing (2.9%), ferrous (3.4%) and non-ferrous (3.2%) smelting and papermaking and paper products industry (3.4%). They were mainly in the middle and upstream industries and the papermaking industry, which further verified the effect of overcapacity cutting and environment supervision on rising of PPI. Seen from the old and new price rising factors, in September PPI rose by 6.9% on year-on-year basis. Tail-raising factors accounted for 4%, and the new price rising factors accounted for 2.9%.
In September, the purchase prices of industrial producers rose by 8.5% (7.7% in August), increasing by 1.2% on month-on-month basis (0.8% in August). The year-on-year growth rate of nonferrous and ferrous metal and fuel was leading. The transmission of corresponding price indexes of upper and middle reaches of PPI was smooth, and price resonance was formed. Among them, the purchase price indexes of non-ferrous metal materials and wires, ferrous metal materials, and fuel and power were leading, increasing by 18.6%, 16.6% and 11.9% in September. Relative to 15.3%, 15.4% and 11.8% in August, the growth was bigger.

In the first three quarters, PPI rose by 6.5% on year-on-year basis, and supply and demand in the industry section were in good conditions. As the overcapacity cutting and limited production of environment supervision continue in the fourth quarter, the upstream PPI prices will be increased. However, as the growth rate of fixed assets investment has no sign of stabilizing and recovery, the expansion of the downstream demands could not support the continuous rising of middle and upstream prices, and the impact of PPI tail-raising factors gradually weakened and reduced. Therefore, according to CCWE’s estimates, in the fourth quarter the year-on-year growth rate of PPI may reduce to about 6.5%, and the annual year-on-year growth rate of PPI will be 6.5%.

5. International part: Overall situation is good, risks still need to be watched out.

Since the third quarter of last year, the global economy has experienced a short period of “resonance” recovery. In this round of global recovery, the major economies varied in policies, which brought uncertainty to the global economy.

The United States: Economic recovery is good, risk of rising interest rate still exists.

The outlook for the US economic recovery is optimistic, and a good trend of high growth, low inflation and low unemployment rate has been formed. IMF raised the expectation of US economic growth, and increased the forecasted growth rate of 2017 to 2.2%, which was expected to be 2.1% previously; and increased the forecasted growth rate of 2018 to 2.3%, which was expected to be 2.1% previously. Since this year, the low inflation in the United States has a significant contrast with good growth and employment data, the trend of American economy has been changed, and the unexpectedly low level of inflation has become an important reason for FED’s hesitate about increase of interest rate. The trend of economic growth in the United States is good, and personal consumption is increasing steadily. In the first quarter and the second quarter of 2017, the actual year-on-year growth rate of GDP in the United States was 2% and 2.2%, respectively. The growth rate was higher than that in the same period of last year. It was at a high level and the trend was upward. Since the fourth quarter of 2016, the year-on-year growth rate of private investment became positive. However, the current year-on-year growth rate is still low, which was 1.66% and 3.34% in the first two
quarters of 2017. The year-on-year growth rate of net exports of goods and services began to rise since the third quarter of 2016. The growth rate in the first two quarters of 2017 was 6.5% and 7.2%, respectively. The year-on-year growth rate of private consumption was 2.87% and 2.73%. The United States is a consumer power in which the consumption accounts for 70% of GDP. The stable consumption growth supports the rapid growth of GDP to a large extent. The increase of year-on-year growth rate and growth of retail sales since June 2017 also proved that consumption growth was relatively strong.

![Figure 53 Year-on-year growth rate of actual GDP and some items of the United States](image1)

![Figure 54 Year-on-year and month-on-month growth rate of retail and sales volume of food services in the United States](image2)

The three consumer confidence indexes also show a positive trend of American consumption. In October, the consumer confidence index of University of Michigan was 101.1, reaching its highest level since January 2014. The U.S. OECD consumer confidence index was above 101 for 10 consecutive months by September. Since 2017, the U.S. ABC News consumer confidence index has been showing a steady upward trend.

