Project Proposal:Estimating the Return on Investment (ROI) of International Higher Education

Research Question

How do differences in earnings, education costs, and post-graduation employment opportunities between students' home and host countries affect the financial return on investment (ROI) of studying abroad?

This research investigates how both economic and policy factors—such as tuition costs, employability after graduation, and income disparities—shape the real value of international education.

Motivation and Background

With the rapid expansion of global student mobility, understanding whether studying abroad offers measurable economic benefits has become increasingly important. Most existing studies focus only on earnings within the host country, overlooking what students might have earned had they stayed home. Few also consider the influence of post-study work policies or cost-of-living differences.

This project introduces a **bilateral framework** that evaluates ROI across both origin and destination countries, capturing not only potential income gains but also the costs and constraints that influence employability abroad. It aims to provide a realistic measure of how international education translates into long-term financial returns.

Data Sources

The analysis integrates multiple large-scale international datasets:

- **UNESCO Institute for Statistics (UIS)** for bilateral student mobility (origin–destination flows);

- **OECD Education at a Glance** for tertiary-level earnings, tuition, and the *Youth Transition from Education to Work* dataset, which measures graduate employability;

- **World Bank World Development Indicators (WDI)** for GDP per capita and PPP-adjusted costs of living.

These sources are merged into an origin–destination structure linking where students come from and where they study, forming the foundation of the ROI analysis.

Methodology

The project will build a panel dataset connecting origin and destination countries. The dependent variable will represent estimated ROI, defined as the relative financial benefit of studying abroad versus staying home.

Independent variables will include:

- Relative earnings between host and home countries,

- Relative costs of study and living,

- Graduate employment and transition-to-work rates,

- Field of study and demographic composition,

- GDP per capita differences (economic control).

Regression models will test how each parameter contributes to ROI, using robust standard errors and diagnostic checks to ensure consistency.

Expected Contribution

This project contributes a novel **origin–destination approach** to estimating ROI, integrating education, cost, and employability data in a single global framework. It moves beyond static country-level studies by linking students' home and host contexts, offering insights useful to students, universities, and policymakers in evaluating the financial and policy determinants of international education outcomes.