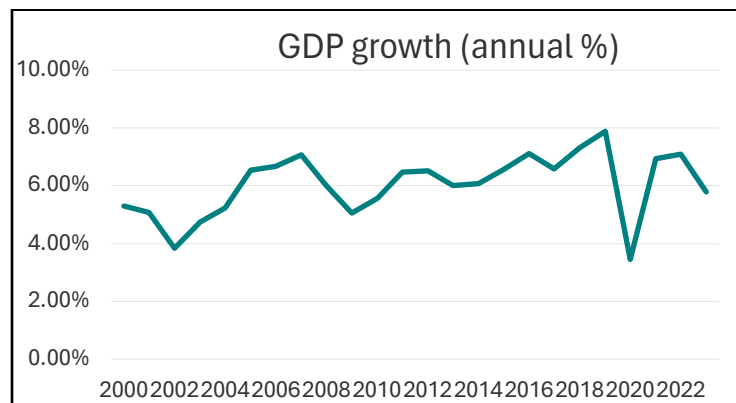


Below are some analyses done on various economic metrics of Bangladesh and Pakistan from the last 20 years. I have analyzed a public dataset and used resources from official news articles are different websites, some of which are cited.

• What is the trend in GDP growth over the years?

For Bangladesh;

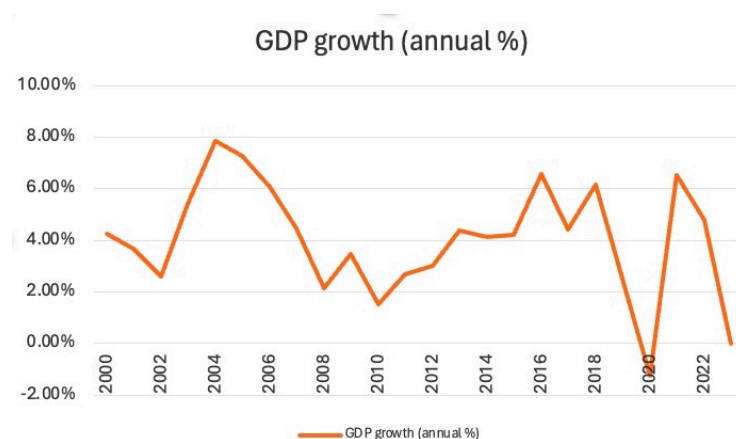


As the graph above depicts, the GDP growth for BD ascended steadily over the last two decades except for sharp decline around 2007-2008 and around 2020.

The first fall of the GDP growth trend around the period of 2007 to 2008 was largely due to the global financial crisis in 2008, as the GDP growth % went down from 7.06% (2007) to 6.01% (2008) to 5.05% (2009). Even though the country seemed to have suffered a modest economic slowdown, the crisis had effect on other industries like exports and remittances.

The second significant drop in the country's GDP growth occurred around 2020 due to the widespread effect of pandemic which slowed down the worldwide economy.

For Pakistan;



The dataset highlights fluctuations in GDP growth from **2000 to 2023**:

2000–2004: GDP growth started at 4.26% in 2000, with a dip to 2.59% in 2002, then rising sharply to 7.83% in 2004. This period saw economic stabilization under General Musharraf's government.

- **Real-World Context:** Increased foreign aid post-9/11, coupled with structural reforms, supported growth. Export-oriented policies bolstered textile and agricultural sectors.

2005–2008: Growth peaked at 7.0% in 2007 before falling to 1.7% in 2008, driven by the global financial crisis and domestic political instability.

- **Key Event:** The financial crisis reduced export demand and foreign investments, while inflation and energy shortages constrained growth.

