

## SUMMARY

In our project, we examined the question: To what extent does an individual's income affect their confidence in various U.S. institutions? Specifically, we examined the confidence of the public in regards to the branches of the federal government, the military, the press, and the scientific and medical communities. These institutions each play key roles in the lives of Americans, and we hypothesize that the confidence that American citizens have in these institutions will correlate with how well they are served by them, and thus by some degree their income. The US Government determines the allocation of public funds, laws and the justice system, alongside several other important roles. The press plays a key role in information availability and accountability of leaders, making trust in the institution particularly important. And the scientific and medical communities play a key role in our health outcomes and economic growth. In examining trust versus income, we hypothesized that, generally, wealthier individuals would be more confident in these institutions. There are two main mechanisms that we hypothesized could cause this to occur. First, wealthy people are likely better served by economic and governmental institutions. Take healthcare, for example: the Health Affairs Journal notes that low income individuals are less likely to have health insurance, access to primary care, or to receive new drugs.<sup>1</sup> Second, receiving better service from these institutions could cause individuals' income to rise in the long run. In order to answer this question, we plotted income brackets against trust in the listed institutions. In general, we found that there was little correlation between an individual's income and their trust in the institutions we examined.

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<sup>1</sup> <https://www.healthaffairs.org/doi/10.1377/hpb20180817.901935/>

