

5530

EMPLOYMENT DISCRIMINATION

Stewart J. Schwab

Professor of Law

Cornell University School of Law

© Copyright 1999 Stewart J. Schwab

Abstract

This chapter first discusses the multiple overlapping definitions of discrimination, including distinctions between group and individual discrimination and between segregation and discrimination in pay. It then summarizes the major economic models of discrimination, particularly Becker's taste-for-discrimination model and statistical-discrimination models, as well as sorting and status-production models. The discussion focuses on the conditions under which markets will tend to eliminate discrimination, noting that this occurs in a more limited range of situations than commonly recognized. The chapter next surveys the economic role of anti-discrimination laws, evaluating arguments that the law speeds the journey to a non-discriminatory equilibrium and that the law breaks social norms perpetuating inefficient discrimination. Finally, it examines empirical studies of employment discrimination laws, including analyses of litigation trends and of the laws' effects on labor markets.

JEL classification: J15, J16, J70, J71, J78

Keywords: Discrimination; Statistical Discrimination; Status-Production Model

1. Scope of Law and Economics Analysis of Employment Discrimination

The law and economics scholarship on employment discrimination examines the welfare consequences of the legal rules regulating employment discrimination. While substantial overlap exists, the inquiry is distinct from the efforts of labor economists to determine the extent of discrimination in labor markets. For recent surveys in this vein, see Darity and Mason (1998); Blau (1998). It is also distinct from the efforts of academic lawyers to describe and criticize employment discrimination laws. The major task of law and economics work surveyed here is to link the two inquiries by studying the effects of law on the labor market. This review limits itself to the literature on race and sex discrimination, ignoring the important areas of

age discrimination (see Posner, 1995, for an excellent overview of the issues), and disability discrimination.

2. Definitions of Discrimination

The term 'discrimination' is elusive. A wine expert is admired for his discriminating taste, but an employer with a taste for racial discrimination is despised (see Cooter, 1994, p. 137). For an extensive discussion of various definitions of discrimination, see Kelman (1991). An overly broad definition would say that an employer discriminates whenever it distinguishes between two workers because they belong to different groups. To see that the definition is too broad, consider an employer who pays 'highly productive' workers more than 'less productive' workers. Although distinctions based on productivity (or, more broadly, merit) violate a policy of egalitarianism, they do not implicate traditional concerns of discrimination. One must be careful with the meaning of 'productivity' as well. Aigner and Cain (1977) define productivity in terms of physical output or actual job performance. They recognize that discrimination against, say, blacks, can always be explained away if their productivity includes antipathy they create in others unrelated to their output or performance.

As a second attempt at definition, perhaps discrimination occurs whenever an employer treats equally productive workers differently *because of* any group characteristic other than, but perhaps related to, productivity. As Cooter (1994, p. 137) suggests, 'discrimination in economic life usually consists in sorting people according to traits rather than productivity'. This definition, at least for law, is both too broad and too narrow.

The definition is over broad because every distinction can be said to be based on a group characteristic, but only some group distinctions are discriminatory. The problem comes in separating invidious discrimination from appropriate (or benign, or merit-based, or non-problematic) distinctions. For example, an employer might distinguish between equally productive college and high school graduates, or between equally productive workers scoring 95 and 85 on a test, or between equally productive black and white workers. Only the last distinction is generally labeled discrimination, because it is based on a suspect or protected group. Anti-discrimination laws have prohibited employers from making distinctions on a number of characteristics, including race, color, sex, age, religion, national origin, age, sexual orientation, marital status and disability. In general, but not invariably, these are immutable characteristics over which the person has no control. Often they are irrelevant characteristics for proper or profit-maximizing employment decisions, but models of statistical discrimination wrestle with situations when these characteristics are correlated with productivity. Epstein (1992, p. 413) has

attacked as inherently arbitrary the labeling of certain distinctions as invidious discrimination. As he puts it, a 'central part of [my] argument against Title VII was that there is no independent conception of which characteristics count as "merit" characteristics and which are invidious'. While difficult lines must be drawn (do distinctions based on beauty, obesity, or veteran's status count as discriminatory?), the law has singled out a few distinctions as legally discriminatory, the most important being distinctions based on race and sex.

Still, it is too narrow to define discrimination as occurring only when an employer treats two equally productive workers differently *because of* a protected characteristic. This definition matches the legal concept of 'disparate treatment' fairly closely. But the definition is narrower than one that focuses on effects. A worker in a protected group could be said to be discriminated against whenever he or she is treated differently than someone in another group on grounds other than productivity. This definition includes the legal concept of 'disparate impact'. For example, employers often distinguish between workers on the basis of non-protected characteristics, such as education, test scores, or criminal convictions. While the anti-discrimination laws do not protect criminals or those with low education or test scores, the laws do forbid employers from distinguishing on such a trait if it has a disparate impact on racial or gender lines and the employer cannot demonstrate that the practice is job related and a business necessity.

Some scholars, including Aigner and Cain (1977), have separated individual from group discrimination. They argue that individual or within-group discrimination is inevitable. As an example, they note that when college graduates are paid their average productivity and high school graduates paid their (lower) average productivity, some high-school graduates will be paid less than their individual productivity (and others paid more, although rarely will an individual complain about being overpaid). But no group discrimination exists. Similarly, they note that racial group discrimination might not occur even when black and white individuals of the same underlying ability are not paid equally, because the overpayment of some might cancel the underpayment of others. In their definition, then, discrimination only occurs when groups with the same average productivity receive different average pay. Anti-discrimination law, however, does not separate individual and group discrimination. An individual black who is treated worse than a white with the same productivity has a claim under the anti-discrimination laws, regardless of whether other blacks might be treated better than whites of corresponding ability.

A final definitional complication is that some writers separate discrimination from segregation. For example, Becker (1971, p. 57) declared

that '[m]any serious errors have been committed because of a failure to recognize that market segregation and market discrimination are separate concepts'. Racial discrimination occurs when blacks earn less than whites of comparable productivity; racial segregation occurs when race affects job assignments by particular firms. Segregation without discrimination can occur when all-black firms pay workers the same as all-white firms of equal productivity. Discrimination without segregation occurs when blacks and whites of equal productivity work in the same firms but blacks are paid less. Segregation and discrimination can go together. Strauss (1991, p. 1635) has warned of the long-term dangers of 'separate but equal' segregation. Anti-discrimination laws prohibit employers both from discriminating in wages and from segregating their workforces.

3. Economic Models of Discrimination

Economists have developed two prominent models of why employers discriminate - a taste model and a statistical discrimination model. Two other models - a sorting model and a status-production model - have appeared more recently.

