

Forecasting the Impact of the Results of the U.S. Election in 2020 on China's Economy based on Analytic Hierarchy Process

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Abstract : This paper mainly studies and analyzes the impact of the U.S. presidential election on China's economy. Through the different policies of finance and trade, measures to combat new crown pneumonia, infrastructure taxation, environmental protection, employment and other policies after the election of different candidates, the data curve is fitted and analyzed. A forecast model has been established, the idea of hierarchical analysis of the forecast model has been applied, and the economic impact that different candidates may have on China at this stage and in the next ten years has been further analyzed. Hierarchical analysis^[1] applies not only to situations where uncertainty and subjective information exist, but also to the logical use of experience, insight, and intuition.

Keywords: Curve Fit Hierarchical Analysis Economic Impact

Introduction

As the 2020 U.S. presidential election draws to a close, the results have become the focus of attention. As we all know, Democratic candidate Joe Biden and Republican candidate Donald Trump's governing philosophy and policies are very different, and the United States as the world's largest economy, each of its policies is affected by the changes in the world's multi-faceted pattern. We need to predict and analyze the impact of Biden's election and Trump's election on China's economy^[2]. In another case, since Biden was vice president during Obama's term, we can use Obama's data on all aspects of his tenure as a primary reference for predicting Biden's post-election impact on China's economy. As for predicting the impact of Trump's election on China's economy, we can use the achievements and policies of the last four years of the Trump administration to analyze.

1. The model hypothesis

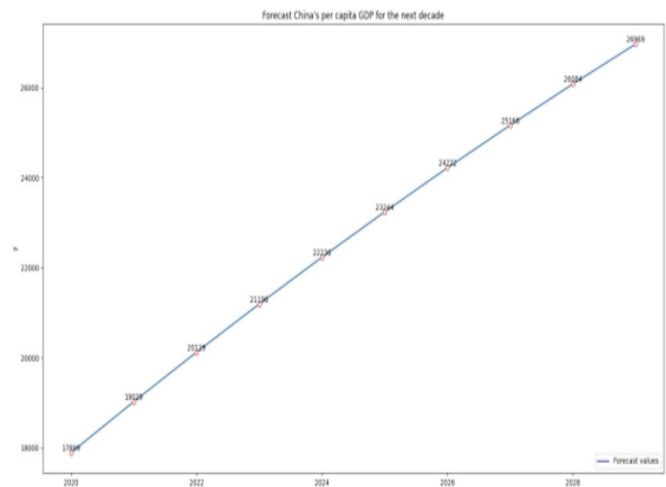
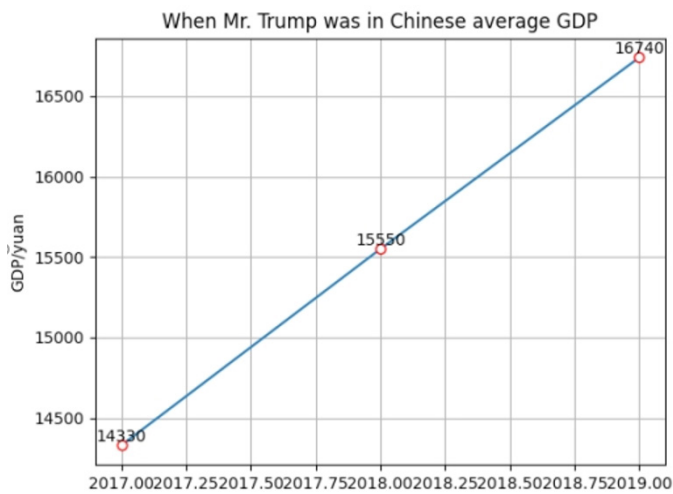
- 1.1 Take the policies of the Obama administration as the policy of the administration after Biden's successful election.
- 1.2 Use the national data indicators of the Obama administration as a reference to predict the economic impact of Biden's successful election on China^[3].
- 1.3 Biden's election will ease relations with China and narrow the scope and scope of the trade war with China.
- 1.4 When Biden is elected, he will first formulate effective epidemic prevention measures and cooperate with China on the prevention and control of the epidemic.
- 1.5 After his re-election, Mr. Trump will not make a major decision on the policy of preventing new pneumonia.
- 1.6 Trump's election will expand the trade war with China.
- 1.7 Use the 2017-2020 U.S. national data indicators as a reference for predicting the economic impact of Trump's re-election on China.

