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Donohue, John , "The Law and Economics of Antidiscrimination Law" (2005). *John M. Olin Center for Studies in Law, Economics, and Public Policy Working Papers.* Paper 290.
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The Law and Economics of Antidiscrimination Law

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July 2005

This paper will be published in A. M. Polinsky and Steven Shavell, eds., Handbook of Law and Economics, forthcoming 2005.

Abstract:
This essay provides an overview of the central theoretical law and economics insights concerning antidiscrimination law across a variety of contexts including discrimination in labor markets, housing markets, consumer purchases, and policing. The different models of discrimination based on animus, statistical discrimination, and cartel exploitation are analyzed for both race and sex discrimination. I explore the theoretical arguments for prohibiting private discriminatory conduct and illustrate the tensions that exist between concerns for liberty and equality. I also discuss the critical point that one cannot automatically attribute observed disparities in various economic or social outcomes to discrimination, and illustrate the complexities in establishing the existence of discrimination. The major empirical findings showing the effectiveness of federal law in the first decade after passage of the 1964 Civil Rights Act are contrasted with the generally less optimistic findings from subsequent antidiscrimination interventions.

* The author wishes to thank Mitch Polinsky, Steve Shavell, and Peter Siegelman for their extremely valuable comments, and Stanford and Yale Law Schools for research support. Michael Gottfried, Christopher Griffin, and Seth Stephens-Davidowitz provided outstanding research assistance.

The last century of world history has been marred by episodes of appalling mistreatment of various racial, ethnic, and religious groups.[1] While the acts of discrimination against and mistreatment of women around the world may have been less visible, their consequences have been even more arithmetically compelling if one credits Amartya Sen's conclusion that 100 million women are missing.[2] In this country, the horrors of slavery and the Civil War ultimately led to the first great body of American antidiscrimination law, which was followed by a century of rigid racial discrimination in the Jim Crow South. The evils of the Holocaust gave considerable impetus to the emergence of the second great body of antidiscrimination law after World War II when New York and New Jersey became the first states to prohibit discrimination in employment. In the ensuing decades, most states followed their lead.

The final phase of expanding federal antidiscrimination law began with the adoption of the Civil Rights Act of 1964. This federal ban on discrimination, which played a critical role in dismantling the rigid discriminatory social order of the South, is now used to regulate an enormous array of social practices from the workplace and schools to public accommodations and policing. Antidiscrimination law has been growing dramatically in scope for at least the last half century, and has revolutionized the American conception of the proper role of government.[3]

Today, most Americans -- and virtually all public officials -- have embraced prohibitions on discrimination as an important constraint on both private contracting and public action. Moreover, even as issues such as a ban on discrimination against gays and certain types of affirmative action have generated opposition, the reach of antidiscrimination law has never been greater.

The growth in the scope of antidiscrimination law can be seen in the language of Section 12920 of California's Fair Employment and Housing Act (FEHA), which states:

> It is hereby declared as the public policy of this state that it is necessary to protect and safeguard the right and opportunity of all persons to seek, obtain, and hold employment without discrimination or abridgment on account of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation.

When employers are not subject to such legal restrictions, advertisements seeking workers described along these precise characteristics – such as "young, white females" or "married, white male" – are abundant. In 1960, American newspapers were full of such now-prohibited advertisements, and in areas of the world that don't have

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[1] See Power (2002). Turkey's killing of nearly one million Armenians, the Nazi's killing of six million Jews, Iraq's slaughter of more than one hundred thousand Kurds, Bosnian Serbs' murder of some two hundred thousand Muslims and Croats, and the Rwandan Hutu's slaughter of 800,000 Tutsi -- among the most horrific events of the last century -- were all motivated or aggravated by racial/ethnic/religious antagonism.

[2] Sen (1990) claims this is because women have not received comparable care to men in health, medicine, and nutrition. Oster (2005) argues that perhaps half of this shortfall is due not to discrimination but to an unusual effect of prevalent Hepatitis B virus that results in a greater percentage of male births (perhaps because of higher miscarriage rates of female fetuses).

[3] For further materials on the issues raised in this paper, see Donohue (2003).

antidiscrimination laws such ads are common today.[4] The growing power of antidiscrimination law in the United States represents a dramatic rejection of classical liberal notions of freedom of contract. Again, Section 12920 of California's FEHA offers the following, sweeping rationale for the legal prohibition:

> It is recognized that the practice of denying employment opportunity and discriminating in the terms of employment for these reasons foments domestic strife and unrest, deprives the state of the fullest utilization of its capacities for development and advancement, and substantially and adversely affects the interest of employees, employers, and the public in general.

The California statute goes on to set forth a similarly long list of prohibited bases for actions concerning housing accommodations (excluding the prohibition on age discrimination while adding a prohibition based on familial status). Many states have responded to tobacco industry lobbying and now prohibit discrimination against cigarette smokers,[5] and a few jurisdictions even ban discrimination on the basis of all physical characteristics.[6] With crime dropping sharply throughout the United States in the 1990s, the American Civil Liberties Union (ACLU) launched a major campaign against discrimination in policing – so-called "racial profiling" – which was gaining wide support, at least until the events of 9/11 rekindled the argument that some types of profiling might serve useful law enforcement functions.[7] Meanwhile, lawsuits challenging discriminatory practices in mortgage lending, housing practices, insurance

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[4] See Darity and Mason (1998). For example, want ads seeking candidates specified by race/ethnicity, gender and age are published online in the classifieds of the *New Straits Times* in Malaysia, which has no law prohibiting private employment discrimination in a country that is roughly 1/3 Bumiputra (ethnic Malay and religiously Muslim), 1/3 Indian, and 1/3 Chinese.

[5] Finkin (1996) describes the recent trend as follows:

> Employers commonly forbid drinking on the job and, more recently, prohibit smoking on the premises. But some employers have gone much further, and refuse to hire or retain employees who drink or smoke at all, in an effort to reduce medical insurance costs attendant to such behavior. Unlike many of the other invasions of individual autonomy, these policies have drawn the attention of politically influential groups, i.e., the tobacco and alcohol interests. Consequently, eighteen states now expressly forbid discrimination on the basis of off-premises use of tobacco; one forbids discrimination on the basis of off-premises use of tobacco or alcohol; and six forbid discrimination on the basis of off-premises use of any "lawful product." Absent such legislation, however, nothing prohibits such employer commands…. Colorado forbids discrimination by employers for engagement in "any lawful activity" off the employer's premises and New York forbids discrimination for engagement in "legal recreation activities."

Moreover, a new argument designed to protect smokers is that smoking is an addiction protected by the Americans with Disabilities Act. While it is doubtful that this argument will prevail, it does underscore the continued pressure for extending the reach of American antidiscrimination law.

[6] For example, the city of Santa Cruz has an antidiscrimination ordinance [Chapter 9.83.02(13)] that goes beyond the law of California to ban discrimination on the basis of "height, weight or physical characteristic."

[7] As Schauer (2003) notes: "As a generalization, the principle of treating all equally is a principle that ignores real differences—and consequently comes at a price."

sales, and the financing of automobiles have been prominent elements of the attack on allegedly discriminatory business practices.

Judged by any measure of legal significance, American antidiscrimination law has continued to grow in importance. It has assumed a large place in current domestic legal consciousness and has been a major legal export as other countries have emulated the U.S. legal prohibitions. Another noteworthy reflection of the importance of this topic is the caliber of the contributors to the scholarship in this area -- the Nobel economists alone include Gary Becker, Kenneth Arrow, Milton Friedman, George Akerlof, Amartya Sen and James Heckman. Within the legal academy, major contributions have come from many top law and economics scholars, including Richard Posner, Robert Cooter, Richard Epstein, Ian Ayres, and Christine Jolls. While a simple vision of animus-based discrimination, which Becker fashioned into the first economic theory of employment discrimination, has motivated elected officials and the public to support an elaborate body of law committed to the eradication of "discrimination" against an ever-widening group of claimants, the issue is far too multi-faceted and the nature of the protected classes far too diverse to be adequately encompassed by a single theoretical framework. In addition, the goals of antidiscrimination law have evolved from the early days of the law when there was an initial broad compatibility between legal and economic notions of "discrimination" to a more expansive legal conception of discrimination that is increasingly in conflict with the economic notion of discrimination. As the ambitions of antidiscrimination law have advanced beyond the narrow task of eliminating economic inequities to promote broader goals of distributive justice, the costs imposed by the regulatory framework and the tensions between the demands of law and the forces of the market have grown. This chapter will address these issues from both a theoretical and empirical basis, while shedding light on what antidiscrimination law has accomplished in the past and what it is achieving today.

Section I begins with a brief overview of American antidiscrimination law that defines the key legal concepts of disparate treatment and disparate impact discrimination, and notes the breadth of American social life that is governed by the far-reaching regulatory apparatus. Section II discusses the basic economic theories of discrimination, and highlights their virtues and shortcomings. Section III then explores the theoretical arguments for prohibiting private discriminatory conduct and illustrates the tensions that exist between concerns for liberty and equality. Section IV makes the critical point that one cannot automatically attribute observed disparities in various economic or social outcomes to discrimination, and Section V illustrates the complexities in establishing the existence of discrimination. Section VI discusses some practical problems with antidiscrimination law, revolving around the difficulties of motive-based litigation and the dangers of Type I and Type II error as well as the costs of preventing the use of efficient statistical discrimination. Section VII then discusses some of the major empirical studies evaluating the impact of antidiscrimination law. One important message from this literature is that the initial adoption of Title VII of the 1964 Civil Rights Act aided black economic welfare but that further efforts to strengthen federal antidiscrimination law have been subject to the law of diminishing returns. Section VIII discusses the evidence on whether antidiscrimination law has aided female workers, examines the data on premarket factors that may influence female labor outcomes, and describes the development of one particular strand of the ban on sex discrimination –

harassment on the basis of sex. The literature on discrimination in mortgage lending and major consumer markets is outlined in Section IX. Section X provides discusses "racial profiling" in policing, and Section XI concludes.

I. The Contours of Antidiscrimination Law

Since the legislative mandates against "discrimination" on certain grounds generally offer little further guidance on what those prohibitions mean, the development of the precise contours of antidiscrimination law over the last forty years has largely been the product of judicial decision-making. Initially, the prohibition embodied in Title VII of the 1964 Civil Rights Act was thought to extend only to *intentional* employment discrimination, or so-called "disparate treatment" discrimination. The courts would ask whether the plaintiff would have been treated differently if he or she did not have the particular trait in question.[8] In the 1971 case of *Griggs v. Duke Power,* the Supreme Court fashioned an additional and potentially more sweeping theory of discrimination. This so-called "disparate impact" doctrine prohibited facially neutral acts that had an adverse impact on certain protected classes unless the employer could offer a sufficiently compelling justification for the practice. In the workplace, typical practices that might be challenged include the use of screening tests for employment or for promotion. In policing, a disparate impact charge might be used to challenge drug enforcement efforts that involved targeting certain cars or driving conduct. Determining what constitutes a justification for conduct that generates a disparate impact involves some balancing of the benefits generated by the practice in question versus the costs to the group that is differentially impacted.

The Supreme Court has held, though, that this disparate impact doctrine is not available to litigants who base their claim of discrimination on the Constitution (typically under the Fifth or Fourteenth Amendments) or to those suing under Section 1981 of the federal code (which provides a remedy only for intentional racial discrimination). The disagreement within the federal judiciary as to whether the disparate impact doctrine is applicable to cases brought under the federal Age Discrimination in Employment Act has recently been answered in the affirmative (the same decision had been imposed legislatively in California in 1999).[9]

One or both elements of the above disparate treatment/disparate impact structure has been applied to legal challenges to discrimination in a large array of different domains:

a. **labor markets** (Title VII of the 1964 Civil Rights Act is the primary federal law and most states have similar -- or in states such as California, more stringent -- prohibitions. The major judicial expansions were the creation of the disparate impact standard in 1971 and bringing sexual harassment within the ambit of the

[8] One major issue of contention raised by this definition was whether it would prevent employers from engaging in voluntary affirmative action that provided some advantage to workers having one of the protected characteristics. This issue will be discussed below.