![Figure 55 Michigan and OECD Consumer Information Index](image3)

![Figure 56 U.S. ABC News Consumer Information Index](image4)
The American economic boom and leading indicator data is eye-catching. The American ISM Manufacturing PMI Index rebounded since April 2017. In September, it was 60.80, creating a new high in the past 13 years and showing the obvious trend of expansion in the US manufacturing sector. Among them, the prices of raw materials and the new order index rose by 9.5 and 4.3 compared with that in August, and were continuously above the boom line of 50, indicating that the current expansion of demands led to rising of raw material prices and growth of the number of new orders. PMI of the non-manufacturing industry was 59.8, which was the highest value since July 2015, indicating that the situation of the service industry was good. Seen from OECD Comprehensive Leading Index, since 2017 the overall economy of the United States is also in a relatively stable state.

The unemployment rate in the United States hit a fresh record low again, and the wage growth steadily increased. Since March 2017, the unemployment rate in the United States maintained below 5%, and in September the unemployment rate reached a low level of 4.2%, hitting a record low in the past 17 years. The data of US Department of Labor shows that in September 2017 the number of new non-agricultural employment changed from positive to negative, and the number of new employment was -30000, lower than the expected level. In July and August, the number of new non-agricultural employment in the United States was 138,000 and 169,000, respectively. The sharp decrease of non-agricultural employment was mainly due to the impact of the hurricane, causing stopping of recruitment activities and temporary unemployment of workers. The reduction of new jobs caused by hurricane did not affect the optimistic judgment about the employment situation in the U.S. labor market. This can be seen verified from the new low of unemployment rate in September and the new high labor participation rate of 63.1%. Reconstruction and employment recovery after the hurricane will make the large probability of new employment data of the fourth quarter change from negative to positive. The year-on-year growth rate of average hourly wage of non-agriculture

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United States: Consumer confidence index of University of Michigan
OECD Consumer Confidence Index (right)

United States: ABC News Consumer Confidence Index: Comprehensive

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United States: Institute for Supply Management (ISM):
PMI of the manufacturing industry
United States: ISM: PMI of non-manufacturing industries

OECD Comprehensive Leading Index: United States Month

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Source: WIND Database

Source: WIND Database
employers in the United States increased and reached 2.9% at present, which was the highest growth rate since 2009. The steady growth of wage income promotes the consumption of the United States and supports the steady growth of the economy.

The inflation in the United States is at a low level, restricting the FED’s increase of interest rate. Since May 2017, the year-on-year growth rate of CPI in the United States rebounded for the four consecutive months. It was 2.2% in September. The month-on-month growth rate was 0.5%, less than the expected growth rate. The year-on-year growth rate of core CPI in the United States remained 1.7% for five consecutive months, all lower than the market expectation. The year-on-year growth of inflation index of personal consumption expenditures (PCE) and core PCE index declined continuously since 2017. They were 1.43% and 1.29% in August.
The continuously low consumer price index and consumer spending inflation index in the United States became the most important factor for FED’s increase of the interest rate. The rising trend of prices in the production sector was obvious. The year-on-year growth rate of PPI is positive continuously since November 2016, and since May of this year the growth increased. In September, it was 2.6%, indicating that the situation in the industrial and economy field was good.

The prices in US real estate market were stable and increased slightly. The sales volume of housing decreased slightly. Changes of two housing price indexes in the United States show that housing prices are stable at present. In October, the initial value of property market index of National Association of Home Builders (NAHB) was 68, increasing by 5% on year-on-year basis and 4% on month-on-month basis. S&P’s housing price index of 20 large and medium-sized cities continued the steady trend since 2015. In July 2017, the year-on-year growth rate was 5.81% and the month-on-month growth rate was 0.73%. The number of new housing and existing home sold in the United States had slight fluctuations and declined, but the overall trend was stable stable. In August 2017, 560,000 and 5.35 million apartments (houses) were sold.
The US stock index increased, and the US dollar index was high. Since January 2017, Dow Jones Industrial Index, S&P 500 Index and NASDAQ Index have risen by 15%, 12% and 17%, respectively. More than 2% of GDP growth, new low unemployment rate, increase of salaries, corporate profits and other good economic fundamental data were mapped to the US stock market.
The continuous promotion and landing expectation of Trump’s tax reform also enhanced the enterprise investment and consumer confidence of residents, and pushed up the stock market. Since 2017, the US dollar index had an overall decline trend, but affected by the expectation of increase of the interest rate and data, the US dollar index increased rapidly recently. The US dollar index rose by 0.68% last week. At present it is in the low shock and consolidation stage.

