

# US Elections 2000-2020

Python Boys

Project 2025

Joel Erik Mattsson - 1001343

Dumitru Vlad Adrian - 883731

Alireza Zafar Vahedian - 908840

Computer Programming  
and Data Management - 2



# General Index & Research Question

What are the key changes observed in the economic, political and social landscape between the periods before and after the elections held between 2000 and 2020?

- 1 **Economical Aspects**
- 2 **Political Aspects**
- 3 **Social Aspects**
- 4 **Conclusions**



1

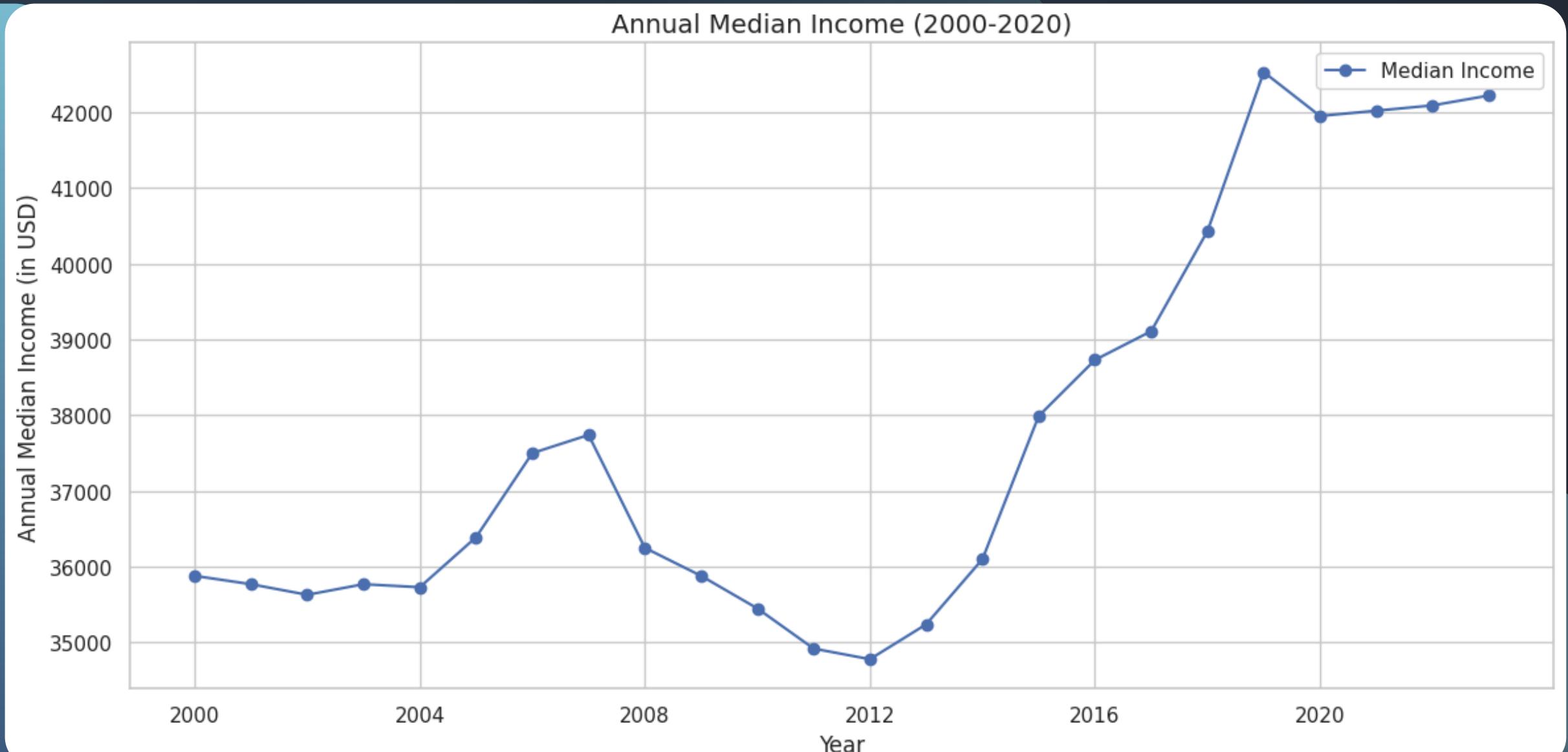
# Economical Aspects



# Annual Median Income (2000-2020)

ANNUAL MEDIAN INCOME: that economical amount that divides the population in two groups

- From 2000 to 2004, the median income remained relatively unchanged
- Between 2004 and 2007, annual income experienced steady growth, followed by a sharp decline due to the economic crash in 2009
- A significant surge occurred between 2012 and 2019, with the median income peaking at almost \$43,000.
- Since 2020, a consistent upward trend has been observed.



```
import pandas as pd
import matplotlib.pyplot as plt

# Load the dataset
median_income_file = '/content/Python Project/us_median_income_1974_2023.csv'
data = pd.read_csv(median_income_file)

# Data Cleaning
# Rename columns
data.rename(columns={'DATE': 'Year', 'MEPAINUSA672N': 'Median_Income'}, inplace=True) → It modifies directly the original df without the needing to assign a new variable to the df and run the code.

# Convert 'Year' to datetime and extract the year
data['Year'] = pd.to_datetime(data['Year']).dt.year → Timeseries to transform year in a format understood by python

# Filter the data for years 2000 to 2020
filtered_data = data[(data['Year'] >= 2000) & (data['Year'] <= 2023)]

# Check for missing values and handle them (if any)
if filtered_data.isnull().sum().sum() > 0:
    filtered_data.dropna(inplace=True)

# Plotting the line chart
plt.figure(figsize=(12, 6))
plt.plot(filtered_data['Year'], filtered_data['Median_Income'], marker='o', linestyle='-', label='Median Income')

# Customize the x-axis to show ticks every 4 years
plt.xticks(ticks=range(2000, 2021, 4), labels=[str(year) for year in range(2000, 2021, 4)])

# Add title and labels
plt.title('Annual Median Income (2000-2023)', fontsize=14)
plt.xlabel('Year', fontsize=12)
plt.ylabel('Annual Median Income (in USD)', fontsize=12)

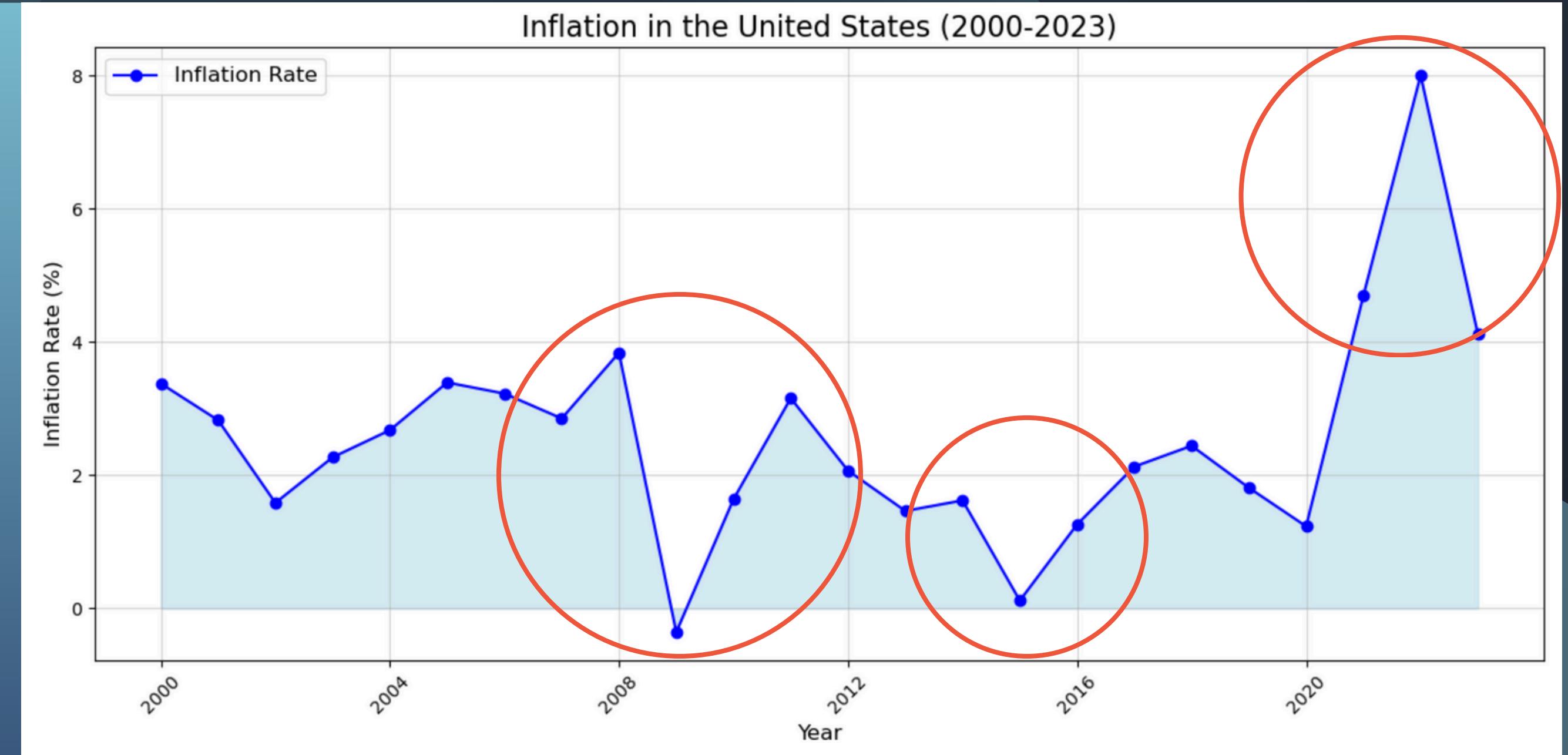
# Add grid and legend
plt.grid(True)
plt.legend()

# Adjust layout
plt.tight_layout()

# Show the plot
plt.show()
```

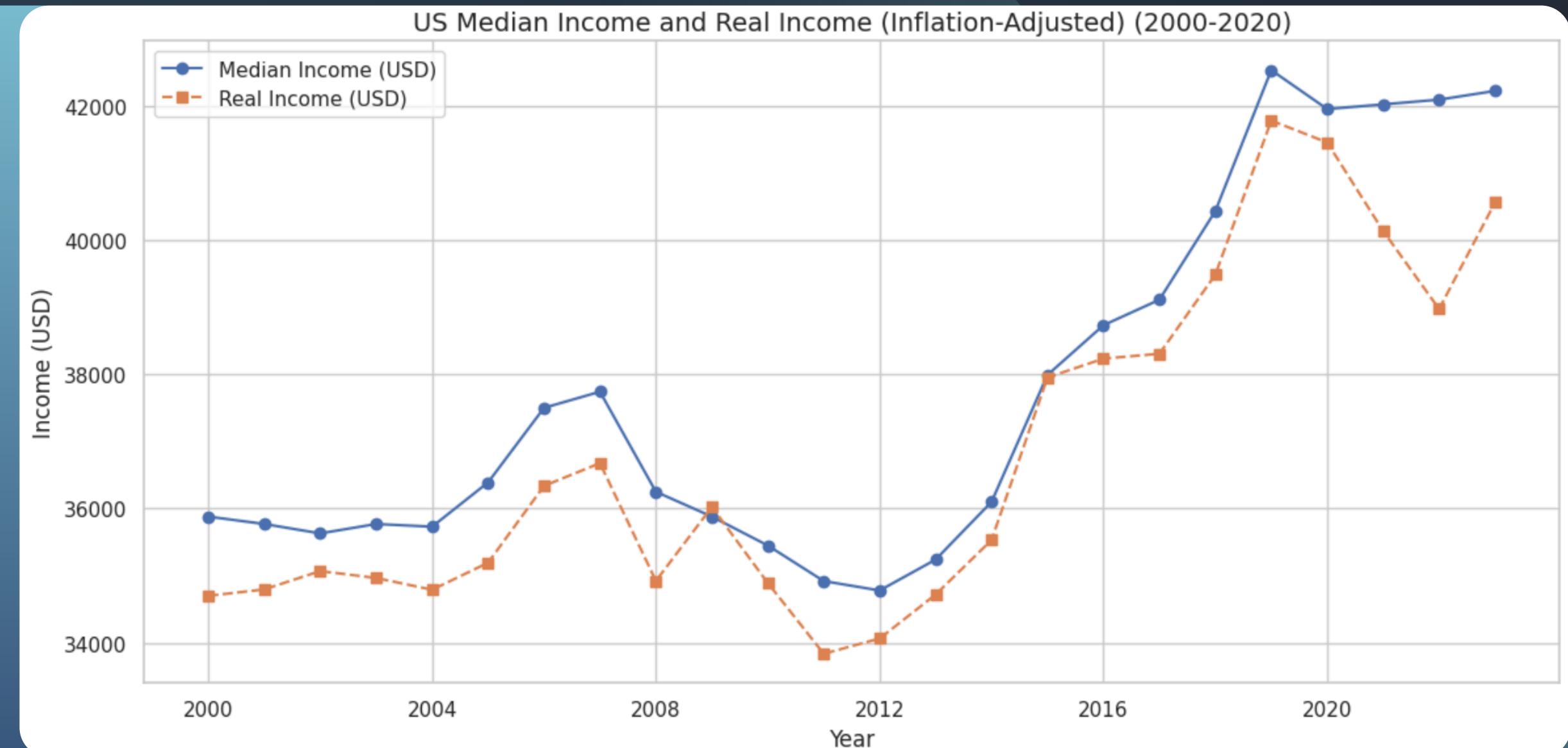
# Inflation Rate (2000-2024)

- The chart shows significant fluctuations in inflation rates from 2000 to 2023
- A sharp decline in inflation is visible around 2008-2009, corresponding to the global financial crisis
- After the financial crisis, inflation gradually recovered, indicating stabilization and economic recovery
- A noticeable spike in inflation occurs around 2021-2022, likely due to the global impact of the COVID-19 pandemic.



# Median Income Inflation-Adjusted (2000-2020)

- 2000-2004: Median income stayed stable, while real income rose slightly before declining.
- 2004-2008: Both incomes grew steadily, peaking in 2007, then dropped in 2008.
- 2008-2012: A sharp decline followed the crash, with real income hitting its lowest.
- 2012-2016: Both incomes recovered strongly, surpassing \$40,000 by 2016.
- 2016-2020: Median income stabilized near \$42,000, with slight fluctuations in real income.



*i* The higher the distance between the two lines, the higher the inflation rate

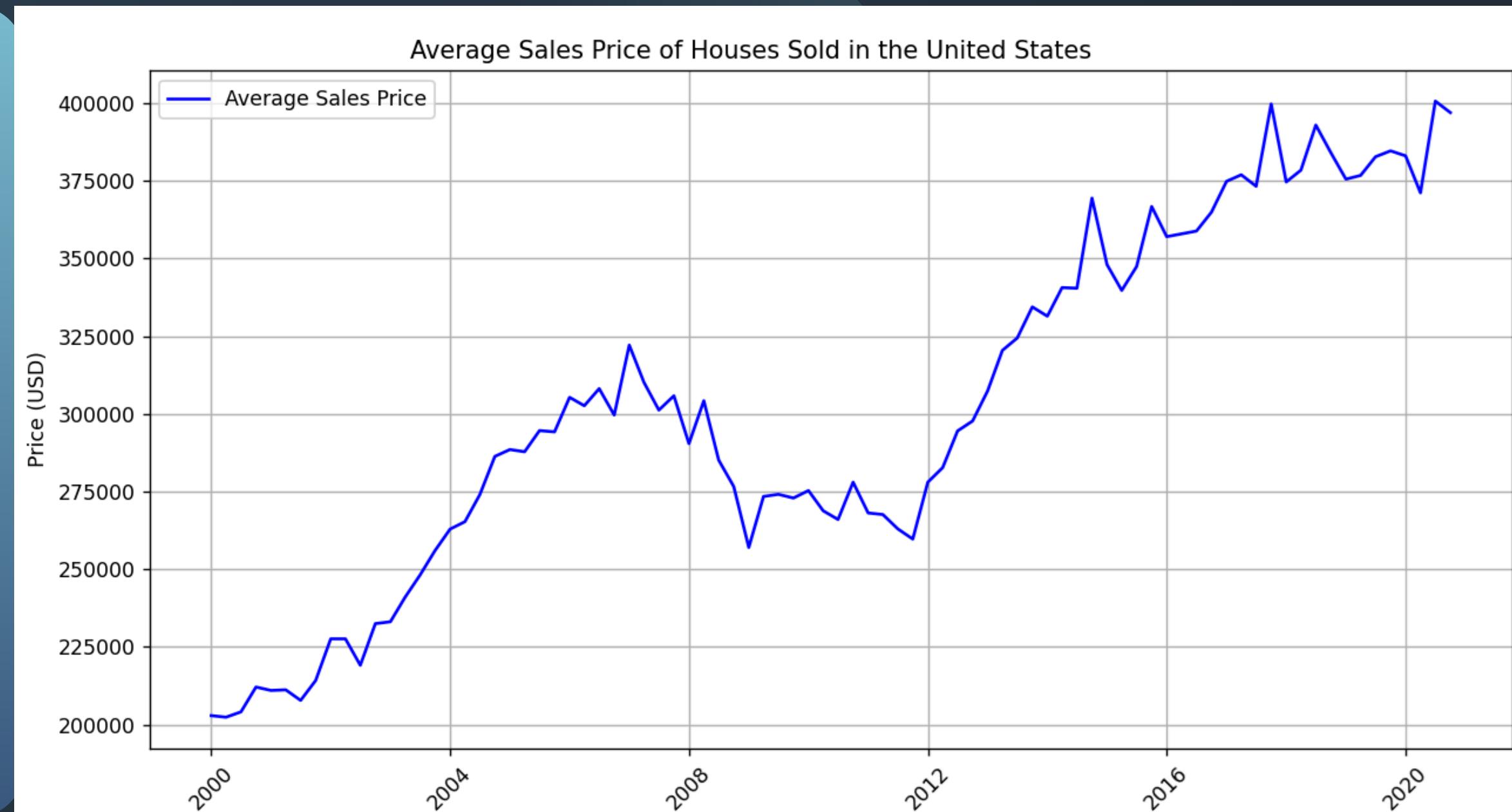
# Average Sales Price of Houses sold in US



# Average Sales Price of Houses Sold in US

Overall, housing prices have increased during all U.S. presidential terms, with the only decline occurring during President Obama's first term (2008 -2012). However, the prices began to rise again during his second term from 2008 to 2012

- Data shows a steady increase in housing prices from 2000 to 2007
- A sharp decline around 2008 due to the housing market crash
- After 2012, the prices began to rise consistently, reaching their peak in 2020



```
import pandas as pd
import matplotlib.pyplot as plt

# Read the data
data = pd.read_csv('Average Sales Price of Houses.csv')

# Convert the observation_date column to datetime
data['observation_date'] = pd.to_datetime(data['observation_date'])

# Filter data from 2000 to 2020
filtered_data = data[(data['observation_date'] >= '2000-01-01') & (data['observation_date'] <= '2020-12-31')]

# Plot the line chart for average sales price
plt.figure(figsize=(12, 6))
plt.plot(filtered_data['observation_date'], filtered_data['ASPU'], label='Average Sales Price', color='blue')
plt.title('Average Sales Price of Houses Sold in the United States ')
plt.xlabel('Year')
plt.ylabel('Price (USD)')

# Set x-axis ticks for specific years (2000, 2004, 2008, 2012, 2016, 2020)
x_ticks = pd.date_range(start='2000-01-01', end='2020-12-31', freq='4YS') # 4-year intervals
plt.xticks(x_ticks, [x.strftime('%Y') for x in x_ticks], rotation=45) # Format as years only

plt.grid(True)
plt.legend()
plt.show()

# Calculate annual growth rate
filtered_data['Year'] = filtered_data['observation_date'].dt.year
annual_growth = filtered_data.groupby('Year')['ASPU'].mean().pct_change() * 100

# Plot the annual growth rate
plt.figure(figsize=(12, 6))
plt.plot(annual_growth.index, annual_growth, label='Annual Growth Rate', color='green')
plt.title('Annual Growth Rate of Average Sales Price of Houses Sold ')
plt.xlabel('Year')
plt.ylabel('Growth Rate (%)')
```

# Annual Average Rate Sold Houses in US

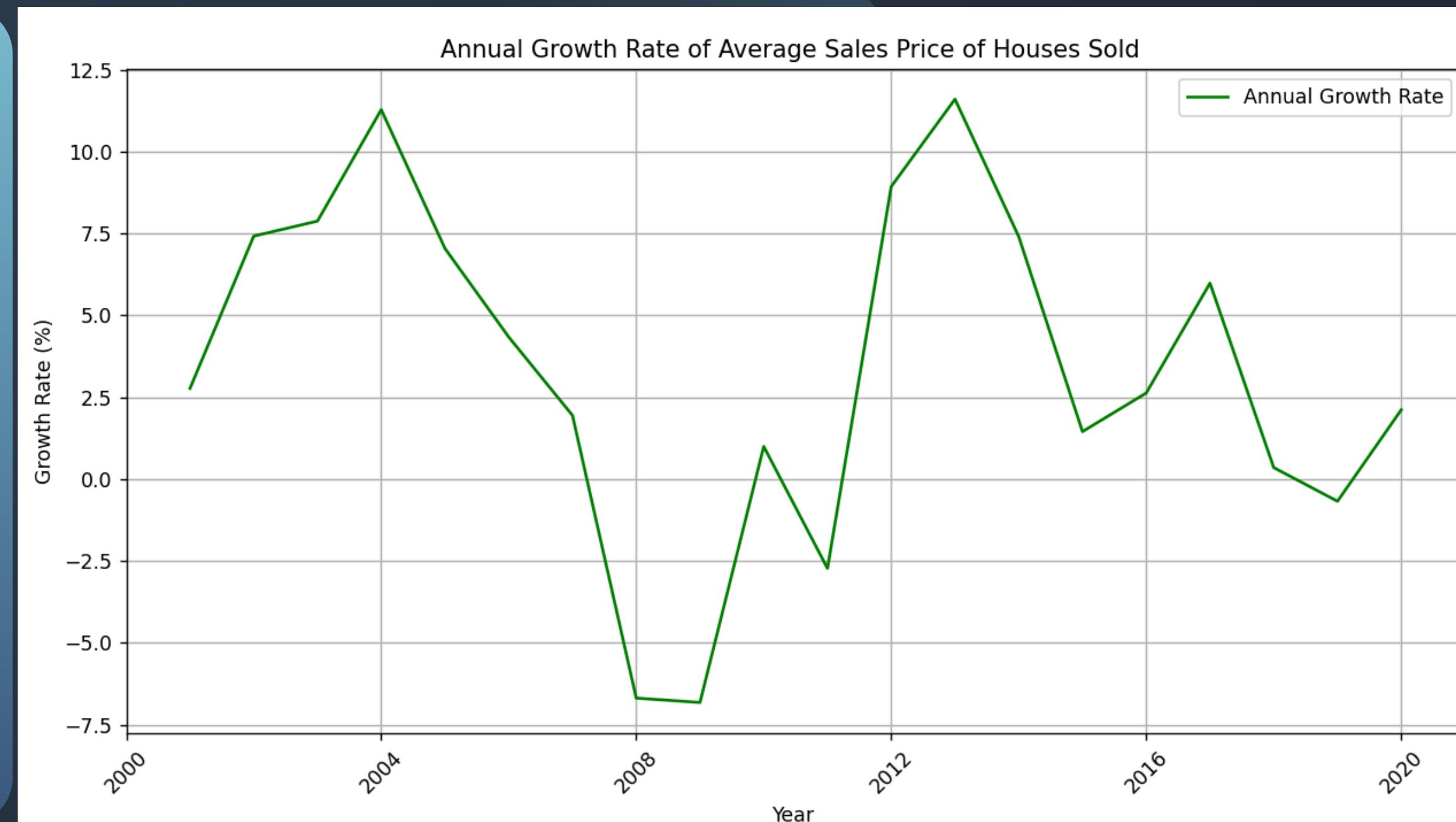
The chart shows that house prices have generally increased over the years, but there have been periods of negative growth, especially during economic crises

