Power BI Assessment

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# Contents

1. World GDP

On this dashboard we'll be able to observe the total and average GDP per capita (annual %) growth of the world combine.

On the left-hand side we can see the Total GDP and its breakdown on the pie chart by all the different regions in the world. We can see that the total growth was of 25,000% and that the biggest contributor to this percentage was Europe and Central Asia with almost a 29.8% share.

On the right-hand side, we can see the Average GDP and it is also broken down into regions in the pie chart. As it can be observed, the average GDP growth per capita was 2%. From the pie chart we can see that the region with the highest GDP growth per capita was South Asia, with a 2.8% GDP growth.
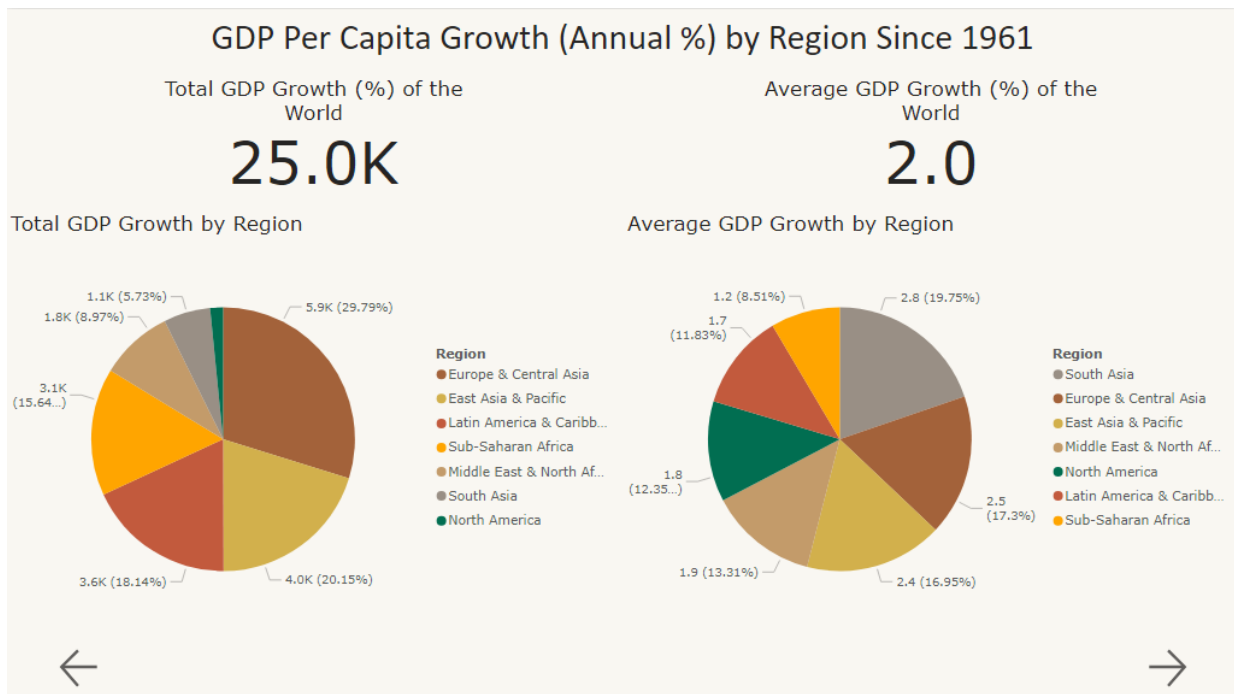
2. Average GDP Growth by Level Income

From this data we can see the impact that the income level has on the average growth of GDP. The visual takes all the data from all countries and regions across the word and sees whether these countries and regions are low income, lower middle income, upper middle income or high income.

From the data we can see that on the left-side of the chart we have low income, and it contributes to 0.6% of the average GDP per capita. On the right-hand side we can see that upper middle income contributes to 2.6% of the average GDP per capita. Whereas lower middle income and high income contribute to 1.6% and 2.2% respectively.
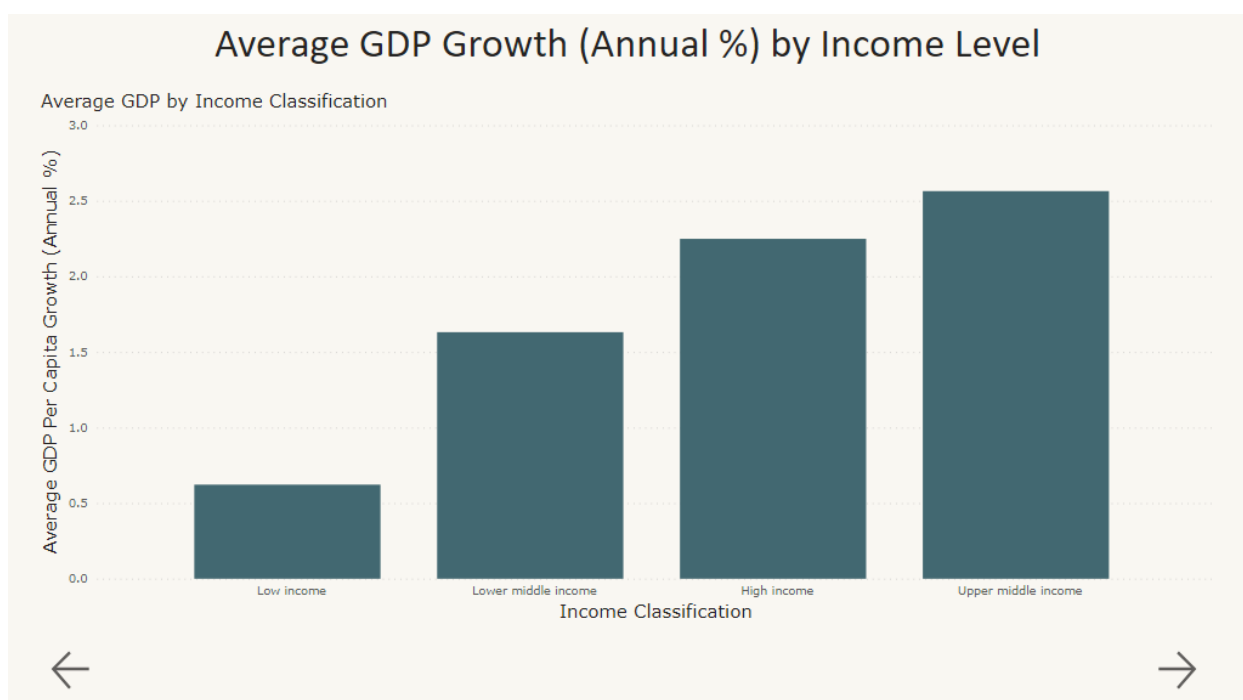
## 3. Average GDP Growth by Decades in all Regions