[9] Smith v. City of Jackson, 125 S. Ct. 1536 (2005).

prohibition of sex discrimination in 1986.[10] The Age Discrimination in Employment Act and the Americans with Disabilities Act represent the two major non-Title VII legislative expansions of federal antidiscrimination law, with the latter explicitly going beyond the prior notion of prohibiting discrimination to mandating that employers provide "reasonable" accommodations to "qualified" disabled workers.[11])

b. **education** (Title VI prohibits discrimination in any program that receives federal funds)

c. **criminal justice and racial profiling** (the Fourteenth Amendment and Title VI have been used to challenge racially disparate outcomes in death penalty cases, drug and traffic enforcement, and street policing)

d. **the provision of health care services** (Fourteenth Amendment and Title VI)

e. **housing and lending** (The Fair Housing Act and Equal Credit Opportunity Act)

f. **purchase of goods and services** (Section 1981 prohibits intentional racial discrimination).

The threat of employment discrimination litigation, along with pressure on federal government contractors to comply with the antidiscrimination and affirmative action requirements of Executive Order 11422, has led many firms to develop affirmative action plans to reduce perceived shortfalls in the employment share of minority and female workers.[12] There is an obvious tension between the establishment of a race or gender-based affirmative action plan and the statutory language of Section 703(m) of the Civil Rights Act of 1991, which states that "an unlawful employment practice is established when the complaining party demonstrates that race, color, religion, sex, or national origin was a motivating factor for any employment practice." The courts have resolved this tension by allowing *private* employers to grant preferences on race or gender grounds but only in the limited circumstances where there is a manifest imbalance in the employer's workforce and any preferential treatment does not unduly burden members of the non-preferred group.[13] *Governmental* affirmative action is subject to strict scrutiny under the equal protection clause of the Fourteenth Amendment (or under the Fifth Amendment in the case of federal governmental action), and the permissible scope of such affirmative action has been defined through a series of Supreme Court decisions. California has

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[10] In 1980, the Equal Employment Opportunity Commission issued "Guidelines on Discrimination Because of Sex," which declared sexual harassment a violation of Title VII of the 1964 Civil Rights Act. These guidelines defined two distinct categories of sexual harassment: "quid pro quo" and "hostile environment" harassment. In the 1986 case of *Vinson v. Meritor Bank*, the U.S. Supreme Court affirmed that "hostile environment" sex harassment violated Title VII.

[11] According to the U.S. Census Bureau, in 1997 about 52.6 million people (19.7 percent of the population) had some type of disability and among those with a disability, 33 million people (12.3 percent of the population) had a severe disability.

[12] See Leonard (1984a), Leonard (1984b), Ashenfelter and Heckman (1976), and Heckman and Wolpin (1976).

[13] *United Steelworkers v. Weber*, 443 U.S. 193 (1979).

adopted a constitutional amendment -- Proposition 209 -- that prohibits any form of preferential treatment based on race or gender in *state* employment or in the operation of other *state* functions, such as education and contracting for construction and other services. Private employers and universities in California are still free to pursue such race and gender-based preferences as long as they do not overstep the bounds of federal law.

II. Theories of Discrimination

Although the contexts in which discrimination is found vary widely, ranging from labor markets and health care to housing, education and the purchase of automobiles, the reasons for such discrimination are relatively few. In fact, the implicit internal justification of discriminators in any area generally falls into one of four categories: 1) "we don't like you" (aversion) or, what is often functionally equivalent, "we prefer someone other than you" (nepotism); 2) "it is in our self-interest to cater to the aversion or nepotism of others even though we don't share those feeling ourselves"; 3) "we can further our independent interests by acting to subordinate another group, either because such actions enhance our self-esteem or undermine economic competition from your group"; and 4) "taking your particular trait into account can help us achieve a legitimate goal more effectively." As we will see, the first two of these are predicated on certain individuals having a "taste" for discrimination, which actually tends to harm the one having such a taste, at least if it is being expressed in a competitive market setting. The third and fourth categories involve the strategic use of discrimination to further one's own interests, in some cases intentionally imposing burdens on the disadvantaged group (Category 3 – the cartel model) and in others simply burdening certain members of the group without necessarily harming the group as a whole unless the group's incentives to invest in their human capital is impaired (Category 4 – statistical discrimination).

To illustrate, the employer who dislikes blacks and therefore refuses to hire black applicants or the police officer who stops a black driver out of animus and gives a ticket when he would not have done so had the driver been white is engaging in animus-based discrimination (Category 1). The airline that exclusively hires young female flight attendants to cater to the preferences of its passengers or the restaurant that hires only white servers in response to customer preferences is acceding to the bias or nepotism of others (Category 2). The prototype of Category 3 discrimination was the informal Jim Crow restrictions that kept blacks out of the southern textile industry throughout the first two-thirds of the 20th Century. The drug enforcement agent who finds that using race or ethnicity can increase the likelihood of making drug seizures, or the employer who feels that such traits are useful proxies for certain productivity-related traits is engaging in statistical discrimination (Category 4). Such behavior, though likely widespread, is illegal, whether the stereotypes are accurate or inaccurate.

Importantly, an actor who doesn't consider any protected characteristic but who acts directly on factors that are universally accepted as legitimate is not engaging in discrimination, even if a racial or ethnic disparity emerges.[14] Thus, the FBI reports that

[14] Determining what factors constitute "legitimate" bases for action has been complicated since the Supreme Court created the disparate impact theory of discrimination. Disparate impact discrimination, which is prohibited in the employment realm by Title VII of the 1964 Civil Rights Act, involves the use of

51 percent of homicide offenders in 2002 were black, while 50 percent of those arrested for homicide were black. Even though only 12.7 percent of the population is black, the close correlation between the race of homicide offenders and race of homicide arrestees undermines the view that the police are invidiously discriminating in making homicide arrests. Assuming all the arrests are accurate, this is *not* discrimination by the police.[15] The next four subsections will discuss the four categories of discrimination in the context of employment discrimination, but, as we have just seen, they apply to other contexts as well.[16]

A. Employer Discrimination

The core understanding of the electorate about the nature of discrimination and the motivating dynamic propelling the expanding prohibitions against discrimination has consistently been that animus by prejudiced employers is pervasive and seriously harms the employment prospects of women and minorities. According to this view, elderly and disabled workers are disadvantaged, not only because on average their age and incapacities lower their productivity but also because of irrational bias. As will be discussed below, one of the key features of this type of discrimination is that it burdens not only the victim, but also imposes a cost on the *discriminator*.

1. The Becker Employer-Animus Model

Gary Becker's theory of employer animus-based discrimination attempts to model this conception of discrimination by positing that a discriminating employer must bear not only the wage when he or she hires a disfavored worker but also pay a discriminatory psychic penalty, δ.[17] Becker's model of the discriminating employer is mathematically equivalent to a case in which the government imposes a variable tax on employers who hire workers of a certain group (defined by race, gender, or other immutable trait), where the tax ranges from zero (for the non-discriminators) to the maximum value M (the value

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a neutral proxy *other than race or some other protected trait*. Because the decision-maker in such disparate impact cases is not relying on a directly relevant factor, this conduct differs from my illustration of a nondiscriminatory judgment, and because it does not rely directly on race (or other protected trait), it differs from my definition of statistical discrimination. (This distinction can break down if a court allows a disparate impact challenge to a subjective employment process that uses only factors "universally accepted as legitimate.")

[15] Of course, the pattern may result from discrimination elsewhere in society, but in a system where "discrimination" is often penalized heavily (both in terms of social opprobrium and through monetary damages), it is important to be clear about who is -- and is not -- engaging in discriminatory conduct. Similarly, the results of the recent New Haven taxi-cab study in Ayres et al. (2005) suggest that black drivers receive considerably smaller tips than white drivers. If this differential accurately reflected differences in driver service (for example, less help with bags or knowledge about locations), then there would be no discrimination. Instead, the authors conclude the disparity results from the animus-based discrimination of taxi passengers. Note, though, that a system designed to reduce discrimination by including tips in the cab fare would help black drivers, while hurting black customers since the latter tended to provide lower tips than white customers (which may not be surprising given the links between race and income).

[16] The theories and empirical studies discussed in subsequent sections have been chosen for their applicability to the functions and forms of antidiscrimination law. For a more general discussion of the theoretical and empirical literature on discrimination, see Altonji and Blank (1999) and Cain (1986).

[17] The variable δ is also known as the discrimination coefficient.

of δ for the most highly discriminating employer).[18] Just as an employment tax would be expected to lower the quantity demanded and earnings of workers, the psychic "tax" lowers the quantity demanded and earnings of disfavored workers. Of course, if there is enough heterogeneity in the population of employers, the actually observed psychic tax should be far less than *M*, since disfavored workers will tend to gravitate to employers who bear a smaller (or no) psychic penalty.

Conversely, the greater the number of disfavored workers in any labor market, the greater the observed value of δ will be in that labor market as the marginal disfavored workers will have to deal with employers characterized by higher values of δ in order to be absorbed into the market. Indeed, this was one of the primary motivations of Becker's model: it provided an explanation for the greater apparent discriminatory penalty in the South without resorting to differences in tastes for discrimination between northern and southern employers. Even if employers in both regions were identical in the extent of their racial prejudice, the much higher percentage of black residents in the South meant that to find jobs, blacks had to associate with increasingly higher δ employers, leading to widening earnings disparities between black and white workers. The Becker model of employer animus thus provided an explanation for an important observed phenomenon – the greater black-white earnings disparity in the South than the North – without resorting to "difference in tastes" as the cause.

INSERT FIGURE 1 HERE (if put into text)

The model also generates a number of other predictions, which can be illustrated with the simple supply and demand model of Figure 1. The intersection of demand curve D_1 and the supply curve *S* illustrates the short-term equilibrium for the market for black workers in a world without discrimination. Black workers would earn a wage of W_1, and Q_1 black workers will be hired. Becker models the introduction of employer discrimination by positing a downward shift in the demand curve to D_2 (which, as a way of reflecting the higher "cost" of black workers, could alternatively be modeled as a pseudo-upward shift in the supply curve – see Donohue (1986) and Donohue (1989)). In this simple case, it is assumed that the vertical distance *AC* reflects the uniform psychic penalty associated with hiring black workers. The consequence of this discriminatory animus is that fewer blacks would be hired (only Q_2 instead of Q_1) and black wages would fall from W_1 to W_2. Thus, at least in the short-run, the Becker model predicts that the disfavored group will experience job losses and receive lower pay relative to the non-discriminatory equilibrium given by point *A* in Figure 1.

As Donohue (1987) underscored, the Becker model predicts that discriminating employers are hurt by their discriminatory preference in that their net profit (monetary minus psychic penalty) is actually larger in the non-discriminatory world than in the discriminatory world.[19] Note, too, that in the example illustrated in Figure 1, while the discriminatory employer's net benefit is *lower*, his total monetary reward is *greater*

[18] Conceivably, the tax could be negative, suggesting that the relevant group of workers is preferred rather than disfavored. This, then, could be thought of as a model of nepotism (or attraction to workers possessing certain non-productivity-related desirable traits).

[19] Note that the "employer surplus" is the area under the demand curve above the relevant wage. Clearly, this is lower for demand curve D_2 than for demand curve D_1.

(because the entire psychic cost denoted by *AC* represents money that ends up in the pocket of the discriminator). In summary, the presence of discrimination can cost jobs and money to the disfavored group and increase income inequality as black earnings fall and the monetary profits of discriminators rise (even as their total psychic welfare declines). One might use these conclusions as the basis for constructing an equity argument for prohibiting employer animus-based discrimination. In this case, equity would be defined by reference to the non-discriminatory equilibrium, and thus legal efforts to move closer to that equilibrium would be defined as promoting equity.[20] Conversely, if one were willing to value all preferences expressed in the market and no others (as many economists are inclined to do), then any attempt of law to move away from the discriminatory equilibrium would undermine efficiency (since the efficient solution would be defined by intersection *B* in Figure 1). If preferences for redistribution or racial justice (or against racial discrimination) are honored, however, then antidiscrimination law can have a role.[21] Note that the Becker model assumes away any possible harm to victims other than lost wages. Since juries now routinely award compensatory damages in addition to back pay, this suggests that the dishonor or psychological costs of discrimination are deemed to be significant.

