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Economics of Discrimination: A Brief Review of Literature

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Abstract

The survey of literature summarizes the key contributions on theoretical literature of economic discrimination. Three theories of discrimination are found in the economic literature: (1) neo-classical, which includes non-stochastic and stochastic versions; (2) institutional; and (3) Marxian. The neo-classical theory of discrimination is almost entirely a demand-side theory. Institutional theory of discrimination though it can be presented as an alternative to neo-classical theories, can also be viewed as a complementary attention to such factors as historical contexts, "pre-labour-market" discrimination against minorities, and a variety of societal factors. Marxists argue that because capitalism is based on gross inequality, it requires various tools to divide the majority like racism and all other forms of discrimination. The present article confines itself to the theoretical literature of economic (primarily labour market) discrimination.

Key words: discrimination, neo-classical, institutional, Marxian.

The review summarises the key contributions made by different economists on present theoretical literature of economic inequality and discrimination. Economic discrimination may be defined as long lasting inequality in economic well-being among individuals based on their colour, gender, or ethnic ties. Second, economic discrimination is also defined as differences in pay or wage rates for equally productive groups which again can be based on non–productivity related factors. Economic discrimination refers to a group rather than to an individual, and it is of greater concern as it persists over time. The present article emphasizes the second definition of economic discrimination. Three theories of discrimination are found in the economic literature: (1) neo-classical, which includes non-stochastic and stochastic versions; (2) institutional; and (3) Marxian. The author has tried to summarize the core of existing theoretical literature based on all these three views.

According to Boyer and Smith (2000), the neoclassical approach to discrimination went through at least three generations. The first, according to them, originated with Alfred Marshall and other late 19th century marginalists. Then, starting in the early 1930s, a second generation appeared, centred on John Hicks and Paul Douglas. Next, a third generation of neo-classical economists rose to power and influence, beginning in the late 1950s-early 1960s. The most important contributors of this group were located at the University of Chicago and included people such as H. Greg Lewis, George Stigler, Jacob Mincer and Gary Becker. Neo-classical writers look at discrimination as an "aversion," i.e., a taste, which when indulged costs the discriminator, who may be employer, worker or consumer. The first statement of neo-classical theory of discrimination was by Edgeworth (1922), where he had advocated "Equal pay to equal work" in the sense of free competition among the sexes with some reservation and adjustments. Discrimination as defined by Kenneth Arrow is "the valuation in the market place of personal characteristics of the worker that are unrelated to worker productivity." Personal characteristics can be features such as sex or race, or other characteristics such as a person's religion, caste or national origin. Becker (1957) pioneered the modern study of discrimination in neo-classical economics with his "taste" model. He argued that employers, workers or customers may have a "taste for discrimination." By it he meant that they have a preference not to hire, work with or buy from a group, such as blacks. A "taste" for discrimination implies that discriminators are willing to pay a

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price to discriminate. Some employers discriminate in response to their customers' or workers' tastes rather than because of their own discriminatory tastes. Becker viewed tastes for discrimination to be determined outside the market. Here he was following the neo-classical assumption that all tastes are exogenous to economic models. In later work, he suggested that tastes are randomly distributed and unchanging (Stigler & Becker, 1977). The prejudice for discrimination might be held by the customer (Borjas & Bronars, 1989) or by the co-worker (Buffum & Whaples, 1995)[1] also. Arrow, in his analysis and reformulation of Becker's model of employer discrimination, arrived at the conclusion that competitive market forces tend to drive discrimination toward zero. "Only the least discriminatory firms survive. Indeed, if there were any firms which did not discriminate at all, these would be the only ones to survive the competitive struggle" (Arrow, 1973, p. 10). Arrow concludes, "It [Becker's model of employer discrimination] predicts the absence of the phenomenon it was designed to explain" (Arrow, 1972, p. 192). There are both supporters and opponents of Becker's original proposition. Epstein (1992) writes in support of Becker, "competitive markets with free entry offer better and more certain protection against invidious discrimination than any anti-discrimination law." Coleman (2002) dismisses Becker's proposition as a largely unsubstantiated belief in "the magic of the market place."