Recently the yield rate of short-end and long-end national debt of the United States both shocked and rose. This year, the yield rate of 2-year US national debt continuously increased in the shock, but the yield rate of 10-year US national debt yields declined. The expectation for increase of interest rate sufficiently transmitted the short-end interest rate, while the transmission of the long-end interest rate is not sufficient, so that the curve of yield rate is continuously flattened. However, with the increase of expectation for increase of the interest rate in December, recently the interest rate of short-end and long-end US national debt both rebounded. As of October 20th, 2017, the yield rate of 2-year US national debt increased from the trough in September by 33 basis points to 1.6%, which reached a high level in the last 9 years. The yield rate of 10-year US national debt increased by 34 basis points to 2.39%. The US Senate passed the budget, and increased the possibility of future tax reform. The long-term inflation expectations and the term risk premium increased, which was good for further increase of the yield rate of 10-year US national debt.

Europe and Japan: Recovery better than expected, and policies still needs to be watched

At present, the European economy continuously recovers, and the performance of Japanese economy is better than expected. In Eurozone in the second quarter of 2017, the seasonally adjusted month-on-month growth rate of GDP was 0.6%, which was equivalent to that in the first quarter and 0.4% and 0.5% higher than that in the third and fourth quarter of last year. Japan's actual growth rate of GDP in the first quarter was 1.9%, and the actual growth rate of GDP in the second quarter was 2.5%, which was higher than the actual growth rate of 1% last year.

Specifically, since the fourth quarter of 2016, the manufacturing PMI of Eurozone was continuously high. Among them, PMI index has been stably below the bloom line in 2016. After March 2017, it maintained at a high level between 56.0 and 58.0. In addition, Eurozone's investment confidence index began to rise in the fourth quarter of 2015, and increased from around 15.0 gradually to about 30.0, which nearly doubled. It indicated that investors' investment confidence in Eurozone enhanced continuously. These two indicators not only indicate that Eurozone's economy is in constant
recovery, and its subsequent growth has some dynamic support. The performance of Japanese economy also exceeded previous expectations. At the beginning of the year when the situation was not good, many indicators reflecting the real economy rose continuously and stably. Japanese mining and manufacturing industrial production index began to become positive at the end of 2016. And then it constantly fluctuated and increased in 2017, and was stable at about 5.0. The leading indicator of the comprehensive bloom index increased substantially between the end of 2016 and the beginning of 2017, reflecting the good performance of subsequent economic development. Therefore, Japan's economic recovery and growth may also be better than previously expected.
From the perspective of the unemployment rate, since 2016 the unemployment rate in Eurozone gradually dropped from 10.3 to 9.1. This process is continuous and stable. The unemployment rate in Japan also fluctuated and dropped from the highest level of 3.4 in 2016 to 2.8. The employment situation is good. The aging problem in Europe is relatively serious. Germany is a leader of the European economy. Its proportion of aged people is even more than 25%. In this context, Europe has easing policies for immigration, and introduces a large number of international migrants. The increase of young people may be one of the reasons for the decline of the unemployment rate in Eurozone, but the influx of a large number of young workers has brought vitality to the European economy.
Unlike the United States, in the process of gradual economic recovery, inflation in Eurozone and Japan also has a rising trend. Since the third quarter of 2016, Eurozone adjusted the year-on-year growth rate of CPI of the current from 0.4% to 1.5%. The year-on-year growth rate of CPI in Japan increased from -0.5% to a positive value, and maintained at about 0.5%. The stage of gradual recovery of the economy is often accompanied by moderate inflation, which shows that the economic situation in Eurozone and Japan has indeed improved and become a miniature of the gradually improvement of global economy.
Since the outbreak of the financial crisis in 2008, the European economy has been in the doldrums for a long time. In the last 1 year, the "black swans" such as Italian banking crisis occurred on after another, so that European economy had been in a state of gradual recovery and fragility. 2017 is the election year in Europe. Holland, France, Germany, Italy and Belgium all welcomed the election of the top leaders. The populism was on the rise and U.S. President Trump was elected successfully. Under such a background, European politics did not have the worrying "Domino Black Swan" event, but continuously consolidated itself and promoted the economic development. The strong economic performance since 2017 shows that Eurozone is gradually going out of recession.