## 1-Growth Rate Range

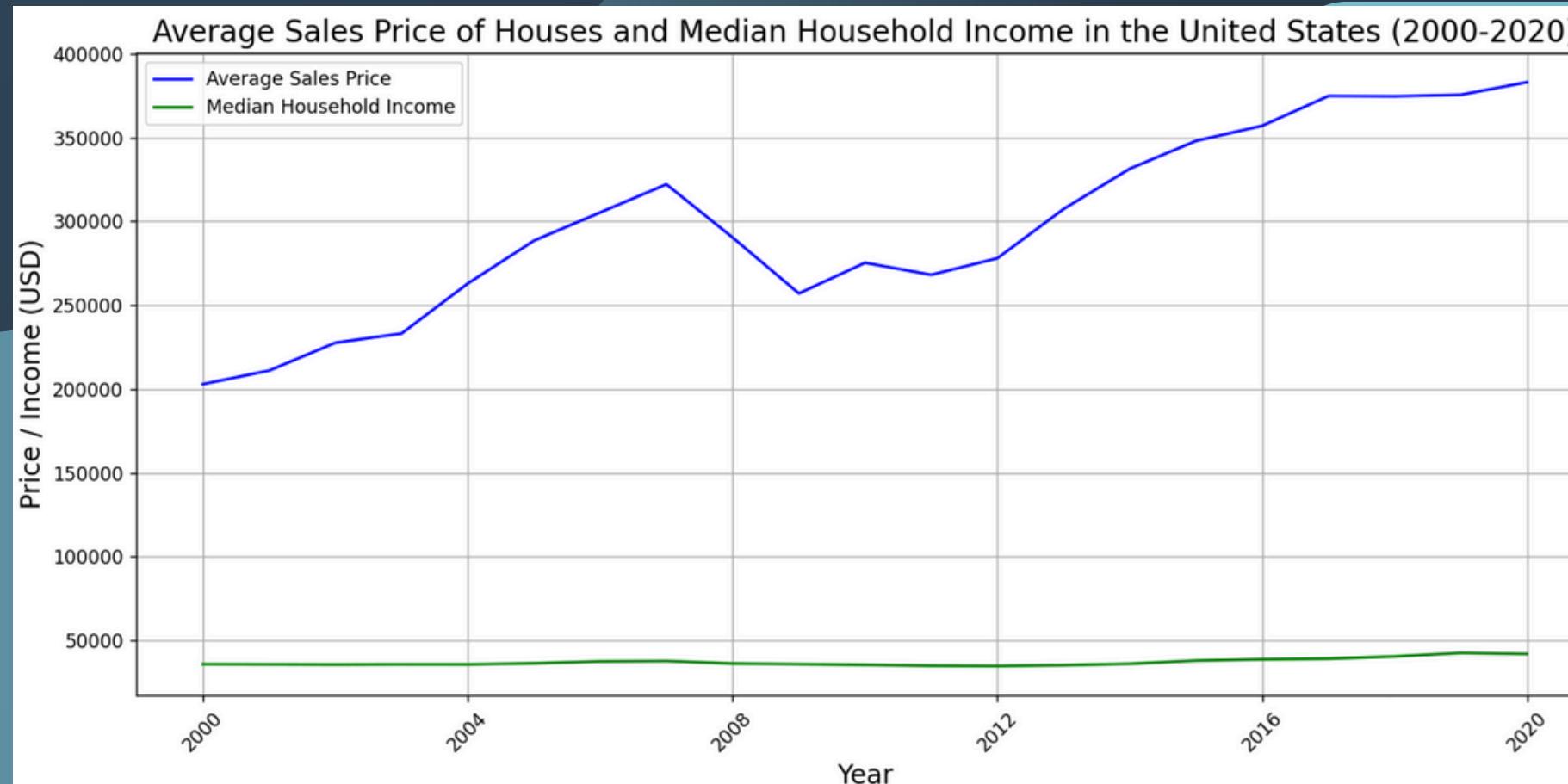
- The growth rate fluctuates between approximately -5.5% and 12.5%.

## 2-Critical Years

- In some years (e.g., during the 2008 financial crisis), the growth rate dropped significantly and even turned negative.



# Analysis of U.S. Housing Prices Annual Growth, Inflation, and Household Income

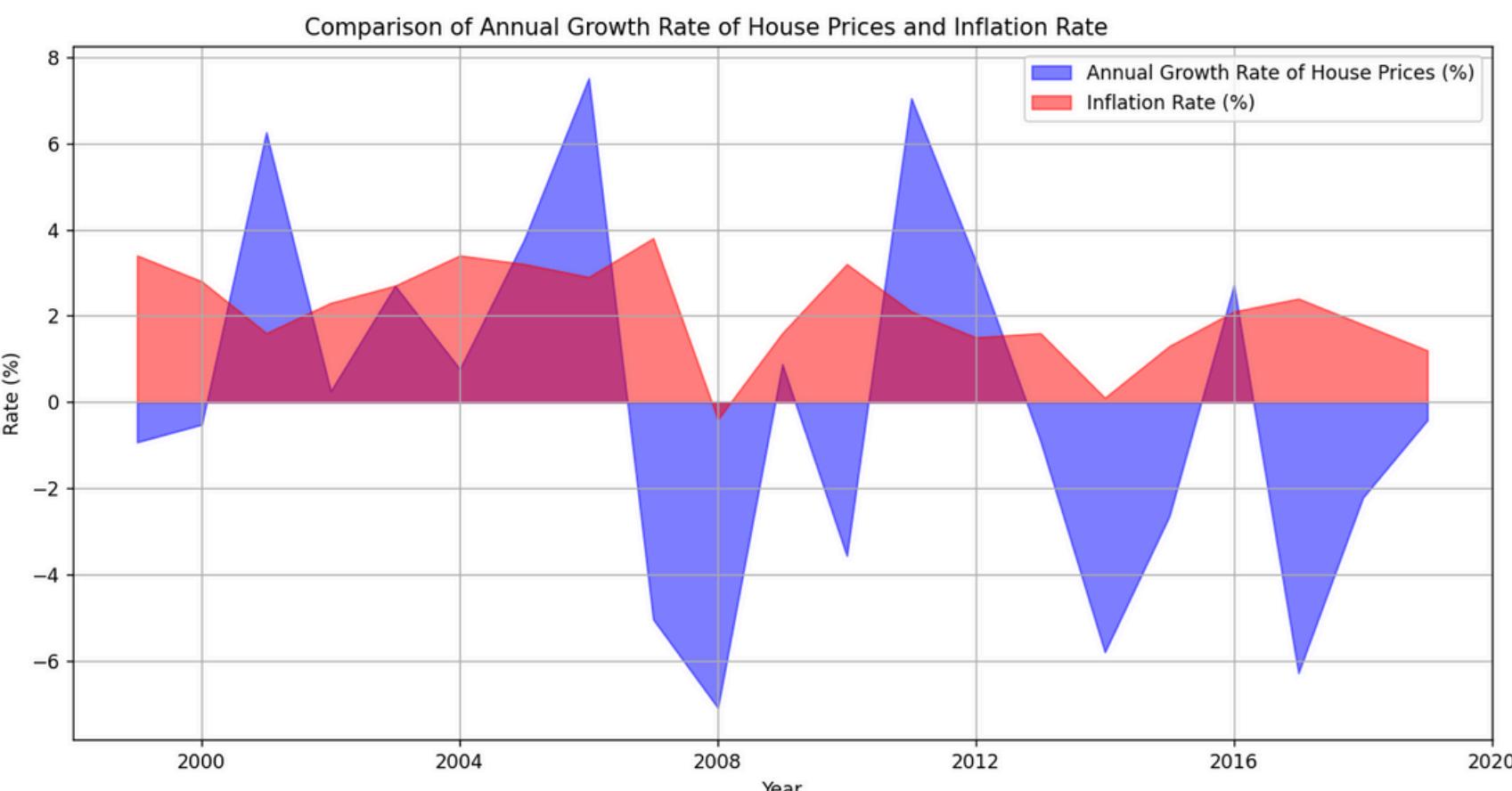


The chart highlights the volatility of the housing market compared to the more stable inflation rate.

- The annual growth rate of house prices shows significant fluctuations with noticeable peaks and dips, while the inflation rate remains relatively stable with smaller variations.
- There is a sharp decline in the growth rate of house prices around 2008-2010, likely due to the 2008 housing market crash, but it begins to recover after 2010.
- In most years, the growth rate of house prices is higher than the inflation rate.

Although both the average sales price of houses and the median household income show an upward trend from 2000 to 2020, there is a significant difference in the rate of increase.

- Housing is becoming less affordable over time, even as incomes rise.
- The slope of housing prices is much steeper compared to the growth in median household income. This indicates that while incomes have risen over the years, housing prices have increased at a much faster pace, leading to a growing affordability gap.

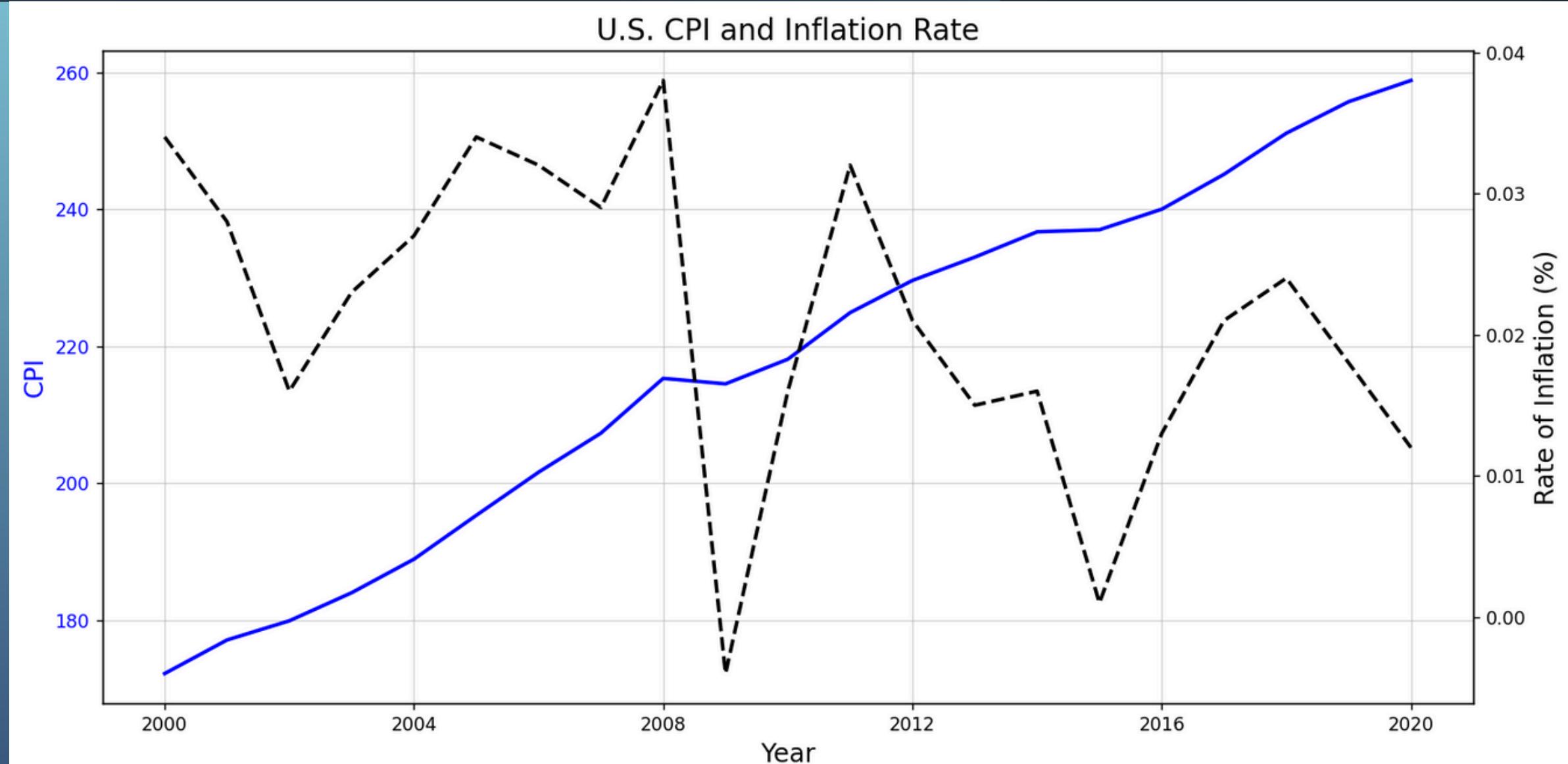


# CPI and Inflation Rate

**Consumer Price Index (CPI):** A measure of the average change in prices over time for a basket of consumer goods and services. An increase in CPI indicates rising prices and reduced purchasing power.

**Inflation Rate:** The annual percentage change in CPI, reflecting the rate at which prices are increasing or decreasing.

- From 2000 to 2020, the CPI steadily increased, indicating gradual price rises over this period. This increase reflects a decline in purchasing power for consumers over time.
- The inflation rate fluctuated during this time but generally remained within the range of 1.2% to 3.8%. These fluctuations reflect the impact of economic conditions and monetary policies on inflation.
- In 2009, the inflation rate dropped to -0.4%, indicating deflation (falling prices) following the global financial crisis.



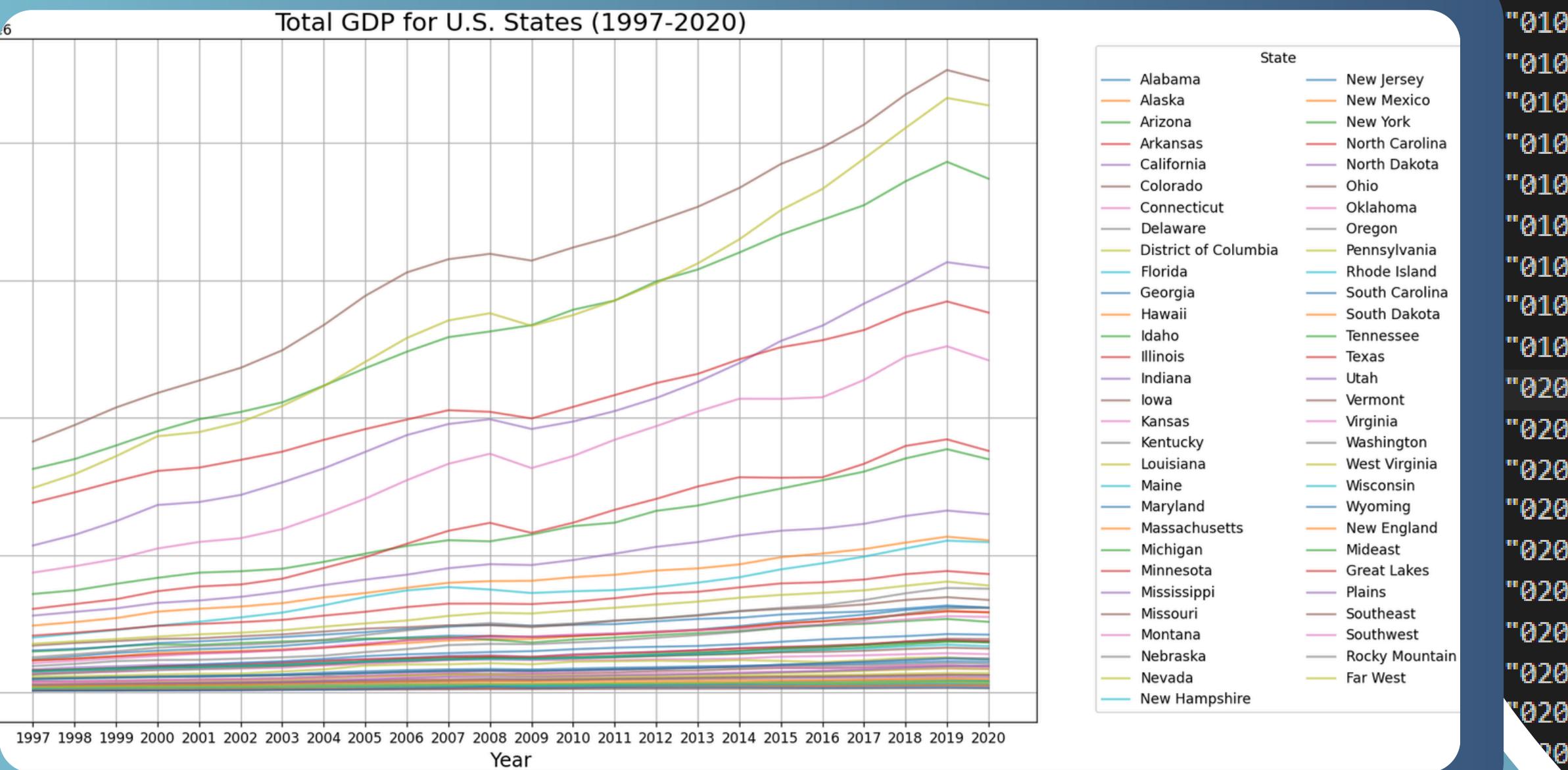


GDP Rates Comparison: How  
impactful is the USD on a  
global scale?

# Step 1: Analyze dataset

# Dataset Discovery: Filter desired rows

- **Challenge:** Each state had multiple industries, but we intended to visualize the total
  - **Problem:** Too many lines and redundant information

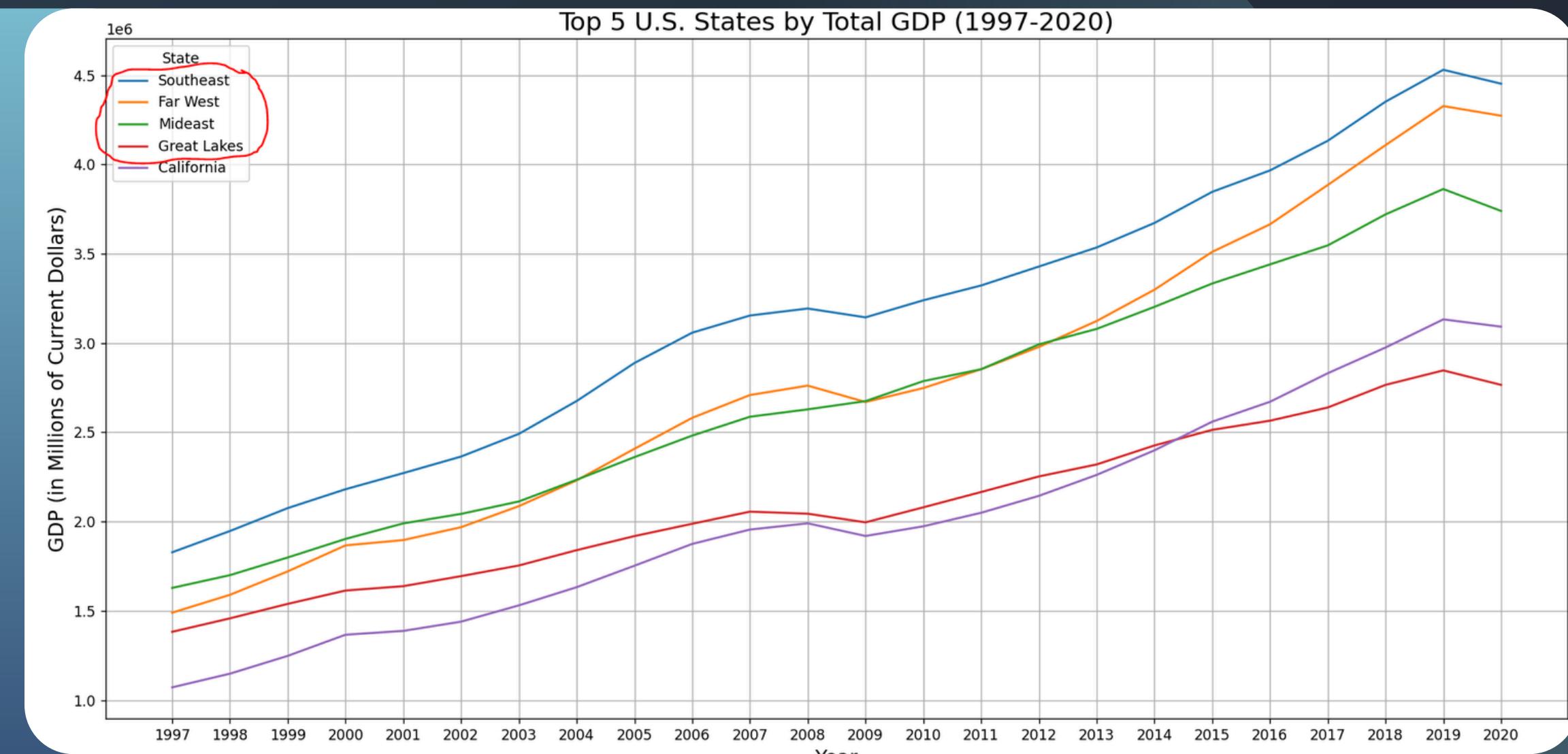


Code	Line Code	Industry Classification
P2N,71,"621","		Ambulatory health care services", "Millions"
P2N,72,"622","		Hospitals", "Millions"
P2N,73,"623","		Nursing and residential care facilities", "Millions"
P2N,74,"624","		Social assistance", "Millions"
P2N,75,"71, 72","		Arts, entertainment, recreation, and sports", "Millions"
P2N,76,"71","		Arts, entertainment, and recreation", "Millions"
P2N,77,"711-712","		Performing arts", "Millions"
P2N,78,"713","		Amusement, gambling, and recreation", "Millions"
P2N,79,"72","		Accommodation and food services", "Millions"
P2N,80,"721","		Accommodation", "Millions"
P2N,81,"722","		Food services and drinking places", "Millions"
P2N,82,"81","		Other services (except repair and maintenance)", "Millions"
P2N,83,"...","		Government and government enterprises", "Millions"
P2N,84,"...","		Federal civilian employees", "Thousands"
P2N,85,"...","		Military", "Millions"
P2N,86,"...","		State and local governments", "Millions"
P2N,87,"11, 21","	"Natural resources and mining", "Millions"	
P2N,88,"42, 44-45","	"Trade", "Millions"	
P2N,89,"22, 48-49","	"Transportation, warehousing, and utilities", "Millions"	
P2N,90,"31-33, 51","	"Manufacturing", "Millions"	
P2N,91,"...","	"Private goods-producing industries", "Millions"	
P2N,92,"...","	"Private services-producing industries", "Millions"	
P2N,1,"...","	All industry total", "Millions"	
P2N,2,"...","	Private industries", "Millions"	
P2N,3,"11","	Agriculture, forestry, and fisheries", "Millions"	
P2N,4,"111-112","	Farms", "Millions"	
P2N,5,"113-115","	Forestry, fishing, and logging", "Millions"	
P2N,6,"21","	Mining, quarrying, and oil and gas extraction", "Millions"	
P2N,7,"211","	Oil and gas extraction", "Millions"	
P2N,8,"212","	Mining (except oil and gas)", "Millions"	
P2N,9,"213","	Support activities for mining and oil and gas extraction", "Millions"	
P2N,10,"22","	Utilities", "Millions"	
P2N,11,"23","	Construction", "Millions"	

