Prof. S. Klasen
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Exam: Analysis of Microdata – Summer Term 2001

The exam consists of two sections. In the first section all questions have to be answered, while in the second section you may choose one out of three options. You may answer the questions either in German or English.

Section I:
Please answer all exercises of this first section of the exam. Spent about six minutes on each exercise. The number of points you may reach for each exercise equals six.

Exercise 1:
>   What are clustered samples and stratified samples? What are the consequences of these sampling designs for estimates of population statistics?

Exercise 2:
>   Mean-independence (scale invariance) and the principle of transfers are two desirable properties of inequality measures. Discuss these two properties. Do the Gini coefficient and the range fulfil these properties (explain)?

Exercise 3:
>   Suppose you have access to a household survey and to detailed information on public spending on education in an economy. How would you use this information to carry out an incidence analysis of education spending?

Exercise 4:
>   How can we test econometrically whether households are able to use informal insurance mechanisms to smooth their consumption in the presence of shocks? What kind of data would you need and what hypothesis would you test?

Exercise 5:
>   In the absence of public safety nets for young people, under which conditions would we expect young people to choose to live with their parents and under which conditions would we expect them to live alone? What are the consequences of such a choice on the reservation wages of the young people?

Exercise 6:
>   Figure 1 displays the results of a quantile regression analysis. Define heteroscedasticity and explain how to use quantile regression to examine it.

Please choose one out of the following three exercises of the second section. If you answer more than one of the exercises of section II, the exercise with the lowest number will be corrected only. The maximum number of points you can reach is 24, so you should spent approximately 24 minutes on answering the chosen exercise.

Exercise 7:

UNICEF claims that 70% of the poor people in the world are women. How may we verify this number? Which issues and problems do we have to take into account when verifying this claim? In the light of your discussion, assess the claim?

Exercise 8:

Some researchers argue that the income elasticity of calorie intake is indistinguishable from zero. Please discuss several ways of estimating this elasticity in practice and problems related to the estimation. In view of these analyses, please also comment on the effect of income on nutrition *outcomes*.

Exercise 9:

Table 1 shows some results of a study on the determinants of the decision of young people to leave the parental household in Britain. Discuss theory, methodology, data needs, and variables to be included in such an analysis. Please also comment on the substantive results of Table 1.