Economic Growth

Take-home exam
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Exam rules

- 1. This is a dual-track exam. Students can opt for Exam A (essay question) or for Exam B (data analysis).
- 2. Students must work autonomously.
- 3. Students must return the exam in PDF via email (barbara.annicchiarico@uniroma2.it and in cc to olga.raduchych@uniroma2.it and eriona.zeqiri@uniroma2.it) by June 9, 2023 (by 23:59). Late exams will not be accepted. Students who opt for Exam B must also include the Stata do file.
- 4. Exams will be subject to plagiarism checks on Turnitin. The overall percentage of similarity tolerance is not higher than 25% (and not higher than 5% for each single source).
- 5. Exams will be subject to checks for the use of AI tools.
- 6. Exams must include a complete references' list of all sources used.
- 7. I will not answer any question.

Exam A

How do savings contribute to economic growth? Discuss the relationship between savings, investment, and economic growth, and provide examples of countries where high savings rates have led to sustained economic growth over time.

• Address the topic in an essay of 2500-2800 words.

- The list of references does not count for the computation of the no. of words.
- Essays lacking precise references will receive a penality.

Exam B

For questions 1-5 use ONLY the data in the file **data_2010_2019.dta** (the file is attached).

- 1. Using variables **rgdpo** and **pop** compute per capita GDP for years **2010** and **2019**. Using per capita GDP, provide a graphical and numerical description of the world income distribution in these two years. What can you see?
- 2. Compute the average annual growth rate of per capita GDP and the average population growth between 2010 and 2019. For each country compute the average human capital index (hc), the average investment rate (csh_i), the average export share (csh_x) and the average government consumption (csh_g).
- 3. Provide a graphical and numerical description of the growth rates of per capita income over the period **2010** to **2019**. What is the relationship between level of income and growth rates? Do poor countries grow faster than rich countries? Why? Discuss your findings.
- 4. Running regression analysis answer to the following questions. What is the impact of human capital on growth? And of the degree of openness? What about the size of the public sector? And the investment rate? Explain your findings.
- 5. In your dataset can see you find some evidence of fast growing countries and of growth disasters? Provide explanations.
- 6. Now use the PWT dataset of the file **pwt100.dta** (the file is in Teams) and choose a Non-OECD country and explore its growth performances over time. Try to explain what you see in the light of historical events, crisis, major structural changes (e.g. reforms, independence, wars, oil crises, global financial crisis etc...). Use the theories seen in class to explore the determinants of growth of the country you choose.