# Step 2: Query top 5 instances

## Dataset Discovery: Data inconsistency

- **Problem fixed:** Too many lines caused a confusion
- **New problem emerged:** Instances were not only grouped by states, but by larger regions as well (SOUTHEAST, FAR WEST, MIDEAST, GRATLAKES)



```
def visualizeTopStatesGDP():
    # Load the dataset
    us_gdp_data = pd.read_csv("project/data-inputs/docs/us_gdp_by_state.csv")

    # Ensure "GeoName" is treated as a string
    us_gdp_data["GeoName"] = us_gdp_data["GeoName"].astype(str)

    # Filter for "All industry total" rows and exclude the total "United States *" row
    all_industry_total = us_gdp_data[
        (us_gdp_data["Description"].str.strip() == "All industry total") &
        (~us_gdp_data["GeoName"].str.contains("United States"))
    ]

    # Extract relevant columns (State and years 1997-2020)
    gdp_years = [str(year) for year in range(1997, 2021)]
    state_gdp_data = all_industry_total[["GeoName"] + gdp_years]

    # Melt the DataFrame to prepare for visualization
    state_gdp_melted = state_gdp_data.melt(id_vars=["GeoName"], var_name="Year", value_name="GDP")

    # Convert GDP values to numeric, handling any non-numeric values like (NA)
    state_gdp_melted["GDP"] = pd.to_numeric(state_gdp_melted["GDP"], errors="coerce")

    regions_to_exclude = ["Southeast", "Far West", "Mideast", "Great Lakes", "Southwest", "Plains", "New England"] # Disregard regions consisting of multiple states
    filtered_gdp_data = state_gdp_melted[~state_gdp_melted["GeoName"].str.contains("|".join(regions_to_exclude))]

    # Calculate the total GDP for each state over the period 1997-2020
    state_total_gdp = filtered_gdp_data.groupby("GeoName")["GDP"].sum().sort_values(ascending=False)

    # Get the top 5 states with the highest total GDP
    top_5_states = state_total_gdp.head(5).index

    # Filter the melted data for these top 5 states
    top_5_states_data = state_gdp_melted[state_gdp_melted["GeoName"].isin(top_5_states)]

    # Visualize the data
    plt.figure(figsize=(12, 8))
    for state in top_5_states:
        state_data = top_5_states_data[top_5_states_data["GeoName"] == state]
        plt.plot(state_data["Year"], state_data["GDP"], label=state)

    plt.title("Top 5 U.S. States by Total GDP (1997-2020)", fontsize=18)
    plt.xlabel("Year", fontsize=14)
    plt.ylabel("GDP (in Millions of Current Dollars)", fontsize=14)
    plt.legend(title="State")
    plt.grid(True)
    plt.tight_layout()
    plt.show()
```

# Step 3: Clean Data

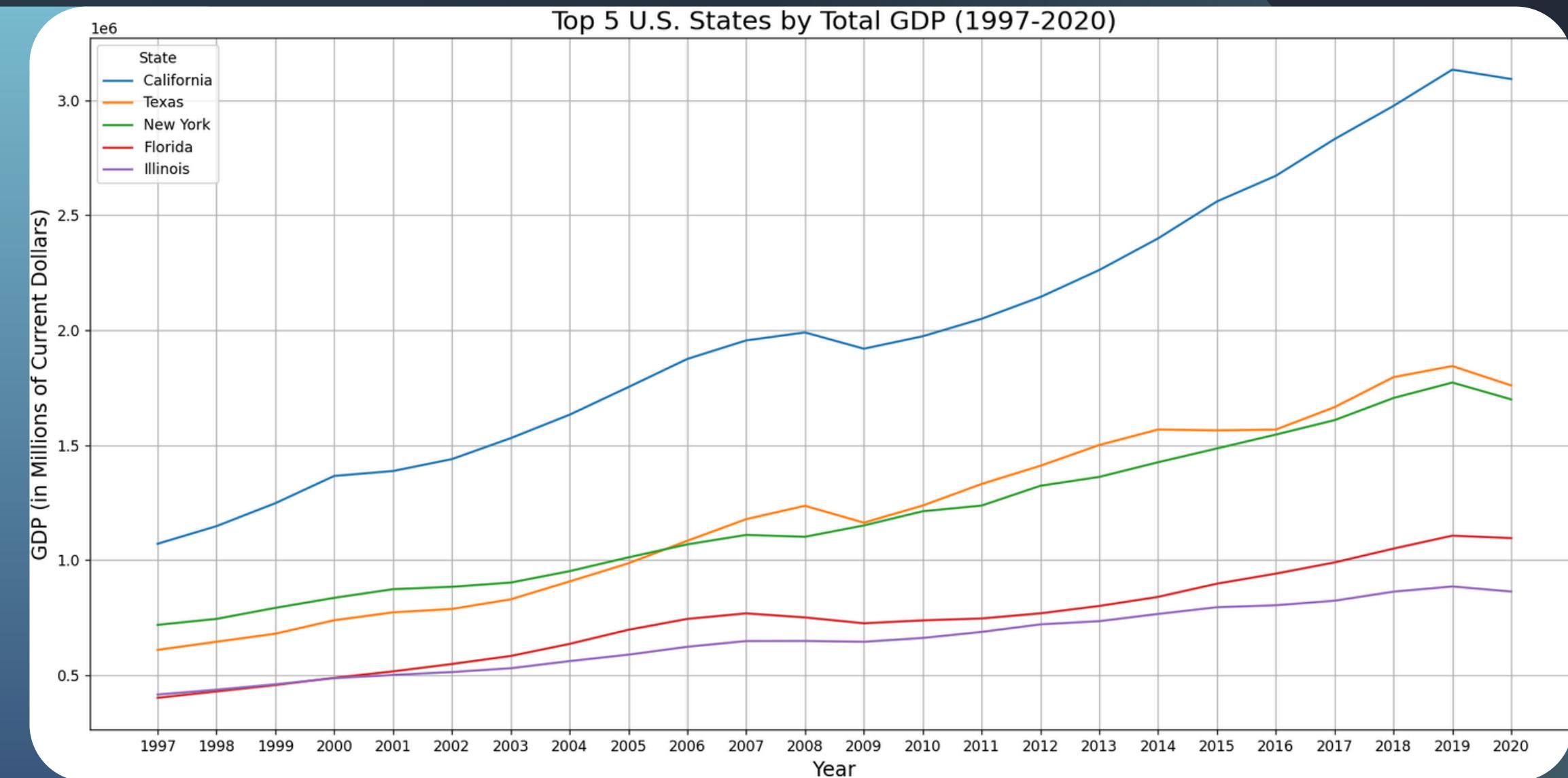
## Dataset Discovery: Consistency across states

- Problem Solved: Data inconsistency of states
- filtering data by states (TEXAS, NEW YORK, FLORIDA AND ILLINOIS)

```
# Melt the DataFrame to prepare for visualization
state_gdp_melted = state_gdp_data.melt(id_vars=["GeoName"], var_name="Year", value_name="GDP")

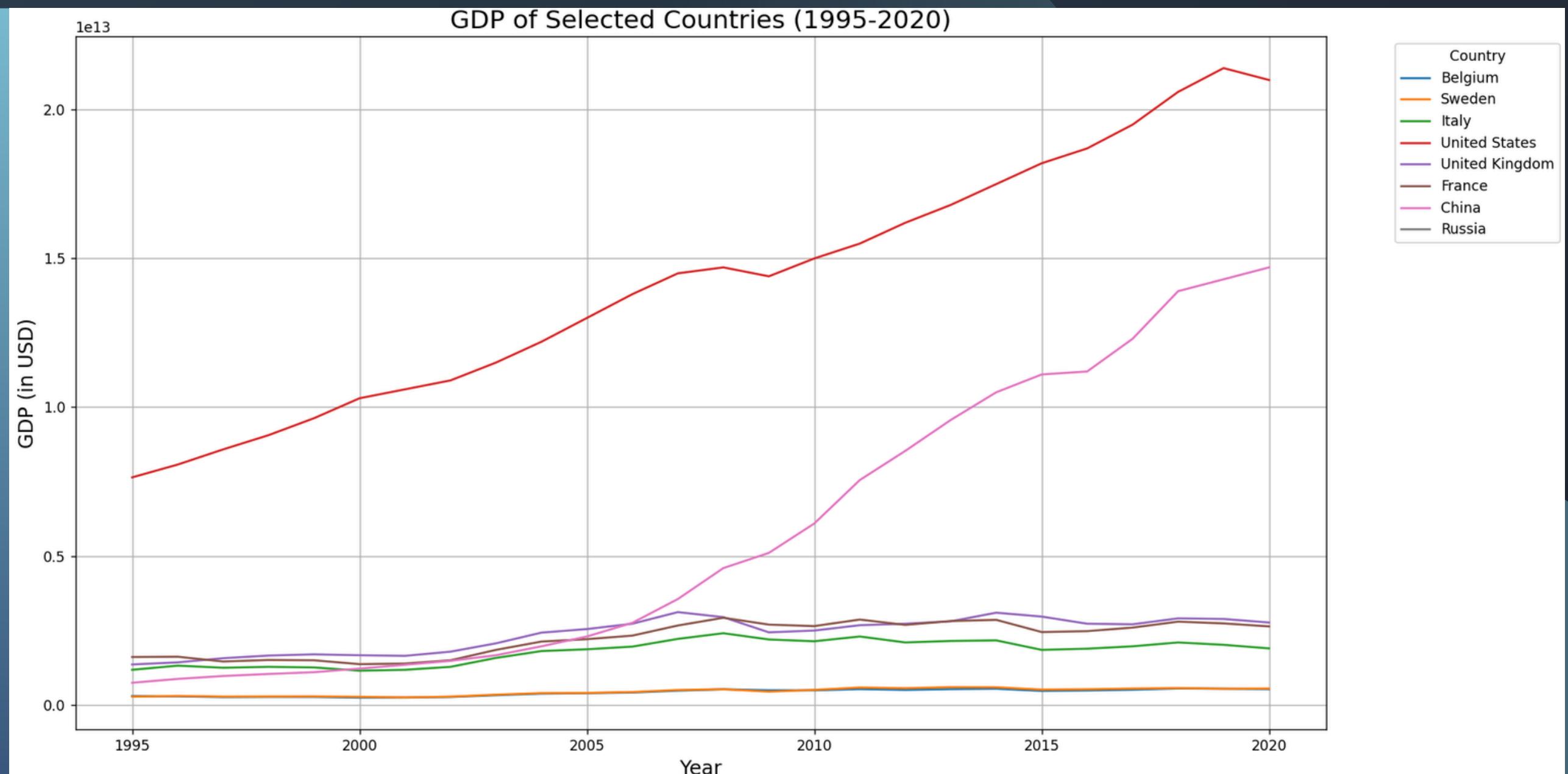
# Convert GDP values to numeric, handling any non-numeric values like (NA)
state_gdp_melted["GDP"] = pd.to_numeric(state_gdp_melted["GDP"], errors="coerce")

regions_to_exclude = ["Southeast", "Far West", "Mideast", "Great Lakes", "Southwest", "Plains", "New England"] # Disregard regions consisting of multiple states
filtered_gdp_data = state_gdp_melted[~state_gdp_melted["GeoName"].str.contains("|".join(regions_to_exclude))]
```



# Global GDP Rates 1995-2020

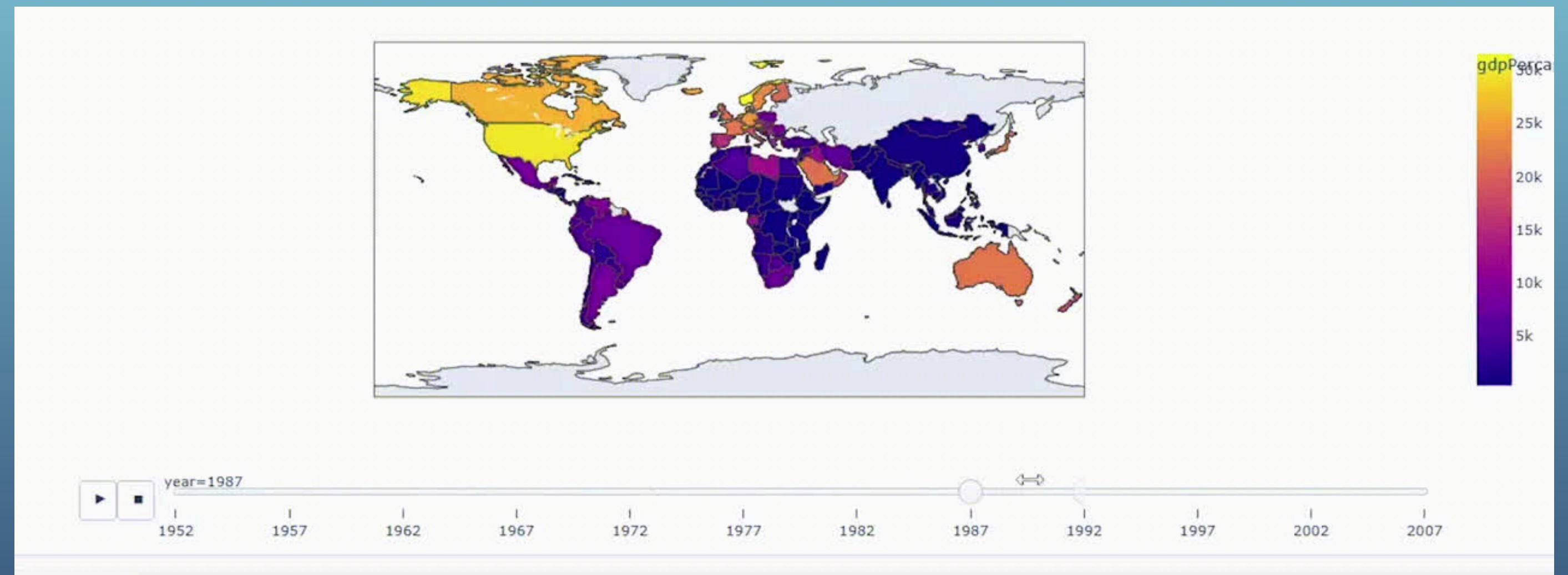
*In general, regardless of republican or democrat, assuming both parties were equally popular over the span of these years (assuming likelihood of 50% win for both parties), we can infer that their leadership in general brings advancements in economy, wealth and standards of living. However, the big question that we researched is what party brings the biggest impact in this sector*



- • • • •
- • • • •
- • • • •
- *i* For all GDP rates, there's a general uptrend with time
- • • • •

# GDP per capita (1952-2007)

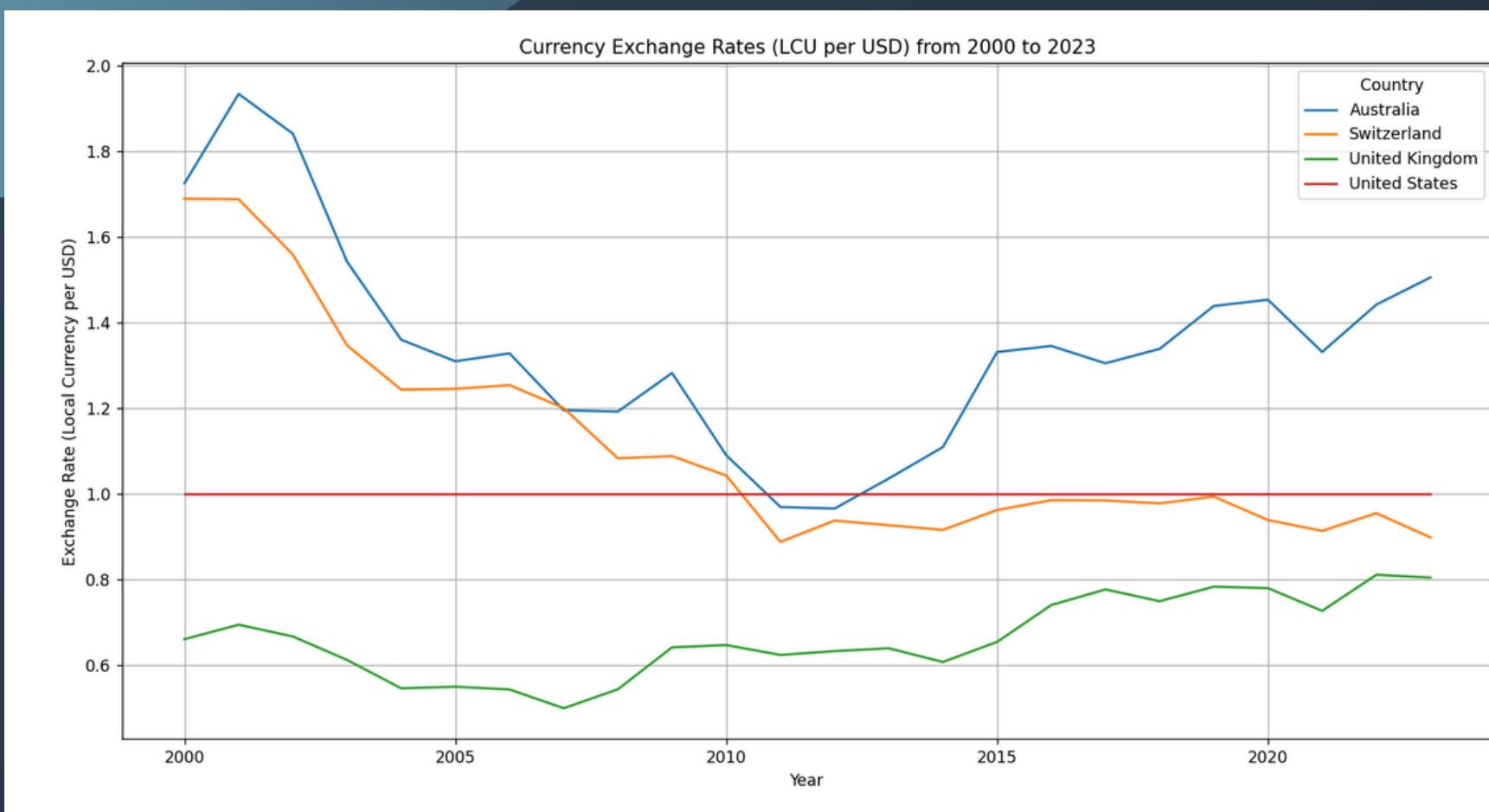
**Insights:** Aligns with the median income and inflation charts. In general, the economy and standards of living along with the technological advancement is improving, regardless of the outcome of the presidential elections



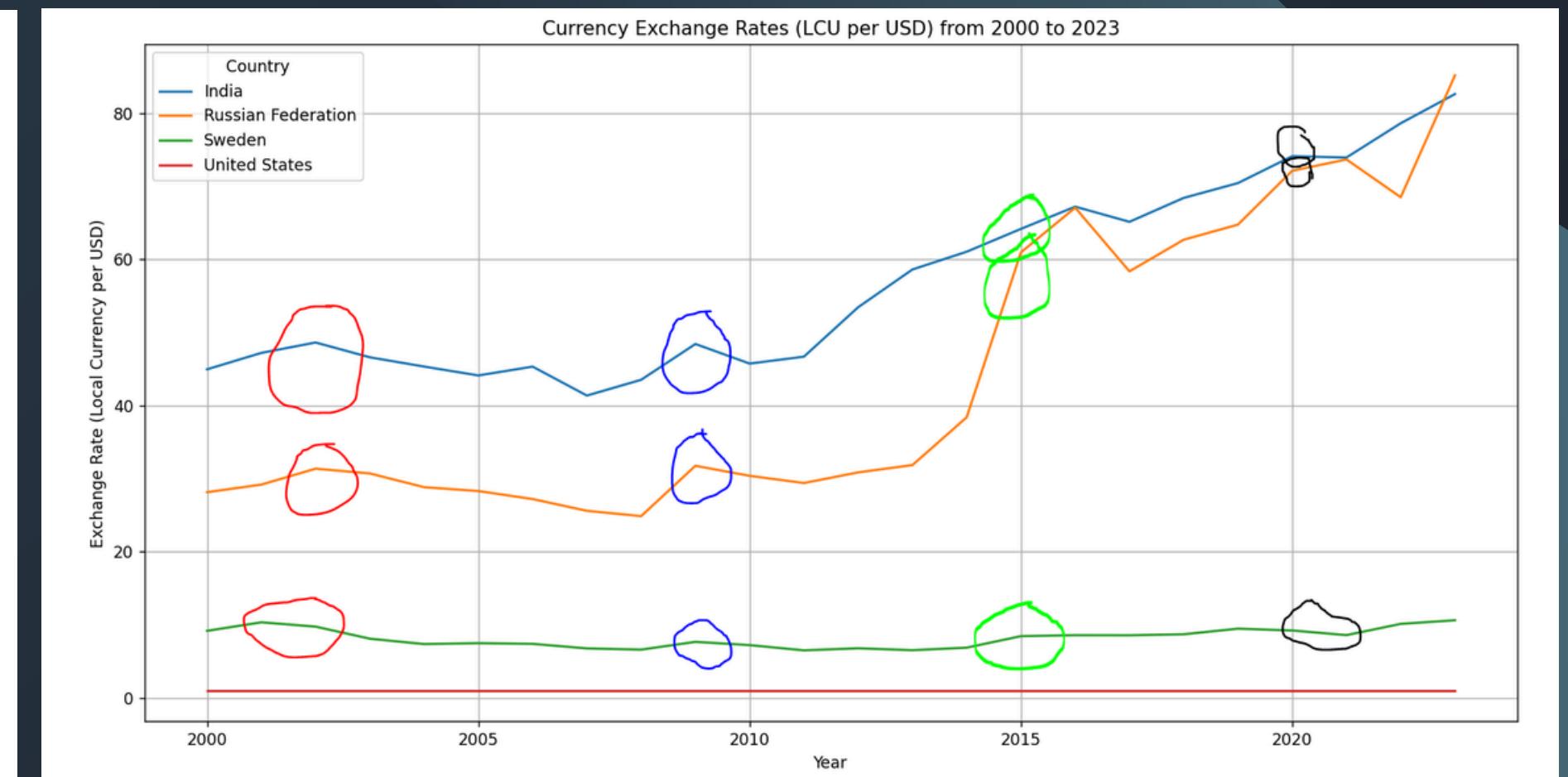
# The influence of the US dollar

*The ideal situation for USD is to have a stronger purchasing power and reliability than its competitors. As a result, the ideal case is for the relative currencies to have a higher LCU per USD --> The higher the y-value for the other currencies, the better for USA. In elections [2012, 2016] this positive trend can be observed*

Currencies closer to the exchange value of the USD:



Currencies further to the exchange value of the USD:



All countries share the a dependency to the US dollar, which is why their slopes are synced

# US Foreign Direct Investments Insights

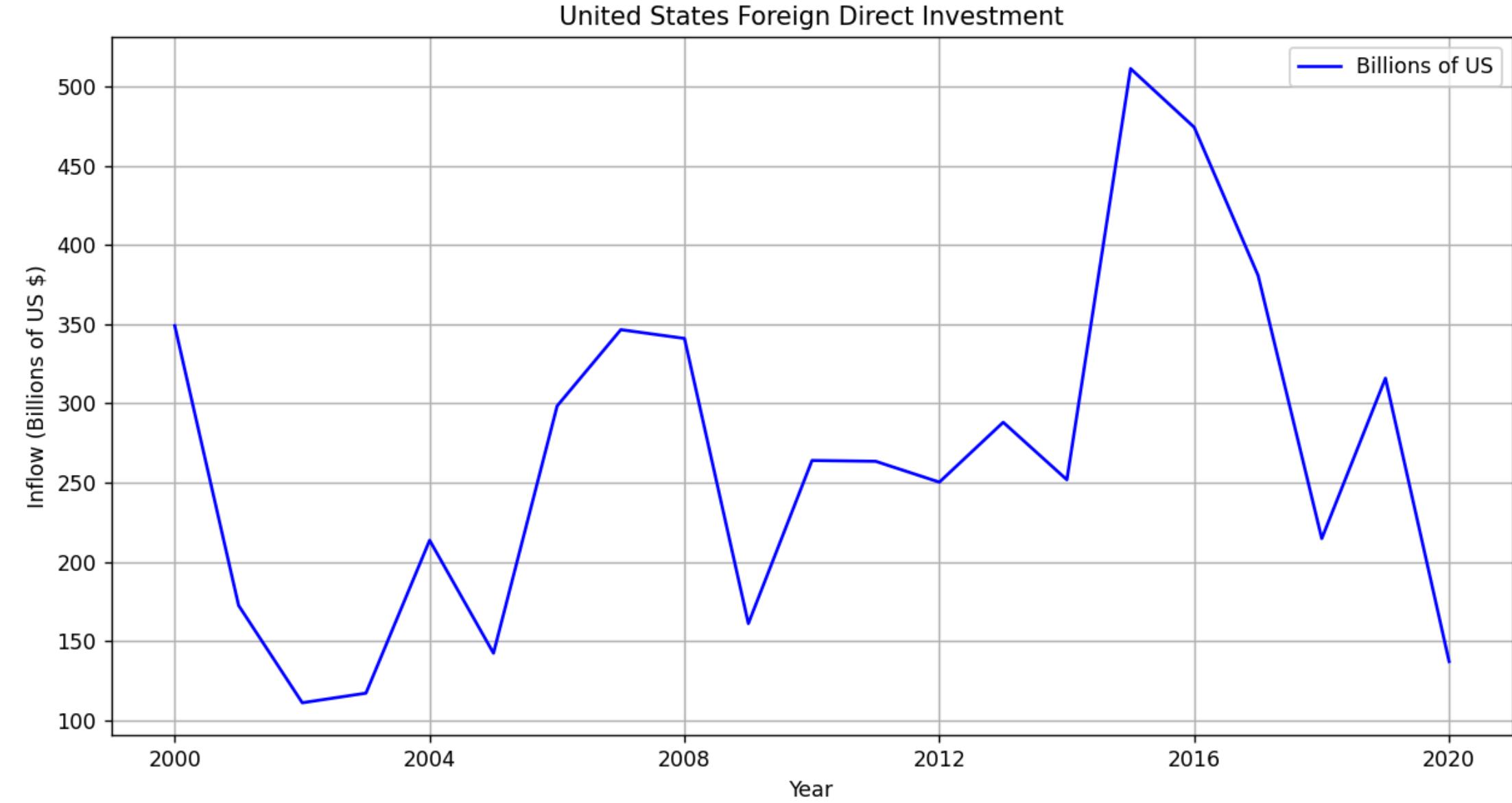
## Analyzing Trends in U.S. Foreign Direct Investment

### Historical Peaks

- Year 2000: FDI reached \$349 billion, one of the highest levels in history.
- Year 2015: A new record was set with FDI reaching \$511 billion.