During the 1960's we can observe that almost all regions around the world enjoyed a somewhat stable GDP growth. But we can see that the Middle East and North Africa had quite the boom in the late 60's. This boom can be associated with the economic growth of the Middle East where it saw massive public investments in infrastructure, healthcare and education.

In the 1970's, the previous observation kept true, the average GDP of the Middle East was on the up and doing well. On the other hand, the region of South Asia wasn't doing too well in the early 70's, it could potentially be attributed to the Vietnam War. Even though the Vietnam War had been raging on since 1955, in the early 70's the Vietnamisation program progressed and in 1975 the country unified.

In the 1980's, the previous great years of average GDP growth in the Middle East came tumbling down, mostly down to Iraq's invasion of Iran, which lasted from 1980 to 1988. On the other side of the world in North America, the visual shows a dip in their average GDP, this was down to the 1981-82 recession.

In the 1990's, we can observe that Europe and Central Asia were seeing a dip in their average GDP in the early 90's, mostly due to the breakup of Yugoslavia and subsequent wars within the region fighting for control, and the dissolution of the USSR.

After the turn of the new century, we can observe that all regions had a reasonable start to the 21st century and their average GDPs were growing. All this growth came to a stop and went negative in 2008 with the market crash and then again went into the negative with the Covid pandemic.
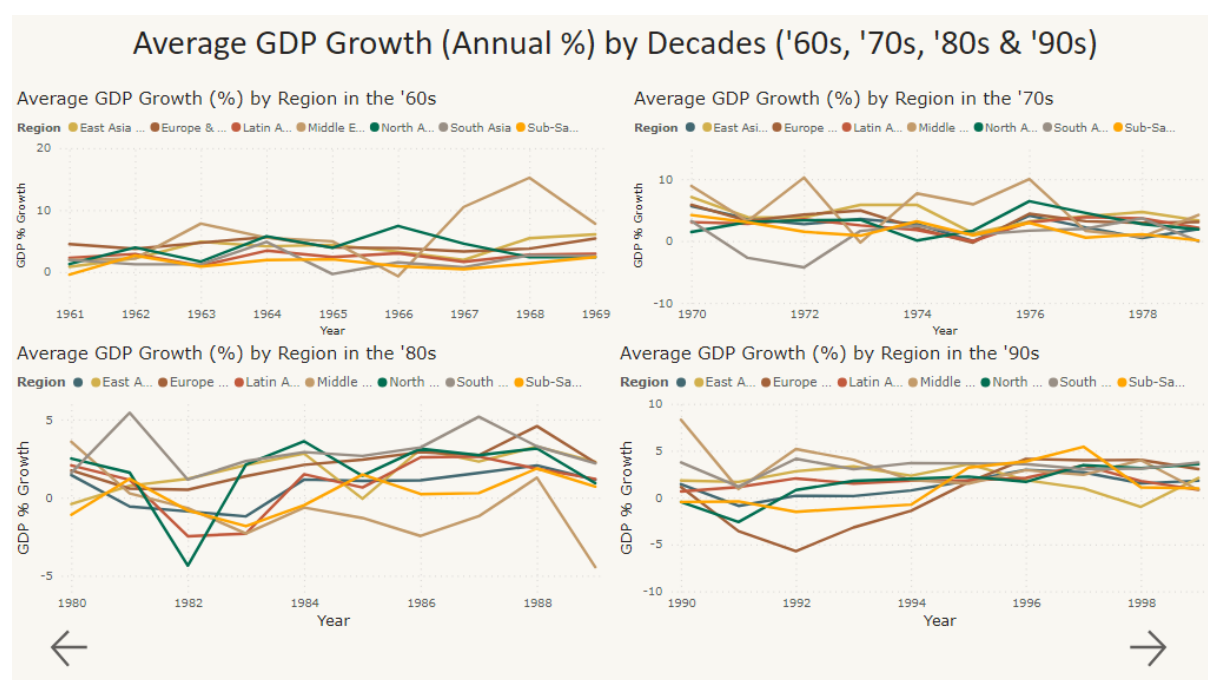
Average GDP Growth (Annual %) Since Turn of the Century (2000 - 2022) by Region