3.1 *Becker's Taste for Discrimination Model*

In the 1950s, Becker ([1957] 1971) introduced the 'taste for discrimination' model that captures the intuitive notion of invidious discrimination. An employer has a taste for discrimination, according to Becker, when he acts 'as if he were willing to pay something ... to be associated with some persons instead of others' (Becker, 1971, p. 14). This definition is general enough to finesse the issue discussed above of which group distinctions are discriminatory, but Becker focused on race discrimination. Assume that group-W and group-B workers (to update Becker's original notation of W and N) are equally productive, and that employers are willing to pay ' d ' not to associate with B workers. In equilibrium, the market wage for W workers is w , equal to the marginal revenue product of W workers. The wage of B workers, however, is $w - d$. Under this model, in the short run black workers will receive a lower wage than white workers of equal productivity, and discriminatory firms will earn lower monetary profits than non-discriminatory firms.

Becker also introduced variants of his model in which customers or employees had a taste for discrimination, meaning that they would demand lower prices or higher wages when associating with black employees. Profit-maximizing firms will respond by segregating their workforces. If enough non-discriminatory customers or employees exist, all-black or integrated firms can pay the same wages as all-white firms. If the taste for

discrimination is pervasive, however, black workers will be segregated and paid less.

Many scholars have asserted that, under Becker's model, in the long run competitive markets will eliminate firms with a taste for discrimination. Posner (1987), for example, has said that discrimination can persist only with some kind of market failure.

The issue is more complex, however. The basic point, not fully realized in the literature, is that markets cater to tastes rather than drive them out. People willing to pay for the costs of apples, or safety, or discrimination, will have it provided to them. True, well-functioning markets confront actors with the full costs of their actions, and so only actors who value their taste more than it costs to produce will indulge. In this sense, markets discipline tastes. One cannot indulge the taste for discrimination or apples on a whim, but will have to pay for it. Further, the taste for discrimination in labor markets is tied to another product - profits for employers, wages and other working conditions for workers, and the physical product or service for customers. Markets will confront actors with the costs of tying. Discrimination will be tied to the product only for actors willing to pay for the joint good. But it seems wrong to say, in general, that competitive markets will drive out a taste. Rather, markets drive out tastes that people are not willing to pay for, and markets sustain tastes where value exceeds cost.

The taste for discrimination differs from the taste for apples in one respect, in that it directly affects other market actors. A customer's preference for red over green apples lowers the relative price of green apples, but the green apples do not care. A customer's preference for white over black workers lowers the wage of black workers, and the black workers suffer lower utility. It may seem that a discriminatory taste imposes an externality on black workers. But this is not so. Externalities occur when the full costs of a market transaction are not borne by the decision makers. Here, however, the discriminatory customer faces higher prices passed on by the employer who hires a more expensive white workforce.

Becker himself was more cautious, and claimed only that 'under certain conditions' would competitive markets eliminate discriminatory employers (1971, p. 45). A number of points - some pointing to market failure but others not - can be made that suggest that a taste for discrimination is consistent with competitive markets in the long run.

First, production technology matters. If constant-returns-to-scale technology exists, so that one firm can expand indefinitely without increasing its average costs, then a single non-discriminating firm can undersell all others and produce the entire industry output (Becker, 1971, p. 44). But if costs rise with output, more than one firm is required to eliminate discrimination. If employer discrimination is pervasive, there may not be

enough non-discriminating firms to hire all the minority workers and eliminate the wage differential. Becker (1968, p. 210) has suggested that a shortage of entrepreneurial skill may prevent firms from fully eliminating discrimination, and thereby declared that 'discrimination exists, and at times even flourishes, in competitive economies'. Donohue (1997, p. 180) is unconvinced by the shortage-of-entrepreneurs explanation. It did not take special skill to know that hiring low-wage black workers in the textile industry would be profitable - unless, as Donohue puts it, 'the scarce skill was knowing how to do this without having one's mill burned down by the Ku Klux Klan'.

Second, a firm with a taste for nepotism, as Becker called it, will thrive in a competitive market. A nepotistic employer gains utility from hiring whites, as distinct from a discriminatory firm that loses utility from hiring blacks. An all-white nepotistic employer, then, has a (subjective) cost advantage over both non-discriminatory and discriminatory employers and thus could produce the entire output, assuming constant returns to scale (see Becker, 1971, p. 44 n.4; Goldberg, 1982). Donohue (1986, p. 1422) finds the nepotism theory unimportant, arguing that the basic assumption that favoritism rather than animus drives discrimination is 'arbitrary and unrealistic'.

Third, as mentioned above, employers willing to pay for their taste in discrimination with lower profits can remain competitive indefinitely. Two scenarios are imaginable here, the closely-held firm and the joint-stock company. An entrepreneur who works alongside his employees may dislike working with blacks, and thus prefer an 8 percent monetary return with an all-white workforce to a 10 percent monetary return with an integrated or all-black workforce. He will stay in business if he is willing to reject offers from non-discriminatory entrepreneurs willing to pay the full monetary value (10 percent return) for the firm. If only a few entrepreneurs with his discriminatory tastes exist, these few firms will be segregated with no market discrimination. If enough discriminatory entrepreneurs exist, discrimination against blacks as well as segregation will occur. The capital market will pressure discriminatory entrepreneurs to sell out, thereby capturing the high monetary return, and retire or go into another business that does not require association with blacks to make high profits. But this repeats the point that if entrepreneurs are willing to pay for their taste in discrimination, the market allows them to do so. The alternate scenario involves dispersed shareholders who do not physically associate with the firm. Some investors might willingly accept lower monetary returns in order to indulge in their taste for investing in discriminatory firms, increasing their overall return as they see it. This is the flip side to the South Africa divestiture movement of the 1980s, where investors willingly accepted lower returns by refusing to invest in firms involved in South African apartheid. If only a small number of investors act this way, segregation may occur without discrimination. If enough discriminatory investors are willing to accept lower monetary returns, they can permanently lower black wages.

Perhaps a more important explanation for long-run discrimination is that profit-maximizing employers in competitive markets will cater to the discriminatory tastes of employees or customers. If some customers will pay less for a product or service from a black employee, or some employees demand hire wages to work with blacks, black employees become less valuable. As Strauss (1991) has ably recounted, the result could be segregation or discrimination. The issue is analogous to the debate whether domestic labor standards are ineffective in the face of foreign competition. There, the assertion is that workers in developing countries willing to work in unsafe conditions or forego other benefits will undercut domestic workers with a taste for safety. While it is far from clear that cheap foreign labor even sets overall levels of compensation domestically (see Freeman, 1995), profit-maximizing domestic employers will provide benefits that workers are willing to pay for with reduced wages, even in the face of foreign workers with no taste for benefits. Analogously, workers with no taste for discrimination will not undercut workers willing to pay for their taste for discrimination.