An important conclusion from the Becker model is that, if there are enough non-discriminatory employers around, there may be no monetary penalty on disfavored workers. In this event, blacks would work for the non-discriminators and would be paid equally to white workers working for the discriminatory employers. Thus, even in the presence of discriminatory attitudes by some employers, effective discrimination (in terms of lower black wages and employment) may be eliminated by the operation of the market, albeit by encouraging the segregation of workers.

2. An Empirical Challenge to the Becker Model

Note that we have been discussing the short-run predictions of the Becker model, which at first would appear to explain lower black wages and employment -- at least for the case of the Jim Crow South and the discrimination confronted by southern black workers prior to the adoption of the Civil Rights Act of 1964. But what would happen in

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[20] Note that this is not the customary equity argument based on the perceived social benefit of enhancing the wealth of the least well off members of society, although coincidentally this value may be served by antidiscrimination policy because of the lower wealth of women and minorities. For this reason, taxes and transfers, which are generally preferred to the use of the legal system as a way to redistribute wealth may not be appropriately targeted to achieve the non-discriminatory equilibrium. Still, it is possible that tax incentives to hire women and minorities might be a more efficient mechanism to reach the non-discriminatory equilibrium at least cost (in light of the not inconsiderable costs of a litigation-based antidiscrimination regime in which difficult issues of motives must be determined by judges and juries).

[21] One can craft a theoretical argument based on the Coase Theorem that in a zero transactions cost world, one would expect discrimination to be banned if the costs of discrimination exceeded their benefits. In this calculus, the preferences of those who are offended by racism and other forms of prejudice would be weighed fully. The outcome would then depend on whether the victims of discrimination and those who decried their plight would be willing and able to compensate those who gained from discrimination. The operation of free labor markets in a discriminatory environment will not reveal the answer to this empirical question since transactions costs will prevent the opponents of discrimination from contracting with the discriminators. (Query whether in practice an effort to bargain for respect will ipso facto be futile, since a Coasean payment to induce someone to respect the payer in itself undermines the payer's sense of self-worth. Of course, this problem can always be elided by considering it to be a violation of the zero transactions costs assumption.)

the long run under the Becker model? The market should discipline such discriminators, and, at least under constant returns to scale, should ultimately drive out the discriminators. For this reason, Milton Friedman argued that legal prohibitions on discrimination in employment would be unnecessary since the market would solve the problem. But this is where the Becker employer-animus model ran into problems. It failed to explain the enduring exclusion of blacks from entire industries in which they were fully capable of performing the work.[22] In the competitive market that Becker premised, the cost to discriminators of forsaking talented black workers should have engendered a painful market response, ultimately leading to the elimination of the discriminators if the employers operated in a world of constant returns to scale. Indeed, Kenneth Arrow observed that Becker had developed a theory of employment discrimination that "predicts the absence of the phenomenon it was designed to explain."[23] Becker anticipated Arrow's point by asserting that the shortage of entrepreneurial skill prevented the elimination of the discriminating employers.[24] This claim is unpersuasive, though, since very little talent was needed to see that blacks could be hired at lower cost into low-skilled industries such as textiles. Yet this never happened until Title VII took effect. Clearly, Title VII and not some newfound entrepreneurial talent explains the large gains of blacks in the decade from 1965 to 1975 (as discussed in Section VII (A) below).

Thus, while Becker's theory of employer animus generated some useful predictions, it failed to explain perhaps the key feature of racial discrimination in the South -- its relentless persistence in excluding black workers from entire industries over more than half a century. Nor can the employer model explain another common characteristic of the pre-Title VII world -- occupational segregation (as opposed to segregation across firms).

3. Is the Becker Model Undermined By Positive Search Costs?

Black (1995) attempts to address the empirical inadequacies of the Becker employer model of discrimination by introducing search costs into the analysis of discrimination. Black relaxes the assumptions of frictionless hiring and perfect competition to conclude that victims of discrimination may not be protected from earnings discrimination even when numerous nondiscriminating firms are present. Two assumptions about market behavior drive Black's model: workers participate in a costly search process and employers have some degree of monopsonistic power. In the population of available workers, some portion λ is male (m) and the other $1 - \lambda$ is female (f).[25] Members of each group have a reservation utility U_j ($j = m, f$) that they compare to wage offers from firms, which are labeled prejudiced (p) or unprejudiced (u). Prejudiced firms, with market share θ, are known to employ only men at the wage w_p^m while unprejudiced firms with market share $1 - \theta$ employ both men and women at wages, w_u^m

[22] Heckman and Payner (1989) note that blacks were largely excluded from the low-skill southern textile industry for the entire 20th Century -- until the effective date of Title VII of the 1964 Civil Rights Act. I analyzed the strengths of this article in Donohue (2002).
[23] Arrow (1972).
[24] Becker (1968).
[25] Black's model, although formulated here in terms of sex discrimination, applies to any type of preference-based discrimination on the part of the employer.

and w_u^f, respectively. Total utility for workers is the sum of wages received plus some non-pecuniary job satisfaction parameter α_k^j ($k = u, p$). This value, which for instance measures the success in matching individuals to occupation, is a random variable with cumulative distribution function $F(\alpha)$ and density $f(\alpha)$. In order to ensure that second order conditions are satisfied, the hazard function $f(\alpha)/[1 - F(\alpha)]$ must be strictly decreasing. For ease of exposition, then, let α be distributed uniformly over the unit rectangle.

The essence of the Black (1995) model is the search process involved in matching workers with employees. When considering employment at a particular firm, a worker accepts a wage offer whenever $w_k^j \geq U_j + \alpha_k^j$. If a match does not take place, the worker incurs cost C. The equilibrium reservation utility will render an individual indifferent between accepting a job and continuing search. For men, this condition yields the equation:

$$C = \theta \int_{\alpha_p^m}^{1} \left(w_p^m + \alpha_p^m - U_m\right) f(\alpha) d\alpha + (1-\theta) \int_{\alpha_u^m}^{1} \left(w_u^m + \alpha_u^m - U_m\right) f(\alpha) d\alpha \tag{1}$$

which, given our assumptions about α, becomes:

$$C = \theta \left[w_p^m + \frac{1+\alpha_p^m}{2} - U_m \right] + (1-\theta) \left[w_u^m + \frac{1+\alpha_u^m}{2} - U_m \right] \tag{2}$$

Equation (2) states that the cost of search must equal its expected benefits, or the net gain derived from employment at either a u or p firm weighted by the probability of meeting that firm type. According to equation (2), the derivative of U_m with respect to w_p^m is θ and with respect to w_u^m is $(1 - \theta)$, which means that reservation utility increases with wage offers but at a lower rate than the wage increase.

Women, however, can gain no utility from visits to prejudiced firms since such firms refuse to hire them. Therefore, their equilibrium condition is characterized by:

$$C = (1-\theta) \int_{\alpha_u^f}^{1} \left(w_u^f + \alpha_u^f - U_f\right) f(\alpha) d\alpha \tag{3}$$

or

$$C = (1-\theta) \left[w_u^f + \frac{1+\alpha_u^f}{2} - U_f \right] \tag{4}$$

The comparative statics of equation (4) again imply that reservation utility increases with the wage offer, but now on a one-for-one basis. However, an increase in the number of prejudiced firms (given by θ) reduces reservation utility. The intuition for this result is that a higher share of prejudiced firms increases search costs for women, which allows unprejudiced firms to offer a lower wage and still attract female employees.

Unprejudiced firms therefore enjoy some degree of monopsonistic power due to the costly search process.

Turning to the employer's decision, let V denote the marginal product of labor, which is assumed to be the same for men and women. Then, an unprejudiced firm's expected profit per applicant is given by:

$$\pi_u^j = \left[1 - F\left(U^j - w_u^j\right)\right]\left(V - w_u^j\right) \tag{5}$$

or

$$\pi_u^j = \left(1 - U^j + w_u^j\right)\left(V - w_u^j\right) \tag{6}$$

and profit maximization entails a wage offer of:

$$w_u^j = 0.5\left(V + U^j - 1\right) \tag{7}$$

On the other hand, using equation (8), prejudiced firms that only hire men can expect a per applicant profit of:

$$\pi_p^m = \left(1 - U^m + w_p^m\right)\left(V - w_p^m\right) \tag{8}$$

and will offer the wage:

$$w_p^m = 0.5\left(V + U^m - 1\right) \tag{9}$$

Constant returns to scale ensure that wage offers are equalized for men across firm types, which in turn equates the "male" profits of prejudiced and unprejudiced employers. From Equations (7) and (9) we see that wages increase by one half for a unit increase in either male or female reservation utility. However, so long as there is at least one prejudiced firm, the negative effect of their presence on women's reservation utility guarantees that $w^f < w^m$. Thus, even when workers are equally productive, the existence of any employers harboring taste-based discrimination against a minority group (or women) will result in lower earnings for the members of that group – even if they work for non-prejudiced employers.[26]

4. Will Increased Competition Reduce Labor Market Discrimination?

For both the Becker employer discrimination model and the Black search cost model, one would expect greater competition would dampen the degree of labor market discrimination. This claim has recently been invoked as part of an argument in support of globalization. Specifically, Jagdish Bhagwati's latest book *In Defense of Globalization* considers the impact of greater world economic integration on the fortunes of women by

[26] Duleep and Zalokar (1991) had previously observed that even if we do see equalization of gross wages, if minorities have to search harder, then the cost of discrimination shows up as lower *net* wages including search costs.

posing the question: "has globalization accentuated, or has it been corrosive of, the discriminations against women that many of us deplore and wish to destroy?" Bhagwati answers this question by arguing that increased trade flows tend to narrow the male - female wage gap.

According to Becker's theory of the taste for discrimination, the decision to hire a male rather than a female of equal or greater potential productivity places the firm at a competitive disadvantage relative to its counterparts. In an autarkic world, uniform taste discrimination will not affect the home country, since all firms are making hiring decisions in the same way. However, once foreign trade is allowed, the forces of external competition reduce the viability of such prejudice since relative productivity now matters. Thus, "[t]he gender wage gap will then narrow in the industries that must compete with imports produced by unprejudiced firms elsewhere." In general, Bhagwati notes, competition, regardless of its source, will render the price of prejudice unaffordable. As a result, "all fat [must] be removed from the firm" and the wage gap will contract.

Bhagwati cites Black and Brainerd (2002) as empirical validation of this theory. Specifically, they report that American firms that experienced an openness/competitiveness shock displayed a faster decline in their gender wage gap. Using Current Population Survey (CPS) data from 1977 through 1994, the authors try to proxy the degree of discrimination against women by computing a "gender wage gap" for 63 industry groupings.[27] The authors then estimate the following equation:

$$\Delta(\ln(wage)_{xm} - \ln(wage)_{x\omega}) = \alpha + \beta\Delta trade_x + \gamma concen_x + \psi(trade*concen)_x \qquad (10)$$

where the dependent variable is the change in the residual gender wage gap, *trade* is the import share and *concen* is an indicator of whether in 1977 the industry was concentrated (i.e., had a four-firm concentration ratio of at least .4). Using the measure of the residual gender wage gap reduces confounding from other sources of variation in earnings such as education and labor market experience. Estimation of equation (10) focuses on the coefficient on the trade-concentration interaction term, which is found, as hypothesized, to be negative and statistically significant. The authors conclude that "a 10 percentage point increase in import share in a concentrated industry would lead to a 6.6 percent decline in the residual gender wage gap."

