

Workfare versus Welfare: Incentive Arguments for Work Requirements in Poverty Alleviation Programs

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Introduction

- ▶ How should govt design poverty alleviation programs?
- ▶ Should these programs require a work condition or not?
- ▶ Work requirements provide incentives to earn. Two potential incentives arguments are :
 - ▶ A screening argument that work requirements may serve as a means of targeting transfer.
 - ▶ A deterrent argument that they may serve as a device to encourage poverty-reducing investments

Screening Argument

- ▶ It is very costly to set up a proxy means testing type rule to target poor. It is particularly costly for developing countries that lack the administrative capacity and data.
- ▶ In such situations, it may be better to make the relief system self-targeting by laying down conditions for claiming support such that only the truly needy present themselves.
- ▶ Even in developed countries, you might observe the earned income but not the potential earnings and therefore there remains an argument for screening through workfare.

Deterrence Argument

- ▶ This relies on the question whether people are poor by choice i.e, they do not want to work or because of bad luck i.e, they could not find work.
- ▶ In case of latter, public assistance can distort incentives (such as divorce if single parents get more benefits).
- ▶ Therefore public assistance should be made less attractive by creating some deterrence.

Baseline Poverty Alleviation Program (PAP) with perfect information I

- ▶ We consider a population consisting of n individuals, divided into two types according to their income-generating ability or wages, $a \in \{a_L, a_H\}$, where $a_L < a_H$ and where H stands for high and L stands for low. A fraction γ has ability a_L . Each individual has identical quasi-linear preferences defined over income y and work l . Thus, utility is given by $y - h(l)$ where $h(\cdot)$ is increasing and strictly convex.
- ▶ A PAP is pair of benefits and costs $\{b_i, c_i\}$. b_i is benefit for individual of type i and c_i is the cost.
- ▶ The cost to govt is $n\gamma b_L + n(1 - \gamma)b_H$
- ▶ The govt's objective is to minimize cost and ensure each individual gets at least z dollars.
- ▶ Both types of individuals choose whether to claim benefits.

Baseline Poverty Alleviation Program (PAP) with perfect information II

- ▶ The private sector labor supply if individual accepts the program is

$$l(b, c, a_i) = \begin{cases} \hat{l}(a_i) - c & \text{if } c \leq \hat{l}(a_i) \\ 0 & \text{otherwise} \end{cases}$$

where $\hat{l}(a_i)$ is the labor supply of individual of type i in the absence of the program.

- ▶ A work requirement smaller than $\hat{l}(a_i)$ will result in equal reduction in private sector labor supply.
- ▶ There is no income effect and therefore labor supply is independent of b_i . Your optimal total labor supply is still same, but it is now divided between private and public sector.

Baseline Poverty Alleviation Program (PAP) with perfect information III

- ▶ Total private sector earnings given this labor supply are

$$y(c, a_i) = \begin{cases} a_i(\hat{l}(a_i) - c) & \text{if } c \leq \hat{l}(a_i) \\ 0 & \text{otherwise} \end{cases}$$

- ▶ Therefore total utility v is

$$v(b, c, a_i) = b + y(c, a_i) - h(l(c, a_i) + c)$$

- ▶ The individual voluntarily accepts the program if and only if $v(b, c, a_i) \geq v(0, 0, a_i)$
- ▶ Assume that only one group will be eligible i.e $y(0, a_H) > z > y(0, a_L)$.
- ▶ In baseline case, assume that a_H and a_L are exogenous and observable. Then, policy maker minimizes the cost and follows two constraints:

Baseline Poverty Alleviation Program (PAP) with perfect information IV

- ▶ Voluntary participation constraint: $v(b, c, a_i) \geq v(0, 0, a_i)$ for both types of individuals.
- ▶ Poor (a_L) must escape poverty and end up with z earnings i.e., $y(c_L, a_L) + b_L \geq z$.
- ▶ The solution is that high-ability individuals should not get any transfer while low ability individuals should get a transfer of $z - y(0, a_L)$. However, they should not be required to work as that would just reduce their private sector labor supply and increase benefits while public program do not have any benefit to society.
- ▶ This is our benchmark PAP with perfect information.

