Generational Debt Attitudes: What a Cross-Analysis of Text and Numerical Sources Tells Us

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I. Objective

Our objective is to gain insight into the generational attitudes toward various types of debt including student loans, outstanding credit card balances, medical debt, car loans, and mortgages. We intend to accomplish this task by completing a qualitative and quantitative analysis on data sources dating from 1946 to 2018.

II. Motivation

As of 2018, citizens of the United States carry an average debt of approximately $38,000$ USD [1]. Although this debt is spread across the generations, different age groups carry different types of debt. For example, generation X debt mainly consists of mortgages and credit cards while the younger generation Z is mainly consumed by student loans. Student loan debt is of particular interest as it is an active topic nationally and concerns the group within this class who may graduate with student loans. Currently there is 1.5 trillion USD in student loans[2] and several news outlets speak of a looming debt crisis [3], [4], and [5]. Additionally, there are many strong opinions on the cause, effect, and solutions to this crisis. There have been a multitude of studies reviewing the financial data in several different ways, however a data-driven analysis of attitudes in conjunction with the financial data has not been accomplished. Our team seeks to analyse journal articles, federal papers, and raw numbers in order to tease out generational attitudes about debt. This analysis would help to determine clearer solutions for the debt crisis with specific segments of the audience in mind.

III. Data

We intend to employ a combination of qualitative and quntitative data from government sources, data hosting sites (i.e., Statista, stlouisfed.org), and financial publications. These data will be used to analyse several types of debt categories such as cost of living, inflation, interest rates, mortgage rates, and student loans. We intend to adjust for inflation and segment large expenses that differ between generations (such as a cell phone bill that exists for generation Z, but did not for the baby boomers). This adjustment will allow similar comparison between time periods and show any new expenses, which may aid in teasing out changing attitudes as well. Newspapers, journal articles, and possibly blogging websites will be used as sources for textual data. The numerical data will be compared in several different scenarios consistently across generations. The textual analysis will change over time due to the appearance of the internet within the time frame. With the internet came more casual forms of communication. Our analysis may include this type of text (blog, twitter, etc.) , although for consistency we will include publications such as journal articles across the entire time span.

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IV. Distribution of Work

A. Rebecca Brink

- Collect numerical data.
- Develop data and methods for normalization with respect to the value of the dollar and yearly GDP.
- Aid in writing paper first draft.
- Edit and polish the final paper and presentation.
- Present the final project.

B. Abhijeet Dhakane

- Collect data from database platforms such as Statista.
- Develop and implement the algorithms to perform the textual and numerical analysis.
- Develop methods which will forecast the different parameters, associated towards debt attitudes.
- Maintain the database.
- Present the final project.

C. Tom Krobatsch

- Perform textual data discovery and collection.
- Planning and processing the database.
- Automate database connections and analysis.
- Perform textual analysis including word normalization and selection.
- Present the final project.

D. Joseph Lavalle-Rivera

- Perform numerical student loan data discovery.
- Analyze numerical debt data.
- Assist textual data discovery.
- Assist database development.
- Aid in document creation and editing.
- Present the final project.

E. Chad Melton

- Perform quantitative generational student loan data discovery.
- Edit/compose documents.

- Assist with quantitative analysis.
- Assist in text analysis.
- Present the final project.

V. Milestones

- Review and note sources of data –Oct, 1
- Collect, sanitize, and organize data – Oct, 10
- Analyze numerical data – Oct, 20
- Analyze textual data – Oct, 30
- Prepare first draft of paper – Nov, 6
- Author presentation – Nov, 8
- Complete final draft of paper – Nov, 15

VI. Outcome

At the end of this project, we will have a better understanding of the attitudes each generation shows toward debt. We will show quantitatively the amount of debt that each generation held, normalized to account for inflation as well as some generational differences in expenses. We will also compare the types of debt within each generation to the other generations. Taking this analysis, we will compare and contrast it to a quantitative analysis of positive and negative words from text about debt. This complete analysis will allow us to look at debt from a subset of the audience's point of view and will allow more distinct solutions to the debt crisis.

References

[1] Planning progress study 2018, northwestern mutual. 2018. (accessed on 9/23/2019).

[2] Zack Friedman. Student loan debt statistics in 2018: A $1.5 trillion crisis. *Forbes*, 2018.

[3] 10 mind-blowing facts that show how dire the us student loan crisis is - business insider. (Accessed on 09/23/2019).

[4] The student loan crisis for families : Npr. (Accessed on 09/23/2019).

[5] Student loan debt crisis - consumer reports. (Accessed on 09/23/2019).