United States Households Net Worth

M SALMAN ALI KHAN

DATED: AUGUST 21ST ,2023

Content

- Definition
- Executive Summary
- Metadata
- Data Wrangling
- Data Transformation
- Data Visualization
- Insights
- Considerations
- Recommendations

Executive Summary

Project Objective:

The main objective of this project is to compare the net worth of different households in United States and determine which households require more focused attention.

Notable Insights:

- White households have always had the highest household net worth.
- The gap of white household net worth against Black, Hispanic or other community's household net worth is growing non-linearly overtime.
- Excluding the white households, the distribution of household net worth is fairly even between other communities in United States

Immediate Future Actions:

- Minority Communities need more policy driven uplifting so that their household worth can increase at a similar rate to white households.
- Policies should be made to ensure the increasing trend is equal across all the minority communities.

What is Household Net Worth

- Household net worth, often referred to as wealth, is calculated by subtracting a household's liabilities (debts and obligations) from its assets (properties, investments, savings, and other valuable possessions).
- This value represents the residual wealth that a household would possess if all debts were paid off using its assets.
- In essence, it's a measure of the economic cushion available to a household in case of emergencies, as well as the potential for future investments, consumption, and intergenerational wealth transfer.

About the Dataset

The open-source dataset is taken from Kaggle:

https://www.kaggle.com/datasets/sqlrockstar/aggregate-household-net-worth-usa-1979-2021

The data set contains information of assets, liabilities and household net worth of households in United States, from 1989-2021, divided into four categories based on ethnicities i.e., White, Black, Hispanic and Others.

Data Wrangling

The csv data file was extracted using Microsoft Excel. The Data Wrangling operations were performed using Power Query in Microsoft Excel. Some of the performed operations were:

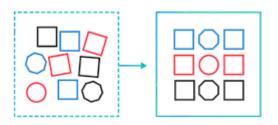
- Header Promotion
- Removal of Duplicates
- Filtering
- Correcting Data Types



Data Transformation

Data Transformation was done by using Power Query and Pivot tables were made using Power Pivot in Microsoft Excel. Some of the performed operations were:

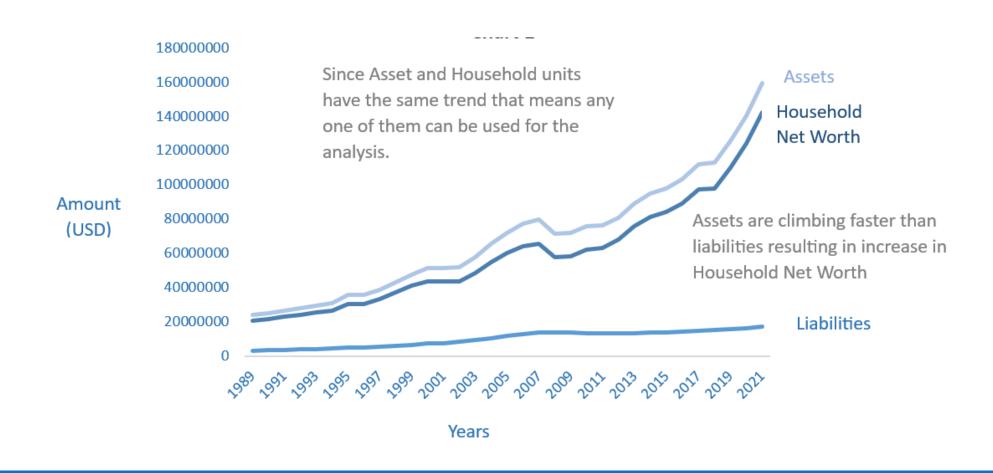
- Removal of Irrelevant Columns
- Unpivoting the data
- Addition of calculated columns for further comparisons
- Creation of specific pivot tables for analysis and visualizations



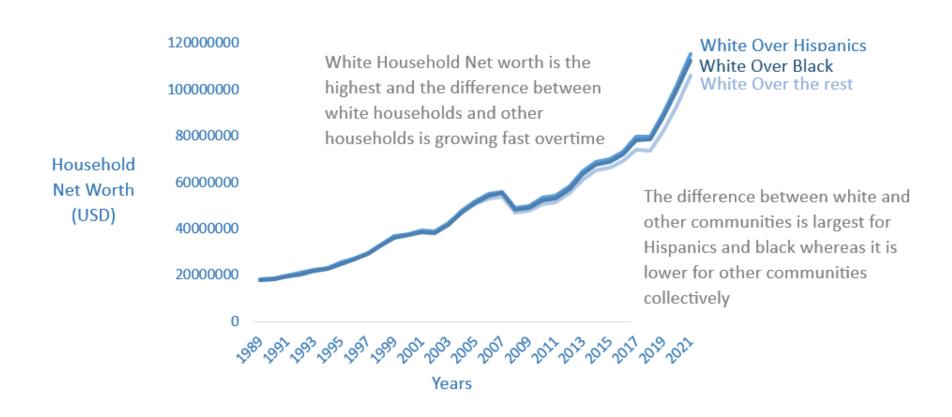
Data Visualization



The aggregated assets, liabilities and household net worth over the years shown using line chart



