

Summary of Rosen, Manufactured Inequality

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September 12, 2018

Part I

Introduction

This paper focus on state dependence that distribute people with different income to live in different areas i.e. city or rural. The paper states indivisibilities in labor market and other life choices-for instance, that people live and work in only one location and not in several at once, or that students choose only one occupation, and not a multitude of them- can create incentives for voluntary distribution, for private participation in monetary gambles that create permanent differences in wealth among identical, risk averse people. External effects change one's taste but people making these choices know and take account how circumstances will affect their preferences. For instance, richer people would choose to live in city where marginal utility of material goods-the kind that money can buy- is higher while poorer people stay at rural area where margin value of goods are lower-there are not many choices of good.

Part II

Model

Preferences take the form

$$\begin{aligned} u(c, z) &= c^\gamma z \\ c &= \text{consumption of material good} \\ z &= \text{quality of residence} \\ 0 &< \gamma < 1 \end{aligned}$$

The person is risk averse and the marginal utility of consumption, $\gamma z c^{\gamma-1}$ is larger in better locations. Assume two locations, z_l and z_h with $z_l < z_h$. The better location is limited in supply, and sites are available in competitive price. Price of low-quality location are unlimited in supply and sell for a competitive price of zero.

A person choose the location with the largest indirect utility, which is $u_j = (y - r_j)^\gamma$ for $j = l, h$. Define the reservation price r^* as the value of r_h that makes the person indifferent between the two locations. Equal indirect utility in both locations imply that $r^* = y[1 - (z_h/z_l)^{-1/\gamma}]$ is an increasing function of income, y . People choose the locations according whether to their value of r^* is greater or less than the market price r_h . Assume y is distributed as $F(y)$. Then the fraction of population desiring to live at z_h is $1 - F(r_h/[1 - (z_h/z_l)^{-1/\gamma}])$. This is the percentage of people whose income exceeds $r_h/[1 - (z_h/z_l)^{-1/\gamma}]$. If the number of desirable locations is limited and only a fraction of k of the population can live there, the market equilibrium must equate demand and supply at rent $r_h = [1 - (z_h/z_l)^{-1/\gamma}]F^{-1}(1 - k)$. Market rent is decreasing in k and increasing in (z_h/z_l) and in

the mean of y . Everyone above the k th percentile of the income distribution lives in z_h , and everyone below lives at z_l . Then, we have

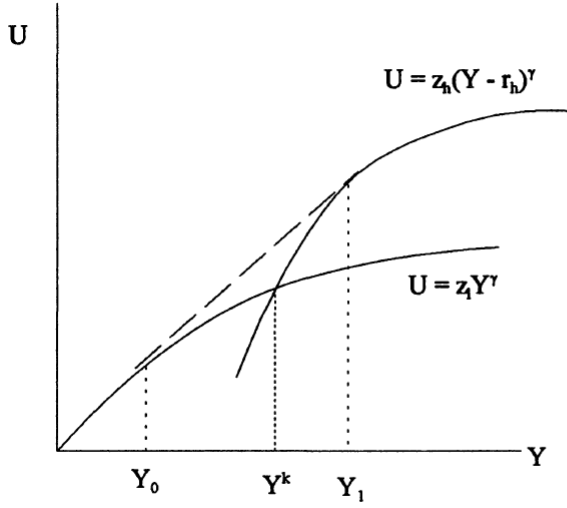


FIG. 1

Anybody whose income is near y^k is effectively risk loving, and will accept unfair gambles. If actuarially fair gambles were available, all those whose income between y_0 and y_1 make bets that will ultimately land them at one of those two incomes, with the amount wagered depending on the precise location of the initial income in that interval. In effect, gambling here is socially productive in providing possibilities for living on the more desirable high-rent properties and raising the marginal utility of income.

Had the initial distribution of income between y_0 and y_1 , there would be no demand for gambling because the income distribution is sufficiently heterogeneous on its own to achieve the equilibrium amount of stratification. In other words, people voluntarily engaged in subsidiary redistributive actions that create stratification if there is not enough difference in income.

Discreteness of the choice set is not essential. If we add an intermediate quality site z_m where $0 < r_m < r_h$, the market assignment of land remains completely stratified by personal income distribution line up with the same percentiles of distribution of land by quality. The envelope now consists of three conditional functions and the convex intervals between adjacent pairs that are smaller than in figure 1. Nevertheless, the envelope may still be globally convex, as in figure 2, and provoke gambles.

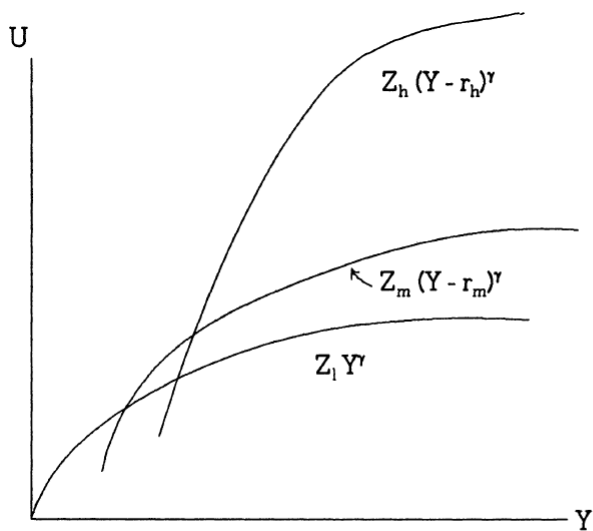


FIG. 2

Part III

Conclusion

Incentives to participate in lotteries of durable good purchases and the like would appear to be lessened by well functioning capital markets that allow people to bring their lifetime utility resources to bear their decisions. For instance, hire-purchase loan make ordinary durable goods purchases accessible to people of relatively modest means without gambling in rich countries such as United States.