Other scholars point to market imperfections to explain the persistence of discrimination. Epstein (1992) blames governmental Jim Crow laws for maintaining discrimination. Like other governmental regulation that interferes with labor markets, these laws mandating segregation perpetuated discrimination. Critics of Epstein have noted that Jim Crow laws, while mandating segregated schools, busses, and marriages, almost never regulated labor markets (see Verkerke, 1992). Labor market impediments were far broader than mere governmental restrictions. Indeed, a debate in the literature is the degree to which discriminatory social norms can persist without government involvement.

Becker (1971, pp. 46-47) pointed to monopolies as a market imperfection. He emphasized that one of the fruits of a product monopoly is the ability to indulge in a taste for discrimination in the labor market without suffering competitive harm. The firm will earn lower profits than if it hired the cheapest possible labor of a given quality, but can still earn above-average profits. Still, if the monopoly is transferable, a discriminating monopolist has pressure to sell out to those without a taste for discrimination. In other words, competitive capital markets as well as competitive product markets put pressure on discriminatory employers.

In a somewhat different vein, Akerlof (1985) shows that discrimination can persist in competitive markets with transaction costs. Suppose some traders have a taste for discrimination against blacks while others do not, and that it takes time or money to distinguish discriminators from others.

Firms with black employees will miss out on some trades and be under a perpetual cost disadvantage.

3.2 Statistical Discrimination

In Becker's employer-taste-for-discrimination model, employers lose profits by discriminating, even if they gain in utility. The deviation from the profit-maximizing assumption was troubling. This deviation meant that competitive pressures might reduce or eliminate discrimination, although as discussed above, more or less ad hoc or secondary assumptions can explain the persistence of discrimination within the taste-for-discrimination model. As an empirical fact, the seeming persistence of discrimination cast doubt on Becker's model. As Arrow (1972, p. 192) observed, only a poor model 'predicts the absence of the phenomenon it was designed to explain'. Still, as Samuelson (1951, p. 323) put it in discussing labor market models, 'In economics it takes a theory to kill a theory; facts can only dent the theorist's hide'.

In response to the shortcomings of the taste model, economists developed models of statistical discrimination as an application of the growing insights from limited-information theories (see Phelps, 1972; Arrow, 1973; Aigner and Cain, 1977). These models assume no prejudice or invidious motive by employers. Rather, employers use group characteristics as a cost-effective way of predicting individual worker attributes in a world of limited information. A profit-maximizing employer wants to hire the worker with the highest expected productivity for the going wage. But gathering information to predict individual productivity is costly. Rather than undertake an expensive inquiry into the quality of the high schools attended by job applicants, the employer might assume that on average blacks attend lower-quality high schools than do whites. Or, rather than undertake a lengthy interview, the employer might assume that a woman job applicant is more likely to quit than an otherwise similar man, or is likely to put a greater drain on the pension fund by living longer in retirement. These stereotypes are merely statistical correlations, hence the term statistical discrimination. Employers that rely on false stereotypes will face a competitive disadvantage similar to employers acting on a taste for discrimination, because they are not hiring the most productive workers. But some stereotypes are true, in the sense that the average differs by group even though the generalization does not apply to many members of the group. Profit-maximizing employers will statistically discriminate whenever the net gains from using the cheap but often-inaccurate proxy outweighs the net gains of more accurate but more costly individualized information.

Statistical discrimination models, while differing in their precise formulations, show how individuals from disfavored groups can receive less

pay than individuals with identical ability but from favored groups. The stereotypes can arise from 'innate' differences between the groups (differences in longevity being one of the less controversial examples here, although even here some argue that women live longer than men because they have been excluded from high-stress jobs), stereotypes can also arise from invidious discrimination outside labor markets (for example, in education), or from the effects of prior labor market discrimination. In Aigner and Cain's prominent early model, the group differences arose because an individual productivity test predicted white performance more accurately than black performance. Statistical discrimination can persist over time, for it is engaged in by profit-maximizing employers. Nevertheless, pressures exist to reduce statistical discrimination. Money can be made through developing low-cost tests and other methods of predicting individual worker ability that reduce the gains from blunt stereotyping.

It might seem that statistical discrimination increases overall efficiency by allowing individual employers to maximize their individual profits. In a world of imperfect information, statistical discrimination indeed helps place workers in jobs where their expected productivity is most valued. But statistical discrimination, by tying individuals to group averages beyond their control, creates an externality that can thwart overall efficiency. Statistical discrimination uses average valuations, rather than marginal valuations which are necessary for efficient resource allocation. Individual incentives can be dulled. For example, in the Aigner-Cain model workers are paid a weighted average of their individual predicted productivity and their group average productivity. Workers in such a model invest too little in training, because they are not completely compensated for individual increases in productivity. As Lundberg and Startz (1983) show, statistical discrimination can exacerbate the distortions. While white workers with statistical discrimination will be encouraged to receive more training, this can be more than offset by the discouragement of blacks to receive training. One empirical problem with the Lundberg-Startz model is that the returns to education are higher for blacks than white, at least in recent years (see Donohue and Heckman, 1991b; Sunstein, 1991, pp. 29-30), contrary to the prediction that statistical discrimination will discourage blacks to acquire human capital.

Statistical discrimination might also exacerbate labor-supply distortions, as shown by Schwab (1986). In his model, workers can work in an individualized market that recognizes individual productivity (self-employment being an obvious example) or in a 'factory' that recognizes only average worker ability. Suppose the more-productive workers in the individualized market are also more productive in the factory market. If so, some workers will inefficiently choose the individualized market even though they would produce more in the factory market, because they would

receive only the average factory wage. Now suppose factory employers learn one more thing about their workers, which is their group status, and productivity varies by group. Favored-group workers are encouraged to work more in the productive factory market, but disfavored-group workers are discouraged. Under plausible scenarios, the discouraged workers can outweigh the encouraged workers, reducing overall efficiency. For example, suppose employers statistically discriminate against women because of their greater average quit rate. This may inefficiently divert women toward self- or home-employment. If men are likely to remain employees in the outside labor market regardless of statistical discrimination (that is, men have a more inelastic labor supply), the discouragement of women will outweigh the encouragement of men.

3.3 Sorting Model

In his important book advocating a repeal of employment discrimination laws, Epstein (1992) introduces a sorting and searching model that blends aspects of the statistical and taste models. For a sympathetic review, see Crespi (1992). Epstein argues that decentralized markets provide substantial protection against discrimination. Epstein contrasts the victims of violence and the victims of discrimination. Without strong laws against violence, people have to be on guard against violent people. That is why we lock our house even when 99 percent of our neighbors are friendly. Even if one pays off one violent person, others will arise. Once laws against violence are enforced, people can concentrate on finding people who make good offers. Even if 90 percent of the people refuse to deal with someone because of his race, he can concentrate on doing business with the remaining 10 percent. The bigots are powerless to block their mutually beneficial deals.

