Internet Influence to China Economy

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**Abstract.** The Gross Domestic Product (GDP) total amount situation of China as the second world economy entity is analyzed in the paper. As a developing fast growing country, China has its own characteristics. With the rapid development of internet, the traditional business model is compared to future business model development in the paper. As a part of national strategies of China, internet is becoming one of most important tools for both business increasing and marketing developing with its users fast growing. China economy development will be related to internet tightly in current time and future.

**Introduction**

In 2010, China surpassed Japan to become the second world economy entity based on gross domestic product (GDP) total amount.[1] It is a milestone to China. Besides that, the following question appears, could China catch up USA which is the first world economy entity? When and how China can make it happen? With the internet growing rapidly and deeply, whether China could make good use of it to realize economy mid-high and sustained growth in a long term? Some analysis can be done briefly.

**Glance about China Economy in History**

China population change in over 2000-year history has its own characteristics. From the century beginning 60 million to 1850 430 million, total number only increased 7 times. Year of year (YOY) growth is only 0.1%. The growth rate is quite low. There are many factors to affect population growth. These factors include natural geography surroundings, agricultural production, war, politic systems and traditional thinking and idioms etc.[2]

Although many factors could affect population growth, China population percentage in history occupies quite big. Except at the ending of Dong Han Dynasty below 10% as bottom, at other time the number is often above 20%. Usually the percentage could occupy 30% roughly.

Based on the analysis above, China GDP total amount and population percentage proportion in the world in history could be showed in table 1.[3,4,5]Comparing to the peak time of China history, China has big room to increase on GDP percentage proportion in the world. Or China has big potential on economy development.

**Table 1.** China GDP total amount and population percentage proportion in the world in history.

| Time            | GDP percentage in the world | GDP Rank | Population percentage in the world |
|-----------------|----------------------------|----------|-----------------------------------|
| Han Dynasty     | 26%                        | 2        | 10%                               |
| Tang Dynasty    | 58%                        | 1        | 20–30%                            |
| 1000            | 22.70%                     | 2        | 20–30%                            |
| Song Dynasty(1095) | 80%                     | 1        | 20–30%                            |
| Ming Dynasty(1500–1600) | 25%–29%                  | 1        | 20–30%                            |
| Qing Dynasty(1700) | 22%                      | 2        | 20–30%                            |
| Qing Dynasty(1800) | 32%                      | 1        | 20–30%                            |
| Year   | Qing Dynasty(1870) | 17%  | 2  | 20~30% |
|--------|--------------------|------|----|--------|
| 1900   | 6%                 |      |    |        |
| 1945   | 4%                 |      |    |        |
| 1997   | 3.5%               |      |    |        |
| 2005   | 4.90%              | 4    |    | 20.20% |
| 2009   | 8%                 | 3    |    | 19.60% |
| 2014   | 13.40%             | 2    |    | 19%    |
| 2015   | 14%                | 2    |    | 18.84% |
| 2016   | 14.84%             | 2    |    | 18.82% |
| 2017   | 15%                | 2    |    | 18.73% |

**Influence of Internet to Traditional Marketing Model in Business and Economy**

The basic internet structure appeared on 40 years ago, it gave us a business platform. On this platform, people could play game, go shopping, watch TV, make friends and do research etc. With internet, people have to do many reforms.[6]

In the past a few years, internet as a new media which reflected very quickly and penetrated strongly leaded to bombed growth on marketing directly. Almost everyone who has Personal Computer (PC) could set up web station and promote brand. The relevant investment is almost zero. The game rule had been totally changed.[7] Now with the mobile phone widely used, mobile internet is developing quickly.

