Project Title

Causal effect of the Great Recession on Unemployment across the Unites States of America

Team Members

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Abstract

To understand and reflect on the correlation of employment type, pay, prices, inflation, and unemployment rate for all the states across the United States of America before, during, and after the Great Recession (2007–09).

Introduction

An employment is a right, not a privilege. The employment scenario of a country can explain the overall satisfaction of its citizens very well. In the United States, the employment data is maintained by the Department of Labor. The Bureau of Labor Statistics (BLS) publishes information on employment and wages by demography, occupation, career information, employment types.

The state and local governments use the employment statistics for planning and budgetary purposes to organize local employment and training services. New policies are remodeled every year by the Federal Reserve, one such policy is to raise the interest rates by measuring the strength of the labor market.

One of the most widely recognized indicators of a recession is high unemployment rate during that period. "In 2015, six years from the end of the recession, total U.S. employment was 148.3 million compared to a pre-recession peak level of 146.6 million. Meanwhile the population of working age people rose by 17.5 million, far more than the 1.7 million employment gain" – Forbes. These are some of the key statistics that show the damaging effect of this recession.

We wish to find out a relation of various employment details with other quantifiable entities like Inflation, Consumer spending, GDP, and wages for different industry types with the data obtained through the Local Area Unemployment Statistics (LAUS) program. The LAUS program is a federal-state cooperative effort to keep track of the employment and the unemployment census for approximately 7,500 areas.

Background

The BLS is a governmental statistical agency that collects, processes, analyzes, and disseminates essential statistical data to the American public. The BLS has taken initiatives so that common people can understand the data easily. In recent years, they have done more to include visualizations in their publications. Few of the publications include "The Economics Daily" (TED) and "Spotlight on Statistics".

The BLS publishes a new edition of "TED" every business day, and they have been doing this since 1998. Each edition of TED typically includes a chart or map, sometimes two, with a few words to explain data in visualization. "Spotlight on Statistics" is another publication that focuses on visualization. Spotlight tells a longer story about a topic through visualizations in the form of slideshow. It also includes brief written analysis about the data.

The BLS also publishes reports "BLS Reports" and "Beyond the Numbers" which includes visualization of data they are explaining. Apart from this, BLS has published many interactive maps and charts where one can check data for different time ranges.

The dataset is also available in the public database of "Google Big Query", which can be accessed using SQL.

Research Work

The Great Recession was a period of economic decline observed in world markets between the late 2000s and early 2010s. The recession majorly originating in the United States of America particularly related to the real-estate markets, resulted in assets depreciation and the collapse of the financial sectors. This lead to a huge increase in unemployment rates, increasing federal debt, inflation, and rise in petroleum and food prices.

In our research, we hope to track the effect of this Great Recession on the unemployment rates across the US and the extent to which the economy has recovered post the recession, across demographic details. The number of unemployed rose from approximately 7 million to 15 million during this period. By mining the data from before and after the Great Recession, we hope to throw some light on the section of the society that was most affected and explore in-depth the details of those who recouped from this quicker than the rest. A recent poll by the U.S. Census Bureau found that greater than 50% of all Americans still think the U.S. has not recovered from the latest recession, despite the data showing otherwise.

The United States saw the middle class and the poor being affected the most by the Great Recession, with the younger generations being especially affected the most. With nearly a decade after the Recession, we highlight on how well the then younger generation is faring in the current employment markets.

References

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