Under the impact of the financial crisis, Japan also experienced the situation of sluggish development, and the economic recovery was slow. In 2012, Prime Minister Shinzo Abe took his office, and then introduced a series of policies to stimulate the economy, including easing monetary policy, in order to revitalize the financial market, create inflation and boost domestic consumption and investment in Japan in a short term. The so-called "Abe economics" also came into being. At present, although the evaluation on "Abe economics" is high or low, in recent years the Japanese economy is slightly better. During this period, the growth rate of Japanese economy sometimes was less than 1%, but sometimes it was more than 2%. Under the background of the slight improvement of the international economic situation, Japan also showed a relatively stable recovery momentum.

International Risk 1: Unconventional political decision of the Trump administration

According to the latest poll, the support rate of President Trump's "America First" policy is lower than that of last year. His unconventional way to do things is far less attractive than that when he was elected. Currently most people prefer the internationalist policy pursued by the United States for a long term. Except Trump's core supporters, the attractiveness of "America First" is limited to other ordinary Americans. The negative effects of Trump's unconventional behaviors are greater than the positive ones. At the same time, only 24% of Americans believe that after Trump's administration the United States is moving in the right direction. In addition, the mid-term election in the United States (congressional election between the two presidential elections) will begin in 2018. At present the Republican Party may win in the mid-term election, but if the Democratic Party wins in the 2018 congressional election US President Trump will become a lame duck president and his re-election prospects will become obscure. In this
context, in order to improve his support rate, President Trump is likely to make unconventional and non-rational decisions in his ruling, such as radical conflicts in some geopolitical sensitive areas, which will not only directly affect the economic development in related areas in China, but also have a negative impact on the development of mutual benefit and win-win between China and the United States.

**International Risk 2: Uncertainty of economic policies in the United States**

**The rise of US debt may cause the risk of fiscal crisis.** Despite the strong economic performance and even unexpected growth momentum in some aspects of the United States, some experts believe that this round of growth is likely to end. In July of this year, Yellen of FED spoke out strongly on debt problems in the United States.

He believes that the United States may encounter a massive financial crisis. Yellen believes that the growth trend of U.S. federal debt is unsustainable, which is likely to hurt the productivity and the standard of living of Americans. In addition, Congressional Budget Office has concluded that if Trump adheres to the implementation of tax cut and infrastructure and other policies the scale of United States government bond will increase to 91% of GDP in 2027, which will bring a heavy burden to the American economy.

**The uncertainty of American monetary policy leads to market risks.** On the one hand, as of February 2018, the term of office of Chairman of FED will expire, and President Trump will nominate the next FED chairman in the near future. Opinions vary on the monetary policy tendency of the new Chairman of FED. Thos nomination will become one of the most important factors which disturb the financial market in the short term. In addition, the environment of economic development of the United States with a high growth, low inflation and a low unemployment rate makes it impossible to have a final conclusion on the evaluation of the current economic situation. The superposition of the two factors makes the future direction of economic development more uncertain. On the other hand, the short-term fluctuations in American prices have triggered a series of discussions, which have increased the volatility and fluctuation of the market in a short term to a certain extent. Overall, in the short term, changes of personnel of monetary authorities of the United States and market fluctuations increase the uncertainty of economic development and expand the external risks of Chinese economy.

