“Parents Just Don’t Understand”

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With the present costs of housing, education, and overall cost of living, the American dream has become an out-of-reach pipe dream for most Millennials and practically all of Gen Z. When compared to our parents’ generation, the Baby Boomers (often called Boomers for short), the percentage of income Millennials and Gen Z must spend on housing, college tuition, childcare and other necessities has increased dramatically, and although median household incomes have also increased, that percentage increase pales in comparison to the increase in costs. By comparing the Median House Sale Prices, College Tuition, and Cost of Living for necessities between 1992 (when Boomers were 30-40 years old) and 2022 (when Millennials are 30-40 years old), I aim to show just how far out of reach attaining the American dream has become for younger generations. The drastic differences in financial situations have profound effects on purchasing power, financial stresses, economic mobility, quality of life, happiness levels, and overall health. I’m hoping, by the end of the “story” to show how the differences are detrimental to the American ideals of Life, Liberty, and the Pursuit of Happiness. Target users could be political analysts, sociologists, psychologists, or just curious data hounds.

The data is compiled from multiple spread sheets taken from Federal Reserve Economic Data found on the Federal Reserve Bank of St. Louis website (fred.stlouisfed.org). Each dataset was cleaned to filter out unnecessary values and only include the years of interest (1992-2022) and was organized into a single Excel file for further manipulation, such as calculating percent differences between years and compiling all the data to share indexes by year, for easier comparison across topics. Since time series is an important aspect of the story, many of the visualizations are represented with line graphs. When calculating percentage differences, only values from the years 1992 and 2022 were used, so the total change across the full range of time was considered. To perform the calculation the following equation was used: ([2022 value] - [1992 value]) / [1992 value]. Bar charts were used to efficiently show the differences between the beginning and the end of the time series. Income datasets were further separated by demographics such as education level, geographic location, race, age, etc. Cost of Living

(Consumer Price Index, CPI) data was further parsed by region and categories such as food, transportation, shelter, tuition, etc.

Users can explore and compare shifts in quantities over time and discover patterns over specific time periods. Bar charts are used for comparing and line graphs are used to explore trends over time and for pattern discovery. Economists can compare housing-price-to-income ratios in the United States between different decades, compare overall cost of living and cost of higher education between decades. Sociologists can investigate the effects of geographic location, socioeconomic strata, race, and age on overall financial freedom and social mobility through access to higher education, quality housing options, and healthier foods. Psychologists can explore the data to further understand the quality of living conditions and nutrition, and other financial stresses their clients are facing daily.

The final versions of visualizations are combinations of line graphs for temporal data comparisons and bar charts for comparisons between only the beginning and end values. In the created dashboards, line graphs are juxtaposed with corresponding bar charts to give the user a view of the trends over time juxtaposed with differences between 1992 and 2022 shown clearly. The bar charts also include data showing percentage differences between the years so users can easily reference total change over the three decades. When hovering over bars, the values are shown in tooltip popups. Tooltips are also shown when users hover over lines on the line graphs to quickly show year and value at that point in the line.

Before beginning work on this project, the original hypothesis was that the younger adult generations (Millennials and Gen Z) have a much more difficult financial landscape to navigate than did their parents (Baby Boomers). I wanted to show how these financial inequalities have a significant impact on mental and physical health and then follow up with some comparisons between the United States and 9 other countries: Mexico, Brazil, Argentina, Germany, Spain, Finland, Norway, China, and Japan. I was hoping to show how differences in cultures and political/economic policies lead to different levels of financial freedom, social mobility, health, and happiness. While I will probably continue pursuing this eventual end goal after the semester ends, I noticed that the scale of this project was starting to snowball, and I was worried about the looming deadline reducing the quality of product.

After further consideration of the fast-growing scope of my project, and after taking the wise advice of my peer reviewer. I decided to step back from my frantic acquisition of data and narrow my view to focus solely on the United States. I also avoided assuming too much about the trends in data before actual analysis, instead choosing to explore my project's primary premise: our parents just don't understand. By this, I mean the Baby Boomers cannot fully comprehend the magnitude of necessary costs that the younger generations (Millennials and Generation Z) are presently facing. Our (I'm an elder millennial) situation stands in stark contrast to the economic and financial situation when they were our age. College tuition was drastically cheaper in their day than it is now. A person was able to work over the summer to pay for college during fall and spring. Mortgages and rent prices were drastically cheaper in their day than they are now. A single income could pay necessary bills for a family of four. Childcare costs were drastically cheaper in their day than they are now.

