Brazilian Immigrant Electorate Analysis

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Project Overview

TITLE: Brazilian Immigrant Participation in Brazil-Held Elections

SPONSOR: Boston Planning and Development Agency

GOALS

- Understand how voting patterns of Brazilian immigrants in Brazilian elections have changed
- Understand the demographic composition of the Brazilian immigrant electorate and how it has changed

RELEVANT BACKGROUND

- Brazilian Immigrants outside of Brazil can still vote in national elections

Datasets and Challenges

Datasets

- Brazilian State Department election and electorate (voters) data between years 1998—2018
- Census Data between years 2008—2020

Challenges

- Inconsistent country/age/education codes between pre-2010 and post 2010 datasets
- Total Population Data only available in PDF (required manual entry into CSV)

Analyses Performed

ANALYSIS CONDUCTED

- Analysis of Aggregate Electorate: Changes in number of voters/countries represented, changes in sex/education demographics, changes in voting patterns (which parties the electorate votes for)
- Deep-dive Analysis on Top 10 countries with largest Brazilian Immigrant Populations: Changes in populations/growth rates, changes in gender/education/age demographics, changes in voting patterns (which parties the electorate votes for and what percentage of the electorate population votes)

Methods Used

- Heavy focus on pre-processing data (due to aforementioned data challenges)
- Analysis mainly focused on filtering data using pandas and numpy to highlight features of interest and producing numerical insights and visualizations
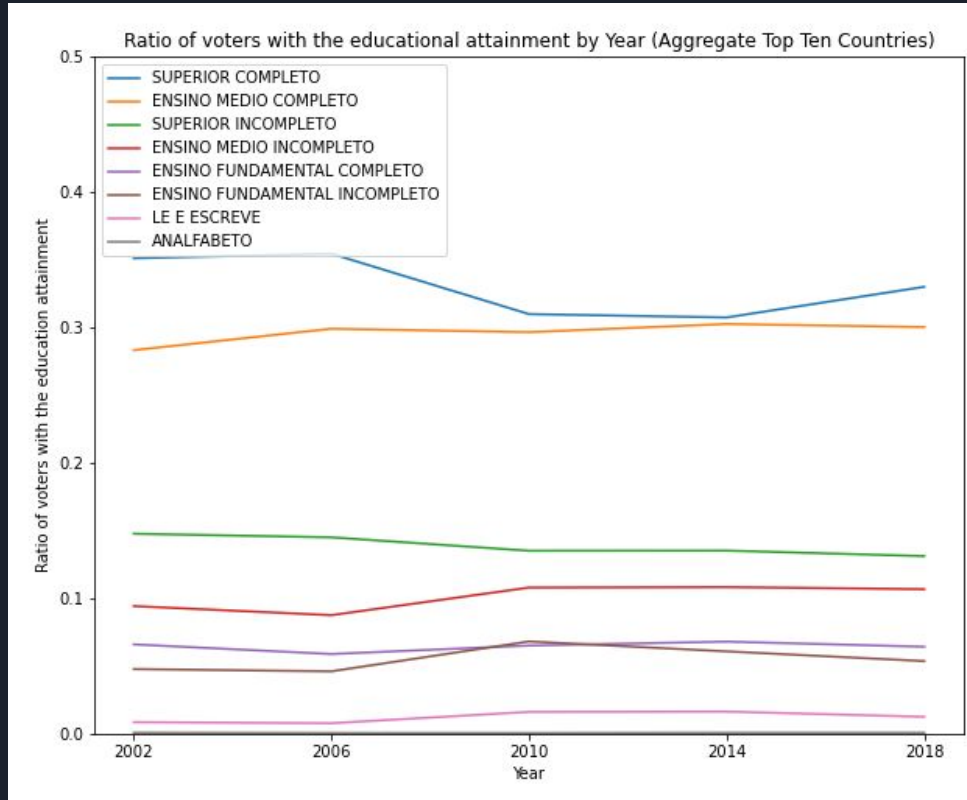
Results