**The risk of trade contraction is caused by the anti-globalization policy of the United States.** Under the guidance of the "America First" policy advocated by the Trump administration, the American international trade policies tend to shrink as a whole, and trade barriers with other countries will continue to increase. For China, that means tighter restrictions on exports. Although the upcoming Trump's visit to China may bring a "honeymoon period" and China’s exports to the United States will temporarily relieved in the short term, in the middle and long term, if the Trump government adheres to the "America First" policy, constantly increases the barrier and reduces the foreign trade, it will have a negative impact on China’s exports to the United States.

**International Risk 3: Policies of international currency issuing countries are inconsistent**

The United States has the trend of accelerating the tightening of monetary policy and promoting the reduction of the balance sheet and increase of interest rate. The American economy has experienced the recovery for many years and the economic indicators continuously improved. Its neutral short-term interest rate has been at the low level of 2.75%, much lower than the average level a few decades ago. In order to prepare adequate monetary policy space to cope with the possible economic downturn in the future, FED withdrew from quantitative easing, reduced the balance sheet and increased the interest rate. In fact, since it announced the withdrawal of quantitative easing in 2014, FED increased the interest rate for 4 times in 3 years, and announced to start the process of "reduction of the balance sheet" in September 2017. Investors generally expect to increase the interest rate again at the end of the year.
European Central Bank (ECB) began to cautiously withdraw from the ultra loose monetary policy. Considering the improvement of investment, exports and other economic data, ECB announced to reduce the scale of debt purchase on the 26th day of this month from 60 billion euros to 30 billion euros and continue for nine months from the beginning of 2018. However, ECB’s withdrawal from the quantitative easing policy is not as expected, which can be verified by the decline of the exchange rate of euro dollar against US dollar and the rise of major European stock markets.

Japan will continue to maintain the quantitative easing monetary policy. Market investors generally expect that the quantitative easing monetary policy will be maintained at the monetary policy meeting of Bank of Japan next week. With the withdrawal of two hawkish board members of Bank of Japan, currently most of the members agree to continue the quantitative easing policy. Although the recovery of Japanese economy is strong, the price level is still low, so Japan's quantitative easing may continue for a period of time.

It can be seen that the withdrawal steps of unconventional monetary policy in major international monetary countries are inconsistent. This may increase the risk of fluctuations of exchange rate between major international currencies and bring shocks to major international stock markets. The fluctuation of China's exchange rate to major countries will increase the uncertainty and risk of the pricing of import and export. The flow of short-term international capital brought by the fluctuation of exchange rate also increases the risk of exchange rate of Renminbi and the domestic financial system.
Expert column

Li Daokui: Great efforts must be made to achieve the grand goal

The successful closing of the 19th National Congress is a milestone political event in the world. It draws a blueprint for the development of China in the next 30 years, and greatly enhances the determination and confidence of all the Chinese to unite together and make efforts.

The report of the 19th National Congress proposed to realize the great rejuvenation of the Chinese nation and realize the Chinese dream by two steps. In this big picture, we analyzed the economic development prospect. We believe that by 2020 China will essentially break away from the so-called Middle Income Trap and begin to become one of the high-income countries in the world. By 2035, China is expected to become one of the world's most advanced economies. People's living standards are likely to rank among the top 30 large and medium-sized economies in the world. By 2050, China's economic development level is expected to reach the world's highest level of economic development. In order to achieve these magnificent goals, China must make efforts from now on. First, the current imbalances must be transformed into the driving force of development. For example, a new growth points can be created by narrowing the gap between regions and between the urban and rural areas. We must continuously improve the quality of the labor force in China from now on, including the popularization of high school education, so that the international competitiveness of Chinese labor can improve continuously and the science and technology revolution’s challenges to the quality of labor can be met. At the same time, from now on we must also study the measures suitable for China's national conditions to cope with the aging of the population, so as to prevent the population aging from becoming a trap which prevents China from becoming a world power.

