Analysis of the Forbes global 500 companies in 2021

Chenbo Zhao

Hangzhou Dianzi University, Hangzhou, 310018, China

1750237969@qq.com

Abstract. This article mainly uses tableau software to visualize and analyze the data of Forbes Top 500 companies in 2021, and from the visualized pictures, we can draw a report about the analysis of Top 500 companies in 2021 and the forecast of future industry development. From the visual analysis of the data, we can conclude that in 2021, Internet companies are growing rapidly and industries such as banking and insurance still maintain a high market share. Because of the rapid development of the information age, Internet companies and technology companies may have a brighter future. The traditional energy industry also still maintains a high scale and sales volume because of the high demand in the market. Finally, this article can bring some valuable data and suggestions for market analysis, industry investment.

Keywords: Data Visualization; Top 500 companies; 2021; Data.

1. Introduction

1.1 Background

The forward-looking report of Forbes magazine is known as the "barometer of the American economy" for guiding the investment direction and providing business opportunities for senior decision makers of enterprises. And Forbes rankings are published every year. Its rankings are not only data, but also reflect the annual global economic trends and the global financial environment. Studying Forbes ranking is a good method for financial learning and data analysis. This report analyzes the world's top 500 companies from different perspectives, such as geographical location, business type and company assets. Through this report, customers can better understand the industry trend this year and understand the future development direction.

1.2 Target Audience

The target audience for this article may be investment firms, financial firms, market analysis firms or other related entrepreneurs.

1.3 Contribution

This article may have the following contributions. First, this article analyzes the Fortune 500 from a qualitative perspective, which is a relatively rare but very useful way to analyze them. Second, this article uses data analysis and data visualization to visualize the data of the Fortune 500 companies. Four questions that are useful for both business analysis and business investment are posed and answered using data visualization. Finally, this article has great insights for both industry research and industry investment.

Fig. 1 Fortune 2021 Global 500 Promotional Image

2. Top 5 companies in four dimensions.

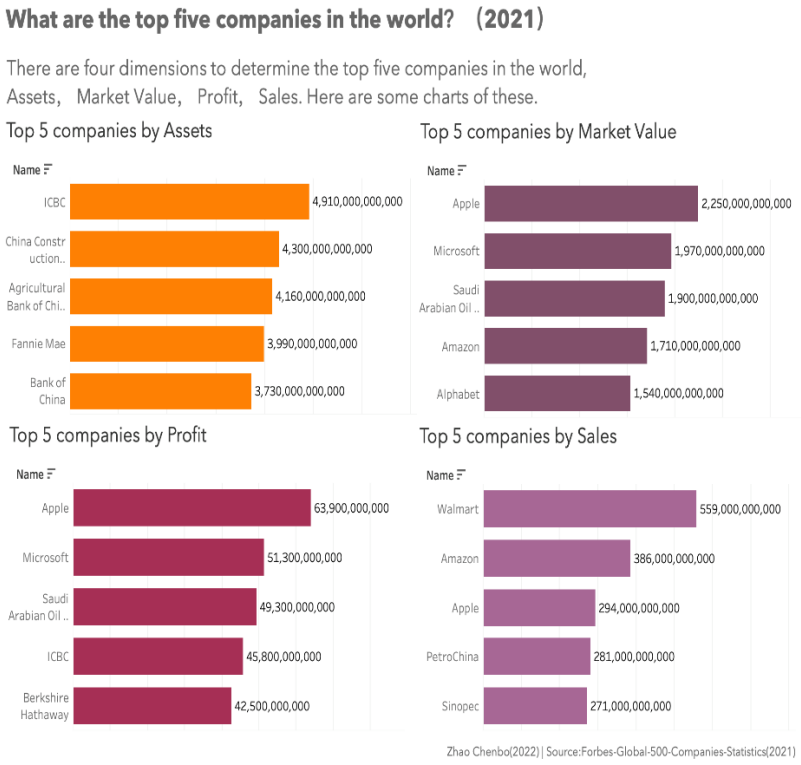

Fig. 2 Top 5 companies in four dimensions

Through this chart, we can see the top five companies in terms of assets, market value, profit and sales. First of all, from the perspective of assets in the first chart, we can see that the top five companies are all related to the banking industry, because the banking industry needs a lot of capital support, so the assets rank top five. The second chart is the market Value chart. We can see that there are four companies in the technology industry. With the advent of the information age and the development of science and technology, the market share of the technology industry has gradually increased these year. The third chart is the profit chart, with two financial companies and two technology companies. It is worth mentioning that the only traditional energy industry in Saudi Arabia appears in both market Value Chart and profit Chart because of its huge oil output. The fourth chart is the sales chart, we can see the emergence of traditional industry companies, such as Wal-Mart, petrochina, Sinopec and so on. This shows that the real economy in this year's development is very considerable.