Epstein recognizes, however, that competitive forces will not totally eliminate discrimination. Much of the remaining discrimination is an efficient response by firms to sorting problems. To have smooth workplace arrangements, firms must solve many collective goods problems. What type of firm atmosphere will exist, from type of piped-in-music to work intensity to degree of office talk? When workers have very different tastes, a firm has difficulty making a decision that will not anger many. 'To the extent that individual tastes are grouped by sex, by age, by national origin - and to some extent they are' says Epstein, smooth operation of the firm may call for sorting on these groups. Epstein recognizes that diversity, say in a sales staff, has benefits as well. Some profit-maximizing firms will opt for diversity, but others for homogeneity. For a related argument, see Cooter (1994, pp. 141-44).

3.4 Status-Production Model of Discrimination

Becker's taste model assumed rather simplistically that individual discriminators wanted to avoid associating with people with certain characteristics, and were willing to pay to indulge in this taste. The model ignored the fact that discriminatory whites were often willing to closely associate with blacks, so long as the relationship maintained hierarchy. A prime example was the common practice of whites employing black domestic workers in their homes. More importantly, the taste model gives no importance to *group* status. McAdams (1995) has developed a quite different model, which he labels a status-production model. The key element is that whites form a socially connected group that invests in elevating its self-esteem by subordinating blacks. The importance of group solidarity explains why whites will not deviate from the social norm by hiring blacks into important positions. Building on Akerlof's (1985) model, McAdams posits that the deviator loses intra-group status, and that the group develops a secondary norm of shunning or otherwise punishing the deviator. Thus, the profit-maximizing entrepreneur calculates that he loses more than he gains by hiring the shunned but cheap blacks.

The status-production model captures the virulent aspects of racism. Its vision of discrimination is more brutal than the prissier taste model, which seems to apply more 'to a kind of tea party discrimination than to the blood and steel of the southern racial scene' (Higgs, 1977, p. 9). As McAdams (1995, p. 1063) emphasizes, the model predicts that discrimination 'will persist in the face of market competition'. It also explains why lower-class whites are most likely to discriminate, because they are least able to produce status in other ways.

The status-discrimination model may well explain the Jim Crow South. More open to question is whether it captures the central features of discrimination today, particularly discrimination based on sex, age, or disability. Epstein (1995) has termed the status-production model a sideshow, applicable to government-sponsored discrimination of the Jim Crow South but little else. He suggests that the enforcement of discriminatory norms is impossible without violence. As he puts it, '[c]oercion is always the main event; status production is the side show'.

4. The Economic Role of Anti-Discrimination Laws

One's views on the need for and effectiveness of law depends greatly on one's model of discrimination. The taste-for-discrimination model sees little need for law. Starting with the premise that markets would root out taste-based discrimination, early law and economics writers urged civil

rights advocates to rely on markets rather than laws (see Friedman, 1962; Demsetz, 1965). An exception to this early writing is Landes (1968). He posits that fair employment laws raise the cost of discrimination and thus, at the margin, will discourage employers from discriminating and will raise the black-white wage ratio.

Posner (1987) complains that the anti-discrimination laws are often counter-productive. Profit-maximizing employers break down discriminatory barriers by hiring qualified blacks at their lower market wage rate, thereby obtaining a cost advantage over discriminatory employers. But the anti-discrimination laws prohibit an employer from paying unequal wages for equal work (indeed, a separate Equal Pay Act prohibits wage discrimination against women, in addition to the general anti-discrimination prohibition of Title VII). Anti-discrimination laws are less effective at finding employers liable when they refuse to hire minority workers at all. Thus, the laws penalize profit-maximizing employers who pay low wages to blacks, but in practice condone employers who refuse to hire blacks. Posner's argument assumes that wage discrimination occurs within a firm, but this rarely happens. As Wright (1986) has shown, throughout this century employers rarely paid blacks less than whites for identical work within a firm, even when it was legal to do so. Rather, blacks were excluded from many high-paying jobs and industries.

Even law and economics scholars more sympathetic to the basic thrust of anti-discrimination laws have worried about some of its perverse incentives. For example, Ayres and Siegelman (1996) warn that disparate impact litigation might induce employers to discriminate against minorities in hiring. Their conclusion runs counter to the usual assertion that disparate impact litigation (which focuses on the relative numbers of minority and majority workers) leads to hiring quotas by employers. But Ayres and Siegelman show that, in recent years, most disparate impact opinions involve firing cases rather than hiring cases. A firing disparate impact case is easier to show because the relevant pools exist within the firm (a greater fraction of black than white employees were terminated), whereas in a hiring case great debate concerns the appropriate pool to compare racial hiring patterns with (all workers? all skilled workers? all suburban workers?). The danger to employers, then, is that hiring large numbers of minorities opens them up to a disparate impact firing suit. For a related argument that anti-discrimination laws do not lead to quota hiring, see Issacharoff (1992, pp. 1238-1239).

Other scholars looked with more sympathy on the efficiency justifications for anti-discrimination laws, even within the taste-based model. Donohue (1986) has argued that the laws speed up the market's push towards non-discrimination. Employers with a taste for discrimination have higher costs than non-discriminatory employers. Anti-discrimination laws, to the

extent they are effective, impose additional costs on employers who discriminate and thus drive them from the market more rapidly. Posner (1987) criticized Donohue for ignoring the costs of government enforcement, arguing that government intervention could make the transition to non-discriminatory markets inefficiently quickly, just as a government mandate that shippers adopt a new, fuel-efficient technology would wastefully cause old ships to be scrapped too quickly. The market is best, asserted Posner, at both eradicating discrimination and determining the optimal timing in which to eradicate discriminate. Posner's basic objection to Donohue's argument was that Donohue argued that government intervention was efficient without pointing to some market failure, such as externalities, monopoly, or high information costs, that casts doubt on the market solution. Donohue, in response, rejected Posner's analogy to shippers, because it implicitly assumed that shipping was in equilibrium when a new technology was discovered, while the existence of discriminatory employers shows that labor markets were not in equilibrium under the Becker model. Companies with outmoded machines cannot be suddenly made efficient by changing ownership, but companies with a taste for discrimination can be suddenly made more efficient by switching ownership, because the psychic costs of discrimination immediately disappear.

Later, taking up more directly Posner's challenge to point to the market failure, Donohue (1992) pointed to third-party moralists who abhor discrimination directed against others. Their preferences are not considered in the contracts between employers and black and white employees. Even if discriminating employers are willing to pay for their taste for discrimination in reduced profits, the outcome is not efficient because employers are ignoring the external harm their discrimination causes these moralists. Conducting a 'thought experiment', Donohue argued that if the average adult American were willing to pay \$100 per year to keep Title VII, the resulting \$17.5 billion benefits would outweigh a 'middle-case' estimate of its administrative and incentive costs. Donohue (1997, p. 28) has acknowledged that economists generally try not to rely on altruism or the preferences of moralists in making efficiency arguments.