I take Black and Brainerd's paper as evidence that increased competition, in this case engineered by increased trade, can narrow discriminatory wage gaps.[28] I am skeptical, though, that the U.S. gender wage gap narrowed because of "imports produced by unprejudiced firms elsewhere," since many of our trading partners over this period were much less oriented towards womens' rights than we were. But note that even if

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[27] Black and Brainerd (2002) describes the derivation of the gender wage gap, the within-year earnings disparity between men and women at the industry level, as follows:

> The log wage is first regressed on four categorical education variables: age, age squared, and a non-white dummy variable; this regression is estimated for the pooled sample of men and women in each year of interest. The residual gender wage gap is then generated as the difference in the average residual wage for men and women, calculated at the industry- or MSA-level.

[28] Query whether the Black and Brainerd results suggest that men earned rents in concentrated industries and that increased competition from trade dissipated these rents, leading to an observed shrinking of the male-female earnings disparity.

employers in a country such as China are biased against women, the competitive pressure that their lower wage structure puts on U.S. firms gives American employers an incentive not to pass up lower cost but equally productive female workers. (The pressure would presumably be greater still if the Chinese employers were not discriminating against women since their costs would be even lower, but competition from low-cost producers should discipline American discriminators in any event).

If the Black and Brainerd study is correct, then two conclusions follow: (1) there was considerable discrimination against women more than a decade after Title VII was enacted and (2) increased international trade following 1977 eliminated some portion of the discriminatory male-female wage gap differentially across the 63 industry groupings.[29] I suspect, however, that the black-white earnings gaps did *not* narrow in the same fashion. If this surmise is correct, then either there was less discrimination against blacks by 1977 or Bhagwati's claim needs to be refined.

Neither the Becker model of animus-based employer discrimination nor the Black search cost model can explain the enduring exclusion of blacks in the southern labor market from entire industries, such as textiles. The following sections will discuss three rival theories to the notion of employer animus to explore whether these other types of discrimination better explain the empirical evidence of the past or present.

B. Customer and Fellow-Worker Discrimination

The first alternative theory of discrimination, also originally crafted by Becker, posits that discrimination emanates not from the employer but from customers and fellow workers. This model has very different implications from the employer animus model in that the market tends to punish employer animus but clearly rewards efforts to accommodate the discriminatory preferences of customers and fellow workers. This model would seem to have at least one major advantage over the employer animus model since it can explain an enduring pattern of discrimination. Several recent papers have tested empirically for customer discrimination and found evidence of unequal treatment for minorities.[30] The most basic theoretical formulation of customer discrimination posits that buyers in the prejudiced group base their decisions on an adjusted price $p(1 + \delta)$ for minority sellers, where δ again represents the discrimination coefficient. Realizing this, firm managers will attempt to assign minorities to jobs with the least amount of customer contact. In the polar case in which labor is perfectly mobile and positions within the firm are easily segregated by group characteristic, then any wage disparity between majority and minority workers of equal productivity will vanish as firms compete for the cheaper supply. When the stringent assumptions of the polar case are not met, however, the

[29] Mulligan and Rubinstein (2005) conclude that the primary factors leading to the narrowing of the measured gender wage gap are that women are investing more in their market productivity and there is a positive selection effect operating in that, unlike in the 1970's, "women working in the 1980's and 1990's typically had better backgrounds (in terms of own schooling, cognitive test scores, and parental schooling) than did non-working women."

[30] Nardinelli and Simon (1990) discover that baseball trading cards featuring nonwhite players sell at a discount compares to white athletes and List (2004) uses an experimental design to uncover discriminatory bargaining offers between white and nonwhite card traders. Holzer and Ihlanfeldt (1998) find that the racial composition of a firm's clientele affects hiring decisions with respect to race (especially for positions with customer contact) as well as the wages that workers receive.

Becker model of customer discrimination can explain enduring wage shortfalls for the dispreferred group.

1. Borjas and Bronars' Customer Discrimination Model

In contrast, the Borjas and Bronars (1989) model of self-employment and customer discrimination introduces imperfect information and search costs, which generate not only workforce segregation but also income inequality. The model assumes that individuals can be divided on two dimensions: (1) between white (w) and black (b), and (2) between buyers and sellers of each race. The percentage of black sellers in the population is given by γ, while that of white sellers is $1 - \gamma$. Assume also that these fractions hold for the buyer population. The mechanism through which discrimination operates is the price markup that the representative white buyer perceives to pay for the product of a black seller, denoted by δ.[31] Therefore, the maximum price that a white buyer will pay for a good produced by a black seller is $R(1 - \delta)$, where R is the consumer's valuation of the product.

The value of a price offer from a seller of race i to a buyer of race j, $V(P, i, j)$, can take one of three values. In the event that a transaction occurs, the price paid may equal the buyer's reservation price (which yields a net payoff of zero) or there may be some positive net gain $R - D(i, j)P$, where P is the seller's price offer. If the buyer rejects a proposal, then she incurs cost C and has expected valuation $EV(P, i, j)$ in the next round of search.

Sellers, on the other hand, seek to maximize the utility function $U = I - (H^{\lambda} / \lambda)$, where I is income, H represents hours worked and $\lambda > 1$. They produce goods at the rate β, conduct α transactions per unit of time and a fraction τ of those transactions result in sales. The variable τ is determined by the segregation strategy of the seller, which equals one for sales to all consumers or γ and $1 - \gamma$, respectively, for exclusive sales to blacks or whites. If production and sales cannot be performed simultaneously, then the efficient portion of the workday devoted to production is $s = \alpha\tau / (\alpha\tau + \beta)$.[32] Substituting these values into the function U and maximizing over H yields an optimal number of hours worked, which in turn generates the indirect utility function:

$$U^* = \left(\frac{1}{\sigma}\right)\left[\frac{\alpha\tau\beta}{\alpha\tau + \beta}P(\tau)\right]^{\sigma} = \frac{y}{\sigma} \tag{11}$$

where $\sigma = \lambda / (\lambda - 1)$ and y represents income consistent with utility maximizing behavior. The segregation strategy is then chosen to maximize indirect utility according to equation (11). Finally, the model allows for differences in seller productivity such that there are high-ability (h) and low-ability (l) individuals in each race group.

Borjas and Bronars close the model by characterizing the equilibrium distributions of prices and income for the various types of market actors. Based on their

[31] It is assumed that white consumers do not discriminate against white sellers and that black buyers are indifferent between sellers of either race.

[32] Efficiency dictates that the part of the work day spent in production, $s\beta H$, equals the portion spent conducting transactions, $\alpha\tau(1 - s)H$. Solving for s gives the equation in the text.

assumptions about preferences and production technologies, the equilibrium set of prices is described by the following observations:

1) The price sellers charge is the minimum of the reservation prices of the consumers they opt to serve.
2) The order of reservation prices is: $P^*(w, w) \geq P^*(w, b) = P^*(b, b) \geq P^*(b, w)$.
3) If the market segregates by race, then sellers will be of the same race as buyers.
4) Since high-ability sellers segregate only if their low-ability counterparts do, then the offer price distribution is ordered as: $P_{wl} \geq P_{wh} \geq P_{bl} \geq P_{bh}$.

Thus, the price schedule of white sellers constitutes a ceiling above which black sellers will never charge. Perhaps more striking is the result that high-ability sellers of both races never price above their low-ability equivalents.

These results determine the first two moments of the income distributions for white and black sellers. From the fourth condition above for prices, it is clear that even if both black and white sellers are retaining all contacts ($\tau = 1$), the latter can always charge a higher price and, on average, generate more revenue. Therefore the mean of the white income distribution will be greater than that of the black sellers. As for the variance of the distributions, Borjas and Bronars note that higher returns to ability follow from greater variance in the distribution of income.[33] They define the variable Δ to be the ratio of the relative incomes of high-ability sellers:

$$\Delta = \frac{(y_{wh} / y_{wl})}{(y_{bh} / y_{bl})} \tag{12}$$

Whenever $\Delta > 1$, the returns to ability for whites exceed those for blacks, and Borjas and Bronars derive a set of outcomes for the variance based on different market segregation patterns.

These features of the price and income distributions indicate that incomplete information (and attendant search costs) for consumers coupled with discriminatory tastes will not only affect the size of the minority class in the market but also its quality composition. Since high ability members of the minority class face lower returns to their skill, they also have fewer incentives to engage in the prejudiced market.

2. Chiswick's Employee Discrimination Model

In addition to customer discrimination, Becker identified fellow employees' tastes as an alternative source of biased outcomes. Chiswick (1973) developed a model of employee discrimination (which was then used to conduct an empirical analysis) as follows. Consider the case in which white workers in some location prefer not to work with non-whites. For a given amount of human capital, the wage for white employees will be:

[33] Borjas and Bronars specifically examine the variance of log income, a standard measure of income inequality, given in this model by $\pi(1 - \pi)[\ln(y_{ih}/y_{il})]^2$. Since this variance measure increases with the ratio of high-ability to low-ability incomes, greater variance is suggestive of a higher return to ability.

$$Y_i = Y_i^*(1+\delta_i X_i) \tag{13}$$

where Y_i^* is the wage of a white worker who works only with other whites, X_i equals one if he works with nonwhites and zero otherwise and δ_i is the discrimination coefficient, which may vary with i. Furthermore, let μ_x be the mean of the X_i's, or the proportion of white workers in integrated firms, p represent the share of nonwhites in the population, μ_δ the mean of the δ_i's and $k = \mu / p$ an index of integration.

As in the customer discrimination model, Chiswick's analysis focuses on the degree of income inequality. Taking first the natural log and then the variance of equation (13) yields the following two equations (for small δ_i):

$$\ln(Y_i) = \ln(Y_i^*) + \delta_i X_i \tag{14}$$

$$\sigma^2(\ln Y_i) = \sigma^2(\ln Y_i^*) + \sigma^2(\delta_i X_i) + 2\operatorname{cov}(\ln Y_i^*, \delta_i X_i) \tag{15}$$

After invoking the formula for the variance of the product of random variables and applying some additional algebra, Chiswick presents the final version of the model as:

$$\sigma^2(\ln Y) = \sigma^2(\ln Y^*) + \left\{k\left(\mu_\delta^2 + \sigma^2(\delta)\right)\right\}p + (-\mu^2 k^2)p^2 + U \tag{16}$$

where U is the residual capturing the unmeasurable covariance term in equation (15).

Inspection of equation (16) generates several hypotheses governing the relationship between income inequality and the level of integration in the workforce. For a fixed variance of Y^*, white wage disparity increases with the nonwhite population (p).[34] Holding constant the discriminatory preferences of white workers, the more labor market integration, the greater the inequity of white earnings. Finally, inequality increases with the prevalence of discriminatory tastes (holding integration constant) and with the variance in those tastes (holding integration and mean tastes fixed). In fact, Chiswick's empirical analysis suggests that white employee discrimination against nonwhites raises average white income inequality by 2.3 percent in the entire U.S. and 3.1 percent in the South.[35] However, discrimination against whites by nonwhites was not found to be a significant factor in explaining their income inequality.

3. Did Ideology Influence the Acceptance of the Employer Animus Model?

Given the relative value of the various models in explaining persistent labor market discrimination, it is important to consider why the employer-animus model (henceforth "the employer model") became the dominant economic model of discrimination from the time Becker advanced it in 1959 and Milton Friedman championed it in the early 1960s. One possible answer is that ideology often trumps truth when high political stakes are involved, and both the left and right had reasons for preferring the employer model. The left found it more palatable to blame employers instead of customers and fellow workers for the ravages of discrimination, and with the enormous political battle brewing over adoption of a federal antidiscrimination law, it

[34] For this result to hold, Chiswick observes that μ_x must be less than ½.
[35] Chiswick (1973).

was better strategy to say that the law was needed to deal with bad southern employers than with the bad citizens of the South (the rest of the country had already adopted state antidiscrimination laws, so the heart of the debate was whether Congress should impose an antidiscrimination law on the South). At the same time, the right embraced the Becker employer-animus model out of dislike for antidiscrimination law and the desire to follow the lead blocking of Milton Friedman (a major opponent of the state antidiscrimination laws) in arguing that legal intervention was unnecessary since the market would effectively discipline discriminatory employers. Writing in 1963 and hoping to derail the federal efforts to adopt an antidiscrimination law, Milton Friedman clearly did not want to draw attention to the fact that the market rewards and hence encourages obeisance to the discriminatory preferences of fellow employees and customers: rather than driving out these discriminators, the market will serve to entrench those who cater to the discriminatory tastes of fellow workers and customers.

