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What Has Economics to Say About Racial Discrimination?

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Racial discrimination pervades every aspect of a society in which it is found. It is found above all in attitudes of both races, but also in social relations, in intermarriage, in residential location, and, frequently, in legal barriers. It is also found in levels of economic accomplishment; that is, income, wages, prices paid, and credit extended. This economic dimension hardly appears in general treatments of economics, outside of the specialized literature devoted to it. Nevertheless, it is important not only in itself but as a test of standard theories.

There is no way of separating completely the study of racial discrimination (or indeed many other aspects of economics) from moral feelings. There are many modern varieties of liberalism, which draw the boundaries between social and individual action in different places, but all agree in rejecting racial discrimination, by which is meant allowing racial identification to have a place in an individual's life chances. It is, of course, important to be analytic; moral feelings without analysis can easily lead to unconstructive policies.

It is natural to suppose that economic analysis can cast light on the economic effects of racial discrimination. But its pervasiveness must give us pause. Can a phenomenon whose manifestations are everywhere in the social world really be understood, even in only one aspect, by the tools of a single discipline? I want to explore here the scope and limits of ordinary economic analysis for understanding racial discrimination even in markets.

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Some Empirical Constraints on Theory

We must start with a simple observation. Before any legal steps were taken to address economic discrimination, it existed in perfectly open form, with no need for subtle economic analysis. Darity and Mason, in their paper in this volume, do well to remind us that help-wanted advertisements stated racial preferences plainly, without even the fig-leaf of a code. I can speak as a witness here. It was simply well-known that most good jobs were not available to blacks. Not only employers but also labor unions, particularly craft unions, were explicit on maintaining the color bar. During the U.S. participation in World War II, the no-strike pledge by labor unions was well-honored, with one glaring exception: when the Philadelphia rapid transit system, caught in the wartime labor shortage, tried to hire blacks, the workers went on a successful strike to prevent the attempt.

Residential discrimination was of course also overt, enforced primarily through voluntary choice by sellers, but also by covenants attached to the land. About 1950, I looked into joining a cooperative housing development, the members of which were primarily Stanford faculty, known liberals. I expressed my dismay on finding a clause limiting non-white participation to 10 percent of the whole. I was assured that it was considered a radical and courageous act to set the proportion above zero and that there could be no mortgage financing if they went further. Intermarriage was rare in the north and illegal in many states. Cafeterias in at least some U.S. government departments would not serve blacks as late as World War II. Strict segregation in the military during World War II, including exclusion from combat, was the norm.

In virtually all southern states, there were explicit ''Jim Crow'' laws requiring segregation in public facilities, transportation, and education, and their existence reflected social attitudes. But the phenomena just discussed occurred also in the parts of the economy not directly governed by legislation.

The presence of racial discrimination throughout American society was, to use the words of Samuel Johnson, a fact ''too evident for detection and too gross for aggravation.'' To establish the existence of discrimination, estimating wage equations would have been beside the point. Of course, society and scholars would want to know the quantitative implications of discrimination for income as well as other indices of well-being. But the fact of discrimination would not have needed testing.

One point of this reminder of the past is to remind us that any theory of racial discrimination, including any theory of its economic implications, has to be consistent with these patent facts. A second point is to raise the possibility that such a widespread set of values is likely to change only slowly. This is not to deny that value changes have occurred and are occurring. It is to suggest that there is likely to be a large residue of discriminatory values and the values that arise among those discriminated against even after the slightly more than 30 years since the passage of the Civil Rights Act. A third point is that the passage of legislation means that the gross evidence available before 1964 is no longer at present. We

are forced to resort to indirect inferences, such as those in the other papers in this symposium.

There was another more specific aspect of labor market discrimination that is well-known to economic historians but seems to have played little role in macroeconomic explanations.[1] As Higgs (1977) and Whatley and Wright (1994) have shown, black and white wages for the same job very frequently differed but little. Discrimination mainly took the form of limiting the range of jobs in which blacks were hired at all. The form which racial discrimination took was the same as in residential segregation. It was not that blacks were charged higher rents for the same residence but that they were excluded from certain (most) areas.

