QTM 350 Final Project: Finding the Key to GDP Growth in Developing, Transitionary and Developed Nations

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Introduction

As transportation, technology and media advance at breaknecking speed, the world's economies have become significantly more interconnected and global than ever before. While many countries have been able to use these advancements to aid in their development, many others are still in transitionary or developing stages and find themselves with imbalanced imports and exports. In order evaluate economic change over time, we sought to explore the metric of GDP growth rate in developing and developed countries over time. More specifically, we wanted to answer the question: Are economic and educational attainment metrics correlated with increased GDP growth rate? Is this correlation found in both developed and developing countries? For this analysis we focused on the the relationship between unemployment rate, inflation rate, and government expenditure on education to GDP growth rate. Then we examined the potential for collinearity (confounding variables), using a correlation matrix, of all nine extracted independent economic and educational variables.

Overall, we found that inflation rate was the only metric that had a positive correlation to GDP growth rate and that it was somewhat consistent on in developing and developed countries. While unemployment rate had a negative correlation to GDP growth rate for both types of economies, it had a much larger correlation for developing countries. Finally, government expenditures on education had a negative correlation with GDP Growth Rate only in developing countries but almost no correlation on average in developed countries. In our analysis of independent health and education variables, we found that health factors were signficantly more correlated with one another than educational factors.