Internet is becoming a marketing tool at our new time. It has brought us an unimaginable huge reform. In human history progressing, when the communication speed and wideness had tremendous and revolutionary progress, it would lead to a new height of marketing and business development. Internet time has surpassed any times of history. There is nothing like internet speed and wideness which could make us dizzy. And internet can be instant and global.[8]

**Role of Internet in Economy Development**

Today internet plus has become a part of national strategies in China. Internet user number is growing rapidly. Internet is affecting our business greatly and changing the weight portion in our business. And successful business development will be connected with the sustained influence trend of internet in the future. Here the relevant internet data of China will be analyzed as below.

**Fast Growing on Internet Users Leads to Economy Development**

At the end of 2017, the number of China internet users touched 772 million as figure 1 showed.[9,10,11,12]

Source: ICT Indicators Database
Figure 1. China internet user situation.

Source: China State Statistics Bureau Data
Figure 2. China E-commerce revenue.
base. Based on it, successful business development could be expected. And it will affect China economy development further.

The E-commerce revenue growth trend displays positive relationship with online shopping people very well as figure 2.[13]

During 2010 to 2017 period, online shopping people in China grewed from 158 million to 533 million. The growth rate is over 230%. However, the E-commerce revenue that they generated was increased from 4600 billion RMB to 29200 RMB. The growth rate is nearly 550%. The data showed internet is tightly related to business development in China. The revenue number is roughly 36% of China GDP number. It is showed that China economy is being influenced by internet business.

China mobile users situation is showed in figure 3.[14]

In 2017 China mobile users touched 772 million. 93.8% of them used mobile internet. This is a great platform for both marketing development and business growth. Because these users could be touched anywhere easily.

Because of the internet being used, whether buyers or sellers could save much cost on physical store, employee and rent for the house etc. This definitely could lead to the margin improvement in general business model. So the internet plays a very important part in successful business development. Furthermore it leads to benign influence to China economy.

Relationship between China GDP Total Amount Growth and Internet Usage

According to the data of China State Statistics Bureau and ICT announced, China GDP total amount and internet users number are showed in figure 4.

With the number of China internet users growing, China GDP total amount is growing.

According to the statistics theory and correlation analysis of Karl Pearson, the relationship between China GDP total amount and internet users in China can be analyzed.

The relativity between China GDP total amount and internet users in China can be described as below:

\[ r = \frac{\sum(x_i - \bar{X})(y_i - \bar{Y})}{\sqrt{\sum(x_i - \bar{X})^2 \sum(y_i - \bar{Y})^2}} \]  

(6)

r is the correlation coefficient to describe relationship between China GDP total amount and internet users in China. r>0 means positive relativity; r<0 means negative relativity; r=0 means 0 relativity. \( x_i \) China GDP total amount and \( i=1 \ldots 8 \); \( y_i \) is number of internet users and \( i=1 \ldots 8 \); \( X \) is average China GDP total amount from 2010 to 2017. Y is average number of internet users in China from 2010 to 2017.

Based on formula (6), \( r=22.61/26.05=0.87>0 \)

So China GDP total amount has positive relativity with the number of internet users in China. That means the internet usage can be one of important factors which lead to China GDP total amount growth. China economy is affected by internet.
Summary

Limitations of the Research
Considering large population of China, GDP per capita is backward in the world. The research in the paper is taken only GDP total amount not per capita growth. Hence, the findings of the impact of internet plus on per capita growth may not be the same. Currently only China GDP total amount with the influence of internet plus is touched and discussed.

Conclusion
In conclusion, internet is changing a lot to the world. The most valuable point of internet is not that internet creates a lot of new things. The key point is through internet people could dig again to all current industries. Based on the transparent information shared and the big data integrated, the relevant resources could be utilized to the maximum extent. With relatively high speed growth rate to China economy today, internet gives people a wide, efficient and productive platform in both business and daily life.

Though China Per Capita GDP is not high, with big population and relatively high sustained YOY growth rate on economy China GDP total amount value will increase very quickly. To many aspects of economy, the development of business will be relevant to internet plus. Internet plus time will play very important part to successful China economy development. With internet plus time development and it being a part of sustained national strategy, China will be first economy entity in near future.

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