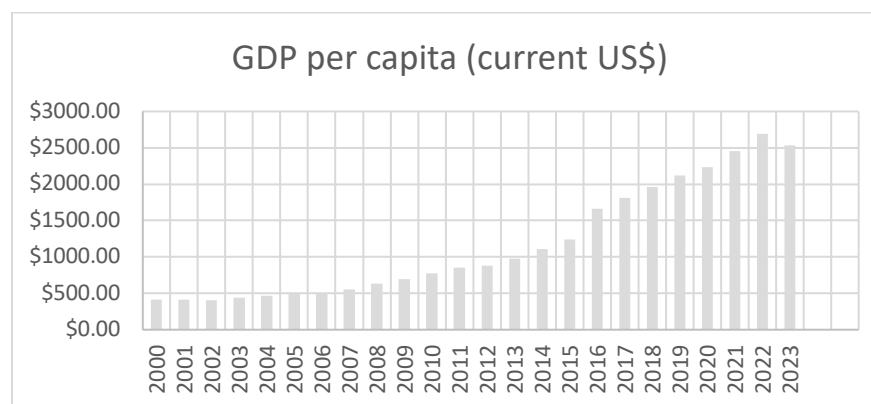
2009–2019: Modest recovery, averaging around 3–5%. Growth reached 5.8% in 2018 but fell due to macroeconomic challenges like high current account deficits and fiscal imbalances.

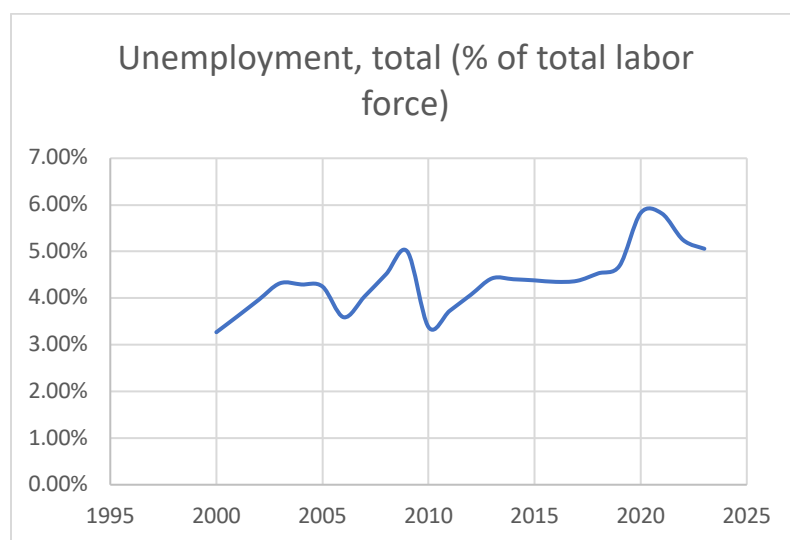
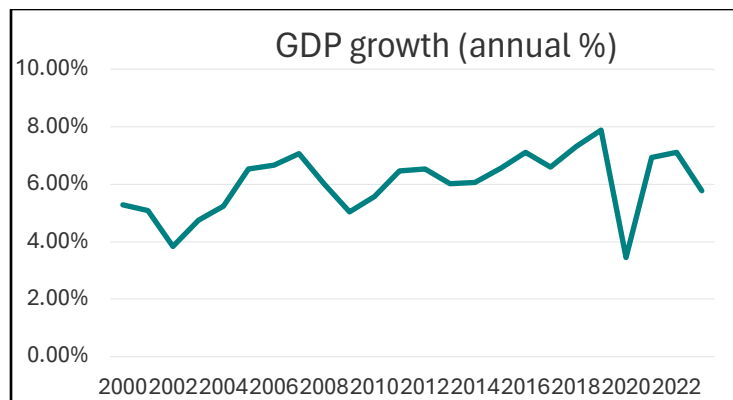
- **Key Event:** CPEC (China-Pakistan Economic Corridor) investments around 2015–2018 supported infrastructure and energy projects.

2020–2023: GDP growth dropped to 1.6% in 2020 due to COVID-19 but recovered to 5.7% by 2021. In 2022–2023, growth slowed again amid high inflation and political instability.

• How does GDP per capita correlate with GDP growth and unemployment?

