Recession and its effects on Employees (1587 words) Srichandana Chakilam, Spring 2023

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1. INTRODUCTION

Due to the considerable economic and social disruption, it may bring about, "recession," an issue that is currently in the spotlight, is frequently feared by people, businesses, and governments. Businesses may experience protracted difficulties during the recession, such as trouble making money, high unemployment, and a general sense of unease and insecurity. Some businesses may even file for bankruptcy. People can have reduced income, job loss, and a decreased ability to get by. Financial markets can be significantly affected by recessions as well, with stock prices falling and volatility rising, further reducing personal wealth, and fostering an atmosphere of instability. The effects might linger for a very long time after the recession has gone. For instance, a person who loses their job during a recessionary period can have trouble finding employment right away, and they might occasionally see lower pay and slower career advancement. Recession affects everyone, not just individuals or workers. Depending on the length and intensity of the economic slump, it also harms businesses and employers.

There have been 34 recession cycles since 1854, with each one lasting 17.5 months on average. A recession has historically lasted 11 months, though, if we only look at the period from 1945 to the present. Bordo and Duca (2016) provided a thorough analysis of the factors that contributed to the financial crisis and recession that happened in 2007–2008. According to them, the interdependence of banks and the lack of clarity in the financial system contributed to the escalation of the crisis. The responses to the crisis, such as the implementation of monetary measures, helped avoid a longer recession, even though recovery took a long time. Numerous communities are still struggling financially [1]. People's mental health may suffer as a result of recessions because of the ripple impact they cause. They could result in a rise in depression, anxiety, and other mental health problems because of the additional financial burden and uncertainty they bring. During recessions, losing a job is a very common consequence and can be particularly harmful to mental health. The prevalence of worry, unhappiness, and even suicide is found to be directly correlated with unemployment, according to the study conducted by Blanchflower (2009) titled "The Psychological Impact of Economic Recession and Unemployment." [2].

2. RESEARCH QUESTION

As various studies suggested that deflation can have a significant impact on mental health, it can lead to an increase in depression, anxiety, and other mental health disorders. Moreover, they also tend to have an impact on international migration patterns, as individuals may be forced to migrate in search of employment opportunities or to escape economic hardship. The paper's primary purpose is to examine the correlation between economic recessions and the mental wellbeing of workers and to understand how it impacts their decision to move in search of jobs.

3. METHOD

3.1 Data

To understand its impact on individuals, Reddit data from 585 submissions have been collected with the help of Python Reddit API Wrapper – also known as PRAW. Reddit is the best platform because of its larger user base, real time updates and ease of data collection. The method used in the analysis is purposive sampling – as the submissions are selected based on the specific keywords that are needed to perform research.

To begin with, necessary credentials are created and defined to access the Reddit API and a list of subreddits is defined to search through. We have considered the following subreddits for the analysis – 'r/AskReddit', 'r/worldnews', 'r/news', 'r/RantsFromRetail', 'r/jobs', 'r/antiwork', 'r/finance', 'r/Advice', 'r/personalfinance'. We defined a list of mandatory keywords that must be present in the submissions. These keywords are case-sensitive, and they play a major role in extracting the exact data we need. Some of them are: 'recession', 'layoff', 'unemployed', 'jobloss', 'layoffs', 'unemployment', and 'lost job'. Additionally, a time range of 600 days is specified to fetch submissions. Using the PRAW library, we search for submissions that match the specified keywords within the defined time range. For each matching submission, relevant information such as the title, self-text, score, subreddit, URL, and creation timestamp is extracted and stored in a dictionary. Finally, the extracted information is converted into a pandas DataFrame and exported to an Excel file. The resulting data frame can be further analyzed using Sentiment Analysis with text classification to extract insights related to the research question of the impact of the recession on mental well-being and migration decisions.

3.2 Analysis

The fetched data is cleaned and handled using different transformation techniques that are just enough for the analysis. From the data collected, only the body of submissions is required for mining in our analysis. The empty values and duplicates are removed and processed data is stored in a dataframe.

Fawcett (2019) wrote an article on how to extract Reddit comments in Python, which could be useful for collecting data to analyze sentiment. In text classification for sentiment analysis, polarity is a crucial aspect that denotes the sentiment expressed in a text. The polarity score quantitatively measures the sentiment conveyed in a text, which can be either positive, negative, or neutral. The score ranges between -1 (entirely negative) to +1 (completely positive), with 0 indicating a neutral sentiment. For instance, the sentence "I love this job" would have a positive polarity score, while "I hate to work here" would have a negative score. On the other hand, subjectivity is a measure that determines whether a text expresses a subjective opinion or a factual statement. Typically, subjectivity is used to categorize a text as either objective or subjective in text classification for sentiment analysis. Objective texts present facts or information that is not influenced by personal feelings or opinions, whereas subjective texts express personal beliefs, opinions, or feelings. The subjectivity score measures the degree of subjectivity in a text, ranging from 0 (completely objective) to 1 (completely subjective)[3].

With the help of these two concepts, we have further analyzed each post's sentiment — which describes whether the recession influenced mental health or contributed to their migration in any way. A qualitative measure of the impact of the text on the reader's sentiment is returned. We have categorized this qualitative insight into four categories - "Not affected", "Strongly affected", "Affected" and "Not that affected". If the polarity and subjectivity of the text are both zero, the function returns "Not affected". On the other hand, if the polarity is less than 0.1 and the subjectivity is greater than 0.5, the text is classified as "Strongly affected". Similarly, if the polarity is less than 0.1 but the subjectivity is less than or equal to 0.5, the text is classified as "Affected". Finally, if the polarity is greater than or equal to 0.1, the text is classified as "Not that affected".