### Impact of Economic Crises

- Year 2001: Following the September 11 attacks and economic recession, FDI dropped to \$172 billion.
- Year 2009: In the wake of the global financial crisis, FDI plummeted to \$161 billion.





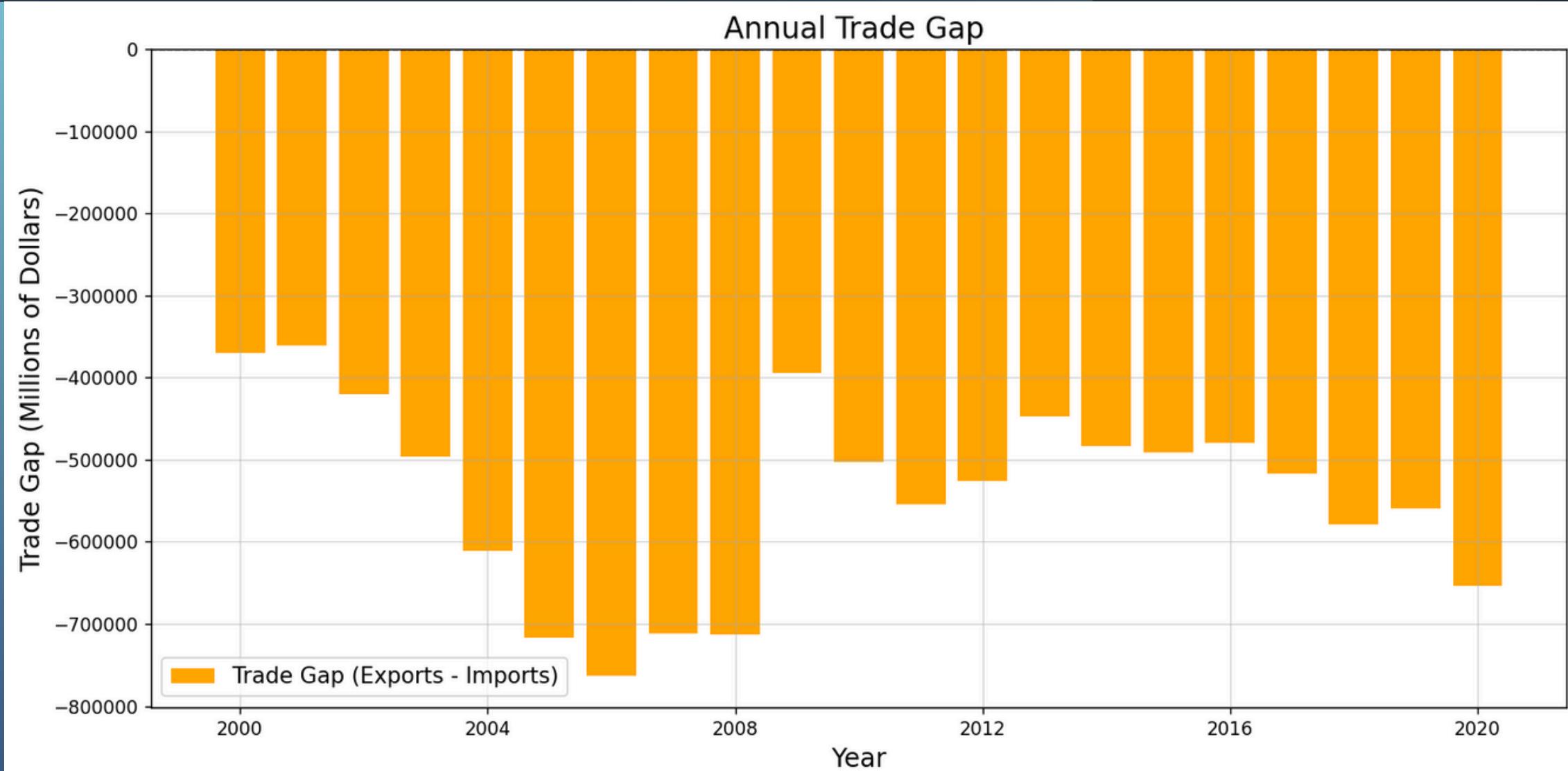
# More in depth: US - National trade, import & export



# Annual Trade Gap

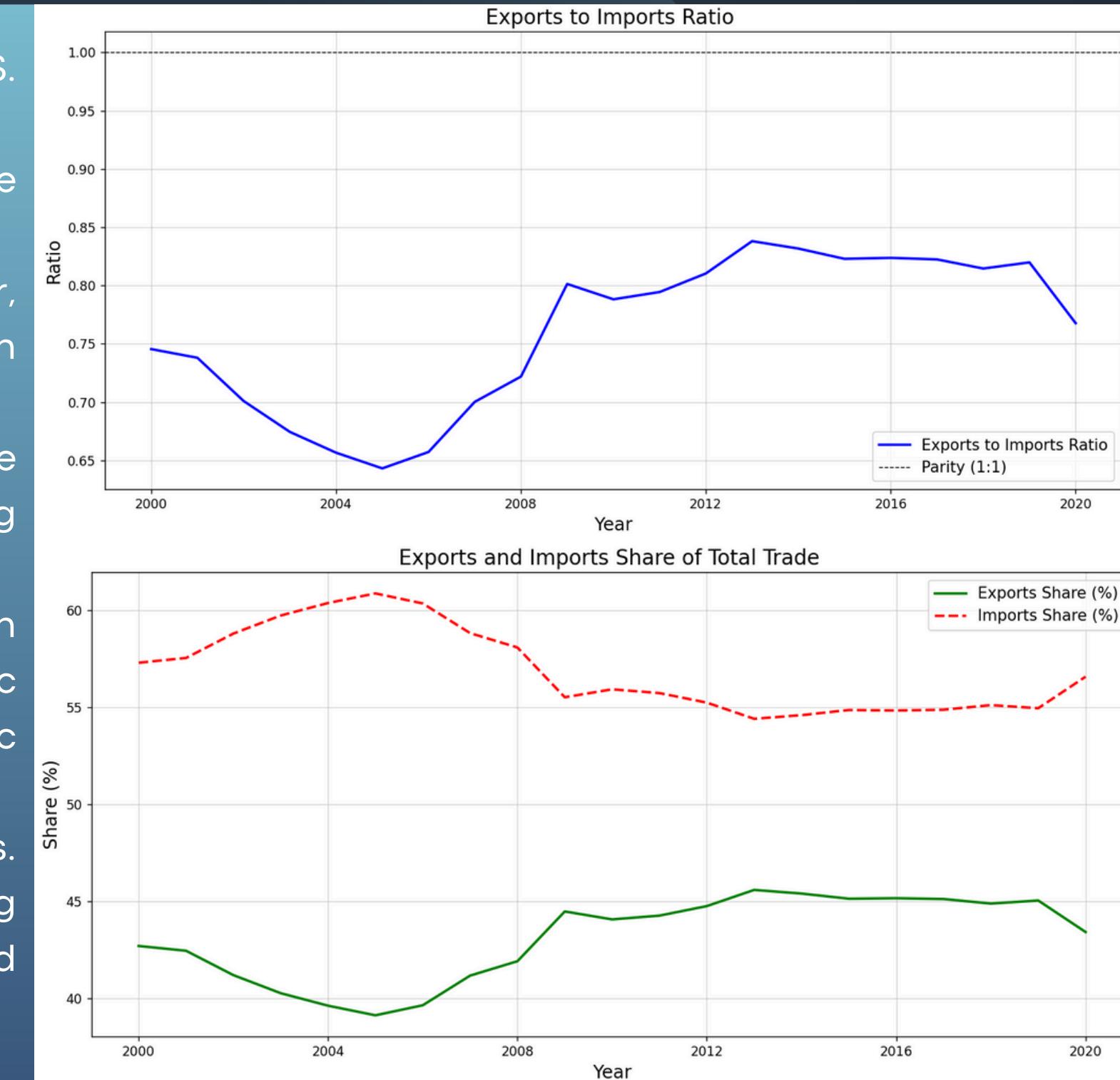
The Trade Gap is the difference between a country's exports and imports. If imports exceed exports, the trade gap is negative (trade deficit), and if exports exceed imports, the trade gap is positive. For the United States, the trade gap is usually negative, meaning the country imports more than it exports.

- The U.S. trade deficit grew significantly, rising from approximately \$370 billion in 2000 to \$650 billion in 2020. This growth reflects faster import expansion compared to exports and a sustained dependence on imports.
- In 2009, the trade gap temporarily decreased to around \$395 billion due to the global economic recession and reduced demand for goods and services. After the economy recovered, the trade gap increased again.
- In 2020, the trade gap reached around \$650 billion, partly due to the COVID-19 pandemic and disruptions in global supply chains.



# Analyzing the U.S. Exports to Imports Ratio and Share of Total Trade

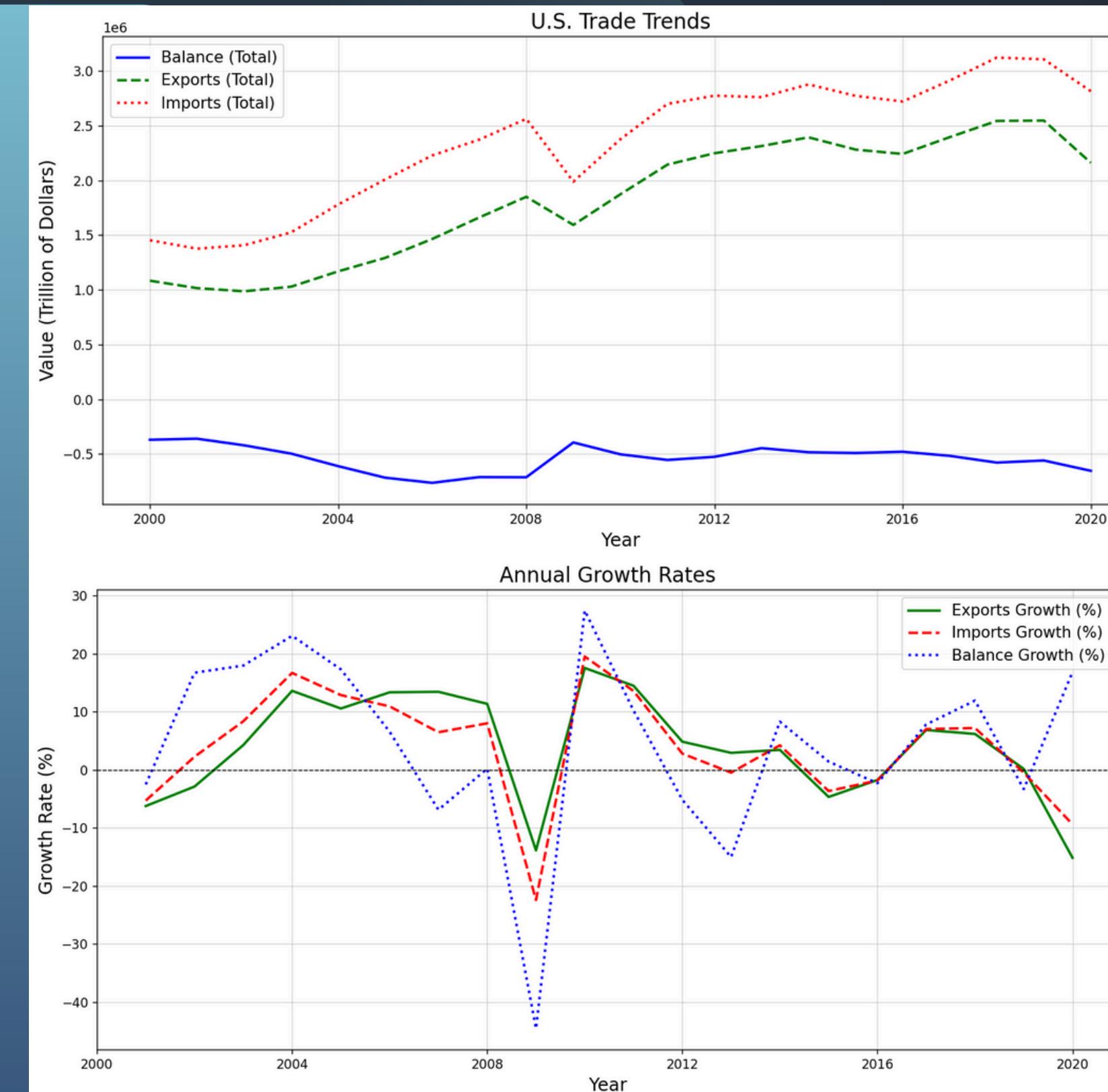
- The exports-to-imports ratio highlights the U.S. reliance on imports and its trade challenges.
- 2008 Financial Crisis: The ratio declined around the 2008 crisis, reflecting reduced demand for exports.
- COVID-19 (2020): In 2020, the ratio decreased further, highlighting the pandemic's negative impact on global trade.
- If the slope is positive, it means that exports are growing faster than imports, indicating an improving trade balance and a reduction in the trade deficit.
- A trade deficit (imports exceeding exports) can negatively affect employment and domestic industries, as it may lead to reduced domestic production and job losses.
- Trade policies are a key issue in election campaigns. For example, Donald Trump focused on protecting domestic industries and imposing tariffs on imported goods during the 2016 election.

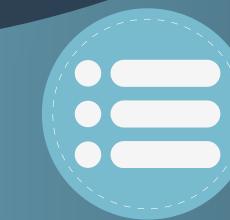


# U.S. Trade Trends

## Exports, Imports, and Annual Growth Rates

- Exports and imports in the United States have generally increased from 2000 to 2020, but imports have grown faster than exports. This has led to a persistent trade deficit.
- The annual growth rates chart shows that exports and imports experienced declines in growth during certain years (e.g., 2008 and 2020), due to economic crises such as the 2008 recession and the COVID-19 pandemic.
- Trade policies, such as tariffs during the Trump era, may have influenced export and import growth. These policies may have led to reduced export growth or increased import growth.
- Between 2008 and 2012, balance growth peaked due to trade balance improvements (e.g., higher exports or lower imports), but also hit its lowest point, largely due to the 2008 global financial crisis, which disrupted trade flows