The status-discrimination model makes the sharpest efficiency justification for the anti-discrimination laws. In that model, employers are trapped by the fear of white stigma from integrating their workforces. As Lessig (1995) has put it, hiring blacks would mark an employer as having either a special greed for money or affection for blacks. The anti-discrimination laws put an important ambiguity in the decision; perhaps the employer hiring a black merely wants to obey the law. By altering the social meaning of discrimination, the anti-discrimination laws can break the

cartel-like solidarity among whites, just as anti-dueling laws ended an inefficient social practice in the previous century (see also McAdams, 1995).

Even Epstein has recognized the usefulness of the anti-discrimination laws in ending rigidities in southern labor markets. As he puts it, 'Title VII was heaven-sent' (Epstein, 1992, p. 251). Epstein emphasizes that Title VII destroyed the web of indirect legal sanctions against firms trying to exploit the profit potential in discrimination, rather than merely alter private behavior. As he explains, in the pre-Title VII south it was all too easy for an all-white town board to lose a building application, or postpone a meeting to approve the sewage connection, of a firm that violated the segregation norms of the era. Epstein's major point, however, is that much contemporary discrimination is efficient, as indicated in his sorting model and in some statistical discrimination models. He therefore concludes that continuance of the anti-discrimination laws imposes heavy costs that are no longer worth the gains.

Other law and economics scholars have questioned the means rather than ends of anti-discrimination law. Cooter (1994), for example, has argued that the absolute regulatory prohibition against discrimination is an inefficient method of controlling discrimination. Cooter's premise is that some discrimination is efficient and thus should not be prohibited, but that market imperfections may allow too much discrimination and perhaps justify intervention. Analogizing to the use of taxes or tradeable permits to control pollution, Cooter suggests that anti-discrimination laws should tax employers who employ too few blacks or women, or give employers tradeable rights, rather than prohibit discrimination altogether. A tax or tradeable rights regime can reach equivalent levels of discrimination, differing only in whether government officials adjust prices or quantities. Either method can enforce discrimination laws at lower cost than a flat prohibition, in part by allowing firms with especially high costs of complying (for example, few qualified minorities are in their particular pool) to hire fewer minorities. Strauss (1991) makes a similar argument, phrasing it as a preference for disparate impact analysis than disparate treatment analysis. Current disparate-treatment law prohibits firms from ever considering race in a decision. Strauss argues that this is costly to enforce because it requires extensive case-specific findings. Many cases of invidious discrimination go unchecked, while some cases of efficient discrimination (particularly efficient statistical discrimination) are banned. Far better, Strauss says, would be to require employers to pay a fine if they do not hire proportionately to the nationwide labor force. If a firm has correct bottom-line numbers, it can then make individual decisions to hire or fire without scrutiny by the anti-discrimination laws. In making this argument, Strauss uses an unconventional conception of disparate impact, because he would not require the government to point to a specific employment

practice, such as a test, that caused the firm to hire fewer blacks. In a similar vein, Mashaw (1991) has argued for racial quotas, with firms with a small percentage of blacks in their workforce being allowed to buy permits from firms with large black workforces. One problem with such tax, fine, or tradeable rights schemes is that the government needs detailed information to set the optimal tax rate. Enormous wasteful lobbying would occur by rent-seeking advocates seeking higher or lower rates or special exemptions. A greater problem is the symbolism of allowing trade in rights to discriminate, although this symbolism has been overcome in allowing tradeable pollution rights. Bell (1992, pp. 47-64) has savagely satirized the concept of tradeable rights. Bell calls his hypothetical Racial Preferencing Licensing Act a 'legalized reincarnation of Jim Crow'.

McCaffery (1993) has likewise advocated tax reform as a solution to sex discrimination. McCaffery sees extensive market failures that create disparities between men and women, including search costs and incomplete markets, but he emphasizes the failures from tax policy. The result of these market failures, he suggests, is that women have been given a stark choice: act like men and become highly committed to the paid labor force, or get out. The market has been dictating choices rather than accommodating them, as Epstein would see it. McCaffery advocates higher taxes on primary workers, typically married men, and lower taxes on secondary workers, typically married women. These changes could unravel the dynamic that leads to polarized options for women.

5. Empirical Studies of Employment Discrimination Law

Unlike law and economics scholarship in many other areas, the scholarship in employment discrimination has gone beyond model building and has taken a serious empirical look at discrimination litigation and the effects of anti-discrimination law. The amount of employment discrimination litigation has exploded in the last quarter century. Between 1970 and 1989, employment discrimination case filings rose by 2,166 percent, compared to a rise of only 125 percent in the overall civil docket (Donohue and Siegelman, 1991). By 1995, employment cases (about 80 percent of which are discrimination cases) comprised 6.8 percent of the federal civil docket (Eisenberg and Clermont, 1995). Employment cases are less likely than other cases to privately settle out of court. Employees win only 26 percent of cases going to trial, significantly less than the 45 percent overall win rate by plaintiffs in federal civil litigation (Eisenberg and Clermont, 1995).

Most employment-discrimination cases protest firings, not refusals to hire. The common image of discrimination is that employers reject black or

women job applicants or pay black or women workers less for the same work. Indeed, in the early years of Title VII litigation, most cases were hiring cases. By the 1980s, however, firing cases were six times more common than hiring cases. Donohue and Siegelman (1991, p. 1015). An employer is thus far more likely to be sued when it terminates a minority worker than when it refuses to hire minority job applicants. This makes employers more reluctant to hire minorities in the first place.

Paradoxically, societal success in overcoming discriminatory barriers may explain much of the rise in discrimination litigation (see Donohue and Siegelman, 1991, pp. 1006-1015). A worker is more likely to sue when rejected from a high-paying job than a low-paying job, because the payoff of a successful lawsuit increases while the costs of litigation vary little with pay. Further, lawsuits protesting discrimination are more likely as the workforce becomes more integrated, because it becomes easier to show that the rejected black or woman was treated less favorably than a white male. Thus, as women and blacks enter high-paying, integrated jobs, the number of discrimination lawsuits rises.

In addition to long-term trends, discrimination lawsuits respond to business cycles. The number of lawsuits increases during recessions, damages for successful suits rise, but win rates fall (Donohue and Siegelman, 1993). The key link is that victims of discrimination receive higher damages the longer they are out of work.

Moving beyond empirical studies of the litigation process, several studies have examined whether the anti-discrimination laws have improved black earnings. Such studies are notoriously tricky. Essentially, the researcher is trying to examine changes after a nationwide law goes into effect, when many other changes in society occur as well. In the case of the anti-discrimination laws, Title VII became effective in 1965, coinciding with important executive orders requiring affirmative action by government contractors, a new Voting Rights Act, continuation of the civil rights movement, and general social unrest. Smith and Welch (1989) have argued that federal anti-discrimination laws had little effect on black economic progress, because black/white earnings ratios had been steadily increasing since the 1940s.