The Aggregate Electorate

- The size of the electorate has varied over time, but the amount of countries represented in the electorate has increased.
- Those with College and High-School education make up the majority of the electorate
  - In terms of completed education, those who completed a "Fundamental" education made up the least.
- Women make up the majority of the electorate
- The most popular political parties are the PSL, PT, and PSDB, but the PSL didn't emerge until 2018 when PSDB dove in popularity.
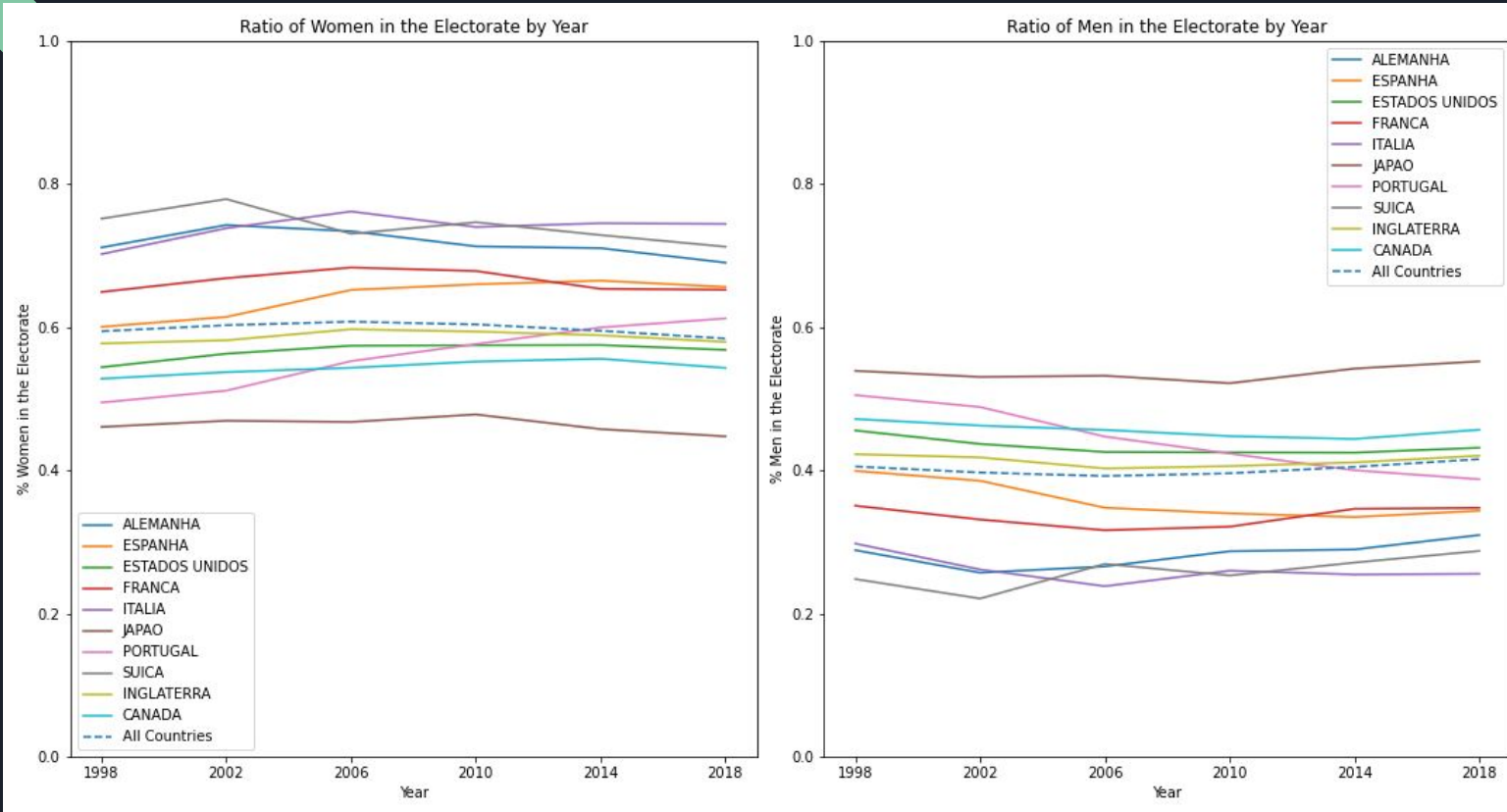
Top Ten Country Analysis