Screening Argument I

- ▶ Suppose policy maker cannot observe potential or actual earnings of individuals.
- ▶ Then, PAP is not implementable. The optimal policy now depends on govt's information set. There are two cases:
 - ▶ Govt cannot observe both potential and actual earnings.
 - ▶ Govt can observe actual earnings but not potential earnings.

Unobservable private sector earnings I

- ▶ Now you need incentive capability constraint that $v(b_L, c_L, a_L) \geq v(b_H, c_H, a_L)$ and $v(b_H, c_H, a_H) \geq v(b_L, c_L, a_H)$. Essentially, we want that each individual to choose the program that is best for them.
- ▶ If you cannot choose the work requirement, then obvious solution to these constraints is $b_L = b_H$.
- ▶ However, with work requirement for low type workers, one can introduce the self-selection.

Unobservable private sector earnings II

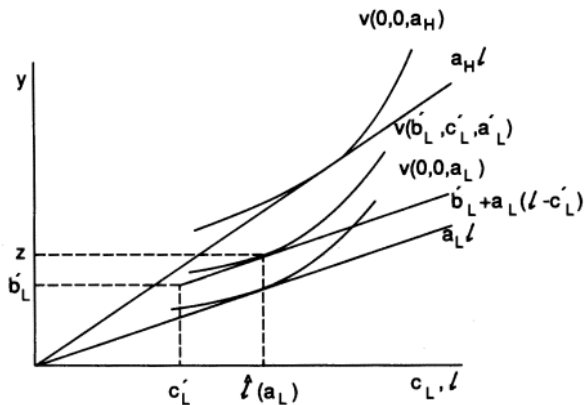


FIGURE 1. THE PACKAGE (b'_L, c'_L) SEPARATES THE TWO TYPES OF INDIVIDUALS

Unobservable private sector earnings III

- ▶ There is now an extra cost because low ability individual reduces private sector labor supply and work c is not productive. So, govt has to balance this trade-off.
- ▶ Govt chooses optimal separating work requirement c_L^s such that high ability individuals are indifferent between choosing the program and not choosing the program while at the same time it is sufficient to get the poor to poverty line z . This is given by

$$v(0, 0, a_H) = v(z - y(c_L^s, a_L), c_L^s, a_H)$$

- ▶ This leads to our 2nd proposition:
PROPOSITION 2: If both income-generating abilities and incomes are unobservable, one of the following two PAP's is cost minimizing:
 1. (welfare) impose no work requirements and offer both ability groups a transfer of $z - y(0, a_L)$

Unobservable private sector earnings IV

2. (ii) (workfare) offer self-categorized high-ability individuals no benefits and offer self-categorized low-ability individuals a transfer of $z - y(0, a_L)$ and require them to work c_L^s .
- ▶ The choice between these two solutions trades off the savings from giving no transfers to the nonpoor against the cost of reducing the poor's private-sector earnings.
 - ▶ This depends on the relative size of the two groups and their respective wage rates or abilities.
 - ▶ Workfare is more likely to be optimal when the low-ability group is relatively small and their wage rate is relatively high. In this case, loss in earnings due to reduction in labor supply of this group is small.

