Policies Against Poverty: an Evalution

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Keywords: Unemployment, Poverty, Assistance, Agent-Based Model, Simulation, Genetic Algorithm

Long abstract

We propose an agent-based model to investigate the effects of policies against poverty – income support, workfare policies and active labor market programs.

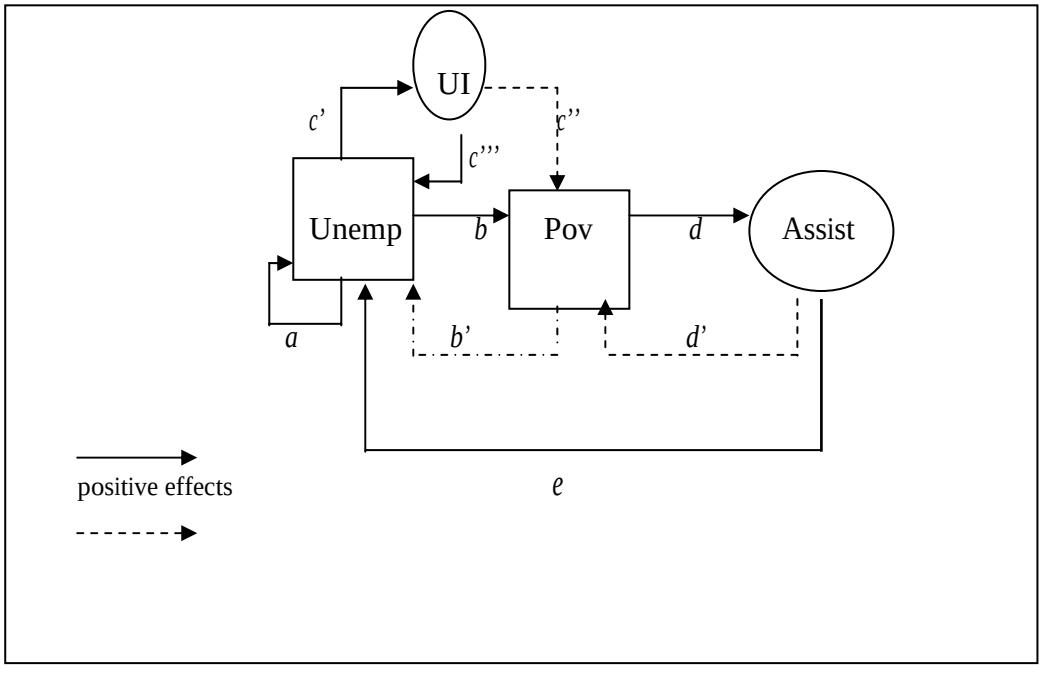
There is a robust evidence both in the theoretical and the empirical economic literature that passive programs as minimum income schemes can provide strong disincentives to work, and thus lead to a "welfare trap". A rational individual does not choose to work if welfare is too convenient. Thus, the first obvious object to look at is **unemployment**: how many individuals are unemployed? for how long?

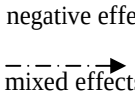
The explicit aim of these programs is to take people out of poverty, or at least to reduce poverty intensity. If the benefit is high enough to reach the poverty threshold, there are no time limits and the take-up rate is 100%, then poverty is automatically defeated (but this would be much too expensive). Otherwise, when benefits are low and support is not always granted until the end of the poverty spell - if skills and social networks deteriorate with time elapsed in unemployment people may remain trapped into poverty. In this light, the number of poor and the length of **poverty** spells are also relevant outcomes.

Finally, **welfare participation** and duration of welfare spells are obviously other objects to monitor.

A qualitative model describing the possible causal links occurring between work/unemployment, poverty and social assistance in a given environment is sketched in fig. 1 (for details, see Contini, Negri; 2005). Both rational choice and "psycho-social" effects are taken into account.

Fig. 1 Links among work/unemployment, poverty and income support measures
Source: Contini, Negri (2005)





Causal effects of income support provided by social assistance are represented by arrows *d'+b'* (disincentive effects of the subsidy, increasing reservation wage), and by arrow *e* (the potential corruptive effects related to psychological and cultural factors).
The first safety network is provided by unemployment insurance (UI) – which however can contribute to unemployment persistence (relation *c'''*) – followed by social assistance when eligibility for unemployment benefits has expired. Institutional features substantively affect some of the relations. Take for example social assistance:

- relation *d*: depends on *eligibility rules* (related to the universalistic vs. category based orientation of policies and to the income threshold);
- relation *d'*: current disposable income (and thus being/not being poor) is dependent on the *level of the subsidy*;
- relation *b'*: reservation wage depends on current non-labor income, but also on future income expectations, which are related to the amount of the benefit and to *expected duration of the allowance*;
- relation *e*: if social assistance is highly *stigmatized*, psychological and cultural effects are likely to be stronger; the relation is also affected by the existence and features of *activation measures*, aimed at reinsertion of the poor into the labor force;
- all relations are also affected by the existence of informal rules working at the local level, and thus by how policies are actually implemented.

The environment can be characterized in terms of features of the labor market (a distribution of wages and a distribution of job opportunities, for example), and by other features of welfare regimes, in particular of other social policies which are likely to affect individual's preferences for work or leisure.

In the paper we implement an operational version of the model by Contini and Negri, by specifying simple functional forms for each of the above links. We then implement an agent-based model, where individuals only choose whether to search for a job, whenever unemployed. Individual choices are selected by a genetic algorithm, which maximizes individual utility.

We sketch a number of different environments, that may be considered as representative of different countries/situations/etc., and see how the different forces outlined above affect the outcomes of interest (on unemployment, poverty and welfare participation dynamics). This could provide some indication on which policy works better in each environment. Our model remains at a theoretical level; we let the calibration of the parameters for future research.