Is there evidence of racial discrimination in the economy today? I have to take the evidence given in the three accompanying papers as decisive. Especially striking are the audit studies on differential treatment in the housing and automobile markets, reported on by Yinger. While one can always invent hypotheses to explain away these results, there is really no reason not to draw the obvious conclusions. There is also convincing evidence of discrimination in the mortgage market. In addition, we have the strong evidence presented in Massey and Denton (1993), not cited in the three papers published in this issue, that residential segregation by race is extremely high. Any conceivable explanation, whether by discrimination in the housing market or by voluntary choice based on racial preferences for neighbors, is based on racial discrimination.

To summarize, we have clear evidence that blacks were in the past excluded from a significant range of good jobs and from the purchase of housing and restaurant services. We have very strong evidence that these practices persist in some important measure. I am going to suggest in this paper that market-based explanations will tend to predict that racial discrimination will be eliminated. Since they are not, we must seek elsewhere for non-market factors influencing economic behavior. The concepts of direct social interaction and networks seem to be good places to start.

Economic Theory and Racial Discrimination—Some Generalities

What light can standard economic analysis cast on answering this question and on analyzing the causal factors? Can the broad facts, inadequately summarized above, fit into a mold to which economic theory can apply?

The answer depends in part as to what we mean by economic theory. Certainly, ''rational choice theory'' is broader than ''economic theory.'' Rational choice the-

[1] What has been studied in the literature is the *effect* of segregated employment on the wages of the group discriminated against. The first paper is that of Millicent Fawcett (1892!), with reference to gender discrimination. Her work was cited and elaborated upon by Edgeworth (1922) and the idea rediscovered and developed empirically in a noteworthy article of Bergmann (1971).

ory means that the individual actors act rationally (that is, by maximizing according to a complete ordering) within the constraints imposed by preferences, technology, and beliefs, and by the institutions which determine how individual actions interact to determine outcomes. Further, the beliefs are themselves formed by some kind of rational process. By economic theory, we mean that in some sense, markets are the central institution in which individual actions interact and that other institutions are of negligible importance.

The theoretical picture of a market is one of impersonal exchange. I confine myself to the competitive case. At a given price (or, more precisely, given all prices), individual agents choose how much to supply and how much to demand. These supplies and demands are simply added up; when the prices are such that total supply equals total demand in each market, equilibrium prevails. There is no particular relation between a supplier and a demander; that is, a supplier is indifferent about supplying one demander or another, and vice versa. This is not a bad description of highly organized exchanges, such as securities and futures markets, but hardly complete for even most commodity markets, let alone the labor and credit markets. Suppliers and demanders have direct personal relations, even or perhaps especially among sophisticated agents, as in interindustry trade.[2] Certainly, employment of labor involves direct personal relations between employee and employer (or the latter's agents) as well as among employees. Similarly, credit relations other than those represented by marketable securities have typically required direct personal interaction between debtor and financial institution.

Nevertheless, most of economic analysis, within the range in which it is applicable, presupposes that the market idealization gives at least a reasonable approximation for the purposes of predicting prices and total quantities. Let us ask whether a market-based model can broadly satisfy the empirical constraints suggested in the preceding section.

On the usual interpretation, it cannot. If the members of the two races, after adjusting for observable differences in human capital and the like, received different wages or were charged different prices in commodity or credit markets, an arbitrage possibility would be created which would be wiped out by competition. Most analysts, following Becker (1957), add to the usual list of commodities some special disutility which whites attach to contact with blacks, taste-based discrimination. Many variations are possible; dislike by employers, dislike by white workers or by foremen, or whatever, as in Welch (1967) or Arrow (1972a, 1972b, 1973).

The trouble with these explanations is that they contradict in a direct way the usual view of employers as simple profit-maximizers. While they do not contradict rational choice theory, they undermine it by introducing an additional variable. First, consider the simple hypothesis of employer discrimination. If employers have

[2] White (1995) has argued persuasively that product differentiation as an active strategy presupposes that the relations among the economic agents are not anonymous.

one variable other than profits in their maximands, why not others? Indeed, other such variables have been hypothesized from time to time—for example, effort (Hicks, 1935; Scitovsky, 1943), growth or size (Marris, 1964; Baumol, 1959), or retention of control by withholding information from employees (Marglin, 1974)—and it would be easy to state many others that may or may not have appeared in the literature.