- The United States has the most Brazilian immigrant voters (and Japan currently has the second most)
- In terms of sex, In Germany, Italy, and Switzerland, Brazilian voters are the most predominantly female, with women making up 70% or more of the Brazilian Immi- grant voter population over all years.
- In European countries the PSL is less popular, and the PT is more popular when compared to the aggregate. For the US and Japan, the PSL is more popular and the PT is less popular. There appears to be a difference in the popularity of parties across countries.
  - European countries tended to be more female compared to the other countries in the dataset, and at the same time tended to have similar voting patterns to each other when compared to Japan and the US
- Voter turnout varies and many countries deviate from the aggregate turnout. The highest turnout was in Canada hovering around 55%, and the lowest being spain hovering around 25%
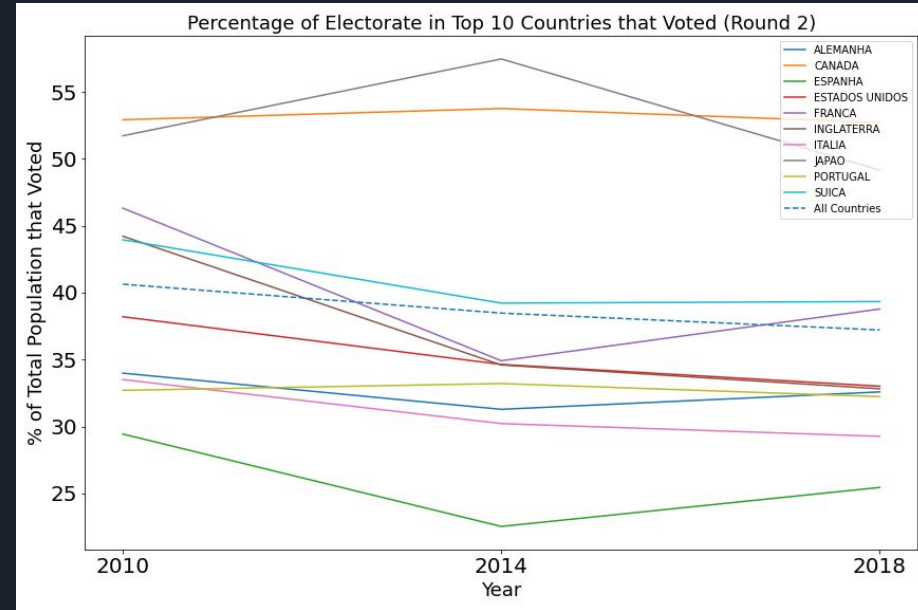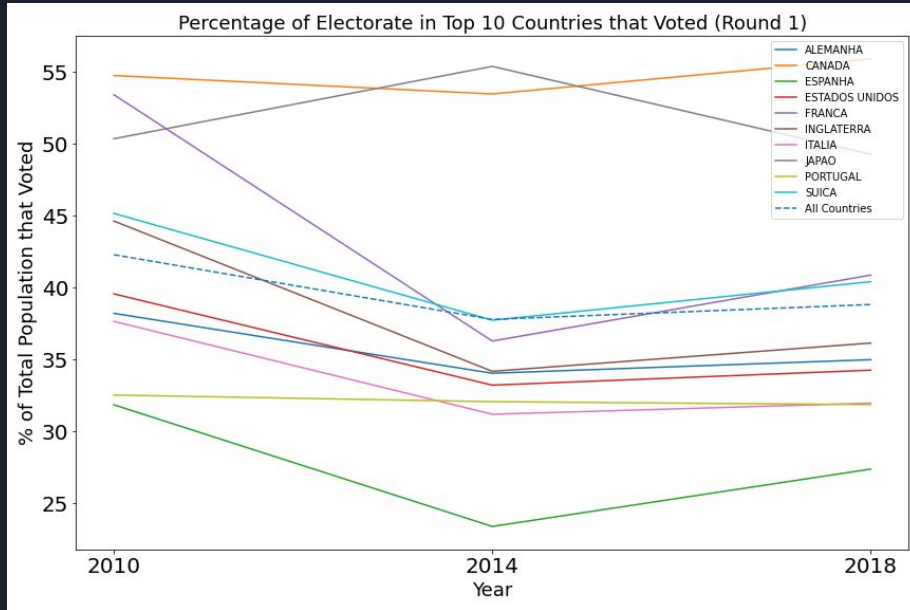
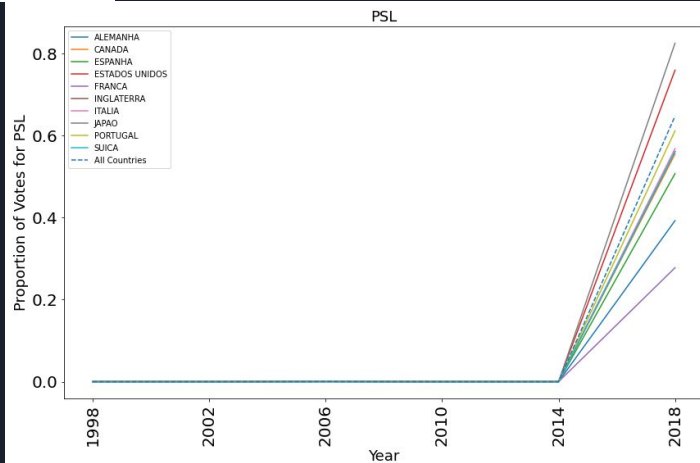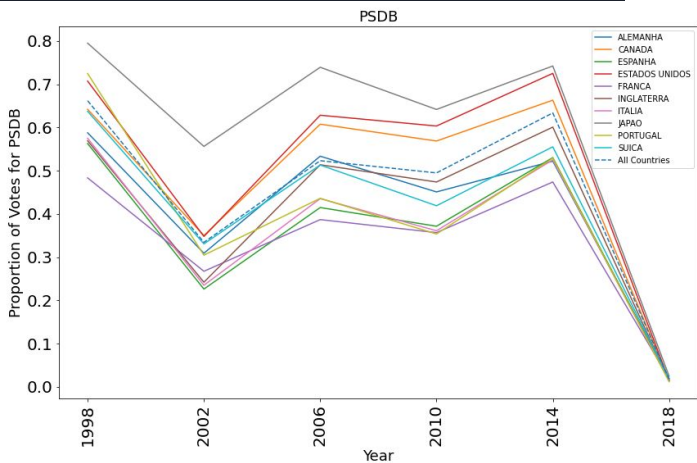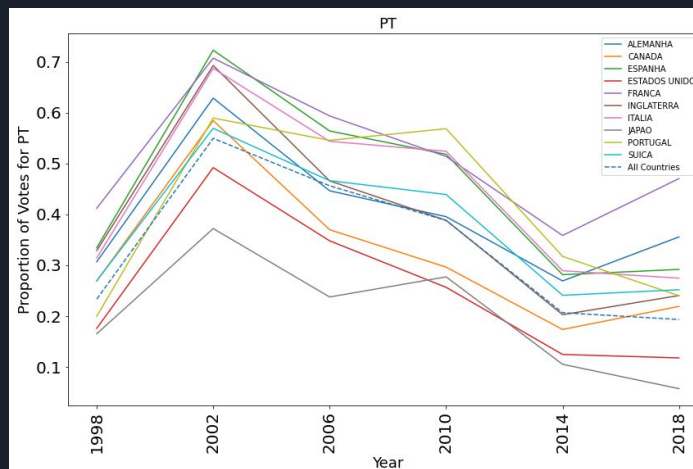# Top 10 Countries - Educational Attainment

Top 10 Countries - Gender Distribution

Results - Voter Turnout

Voting for Top 3 Parties

Next Steps

- Overall we were able to achieve the goals we set for ourselves. We achieved a deeper understanding of the demographic composition and voting patterns of the Brazilian Immigrant electorate.
- By creating meaningful and clear representations of our findings, our client will be able to use our findings to inform voter outreach programs
- The same analysis can be applied to other countries with large a immigrant population abroad.