Neo-classical economic theory suggests existence of "statistical discrimination" (originally proposed by Phelps, 1972). Examples of statistical discrimination include wage or hiring decisions in labour markets, racial profiling in law enforcement and determinants of loan approval rates or differential premiums for insurance. In some settings, statistical discrimination is legal and acceptable (for example, insurance rates); whereas in others it is controversial and/or illegal (for example, racial profiling and employment discrimination). Existing research has focused on first-moment statistical discrimination: that is, discriminatory wage offers to females or lower loan approval rates for minority applicants are based on average productivity and default rates respectively. Agents attribute average group characteristics to each individual from that group when it is costly to gather information. But using the groups' means to estimate individuals' characteristics results in mistaken predictions about individuals who are qualified in a way unusual for their group to which they belong. Aigner and Cain (1977) have argued that statistical discrimination is not "really" discrimination against a race or sex group. They posit that racial and sexual discrimination should be defined to require that the average pay of women and blacks is less than the average productivities that group members bring to the labour market. They argue that if the group means of productivity are the basis of hiring and pay decisions, racial and sexual groups will receive an average level of pay commensurate with their average productivity. Thurow (1975) shows that any employer faced with differences in work probabilities will practice statistical discrimination (e.g., between men and women as a group) even though there is not a basic taste for discrimination. Though several economists like Polachek and Siebert (1993) indicate that statistical discrimination is advantageous from economic point of view, while economists like Haagsma (1998) argue that there is no firm basis for claiming that the statistical discrimination is always welfare improving. England and Lewis (1989) differentiate "error discrimination"[2] from "statistical discrimination" in that the former involves erroneous estimates of group averages, whereas the latter involves correct estimates of group averages (though even statistical discrimination causes erroneous predictions for individuals who are atypical for their race or sex group). Some authors (Blau, 1984; Bielby & Barron, 1986) include what we are calling "error discrimination" in their definition of statistical discrimination.

Another contribution of neo-classical economists in the theoretical literature of economic discrimination is "monopoly" model of discrimination which talks about members of a group formally or informally colluding and acting monolithically rather than as competing individuals.

[1] Though the paper is based on empirical research (beyond the scope of this article) I have referred to this as it talks of sources of employee-based discrimination.

[2] Describe actions of employers who underestimate the average productivities of a group, and, based upon this mistaken belief, are unwilling to hire group members or will hire them only for a lower wage.

The existing literature also shows that the existence of monopsony firms in the labour market is a source of discrimination. Robinson (1934) provide a consistent model for discrimination by a monopsony firm simply by postulating a more inelastic supply curve of labour for minority workers. One can interpret white workers' and employers' collusion in discriminating against blacks in South Africa with this model (Lewin, 1979). Madden's (1973) monopoly model and Hartmann's (1976) and Strober's (1984) theories of patriarchy see women as being kept out of good jobs by collusion among men, viz., husbands, employers and workers. Cain (1986) indicates that monopoly has two characteristics that permit long-run discrimination: first, a definitional uniformity in tastes since there is only one employer; and second, above-competitive profits. On the other hand, Alchian and Kessel (1962) advanced the view that even where monopolists affect wages in their labour market, they would be unlikely to sacrifice money profits permanently by a policy of (racial) discrimination because profit-maximizing investors would buy them out. Though a regulated monopolist or government monopoly, which was constrained *not* to maximize profits, could indulge in discrimination at no loss in profits and, therefore, offer no incentive for a "takeover". Forming a monopoly in the sale of labour (labour union) can also be a source of discrimination. Institutional research, while divided about the overall discriminatory impact of unions, documents many cases of discrimination by unions [Northrup (1944), Ross (1948), Marshall (1965), Gould (1977), and Hill (1977) among many others].[3] Cain (1986) shows that theoretically even Government's policies with an intention to reduce discrimination turn out to worsen the problem.