We believe that Chinese economy in 2018 is expected to complete substantial changes in growth momentum. Specifically, in the field of fixed assets investment, private independent investment is expected to accelerate substantially, thereby greatly reducing the dependence of Chinese economy on infrastructure investment with a rapid growth. In 2018, Chinese economy will also face major challenges in the international aspects, including political volatility in developed countries, the adjustment of monetary policy in the world's major currency issuing countries, and the resulting volatility in international financial markets. Geopolitical risks are likely to continue to develop in 2018, and even become a crisis. Although there are many uncertain factors, we believe that in 2018 Chinese economy may maintain a rapid growth and motive force of growth may begin to realize the fundamental transformation. It is a beautiful answer of Chinese economy after the 19th National Congress.

Yuan Gangming: Promote the conversion of old and new kinetic energy and march forward to the grand goal

The 19th National Congress proposed to focus on solving the problem of unbalanced and insufficient development in the process of striding towards the grand goal of a socialist power. Since the reform and opening up, Chinese economy realized the historical change from traditional planned economy to socialist market economy, and essentially formed the modern economy operation mechanism of microeconomic market competition and macroeconomic regulation. Currently, China is promoting the transformation of development mode from quantity expansion to benefit and quality improvement, and promoting economic development to a new height by optimizing the economy structure and converting the new energy of growth momentum. However, in the current economy poor progress of restructuring, development and transformation and other problems still exist, which need to be seriously treated.

In recent years, China's economic growth slowed down continuously due to the active adjustment of the existing economic transformation and the failure to give a full play of the growth potential, namely the problem of insufficient growth. In view of the insufficient growth, the quality and efficiency of growth are not high, the structural adjustment is slow, and it is difficult to maintain the scale expansion growth of some industries with a large amount of investment. The amount of labor and raw material resources used in these industries is large, resulting in decreasing of scale benefit. Some traditional industries such as resource mining have a serious excess capacity, often suffer losses and rely on policy rescue. The power of transition and adjustment is insufficient. When there is an opportunity, they will return to the quantity expansion.

Since the second quarter of 2016, China's economic growth rate reduced, became unchanged and rose. Most studies and comments believe that this is the change brought by the progress of China's economic restructuring and
transformation. The latest data released in October 2017 shows that in the first three quarters the economic growth rate maintained an upward trend and it increased to 6.9% at the beginning of the year. PMI, industrial added value and other indicators increased substantially. According to some comments, the economic growth rate was 6.7% last year, and this year it kept rising for 3 consecutive quarters and rose to 6.9%. For a total of 7 quarters, it rose steadily, confirming that Chinese economy had changed from continuous downward into steady rising. The structure optimization and adjustment will promote the steady rising of the economic growth rate. The National Bureau of Statistics emphasizes that the increase of the growth rate brought by new and old kinetic energy conversion and the rapid growth of new economy and new industries has a solid foundation. However, seen from economic changes in the first three quarters, the overall economic growth rate was high and then low, some important indexes had fluctuations and declined, the rising trend was not stable, the structure adjustment sometimes advanced and sometimes moved backward, the traditional industry with overcapacity rebounded, and the growth of some emerging industries slowed down.

GDP grew by 6.9% accumulatively in the first three quarters, but declined by 6.8% on the year-on-year basis in the third quarter. The downward trend was obvious. Three demands all declined in April. The year-on-year growth rate of consumption, investment and export dropped from 10.9%, 9.2% and 15.9% in March to 10.3%, 7.5% and 8.1% in September. The industrial added value dropped from 7.6% to 6.6%. The year-on-year growth rate of the main revenue and profit of industrial enterprises dropped from 13.7% and 31.5% to 12.7% and 21.6%. The growth rate of the third industry dropped from 8.3% in the fourth quarter of last year to 8%. The ex-factory prices of industrial products dropped from 7.8% in February to 6.9% in September. National Bureau of Statistics and other departments believe that the growth rate of prices of industrial products and revenue and profit of industrial enterprises rose and then declined. The decline slowed down gradually and tended to be stable. However, the three demands reduced greatly, the monthly year-on-year growth rate of the total retail sales of social consumer goods increased in the first half of the year, and had fluctuations and declined in the second half of the year. The accumulative growth rate of fixed assets investment increased in the first quarter, and then fell sharply. In the third quarter, the growth rate decreased to -1.1%. The growth rate of industrial added value significantly dropped, and then rebounded in September but was still % lower than that in the first quarter. The overall trend was downward. Prices of industrial products and income and profits of industrial enterprises rose and then declined, but the decline slowed down, mainly because real estate and related industries were affected by fluctuations in housing prices.