There are at least two objections to this line of analysis. One is that introducing new variables easily risks turning the ''explanation'' into a tautology. Molière had one of his characters explain sleep as the result of an accumulation of the ''dormitive principle''; opium's effects were due to the fact that opium possessed a large quantity of the dormitive principle, and so forth. This was clearly intended as a parody of scientific discourse, and it certainly would be a parody of economics to multiply entities in this anti-Occamian fashion. Perhaps more serious is the neglect of Darwinian principles. Presumably the population of employers is not uniform in its discriminatory tastes. Then, under the usual assumption of constant (or increasing) returns to scale, competition would imply the elimination of all but the least discriminatory employers. If there are any non-discriminatory employers, they would drive out the others.

A further objection to the hypothesis that racial wage differentials arise from employer discrimination is that large corporations hire a major fraction of the labor force. Attributing taste to impersonal entities is a hypothesis of dubious usefulness. It is hardly in the stockholders' interests to discriminate under the postulated condition, and competition in the capital market should be effective in eliminating discrimination. Finally, the hypothesis of employer discrimination does not at all explain segregation by occupation.

An alternative hypothesis is that labor market discrimination is due to discriminatory tastes of other employees. In the case of large corporations, for example, it would be those of the executives, although other scenarios have been advanced. But then it is easy to see that in simple cases, the natural equilibrium would be segregation within an industry—that is, firms with either all black or all white labor forces. (Some of these arguments appeared in my papers cited above.) The matter is a little more complicated when there are complementary labor inputs, like foremen and floor workers or skilled and unskilled labor. If for some historical reason, the foremen, for example, are all white and require compensation for working with blacks, then racial differences in wages will appear. But if foremen differ in their discriminatory tastes, then the less discriminatory will receive higher wages for working in plants with higher proportions of black floor workers. This implication has not been tested, but certainly seems dubious. Again, in any case, the model of worker-based discriminatory tastes may explain segregation within industries but not segregation by occupation.

Finally, what can market-based theories make of discrimination against black consumers? Sellers of houses and mortgages have refused to sell to black customers and still refuse to some extent. It is hard to think of any market–based explanation for

refusal to sell. Sellers of automobiles sell to black customers only at higher prices. Why does not competition prevent this discrimination, according to well-known arguments?

Statistical Discrimination

Modern economic theory for the last 30 years has emphasized how information or, more properly, beliefs and expectations influence economic behavior. These beliefs may in turn be based on some kind of evidence; the rational choice theory implies that beliefs contradicted by experience will not survive. In the present context, this has given rise to the theory of statistical discrimination. Suppose blacks and whites do in fact differ in productivity, at least on the average. This is in turn due to some cause, perhaps quality of education, perhaps cultural differences; but the cause is not itself observable. Then the experience of employers over time will cause them to use the observable characteristic, race, as a surrogate for the unobservable characteristics which in fact cause the productivity differences (Phelps, 1972; Arrow, 1972a, b, 1973; for a more recent version, see Lundberg and Startz, 1997). This is a market-based explanation which does not require tastes for discrimination.

If there are a number of observable variables, such as quantity of education, then the hypothesis of statistical discrimination implies that an estimate of wages based on these observables will be significantly improved by adding race as a predictor. But this is the same conclusion as arrived at by hypothesis of market-based discrimination based on taste.

Can one distinguish between statistical and taste-based discrimination? Clearly, to do so in the case of the labor market depends on the ability to observe a measure of the individual's marginal productivity. Unfortunately, such data do not in general exist. Parallel evidence may be better found in the mortgage market. The evidence, as summarized by Ladd in this symposium, is not very extensive, but it suggests that, given the observed variables, blacks do default somewhat more. If discrimination were taste-based, we would expect the opposite.

Of course, it is not very satisfactory to postulate that the unobserved determinants of performance just happen to be correlated with race. The hypothesis that statistical perceptions change behavior as well as reflect it is alluded to by Darity and Mason toward the end of their paper and was earlier formulated by Arrow (1972a, b; 1973) and Coate and Loury (1993). To prepare to work requires investment by the worker. Not all of this investment is observable; it may require changes of habits and attitudes towards work, and diligence in school and home tasks, to give some examples.[3] If the employer is going to judge by race, then there is no

[3] In evidence surveyed a long time ago by Bowles and Gintis (1976, ch. 13), it was observed that job performance was better forecast by habits and behavior of students than by their grades or achievement test scores.

reward for these investments. They will not be acquired, and then the statistical judgments will be confirmed.