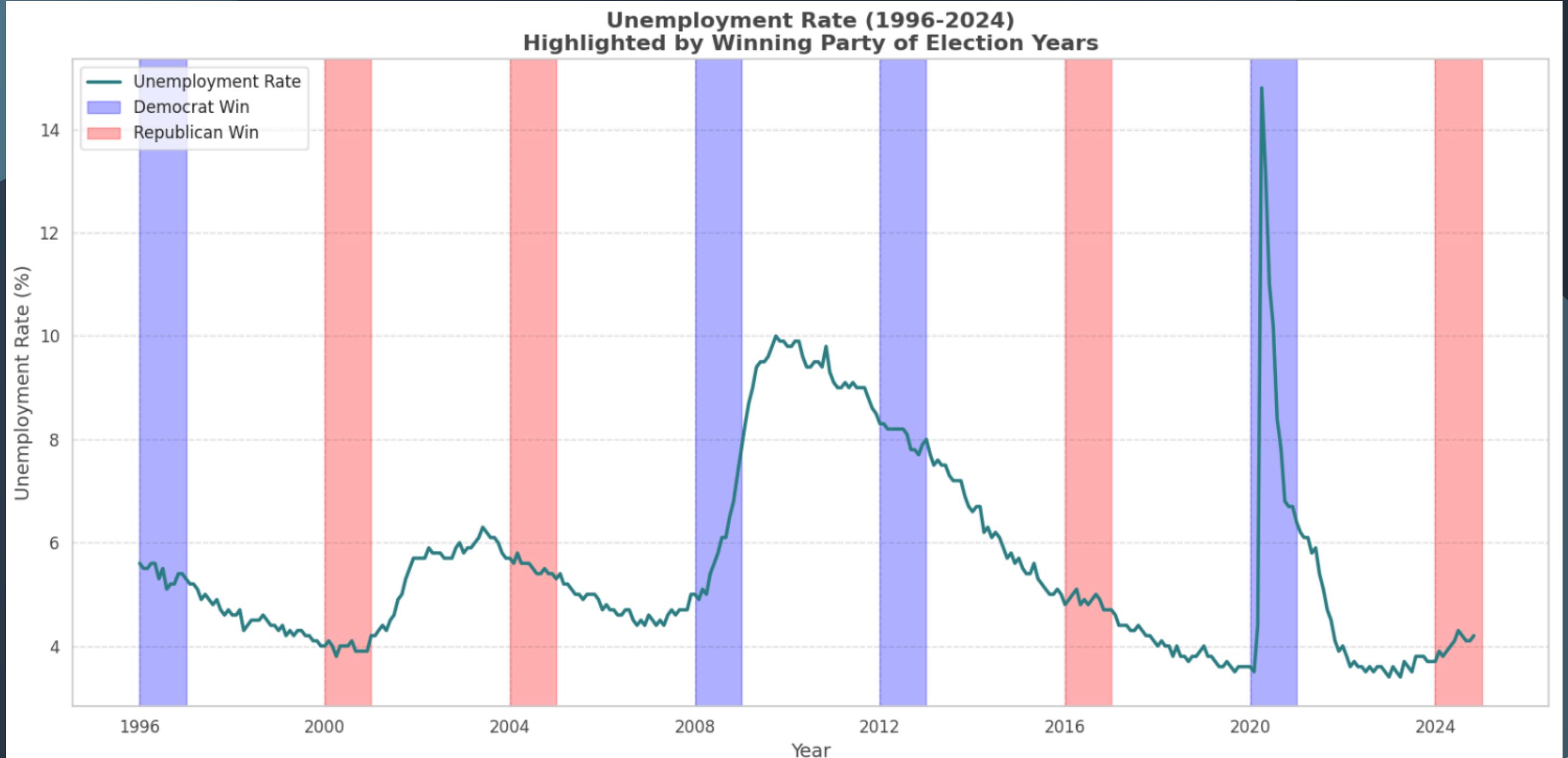
# Focus on Unemployment



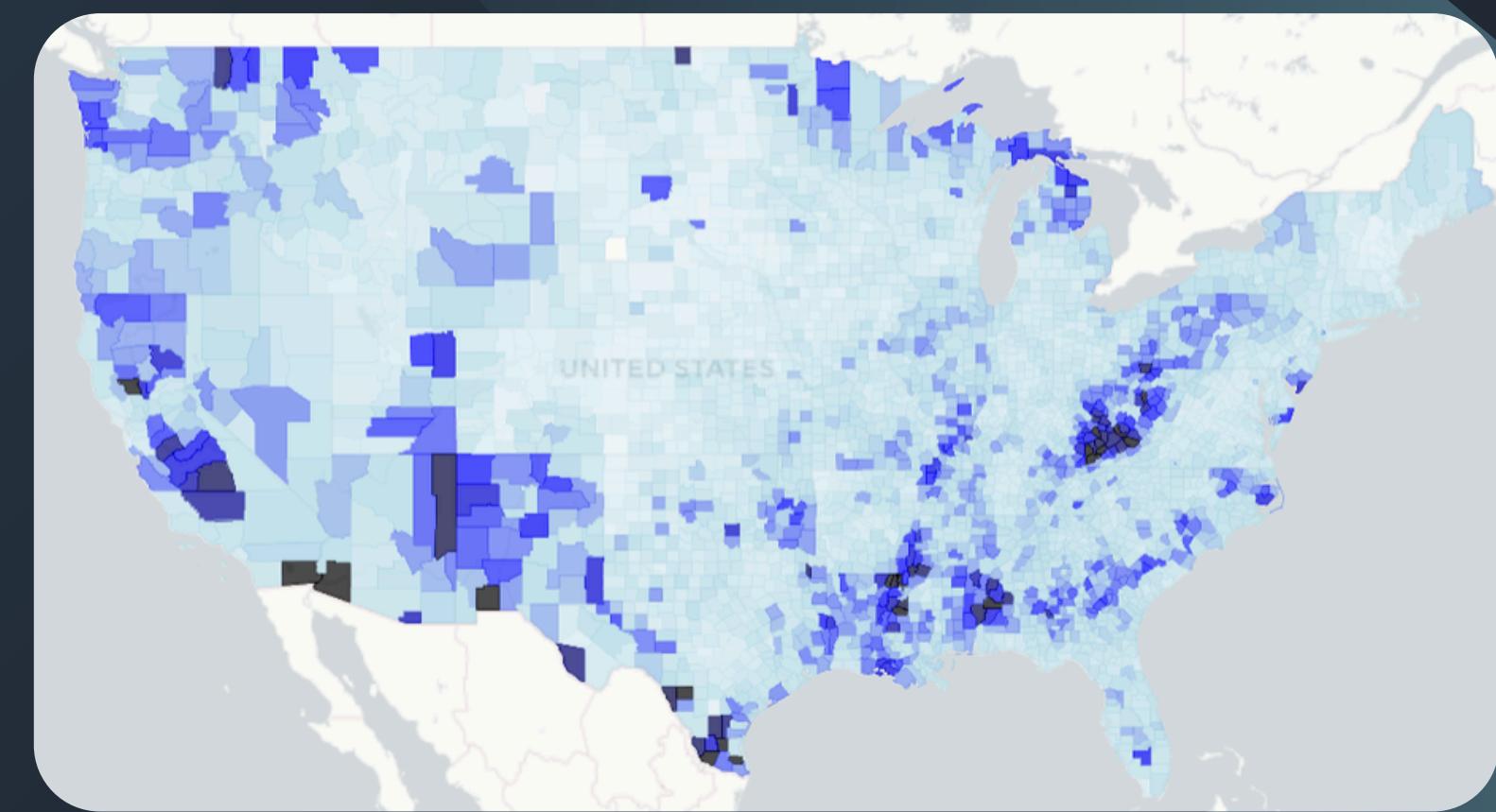
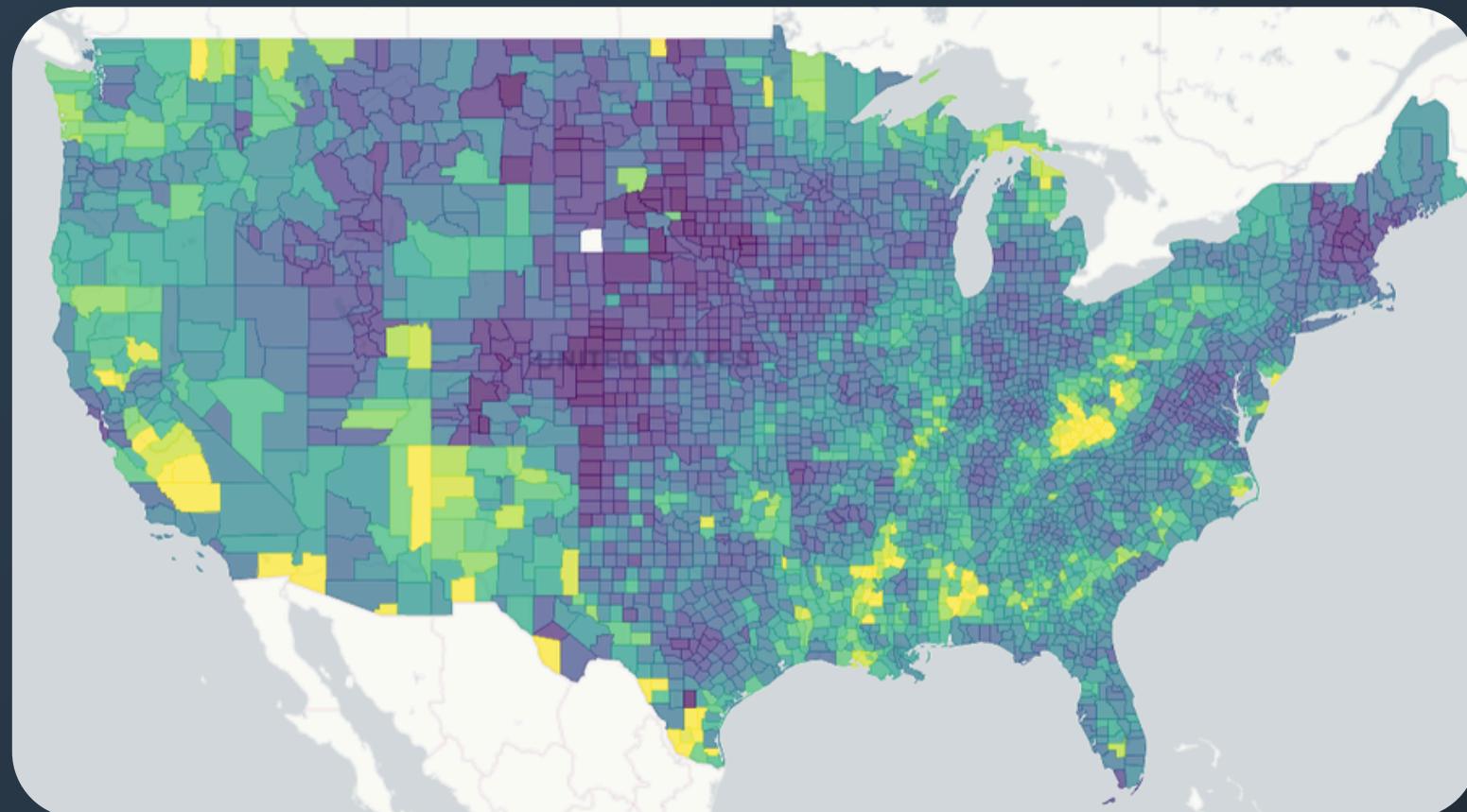
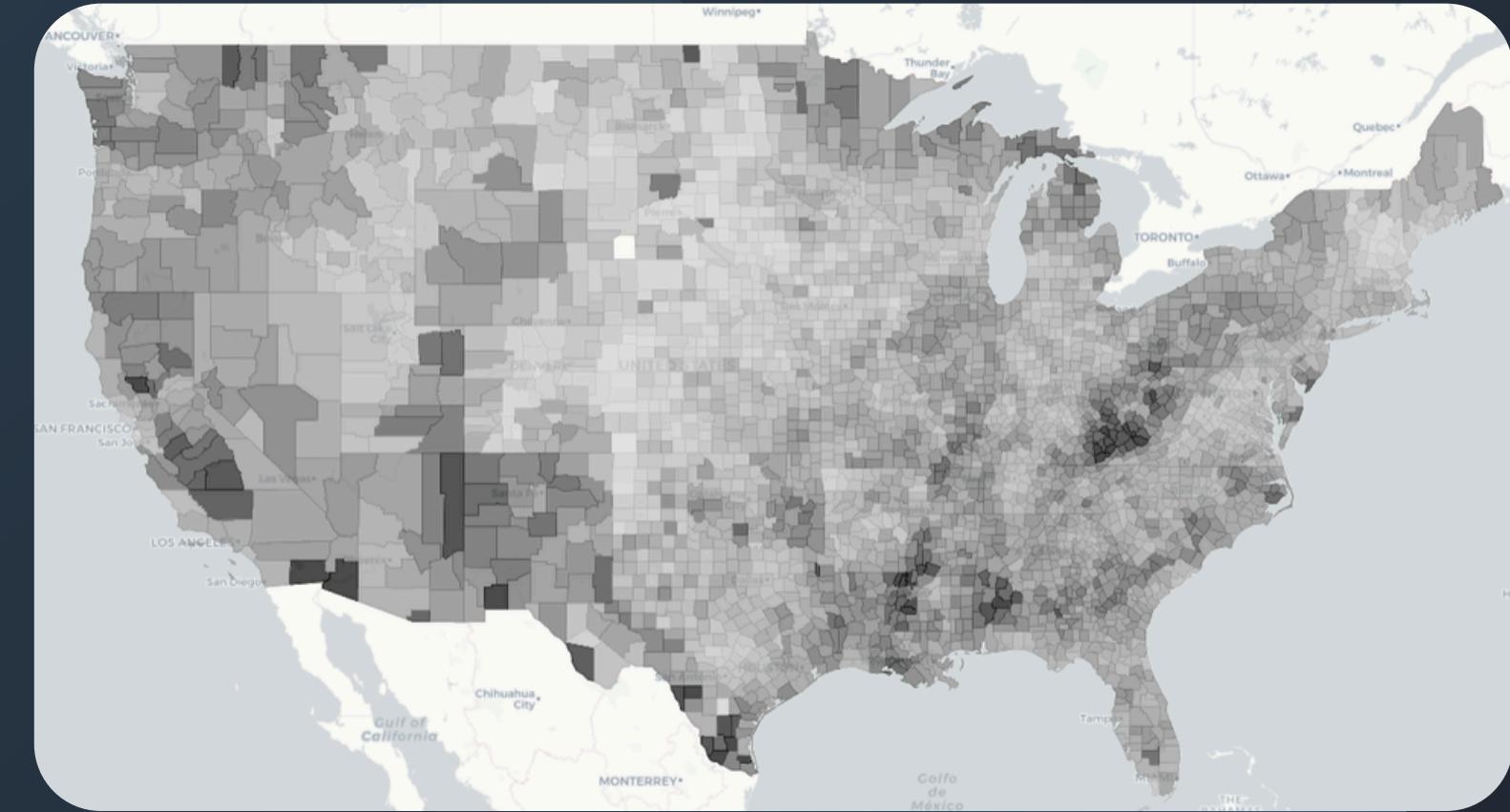
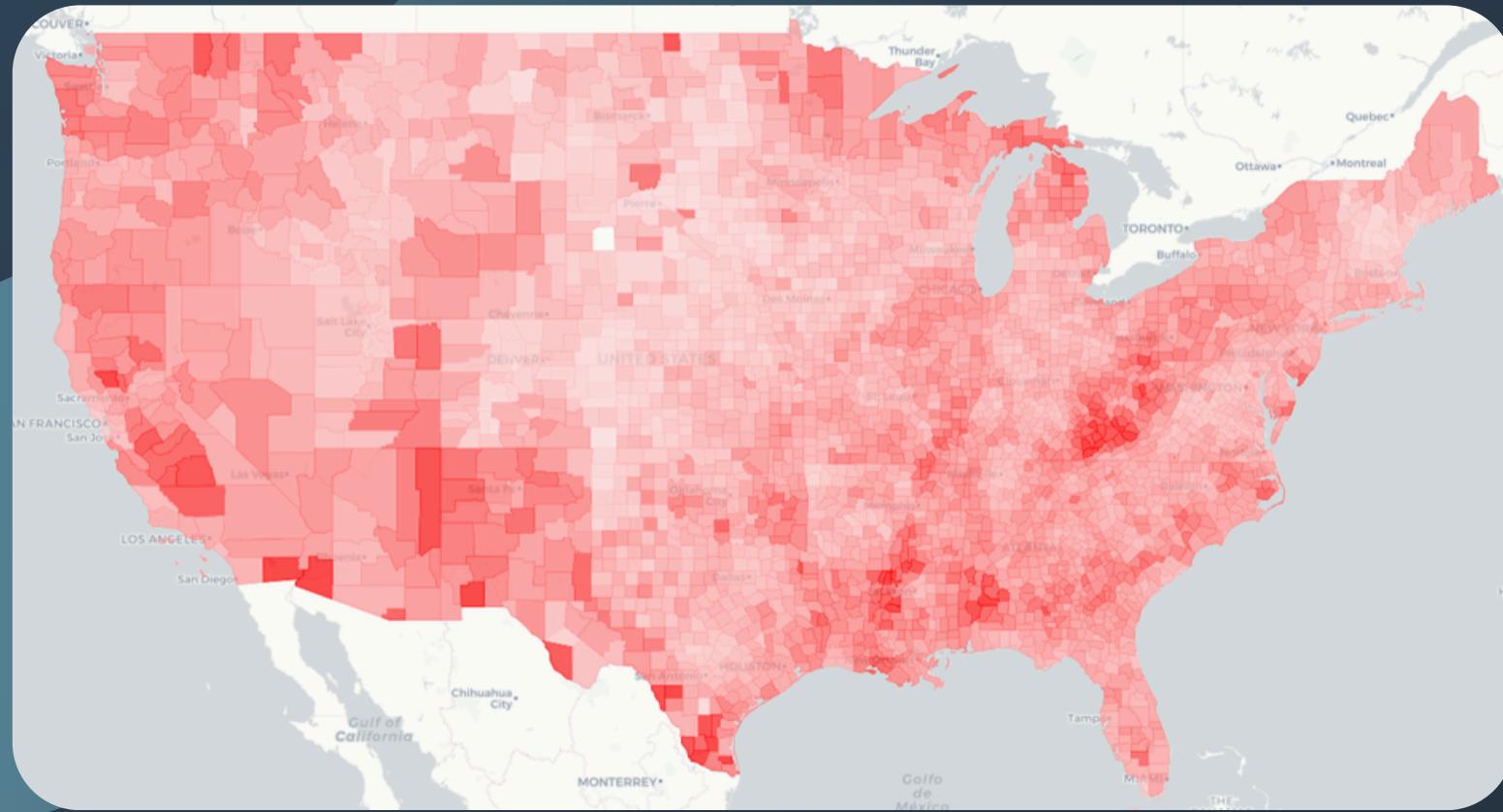


# 1996-2024 Unemployment Rate

2008-2016 was ruled by democrats and Obama: What are the takeaways?



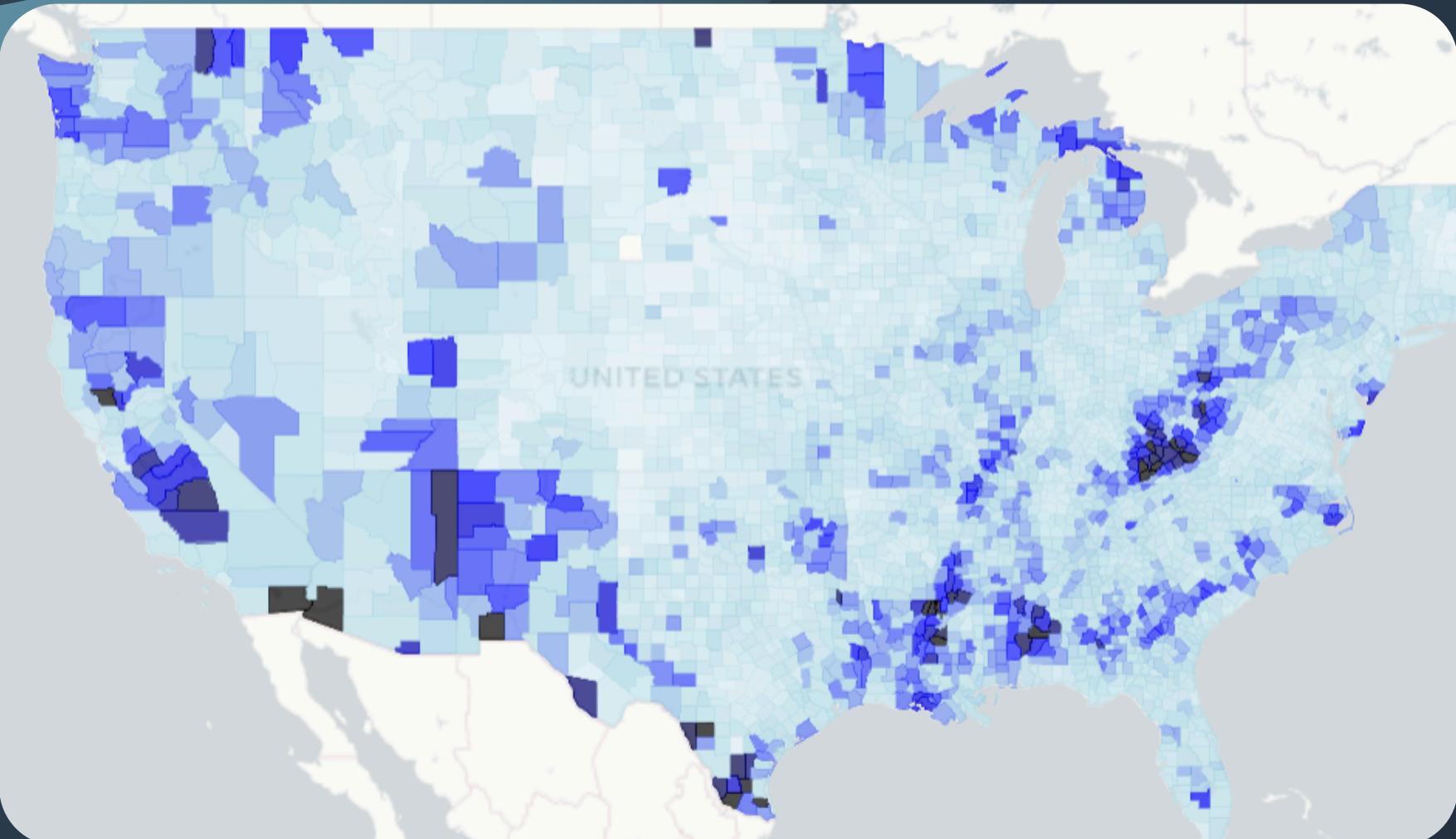
# 2016 - Unemployment Rates



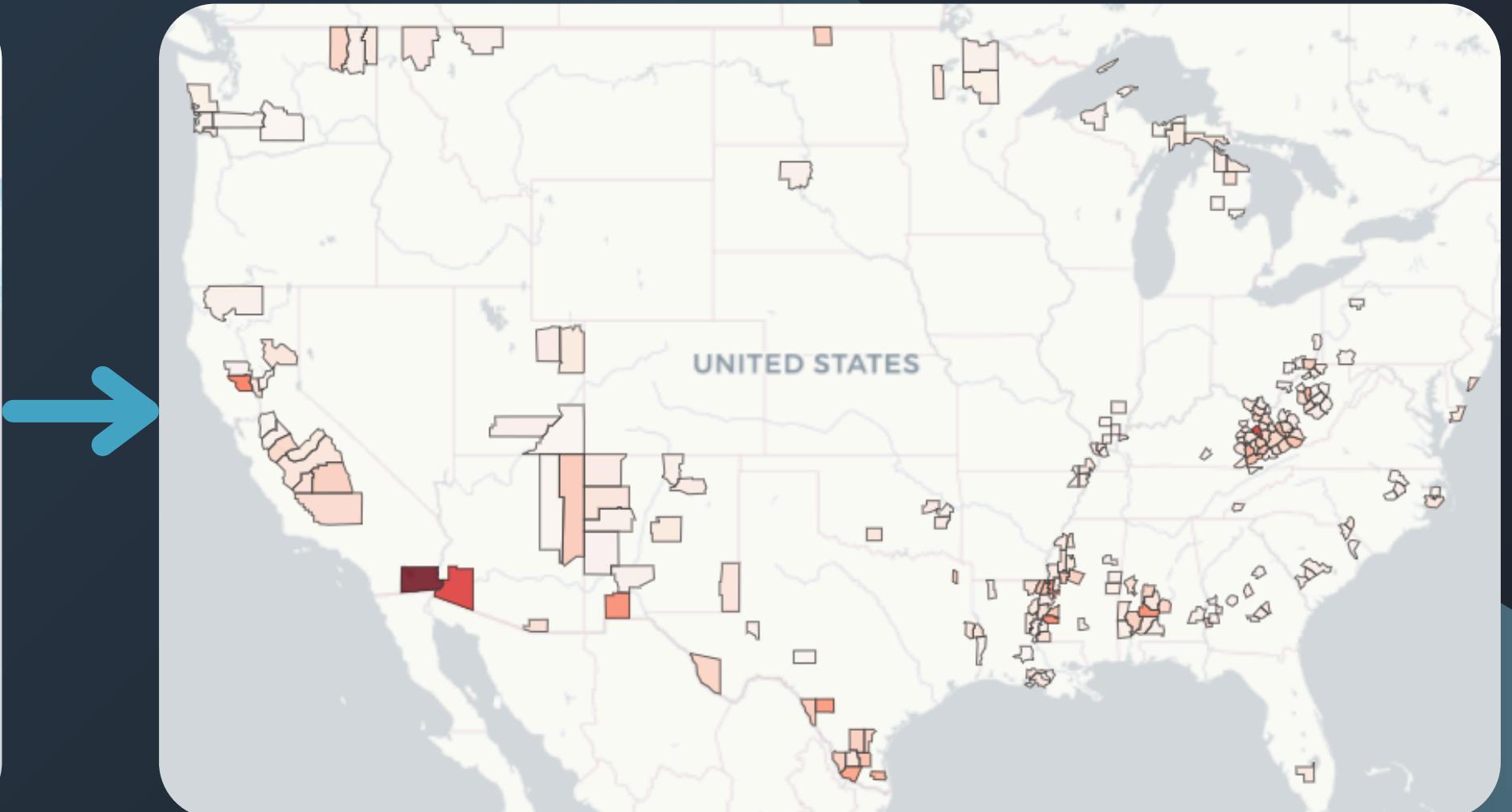


# From overall to detailed unemployment rates in 2016

Before and After Query



General unemployment rates



300 US counties with highest unemployment rate

# Economic Conclusions



## Broad Perspective

Broad economic trends generally exhibit independence from the outcomes of presidential elections or the governing political party, whether Democrat or Republican.



## Wage-Inflation Correlation

Rising inflation makes it vital for Federal Reserve policies to address inflation and wage growth to protect citizens' purchasing power.



## Real Estate Takeaways

U.S. housing prices have risen since 2000, but slower income growth and inflation have reduced affordability, widening the gap between income and housing costs.



## Key Economical Drivers

Significant events, such as the 2009 real estate crash and the 2020 COVID-19 pandemic, have profoundly impacted overall economic stability.



## GDP and Unemployment

Unemployment in the inland is lower, while coastal areas have more work competition.



## Import - Export Trade

U.S. imports have consistently exceeded exports, resulting in a persistent trade deficit. This trend has been influenced by trade policies, economic crises, and structural changes in the economy.

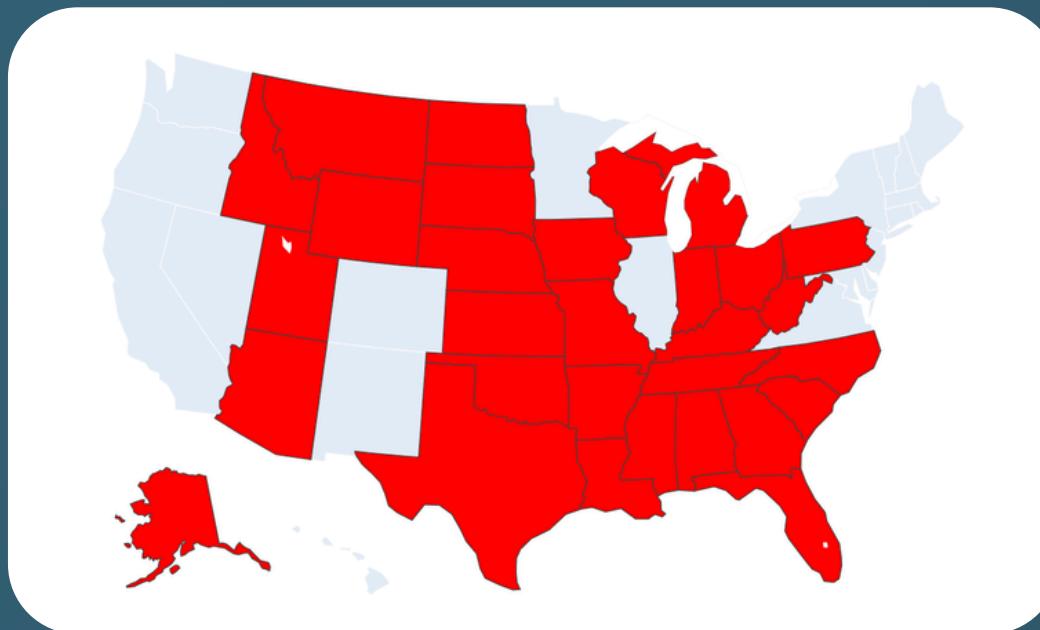


2

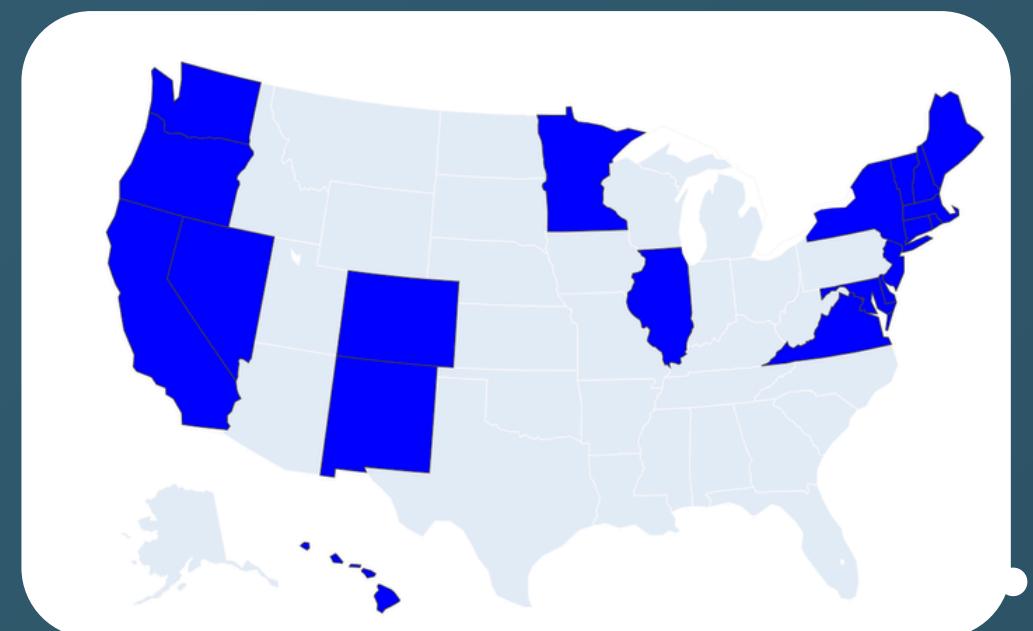
# Political Aspects



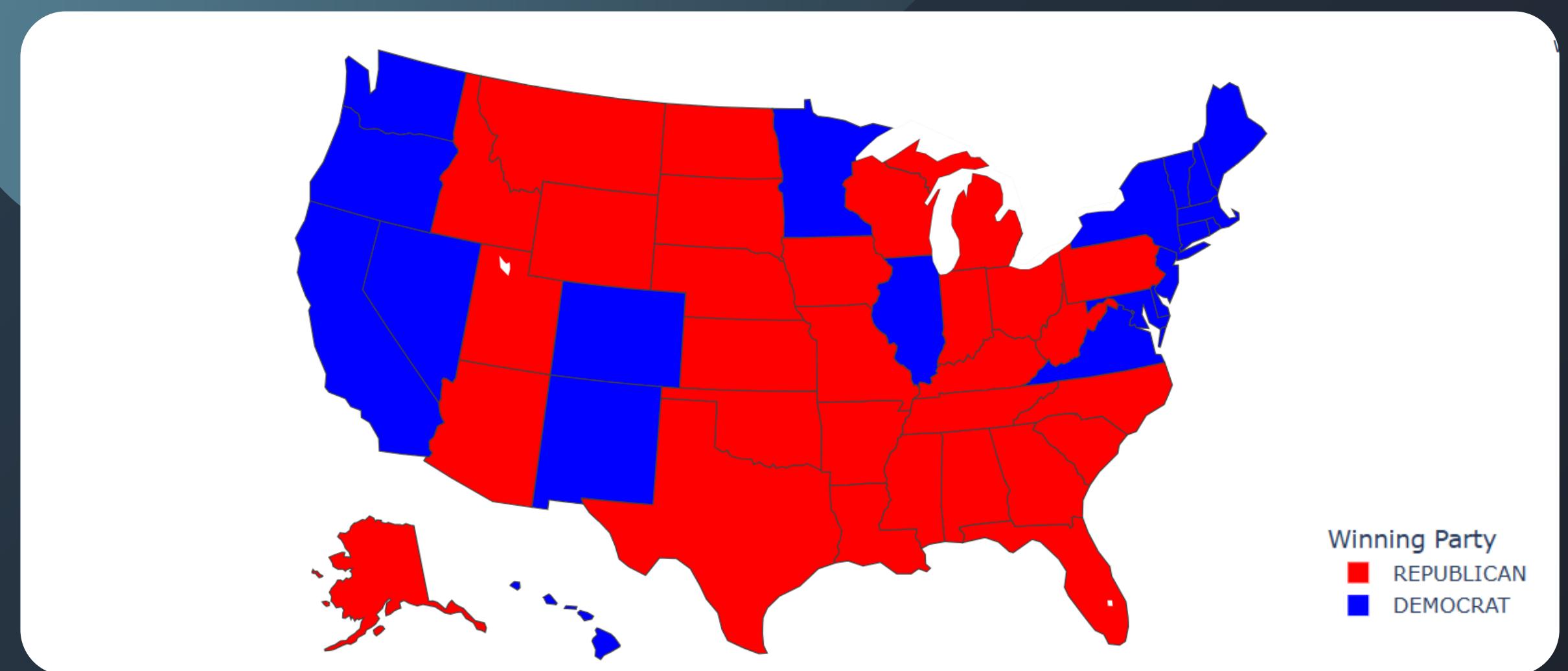
Republicans: More popular in South and North