For Bangladesh;

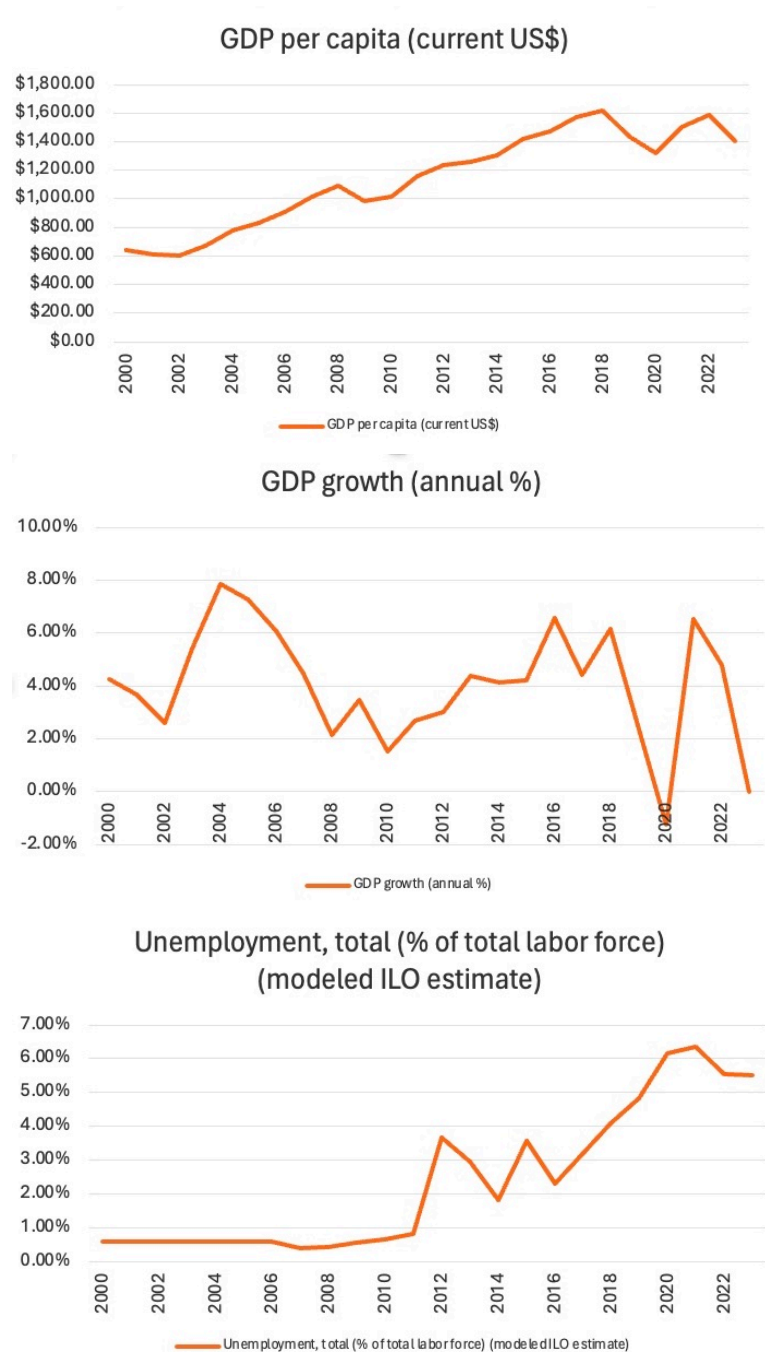




Correlation-

• **GDP Per Capita vs GDP Growth** - Looking at the charts represented above we can see that the data from GDP growth and GDP per capita does correlate positively except around 2020 when the GDP growth declined substantially but the GDP per capita remained steady. While this seems counterintuitive, there are several factors which are at play. Most importantly, pandemic impacted certain sectors like hospitality, tourism and transportation, among others. Most of these industries primarily involve low-income jobs as well as contribute minimally to GDP per capita, which is why the GDP per capita remained steadier.