3. Top three countries.

From this map chart, we can see that the top three countries with the largest number of the world's top 500 are the China, United States and Japan. The number of Fortune 500 companies in these three countries is 143, 122 and 52. This also corresponds to the top three economies in the world. It is worth noting that China's Fortune 500 companies accounted for only 61 of the 2011 Forbes World 500 list, while the United States was a distant second with 121. But in just a decade, China's tremendous economic and social growth is evident in the number of Fortune 500 companies in 2021. China holds the number one position in the world with 143 companies. This shows the booming economy and the huge potential of China in recent years.

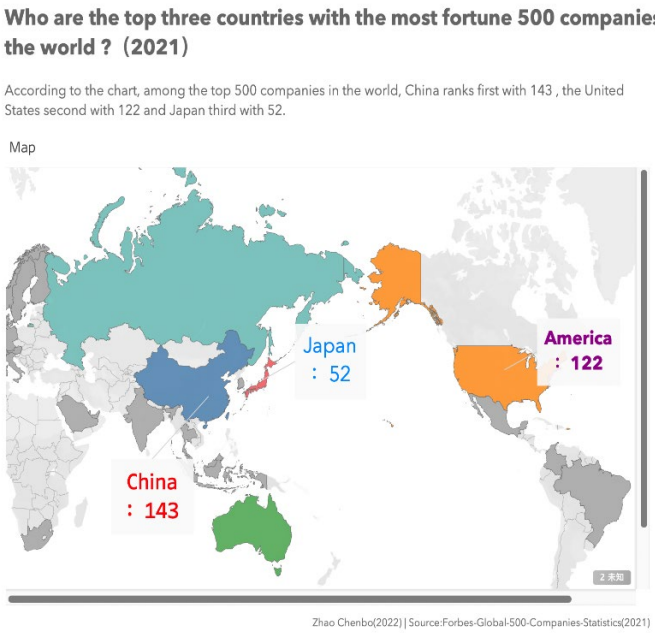

Fig. 3 Top 3 countries

4. The sum of sales by country.

We can use this chart to understand the total sales of the Fortune 500 companies in different countries The chart shows how much a country sells in terms of the shade of color. The darker the color, the higher the sales. We can see that the USA has the deepest color with annual sales of $9,359,900,000,000 and China ranks second with annual sales of $4,200,000,000,000. The top 500 companies in the U.S. and China accounted for 54.46 percent of the total sales. The United States accounted for 37.57 percent and China 16.87 percent. The total sales of Fortune 500 companies in the United States is almost double that of China, but the number is dozens less than China. We can see through these two figures that even though China's economy is developing rapidly, there is still a significant gap compared to the United States. Finally, this chart maybe reflects the fact that the United States and China are absolutely leading the world in economic development in 2021.