Optimal Workfare Requirement

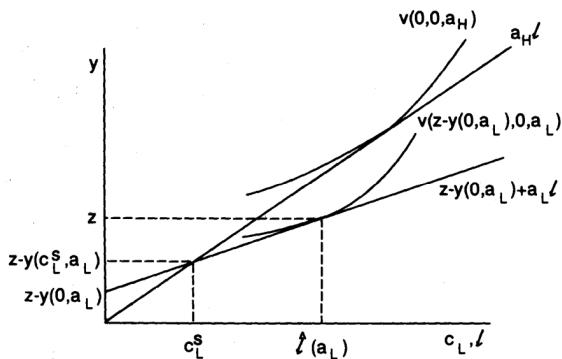


FIGURE 2. ILLUSTRATION OF THE SOLUTION DESCRIBED IN PROPOSITION 2

Observable private sector earnings I

- ▶ Now, the policy maker can observe actual(private sector) earnings but not potential earnings.
- ▶ Now you can separate poor vs non-poor to some extent by observing their private sector earnings.
- ▶ So, rich people will have to earn less in private sector and given their high wage rate, it can be costly to reduce their private sector earnings.
- ▶ So, now value of masquerading is lower for the rich.
- ▶ Therefore, benchmark PAP is implementable if and only if $v(0, 0, a_H) \geq z - h(\frac{y(0, a_L)}{a_H})$.
- ▶ So, a high-ability individual prefers claiming no benefit to reducing his labor supply to $y(0, a_L)/a_H$.

Observable private sector earnings II

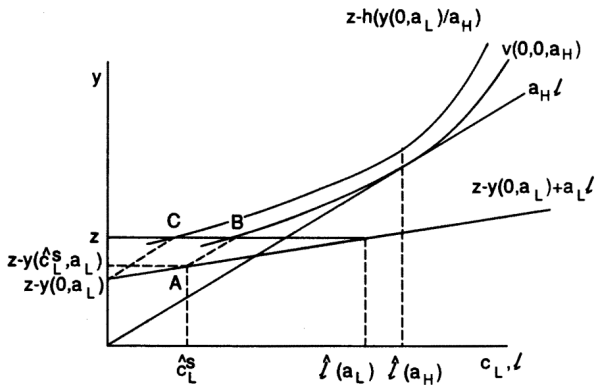


FIGURE 3. ILLUSTRATION OF THE SOLUTION
DESCRIBED IN PROPOSITION 3

The Deterrent Argument I

- ▶ The deterrent argument is that people are poor by choice and therefore public assistance can distort incentives. Model this as effort that can increase the wage rate.
- ▶ *Proposition 4* : If income-generating abilities are observable but depend partly on choices made earlier in life, the cost-minimizing PAP either imposes no work requirements and offers low-ability individuals a transfer of $z - y(0, a_L)$, or imposes the maximal work requirement C_L^m on low-ability individuals and offers them a transfer of $z - y(0, a_L)$
- ▶ C_L^m is requirement that would make them indifferent between status quo and participating into the program.

The Deterrent Argument II

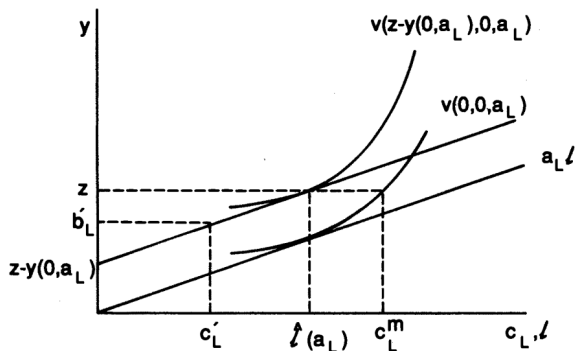


FIGURE 4. ILLUSTRATION OF THE MAXIMAL
WORK REQUIREMENT, c_L^m

Conclusion

- ▶ The paper provides a framework to think about the workfare vs welfare debate.
- ▶ It shows that workfare can be optimal in some cases.
- ▶ It also shows that the optimal workfare requirement depends on the relative size of the two groups and their respective wage rates or abilities.
- ▶ The cost of workfare is that it crowds out private sector labor supply and therefore increases costs of poverty alleviation and size of the benefits.
- ▶ However, the benefit of screening through workfare is that reduces transfers to the poor.
- ▶ For deterrence , Workfare can only be an effective deterrent if the amount of work demanded is considerably in excess of that which poor individuals would do in the absence of intervention. However, this relies on the fact that govt cares about income not welfare.