EXPLORING GLOBAL WEALTH:
AN ANALYTICAL STUDY ON BILLIONAIRES

Final Visualisation Project | Course Leader: Michael Kuhn

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Introduction

The analysis conducted on the Billionaires Statistics Dataset sheds light on global wealth distribution and demographic trends among billionaires. This report summarises key insights derived from the dataset, focusing on wealth concentration, top billionaires, sources of wealth, geographic distribution, and correlations among variables.

Data Overview

Over 2,500 billionaires worldwide, together with their net worth, age, place of residence, wealth source, industry affiliations, and other details, are covered in detail by the Billionaires Statistics Dataset. The collection also contains macroeconomic data for the nations where these billionaires live, like GDP, inflation rates, enrolment in school, and taxation policies.

Summary Statistics

The dataset encompasses over 2,500 billionaires worldwide, providing comprehensive details such as net worth, age, residence, wealth source, and macroeconomic indicators for their respective countries. Key summary statistics reveal intriguing patterns within the data. The mean billionaire net worth of $4.62 billion significantly surpasses the median of $2.3 billion, indicating a skewed distribution with notable outliers. Additionally, billionaires exhibit a wide age range from 18 to 101 years, although they tend to be concentrated among the elderly population, with a median age of 65 years. Economic data reveals variations in GDP per capita and total tax rates across countries, reflecting diverse economic environments.

Table 1

	Final Worth (billion)	Age (years)	Total Tax Rate by Country (%)	GDP by Country	Population by Country
Count	2640.000000	2575.000000	2458.000000	2.476000e+03	2.476000e+03
mean	4623.787879	65.140194	43.963344	1.158287e+13	5.102053e+08
std	9834.240939	13.258098	12.145296	9.575588e+12	5.542447e+08
min	1000.000000	18.000000	9.900000	3.154058e+09	3.801900e+04
max	211000.000000	101.000000	106.300000	2.142770e+13	1.397715e+09

Wealth Distribution and Concentration

A preliminary examination of the data indicates a significantly skewed distribution of net worth for billionaires (Figure 1). Several billionaires have net worths in the hundreds of billions of dollars, as evidenced by the histogram's noticeable peak near the top. Given that the richest 10% of billionaires own over 70% of the world's net worth, this striking concentration of wealth draws attention to the tremendous disparity that exists among the billionaire class worldwide.

