

**Course Name and Number:** MBAF 504: Economics from a Business Perspective

Term Paper II is prepared to check your understanding of the long run economic growth and disparities between countries level of development based on empirical evidence. The data for this purpose of analysis is provided in the moodle. Originality and clarity in your work is highly valued. As usual, this paper will be submitted through Turnitin to review for plagiarism. This work accounts for 20% of your total grading of the course.

### **Long-run Economic Growth & Convergence**

Use the dataset provided in the Moodle for this question. The data depicts the GDP per capita of different countries for the selected years of 1970, 1985 and 2007. You can use any data analysis programming language that you are convenient with for this term paper. You can also use the programming language which we used in the class, Gretl, accessible for free download at <http://gretl.sourceforge.net>.

#### 1. Introduction

- Discuss Long Run Economic Growth
- Will the poor countries catch up rich countries by growing faster?
- Identify between conditional and unconditional convergence

#### 2. Background

Select 6 sample countries from the data (3 poor and 3 rich) and explain what important key historic or economic factors have happened during the years under consideration and how is this reflected in their per capita GDP? Make an economic analysis of the characteristics of these countries under consideration.

#### 3. Data Analysis

- Using data of GDP per capita provided in the dataset, plot histograms of GDP for all the three years and describe how the distribution of income evolves. If there are any outliers, omit them. In a case where you encounter any outlier, then provide economic intuition for evaluating these countries as outliers.
- Calculate the Growth rate of GDP per capita for each of the countries in the years under consideration. Show boxplots of incomes for all the countries in each year. What happened? Is there any evidence for convergence? Discuss the notions of conditional and unconditional convergence in this regard (Hint.: Use logs instead of levels).
- Split the data into two groups of poor and rich. The split should be done according to the median income in 1975. Then show boxplots of incomes for both groups in each year. What happened? Is there any evidence for convergence? (Hint.: Use logs instead of levels. Start with

splitting the sample: poor in 1975, 1985 and 2007, then same for the rich. Plot boxplots for each).

4. Explanation of Economic growth and Convergence

Explain the structure of the data provided and how it characterises the countries under consideration over the years that are taken into account. Using your own words, explain why you believe that the poor countries in the data can (cannot) catch up the rich countries? Your argument should be based on the convergence analysis you made from the data. You can support your argument by citing relevant works that are in line with your analysis.

5. Conclusion

In summing up your analysis; provide a summary of the main points in your paper in connection with the theory of long run economic growth and convergence.

The general content and flow of the paper should follow:

1. Introduction
2. Background
3. Data Analysis
4. Explanation of Economic growth and Convergence
5. Conclusion
6. References