



Development Economics I

Poverty Project

Fall 2022

- Please name your file like `lastname1_lastname2_PovertyProject.zip`.
- Email your work to `ali.sani94@sharif.edu`, `mahlasabersh@yahoo.com` and `faezeheskandari3@gmail.com` before the deadline.
- Provide the link to your maps in the report.
- Your documentation should be reproducible and contains your scripts, for instance, your do-files.
- Creative thoughts will be rewarded.

1 Poverty Indicators

1. Draw the capacity curve of Iran. Take the utility as the total amount of headcount expenditure of a family. Define your choice of assets.
2. Calculate the poverty line and poverty gap. You can use any Iranian dataset you find useful.
3. Calculate any suitable variable as indicators for different aspects of poverty, especially for "Multi-Dimensional Poverty". You must provide definitions and regarded calculations for each one.
4. Use `Shiny` and `Leaflet` libraries in `R` to create an interactive map at the province level. As an example, you can find some sample [here](#). Moreover, you can use any other software to produce such interactive maps.

2 Policy Design

1. In this section, you have to consider and design a policy in which the provided assumptions be satisfied. Before that, any group should choose one policy to design and give some tips for its implementation. Let us know which policy you choose via e-mail. Note that each group should take just one policy, and policies between groups are not the same. Hence, the policies go to groups to pick them up sooner than others. [Koehler \(2021\)](#); [Grosh et al. \(2022\)](#) are good sources for this section- especially chapter one of [Koehler \(2021\)](#).
2. The policies are as follows:
 - (a) Energy Subsidy: Subsidizing any kind of energy like gas, electricity, etc., to final consumers, in this case, people.
 - (b) Food Subsidy: Providing necessary nutrition for people. It could be through buying farmers' crops, etc.
 - (c) Good Subsidy: giving people any kind of final good, and not cash transfer.
 - (d) Exchange Rate Subsidy: Cut costs of important commodities' imports by providing a proportion of import costs.
 - (e) Cash Transfer: Giving people a specific amount of money.
3. Based on what you have chosen, design a policy whose goal is reducing the poverty line, poverty gap, and calorie poverty rate. In this design, there are some assumptions you should consider. While some assumptions are on you to specify, there are several strict ones, as follows:
 - (a) The total amount of the budget for the first year equals 30 Hemmats, which is 30,000,000,000,000 rials.
 - (b) The budget is only for one year. However, you have to design the policy taking cover for five years. Thus, consider the appropriate budget for later years to finance your policy. This means you do not have 30 Hemmats every year, and your finance method influences other parts of the economy, which may affect your policy.
 - (c) Iran is under sanctioned, so Iran can not sell her oil in the market.
 - (d) Take account for inflation and what might affect your policy.
4. Aftermath, evaluate your policies using indicators provided in [Grosh et al. \(2022\)](#). Read chapter 7 of the textbook and provide equivalent indicators and graphs, especially for those in its annex in your report to evaluate your policies.

3 Targeting

The government has decided to use a cash transfer policy to compensate for individuals' purchasing power. In this policy, households in the first three deciles get 4,000,000 rials per person in the household, the 4th to 9th get 3,000,000, and households in the 10th decile get nothing. Propose a method in which how people should be deciled, or targeted, to give the cash transfers. In your opinion, does the government have to react to all people the same, or, for instance, should it pay specific attention to special groups like invalids?

Using [Grosh et al. \(2022\)](#) is recommended. For this section, you also can use the [2% public dataset of Refah](#).

References

- Grosh, M., Leite, P., Wai-Poi, M., and Tesliuc, E. (2022). *Revisiting Targeting in Social Assistance: A New Look at Old Dilemmas*. World Bank Publications.
- Koehler, G. (2021). Effects of social protection on social inclusion, social cohesion and nation building. In *Handbook on social protection systems*, pages 636–646. Edward Elgar Publishing.