Friedman engendered much antagonism for the discipline of economics by his strident opposition to the 1964 Civil Rights Act. While his equation of this federal law to the Nazi Nuremberg laws (see the quote below in the text at footnote 64) was puzzling, and his claim that blacks would be better off without the law has now been widely rejected, Friedman's opposition to an antidiscrimination law that injected government into a large realm of hitherto unregulated private contracting is consistent with his larger goal of promoting freer markets and less government. It is not implausible that he believed that in the long-run even southern blacks would be better off with this policy mixture. One sees this sentiment expressed in the work of Bhagwati (discussed above), in which he invokes the Becker employer model in stressing the benefits of competition and free trade in reducing earnings disparities by sex. The bottom line then is that market incentives can encourage discrimination in some settings and discourage it in others, and therefore, one needs to know a considerable amount about the nature of the discrimination and the institutional context before one can predict which of these outcomes will occur. In the Jim Crow South, federal law was needed to protect blacks since both the market and the local judicial/political system had failed; but that doesn't necessarily imply that law is serving a similarly important function today. Nor can one conclude that because the market catered to the discriminatory preferences of workers and customers at an earlier time, increased market pressures today from free trade and globalization will cause more discrimination (although these economic forces might harm workers at the bottom end of the socio-economic scale, who are disproportionately black, not because of *discrimination* but because of the downward pressure on the wages of low-skill workers).

In certain settings, customers have demonstrated strong discriminatory preferences. In the early days of Title VII, the courts addressed the issue of whether an employer could lawfully accommodate the discriminatory preferences of customers in a series of cases challenging airline rules that favored the hiring of young, unmarried, and attractive women to be flight attendants. The law is now well-established that such conduct constitutes unlawful employment discrimination. Clearly, the market and the law have clashed in this arena.[36]

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[36] Indeed, the airline run by the restaurant chain Hooters has found a way around the prohibitions of Title VII by structuring its service of Hooters Girls on its planes as a way of selling sex appeal (since federal law allows sex discrimination if it is based on a bona fide occupational qualification) rather than hiring these

Fellow-worker discrimination is also a problem, but it need not undermine employment prospects (in terms of jobs and wages) if firms simply move to more segregated workforces. Of course, because current law prohibits segregation, the market and the law are in direct conflict in this area as well. But while customer and fellow-worker discrimination can explain the enduring character of racial discrimination in the South (in contrast to the employer model), neither customer nor fellow-worker discrimination can explain the pattern of exclusion from the southern textile industry. Customers would have no way of knowing, nor presumably would they care about, the race of the workers in textile plants. While fellow-worker discrimination might explain exclusion from a particular plant, if this problem were rampant, it would, again, only lead to segregated plants -- not the complete exclusion of blacks from the industry that Heckman and Payner (1989) have so thoroughly documented in the pre-Title VII world.[37]

C. The Cartel Model of Discrimination

The second rival to employer animus models is the cartel model of discrimination designed to explain the enduring discriminatory patterns of the Jim Crow South. While Becker premised his models of discrimination on the operation of a perfectly competitive market operating without constraint, the cartel model posits that white employers and workers managed to thwart the operation of the market by exploitatively relegating blacks to low-paying positions.[38] While Becker argued that discriminators were hurt by their discriminatory attitudes, the cartel model posits that discrimination generates supra-competitive profits for the discriminators.[39] The cartel model has a clear advantage over the Becker employer-discrimination model by better conforming with the reality that "the market" never seemed to thwart Jim Crow restrictions, which endured for decades until federal intervention finally brought them crashing down. Similarly, the cartel model conforms to the historical evidence better than the customer and fellow-worker discrimination models. Specifically, the customer discrimination model founders because discrimination was present even when customers could not identify workers, and the fellow-worker discrimination model predicts segregation (not wholesale exclusion as was observed in the southern textile industry). Libertarians, such as Richard Epstein, have also endorsed the cartel model since it has an appealing built-in remedy -- simply destroy the power of the cartel, and the market will be able to operate in the protective manner that it should. Government might be needed to break up the cartel, but once competition is restored, government should revert to its more limited role of preventing

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women for customary flight attendant jobs, for which the airline would have no right to discriminate on the basis of sex.

[37] One Chicago scholar responded to hearing of the findings of Heckman and Payner (1989) by pointing out that a powerful industry-wide union could have explained the exclusion of blacks. While the point is correct as a matter of theory, it fails as a matter of fact – such powerful unions were virtually non-existent in the southern textile industry throughout the first sixty-five years of the 20th Century.

[38] See Altonji and Blank (1999) for an excellent review of the theoretical literature on occupational exclusion.

[39] Recall from the discussion of the Becker employer model depicted in Figure 1 that the monetary profits of the discriminators *rose* even though their utility fell because of the psychic cost of having non-preferred workers. In the cartel model, the employers are able to restrict the hiring of black labor in order to increase their monetary profits without paying the psychic cost, and the absence of competition enables them to retain the supra-competitive price.

the use of force and fraud.[40] In short, the libertarian argument is that no antidiscrimination law is needed once the stranglehold of the racist cartel is broken.

What is still unclear, though, is whether the "cartel" was the product of pernicious governmental restrictions and private violence, as Epstein insists, or the product of status-enhancing norms that generated utility gains for the white community, as Richard McAdams has argued.[41] McAdams' theory comports with empirical data from the Jim Crow period. While both Epstein and McAdams agree that whites clearly collaborated to help themselves at the expense of blacks, and while some of this action was enforced by law -- for example, many aspects of segregation were legally mandated -- there were many arenas in the South in which the law did not speak, yet the cartel was maintained. For example, there was no legal requirement that firms refuse to hire blacks, yet entire industries in the South did this for decades without any sign that the market was eroding this pattern -- until the passage of the 1964 Civil Rights Act. McAdams and Epstein then stand in contrast to Becker and Friedman in arguing that federal governmental action was necessary to break up the power of the white cartel. But McAdams rejects the Epsteinian view that the cartel could only have been sustained by virtue of discriminatory governmental action, which itself was the problem. According to McAdams, legal intervention was needed to overcome discriminatory patterns that were not backed up by governmental restrictions. Whites had a vested interest in policing the informal cartel because they benefited from the increase in prestige and status, as well as the monetary benefits that were derived from subordinating blacks. McAdams marshals the social science literature showing that groups can enforce norms which enable a cartel to persist and thwart the power of those whose efforts to cheat on the cartel -- for example, firms hiring cheap black labor -- might eliminate the discriminatory conduct.

Interestingly, even if McAdams' hypothesis provides a better theoretical explanation for discrimination during the Jim Crow era than that offered by Becker or Friedman, there remains a question about its relevance to current American conditions. Are self-enforcing discriminatory norms still powerful enough to undermine the protective forces of competitive labor markets? Current stories of American companies establishing customer service call centers in foreign countries suggest a type of aggressive pursuit of profits that is hard to square with any pure taste for discrimination or self-enforcing discriminatory norms.[42]

D. Statistical Discrimination

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[40] Epstein (1992).

[41] McAdams (1995).

[42] Query whether these global shifts only suggest that enormous profit opportunities can overcome discrimination. According to "Financial Firms Hasten Their Move to Outsourcing" (2004):

> in 2003 the average M.B.A. working in the financial services industry in India, where the cost of living is about 30 percent less than in the United States, earned 14 percent of his American counterpart's wages. Information technology professionals earned 13 percent, while call center workers who provide customer support and telemarketing services earned 7 percent of their American counterparts' salaries. Experts say that with China, India, the former Soviet Union and other nations embracing free trade and capitalism, there is a population 10 times that of the United States with average wage advantages of 85 percent to 95 percent.

The third rival to the employer animus models are the models of statistical discrimination. A central feature in these models is that unobservable attributes of workers that differ by sex, race or ethnicity prevent employers from ascertaining their true individual capabilities. Consequently, the existence of imperfect information induces employers to form hiring and wage decisions based on whatever observable information they can gather (including the worker's race or sex) as well as their prior beliefs about the expected ability of potential workers. This concept was first introduced by the models of Phelps (1972) and Arrow (1973). Since then, extensions of these theories have been highly prominent in the economic analysis of discrimination. Section 1 begins with a discussion of "statistical discrimination" in which the underlying productivities of the two groups are unequal, perhaps because of poorer schooling and lower SES (blacks) or because of expected differences in tenure (women). Section 2 then discusses two models of statistical discrimination in which the underlying productivities of the two groups are equal yet because of the imperfection of the signal available to the employer which is more variable for the dispreferred group, earnings disparities emerge between equally productive groups of workers. The two models are the standard, static model of statistical discrimination as depicted in Aigner and Cain (1977) and the dynamic extension in Oettinger (1996), which allows for learning over time.

1. "Statistical Discrimination" Where Group Productivities are Unequal

Statistical discrimination models would appear to have greater explanatory power than the Becker employer model in that they are consistent with the persistence of discrimination over long periods of time. Note, though, that while statistical discrimination as here defined is clearly prohibited under federal law, it does not necessarily constitute discrimination in the economist's sense of the term. Specifically, if on average Group A is less productive than Group B (perhaps because of poorer schooling options), then it is not discriminatory (in the economist's definition) for members of Group A to be paid less than those of Group B. Indeed, to the economist, a situation in which the earnings shortfall accurately reflects the productivity shortfall is the definition of a *non-discriminatory* outcome. Federal law is clear, however, that ascribing the qualities of a racial or gender group to an individual member of that group (even if correct on average) constitutes unlawful discrimination against that individual. The greater individualized treatment in the hiring process that the law mandates will tend to help the more elite members of the group, who will not be tainted with the lower-average quality predictions that would otherwise be ascribed to them.[43] Conversely, *eliminating* statistical discrimination tends to harm those with the least human capital, as more individualized consideration will confirm their likely lower-than-average productivity. Thus, unless reliance on statistical discrimination impairs human capital accumulation or

[43] The divergence between the economist's conception of discrimination and the legal or popular conception of discrimination is illustrated by the manner in which the law tries to encourage employers not to consider the fact that young women are highly likely at some point to have children, which may impose costs on the employer. Indeed, if the only salient difference between male and female workers was that women needed to take time off for childbirth and subsequently spent more time in child-rearing than their male counterparts, and these traits were costly or less desirable to employers, than an economist would say that paying women identically for what is on average a less valuable contribution to an employer would be discrimination. Any attempt to pay women less on this basis would clearly violate both the legal and popular conception of discrimination.

on the job performance -- a subject addressed below -- the legal attack on statistical discrimination should not be expected to improve overall welfare of any disfavored group but only to redistribute wealth from the poorest members of that group to its more affluent members.

Three main points should be made about this simple model of statistical discrimination. First, while the practice will be persistent to the extent that it is profitable to employers (presumably in helping them select good workers at low cost), there are ways for the above-average members of the group to protect themselves by signaling their high productivity to employers. Of course, without the benefit of Title VII, these workers would have to pay the costs of such signaling, which may be an argument for the legal prohibition if these signaling costs are high relative to the costs of legal enforcement. Second, there is a potential inefficiency associated with statistical discrimination in that it undermines *ex ante* incentives for investment in human capital if workers perceive that they will be treated *ex post* as "average" members of their group when seeking employment.[44] Unless a signal can overcome this treatment – note the distinction between a directly productive investment in human capital and a pure signal that is merely revelatory but unproductive -- a worker who invests in greater human capital incurs a cost that is not fully rewarded, which will therefore result in inefficient underinvestment. Again, this inefficiency can provide a second basis for the legal prohibition of statistical discrimination. But while the risk of underinvestment in human capital as a response to statistical discrimination may have been more problematic in the past, the current empirical evidence raises doubt that this is a major concern today since returns to education are as high for blacks and other groups as they are for whites.[45] Whether underinvestment induced by statistical discrimination has been a major problem for other protected workers, such as women or the disabled, is unclear.