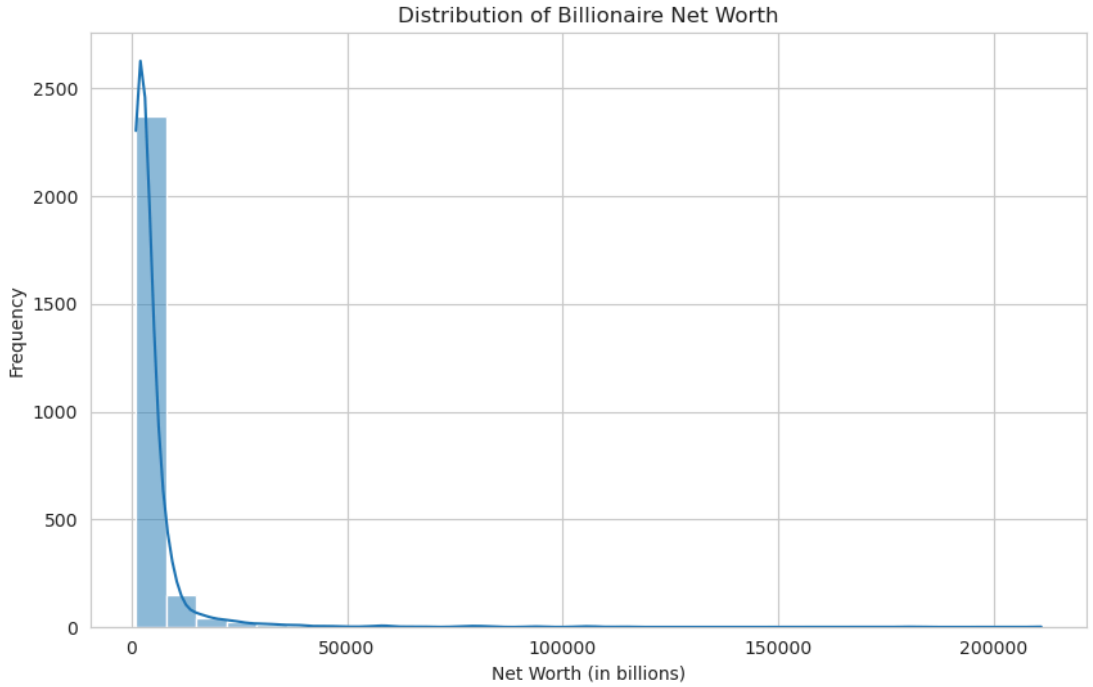

Figure 1: Distribution of Billionaire Net Worth

Top Billionaires and Their Wealth

An initial examination highlights the stark wealth concentration among billionaires, with a few individuals possessing net worths in the hundreds of billions of dollars. The top 10% of billionaires own over 70% of the world's net worth, underscoring significant wealth disparity within the billionaire class.

Analysis of the top billionaires reveals a hierarchical distribution of wealth, with notable individuals like Jeff Bezos, Elon Musk, and Bernard Arnault holding net worths between $100 billion and $200 billion. Insights into the primary sources of wealth indicate contributions from real estate, investments, diversified business ventures, and sectors like software, hedge funds, and pharmaceuticals.

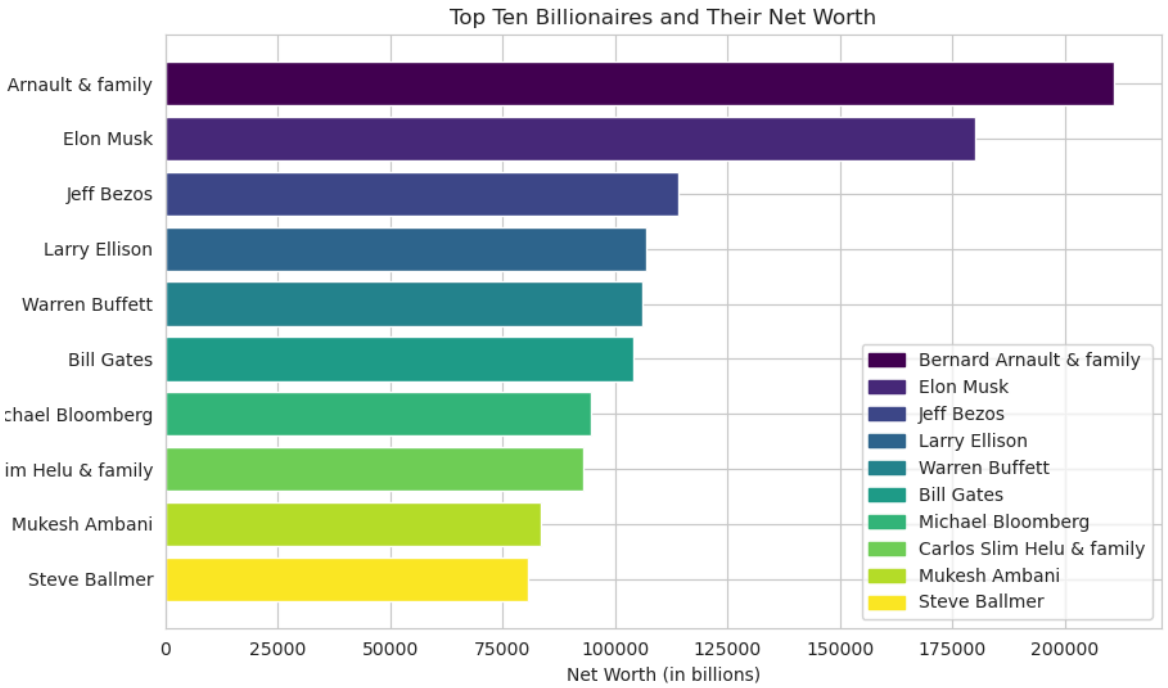

Figure 2: Top Ten Billionaires and Their Net Worth

Sources of Billionaire Wealth

The data also provides insights into the primary sources of wealth for billionaires (Figure 3). The top sources include real estate, investments, and diversified business ventures, suggesting that certain economic activities and business models may be more conducive to the rapid accumulation of vast fortunes. Sectors like software, hedge funds, and pharmaceuticals also contribute significantly to the wealth of billionaires. (Dyvik, 2023)