I will admit that the numbers for median income have gone up. However, the ratios of costs to income have gotten substantially worse. Millennials and Gen Z are spending larger proportions of our net income on necessities like shelter, food, education, healthcare, childcare, transportation, etc. We've been told the problem lies in our love of Starbucks and avocado toast. We've been told to pull ourselves up by our bootstraps (this phrase is attributed to a late-1800s physics textbook asking, "Why can not a man lift himself by pulling up on his bootstraps?" When it became a colloquial phrase referring to socioeconomic advancement, it was meant sarcastically, suggesting that it was an impossible accomplishment). We've been assured that our parents had it just as hard, if not harder, than we do. To this, I dissent. To support my dissention, I turned to the data in search of economic disparities that could explain why many millennials feel the weight of the world on their shoulders and can only dream of any modicum of financial freedom or one day possibly becoming homeowners.

To show this disproportion, comparisons were made of median incomes and major life expenses (housing prices, college tuition costs, food prices, etc.). Data was gathered for the years spanning 1992-2022 for Median House Sale Price, Median Household Income, Median College Tuition, and Consumer Price Index (CPI) for necessities such as food, shelter, transportation, medical, and childcare. To investigate further trends concerning food prices, data was gathered for the aforementioned years on CPI of different categories of food items: cereals, meats, fruits, dairy, etc. To investigate further trends in income over time, data was gathered for the same years with various differentiations along demographic lines: education level, age, ethnicity, and geographic location (rural/urban).

The Story was created using Excel to explore, organize, and reformat datasets, all of which were acquired in the comma-separated values (csv) format. Excel was also used to calculate statistics associated with data values. Tableau was used to create visualizations in worksheets. The worksheets were then combined onto dashboards so multiple visualizations can be explored simultaneously. During the construction of the dashboards, adjustments were required for font sizes of axes, labels, and titles. The font size was reduced to accommodate the smaller space used by the visualization when combined with other charts/graphs into one dashboard. Originally, many of the visualizations had their own disjointed color schemes. Upon combining them into dashboards, corresponding visualizations (line graph + bar chart) were also given corresponding color palettes so their shared attributes can be easily tracked across separate visualizations.

Key Insights and Opinions:

Data showing the changes in household incomes, housing prices, college tuition, and costs of living support the hypothesis. While incomes have increased, they have not grown equally with the rising costs of housing, higher education, healthcare, food and other necessities. Due to these inequalities, millennials may never own a home, one of the primary methods for the middle class to build wealth. Moreover, upon investigation of income disparities between ethnic groups, ages, and geographic location, the fairly stagnant wages for lower education levels like high school and associate level degrees, and the massive increase in college tuition costs, one can begin to understand how families can become stuck in lower socioeconomic strata and how the cycle of poverty perpetuates through generations.

For African Americans, especially those under the age of 25 that live in rural areas, socioeconomic mobility is often impossible. Due to their low wages, they cannot afford to attend college and, due to their lack of a college degree, they also cannot graduate to higher income levels and help their children pay for tuition, so the cycle repeats ad infinitum. We can tell a similar story for young, rural Hispanics with only a lower-level education like high school or associate’s degree.

On the opposite end of the spectrum, middle-aged, educated, urban Whites and their Asian counterparts are garnering high wages, so they can afford to send their children to college, and their children can perpetuate the cycle (albeit a different one) of graduating to higher income levels due to their higher education levels. Higher education allows for more social and economic mobility, leading to more privileges and opportunities throughout life. Unfortunately, the towering cost of tuition is gatekeeping staggering numbers of African Americans and Hispanics/Latinos out of many universities, effectively condemning them to remain in the lower socioeconomic strata for generations. Luckily, scholarships exist to help less fortunate high schoolers pay for college, often being the first of their family to attend, but those scholarships are highly selective and are only awarded to a limited number of promising students. This gatekeeping has recently been exacerbated by the rising costs of living, especially in urban environments where around 80% of the country's population resides. When families are strapped trying to afford necessities, they cannot even consider paying outrageous college tuition costs for even a single semester, much less the whole four years. To throw salt in a wound, if the student attends college out of state, the tuition is even higher, not to mention the added expense of housing, bills, food, etc. since they are not living with their parents during the school year. Again, programs exist to help students pay for these things, but the application process is rigorous, and the funds are limited so not everyone can get help.