4. RESULTS

Using text categorization and sentiment analysis, we were able to visualize the dataset and determine how the recession has affected different people. Each submission on the subreddits is categorized as "Affected", "Not affected", "Not that affected", or "Strongly affected" based on Polarity and Subjectivity scores. We were able to categorize 449 postings based on their text from the original dataset of 585 submissions. According to the dataset analysis, only one post out of all the investigated postings was labeled as "Not Affected" by the financial crisis. This result implies that the recession has had some sort of effect on almost all jobs. Although this analysis may not be representative of a broader population, these outputs could provide valuable details for further examination to the current economic situation.

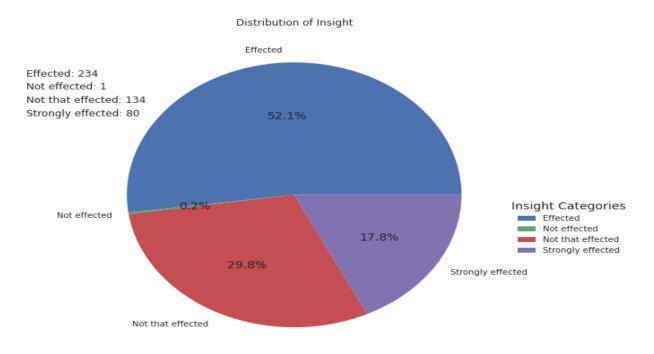


Figure 1 Breakdown of Reddit Submissions by the Impact of the Economic Recession

A sentiment score-based histogram will show the same results.

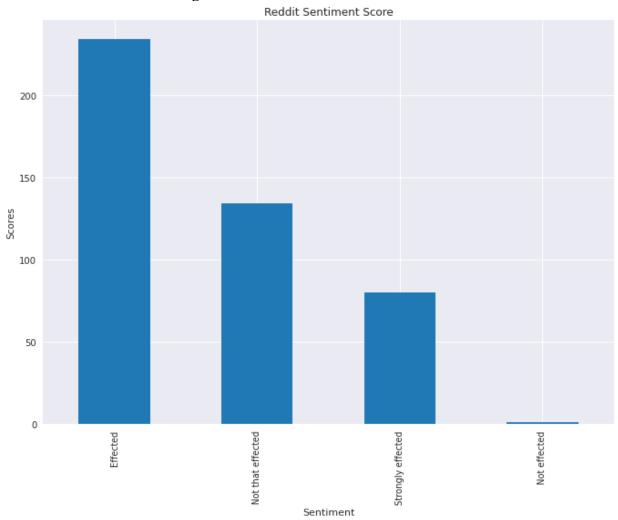


Figure 2 Distribution of Reddit Posts by Economic Impact Insights

The histogram shows the distribution of various insights found in the Reddit postings about the economic recession based on the examined dataset. The number of postings connected to each insight is shown on the y-axis, while the various sorts of insights are shown on the x-axis. Most posts are related to the insights "Job/Income Loss" and "Economic Downturn", whereas very few posts are related to the insight "Not Affected". To create effective policies and interventions, politicians and researchers may find this information helpful in understanding how the economic

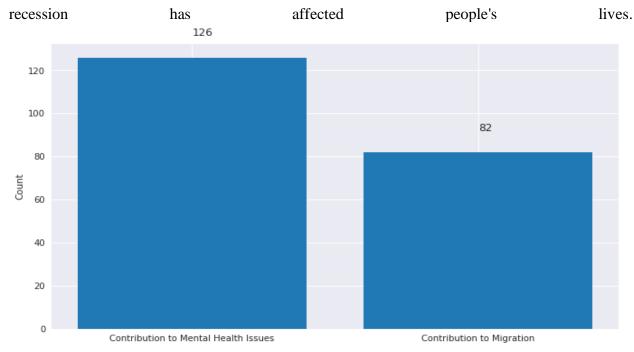


Figure 3 Impacts of economic turndown on individuals' mental health and their decision to migrate.

We filtered the data based on the presence of the keywords to ascertain the number of submissions that include words related to mental health issues in the dataset. Out of the 449 posts that were examined, 126 posts made up the resultant subset of data. This finding might point to a connection between depression and the economic downturn in terms of mental health problems. The dataset examined for this study also provided new information about how migration affected the Reddit community at the same time. A considerable number of posts referenced migration because of the economic recession. According to the posts, individuals were relocating to other areas in search of employment. This emphasizes the wide-ranging effects of a recession and how they can affect people's lives in ways more than just economically.

5. CONCLUSIONS AND LIMITATIONS

After a detailed study to comprehend the influences of a financial crisis, understanding the consequences of recession stands crucial for policymakers and healthcare providers to mitigate the damaging results and improve the overall well-being. That said, several possible limitations should be considered. Firstly, the analysis we have performed has relied on partial data from a few subreddits, which can affect the validity and reliability of the findings. Moreover, the analysis may not have accounted for all the relevant variables and factors that can influence the impact of the recession on individuals and society, such as demographic characteristics, geographic location, and cultural norms. Therefore, it is important to acknowledge these limitations and use them as opportunities for further research and refinement of future analyses.

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