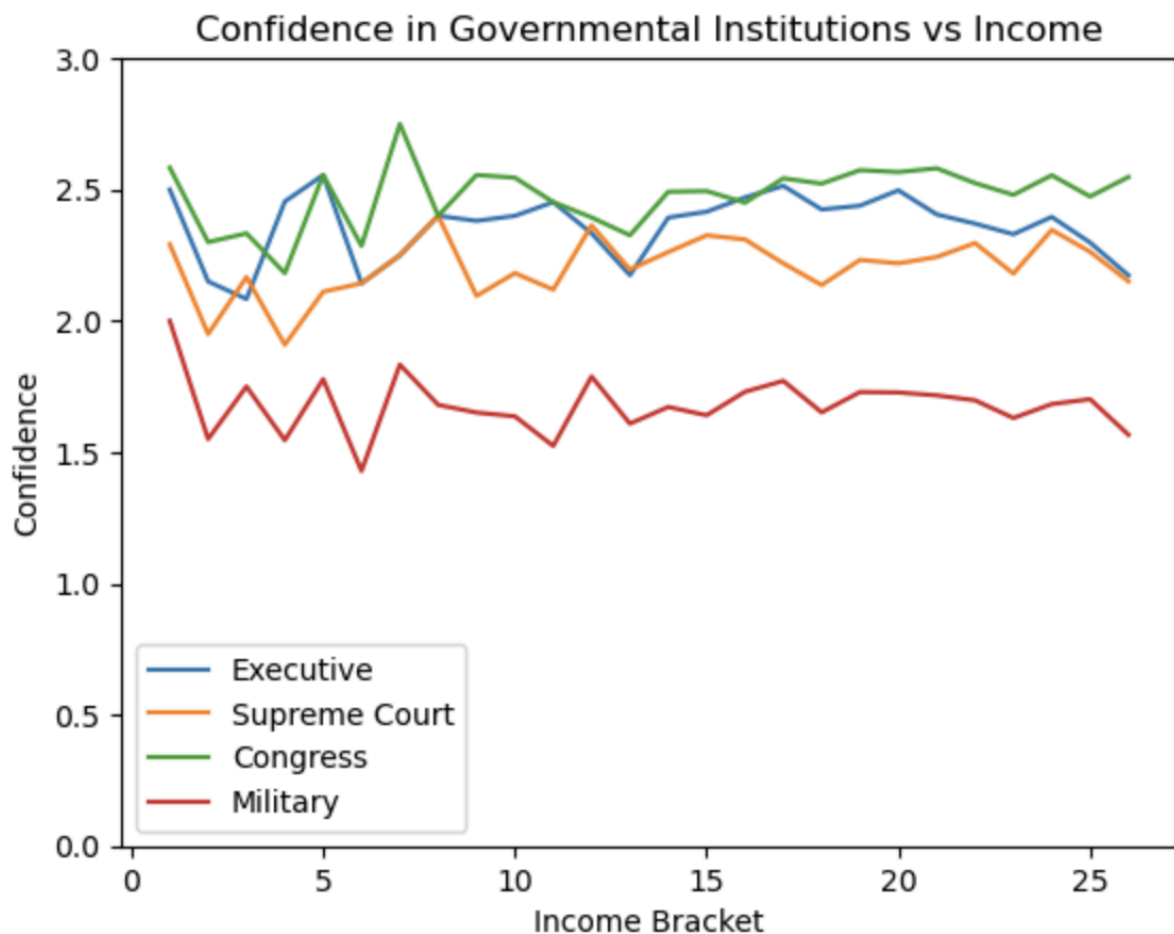
# DATA

The data from this study was gathered from the General Social Survey (2022) which was conducted by the National Opinion Research Center (NORC) at the University of Chicago. The GSS is an annual survey conducted since 1972 that measures social changes, trends, and constants in the attitudes, behaviors and attributes of the adult population. The 2022 survey included, among many other data points, familial income and trust in U.S. institutions - the variables that were needed to conduct our analysis.

We performed several cleaning steps on our data to ensure that our analysis would go smoothly. Since our study focuses on the relationship between familial income and trust in public institutions, we needed to retain all relevant variables from the dataset. First, we selected all rows under the codenames INCOME16, CONPRESS, CONMEDIC, CONSCI, CONFED, CONJUDGE, CONLEGIS, CONARMY which represent familial income and confidence in the press, medicine, the scientific community, the executive branch, the Supreme Court, Congress, and the military respectively. We then filtered the rows by the year 2022 to focus only on the recent data on this relationship. Finally, we replaced the strings with values listed in the codebook to allow some clarity in our visualizations. The confidence data stored in the GSS was in a string format with options of ‘hardly any’, ‘only some’, and ‘a great deal’, while the familial income data was stored in strings ranging from ‘under \$1,000’ to ‘\$170,000 or over’. For ease of analysis, all of these strings were converted into the values suggested by the code book, such as changing answers of ‘hardly any’ into a value of 3 and answers of ‘a great deal’ into a value of 1. This conversion of the categorical variables into numerical variables allowed more clarity in our graphs by allowing for clear, measurable trust levels instead of categorical variables that are more difficult to represent in a statistical analysis.

## RESULTS

To begin to examine our data, we plotted confidence in each institution individually against income. Each of those plots individually did not contain much information nor show particularly pronounced trends so, to compare the trends between multiple institutions and show the relative public trust in each, we plotted several on the same axis. We grouped these institutions according to their commonalities, placing all governmental institutions on the same plot, with all public institutions on another