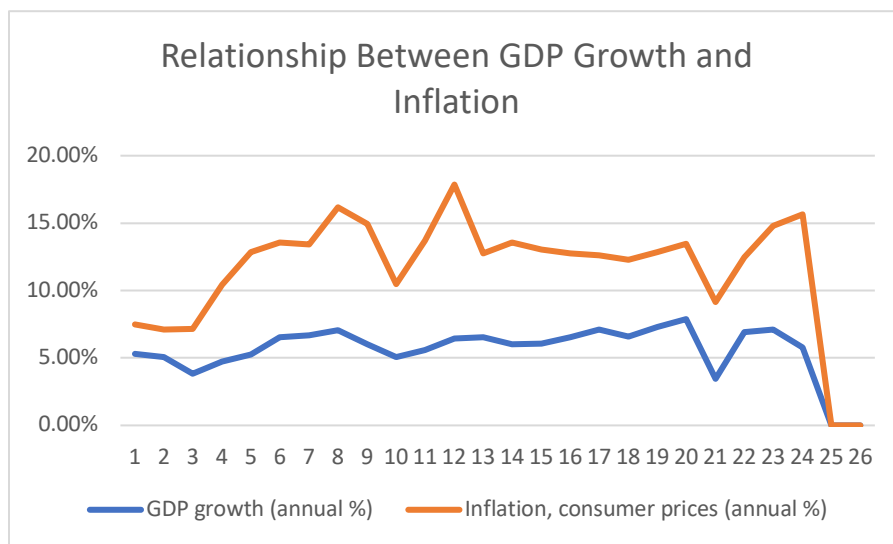
For Pakistan;



- **GDP per Capita vs. GDP Growth:** A weak negative correlation (-0.08) suggests that GDP growth does not consistently lead to proportional per capita income increases.
 - Example: In 2018, GDP growth was high (5.8%), but GDP per capita increased only modestly, reflecting high population growth (~2% annually).
- **GDP per Capita vs. Unemployment:** A strong positive correlation (0.79) indicates that higher GDP per capita often coincides with rising unemployment. This may point to growth driven by automation and capital-intensive sectors that create fewer jobs.

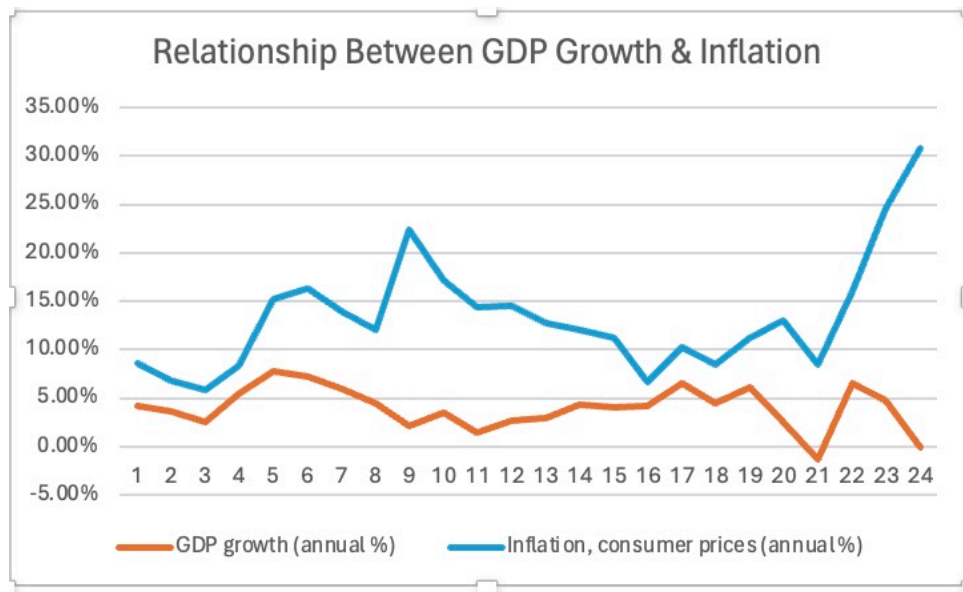
• How does inflation impact GDP growth and unemployment?

For Bangladesh;



- **GDP Growth and Inflation:** The relationship is nuanced. Moderate inflation might be part of an expanding economy, but sharp inflation increases—often triggered by external commodity price shocks or supply constraints—can slow growth. Policy measures taken by the Bangladeshi authorities have sometimes successfully balanced these factors.
- **GDP Growth and Unemployment:** A negative correlation is typically observed, reflecting the benefits of labor-intensive sectors like RMG and agriculture during periods of economic expansion. However, structural issues such as a sizable informal sector and skill mismatches can influence the degree of this inverse relationship.