The comparison of household units between white and other community households shown using a line chart



The comparison of household units, assets and liabilities between all the communities aggregated for all the years



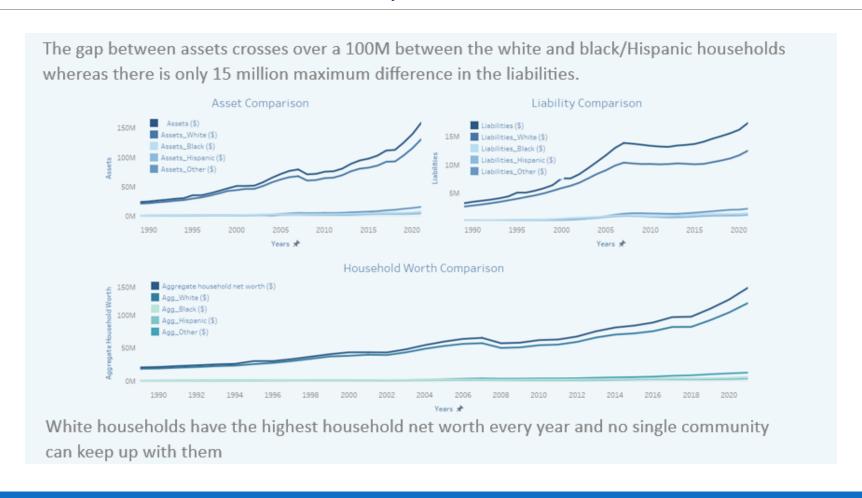
White households have 72% more assets than all the other communities combined

White households have 54% more liabilities than all the other communities combined

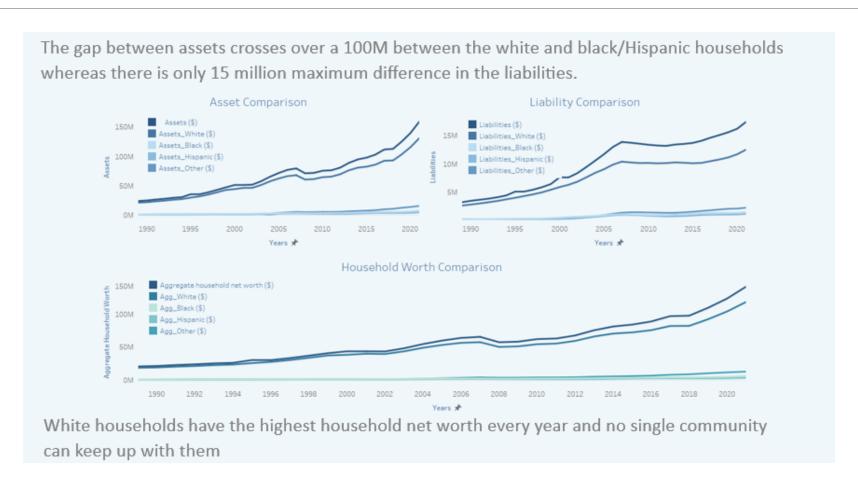
White households have 74% more household units than all the other communities combined

As White Households are more in number so they have both the highest percentage of assets and liabilities, however, the percentage of assets fairly exceeds that of liabilities resulting in the higher percentage of household net worth.

Comparison of the increase in assets, liabilities and household net worth in each community



Exploration of multiple trends and distributions





Analysis Insights

- 1. White households have always had the highest household net worth. White Households have 8 times more household units than the rest of the communities combined.
- 2. The gap of white household net worth against Black, Hispanic or other community's household net worth is growing overtime. The gap between assets crosses over a 100M between the white and black/Hispanic households whereas there is only 15 million maximum difference in the liabilities.
- 3. This gap is increasing at a non-linear rate as degree three polynomial equation was the best fit, this indicate that the gap is widening at an increasing rate.
- 4. Excluding the white households, the distribution of household net worth is fairly even between other communities in United States.

Considerations to keep in mind

- 1. There are more white households than black or Hispanic households so their net worth should logically be greater.
- 2. The integration of more communities in United States has an equal effect on all the existing communities in the data set.



Recommendations

- 1. Even though there are more white households than black or Hispanic household, the gap between these communities is still increasing fast so uplifting of minority communities through special programs and policies is needed.
- 2. Such policies are to equally influence all the minority communities without discrimination as to upset the current trends.

THE END