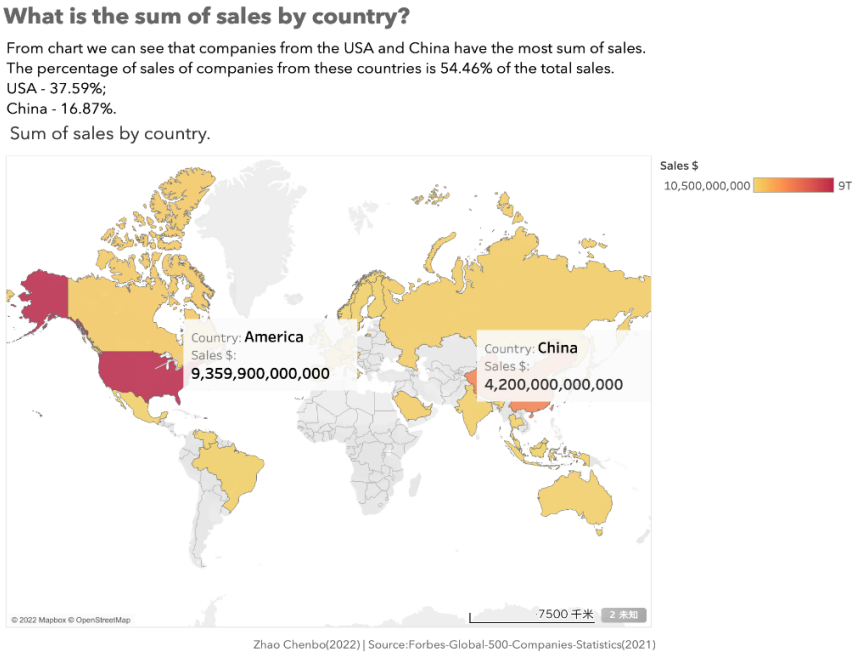

Fig. 4 Sum of sales by country

5. The areas of the top 10 companies

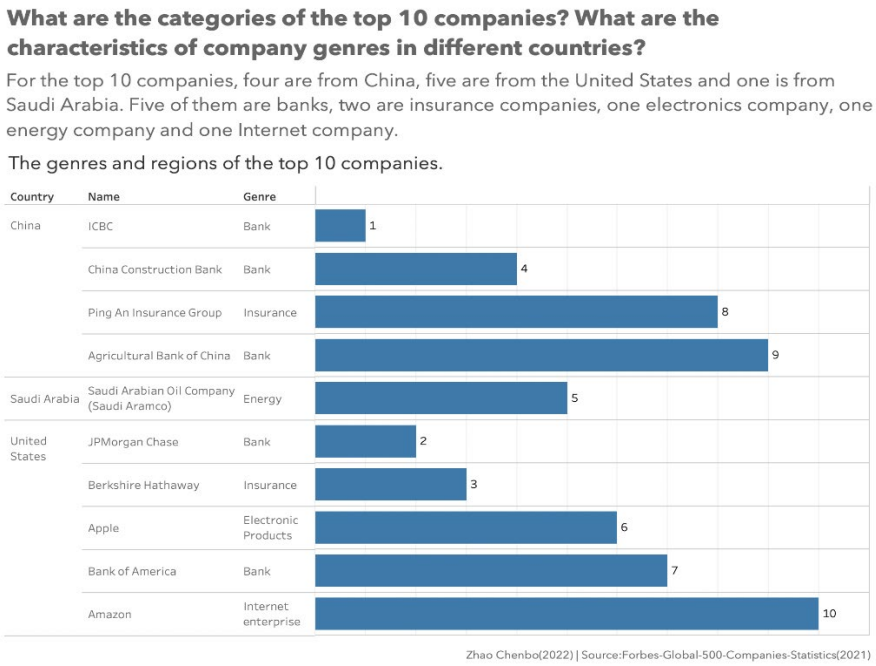

Fig. 5 The categories of top 10 companies

This chart shows the country, genres and names of the top ten companies in the world. In this chart we can see that the top 10 companies in the world come from three countries: China, Saudi Arabia and the United States. There are four in China, five in the United States and one in Saudi Arabia. First, overall, banks account for half of the top 10 companies, indicating that the traditional banking industry will remain the leading industry in 2021. The insurance industry also accounted for one fifth. I think maybe this is because 2021 is a year severely affected by the COVID-19 pandemic, and many people start to buy insurance for their own safety or the safety of their families. And technology companies such as Apple and Amazon jumped into the top 10 this year, surpassing many traditional industries. These are two companies that we are familiar with, because each of us has probably used their products or technology. That's why they're ranked so high. In the end, we find that Saudi Arabia Oil company is still high on the list. This is because this single company accounts for 10% of the world's oil production. This is an amazing number, and we can say that every day our oil price can be affected by any one of their policies.

6. summary

Through this research report, we learned about the regions and types of the strongest companies in the Fortune 500. First of all, the distribution of these companies reflects the development of countries around the world from another perspective. For example, the United States and China have the largest number of fortune 500 companies, and the two largest economies in the world are Also the United States and China. Secondly, from the first chart of the world's top five companies in all aspects and the last chart of the world's top ten companies, we can analyze what the rising industries will be in 2021. There is no doubt about the rapid development of the traditional banking industry. And then the insurance industry reaped the benefits of global turmoil. It is worth mentioning that no matter from the analysis of all aspects or from the comprehensive ranking, technology companies are showing a trend of booming development, among which apple, Amazon, Google and Microsoft, which we are most familiar with, are the leaders of the technology companies. I think the rapid development of technology companies is closely related to the globalization of information, which may be the development direction of the future society. Finally, although we are stepping into the information society, we can find that the development of traditional energy industries such as Saudi

Arabia oil Company, PetroChina, Sinopec and so on is not declining, because the global vehicle number is too large, as well as the aerospace industry, power plants and other industries need a lot of energy. The development of human society is inseparable from the exploitation of traditional energy, so I think the traditional energy industry will not decline in a short time.

In China, Tech companies are growing particularly fast. Many people want to work in companies like TikTok, Tencent, Alibaba and so on. I don't think the development of technology companies can be held back in this information society, even though China's policies require the development of the real economy.

With this study, we can generally understand the future direction and development trend of the industry. First of all, traditional industries related to people's daily life and economy are enduring. Secondly, with the development of economy and the progress of technology in these years, technology companies have great potential and development prospect. Finally, this article has greater insight into the future industry forecast and investment analysis.

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