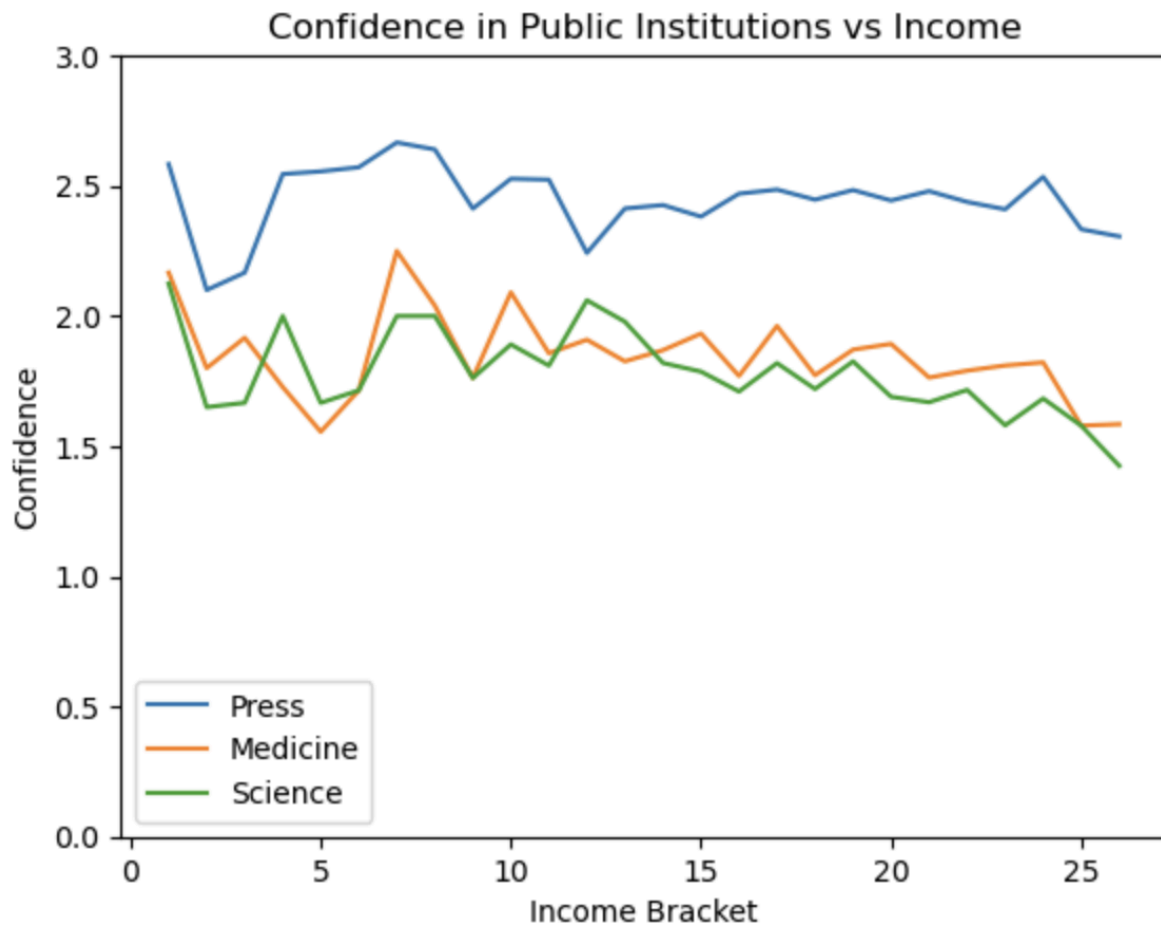


From this chart, it's first clear that there is no distinct correlation between income and average level of confidence in governmental institutions. This could be a good signal for these

government institutions' ability to serve the needs of people fairly equally. If the government was biased in its ability to support the needs of wealthier citizens, it is possible that that would be reflected in how those people rated their trust in those specific institutions. It is also interesting to compare people's absolute level of confidence. Firstly, among the branches of the federal government, the Supreme Court is generally the least trusted branch, on both sides of the income spread. This is interesting because the Supreme Court is designed to be the most insulated from the world of politics, and act as an unbiased interpreter of the nation's laws. The relative lack of public trust in this branch when compared to the executive and legislative branches could suggest that the Supreme Court has eroded its reputation as a non-political entity. This is certainly possible given the recent high-profile *Dobbs v. Jackson Women's Health Organization* (2022) decision, which effectively overturned *Roe v. Wade* (1973).<sup>2</sup> It also could suggest that people are more trusting of elected officials, regardless of whether they are more tied up in the world of political interests. It's also interesting that the military has such low average public confidence. With an average score of about 1.7, it suggests that a large number of people have "only some" or "hardly any" confidence in the military. Perhaps, this is related to the recent focus on counterterrorism that has led to very long conflicts in the Middle East. We are curious to explore why the level of trust in the military is much lower than other governmental institutions, looking at temporal data could be helpful here. There are also other variables in the GSS that could be considered going forward to shed more light on these hypotheses in other studies.

