Business Fundamentals Project

Raising Total Fertility Rate in Taiwan

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Abstract

Taiwan has the lowest Total Fertility Rate (TFR) globally, with 1.07 children per woman. Without maintaining the 2.1 "replacement level" of TFR, a county's population will shrink and lead to various challenges, including economic slowdown, higher healthcare costs, and a shrinking labor force. By studying the policy, society, environment, economy, and geography detail of a few high TFR targets similar to Taiwan, attainable recommendations will be provided to the Taiwanese government to help raise the TRF to a healthy level.

Design

We will first identify which features are highly correlated to TFR, and the analysis should shed light on why the TFR of Taiwan and other countries has been decreasing during the past few decades. Further investigation will be conducted to determine which countries are good candidates to drill down on their society, policies, environment, etc. After examining the overall condition of target countries, feasible solutions to raise TFR will be composed and presented to the Taiwanese government.

Data

The dataset with country and region features is downloaded from [CIA The World Factbook](). The historical data of TFR since 1960 is downloaded from [The World Bank](). The literacy rate data is downloaded from [Wikipedia](). Excel is used to aggregate all data into a tabular format.

Algorithms

Explore the relationship between a country's TFR and its other features using Tableau visualizing capability. Insightful visualizations are presented in the presentation, as well as the [Tableau dashboard]().

Tools

- Excel for exploratory data analysis
- Tableau for data visualization

Communications

Presentation pdf, write-up, and Excel files can be found on the following GitHub page:
https://github.com/zyzzyva1423/Business_Fundamentals_Project

Interact with the data on Tableau Public:
https://public.tableau.com/app/profile/william.mai1301/viz/TFRStudy/Summary