The third point may be the most telling criticism of statistical discrimination when practiced against previously subordinated groups. In this situation, it may be unrealistic to assume that employer judgments will be correct on average since cognitive biases may tend to confirm the negative stereotypes that are retained from the time of subordination. Indeed, numerous studies find that individuals focus more on confirming evidence while tending to discount disconfirming evidence, which suggests that a legacy of past subordination may tend to be self-perpetuating if stereotypes tend to be reinforced.[46] Of course, competitive markets will tend to discipline firms that are subject to such cognitive biases and reward those who more accurately set the price of labor. But as Bhagwati suggested in his discussion of the gains from introducing external competition, a social consensus can develop about the attributes of previously subordinated groups that is highly resistant to change. Psychologists have developed an implicit attitudes test that reveals that most Americans strongly associate -- albeit at an unconscious level --

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[44] Lundberg and Startz (1998).

[45] One might still argue that, perhaps owing to lower parental investment and lower quality education, the costs of greater investment in human capital are higher for blacks, which might suggest that blacks would need more than equal percentage returns to elicit the optimal level of human capital investment.

[46] Loury (2002). It appears that certain beliefs are important to many as a basis of providing a sense of order or security, and these beliefs can be highly resistant to change even in the face of compelling evidence to the contrary.

positive attributes with being white and negative attributes with being black.[47] As Kenneth Arrow has observed:

> "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."[48]

At some point, the repeated association of race and lower productivity may become an embedded truth for many, as well as a factor that systematically undermines the productivity and performance of the victims of this stereotype, through what psychologists have called the "stereotype threat."[49] Indeed, once this "self-confirming" stereotype becomes entrenched, it might well lead to the type of Beckerian animus-based discrimination that was discussed above.[50] The growing literature that supports this view strengthens the case for legal prohibition of such discrimination.[51]

Arrow also believes that none of the economic models of discrimination can fully explain the observable patterns of behavior. For example, he finds that there is no market-based explanation for discrimination against black consumers, yet he considers the evidence in support of such discrimination to be compelling. Arrow also conjectures that beliefs and individual preferences may themselves be the product of social interactions unmediated by prices and markets. He focuses on the non-market network of social acquaintances and friends in the labor market that are often stratified by sex and race. Arrow emphasizes that this "network model" may be the most appropriate for the labor market, because each transaction within the employment sphere is a social event.[52] Since employment may occur by means of referral from current employees, labor segregation and discrimination can easily arise, particularly if profit maximization takes a subordinate role to maintaining a social network.

2. True Discrimination – Equally Productive Groups yet Unequal Pay

If employers simply generalize about individuals based on group difference in average productivity, we have seen that true discrimination is difficult to generate. Seeing every women as the average woman does hurt some women, but helps others (those below the average for women) and hence can not really explain group differences in average pay that are not based on group differences in average productivity. To explain this kind of discriminatory outcome, we need to focus on differences in the *reliability* of

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[47] Greenwald, Banaji, et al (2002).
[48] Arrow (1998).
[49] Steele and Aronson (1995).
[50] Loury (2002) and Ramirez (2004).
[51] Arrow finds the model of statistical discrimination can also explain discrimination in the mortgage market because blacks default more on loans than whites. Discrimination in this market is statistical rather than taste-based because the mortgage-lender is simply attempting to minimize risk when providing more loans to whites.
[52] See Bayer, Ross and Topa (2005) for empirical evidence revealing a significant effect of social networks on a variety of labor market outcomes.

productivity-related information across groups. This approach is taken by Aigner and Cain (1977), whose model develops as follows. Consider again a labor market comprised of two groups, X and Y, and let their underlying productive ability, α, be a random variable distributed such that $\alpha \sim \mathrm{N}(\mu, \sigma_\alpha^2)$. The interpretation for this condition is that the employer does not know the value of α for a job applicant but possesses information about the distribution of ability in the overall population. Although the employer *ex ante* cannot learn α, he observes a noisy signal s (such as the score from an aptitude test) which equals the sum of true ability and a normally distributed error term with mean zero and variance σ_g^2 for g = X, Y. The crucial assumption of the model is that $\sigma_X^2 > \sigma_Y^2$, which means that the signal more accurately reflects latent ability for Group Y. Presuming that workers and firms are risk neutral, competition for workers bids wages up to their expected productivity conditional on the signal. Therefore, the wage is set according to:

$$w = E(\alpha|s) = \mu\left(\frac{\sigma_g^2}{\sigma_g^2 + \sigma_\alpha^2}\right) + s\left(\frac{\sigma_\alpha^2}{\sigma_g^2 + \sigma_\alpha^2}\right) \tag{17}$$

In words, the wage is a weighted average of mean ability (group characteristic) and the signal (individual characteristic) where the weights are derived from the projection of α onto s. Differences in the information content of s alter the two weights but do not generate differences in the average wage of the two groups.[53]

The Oettinger (1996) model explores the simplest form of learning using a two-period horizon. Let those periods be indexed by t = 1, 2 and allow α and s to vary with time. As before, $\alpha_t \sim \mathrm{N}(\mu, \sigma_\alpha^2)$ and $s_t = \alpha_t + \varepsilon_t$ where $\varepsilon_t \sim N(0, \sigma_g^2)$ and the variance of the error term for Group X exceeds that for Group Y. With only two periods, workers may either remain in their period 1 job during period 2 or switch to another position. Oettinger continues to assume a wage structure based on expected productivity but also allows for piece rate wages; therefore the wage in period t is $w_t = \theta\hat{\alpha}_t + (1-\theta)\alpha_t$ where $\hat{\alpha}_t$ is the conditional expectation of ability and $0 \le \theta \le 1$. This setup departs from the static model of statistical discrimination most notably in its assertion that productivity is match-specific. In other words, neither employee nor employer knows the former's ability in a given position before a match takes place. Thus, Oettinger remarks that for this model of learning to matter, "the arrival of this new information…must vary across job matches, and job mobility must be feasible."[54]

Since the firm will discover α_1 for a worker that stays in period 2, the wage schedule over time will be:

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[53] Taking the expectation of wages over s, it is evident that the average wage will be the mean level of ability μ since that is the mean of s. For this reason, Aigner and Cain take issue with the original Phelps (1972) model because differences in mean ability or signal variances do not engender average wage inequality. Thus, in order to get true discrimination, they demonstrate that employers must also be risk averse. This means that employer utility depends on signal variances, which causes the group with the less informative signal to receive a lower average wage. The model is subject to criticism, not only on the grounds that the signals are not less reliable for different groups, but also because it would seem to be unlikely that employers are sufficiently risk averse to penalize blacks to a large degree.

[54] Oettinger (1996).

$$w_1 = \theta\hat{\alpha}_1 + (1-\theta)\alpha_1$$

$$w_2 = \begin{cases} \alpha_1 & \text{if } \alpha_1 \geq \hat{\alpha}_2 \text{ (true for stayers)} \\ \theta\hat{\alpha}_2 + (1-\theta)\alpha_2 & \text{if } \alpha_1 < \hat{\alpha}_2 \text{ (true for movers)} \end{cases} \tag{18}$$

Recall from above that the conditional expectation of α_1 under risk neutrality does not differ between Group X and Group Y; it is simply μ. Since period 1 wages are a weighted average of that conditional expectation and its true value, initial wages for X and Y are then expected to be equal.

The model then analyzes expectations of between-period wage changes and second period wages to derive hypotheses about the effects of signal extraction on wage disparities. Workers will choose to remain in their period 1 jobs if they expect a wage *decrease* from moving. Hence their expectation, conditional on staying, is:

$$E\left(\theta(\alpha_1 - \hat{\alpha}_1) \middle| \alpha_1 - \hat{\alpha}_2 \geq 0\right) = \left(\frac{(1-\rho^2)\theta}{\sqrt{1+\rho^2}}\right)\left(\frac{2\sigma_\alpha^2}{\pi}\right)^{1/2} \tag{19}$$

where ρ is the signal to noise ratio. The implication of equation (19) is that the expected value of staying decreases as the signal becomes more precise. Therefore, under the model's assumptions, X stayers can expect larger average wage gains than Y stayers. On the other hand, a mover faces an expected wage of:

$$E\left(\theta(\hat{\alpha}_2 - \hat{\alpha}_1) + (1-\theta)(\alpha_2 - \alpha_1) \middle| \hat{\alpha}_2 - \alpha_1 > 0\right) = \left(\frac{(1+\rho^2) - (1-\rho^2)\theta}{\sqrt{1+\rho^2}}\right)\left(\frac{2\sigma_\alpha^2}{\pi}\right)^{1/2} \tag{20}$$

Now, enhanced signal precision (higher ρ) raises expected wages and thus predicts greater wage gains for Y movers.

In the second period, only the level of w_2 matters since the decision to move or stay has already been made. The expectations of a worker that remains at his first period firm and one that relocates are, respectively:

$$E\left(\alpha_1 \middle| \alpha_1 - \hat{\alpha}_2 \geq 0\right) = \mu + \left(\frac{1}{\sqrt{1+\rho^2}}\right)\left(\frac{2\sigma_\alpha^2}{\pi}\right)^{1/2} \tag{21}$$

$$E\left(\theta\hat{\alpha}_2 + (1-\theta)\alpha_2 \middle| \hat{\alpha}_2 - \alpha_1 > 0\right) = \mu + \left(\frac{\rho^2}{\sqrt{1+\rho^2}}\right)\left(\frac{2\sigma_\alpha^2}{\pi}\right)^{1/2} \tag{22}$$

These two equations differ solely by the factor ρ^2 in the second term on the right hand side. Since that coefficient is necessarily positive but less than one, the model suggests positive returns to job tenure. However, as ρ rises, so too does the return to job switching. Therefore, Group X should benefit more from staying in period 2, whereas

Group Y profits from changing positions. Using equations (21) and (22), one can compute the unconditional second period wage to be:

$$E(w_2) = \mu + \left(\frac{(1+\rho^2)\sigma_\alpha^2}{2\pi} \right)^{1/2} \tag{23}$$

This equation unambiguously predicts that Group Y, with a higher value of ρ, will have higher wages in the second period. Thus, "the model predicts that while no wage gap should exist at the time of labor force entry, one should develop as time in the labor force accumulates." Oettinger's intuition for this outcome is that the random draw that characterizes period 1 matching precludes any wage gap. However, more successful matches in the future lead to higher wages, and minorities (in our case, Group X) are disadvantaged because of their noisy productivity signal.[55]

The theoretical models discussed in this section are certainly interesting in that they purport to explain true discrimination where groups of equal productivity receive unequal compensation. Nonetheless, Cain (1986: 729) does "not find the empirical counterparts to [these] models of statistical discrimination and signaling to be convincing." Altonji and Blank (1999: 3190) concur: "we are unaware of any empirical work that systematically investigates the proposition that the 'signal to noise' in employer assessment of workers is lower for women than men or for blacks than whites, despite the prominence of the idea in the discrimination literature. For this reason, we are not clear how much weight should be placed on the statistical discrimination/information quality explanations for differences in group outcomes…"

III. Should Private Discrimination Be Prohibited?

Although the American public overwhelmingly endorses the view that labor market discrimination on the basis of race and gender should be unlawful, standard economic theory can be invoked to argue that such discrimination should not be prohibited. This argument proceeds from a basic assumption of neoclassical economics that utility maximization is an attractive principle of social welfare. As a first approximation, permitting individuals to make choices that may reflect discriminatory preferences maximizes utility. In essence, a partial equilibrium analysis invests the intersection of supply and demand curves with normative significance, and neoclassical economics tends to view discrimination as simply one more preference that shapes those curves.