Democrats: More popular in East and West



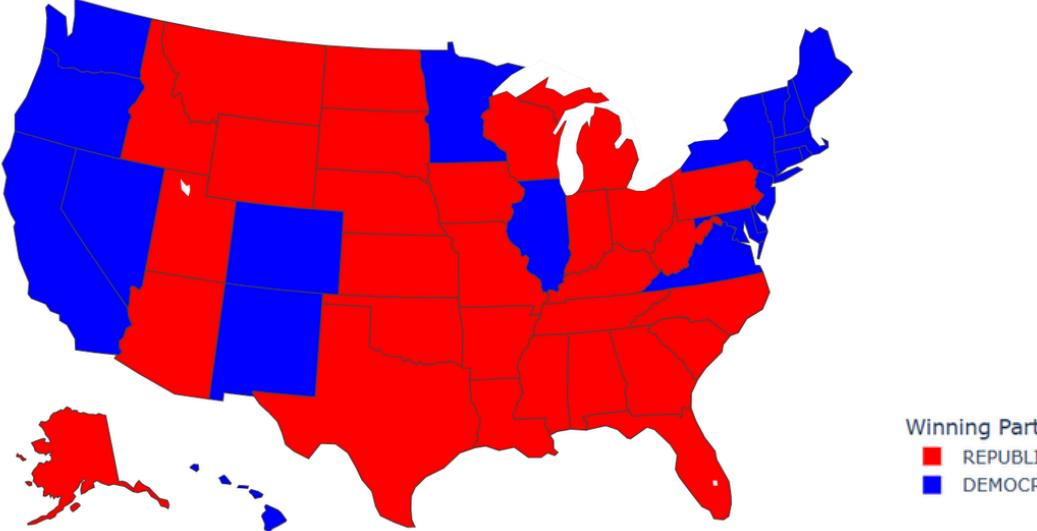
# 2016 Election Results by Party



# 2016 Election: Votes by states distribution

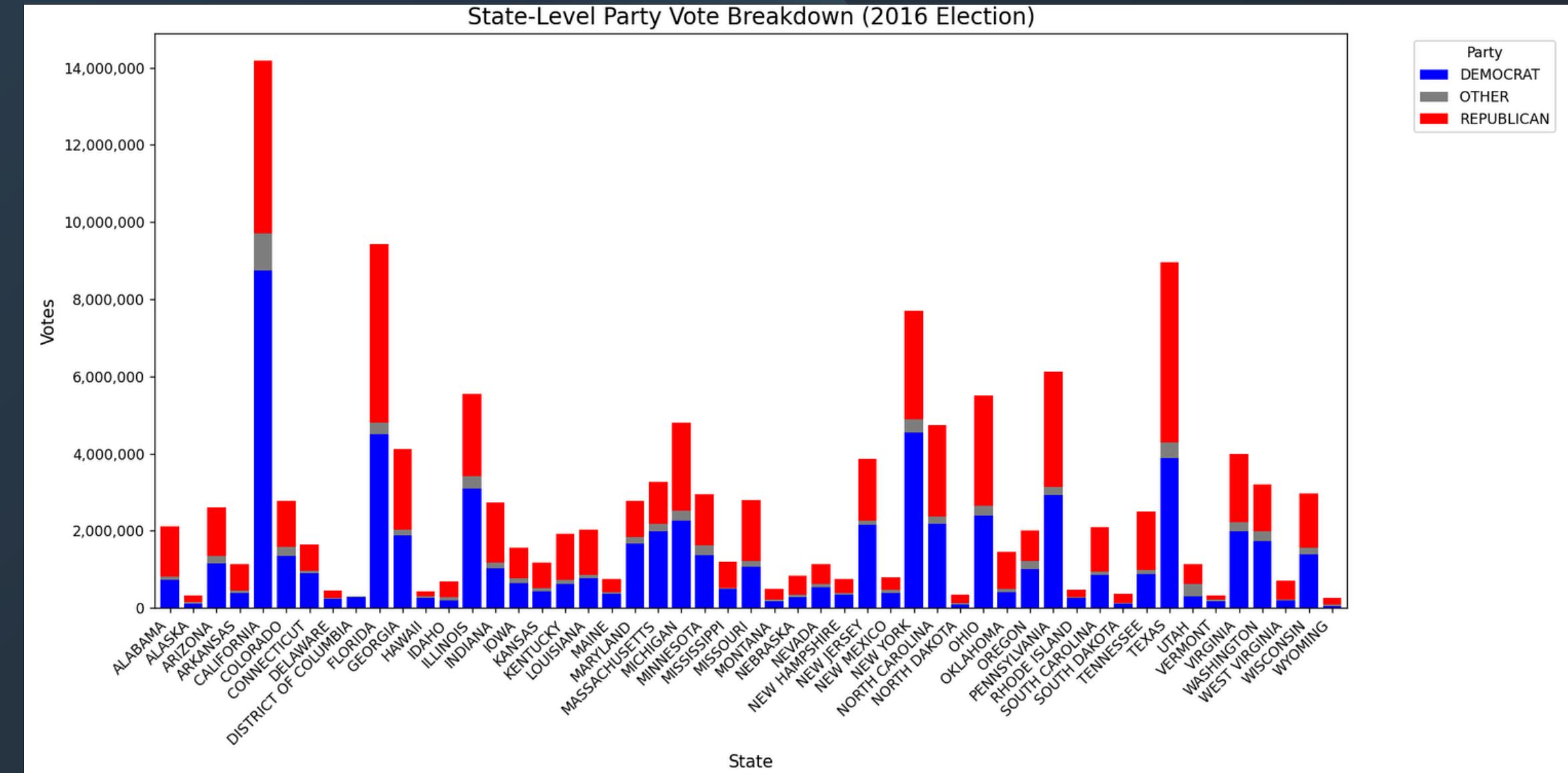
MAJORITY OF VOTES:

California, Texas, Florida, New York



MINORITY OF VOTES:

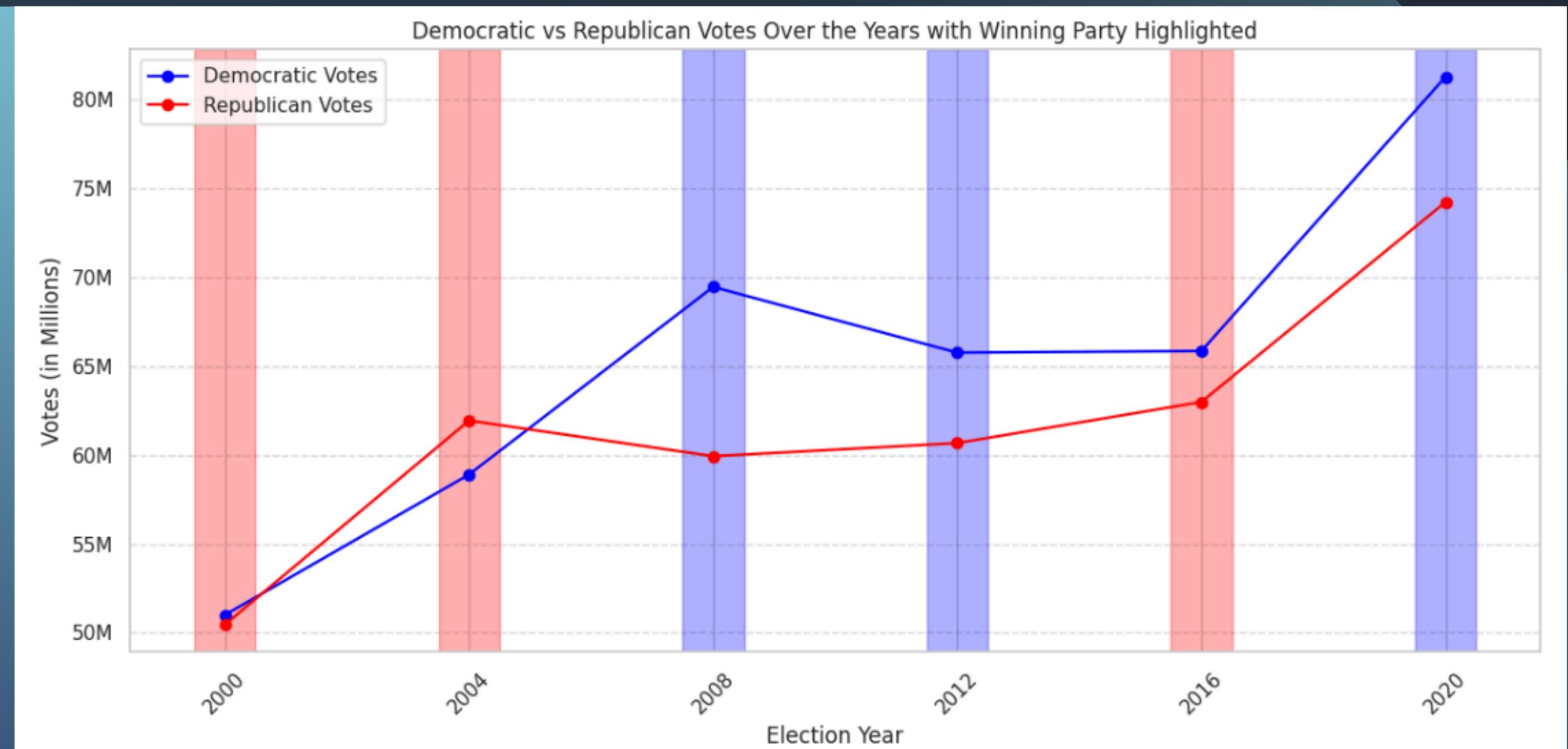
Alaska, Delaware, Wyoming

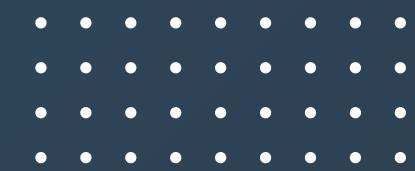


- Republicans dominate in states like Texas and Florida, while Democrats are strong in California, New York, and Illinois.
- Swing states like Florida and Pennsylvania show closer vote distributions.
- Other parties contribute minimally across all states.

# Democratic vs Republican votes over 20 years

- Democratic votes have consistently increased over time, with a significant jump in 2020.
- Republican votes show a steadier growth trend, but also peaked in 2020.
- Winning parties are highlighted, showing shifts in dominance between Democrats (blue) and Republicans (red).
- Election years like 2008, 2012 and 2020 were major wins for Democrats, while 2000, 2004 and 2016 marked Republican victories.





# The Impact of Immigration Policies on U.S. Presidential Elections

Immigration has always been a hot-button issue in U.S. presidential elections, with candidates often taking strong stances on both legal and illegal immigration.

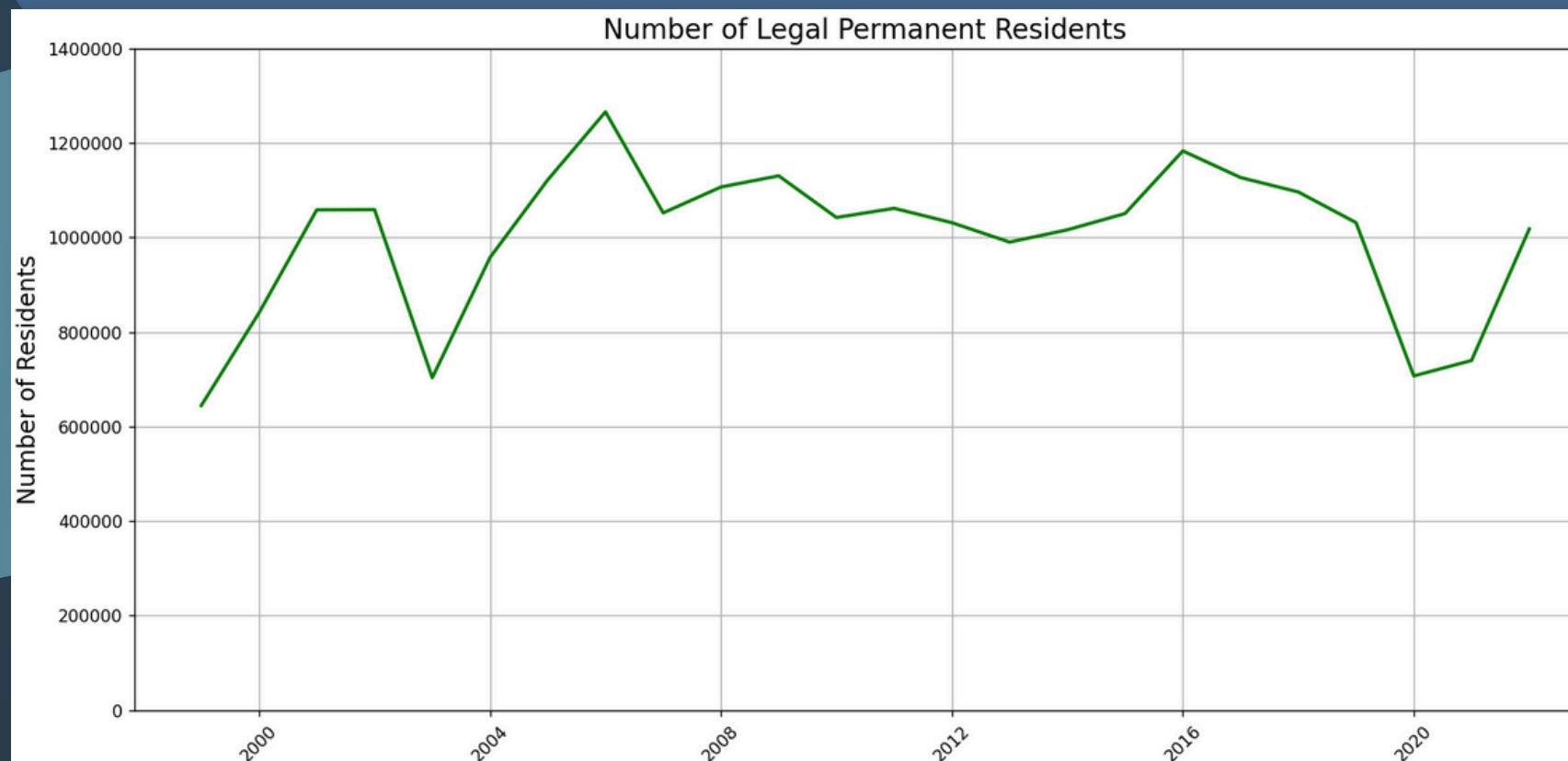
Immigration policies can sway voters, especially in swing states with large immigrant populations



# Navigating Immigration

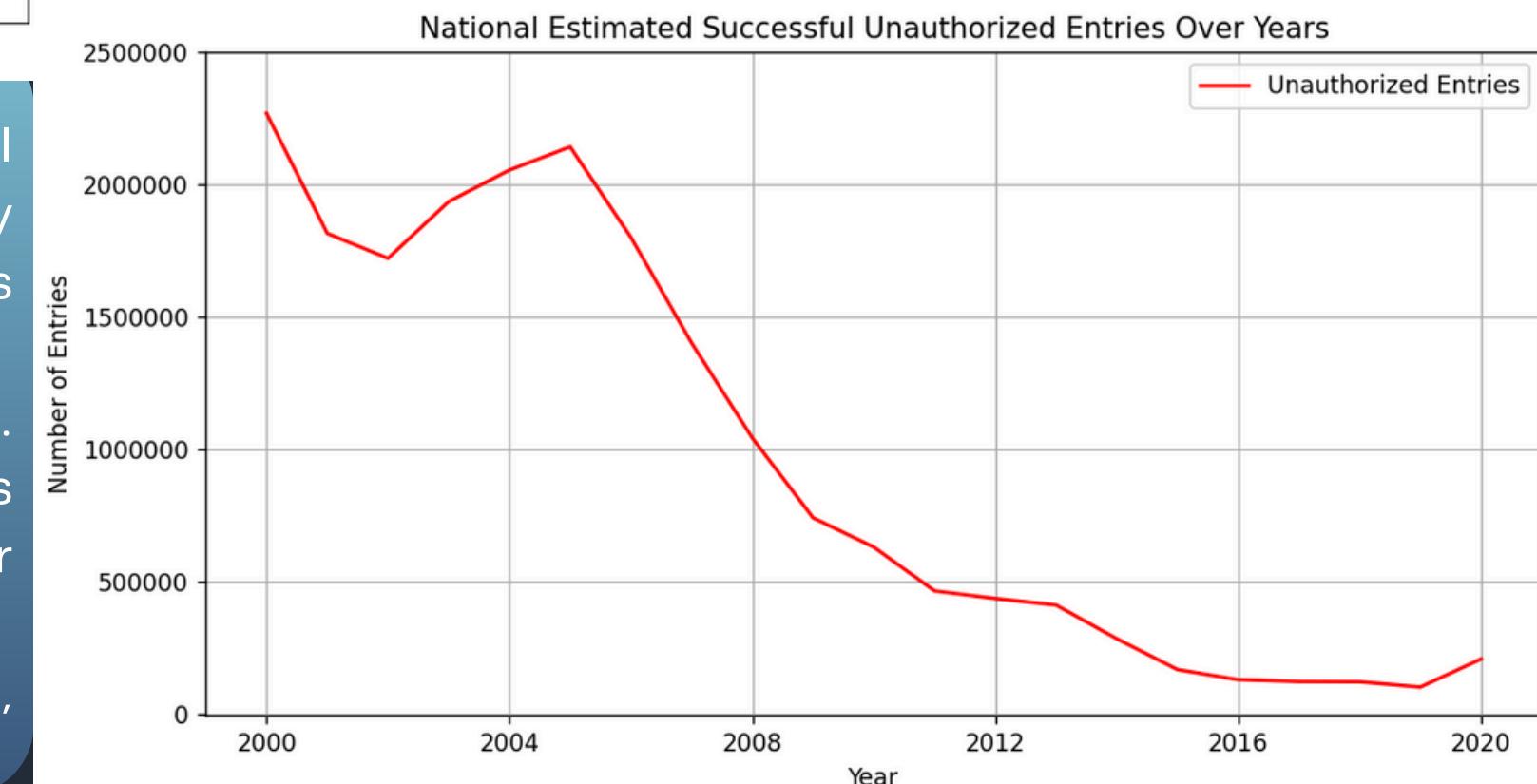
## Contrasts Between Legal Routes and Unlawful Crossing

While the number of legal immigrants (green card holders) has remained consistent, unauthorized entries into the U.S. have significantly decreased since 2000. Between 2000 and 2004, there were over 2 million unauthorized.



- During Donald Trump's presidency, the number of legal permanent residents significantly decreased. This decline may be due to Trump's restrictive immigration policies, such as tighter visa restrictions and increased security checks.
- After 2020, the number of legal permanent residents increased. This rise may be attributed to changes in immigration policies under the Biden administration and the return to normalcy after the pandemic.
- In 2020, due to the COVID-19 pandemic and embassy closures, legal permanent residents dropped to about 600,000

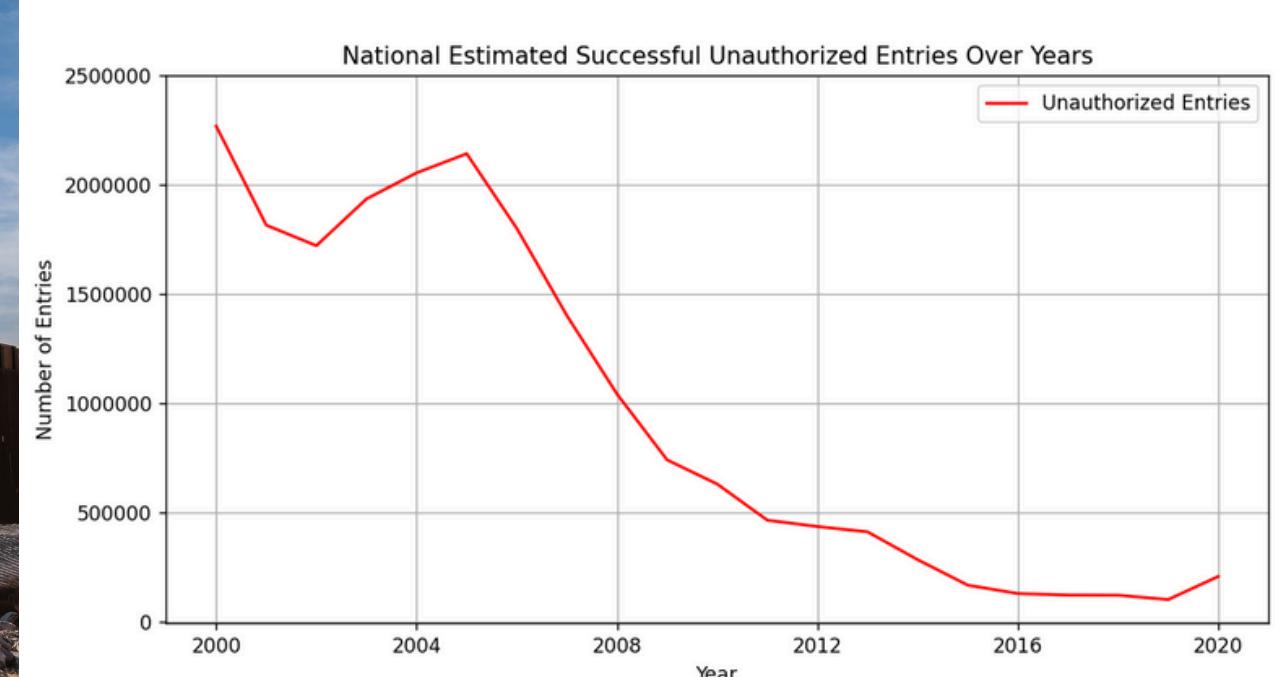
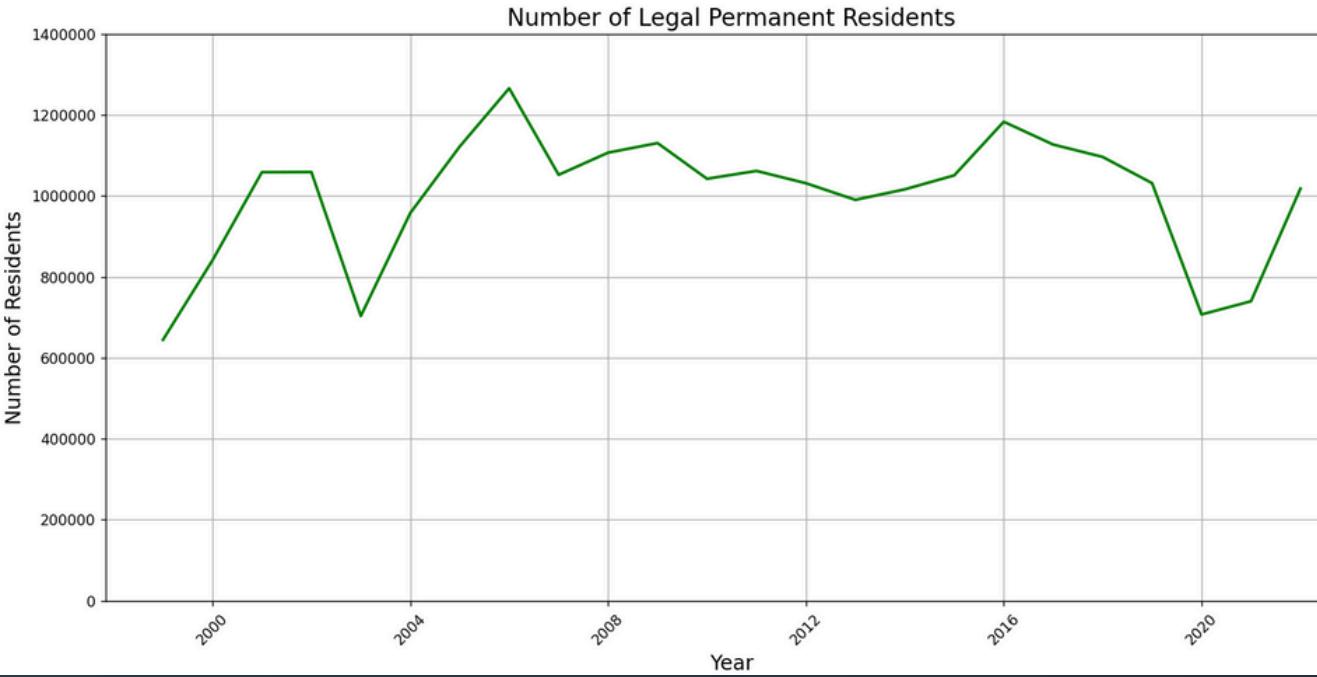
- Issues like border security, deportation policies, and pathways to citizenship for undocumented immigrants are central to election campaigns.
- For example, the construction of a border wall (a key promise of Donald Trump in 2016) or DACA (Deferred Action for Childhood Arrivals) have been major talking points





# Trump Era 2016-2020 most controversial events

Immigration Policies and the Border Wall with Mexico  
Unemployment Rate, Economic and Trade Policies  
Handling of the COVID - 19 Pandemic



# Political Conclusions



## Regional Party Strengths

Republicans dominate in the South and parts of the North, while Democrats are stronger in the East and West. Swing states like Florida and Pennsylvania remain highly competitive.