US policy makers have a responsibility to their constituents to strengthen antitrust laws to address complexities of today's digital economy, including more closely scrutinizing mergers and acquisitions to prevent the creation of monopolies. In cases where companies have become too dominant, the government could break them up into smaller entities, much like the breakup of AT&T in the 1980s. We could bolster the Federal Trade Commission and Department of Justice with more resources to enforce antitrust laws and pursue legal action against monopolistic practices. Offering incentives and grants to small and medium-sized enterprises would encourage competition across various industries. We could ensure the markets remain open and accessible by reducing barriers to entry and preventing established companies from engaging in anti-competitive practices. By phasing out subsidies and tax breaks for large corporations, especially those engaged in anti-competitive practices and contributing to environmental degradation, we could redirect those funds to programs that benefit the public.

We could implement price caps on essential goods and services like prescription drugs, energy, and housing to prevent price gouging. By strengthening regulations on utility companies, we would prevent excessive rate hikes and ensure that essential services remain affordable to consumers. We should mandate transparency in pricing by requiring companies disclose how they determine prices for goods and services, particularly in industries like pharmaceuticals and healthcare, where prices are often opaque and inflated. We should consider establishing public options for essential services like public utilities and public broadband to provide competition to private companies and keep prices in check.

Congress could also curb hedge funds from driving up housing prices, by regulating real estate investment. Congress should limit the amount of residential real estate that hedge funds and private equity firms can purchase, particularly in markets with housing shortages. They could impose higher taxes on large-scale property purchases by institutional investors, making it less attractive for hedge funds to buy up large quantities of residential properties. We could promote affordable housing by expanding programs to encourage the construction of affordable homes through incentives like tax credits for developers, particularly for urban areas with high housing demand. We could support community land trusts and non-profit organizations that buy and manage land for affordable housing, ensuring that properties remain affordable in perpetuity. We could implement rent control measures in high-cost areas and strengthen tenant protections to prevent rent gouging and evictions.

The government could reduce overall cost of living by increasing the federal minimum wage to a living wage that reflects the cost of living in different regions of the country and strengthening labor laws to guarantee fair wages, benefits, and working conditions. By establishing a universal healthcare system Congress could reduce the burden of healthcare costs on individuals and families, making it more affordable to access medical care. Congress could negotiate drug prices with pharmaceutical companies or establish price controls to make prescription drugs more affordable. We could subsidize essential services like childcare and invest in public transportation infrastructure to reduce transportation costs and make it easier for people to commute without relying on expensive personal vehicles.

Congress could reallocate much of the massive US defense budget to directly fund public universities, reducing their reliance on tuition funds. The US Tax Code could be amended to increase taxes on high-income individuals and corporations and use the revenue to fund social programs that reduce cost of living and provide more grants and scholarships to low-income students, making college more accessible. The US could even adopt European models offering tuition-free or low-cost higher education where public universities are funded by the government, reducing or eliminating the need for tuition fees. We could implement income-contingent loan systems like the UK and Australia, where graduates pay back loans based on their income after graduation, ensuring repayment is manageable and fair. The US government could increase investment in community colleges and vocational training programs and create clear and supported pathways from community colleges to four-year universities to help students save on tuition by completing their general education at a lower cost. We could create tax incentives for businesses to encourage investment in education, particularly in providing scholarships, internships, and apprenticeships for low-income students. We could implement tuition caps at public universities to help control rising costs and require universities to be transparent about their spending, ensuring a significant portion of their budget is used for direct educational purposes.

These approaches, if implemented thoughtfully and with broad support, could help to limit corporate monopolies, curb corporate greed, reduce the influence of hedge funds on the housing market, and ultimately lower the overall cost of living for everyday Americans. Moreover, they could transform the American higher education system to be more equitable and accessible, mirroring the successes seen in many European countries.