BUAN 6312.001 – Applied Econometrics and Time Series Analysis

Group Project Proposal – Global Economy Indicators

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Group 2

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Introduction:
Our project explores the evolving contributions of agriculture, manufacturing, and services to GDP across developed and developing economies from 1970 to 2021. By analyzing sectoral shifts, we aim to understand how these changes impact overall economic growth.

Research question:
How have sectoral contributions (agriculture, manufacturing, and services) to GDP changed over time in developed versus developing economies, and what impact does this shift have on overall economic growth?

Scope of the project:
We will investigate the relationship between sectoral contributions and GDP growth, comparing patterns in developed versus developing economies. Using techniques from Applied Econometrics and Time Series Analysis, we'll explore trends, conduct regression analyses, and assess the influence of sectoral shifts on economic development.

Interest and Relevance:
Understanding sectoral shifts in GDP contributions is crucial for insights into sustainable economic growth. Developed economies typically transition from agriculture to manufacturing and services, while developing nations may follow unique paths. While existing research suggests that shifts from agriculture to industry and services correlate with higher growth, few studies systematically compare these patterns between developed and developing countries over time. This study will fill that gap by analyzing sectoral transitions across income levels and quantifying their impact on GDP growth.

Existing Findings:
Existing literature often shows that as countries develop, they shift from agriculture to industrial and service sectors, which are linked to higher growth rates. However, less attention is given to comparing these shifts systematically between developed and developing nations over a long period.

Contribution:
This study will contribute by providing a comparative analysis of sectoral transitions across income levels, highlighting differences in economic development paths. It will also quantify the impact of each sector on GDP growth in different economic contexts.

Dataset overview:
We will use a dataset covering sectoral contributions to GDP from 1970 to 2021, segmented by income level and region. This dataset includes GDP and sectoral data (agriculture, manufacturing, services) for a comprehensive analysis. There are ***10,513 observations*** in our dataset with ***26 attributes.***

Dataset source: https://www.kaggle.com/datasets/prasad22/global-economy-indicators/data