

Introduction

Largely comprised of small island nations, the Caribbean lies in the tropical region spanning the distance between North and South America, to the east of Central America. Caribbean countries share many geographical and political features, but some historical and cultural definitions broaden the scope of the region to include some Central and South American countries with borders on the Caribbean sea. Two features which are common throughout Caribbean countries are the relatively small population compared to larger countries, and consequently the smaller economies.

Many Caribbean countries rely on tourism and hospitality industries, while others rely on the export of goods. A unifying trait of these economies is the high level of sensitivity to both global economic trends, which affect how many visitors come and how much they spend, and global climate, which impacts sea levels and temperature, in turn affecting beach and reef quality and fish availability.

As the world looks keenly at economic balance and climate change, it is important to evaluate the health of small economies such as those in the Caribbean. Of course, it is also crucial for the countries themselves to recognise what factors contribute to or indicate economic health. The goal of this project is to answer the question, **“How are the prices of establishments such as restaurants, hotels and recreational facilities related to the gross domestic product (GDP) of Caribbean countries?”** While not seeking to imply a causal relationship between features, I will use available data to investigate the extent to which the costs of goods and services describe or predict two measures of GDP.

Data

In order to meaningfully approach my research question, several pieces of data will be necessary. Fortunately, the data I need are available on the web to those who search well.

First, I will identify those countries which I think are relevant to the study. Multiple agencies and individuals have different ideas of what constitutes a Caribbean country. In the interest of collecting enough data, my list will not be too conservative, but not so liberal that I include countries outside the Caribbean with different population and economic profiles. I also need to make sure that the countries I select have economic data available. Territories such as the British and U.S. Virgin islands may also be excluded if they are counted as part of different economies.

I will need to source data on the GDP of those countries I choose to study. For this project I am studying two measures of GDP: nominal and purchasing power parity (PPP). I need to identify a source which reliably records and publishes these records, which are part of normal economic reporting for a country. The availability of these data may affect the scope of this study; Cuba,

for example, does not have readily available documentation of economic measures, and will likely be omitted.

I will use the Foursquare ReST API to collect the data on the costs of goods and services in various countries. I will use data on the venues within a fixed radius of the coordinates of each country's capital. Determining this radius will pose some challenge as there is significant variability in the sizes of capitals within this group. Part of this determination may rely on the precision to which capital coordinates are available. To that note, capital city coordinates are available to be scraped from the web, but will likely have to be cleaned depending on coordinate notation (e.g. 45.30W vs. -45.30).