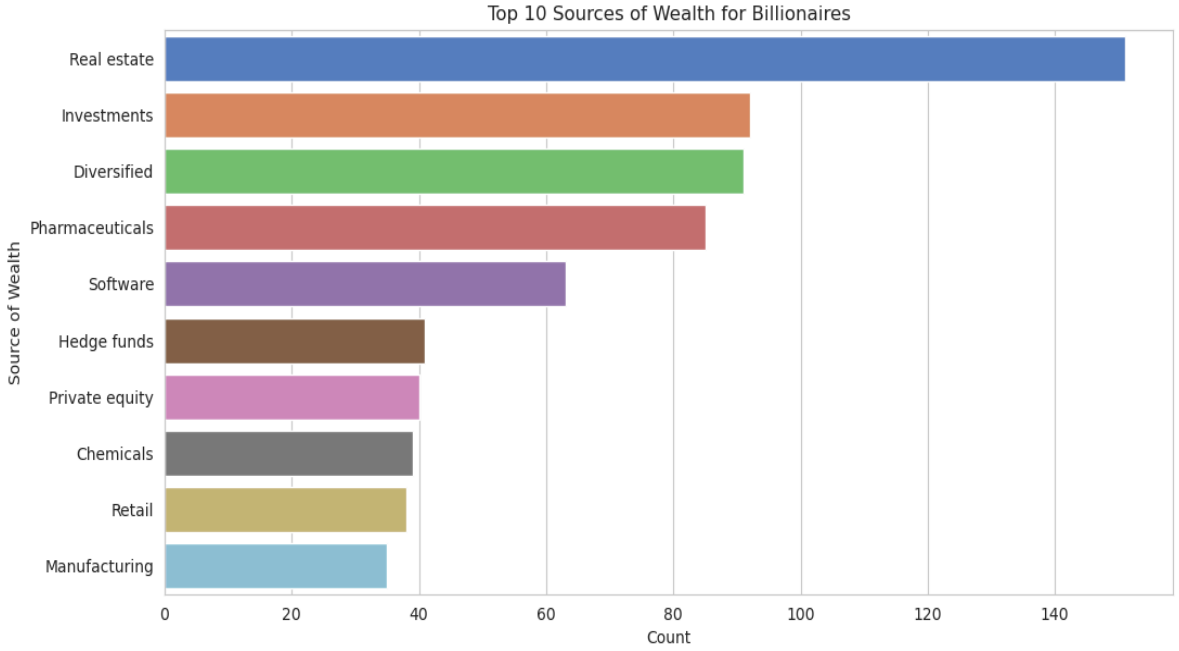

Figure 3: Top 10 Sources of Wealth for Billionaires

Top 20 Countries

Geographically, the dataset illustrates a clustering of billionaires in specific regions, with the United States, China, and India boasting the largest numbers. Other countries like Germany, the United Kingdom, Russia, Switzerland, and Hong Kong also feature prominently. This uneven distribution suggests the influence of economic and political factors on wealth accumulation. (Wong, 2023; Staff, 2022)