Seen from the changes of real estate related industries and high-tech manufacturing and equipment manufacturing industry in the industries, in the last two months the growth rate of real estate related industries declined. The year-on-year growth rate of the added value of coal, iron ore, nonferrous metal, nonmetal ore, iron and steel, nonferrous metal, cement and others dropped to -1.3%--9%, decreasing by about 1-6% compared with that in the month with a high point. Among them, the year-on-year decline of iron ore and non-ferrous ores was the largest, which was -5.1% and 8.9%. The growth rate of electrical machinery and pharmaceutical in the high-tech manufacturing and equipment manufacturing industry continuously increased, increasing by 0.3%-0.7% compared with that from the first quarter to the last month. The year-on-year growth rate of metal products and special equipments continuously declined, decreasing by 0.4%-1.5% compared with the high point in the first quarter. The year-on-year growth rate of automobile, computer communication, general equipment and aerospace equipment had fewer fluctuations, was unchanged from that of last month or increased, but decreased by about 0.1%-4% compared with the high point in the first quarter. Overall, the growth rate of real estate related industries declined significantly, and the growth rate of the high-tech manufacturing and equipment manufacturing industry was high. The year-on-year growth rate was often more than 10%, higher than that of coal, steel and other traditional industries related to real estate.

positive changes in structural adjustment was shown, but the industries whose monthly year-on-year growth rate of the high-tech manufacturing and equipment manufacturing industry declined in 2017 were more than those whose growth rate increased. The amount of increase was smaller than that of decline. It has no effect on the economic recovery in the first three quarters of this year.

Seen from change of prices of industrial products and the indicator of benefits of industrial enterprises calculated with the nominal price, in September prices of related products of real estate rose by 6.3%-31.5% on year-on-year basis, prices of products in the high-tech and equipment manufacturing industry rose or declined by 6.5%--0.7%. In September, compared with that in January, the amount of increase of prices of real estate related industries declined. The amount of increase of prices of coal and iron ore with the most amount of increase declined by about 10%. The amount of increase of the high-tech manufacturing and equipment manufacturing industry decreased or became negative. The amount of increase of prices of real estate related industries declined. Its amount of increase was still much bigger than that of the high-tech manufacturing and equipment manufacturing industry. The amount of increase of prices of real estate related industries was significantly bigger than those of other industries, and it had a great impact on price index of industrial products (PPI). PPI affected by the significant rising of prices of the real estate related industries decreased last year, and then increased and had fluctuations this year. It did not show that the overall supply and demand of macro economy improved. From August to September of this year, PPI increased by about 1%
The change in the growth rate of total profits of industrial enterprises since the beginning of this year was mainly affected by changes in the profits of real estate related industries. From February to March of this year, profits of iron ore, nonferrous metal, iron and steel, coal and other real estate related industries rose sharply by 80%-21 times. In February, the total profits of industrial enterprises accumulatively increased to the highest point of 31.5% on year-on-year basis. In the subsequent months, the decrease of the growth rate of total profits synchronously changed with the profits of real estate related industries. The National Bureau of Statistics and other departments emphasized that the decreasing amount of the growth rate of total profits of industrial enterprises gradually reduced, and the growth rate slightly increased in September, showing the trend of stable total profits. But in fact this was only due to changes in the growth rate of profits of steel and other real estate related industries in this period. Profits of real estate related industries grew significantly mainly due to the sharp rise in housing prices, rather than the improvement of cost drop efficiency. Since the beginning of this year, the actual growth of the added value of the high-tech manufacturing and equipment manufacturing industry calculated with constant prices was faster than that of real estate related industries, but its product prices rose by around 1% or 0 in most industries, and the profit growth was between 1% and 26%. The growth rate of profits of most industries decreased. The amount of increase of prices and profits of the high-tech manufacturing and equipment manufacturing industry was much smaller than that of the real estate related industries. The growth momentum became weak, investment growth slowed down, and the investment growth rate of most industries decreased from more than 10% many years ago to less than 10%. The investment growth rate of medicine, general equipment and other industries fell to around 0. The product prices and profits of real estate related industries greatly increased, so that they were greatly stimulated by revenue. Coal, reinforcing steel bar and other products have excess production capacity. The reduction of production in the last two years changed into substantial increase of production. Affected by different changes of product prices and profits of real estate related traditional industries and the emerging manufacturing industry, the new and old growth momentum encountered the problem of reverse change. In the first three quarters of 2017, prices of industrial sectors and changes in profits of industrial sectors calculated with the current prices were strongly affected by the sharp rising and dropping of housing prices.

