

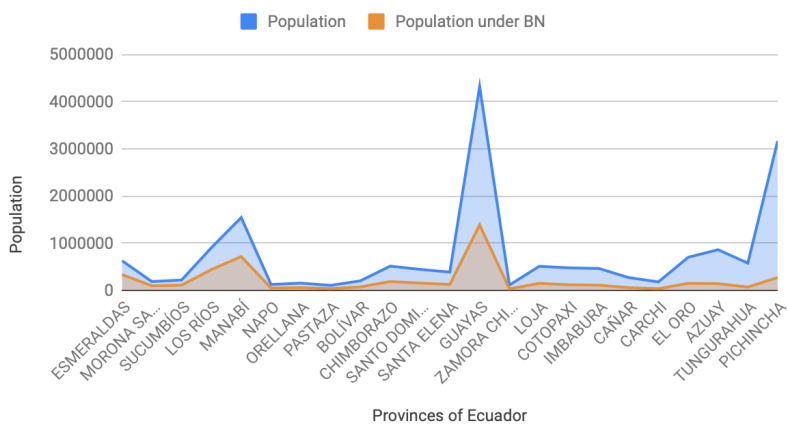
Ecuador Education System - Initial Analysis

Ecuador has had a long history of battling poverty across the country. With a varying number of populations across provinces, as well as a wide variety of average income across the populations, one of the methods that Ecuador has implemented to address this issue was to provide free (government-funded) elementary and middle schools across each region in the country. The Ecuadorian Education department posts a yearly statistical summary of the performances of elementary and middle schools across the country- which reports show, the program had an initial success with an incredible increase in overall school enrollments. However, as the trends continue - the enrollments numbers have plateaued, and poverty is still prominent across several areas of the country- in what is defined as a “poverty trap”- or a situation that does not allow a certain region to escape poverty due to lack of income and lack of opportunities to create income.

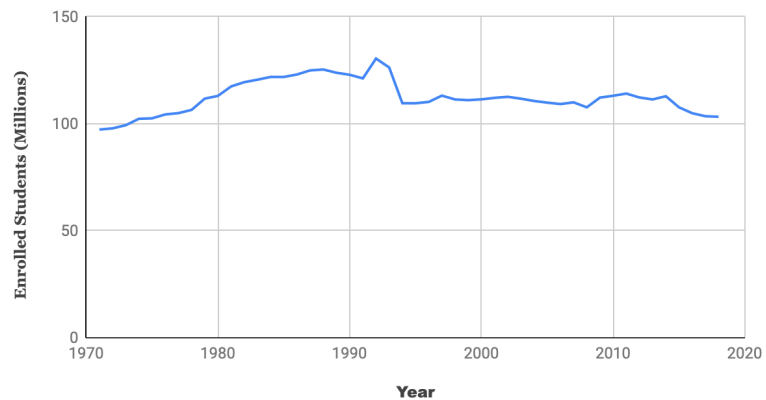
The main hypothesis of this project is to show that there is a correlation between the number of schools that are accessible to children (and therefore having an effect on enrollment rates) and areas that contain much higher rates of poverty. Although there are many possible causes of a poverty trap, I am hoping that this project shows that increasing the number of schools in certain areas that may have been “neglected” could hold the potential to decrease poverty rates by creating more opportunities for the future generations and even provide an immediate source of income for individuals that could be involved in the education system.

The charts below are an initial demonstration of the drastic population levels across provinces, but also, the stark difference in poverty rates across regions and number of schools across regions and the plateau that school enrollments have seen in the past couple of decades.

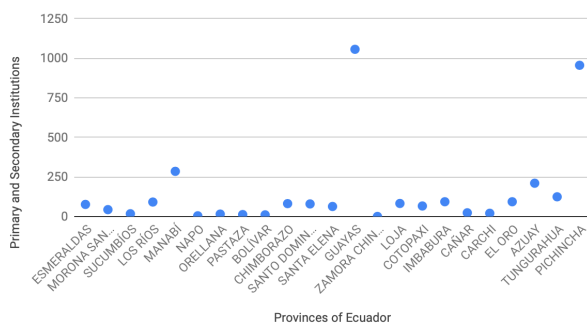
Province Population and Population Without Basic Needs



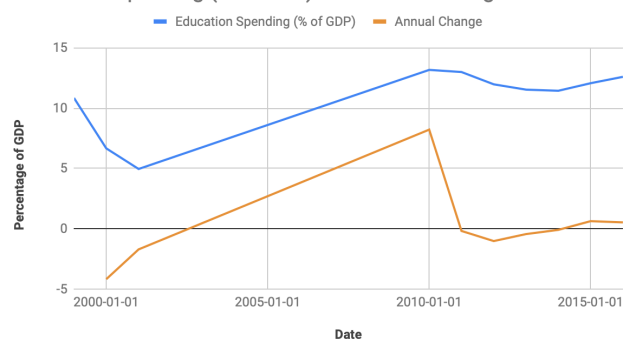
Number of Enrollments in Primary School



Provinces and Number of Institutions



Education Spending (% of GDP) and Annual Change



Next Steps

Moving forward from the project, I am hoping to build a simple regression model that shows a correlation between the number of schools per province and the poverty rate - as well as a comparison across provinces that are lower in number of schools but are technically in areas that are considered to be part of the poverty traps in Ecuador.