Index of Economic Freedom

Project Information

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1. Project Scope

The U.S. government wants the United States to become more attractive to foreign investors. The Heritage Foundation wants to strengthen its consultancy portfolio. Thus, the aim of this data analysis at The Heritage Foundation is to

- evaluate which focus The Heritage Foundation would recommend for attracting foreign investors in this legislative period based on its Index of Economic Freedom
- provide an indication if The Heritage Foundation should expand their consultancy division
(especially the consultancy activity based on the Index of Economic Freedom)

2. Data Source

The data set underlying this project is the "Index of Economic Freedom", which is measured annually by The Heritage Foundation, an U.S.-American think tank.

Economic freedom is an important factor for individual wellbeing as well as national and international economic growth. The index takes into account macroeconomic data such as "tax burden", "government

spending" and "fiscal health", human rights like "property rights" and "labor freedom" as well as microeconomic (business) factors like "business freedom", "trade freedom" and "investment freedom". As such, the index is a valuable data set to plan politics, investments and policies from an administrative or business standpoint as well as an interesting source of information for academia and the interested public.

1.1 Collection method:

The data is internal data of The Heritage Foundation. The aim of The Heritage foundation is to produce in-depth research reports and commentaries that it shares with decisionmakers and the interested public. In developing their index, the researchers analyze, condense and cite reports and data of other (research) institutions.

1.2 Contents of the data

The Heritage Foundation measures economic freedom based on 12 quantitative and qualitative factors, grouped into four broad categories (or pillars) of economic freedom:

1. Rule of Law (property rights, government integrity, judicial effectiveness)
2. Government Size (government spending, tax burden, fiscal health)
3. Regulatory Efficiency (business freedom, labor freedom, monetary freedom)
4. Open Markets (trade freedom, investment freedom, financial freedom)

The index covers 12 freedoms in 184 countries from 1995 until 2022.

The 14 columns in the original data set are "name" (of the country), "index year", "property rights", "government integrity", "judicial effectiveness", "tax burden", "government spending", "fiscal health", "business freedom", "labor freedom", "monetary freedom", "trade freedom", "investment freedom" and "financial freedom". The data set contains 5152 rows.

1.3 Measurement:

Every component is considered equally important. Each freedom is weighted equally in determining country scales. Each of the twelve economic freedoms within these categories is graded on a scale of 0 to 100 (a lower score means less freedom, a higher score more freedom). A country's overall score is derived by averaging these twelve economic freedoms, with equal weight being given to each. More information on the grading and methodology can be found here.

For the 2022 index, most data covers the second half of 2020 through the first half of 2021. The information considered for each factor was current as of June 30, 2021. For example, the monetary policy factor is a 3-year weighted average rate of inflation from January 1, 2018, to December 31, 2020.

3. Data

2.1 Data profile

The first variable, "name", is qualitative, structured, nominal

There were two columns added to the original dataset (which had 14 columns), "latitude" and "longitude". These are qualitative, structured and ordinal.

The column index year is qualitative, structured, time-variant and ordinal.

The remaining columns hold quantitative and structured data.

After adding "latitude" and "longitude", the data set now has 16 columns and – as before – 5152 rows.

The data contains 5 categorical variables ("name", "index year", "overall score", "latitude", "longitude" – the latter were added by me to the original data set) and 11 continuous variables (property rights", "government integrity", "judicial effectiveness", "tax burden", "government spending", "fiscal health", "business freedom", "labor freedom", "monetary freedom", "trade freedom", "investment freedom" and "financial freedom").

2.2 Data Limitations

The columns "fiscal health" and "judicial effectiveness" hold no data (N/A) for 2016 and earlier.

Because of missing data the countries Afghanistan, Iraq, Libya, Syria, Yemen, Somalia and Liechtenstein can't be ranked (all years and all columns are N/A).

There are also countries which have a lot of missing data in the earlier years, such as Bhutan, Brunei, Comoros, Dominica, Eritrea, Kiribati, Saint Lucia, Sao Tome and Principe, Serbia, Seychelles, Solomon Islands, Tonga and Vanuatu.

2.3 Data Bias

Collection Bias:

There is a possible collection bias because the user of the Index of Economic Freedom can't make sure the collection in the research papers the Heritage Foundation used in order to create their scoring was done without any human or analytical mistakes. They also can't be sure if the foundation covered all the data they could have collected. But, the collection bias is somewhat reduced by the fact that the researchers used objective macroeconomic data like GDP (e.g. for the columns "tax burden" and "fiscal health".

Measurement Bias:

There is a possible measurement bias because the consumer can't make sure the measurement in the research papers the Heritage Foundation used in order to create their scoring was done without any human or analytical mistakes. I also can't control if the measurement of the Heritage Foundation has been done correctly, although the methodology suggests the factors (the columns) have been measured thoroughly.

2.4 Data Ethics

The data set doesn't contain data about individuals, so there is no issue with the data ethics principles privacy and transparency. Furthermore, the index covers184 countries from all regions of the word, so the principle equality is also not affected.

One problem with equality could lay in the choice of the 12 quantitative and qualitative factors as well as the secondary research resources. The Heritage Foundation represents itself as a conservative think tank which, by its own account, "ceaselessly advocates for individual liberty, limited government, free enterprise, traditional American values, and a strong national defense to protect it all" so the indicators and the choice of data and research resources could be biased by a conservative mindset. But, again, the methodology suggests a transparent and stable approach.

4 Why the data was chosen for this project

4.1 Data source

The Heritage Foundation, based in Washington, D.C., is a reliable data source. The think tank was ranked in the University of Pennsylvania's Global Go-To Think Tank Index as number one for impact and public policy and number one for best use of social media and the internet. In 2020, by its own account, it had 154 meetings with congressional staff, 89 meetings with executive branch officials, 55 meetings with members of congress, 94 working groups and fellowship events in Capitol Hill, 62 candidate briefings and 54 events with remarks by government leaders.

4.2 Personal interest

Having a political science background, I was interested in a data set with political data instead of commercial data. I see it as an opportunity to bridge the gap between what I have done previously in university, which was manually and qualitatively analyzing political data, to what I do now, which is a technical analysis of merely quantitative data.

5. Key Questions

Why do countries rank differently in the economic freedom index?

Is the scoring stable over the years or are there changes?

Is there a correlation between factors?