Since the beginning of 2017, the overall real estate prices change from quick rising of last year to gentle dropping. The year-on-year price index of new commercial housing in 70 large and medium-sized cities dropped from 10.4% in October of last year to 8.2% in August of this year. That of the first-tier cities dropped from 30.9% to 5%. In August, it dropped to -0.3% on month-on-month basis. Ministry of Housing and Urban-Rural Development and other relevant departments believe that the real estate regulation has achieved remarkable results. However, seen from the state of the current real estate market, the actual effect of regulation is not very sure. After 9.30 regulation of last year, housing prices in 70 large and medium-sized cities did not drop, but rose from 9% to 10%. The year-on-year index of housing prices in the first-tier cities dropped obviously in August. Since this regulation, people always doubt whether the regulation effect is lasting and reliable. After regulation measures were taken last year, the growth of housing prices was bigger, land transfer prices were higher, and real estate developers rushed to purchase land. In September this year, the year-on-year growth of prices of land transactions reached a record high of 46.3%, increasing by 33% compared with that before the regulation. The new construction area grew 6.8% on year-on-year basis, the construction area and the completion area increased by 3.1% and 1% respectively, and the real estate investment growth rate was 8.1%, slightly higher than the new construction area. The growth rate of construction and completion was very low, and the growth rate of real estate investment was almost from new area. Real estate developers rushed to buy land, and simply started working to occupy the land. There was no continuous construction, so as to prepare for the next round of higher housing prices. The Chinese real estate market has become a speculative investment market. Speculators know that the dropping of housing prices this time is the same to the changes in the previous rounds. After the temporary dropping, a new round of rising will break out. The housing property tax is levied on housing with an age of 2 years, rather than 5 years. Various purchase restriction and loan restriction measures bypass such a measure which encourages speculation in real estate. Rental and purchase with the same rights, common property rights, cooperation in the building of rental housing and other measures cannot stop speculation in real estate. Speculation in real estate is still unobstructed. Real estate relies on speculation and high prices to obtain profits. The economic growth relies on rounds of sharp rising of housing prices. Every round of housing price fluctuation brought the excessive expansion of production capacity and excessive production capacity of related industries, resulting in increased economic downward pressure. The prices and profits of real estate and related industries are too high, and a large number of capital and resources are attracted.
It causes extrusion of the advanced manufacturing industry and other emerging industries, and helps coal, steel and other real estate related products to expand freely. They are more and more excessive. Such a situation hinders structure optimization and adjustment in which the emerging industries replace the traditional industries and conversion of old and new kinetic energy.

The 19th National Congress proposed that development must be the scientific development. We should promote the economic development and change of motives; improve the total factor productivity; accelerate the construction of the industrial system with the collaborative development of real economy, modern finance and science and technology innovation; make efforts to build the economic system with an effective market mechanism, active microcosmic bodies and appropriate macro-control; and strive to achieve the grand goal of the building of a powerful socialist state. We should treat difficulties and challenges encountered seriously and see the trend. We should not be confused by the immediate conflicts. We should promote the transformation of the development mode, promote the old and new kinetic energy conversion in the right direction, achieve structural optimization, and fully develop potentials.

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