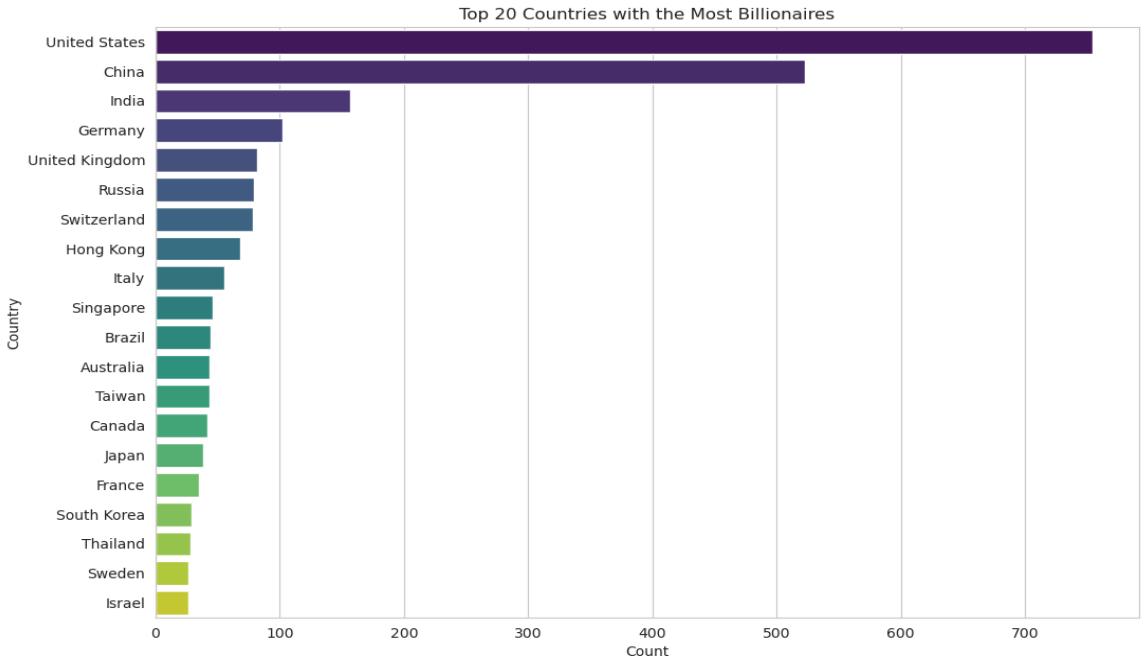

Figure 4: Top 20 Countries with the Most Billionaires

Correlations and Interactions

Correlation analysis reveals interesting relationships among variables. While older billionaires tend to have slightly higher net worths, countries with higher total tax rates exhibit fewer ultra-high-net-worth individuals. Moreover, a positive correlation exists between GDP per capita and total tax rates, indicating that wealthier countries tend to have higher tax burdens. (Baiardi et al., 2019; Hope and Limberg, 2022)

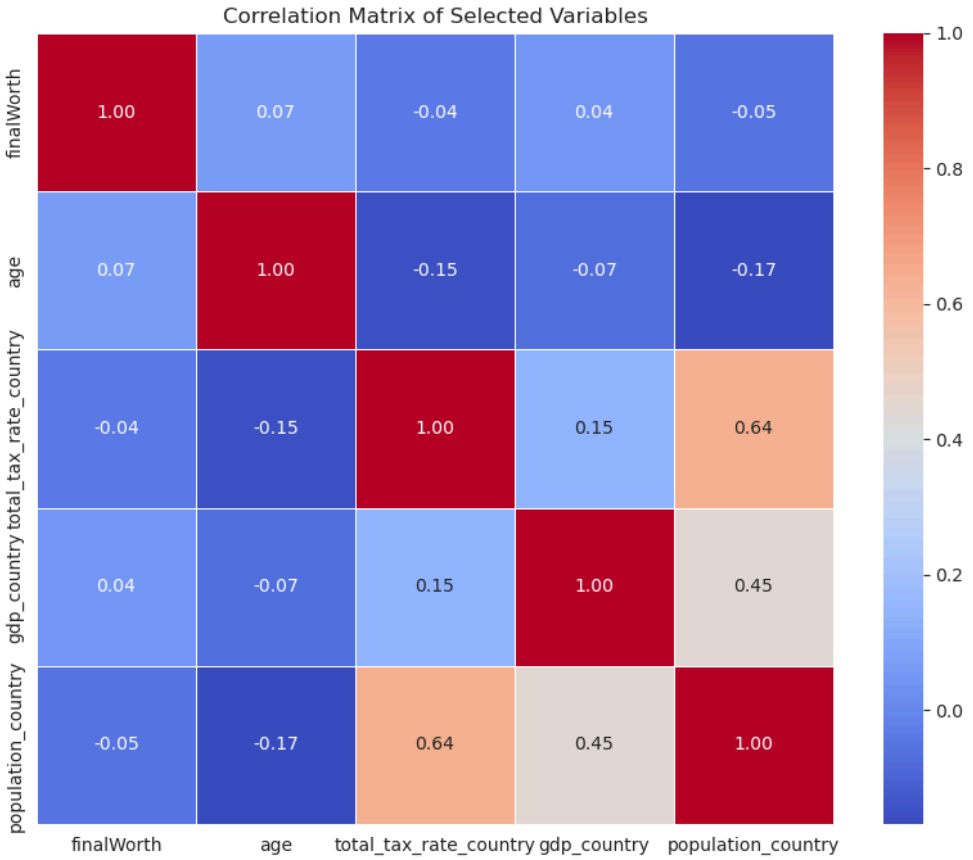

Figure 5: Correlation Matrix of Selected Variables

Conclusion

In conclusion, the Billionaires Statistics Dataset offers valuable insights into global wealth distribution and the factors shaping billionaire demographics. The analysis underscores the extreme concentration of wealth, gender disparities, primary sources of wealth, geographic distribution, and correlations with economic indicators. These findings contribute to discussions on economic inequality, entrepreneurship, innovation, and policy implications for global wealth distribution. (ElgiriyeWithana, Okebiorun and Nadiradze 2023; Whitcomb 2016)

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