Average GDP Growth (%) in 21st Century

Region ● ● East Asia & Pacific ● Europe & Central Asia ● Latin America & Caribbean ● Middle East & North Africa ● North America ● South Asia ● Sub-Saharan Africa
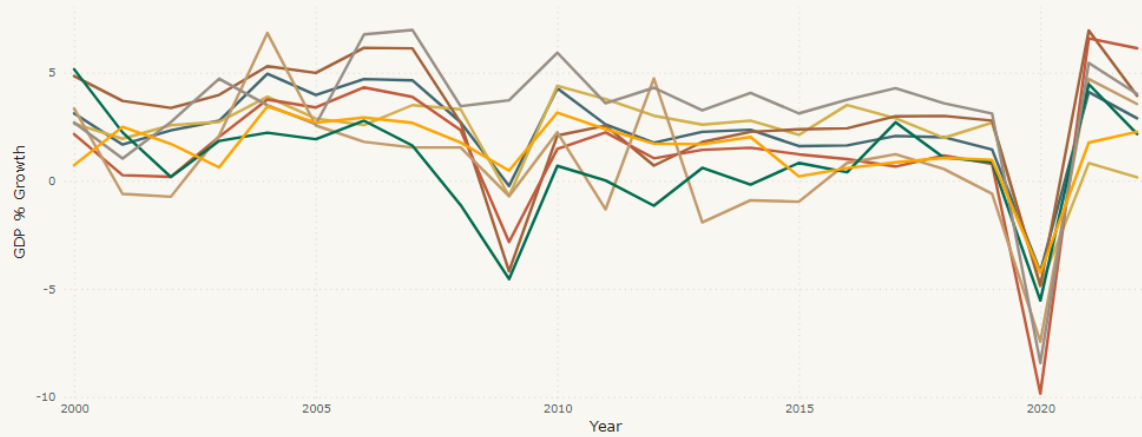
4. Average GDP Growth for Top Economic Powers (1980 – 2022)

In this graph, the data was plotted for the great economic powers, which are Brazil, China, Germany, India, Japan, and the USA.

From the data on the graph, we can clearly observe that the GDP growth of China had a few booms and has been outperforming all other economic powers. The three great booms in China's economy can be explained in simple terms:

In 1984, the Sino-British Join Declaration was signed, this was an agreement where the British would hand over Hong Kong to China.

In 1992, a consensus between China and Taiwan set a foundation for creating diplomatic bases for exchanges in their cross-strait dialogue.

In 2007, it was reported that China had started to export more than it imported by quite a high margin and the gap growth between these two was predicted to be almost exponential.

Despite Brazil being the 5th largest economy in the world and access to large oil reserves it had a bad period in the 1980s, which is also called the 'Lost Decade'. This was due to stagnation, inflation, and crisis. As Brazil was a dictatorship up until 1985, political liberalisation was also a contributing factor to the Lost Decade. Throughout the years until 2022, Brazil's GDP growth would always oscillate, mainly due to political reasons.

For Germany, India, Japan and USA we can see from the graph that they enjoyed a pretty stable GDP growth since 1980 and the hardest impact that these economies have had was due to world events and crisis, which were the 2008 market crash and the 2020 Covid outbreak.
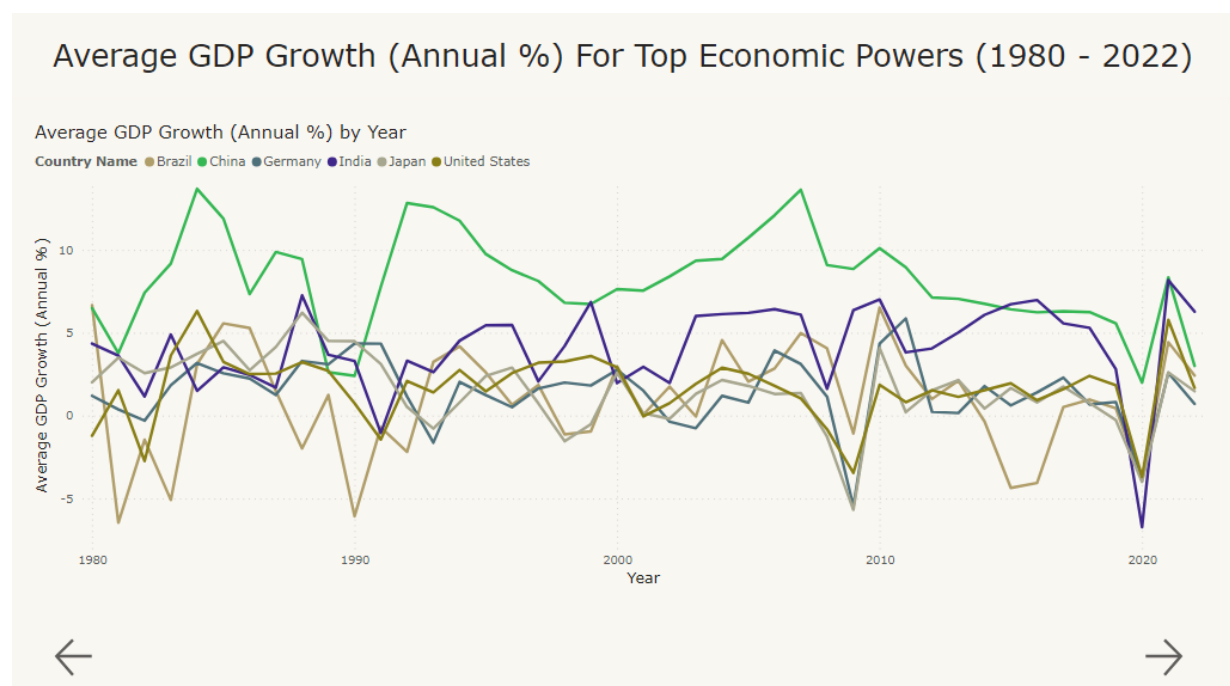
5. Average GDP Growth of the Poorest Nations (1980 – 2022)

For this dashboard the chosen countries of Burundi, Central African Republic, Malawi, Niger, and Sierra Leone were compared as they are ranked among the poorest nations in the world.