Better black education and migration from the south to higher-paying jobs in the north are the most important explanations for black economic progress, they suggest, neither of which is directly attributable to law. Donohue and Heckman (1991a) have contested this conclusion. As the title of their review article indicates, they find black economic progress to be episodic rather than continuous. The first period of progress occurred around World War II. The second critical episode was the period from 1964 to 1975, when the black/white earnings ratio increased from 0.62 to 0.72, with most of the progress coming in the South (Donohue and Heckman, 1991a, p.

1607). Black outflow from the south had slowed dramatically by 1965, and improvements in amount and quality of black schooling explain only part of the post-1965 jump in black earnings. Donohue and Heckman conclude that Title VII, along with other civil rights legislation of the period, had a positive impact on black/white earnings by shaking the economic and social taboos of the south that had prevented employers from hiring black workers. A particularly important example comes from the textile industry in South Carolina, as examined by Heckman and Payner (1989). Prior to 1965, few blacks were employed in the South Carolina textile industry, when black employment levels and wages suddenly rose. Shifts from agriculture and improved black education cannot explain the timing. The mid-1960s saw a tight labor market, making the underemployment of blacks particularly costly to employers. Heckman and Payner find quite plausible the story that in 1965 entrepreneurs 'seized on the new federal legislation and decrees' and began hiring black workers as they had wanted to do. Epstein (1992, p. 245) attributes the surge of black employment to the federal government's attack on Jim Crow regulation, pointing out that South Carolina had a 1915 statute, not formally repealed until 1972, mandating segregation in textile factories. Verkerke (1992, p. 2091) responds that nearby southern states also had highly segregated textile factories but no express segregation law.

Some intriguing studies have exploited changes in coverage of Title VII to measure its effectiveness. In 1972 Congress expanded the coverage of Title VII from employers with 25 employees to employers with 15. Chay (1998) has found that relative black employment and earnings rose in industries in the South with a high percentage of small employers, suggesting that the statute increased the relative demand for blacks. Bloch (1994) has also emphasized differences in coverage, noting that the most intensive enforcement of anti-discrimination policy is for federal contractors, followed by employers with 100 or more employees required to file detailed EEO-1 reports on their hiring practices, followed by employers with 15 or more employees who are subject to Title VII. While significant data problems exist, he shows that minorities appear to have greater representation in more-regulated firms. Welch (1989), as reported in Donohue (1989), likewise has found that employment of blacks and women has increased between 1966 and 1980 for EEO-1 reporting firms. Bloch warns, however, that this pattern does not necessarily show any aggregate increase in black employment or wages, and may represent only a shift in black employment from the uncovered to the covered sector.

Most analysts agree that, after the 1965-75 surge, blacks have made far less economic progress since then, and that black earnings remain substantially less than for whites, even after adjusting for education and other productivity factors. The anti-discrimination laws seem to have had

little effect in the last twenty years (although it is always hard to disprove the negative assertion that the laws prevented a decline). Whether more vigorous enforcement of the anti-discriminations would help, or whether they have run their course and further progress must come in other directions, is unclear.

6. Special Issues in Sex Discrimination Laws

Much of the general law and economics approach to employment discrimination applies equally to sex and age discrimination as well as race discrimination. Sex discrimination raises a number of special issues, however, and as Epstein (1992) has emphasized, the parallels between race and sex discrimination are imperfect at best. As Wasserstrom (1977) has ably explained, color-blindness is the eventual goal of the anti-discrimination laws, but sex-blindness is not. No employer could provide separate but equal bathrooms for blacks, but all large employers provide separate bathrooms for women. In addition, pregnancy and childbirth uniquely affect women workers.

The economic models fit differently for race and sex discrimination. Becker's taste for discrimination model is formulated generally enough to accommodate a preference against associating with women or blacks. It seems to fit well enough the fact that many bosses, co-workers, or customers prefer dealing with men (and, in other situations, dealing with women). Perhaps men gain status by maintaining group solidarity against women, but McAdams's status-production model seems somewhat hollow when applied to sex discrimination. Statistical discrimination models, by contrast, often apply well to sex stereotypes. Epstein (1992, p. 65) has applied his sorting model to sex discrimination, emphasizing the divisions within the firm that can arise when women want part-time status. In Posner's (1989) view, the economics of sex discrimination is distinctive because of the interdependence in utilities of men and women. Married couples have joint consumption and often act altruistically towards each other. Thus, for example, married women indirectly benefit if labor market discrimination increases husbands' pay. Because racial intermarriage remains rare, blacks do not indirectly benefit when whites are favored.

Anti-discrimination law has recognized differences between race and sex discrimination. Most important is the bona fide occupational qualification (bfoq) under Title VII, which applies to sex but not race distinctions. Title VII prohibits employers in any context from using race to sort workers, but allows employers to sort by sex if sex is a bona fide occupational qualification (bfoq). Thus, employers can have separate but equal bathrooms or grooming standards for men and women, but not for race.

Women tend to live longer than men. Many employers acted on this 'true stereotype' in constructing pension plans, using sex-based annuity tables that required women to make higher contributions for equivalent monthly pensions, or receive lower monthly pensions for equivalent contributions. The practice is a paradigmatic example of statistical discrimination. No malicious discrimination was intended, but employers were explicitly using sex as a proxy to predict longevity. Nevertheless, it is illegal. In two cases, *Los Angeles Department of Water and Power v. Manhart* and *Arizona Governing Committee v. Norris*, the Supreme Court prohibited employers from using sex-based tables in calculating individual contributions or benefits (although the Court allowed employers to consider the overall percentage of women in calculating whether overall contributions match benefits). The Court reasoned that the anti-discrimination laws demand fairness toward individuals before fairness to groups, and the sex-based classification involved group generalizations rather than 'thoughtful scrutiny of individuals'. In short, the Court prohibited statistical discrimination even when 'true'.

An extensive law and economics commentary has criticized the pension decisions, arguing that employers should be allowed to consider sex in calculating pension contributions or benefits (see Kimball, 1979; Freed and Polsby, 1981; Benston, 1982; Epstein, 1992). They see employers or their insurance companies using sex classifications to solve an adverse selection problem. With unisex tables, women covered by a pension plan will receive six to twelve percent more than they contribute to the plan (Epstein, 1992, p. 323, citing Benston, 1982, p. 515). These distributional consequences reduce overall welfare, as plan participants begin 'gaming' the system. As Epstein points out, strategic considerations become largest when a husband and wife are each entitled to pension benefits. With unisex tables, the couple has an incentive to shift their benefits towards the wife by having the husband take a self-and-survivor annuity and the wife take an annuity for her life alone. Employers have an incentive against hiring women or toward dropping life-time pension benefits.

