**Analysis of Yearly Inflation of the USA**

Inflation shows the annual percentage change of the average cost of consumer goods and services, measured by the consumer price index (Glossary | DataBank, 2021). The last 12 months (ended February 2022 ) of the annual inflation rate of the USA is 7.9%, which is greater than the previously highest inflation rate of 7.5% in the year 1982(Smialek, 2022). Due to the high inflation and sky-high gas prices, food and rent costs are rapidly increasing, impacting the household budget of many families. According to Smialek(2022), increased wages and saving due to pandemics help many families to continue spending despite rising prices. Still, most low-income families will suffer because a big piece of their income goes to daily essentials, which will be challenging due to rapid price increases.

The dataset of DataBank shows(Glossary | DataBank, 2021) the annual percentage of consumer rates, and according to WorldBank data, the highest inflation(%consumer rates) in the USA was 13.5 in 1980. Unfortunately, the WorldBank dataset has inflation data until 2020, and this analysis shows the inflation rates of the USA in 2020 compared to other countries. Also, we analyzed inflation rate variation in the last decades in the USA and compared values to other four countries, the United Kingdom, India, China, and Russia.

The world map of inflation data (Figure 1) shows the countries with high and low inflation in 2020. This graph helps to compare the USA inflation with other countries, and it seems the inflation of North America is low compared to Asia, Africa, and South America. I filtered a couple of countries with high inflation rates (>10%) from the map to see the difference. That includes Zimbabwe, the highest inflation rate in 2020, 557.2%, and Sudan, 150.3%. The world map helps to visualize all the countries' inflation rates once and compare the impact of the economy in various parts of the world. But the world map does not show the minor differences of inflation clearly, and when there are high rates such as Zimbabwe and Sudan, the visualization seems ineffective.

Map

Description automatically generated

**Figure 1**

The line graph (Figure 2) shows the USA inflation rate of consumer prices of the last decade starting from 2010. The highest inflation rate was 3.16 in 2011, and after ten years, we are suffering from the burden of the highest inflation rate after 40 years. This simple chart gives a high-level idea about how consumer prices behaved in the last ten years, and we had the best rate in 2015.

Chart, line chart

Description automatically generated

**Figure 2**

In the following chart (Figure 3), we analyzed the behavior of consumer price inflation data in the last two decades in the USA compared to the four largest economies in the world, China, India, Russia and UK. USA and UK do not have a significant drop or increase in inflation in the last 20 years, but other countries have substantial deviations. The line chart helps compare countries' inflation rates, and different colors help see the difference quickly. Data overlapping is one issue in this chart, and if there are many countries, the graph would be ineffective. Figure 4 used line charts for each country in one visualization, but it isn't easy to compare the different rates of countries using this visualization.

Chart, line chart

Description automatically generated

**Figure 3**

Chart, line chart

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**Figure 4**

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**Figure 5**

Surging USA inflation rise and rising gas prices are daily news in the USA now, and it has a significant impact on citizens. The USA inflation rate didn't have substantial rice from 1983 to 2020 (Figure 5). Now we are in a time of high inflation rate, which rapidly increases consumer goods and services prices, everything becoming more expensive. We were curious about how the inflation rate has varied in the last two decades, and this is the first time many of us have experienced highly increasing goods and services in our lifetime.

**References**

*Glossary | DataBank*. (2021). Databank.Worldbank.Org. https://databank.worldbank.org/metadataglossary/gender-statistics/series/FP.CPI.TOTL.ZG

Smialek, J. (2022, March 11). *Inflation Rises to 7.9 Percent for February 2022*. The New York Times. https://www.nytimes.com/2022/03/10/business/economy/cpi-inflation-february-2022.html#:%7E:text=Inflation%20Rises%20to%207.9%20Percent%20for%20February%202022%20%2D%20The%20New%20York%20Times