



Instructions:

- Please, read carefully the exam before answering. Make sure you understand!
- **Duration: 20 min**
 - Individual Exam: 10 min
 - Team Exam: 10 min
- Make a plan!
- I know you've studied enough, so everything will be alright! ☺

Question permutation table:

Version		1	2	3
Question				
1	→	4	2	7
2*	→	5	3	8
3	→	6	4	4
4	→	9	1	10
5	→	7	6	3
6	→	8	7	9
7	→	3	10	6
8	→	1	8	5
9	→	10	5	1
10	→	2	9	2

*: Question follows previous

Look at this graph:

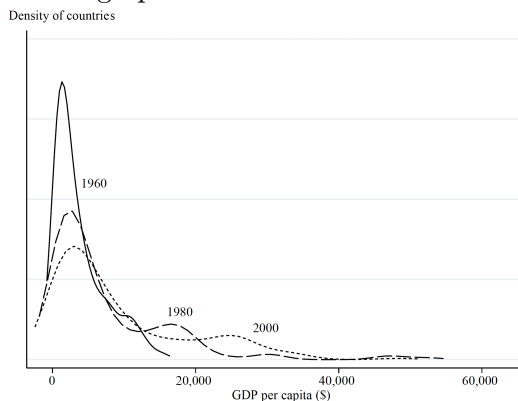


FIGURE 1.1 Estimates of the distribution of countries according to PPP-adjusted GDP per capita in 1960, 1980, and 2000.

1. According to this graph we can conclude that:

- (a) There is a general trend of poverty around the world
- (b) There is an increase on the average income
- (c) In 1960 the medium country was better off
- (d) The richest countries were more in the past
- (e) none of the above

Correct answers: (b)

Explanation: If you look at the graph you can see that there is an increase on the mean of income throughout the years. We cannot say anything about inequality



2. This graph could be mis-leading the actual economic growth because:

- (a) We do not take into account population
- (b) The increase on average income, so, we should use $\log x(t)$
- (c) It does no include less developed countries
- (d) We do not consider other variables such as education

Correct answers: (a), (b)

Explanation: • Having a population-weighted distribution allows to control for level effect such as big countries will produce more just because its size. In this case, countries such as China, India, the United States, and Russia receive greater weight because they have larger populations.

- This is for the simple reasons that whn $x(t)$ grows at a propotional rate, $\log x_t$ grows in linear way.

Look at this graph:

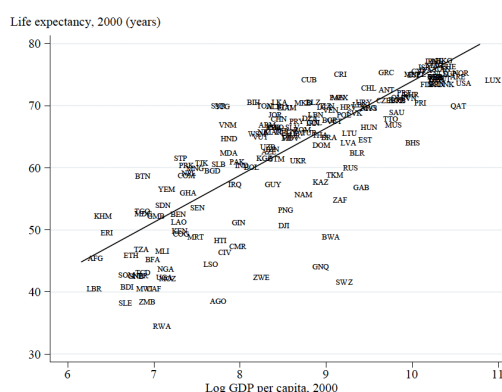


FIGURE 1.6 The association between income per capita and life expectancy at birth in 2000.

3. According to this graph

- (a) It implies that those countries with more income life longer, because income causes an increase of life expectancy
- (b) In Rwanda, people used to live less years because they are poor.
- (c) In all European countries people live longer
- (d) There is a clear positive association/correlation between income and life expectancy

Correct answers: (d)

Explanation: We know that there is a positive correlation (no causation) of growth and life expectancy, because there they might have access to different public services such as health, infrastructure, among others.

4. According to Acemoglu, the main factors that could correlate with postwar economic growth are:

- (a) Investment
- (b) Education
- (c) Having a long life expectancy
- (d) Physical capital

Correct answers: (a), (b), (d)

Explanation: These are the most standard dimensions that have been mentioned in the literature as the main determinants.



5. Understanding the determinants of long term growth requires to understand we need to explore the initial associations, because it is very difficult to establish:

- (a) causal effect
- (b) a multiple criteria to explain growth
- (c) a regressions
- (d) a perfect model to explain everything

Correct answers: (a)

Explanation: "Causal effect" refers to the answer to the following counterfactual thought experiment: if, all else being equal, a particular characteristic of the country were changed exogenously (i.e., not as part of equilibrium dynamics or in response to a change in other observable or unobservable variables), what would be the effect on equilibrium growth?

6. In the classical model of growth, the 'iron law of wages' is based only on labour supply because:

- (a) population is always increasing
- (b) there is not an equation for demand
- (c) the trade unions controlling the wage
- (d) there is exploitation of labour

Correct answers: (a)

Explanation: Remember that the 'iron law of wages' said that the wages cannot be above or below the level of substance because the Malthusian law ($\uparrow \text{wage} \rightarrow \text{surplus} \rightarrow \text{population}$). So, neither the trade unions, nor the demand side matter.

7. The main different between Harrod-Domar (HD) model and the Keynesian (K) theories of growth is:

- (a) population is always increasing
- (b) there is not an equation for demand
- (c) the trade unions controlling the wage
- (d) there is exploitation of labour

Correct answers: (a)

Explanation: In theory, the Harrod-Domar (HD) model is a cross between the classical and the Keynesian theories of growth. Harrod and Domar rightly emphasized that the prime mover of the economy is investment and it has a dual role to play. It creates demand but it also creates capacity (Baldwin 1972). Whereas the Keynesians concentrated only upon the former, the classicists emphasized the latter.

8. The main contribution of the neo-classical growth theory is:

- (a) make capital-ratio flexible
- (b) include money
- (c) use the Cobb-Douglas function
- (d) improve the HD model

Correct answers: (a)

Explanation: Please never forget!! one of the main contribution of the neo-classical model was to make capital-ratio flexible, this is why they need

9. According to the Neoclassical theory, a 'well-behaved' production function contains the following properties except:

- (a) constant returns to scale
- (b) no technical progress
- (c) capital is 'malleable'
- (d) it can have a lineal transformation

Correct answers: (d)



Explanation: We will have this during the lecture today.

10. A Robinson Crusoe economy implies:

- (a) households are consumers and producers
- (b) there are multiples producers
- (c) there is a state
- (d) there are different households

Correct answers: (a)

Explanation: We will have this during the lecture today.

You finished the exam - Well done!