Similar controversy arose over the issue of whether employers violated anti-discrimination laws by excluding pregnancy from health-insurance benefits or pregnancy leave from disability benefits. Epstein (1992, p. 32) emphasizes that pregnancy is a poor candidate for insurance, because it is largely a controlled event and thus a moral hazard problem is created by insuring its costs - women are more likely to become pregnant. Many European countries, concerned with low birth rates, regard this as a favorable aspect of insurance, and provide for pregnancy health costs (generally as part of national health insurance) and paid maternity leave with government programs. Indeed, whether childbirth benefits should be

provided through government programs or employer mandates is a good example of the tradeoffs articulated by Summers (1989). In a thoughtful article, Issacharoff and Rosenblum (1994) contrast the extensive European government benefits toward pregnancy with the limited employer mandates in the United States - essentially a non-discrimination command and an employee's right to twelve weeks' unpaid leave for childbirth. They propose a more extensive set of benefits modeled after unemployment insurance.

In the early US pregnancy cases, the Supreme Court upheld employer benefit plans that excluded pregnancy. The Court reasoned that a classification between pregnant persons and other persons was not explicitly sex-based and therefore was not disparate treatment; and because the costs of providing health insurance was as great for women (even without pregnancy coverage) as for men, no disparate impact claim was made. Congress promptly reversed this holding with the Pregnancy Discrimination Act amending Title VII. Employers must treat pregnancy like any other disability. Posner (1989) notes that this compels employers to ignore the higher average cost of employing women, who are more likely to leave the workforce to have children. The consequence of ignoring these differences, Posner argues, is inefficient and may not benefit women as a whole. Women directly lose because employers have an incentive not to hire them. Applying his interdependence analysis, Posner argues that women as wives indirectly lose. The biggest losers are married but childless working women, because the wife and husband have lower wages than if employers could consider pregnancy and she will not gain from the higher fringe benefits.

Donohue (1989) challenges Posner's argument that statistical discrimination against women is socially efficient. Following the approach of Lundberg and Startz (1983) and Schwab (1986) discussed above, Donohue reiterates that while acting on statistical averages may maximize firm profits, it creates dynamic distortions. For example, if employers are reluctant to train women for top corporate positions because they tend to quit to have children, even women who plan to stay in the labor market have reduced incentives to invest in human capital. Donohue also more broadly challenges Posner's interdependency thesis. Even if consumption is joint and women are altruistic, Donohue says, women may have different preferences and may want altruistically to spend more on their children than their husbands would wish. If sex discrimination lowers the economic power of women, their bargaining within a marriage is probably weakened.

Sexual harassment continues to be a major issue in employment discrimination law, and the law and economics literature helps frame the issues. Hadfield (1995) has used an avowedly economic approach to define sexual harassment. Harassment occurs, under her test, whenever a woman is subjected to actions that a man is not that would cause the woman to alter

her behavior to avoid the actions if she could do so without cost. Hadfield emphasizes that many women are trapped (not at the margin) and thus must endure the harassment, but otherwise might refuse night shifts, overtime or travel assignments where harassment is likely. Whatever the definition, Posner (1989) notes that sexual harassment is not in the employer's self interest, but often the costs of prevention are high. Just as other antisocial workplace behavior, such as embezzlement, is subject to public enforcement, so too should sexual harassment be - depending on the relative costs of public and private enforcement. Epstein (1992) agrees that prohibitions on sexual harassment are perhaps the easiest anti-discrimination prohibitions to justify, at least if the claims stay close to their tort roots. Verkerke (1995) has explored the standards upon which employers should be liable for sexual harassment by its employees. He argues first that employer liability for creating a sexually hostile environment should not differ from employer liability for other forms of discrimination, but rather should depend on creating the proper incentives for employers to acquire information about harassment. Conditional notice liability, whereby employers are not liable if they have 'experimented' in creating notice procedures and have not been notified of the harassment, may be most appropriate. But Verkerke emphasizes that the choices of liability standard require data currently not available.

Bibliography on Employment Discrimination (5530)

- Aigner, Dennis J. and Cain, Glen G. (1977), 'Statistical Theories of Discrimination in Labor Markets', **30** *Industrial and Labor Relations Review*, 175-187.
- Akerlof, George (1985), 'Discriminatory, Status-Based Wages Among Tradition-Oriented, Stochastically Trading Coconut Producers', **93** *Journal of Political Economy*, 265-276.
- Arrow, Kenneth (1972), 'Some Mathematical Models of Race Discrimination in the Labor Market', in Pascal, Anthony (ed.), *Racial Discrimination in Economic Life*, Lexington, Lexington Books, 187-203.
- Arrow, Kenneth (1973), 'The Theory of Discrimination', in Ashenfelter, Orley and Rees, Albert (eds), *Discrimination in Labor Markets*, Princeton, Princeton University Press, 3-33.
- Ayres, Ian and Siegelman, Peter (1996), 'The Q-Word as Red Herring: Why Disparate Impact Liability does not Induce Hiring Quotas', **74** *Texas Law Review*, 1487-1526.
- Becker, Gary S. (1968), 'Discrimination, Economic', in Sills, David L. (ed.), *International Encyclopedia of the Social Sciences*, vol. 4, New York, Macmillan and Free Press, 208-210.
- Becker, Gary S. (1971), *The Economics of Discrimination*, 2nd edn (1st edition 1957), Chicago, University of Chicago Press.
- Bell, Derrick (1992), *Faces at the Bottom of the Well: The Permanence of Racism*, New York, Basic Books.

