

# Efficiency, Equality and Poverty: Review questions 2

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**Question 1:** The following table shows the average income (in thousand euros per year) in each of the five quintiles of the population of four countries.

Country	1st quintile	2nd quintile	3rd quintile	4th quintile
1	1	4	10	11
2	2	5	9	10
3	3	4	8	11
4	1	3	9	13

- 1) Is there a country where the distribution of income is strictly more equal than that of any other ? Justify
- 2) Rank the 4 countries according to their Gini coefficient.
- 3) Is there a country who has a strictly lower Gini coefficient than that of any other ? Comments on the difference, if any, between your answer to this question and that of question 1

**Question 2.** True or false ? Justify Suppose that we restrict the domain of conceivable preferences that individual can have over social alternatives to those that are single peaked on this domain. Then the Borda rule satisfies all Arrow's axioms.

**Question 3:** True or false ? Justify. Defining freedom of choice by the number of available options reflects a concern for the the diversity of the available options.

**Question 4:** True or false ? Justify Utilitarianism requires utility levels to be interpersonally comparable.

**Question 5:** True or false ? Justify. Ranking various prices and income configurations on the basis of the sum of money metrics for some reference prices satisfy all Arrow's axioms but unrestricted domain

**Question 6:** True or false ? Justify. The Pareto principle says that when given the choice between an efficient alternative and an inefficient one, one should always choose the efficient one.

**Question 7.** Suppose we summarize (very crudely) the distribution of income in France by focusing on the average income in each of the following four groups: the poor, the lower middle class, the upper middle class and the rich. Since the election of Nicolas Sarkozy, one has seen the income of the poor increased (by the so-called Revenu de Solidarité Active) and the income of the rich increased as well (by the so-called "bouclier fiscal", which has put a ceiling on the tax paid by rich people). For the moment these gifts are paid for by the budget deficit but sooner or later, these gifts will be paid by someone. If we suppose that they will be paid by the lower and the upper middle class, can it be said that these changes in the income distribution lead to a more equal income distribution ? Justify with care