Introduction

The following research attempts to explore what may cause population growth rates to be higher in some states than in other states. Currently, in the United States, Nevada and Idaho rank as the fastest growing states in the country. Both states have a population growth rate of 4.1% over the past year. While Nevada and Idaho experienced a rise in population growth, New York and Illinois experienced a decline in population by roughly fifteen thousand people. Texas had the highest level of net domestic migration, and Texas had the largest numeric growth.

Population Growth Rate Variation Among the Fifty States

Materials and Methods

If you are unable to see a state, individuals may lean toward not ranking it to that rate. A high level of research has linked economic and population rates to go together hand in hand. Factors such as unemployment rates, which would decline a state’s economy, decrease a state’s population growth rate (Glaeser 1993). Hypothesis 1: An unemployment rate increase the population decreases.

According to Koles, people prefer to live in places that have a low tax rate than a high tax rate because a low tax rate means that less of their earned income is being given to the government.

Hypothesis 2: The lower the tax rate, the more an increase in population.

The hypothesis explains how a neighborhood or state someone is in can impact one’s income or what someone’s income will be in the future because of the area, surroundings, and atmosphere they were raised in and learned from.

Hypothesis 3: Changes in an individual’s income will effect population growth rates.

People may consider moving to a state that has better education ratings then a different state (Glaeser 1993).

Hypothesis 4: An education system becomes stronger, population will increase.

Results

In order to understand my results, I used the multivariate regression equation with standardized regression coefficients. Because my data numbers fluctuated in an uncorrelated manner, I did not take my multivariate regression equation to its most parsimonious form or reproduce it using standardized beta. The table used to model the results from the multivariate regression equation for the research is as follows:

Table 1: Independent Variables Effects toward Dependent Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized Beta</th>
<th>Standardized Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>206</td>
<td>218</td>
</tr>
<tr>
<td>Schools</td>
<td>0.375</td>
<td>0.347</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>-1.870</td>
<td>0.354</td>
</tr>
<tr>
<td>Unemployment</td>
<td>865</td>
<td>254</td>
</tr>
</tbody>
</table>

The value shown if the data collected is statistically significant or not. Income and unemployment are not statistically significant. Therefore, income and unemployment do not affect population growth rates as predicted. Schools and tax rates are statistically significant. Therefore, school systems and tax rates affect population growth rates. Since R-squared is .464, school system graduation rates and state and local sales tax rates explain 40% of the variance in population growth rate percentages among the fifty states. Both schools and tax rates have an almost equivalent effect on population growth rates because the standardized beta is very close to one another for both variables. The negative value in the value for schools shows that as graduation rates drop, the population growth rate drops.

Dependent Variable: Population Growth Rates

Population growth rates will be measured over a ten-year time period, from 2000-2010. The data used to determine the population growth rates will be data from the Census Bureau and Economics Analysis. The change in average incomes will show if a state has a higher population growth rate than expected.

Independent Variable 1: Unemployment

Unemployment will measure the percentage of people that are jobless in each state, which will help to explain if states with high unemployment have a lower percentage in population growth. Data statistics regarding unemployment rates will be collected from the Bureau of Labor Statistics.

Independent Variable 2: Tax Rates

Tax rates will measure a state’s average local and state sales tax. Sales tax is defined as taxes on purchases. Full-time residents will not be included in the data because federal taxes are not collected by the federal government and are uniform throughout all fifty states, while state and local taxes are created by the state and counties within the state.

Independent Variable 3: Income

Income will measure how much the resident’s average income for the state. Income will be collected from the Bureau of Economic Analysis. Data for the average incomes will be collected from Bureau of Economic Analysis. The change in average incomes will show if a state has a higher population growth rate than expected.

Independent Variable 4: Education

Education will be measured as a state’s high school graduation rate. It is assumed that states that gives a high degree of focus on its education system have more students graduating than those that put less of emphasis on education. Data for the graduation rates was collected from the National Education Association.

Although, it was believed that all variables, unemployment, tax rates, income, and education, would have an impact on population growth rates for the fifty states, only tax rates and education influence population growth rates, while unemployment and income do not influence population growth rates.

Conclusion

Unemployment may have no significant to population growth rate because people may stay where they move just because of the unemployment rate in that state. Unemployment rates are an important factor to look at when individuals are planning to move because it is also possible that people move to different states after they have a secure job in that state because they are being relocated for work. It is something that this research did not focus on. Further detailed research can still prove that unemployment rates may influence where someone moves in a specific part of a state. It is possible that looking at the state’s overall unemployment rate may show no significance but looking at separate cities within a state may have a significance because it is more specific data that is being analyzed. Income may not have had significance to population growth rates because people may move to a state regardless of their income but decide to buy a weather or less expensive city within that state. States that focus on having a good education system with strong teachers and teaching policies will result in more of a population growth then states with weak education systems in place. States that do not set high state and local sales tax policies will notice more of an increase in population then states with high taxes.

For forthcoming research on population growth rates, it may be in one’s interest to explore if education and tax rate still have an impact on population growth rates, or if income and unemployment still do not have an impact on population growth rates based on more recent data from when the 2020 census is released. This research can also be taken further by looking at major populated cities in every state and comparing the cities tax rates and education system with the city and states population growth. Different independent variables can also be tested with the same dependent variable, on why some states have a higher population growth over other states. Other variables that could help explain population growth rates in states may be attractions in the state, for example beaches, weather, people may prefer the cold or hot, transportation systems, if buses are available, the type of people residing in the state, or moving closer to family. Crime rates may also play a role into individual’s decision to move to a certain state, because everyone would prefer to live in a safe environment.

The results from this research can also be examined further. The results showed that people prefer to live in states with low tax rates and good education systems, but for good education systems to be enforced, public schools need to have the same wage as the best teachers, have many school supplies and technological tools, and to build and renovate schools in poor conditions. This shows that individuals looking for good school system’s, but lower taxes contracts one another. Therefore, it could be that individuals are looking for good private school systems in a state versus public schools. Since private schools are not funded by local, state, or the federal government, it would seem more logical for individuals to want to live in that state. It is possible that looking at the state’s overall unemployment rate may influence where people move to, but this is not possible.

The topic and research conducted in this paper can be taken to many more levels and expansions because surely population growth rate cannot be explained or affected by just the two variables found to be significant in this research.

Literature Cited


Introduction facts collected from United States Census Reports