From the data on the graph, we can see that Sierra Leone had two booms in their average GDP, one peaking in 2002 and the other in 2013, both of which seem to be correlated with general elections within the country. It can also be observed that Sierra Leone had a steep decline in their GDP in 2015, this was a direct result of disaster where burst riverbanks caused destruction in eight communities.

In 1995, we can observe a sharp rise in average GDP growth from Malawi. Ever since 1964, Malawi had been a dictatorship but all that came to an end in 1995. Therefore, this increase was because of a major political shift.

In 2013, we can see that the average GDP in the Central African Republic took a very steep decline, this was the cause of a civil war that started at the end of 2012 and is still on-going to this day. The average GDP did climb into the positive, but it has been in the negative ever since the Covid pandemic.

Average GDP Growth (Annual %) of the Poorest Nations (1980 - 2022)
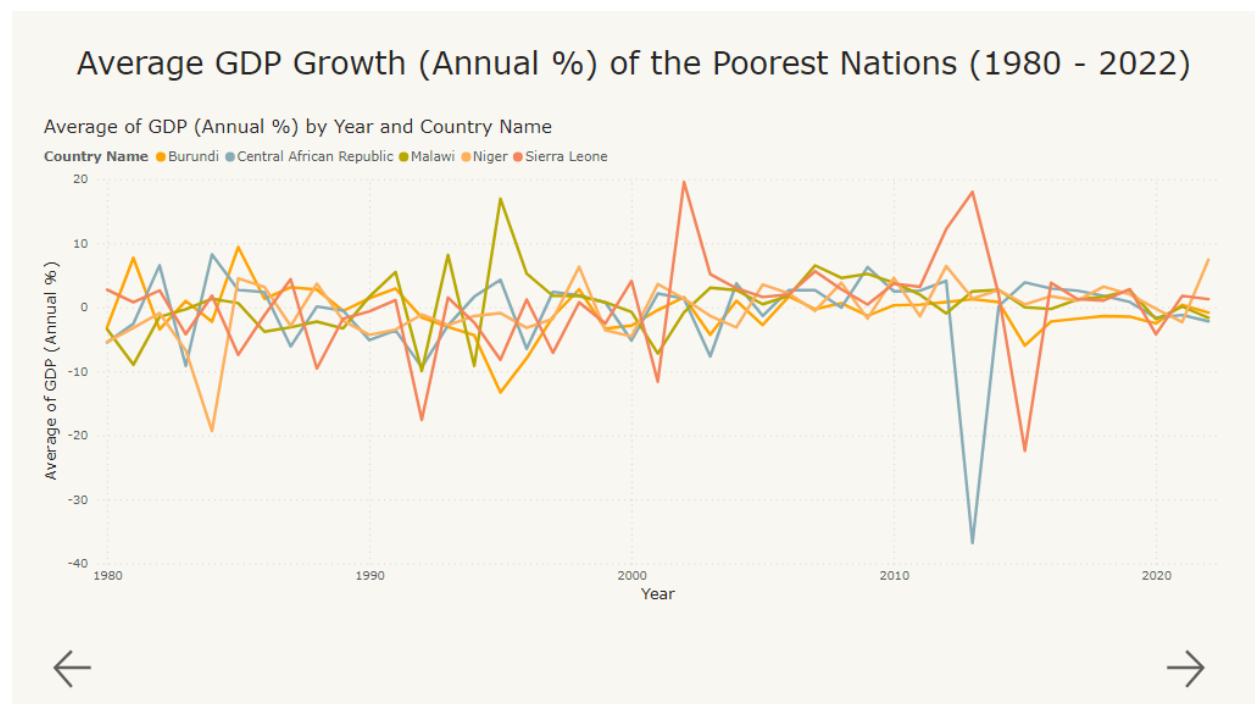
6. The Effects of the Breakup of Yugoslavia on the Independent States (1991 – 2022)
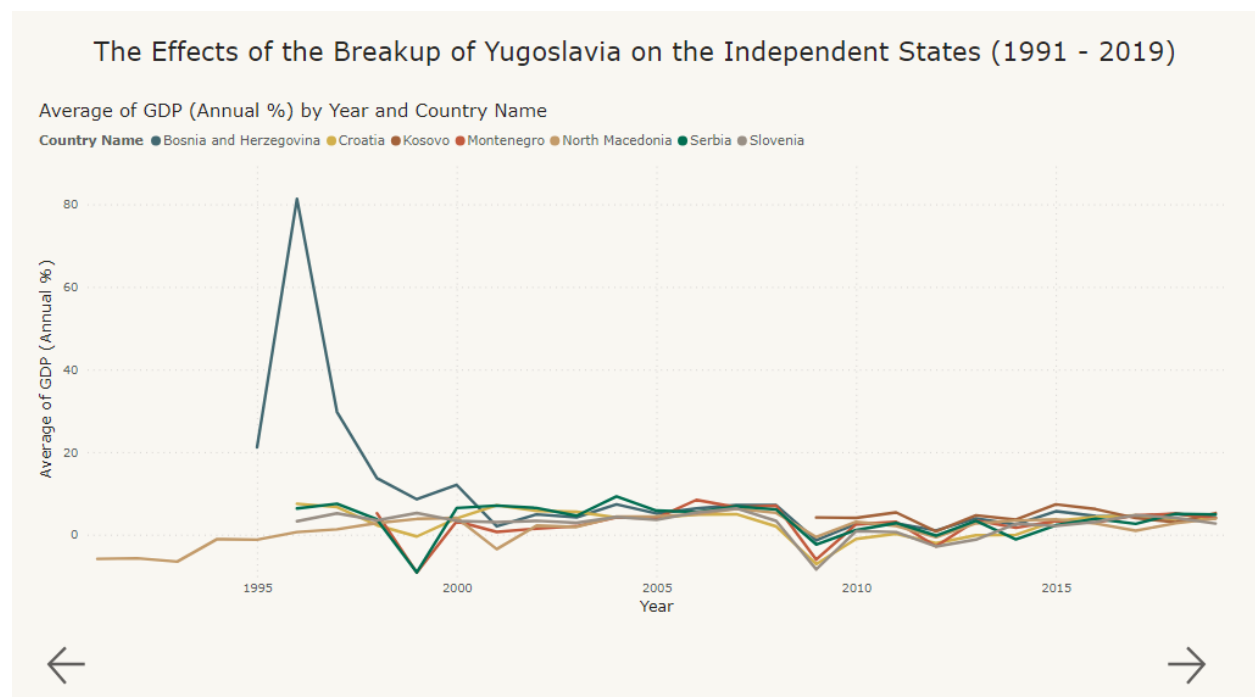
In this section, we explore the GDP per capita growth (annual %) for each Yugoslavian state that achieved independence.