- Benston, George (1982), 'The Economics of Gender Discrimination in Employee Fringe Benefits: Manhart Revisited', **49** *University of Chicago Law Review*, 489-542.
- Blau, Francine D. (1998), 'Trends in the Well-Being of American Women, 1970-1995', **36** *Journal of Economic Literature*, 112-165.
- Bloch, Farrell (1994), *Antidiscrimination Law and Minority Employment: Recruitment Practices and Regulatory Constraints*, Chicago, University of Chicago Press.
- Chay, Kenneth Y. (1998), 'The Impact of Federal Civil Rights Policy on Black Economic Progress: Evidence From The Equal Employment Opportunity Act of 1972', **51** *Industrial and Labor Relations Review*, 608-632.
- Cooter, Robert (1994), 'Market Affirmative Action', **31** *San Diego Law Review*, 133-168.
- Crespi, Gregory S. (1992), 'Market Magic: Can the Invisible Hand Strangle Bigotry?', **72** *Boston University Law Review*, 991-1011.
- Darity, William A., Jr and Mason, Patrick L. (1998), 'Evidence on Discrimination in Employment: Codes of Color, Codes of Gender', **12** *Journal of Economic Perspectives*, 63-90.
- Demsetz, Harold (1965), 'Minorities in the Marketplace', **43** *North Carolina Law Review*, 271-297.
- Donohue, John J., III (1986), 'Is Title VII Efficient?', **134** *University of Pennsylvania Law Review*, 1411-1431.
- Donohue, John J., III (1989), 'Prohibiting Sex Discrimination in the Workplace: An Economic Perspective', **56** *University of Chicago Law Review*, 1337-1368.
- Donohue, John J., III (1992), 'Advocacy versus Analysis in Assessing Employment Discrimination Law', **44** *Stanford Law Review*, 1583-1614.
- Donohue, John J., III (1997), *Foundations of Employment Discrimination Law*, New York, Oxford University Press.
- Donohue, John J., III and Heckman, James J. (1991a), 'Continuous versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks', **29** *Journal of Economic Literature*, 1603-1643.
- Donohue, John J., III and Heckman, James J. (1991b), 'Reevaluating Federal Civil Rights Policy', **79** *Georgetown Law Journal*, 1713-1735.
- Donohue, John J., III and Siegelman, Peter (1991), 'The Changing Nature of Employment Discrimination Litigation', **43** *Stanford Law Review*, 983-1033.
- Donohue, John J., III and Siegelman, Peter (1993), 'Law and Macroeconomics: Employment Discrimination Over the Business Cycle', **66** *Southern California Law Review*, 709-765.
- Eisenberg, Theodore and Clermont, Kevin M. (1995), *Judicial Statistical Inquiry Form*, <http://teddy.law.cornell.edu:8090/questata.htm>.
- Epstein, Richard A. (1992), *Forbidden Grounds: The Case Against Employment Discrimination Laws*, Cambridge, MA, Harvard University Press.
- Epstein, Richard A. (1995), 'The Status-Production Sideshow: Why the Antidiscrimination Laws Are Still a Mistake', **108** *Harvard Law Review*, 1085-1109.
- Freed, Mayer G. and Polsby, Daniel D. (1981), 'Privacy, Efficiency, and the Equality of Men and Women: A Revisionist View of Sex Discrimination in Employment', **1981** *American Bar Foundation Research Journal*, 583-636.
- Freeman, Richard B. (1995), 'Are Your Wages Set in Beijing?', **9** *Journal of Economic Perspectives*, 15-32.

- Friedman, Milton (1962), *Capitalism and Freedom*, Chicago, University of Chicago Press.
- Goldberg, Matthew (1982), 'Discrimination, Nepotism, and Long-Run Wage Differentials', **97** *Quarterly Journal of Economics*, 307-319.
- Hadfield, Gillian K. (1995), 'Rational Women: A Test for Sex-Based Harassment', **83** *California Law Review*, 1151-1189.
- Heckman, James J. and Payner, Brook S. (1989), 'Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina', **79** *American Economic Review*, 138-177.
- Higgs, Robert (1977), *Competition and Coercion: Blacks in the American Economic, 1865-1917*, New York, Cambridge University Press.
- Issacharoff, Samuel (1992), 'Contractual Liberties in Discriminatory Markets', **70** *Texas Law Review*, 1219-1259.
- Issacharoff, Samuel and Rosenblum, Elyse (1994), 'Women and the Workplace: Accommodating the Demands of Pregnancy', **94** *Columbia Law Review*, 2154-2221.
- Kelman, Mark (1991), 'Concepts of Discrimination in "General Ability" Job Testing', **104** *Harvard Law Review*, 1157-1247.
- Kimball, Spencer (1979), 'Reverse Sex Discrimination: Manhart', **1979** *American Bar Foundation Research Journal*, 85-139.
- Landes, William M. (1968), 'The Economics of Fair Employment Laws', **76** *Journal of Political Economy*, 507-552.
- Lessig, Lawrence (1995), 'The Regulation of Social Meaning', **62** *University of Chicago Law Review*, 943-1045.
- Lundberg, Shelly and Startz, Richard (1983), 'Private Discrimination and Social Intervention in Competitive Labor Markets', **73** *American Economic Review*, 340-347.
- Mashaw, Jerry L. (1991), 'Implementing Quotas', **79** *Georgetown Law Journal*, 1769-1775.
- McAdams, Richard H. (1995), 'Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination', **108** *Harvard Law Review*, 1005-1084.
- McCaffery, Edward J. (1993), 'Slouching Towards Equality: Gender Discrimination, Market Efficiency, and Social Change', **103** *Yale Law Journal*, 595-675.
- Phelps, Edmund (1972), 'The Statistical Theory of Racism and Sexism', **62** *American Economic Review*, 659-661.
- Posner, Richard A. (1987), 'The Efficiency and the Efficacy of Title VII', **136** *University of Pennsylvania Law Review*, 513-521.
- Posner, Richard A. (1989), 'An Economic Analysis of Sex Discrimination Laws', **56** *University of Chicago Law Review*, 1311-1335.
- Posner, Richard A. (1995), *Aging and Old Age*, Chicago, University of Chicago Press.
- Schwab, Stewart (1986), 'Is Statistical Discrimination Efficient?', **76** *American Economic Review*, 228-234.
- Smith, James P. and Welch, Finis R. (1989), 'Black Economic Progress After Myrdal', **27** *Journal of Economic Literature*, 519-564.
- Samuelson, Paul A. (1951), 'Economic Theory and Wages', in Wright, David M. (ed.), *The Impact of the Union*, New York, Harcourt, Brace & Co., 312-342.

- Strauss, David A. (1991), 'The Law and Economics of Racial Discrimination in Employment: The Case for Numerical Standards', **79** *Georgetown Law Journal*, 1619-1657.
- Summers, Lawrence H. (1989), 'Some Simple Economics of Mandated Benefits', **79** *American Economic Review. Papers and Proceedings*, 177-183.
- Sunstein, Cass R. (1991), 'Why Markets Don't Stop Discrimination', **8** *Social Philosophy and Policy*, 22-37.
- Verkerke, J. Hoult (1992), 'Free to Search', **105** *Harvard Law Review*, 2080-2097.
- Verkerke, J. Hoult (1995), 'Notice Liability in Employment Discrimination Law', **81** *Virginia Law Review*, 273-385.
- Wasserstrom, Richard A. (1997), 'Racism, Sexism, and Preferential Treatment: An Approach to the Topic', **24** *UCLA Law Review*, 581-621.
- Welch, Finis (1989), 'Affirmative Action and Discrimination', in Shulman, Steven and Darity, William, Jr (eds), *The Question of Discrimination*, Middleton, CT, Wesleyan University Press.
- Wright, Gavin (1986), *Old South, New South: Revolutions in the Southern Economy Since the Civil War*, Baton Rouge, Louisiana State University Press.