2. Model-building and solution

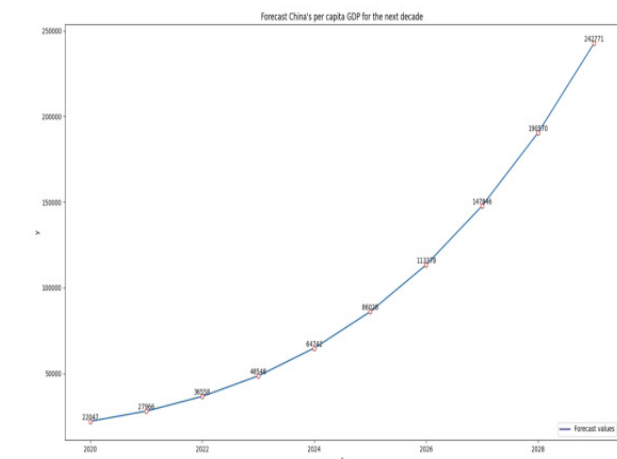
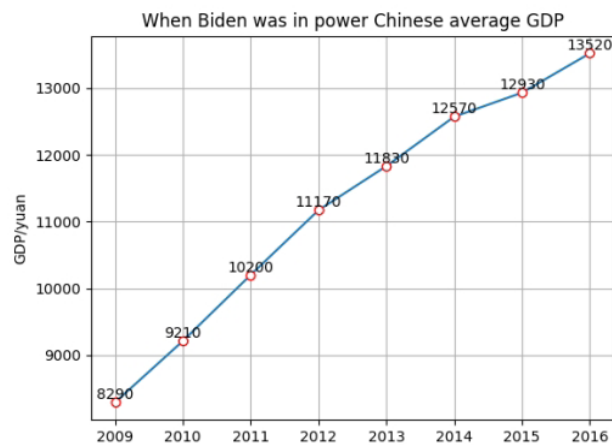
Hierarchical analysis refers to a complex multi-objective decision-making problem as a system, the goal is broken down into multiple goals or guidelines, and then broken down into multiple indicators (or guidelines, constraints) of several levels, through qualitative indicators fuzzy quantitative method to calculate the hierarchy single sort (weight) and total sorting, as the target (multi-indicator), multi-scheme optimization decision-making system method. Hierarchical analysis is to break down the decision-making problems into different hierarchies according to the order of the total goal, the sub-objectives of each layer, the evaluation criteria and the specific preparation scheme, and then use the method of solving to judge the characteristic vector of the matrix, to obtain the priority weight of each element of each level to the element at the previous level, and finally to weight and then re-prioritize the final weight of each alternative to the total goal, the ultimate weight is the optimal scheme. Hierarchical analysis is more suitable for target systems with hierarchical staggered evaluation indicators, and target values are difficult to describe^[4] quantitatively.

3. Model visualization

3.1 If Trump is elected



3.2 If Biden is elected



4. Conclusions

Regardless of the outcome of the election, the U.S. government will continue its protectionist policy toward China

Biden is not entirely a champion of free trade, but his trade policy will not be as aggressive as Trump's. Biden has promised to repair relations with traditional allies to put pressure on China. Biden is expected to eliminate tariffs on imports of steel and aluminum from outside China during his first term. Under pressure from Democrats, most tariffs on Chinese goods are likely to remain in place. Biden also said he would eliminate tariffs on foreign agricultural products.

If Mr. Trump is re-elected, he will add protectionist policies to China during his next term. There is a good chance that the U.S. government will restart its trade war with China, and Mr. Trump will impose tariffs on Chinese imports from China^[5], citing the failure of China to import from the United States to meet the requirements of the first phase of the agreement. The U.S. is expected to raise import tariffs on \$110 billion of Chinese consumer goods from 7.5 percent to 15 percent, \$250 billion from 25 percent to 30 percent, and impose 5 percent tariffs on previously duty-free \$160 billion in imports. These measures will prompt China to take trade countermeasures. Regardless of the outcome of the election, the U.S. government will continue its protectionist policy toward China.

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