Put differently, standard neoclassical economics usually begins with the assumption that, *in the absence of market failure*, there is no economic argument for government intervention into a competitive labor market. In the various taste-based models, discrimination merely reflects a personal preference of an employer, fellow employee, or customer not to associate with a certain category of individuals.[56] This model of personal preference implies that discrimination does not constitute a "market

[55] One should keep in mind that these results are predicated on the assumption that θ does not vary between the two groups. If it did, the results would be ambiguous.
[56] Becker (1957).

failure" in that competitive markets will still generate the most efficient allocation of resources. In terms of the partial equilibrium analysis of a labor market depicted in Figure 1, discrimination is a factor that influences the contours of the relevant supply and demand curves, but the intersection of those curves still represents the efficient solution in that any deviation from that outcome would lower welfare (as long as one honors discriminatory preferences). Similarly, under the statistical discrimination models, firms are assumed to be profit-maximizing, so again there is no market failure, which ordinarily implies that there is no efficiency argument for governmental intervention.[57]

In a competitive market, the price of a good or service should equal its value to the marginal buyer (if not, competitive pressures will cause the price to rise or fall to restore the equality.) Thus, from the perspective of consumer sovereignty, a free market economist might even say that, in a competitive market, there can be no "discrimination" in the sense that the price paid for any good or service should equal the value that the marginal purchaser places on it. Figure 1 reveals that the marginal purchaser of black labor values the marginal worker by BQ_2, which is clearly lower than AQ_1, the value of the marginal worker in the absence of discrimination. This is somewhat of a semantic point, but one would ordinarily not say that a customer who prefers the voice of Singer A to that of Singer B and thus is willing to pay more for recordings of A's music is "discriminating" against Singer B. The willingness to spend more to enjoy A's music reflects the customer's preference for that artist, and the market will ordinarily cater to that preference. In essence, the modern legal prohibition of "discrimination" posits that any preference based on race, gender, and a host of other factors is illegitimate and therefore, the goal of law is to ascertain the equilibrium intersection of the supply and demand curves -- point A in Figure 1 -- that would exist if no economic agent had any awareness of these traits (or at least no differential valuation of them). Of course, the pure preference distinction between Singer A and Singer B does not capture the historical context in which blacks have endured a long history of oppression and subordination. This example does raise the issue of whether discrimination in the absence of such history of oppression should be treated differently from other market preferences. Would white males over 40 – the primary litigants in age discrimination cases – have a strong claim for legal protection on these grounds?

The moral judgment that discriminatory preferences should not enter the social welfare calculus might be analogized to the standard philosophical argument that malicious preferences -- those benefits that derive from the suffering of others -- must be outside the welfare calculus. Clearly, some discrimination has been of this type in that it has been used to subordinate certain groups as a means to elevating the well-being of members of the dominant group.[58] But not all discrimination has this malicious, other-regarding character, and philosophers have had trouble justifying why non-malicious discriminatory preferences should be disregarded. Consider in this regard the words of Ronald Dworkin arguing against Catherine MacKinnon's view that pornography should be prohibited because it represents impermissible discrimination against women.[59]

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[57] For an argument that antidiscrimination law can promote efficiency in a world of Becker employer discrimination by driving the discriminators from the market more rapidly, and thereby reducing the costs of discrimination, see Donohue (1986), the reply in Posner (1987) and a final rejoinder in Donohue (1987).
[58] See the discussion of McAdams (1995) in Section II (C), above.
[59] Dworkin (1993).

Dworkin argues that the "principle that considerations of equality require that some people not be free to express their tastes or preferences anywhere" is "frightening" and that if liberty and equality really conflict "we should have to choose liberty because the alternative would be the despotism of the thought-police."[60]

But in the realm of discrimination in employment, housing, and education, we do have to choose between liberty and equality (at least in the negative conception of liberty implying freedom from external restraint). As Dworkin states:

> Exactly because the moral environment in which we all live is in good part created by others … the question of who shall have the power to help shape that environment, and how, is of fundamental importance, though it is often neglected in political theory. *Only one answer is consistent with the ideals of political equality: that no one may be prevented from influencing the shared moral environment, through his own private choices, tastes, opinions, and example, just because these tastes or opinions disgust those who have the power to shut him up or lock him up.* Of course, the ways in which anyone may exercise that influence must be limited in order to protect the security and interests of others. People may not try to mold the moral climate by intimidating women with sexual demands or by burning a cross on a black family's lawn, **or by refusing to hire women or blacks at all**, or by making their working conditions so humiliating as to be intolerable (emphasis supplied).
>
> But we cannot count, among the kinds of interests that may be protected in this way, a right not to be insulted or damaged just by the fact that others have hostile or uncongenial tastes, or that they are free to express or indulge them in private. Recognizing that right would mean denying that some people -- whose tastes these are -- have any right to participate in forming the moral environment at all.
>
> …This is an old liberal warning -- as old as Voltaire -- and many people have grown impatient with it. They are willing to take the chance, they say, to advance a program that seems overwhelmingly important now. Their impatience may prove fatal for that program rather than essential to it, however. If we abandon our traditional understanding of equality for a different one that allows a majority to define some people as too corrupt or offensive or radical to join in the informal moral life of the nation, we will have begun a process that ends, as it has in so many other parts of the world, in making equality something to be feared rather than celebrated, a mocking, 'correct' euphemism for tyranny.[61]

There is an interesting contradiction here. At first, Dworkin seems to be making a strong philosophical argument for why individuals should be allowed to exercise their private tastes and choices by discriminating against other groups even if society finds that

[60] Dworkin (1993).
[61] Dworkin (1993).

offensive (note specifically the language in italics). But then, in the language highlighted in bold, he specifically exempts employment discrimination from his general view that liberty interests must trump equality. Note that in detailing the types of conduct that society can legitimately curtail, Dworkin includes acts of intimidation and coercion -- which were traditionally prohibited as common law torts -- as well as simple refusals to deal with certain groups, which have traditionally been permitted. Richard Epstein notes that "the parallel between force and discrimination has an apparent verbal seductiveness, but the differences between the two types of behavior are so profound that it is unwise to move from a condemnation of force to an equal condemnation of discrimination…"[62]

As Epstein notes, acts of coercion and force undermine security because even if 99 percent of the populace is not a threat, we must be concerned about the one percent that "bears us the most ill will." But with competitive labor markets, we need not worry about the person who most dislikes us, but can seek out and contract with those who bear us the least ill will. As long as a few employers are willing to hire members of any protected class, these workers will have options that are far more attractive than if they had to deal with the most discriminatory employer. Although violence and discrimination have often gone together, Epstein argues that, if government had to choose which it would focus on stopping first, it should choose violence.[63] Compared to discrimination, violence is easier to identify and hence sanction (with lower Type I and Type II error), and the benefits of stopping violence will be more far-reaching. This distinction is also important in evaluating the results of audit experiments that seek to uncover the proportion of employers who harbor bias against certain groups. If, for example, 20 percent of potential employers would discriminate against a particular group, this does not necessarily tell us whether the members of that group will suffer significant harm in the labor market -- as long as a considerable portion of the labor market is open to them. Thus, competition dampens the "effective discrimination" experienced by those who are victims of bias – at least in terms of wage impairment, even if not in terms of the psychological harm of being rejected.[64]

While some economists stress the pragmatic point that competitive markets can reduce the need for antidiscrimination law, Milton Friedman, writing in *Capitalism and Freedom*, argues that such laws are not only unnecessary from a consequentialist perspective, but also defective as a matter of deontology:

> [Antidiscrimination] legislation involves the acceptance of a principle that proponents would find abhorrent in almost every other application. If it is appropriate for the state to say that individuals may not discriminate in employment because of color or race or religion, then it is equally appropriate for the state, provided a majority can be found to vote that

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[62] Epstein (1992).

[63] Epstein urges that the notion of "rounding up" or enslaving certain groups is completely different from merely refusing to deal with the group or choosing only to deal on more favorable turns. The first is imposing harm and the second is simply failing to confer a benefit, which explains why at common law the first was unlawful and the second was not.

[64] This applies for both victims of labor market discrimination as well as victims of product market discrimination. Still, the transaction costs of having to seek out the non-discriminators are real (and in one respect tend to be exacerbated by an antidiscrimination law since employers can't advertise only for their desired candidates on racial or ethnic grounds).

> way, to say that individuals must discriminate in employment on the basis of color, race or religion. The Hitler Nuremberg laws and the law in the Southern states imposing special disabilities upon Negroes are both examples of laws similar in principle to [antidiscrimination legislation].[65]

Note that Friedman's dubious equation of governmental prohibition and mandates of discrimination would be correct if liberty interests always trump equality interests as Dworkin argues because curtailing liberty is to be avoided regardless of whether the law promotes equality (Title VII) or is designed to stifle it (Nuremberg laws and Jim Crow). In the latter case, both liberty *and* equality are infringed, so the argument against the Nuremberg laws is particularly strong. One can easily imagine arguments -- contrary to the views of Dworkin and Friedman -- that limited curtailments of liberty could be justified by important enhancements of equality (and indeed Dworkin seems to have embraced exactly this principle with his endorsement of employment discrimination law). Still, one should be mindful of the admonitions of Dworkin, Friedman, Isaiah Berlin and others, that governments have inflicted much harm not only when deliberately curtailing freedom in order to inflict greater inequality, but also when sacrificing liberty in the name of greater equality.[66]

Ironically, we have the great liberal Dworkin arguing for what seems to be a libertarian position vis-à-vis employment discrimination (although he denies this conclusion), while the conservative Frank Easterbrook has rather forcefully articulated an argument for societal concern about the harm caused by discriminatory attitudes and behavior. In a judicial decision striking down an Indianapolis anti-pornography ordinance, Easterbrook offers the following argument for why equality should trump liberty in the domain of employment discrimination (although on First Amendment grounds he then rejects the force of this argument):

> Indianapolis enacted an ordinance defining "pornography" as a practice that discriminates against women. "Pornography" is to be redressed through the administrative and judicial methods used for other discrimination…Indianapolis justifies the ordinance on the ground that pornography affects thoughts. Men who see women depicted as subordinate are more likely to treat them so. Pornography is an aspect of dominance. It does not persuade people so much as change them. It works by socializing, by establishing the expected and the permissible. In this view pornography is not an idea; pornography is the injury.
>
> There is much to this perspective. Beliefs are also facts. People often act in accordance with the images and patterns they find around them. People raised in a religion tend to accept the tenets of that religion, often without independent examination. People taught from birth that black people are fit only for slavery rarely

[65] Friedman (1962).
[66] See Berlin (1969).

> rebelled against that creed; beliefs coupled with the self-interest of the masters established a social structure that inflicted great harm while enduring for centuries. Words and images act at the level of the subconscious before they persuade at the level of the conscious. Even the truth has little chance unless a statement fits within the framework of beliefs that may never have been subjected to rational study.
>
> Therefore we accept the premises of this legislation. Depictions of subordination tend to perpetuate subordination. The subordinate status of women in turn leads to affront and lower pay at work, insult and injury at home, battery and rape on the streets.[67] In the language of the legislature, "[p]ornography is central in creating and maintaining sex as a basis of discrimination. Pornography is a systematic practice of exploitation and subordination based on sex which differentially harms women. The bigotry and contempt it produces, with the acts of aggression it fosters, harm women's opportunities for equality and rights [of all kinds]." Indianapolis Code Section 16-1(a)(2). *American Booksellers Ass'n, Inc. v. Hudnut*, 771 F.2d 323, C.A.7 (Ind.), 1985, at 323, 328-29.