The discussion of statistical discrimination so far assumes that the employers or creditors use all the information available throughout the economy. In Bayesian terms, the posterior information is sufficiently rich to make the contribution of the prior minimal. But of course this is not so. Each employer has a very limited range of experience, and so prior beliefs can remain relatively undisturbed. Indeed, to the extent that discrimination takes the form of segregation, then there will in fact be little experimentation to find out abilities. As Whatley and Wright (1994) point out, the very fact of segregation will reinforce beliefs in racial differences.

Social Interactions and Networks

Enough has been said to suggest that market-based theories give an inadequate account of the effects of racial discrimination on economic magnitudes and the effects of the economic system on racial discrimination. It is increasingly recognized that many social interactions with economic implications are not mediated through a depersonalized market, but rather through the cumulative effect of individual choices. An early example is Schelling's (1971) analysis of residential segregation. He started with preferences towards the races of neighbors but pointed out that even mild discriminatory attitudes, if widespread, might lead to a very segregated equilibrium. Implicitly, he assumed that it was not possible to have discriminatory prices in a given location, for example, lower rents for whites in predominantly black neighborhoods.

The hypothesis that prices do not reflect every kind of social interaction, even those of economic importance, is used in many contexts. Every now and then, economists studying the labor market have found it important to postulate some kind of rigidity of relative wages. For example, Dunlop's (1957) study showed that the wages of the same occupation, truck drivers, varied with the general wage levels of the different industries which employed them. Similarly, a frequently-maintained hypothesis about unemployment is that there is some fair level of wages which must be maintained (for example, Hahn and Solow, 1995, ch. 5).

I intend these points as an illustration of a more general principle—that beliefs and preferences may themselves be the product of social interactions unmediated by prices and markets. This concept has been the object of significant theoretical research recently (for example, Blume, 1997; Durlauf, 1997a, b) and empirical application to the frequency of criminal activity (Glaeser, Sacerdote, and Scheinkman, 1996).

Another variation of the theme that social linkages alter resource allocation processes is found in the concept of social capital that was introduced by Loury (1977), developed by Coleman (1990, ch. 12) and used empirically, among others, by Putnam (1993) and Borjas (1992). These scholars have hypothesized that a dense

network of social connections, even though developed for noneconomic purposes, will enhance both political and economic efficiency. Admittedly, the concept of social capital is very hard to pin down in an explicit model, but enough has been done to show its importance.

I want to conclude by concentrating on one particular type of social structure which has already shown its applicability to the labor market, the network of acquaintances and friends. Sociologists and some economists who have worked in this area have shown by careful empirical work that a very large fraction of the jobs are filled by referrals by current employees. There are many such studies; for especially careful and definitive ones, see Rees and Shultz (1970, ch. 13) and Granovetter (1974). The network concept of labor allocation differs considerably from a market. It is indeed very easy to say how social segregation can give rise to labor market segregation through network referrals. Discrimination no longer has any cost to the discriminator; indeed, it has social rewards. Profit maximization is overcome by the values inherent in the maintenance of the network or other social interaction. The methodological demands which are satisfied by a network approach have been outlined by Granovetter (1988) and White (1995). More definite modeling of networks in the labor market still needs to be done. Clearly, the anonymous market, in which in effect every seller is connected with every buyer, is one extreme of a network. Intuitively, it is clear that a sufficiently dense network will mimic a market (Kranton and Minehart, 1997). But the empirical accounts of employment suggest instead a network with relatively few links compared with all those possible.

The main point is that personal interactions occur throughout this process, and therefore there is plenty of room for discriminatory beliefs and preferences to play a role which would be much less likely in a market subject to competitive pressures. The network model seems most appropriate for the labor market, and perhaps less so for the housing, automobile, and credit markets. But in all of these, each transaction is a social event. The transactors bring to it a whole set of social attitudes which would be irrelevant in the market model.

Models of racial discrimination in which all racial attitudes are expressed through the market will get at only part of the story. At each stage, direct social transactions unmediated by a market play a role. Even the market manifestations will be altered by these direct social influences.

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