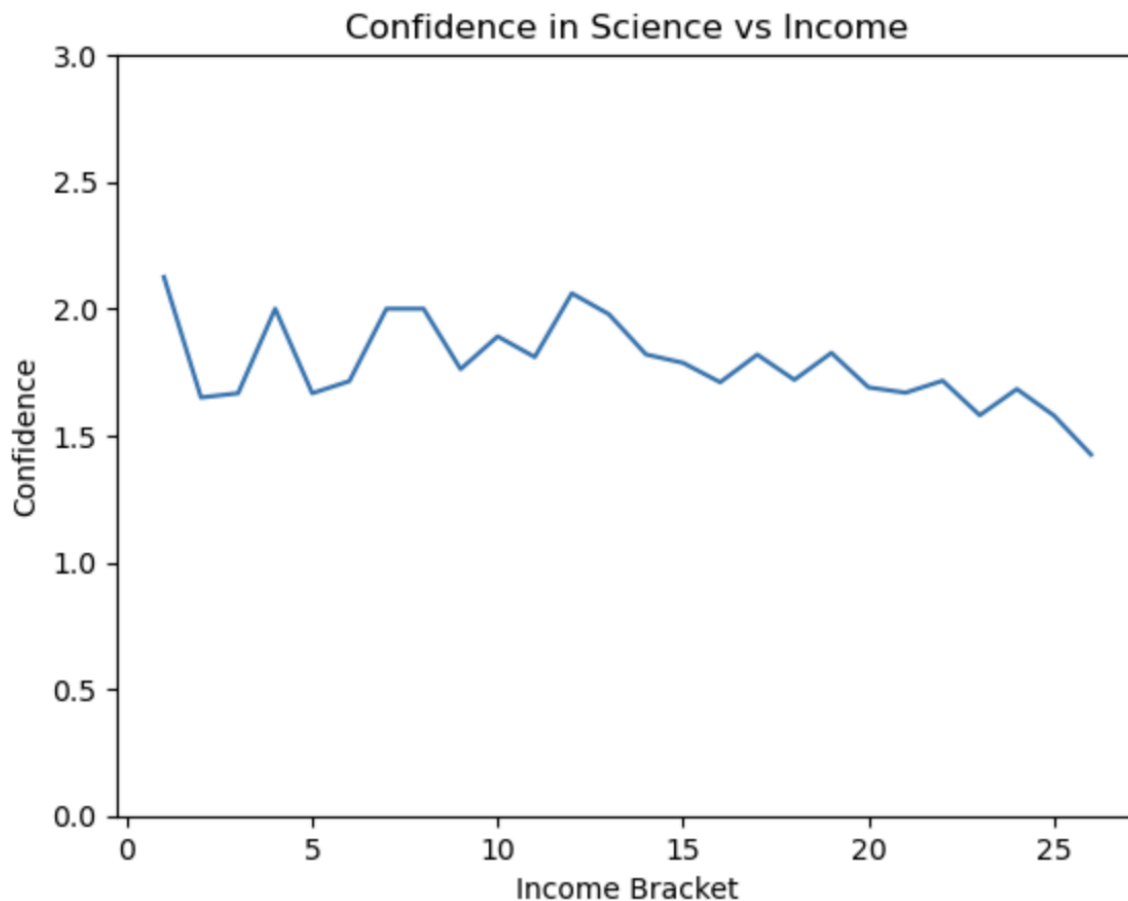
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<sup>2</sup> [https://www.supremecourt.gov/opinions/21pdf/19-1392\\_6j37.pdf](https://www.supremecourt.gov/opinions/21pdf/19-1392_6j37.pdf)



Now, looking at non-governmental institutions, again we see that there are not any clear trends of confidence changing with income level. In terms of absolute level, it's interesting to see that the Press ranked as one of the highest in terms of public confidence. An average of around 2.5 suggests a high number of individuals that stated they had "a great deal of confidence" in the people managing the press. We thought this was a somewhat surprising result; since the 2016 election, the press has seemed to become increasingly polarized while candidates (especially Trump) have attacked the press and called its trustworthiness into question. Perhaps this implies that the press has done a fairly good job of insulating themselves from these attacks and

maintaining their reputation. To examine this further, it would be helpful to examine temporal data, and see if there was a notable shift during and after the 2016 election.



While there were no dramatic trends, there might be something interesting happening with the confidence in the scientific community versus income. It appears that for the highest income brackets, confidence in the scientific community drops off. We were surprised by this result, which could simply be random variation/noise in the data. But, it could also suggest some other reasons. For example, wealthy people may be more aware of corporate influence on research. Another possibility is that wealthier people are more likely to be college educated, and may have more pressing concerns of the lack of reproducibility in some research.

## CONCLUSION

Overall, our project and visualizations do not show a strong correlation between trust and confidence in institutions and income. This could be a signal that American institutions generally do a better job than we thought of serving people equally and adequately. Although, more research is needed to back up this claim.

For example, one criticism of our methods is that we were not able to isolate income effects on confidence. Income is a particularly difficult effect to extract within the context of social science research. Income is closely intertwined with a variety of other social factors: race, sex, age, geography, education and more. So, by not controlling for the effects of those variables in some way in our model, we are biased by omitted variables. We were limited in our ability to address this by the scope of what has been addressed in class. But, it would be interesting in the future to look at a multiple regression or some quasi-experimental method to extract the underlying effect of income on confidence in institutions.

In addition, there are a variety of new research questions we came across during this project. One interesting aspect to examine would be political affiliation. Does trust in institutions depend on an individual's political affiliation? It would also be interesting to add a temporal element. This question came up in the context of the trust in the press. With the attacks on the press and the notion of "fake news" coming to the forefront in the 2016 election cycle, did this have any impact on the GSS survey trust in the press? A similar question about trust in the military following 9/11 and then a series of conflicts in the Middle East comes to mind, and it would be interesting to see time series results for each of these institutions.

Overall, while somewhat inconclusive in regards to our primary hypothesis, this data provided some interesting insights which have a lot of potential for further exploration, with expansion to explore this relationship across time, or the other related variables discussed above.