From the data, we see a spike increase in 1996 for GDP growth in Bosnia & Herzegovina, this was due to the end of the almost 4-year Bosnian War. In the years following, we see its GDP levelling off to a more normal amount due to parliamentary elections in 1998.

In 1999, Serbia and Montenegro, which used to be one country saw a decrease in their GDP. This was due to a NATO bombing attack that lasted 2 months. Once a treaty was agreed and signed, we can observe that their GDP growth went back to normal levels.

In 2001, we can observe in a GDP decrease of North Macedonia, while still part of the Yugoslav Wars, North Macedonia saw an insurgency from the Albanian National Army.

In 2009, we see that all countries that were part of Yugoslavia got hit with the effects of the housing crash. What we don't observe is a dent in the Kosovan GDP growth in this time, this was because of the insularity of the country's economy and the unrest that was taking place for independence.

The Effects of the Breakup of Yugoslavia on the Independent States (1991 - 2019)

Average of GDP (Annual %) by Year and Country Name

Country Name ● Bosnia and Herzegovina ● Croatia ● Kosovo ● Montenegro ● North Macedonia ● Serbia ● Slovenia

7. The Effects of the Dissolution of the USSR on its 15 Constituent Republics (1990 – 2022)
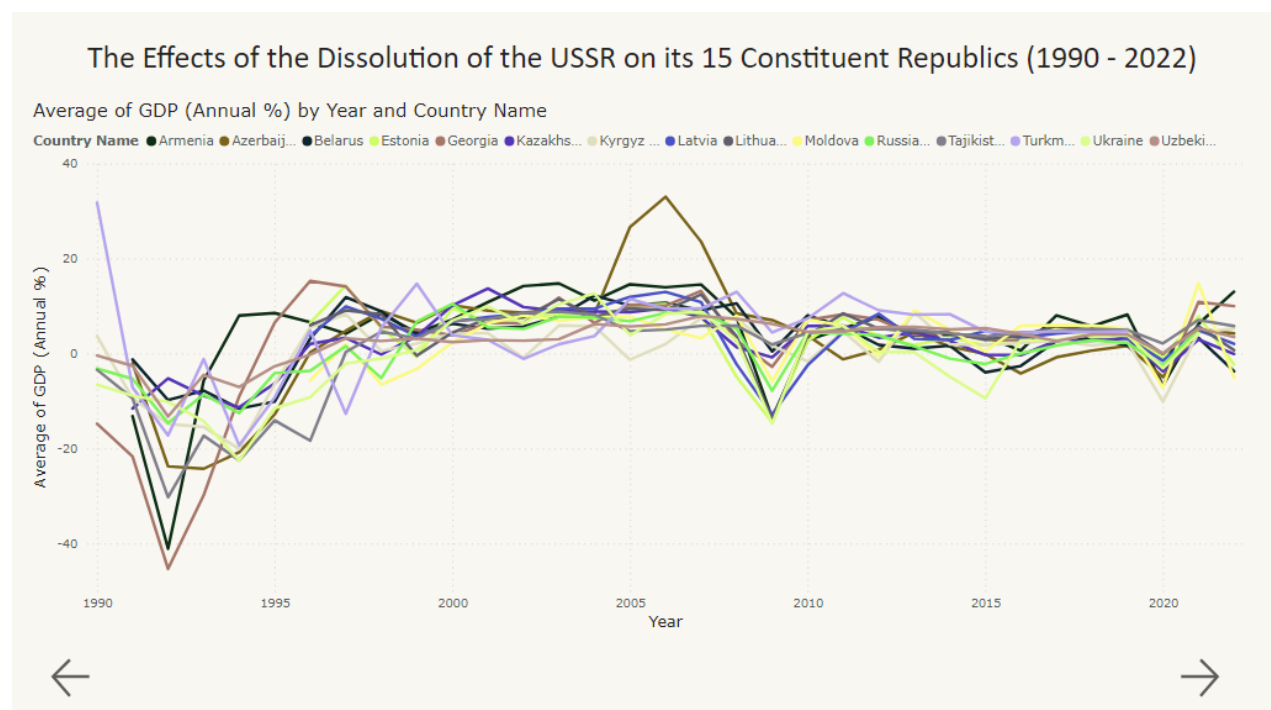
While observing the data of this dataset, it behaved as I would have expected. While the collapse of the USSR occurring on the 25th of December 1990, we see a step decline in GDP from all the constituent republics in the subsequent years. But, also as expected, there was a period of great stability in GDP across all regions in the early 2000s.