## Vote Distribution by State Size

California, Texas, Florida, and New York account for the largest share of votes, while smaller states like Alaska, Delaware, and Wyoming contribute minimally.



## Trends of Vote Growth

Democratic votes have consistently increased, peaking in 2020, while Republican votes grew steadily and also peaked that year. Party dominance alternated in key elections (e.g., 2008, 2016, 2020).



## Minimal Impact of Third Parties

Across all states, other parties consistently account for a small percentage of the total vote



## U.S. Immigration Trends

The number of legal immigrants has fluctuated in almost a constant range between 600,000 to 1,200,000 while unauthorized entries into the U.S. have significantly declined since 2000.



3

# Social Aspects



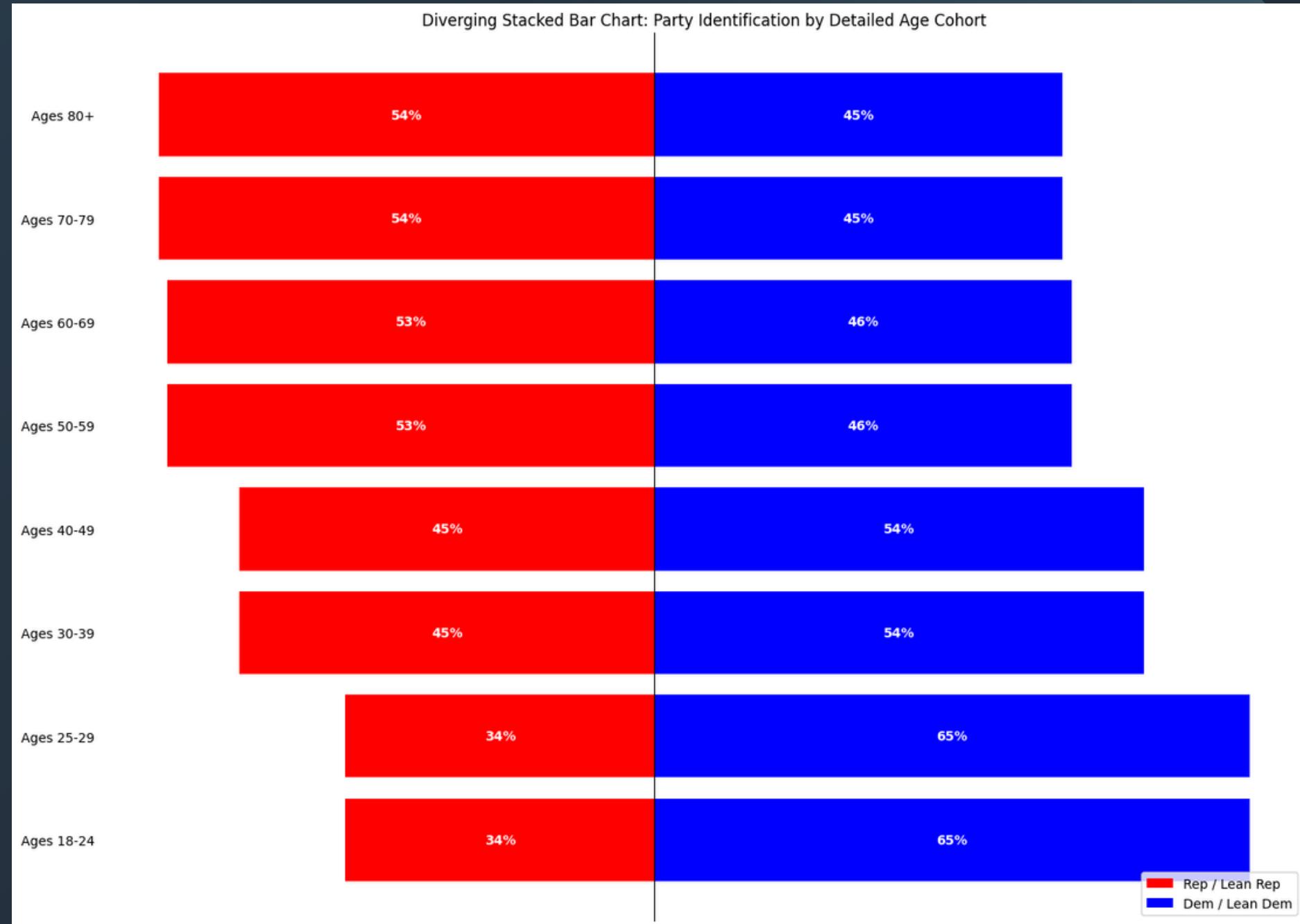
## General Observations

Individuals aged 30-80+ tend to be more evenly split: those aged 30-39 lean slightly Democrats while while those aged 40 and older lean slightly Republican

Younger individuals (18-49) are definitely more inclined to vote for Democrats

Older individuals (50-80+) vote more Republican

# Voter Preferences by Age Group (1994-2023)



This chart is based on a dataset compiled from surveys of a total of 10,000 participants

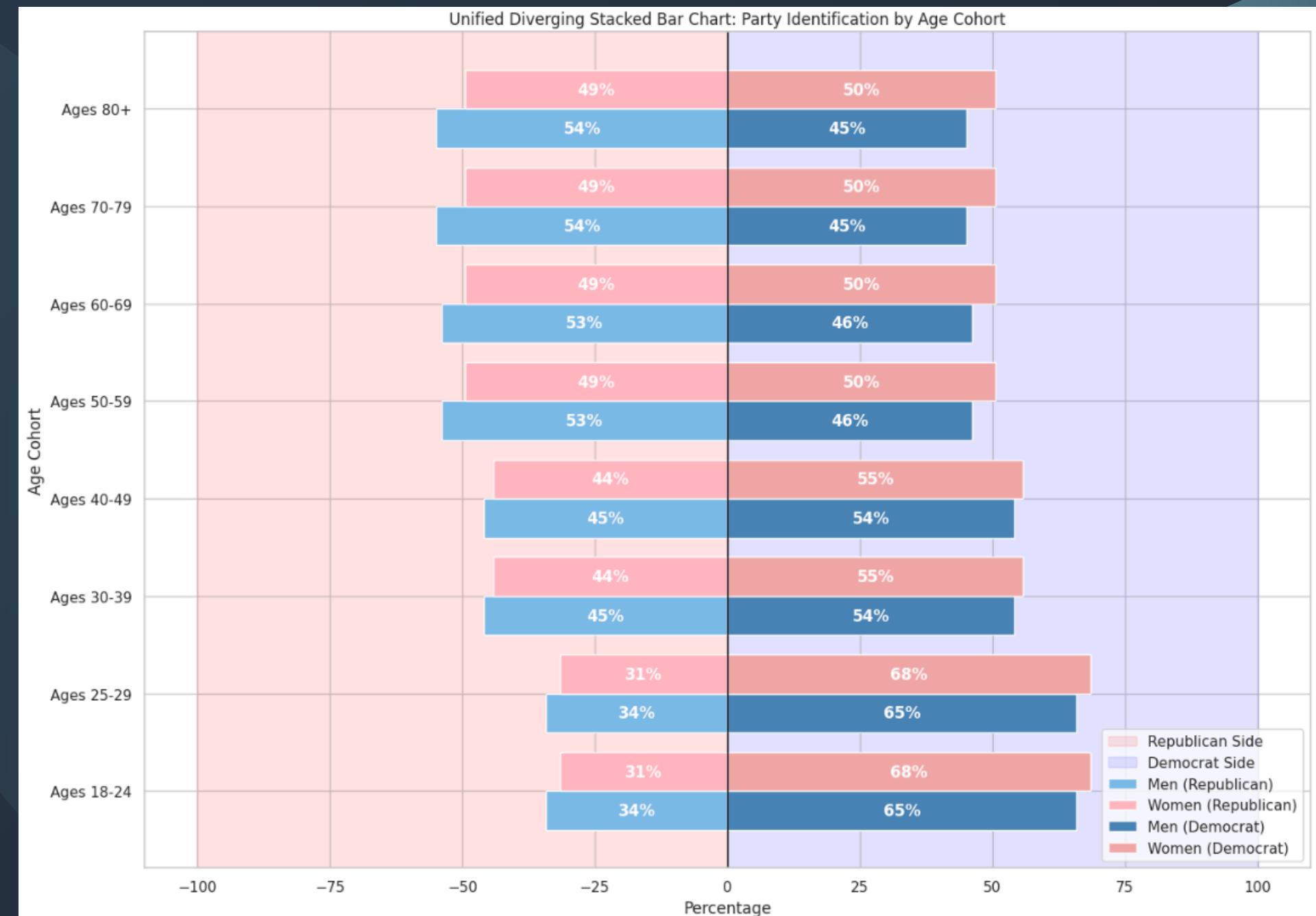


# A Closer Look: Examining Gender Trends (1994-2023)

Men are more inclined to favor Republican candidates

Women generally demonstrate stronger support for Democratic candidates

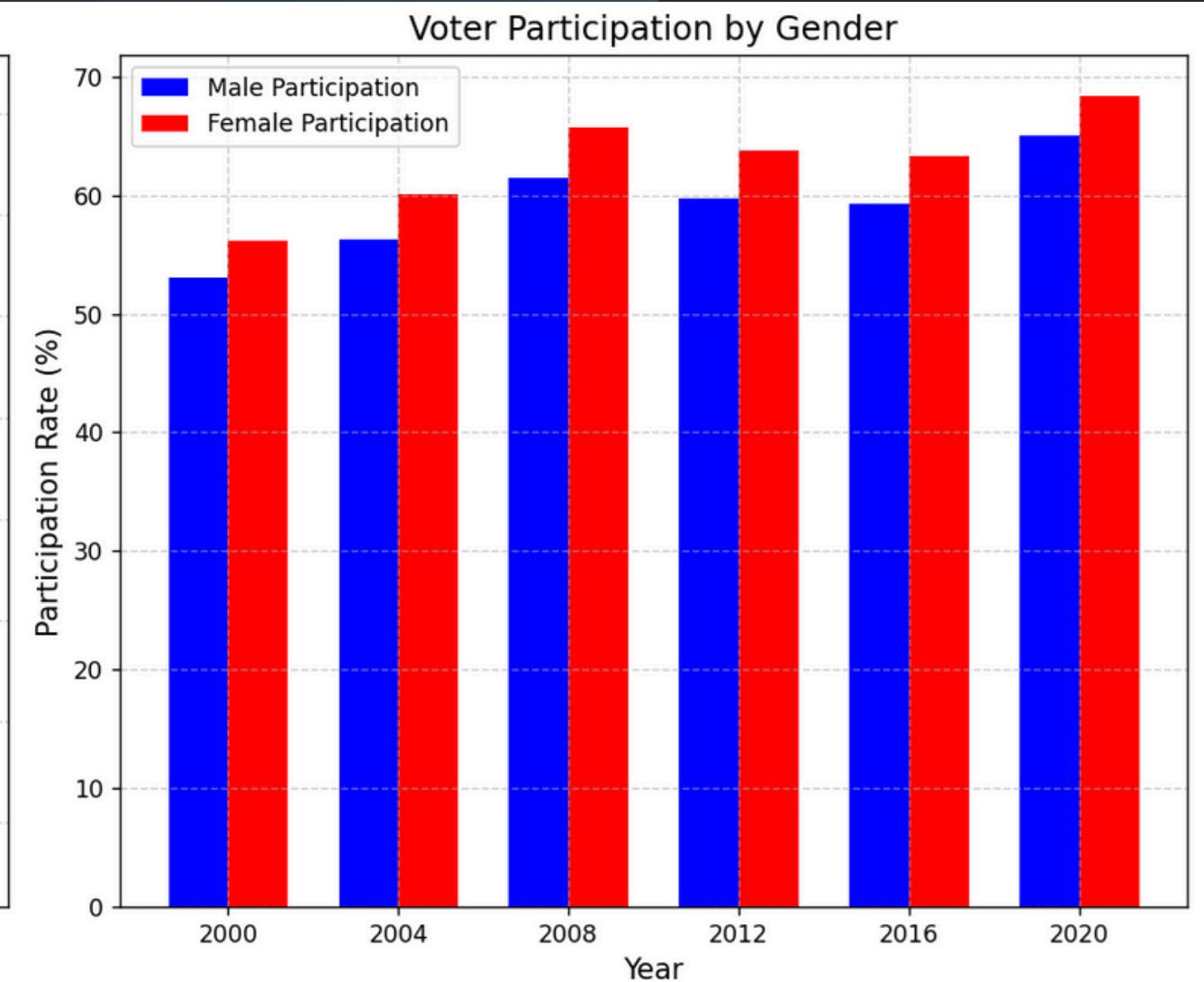
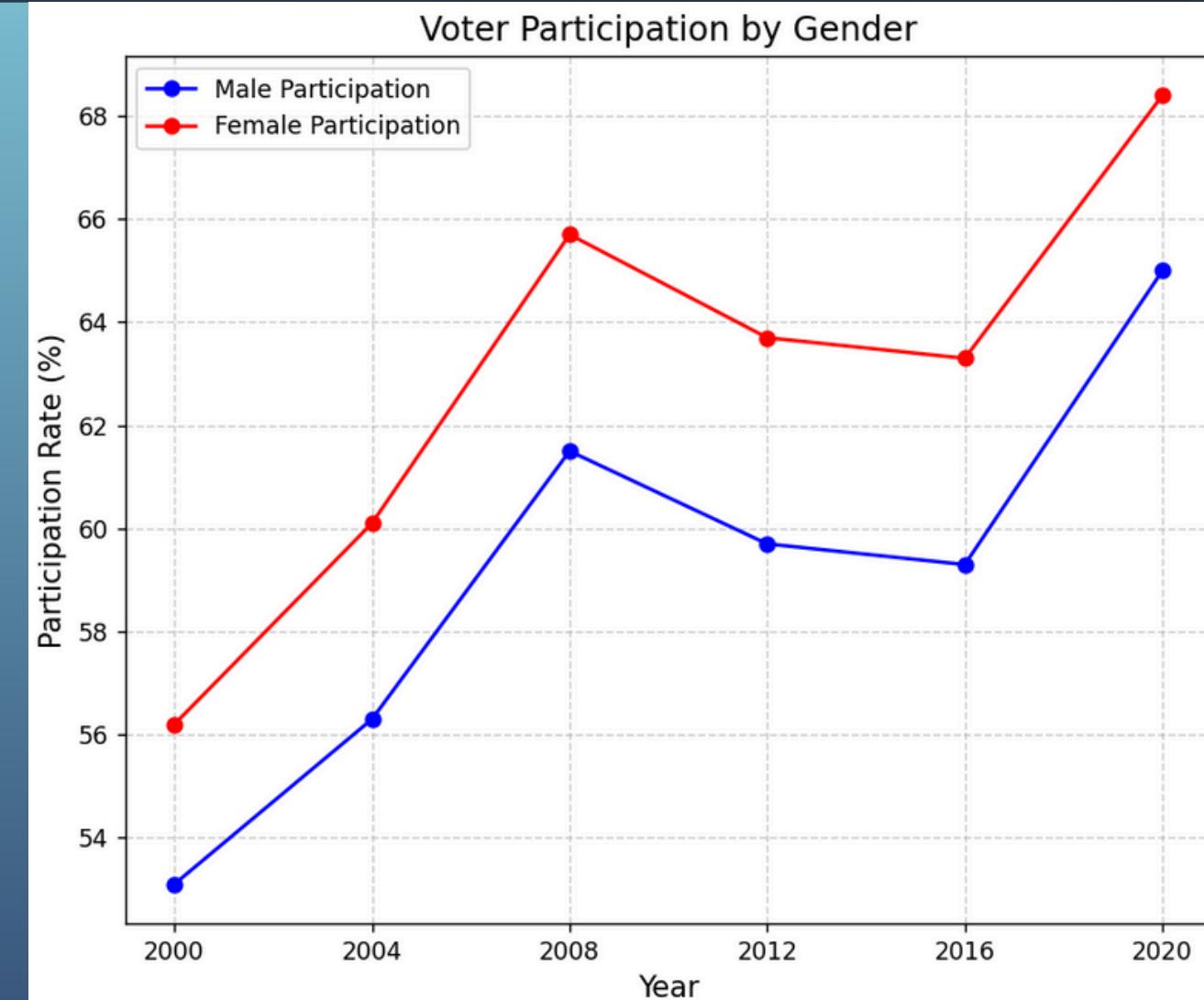
Younger cohorts are overwhelmingly Democratic (both men and women), but this support wanes in middle and older age groups, where Republican alignment strengthens, particularly among men



# Voter Turnout by Gender

A key observation is that voter turnout has steadily increased each year since 2000. The initially low numbers may be attributed to less prominent election issues or limited accessibility to voting methods during that period.

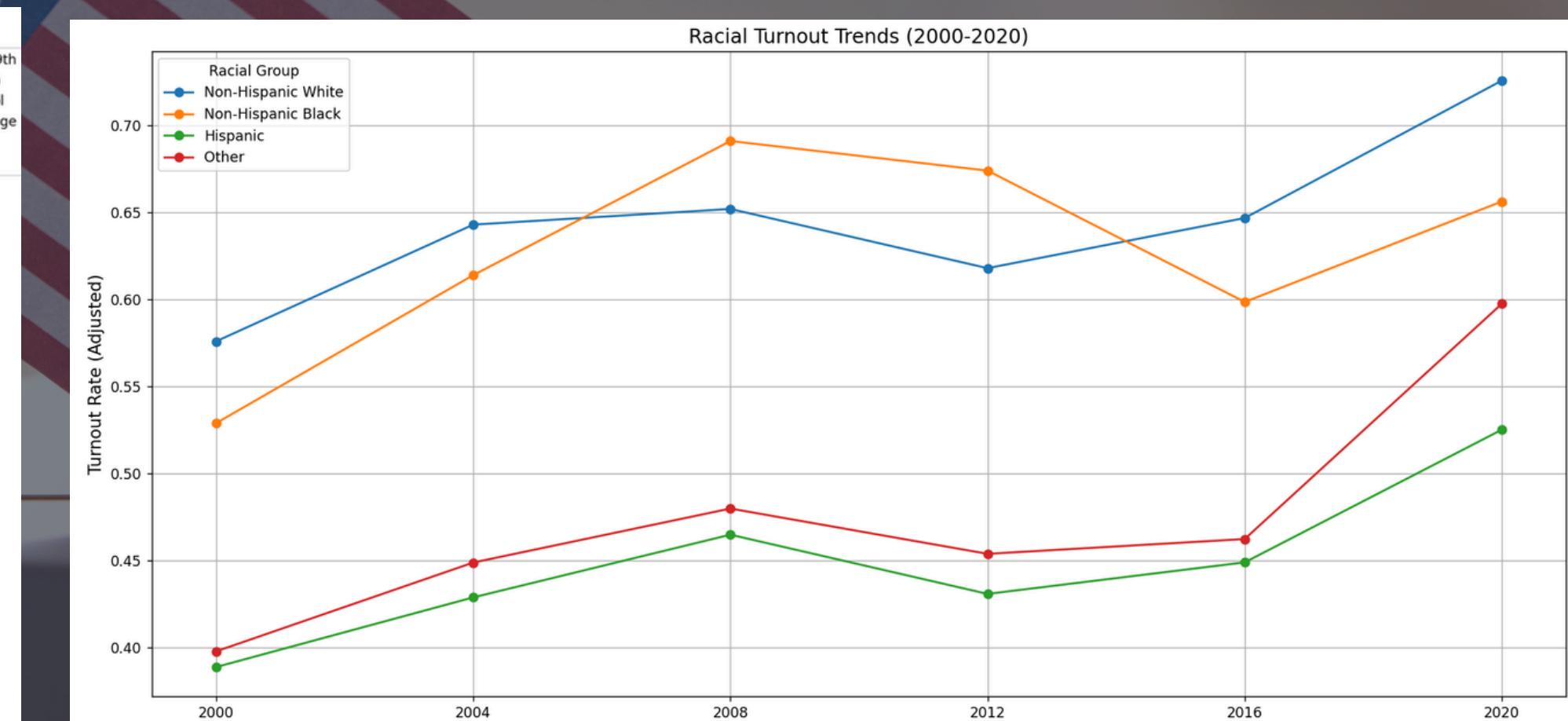
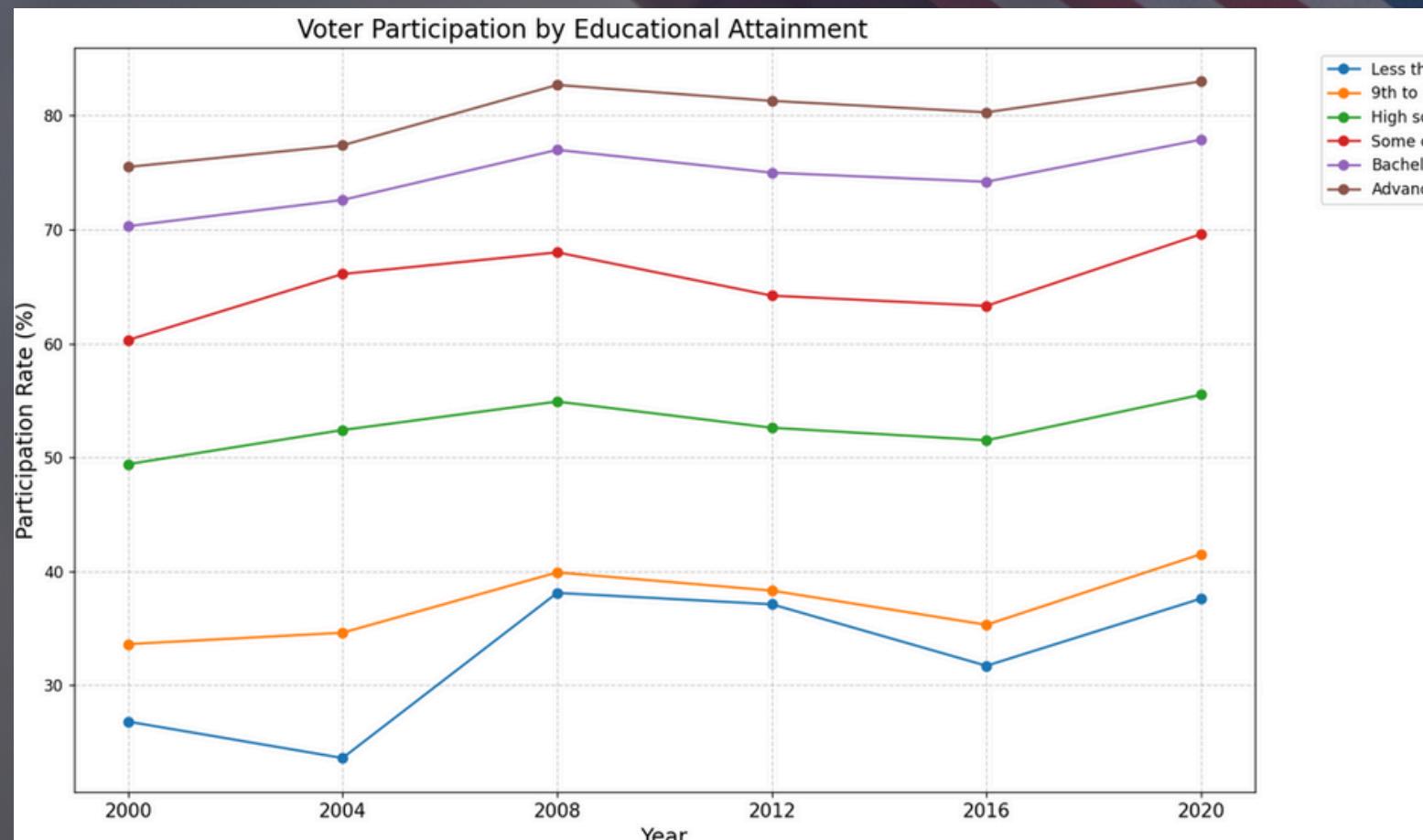
In 2020, both men and women had their highest participation rates in the elections. This surge may be attributed to the high stakes of the 2020 election, the sensitivity of the issues at hand (such as the COVID-19 pandemic and economic uncertainty), and extensive efforts to boost participation (e.g., mail-in voting, social movements and awareness )

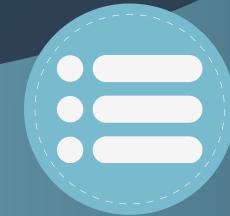


# Vote Participation Trends

- From the chart below, we can conclude that, as one's education increases, one's investment in politics increases.
- The percentage of voters in US elections increases in parallel with education.
- Individuals with higher education levels typically have greater political awareness and are more likely to engage in democratic processes.