Institutional theories of discrimination are a varied group of historical, legal and case-study analyses of labour market discrimination. Sometimes they lack a formal structure and are limited in their generalization. At the same time, these studies are able to deal with more complicated structures than the neo-classical models. They may describe the interrelations of the combined forces of, say, monopolistic industries, trade unions, government regulations and community prejudices. Boyer and Smith (2000) describe evolution of the institutional theory in three generations: the pioneers of the field in the United States; and the most important early contributors came from the first generation of institutional economists (roughly 1890-1940), represented by people such as Richard Ely, John R. Commons and Sumner Slichter. They were then succeeded by a second generation of institutionalists (or "neo-institutionalists") who dominated labour economics from roughly 1940 to 1965. Important names include John Dunlop, Clark Kerr, Richard Lester and Lloyd Reynolds. This group was, in turn, succeeded by a "third generation" of institutionalists (or "neo-neoinstitutionalists"), such as Michael Piore, Peter Doeringer, Paul Osterman and Lester Thurow.

In his survey of the economics of racial discrimination, Marshall (1974) advocate an institutional theory of discrimination which, although presented as an alternative to neo-classical theories, could be viewed as a plea for more complementary attention to such factors as historical contexts, "pre-labour-market" discrimination against minorities, group bargaining, psychological motives of the economic agents, monopoly elements and variety of societal factors Marshall classified as "environmental". Piore (1970) argues that the initial placement of disadvantaged workers into low-wage, low-status jobs creates attitudes and habits that perpetuate their low status. Doeringer and Piore (1971) devised the "internal labour market"[4] theory. Boyer and Smith (2000) develop an article on evolution of neo-classical and institutional tradition in labour market and describe institutional economics as a fact gathering descriptive approach. On the other hand, Kaufman (2002) argues that the essence of institutional economics is not a fact gathering descriptive approach but a paradigm built on property rights, a behavioural model of human agents and theories of imperfect competition.

[3] It comes under "institutional theory of discrimination"

[4] Which refers to structured mobility ladders of jobs within a firm.

Marxist models of discrimination have been developed as a critique the implications derived from Gary Becker and Milton Friedman's conclusion that capitalism and racism are incompatible. These class-based models show that the interests of employers as a class to pay lower wages to blacks than to whites coincide with the interests of an individual employer. They focus on one central aspect of racism that capitalism uses racism to divide workers. According to them discrimination is a profitable tool in which firms engage as a matter of explicit strategy as suggested by some renderings of the dual labour market hypothesis. Based on Marx's analysis that production is a social as well as technical process, these models show that an individual employer can make more profit from a racially divided working class than from a united one. In these models, the level of wages and the average production per worker depend on workers' bargaining power as well as technology. More worker bargaining power means higher wages and lower profits and less bargaining power means lower wages and higher profits. This provides a microeconomic foundation, consistent with profit maximizing behaviour, of disparate on the job treatment of equally skilled black and white workers. It also explains why black workers will not replace white workers, even if the latter can be paid lower wages. Reich et al., (1973) had shown that political and economic forces within capitalism have given rise to and perpetuated segmented labour market and sources of segmentation must be treated as endogenous. Reich (1974) also shows racism interacts symbiotically with capitalistic economic institutions. Roemer (1978) developed the Marxian theory of value and exploitation for an economy where workers are exploited at different rates which are independent of their productivity. He shows that reasons for the emergence and persistence of discrimination in capitalist economies are much more akin to Marxian divide and conquer notion. In this context Roemer (1979) gives micro foundation for a divide and conquer model of wage determination when there are discriminatory equilibria at which both white and black workers are worse off and employers are better off than would be the case without worker dissension. Moreover, the model shows that since the whites are the costlier workers to hire, equilibrium occurs at a point where white workers are hired in that minimal proportion necessary to trigger the dissension effect. Although the equilibrium is discriminatory, it cannot be unravelled. Manson (1992) examines the similarities between Michael Reich's divide-and-conquer model of discrimination and the Becker-Arrow taste model of discrimination. It shows that Reich's model of discrimination is analytically identical to Arrow's employer discrimination model when employer utility is a function of total profits and the racial employment ratio. It also shows that the Becker-Arrow distinction between employer and employee discrimination is invalid. Finally, the author argues that neoclassical competition is the major defect of both models.

Economic discrimination which is usually defined as long lasting inequality in economic well-being among individuals based on their colour, gender or ethnic ties is of greater concern as it persists over time. Therefore, the neo-classical theory which suggests that market forces cause demise of discrimination has faced severe active debates. The present article summarizes the existing neo-classical literature on economic discrimination, as well as the institutional and Marxian theory of discrimination as an explanation of persistence of discrimination.

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