To point out a few other facts that further plunged the GDP of certain countries, Armenia and Azerbaijan were in military conflict with each other since 1988 and only ended in 1994. Following the end of this conflict we see that both their GDPs steadily increased throughout the subsequent years.

In 1992, there was an internal conflict in Georgia that lasted just over a year, once resolved, we could observe that their GDP also started to increase in subsequent years.

In the mid-2000s we see a huge GDP increase in Azerbaijan, this increase was mainly due to becoming a major oil-based economy. By becoming an oil-based economy, it then had a positive knock-on effect into other drivers that increased its GDP such as technology and productivity.

In 2015, we can observe a significant dip in the GDP of Ukraine, in February of the same year, the Russo-Ukrainian war officially broke out in the Donbas region of Ukraine. But then the GDP subsequently raised in subsequent years up until the Covid outbreak.

The Effects of the Dissolution of the USSR on its 15 Constituent Republics (1990 - 2022)

Average of GDP (Annual %) by Year and Country Name

8. Forecasting Average GDP Per Capita for the World until 2030

For this last and concluding visual, a forecast prediction has been made using all the countries and regions available to us from 1961 to 2022.

The prediction was that in 2023, the average GDP growth was 1.6%. As we are now in 2024, we know exactly what happened in 2023, with a quick search it was seen that the average GDP growth in the world was 2.2%, so not as bad as the forecast suggested.
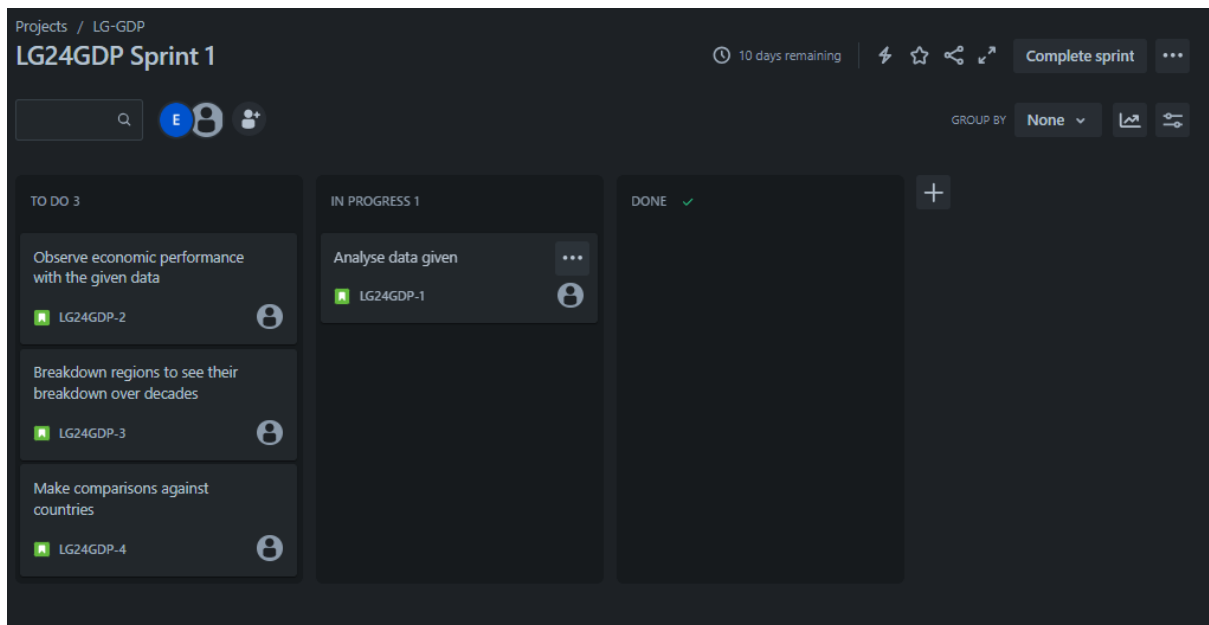

Forecasting the Average GDP Per Capita (Annual %) for the World Until 2030
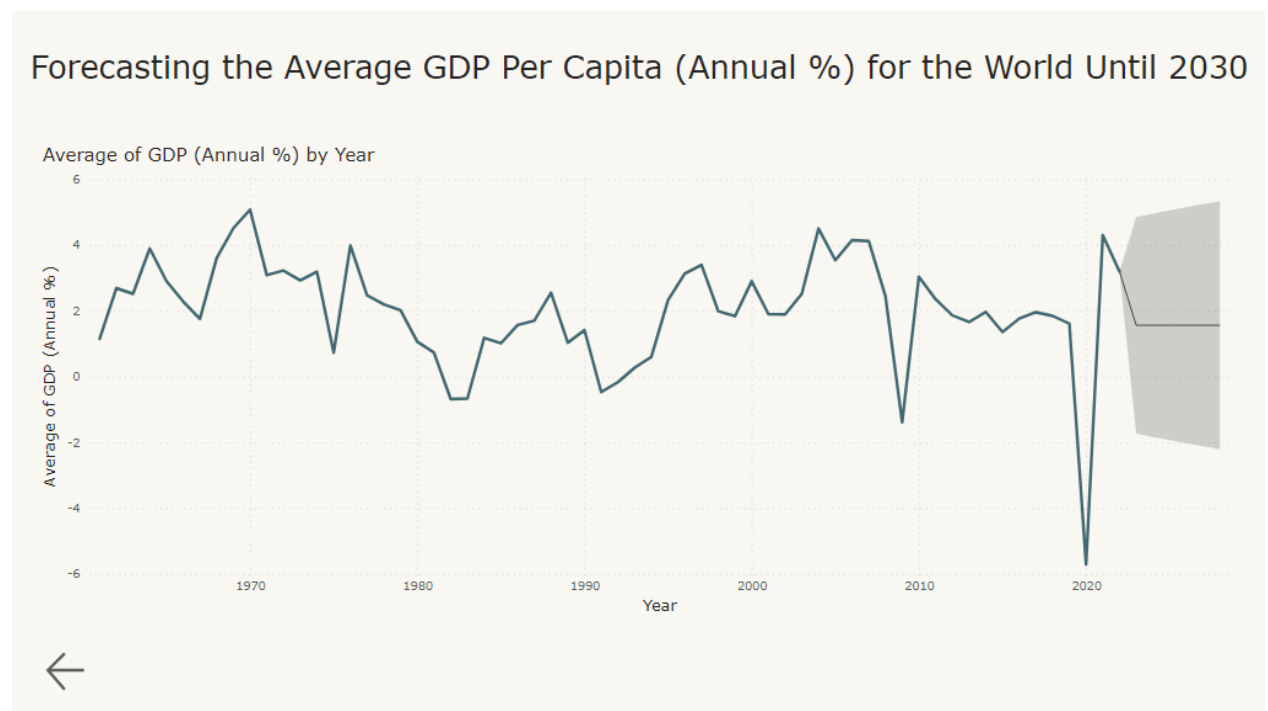
Appendix