- Overall, participation among all groups has been increasing over the period
- These may reflect demographic shifts and increased political awareness among minority groups.
- Particularly in 2008, Black participation reached its highest level, likely due to the historic nature of the election and Barack Obama's candidacy.
- Significance of 2020, participation rates for almost all racial groups reached their highest levels, likely due to the high stakes of the election, social issues (e.g., Black Lives Matter movement), and changes in voting methods (e.g., mail-in voting).





# More in depth: Urban vs Rural Areas



## General Trends - Conclusions:

East Coast: More urban overall

West Coast: Urban areas are concentrated along the coastline

Inland: There are more rural areas in the inland, especially on the west side

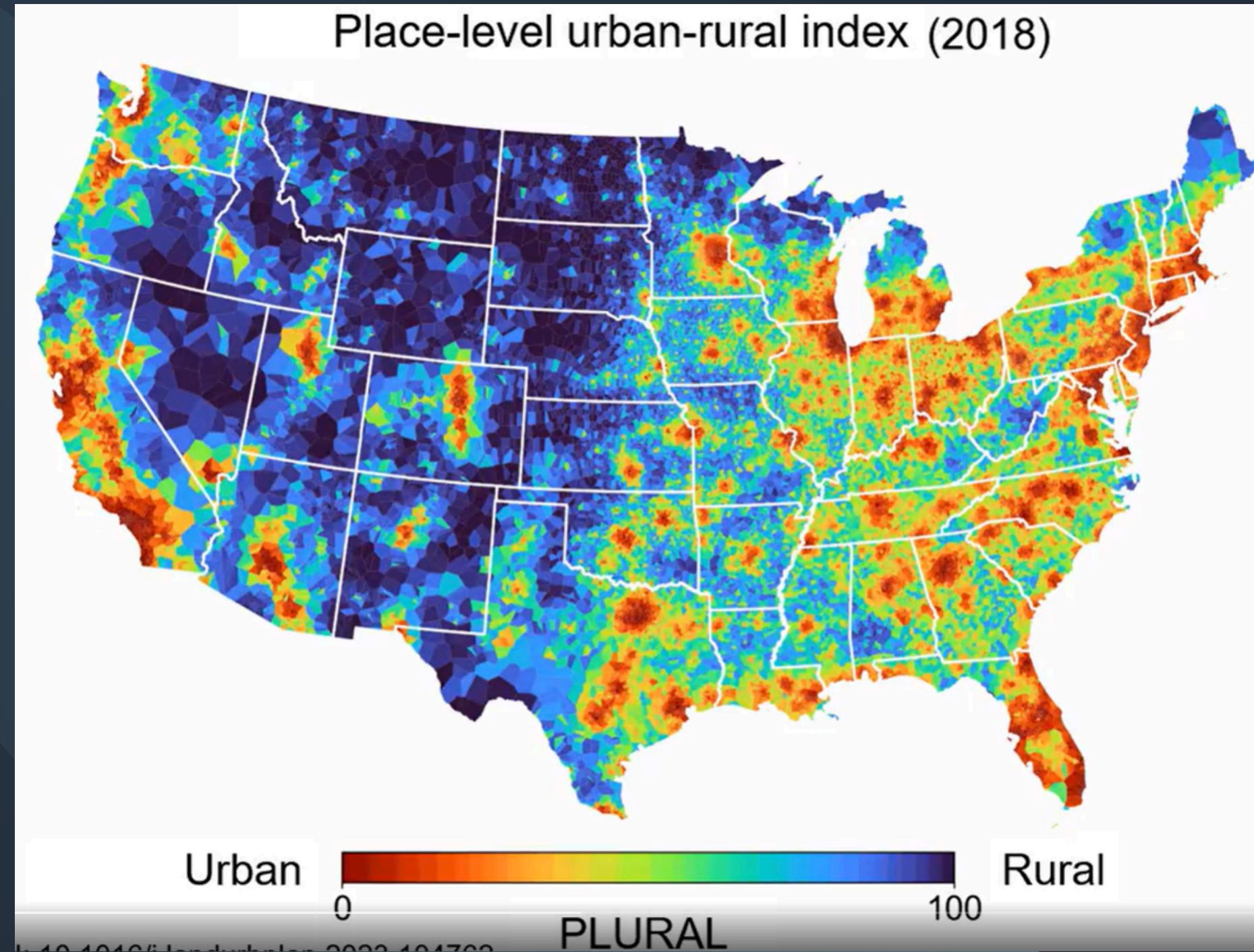
### Western, Rural-Inland States

Montana, Wyoming, Idaho, North Dakota & South Dakota

### Eastern, Urban-Coastal States:

New York, New Jersey, Massachusetts, Maryland & Virginia

# Urban vs Rural - Step 1 - Use online reference to select samples



Source: <https://x.com/JohannesHUhl1/status/1658280902613426178>



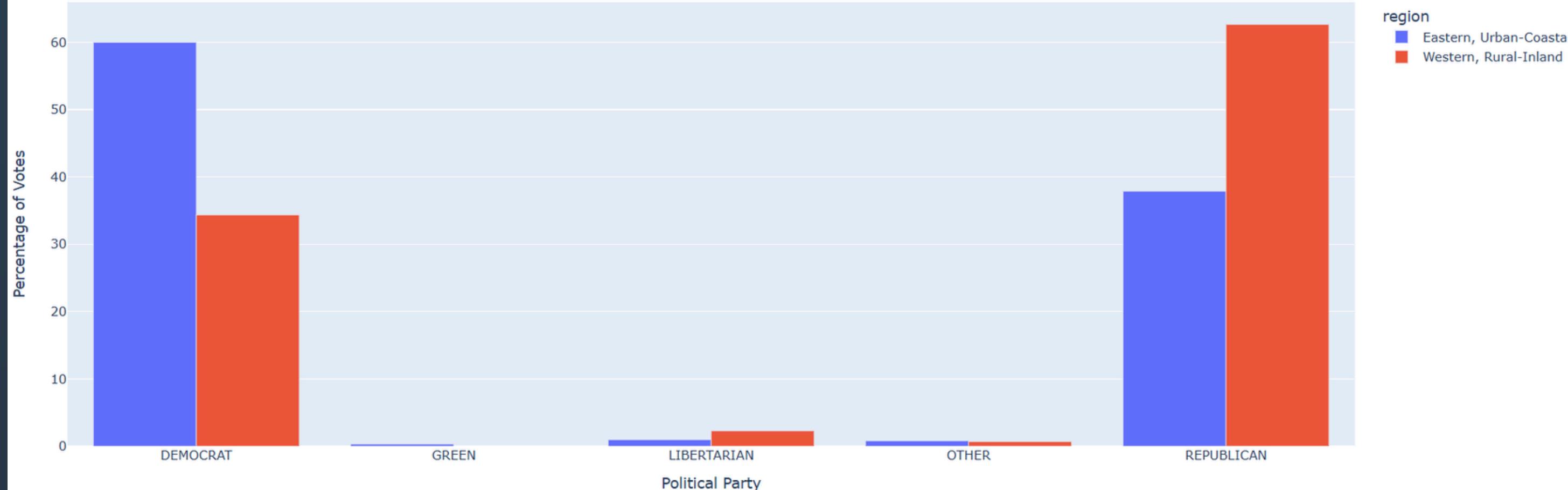
# Step 2 - Use selected states for comparison

## Western, Rural-Inland States

The Western, Rural-Inland States lean heavily Republican, while the Eastern, Urban-Coastal States are predominantly Democratic. This underscores the rural-urban divide in American politics, with each region favoring policies tailored to its lifestyle and economic needs.

## Eastern, Urban-Coastal States:

Corrected Party Popularity by Region: Western Rural vs Eastern Urban



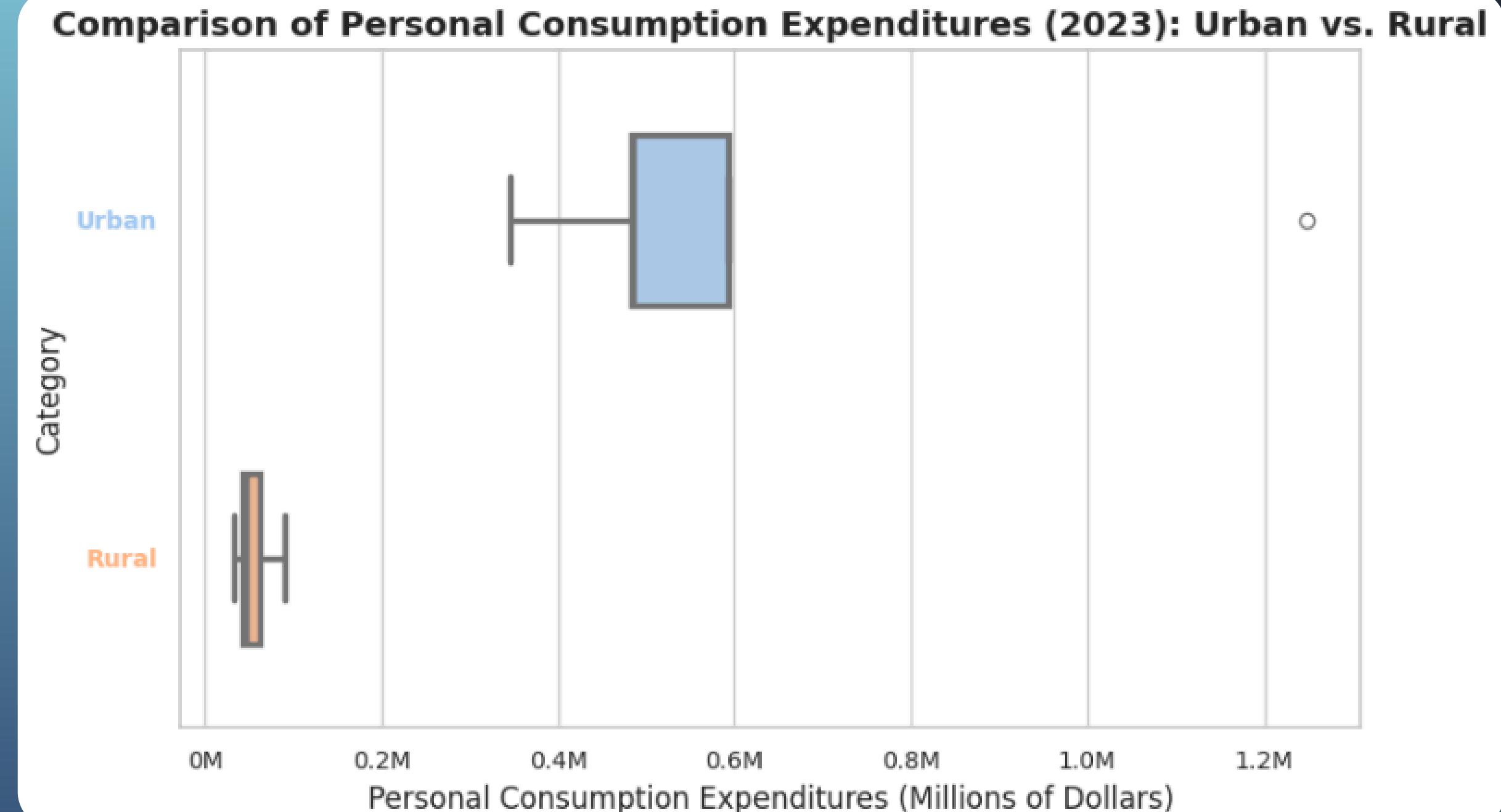
# Expenditures: Urban vs Rural

## Urban States

New York, New Jersey,  
Massachusetts, Maryland &  
Virginia

## Rural States

Montana, Wyoming, Idaho,  
North Dakota & South Dakota



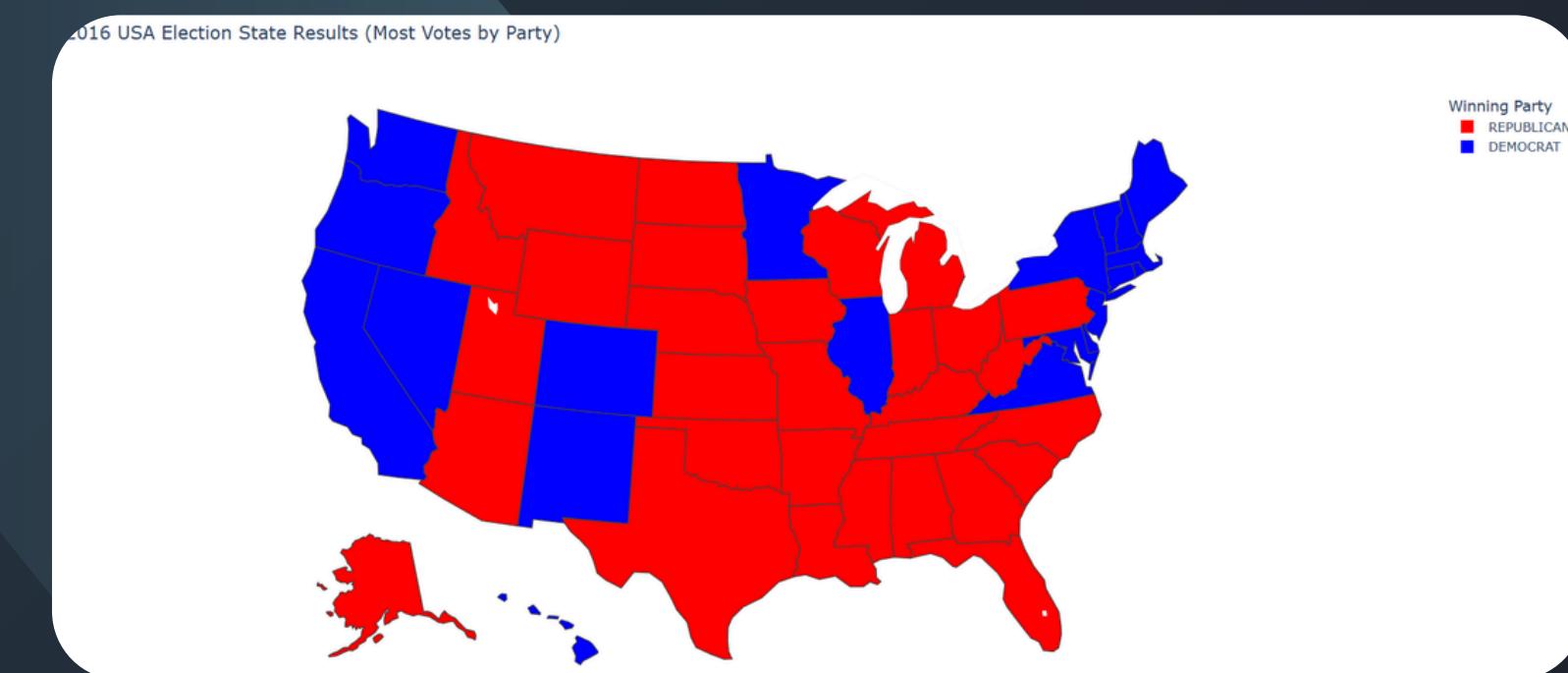
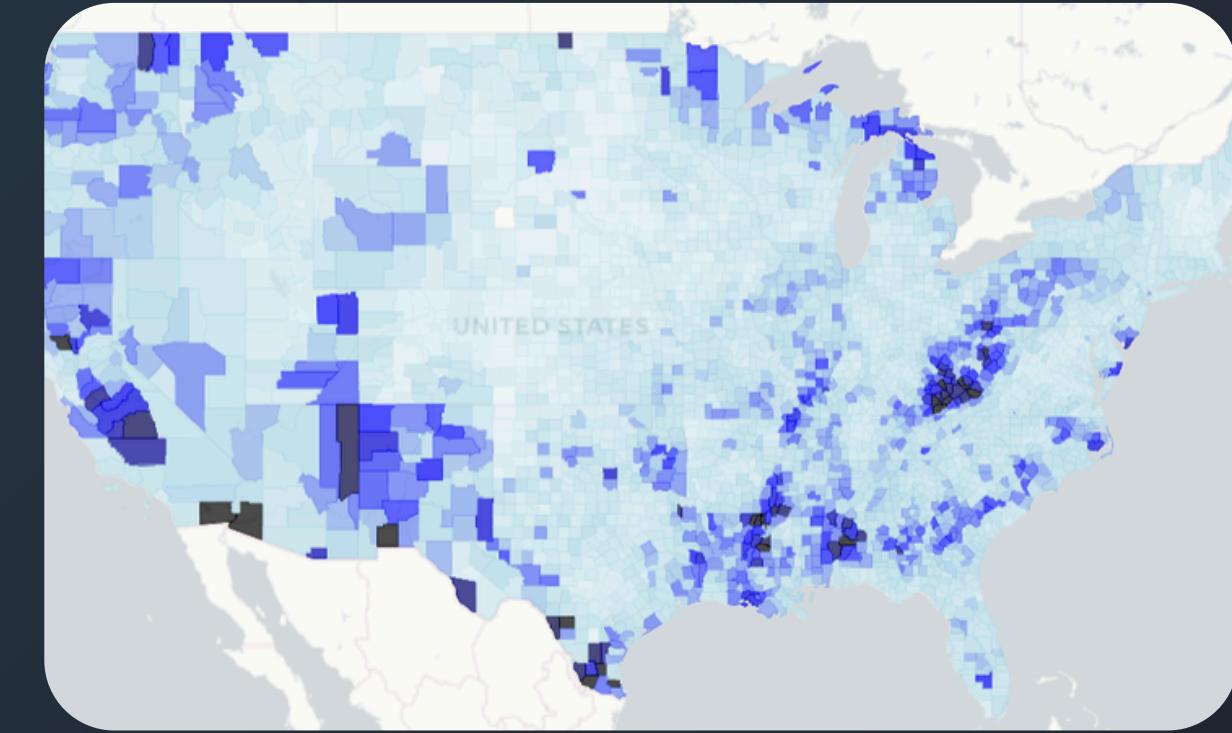
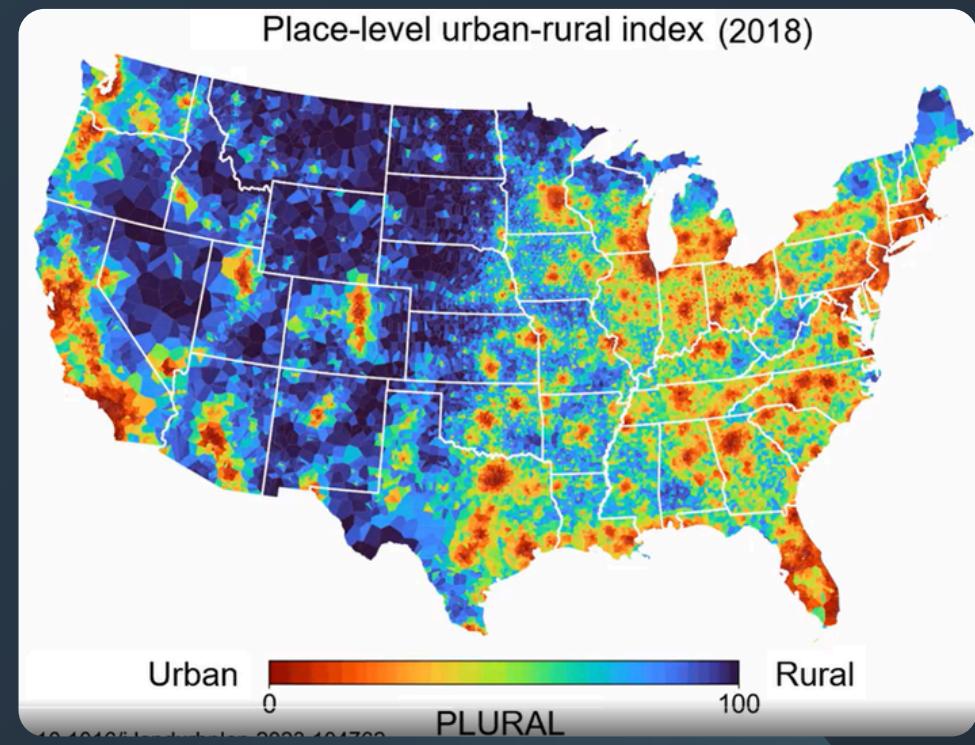
# Conclusions: Urban vs Rural

## Spendings & Unemployment

Generally, Urban areas have higher spendings, but the competition for workforce is higher, resulting in a higher unemployment. Thus, rural areas are more stable

## Voting Patterns

Republicans dominate sparsely populated rural regions, and democrats excel in urban areas



# Social Conclusions



## Age

Younger individuals (aged 18–49) tend to vote more Democratic, while older individuals (aged 50 and above) are more likely to vote Republican



## Gender

Women generally show greater interest in politics and U.S. elections, as reflected in higher participation rates



## Urban vs Rural

The Western, Rural-Inland States lean heavily Republican, while the Eastern, Urban-Coastal States are predominantly Democratic.

This underscores the rural-urban divide in American politics, with each region favoring policies tailored to its lifestyle and economic needs.



## Education

Individuals with higher levels of education are more likely to participate in the US elections





A circular graphic featuring the United States flag. The stars are arranged in the upper left corner, and the red and white stripes are visible across the rest of the circle. The entire graphic is set against a dark blue background with a dashed white circle around it.

# Thank you For Your Attention

27 January, 2025  
Mestre, Venice

Computer Programming  
and Data Management - 2



# Group Members

.....



Vlad  
883731



Alireza  
908840



Joel  
1001343

.....