For Pakistan;

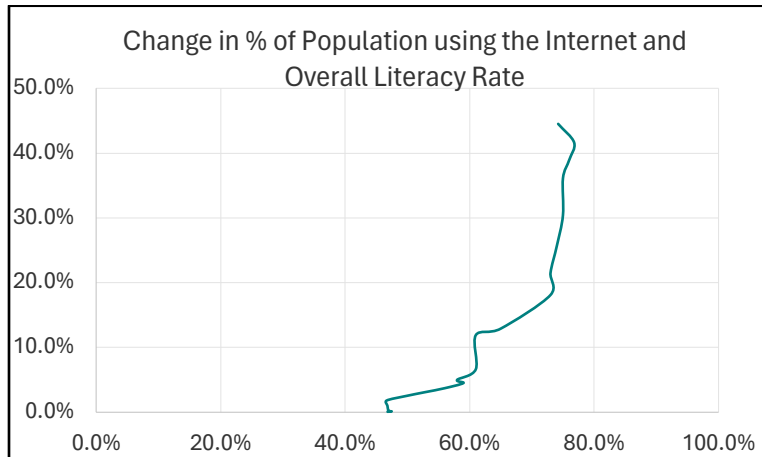


- **Insights:**
 - **Inflation vs. GDP Growth:** A negative correlation (-0.47) shows that higher inflation typically slows economic growth. For example:
 - In 2008, inflation peaked at ~20%, while GDP growth fell to 1.7%.
 - **Inflation vs. Unemployment:** A moderate positive correlation (0.31) indicates that higher inflation is associated with rising unemployment, likely due to reduced purchasing power and business closures.
- **Real-World Context:**
 - **2008:** High inflation from food and energy crises coupled with the global recession.
 - **2022–2023:** Inflation above 20% due to global supply chain disruptions and currency devaluation reduced real incomes, increasing unemployment.

- **What percentage of individuals are using the internet, and how has this changed over time?**

For Bangladesh;

Is there a link between internet usage and literacy rates?

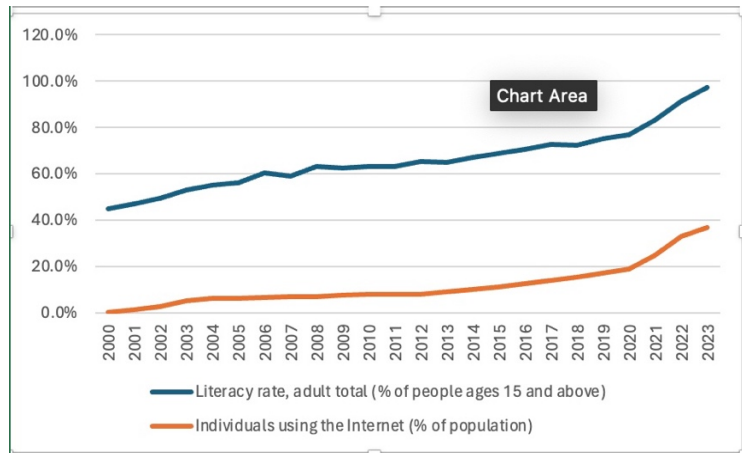


Correlation Insights; The data from 2000 to 2023 clearly demonstrates a positive correlation between literacy rates and internet usage in Bangladesh. As literacy improved, largely driven by educational reforms and national initiatives like Digital Bangladesh, more citizens were able to use the internet, further driving economic and social development. This symbiotic relationship underscores the importance of investing in human capital and digital infrastructure simultaneously.

The following events also contributed to the trend as analyzed;

- Digital Bangladesh Initiative
- Expansion of Mobile Internet
- Global Technological Advancements
- Economic Liberalization and infrastructure development/ investment.

For Pakistan;



- **Correlation Insights:**

- A strong positive correlation (0.73) indicates that higher literacy rates facilitate internet adoption. For instance:
 - **2000–2010:** Internet usage remained low (~8%) due to stagnant literacy rates (~50%).
 - **2015–2023:** Internet adoption increased from 12.4% in 2016 to 36.7% in 2023, coinciding with literacy improvements from 58% to ~62%.
- **Real-World Example:** Initiatives like the Punjab Education Sector Reform Program promoted literacy, indirectly supporting technological adoption.

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Ali M., Islam A. (March 2011) “The Great Recession of 2008: Impact on the Bangladeshi Economy and International Business Implications.” Thunderbird International Business Review. Retrieved From;
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