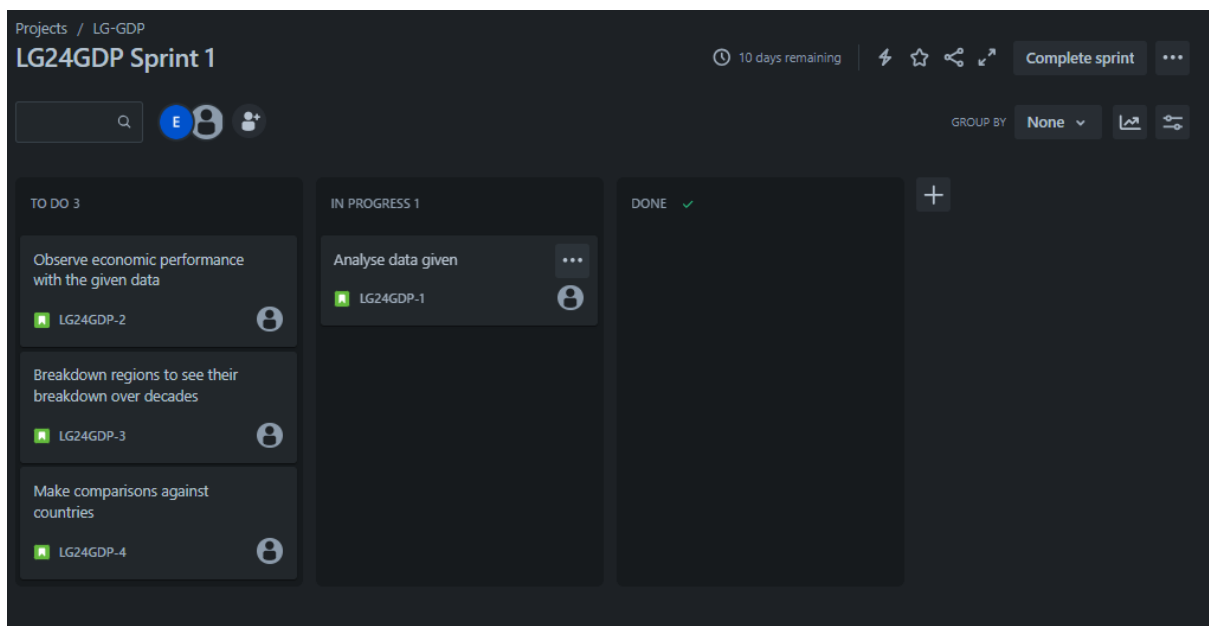Fig. 1 – Starting first sprint

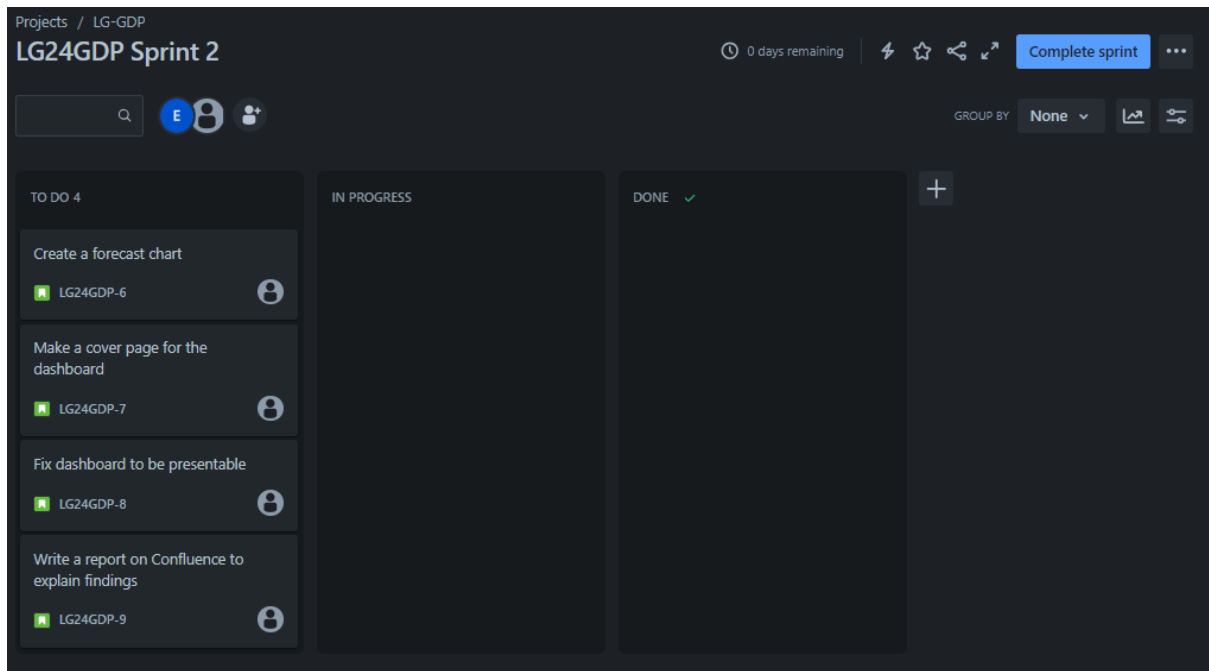Fig. 2 – Completing the first sprint
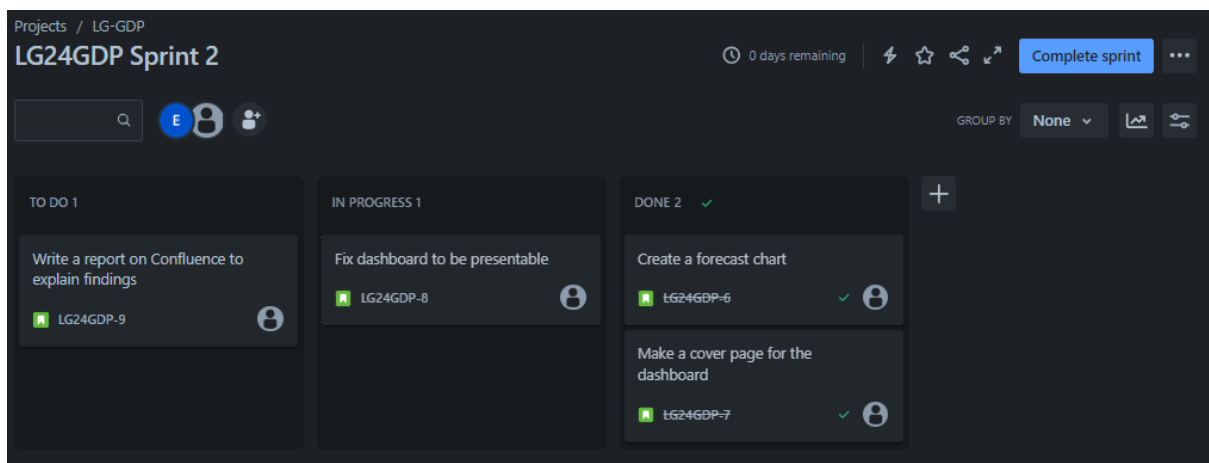
Fig. 3 – Starting the second sprint
