Executive Summary: Exploring Global Patterns Through Data Analytics

Uncovering how nations borrow, grow, and sustain their economies through the power of data analytics.

This project investigates the global debt landscape to understand how countries manage borrowing and economic growth. Using open data from the **World Bank**, we analyzed both **government debt as a percentage of GDP** and **total external debt in U.S. dollars** to uncover patterns of financial strength, vulnerability, and sustainability across nations.

The findings reveal wide differences in debt structures worldwide. Smaller or developing economies, such as **Sudan** and **Seychelles**, exhibit extremely high debt-to-GDP ratios, showing economic strain and limited repayment capacity. In contrast, advanced economies like **Singapore**, **the United Kingdom**, and **the United States** maintain high debts that are supported by strong financial systems and investor confidence. Meanwhile, emerging economies including **China**, **India**, and **Mexico** record the largest debt volumes in absolute terms but maintain relative stability due to their economic size and growth potential.

Through data extraction, cleaning, and visualization in **Python**, this analysis demonstrates how **data analytics helps uncover global financial patterns** and informs sustainable debt management decisions. Ultimately, the project highlights that debt, when used wisely, can drive growth — but when mismanaged, it can threaten economic resilience and stability.