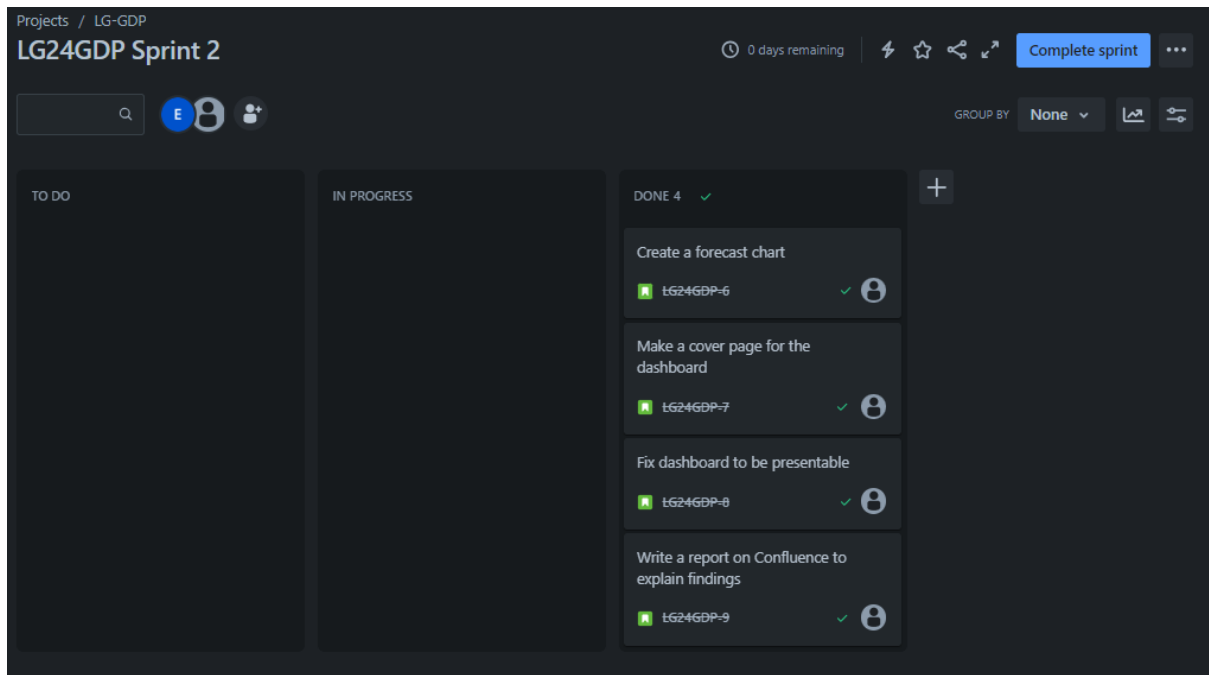

Fig. 4 – Making progress on the second sprint

Fig. 5 – Completing the second sprint

Confluence Link: https://albanybeckworldwide.atlassian.net/jira/software/projects/LG24GDP/pages