Note that while the specific Indianapolis statute in question was aimed at pornography, the statute was deemed to be a form of discrimination against women and the arguments advanced in support of the legislation are frequently advanced in support of all antidiscrimination law. If one accepts the view that acts of discrimination serve to construct and buttress a powerful and subconscious framework of discriminatory beliefs then the case for governmental intervention is greatly strengthened. In contrast, if discrimination is simply one of the infinite tastes or preferences that individuals express through their private choices and labor markets are highly competitive and governed by Beckerian notions of discrimination, then it is difficult to construct either an economic or philosophic argument for why government intervention would be needed. The two moves that those arguing for employment discrimination law have advanced are that 1) the Becker model is incorrect in that it fails adequately to capture the causes and consequences of discrimination, and 2) there is some other impediment that keeps the labor markets from operating competitively (thereby undermining confidence that competition will protect workers from exploitation). One can translate these two arguments into economic terms. The Becker model is inadequate if discrimination (1) creates important negative externalities, (2) is perpetuated by other types of market failure, or (3) leads to socially undesirable distributional outcomes, as in the various search models described above. In that event, the Beckerian vision of the competitive

[67] "…In saying that we accept the finding that pornography as the ordinance defines it leads to unhappy consequences, we mean only that there is evidence to this effect, that this evidence is consistent with much human experience, and that as judges we must accept the legislative resolution of such disputed empirical questions…."

laissez-faire equilibrium maximizing social welfare is no longer theoretically assured even if the discriminatory preferences are fully honored.[68] The second argument posits either that discriminators have been able to act as an exploitive and anticompetitive cartel in which blacks were essentially denied access to jobs, or there is some other friction that prevents the discriminators from being driven from the market at the optimal rate, as discussed in Donohue (1986). Of course, the entire apparatus of Jim Crow in the South prior to the adoption of the 1964 Civil Rights Act would seem to support this characterization, as discussed in Section II (C), above.

In the end, it is important to realize that both opponents and supporters of bans on discrimination have at times relied on rhetorical excess to advance their positions. Milton Friedman's attempt to equate a law like Title VII to something that is now universally reviled (the Nazi Nuremberg laws) is one obvious example. A law that is designed to be an integral part of a legal apparatus of subordination and ultimate extermination simply cannot be equated with one that prohibits discrimination. Similarly, supporters of laws such as Title VII link the prohibition of discrimination to a battle against slavery and violence against subordinated groups, but again this link need not exist if the only practice that is being banned is the individual decision not to deal with a certain group (or not to deal in as favorable terms as those given to some other group). Presumably, acts of slavery and violence can (and of course should) be prohibited directly, regardless of whether discrimination is tolerated or banned.

Nor is every act of discrimination so obviously malicious or mean-spirited. There is considerable evidence that employers pay more for "attractive" workers.[69] According to one study: "The 9 percent of working men who are viewed as being below average or homely are penalized about 10 percent in hourly earnings. The 32 percent who are viewed as having above-average looks or even as handsome receive an earnings premium of 5 percent." The study goes on to note that the findings for women are similar although somewhat smaller: the best looking women earned 4 percent more, while the least attractive earned 5 percent less than average looking workers.[70] Another study found that obese women suffer in the labor market, but that 95 percent of their lower economic status comes from their poorer prospects in the marriage market (in terms of lower probability of marriage and a lower earning spouse if married).[71] Consequently, if race or ethnicity influences one's notion of attractiveness, it would not be surprising if some employers gravitated more to certain racial or ethnic groups in making their employment decisions. Employers also may gravitate to certain personalities, which could again be influenced by the culture of certain racial or ethnic groups. While society seems to accept preferences for attractive physical or personality traits, the distinction between such permissible preferences and impermissible discrimination when the preferences

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[68] See generally, Sen (1970).

[69] Hamermesh and Parker (2003) examine the effect of physical attractiveness on student evaluations of professors. Relying on student evaluations of 94 professors in 463 courses at the University of Texas at Austin, they found that teachers' attractiveness directly impacts the student's evaluations of their teachers: increasing attractiveness by 1 standard deviation increased the evaluation of the professor by roughly one-half a standard deviation. The authors consider, but do not resolve, the question of whether the good looks correlate with better teaching skills or effectiveness, which might provide a productivity-based explanation for the disparity.

[70] Hamermesh and Biddle (1994).

[71] Averett and Korenman (1996).

correlate with race or ethnicity is not easy to discern either conceptually or in practice. Nonetheless, federal antidiscrimination law embodies the judgment that society is willing to allow discrimination against "unattractive" individuals as long as the reason for the judgment of unattractiveness is not one of the precluded traits of race, sex, religion, ethnicity, disability, or age.

IV. Discrimination versus Disparities

Continued concern about the existence and consequences of discrimination is primarily driven by large and enduring racial/ethnic disparities in poverty and unemployment rates as well as earnings and wealth. For example, 22.7 percent of all blacks earned wages below the poverty line in 2001 as opposed to only 9.9 percent of whites.[72] For decades, black unemployment rates have typically been twice those of whites: recent data in December 2002 shows the unemployment rate was 11.5 percent for blacks and only 5.1 percent for whites.[73] For full-time workers, the median white male full-time worker had an income of $40,790 in 2001 while the median black male full-time worker only made $31,921 (see Table 1 below). Moreover, racial disparities in wealth are vastly greater.

Wide gaps in various employment measures also exist between male and female workers. Perhaps not surprisingly, the employment-to-population ratio for females was 56.3 percent in December 2002 but 68.8 percent for males.[74] Even for full-time workers who worked the entire year, women earned less than men: the median male full-time white worker had an income of $40,790 in 2001, while white female workers earned only $30,849.[75] The comparable numbers for black full-time, full-year workers were $31,921 for men and $27,297 for women, as shown in Table 1. Note that black men are earning more on average than white women.

Table 1 indicates that blacks (both male and female) made considerable progress in narrowing the earnings gap for full-time, full-year workers (FTFY) in the decade following the implementation of Title VII (from 1965 to 1975). During that decade, this black-white earnings gap narrowed to roughly 75 percent for men and 95 percent for women. Since 1975, the earnings growth of black women has not kept pace with white women, although FTFY black men have kept pace with white men (and even narrowed the gap to 78 percent by 2001, although the weakening of the economy thereafter may have undercut this progress to some degree).[76]

Two other notable points can be seen in Table 1, although significant selection effects are likely operating in both cases. First, while their declining earnings ratio suggests that Hispanics have lost out relative to whites in the 1990s, the huge influx of low-skilled, low-education Hispanics obscures this comparison. Note that the number of Hispanics in FTFY employment more than doubled between 1988 and 2001. Second, the table reveals that Asians have done extremely well in the labor market, but immigration

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[72] See Table B-33 of The Economic Report of the President (2003).
[73] See Table B-42 of The Economic Report of the President (2003).
[74] See Table B-39 of The Economic Report of the President (2003).
[75] Part of this disparity is explained by the fact that male full time, full-year workers work longer hours than female full time, full-year workers.
[76] Greater rates of departure from the labor market by lower wage black men may have artificially improved these black-white earnings ratios to some degree. See Carneiro, Heckman, and Masterov (2005).

may have generated the opposite selection effect from the Hispanic in-migration. Asian FTFY employment also more than doubled over the 1988-2001 period. The selection of Asian immigrants from the right tail of the skill distribution at least raises the possibility that if one controlled for education and hours worked, one might also observe an unexplained earnings shortfall for Asians. Nonetheless, it is striking that Table 1 reveals that the raw median earnings ratios for FTFY workers show Asians at or above the white levels (despite the difficulties imposed by the need to learn English for some recent immigrants).

Clearly, there are substantial disparities in earnings and other economic and social outcomes among groups, but, of course, labor market disparities can exist even in the absence of employment discrimination. Indeed, one of the greatest challenges in ascertaining the presence of employment discrimination is that *most employment discrimination cases are filed by groups that we would expect to have lower earnings even in the absence of discrimination*. For example, lower socioeconomic status correlates with lower levels of education obtained in lower quality schools and, consequently, lower levels of human capital attainment, which is an unfortunate fact of life in America for many blacks and Hispanics. While one would not expect to see women disadvantaged in schooling (at least in this country), the fact that women become pregnant and tend to assume primary care for young children imposes burdens on them that male employees less frequently shoulder. The result is that hiring female workers of a certain age predictably imposes certain higher costs on employers that are not borne if male workers are hired.[77] Obviously, individuals with physical or mental disabilities, medical conditions, or advanced age will have attributes that for many jobs will be less attractive to employers, again even in the absence of "discrimination." To the extent that the baseline for determining disparate impact is equality among groups that are not equally productive, employment discrimination law becomes a mechanism for providing preferences in the guise of enforcing an antidiscrimination mandate.[78] To the extent that the protected groups are encumbered by taste-based discrimination in addition to the productivity-based reasons for lower pay or other differential treatment, then the current approach of unacknowledged preferences may be helping to achieve the non-discriminatory equilibrium. If, however, the degree of preference exceeds any true economically discriminatory disadvantage, then the law is providing welfare benefits through the antidiscrimination framework.[79]

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[77] Males of course have their own disadvantages in that they tend to be more violent and more prone to criminal conduct than women are. Age and marriage, as discussed below, seem to dampen these antisocial tendencies. Moreover, the percentage of males that engage in serious antisocial conduct is substantially lower than the percentage of women who have children, so employers may be able more effectively to identify less desirable male employees.

[78] In a disparate treatment case, a plaintiff would ordinarily buttress the claim of intentional discrimination with a simple showing that the protected group was being treated less favorably than the comparison group and that this difference was statistically significant. The same calculation would ordinarily be made in a disparate impact case, although the employer would argue that there was no disparate impact as long as the relevant rate for the protected group was at least 80 percent of the rate of the comparison group. Thus, if an employer hired 20 percent of white applicants and 17 percent of black applicants, the employer would invoke the Equal Employment Opportunity Commission's 80 percent rule to argue there was no disparate impact. See Meier et al. (1984).

[79] Providing welfare benefits through the antidiscrimination apparatus tends to target the benefits to the elite members of the protected classes rather than the neediest members of such classes. This has some

This brief discussion underscores that disparity is not a sufficient condition for the existence of discrimination. While discrimination can and has contributed to racial and ethnic inequity in earnings, the mere presence of such a disparity does not establish the presence of discrimination. For example, differences between racial or ethnic groups in basic levels of education or even earlier differences in pre-natal exposures to drugs and alcohol can lead to disparities in ultimate outcomes even in the absence of any invidious discrimination.[80] Conversely, the absence of discrimination in one stage does not eliminate the possibility that discrimination was present and caused harm at some earlier stage. Thus, disparities observed in the labor market may not reflect discrimination in that domain, but could be generated by discrimination that occurred in a prior sphere (health, housing and education, for example). A growing literature has tried to ascertain what portion of the large disparities in economic welfare between men and women, whites and non-whites, and among other classes of protected individuals stems from discrimination and what is the product of differences in human capital, personal preferences, and ambitions.[81]

Some articles focusing on earnings disparities between gay and heterosexual workers illustrate these issues. We know that many individuals and employers discriminate against gays (the U.S. military for one), although one consequence of the widespread bias is that many gays do not advertise their sexual orientation to employers. How does this bias influence the labor market outcomes of gay workers? Using simple earnings regressions, one study found that "lesbian women earn more than comparable single and married women, while gay men earn less than their married male counterparts and also perhaps somewhat less than comparable single heterosexual men."[82] Assuming that such findings are correct, how are they to be interpreted? In general, it appears that married men earn more than both straight unmarried men and gay men (the latter two earning about the same).[83] Does this show that being gay doesn't matter at all and the only important stimulant to earnings for a man is being married (to a woman)? Perhaps married men are simply more attached to the labor force, so that they work a greater portion of the year and more hours while working. One might suspect that married men work harder or more reliably because they need to support a family. Alternatively, the married men may not work harder but may simply bargain harder or more effectively given the ability to reference family needs as a justification for higher earnings. Since lesbians earn more than married women, the various earnings disparities are clearly not explained by a simple story of discrimination against gays -- again one suspects that marriage (at least when accompanied by child rearing) facilitates a sexual division of

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obvious undesirable distributional consequences but may have offsetting external benefits if the visible advancement of the elite members both undermines stereotypic attitudes about members of the protected classes and serves a useful mentoring or role-modeling effect. In other words, visible black economic advancement may generate positive externalities.

[80] Carneiro, Heckman, and Masterov (2005).

[81] See Blank et al. (2004).

[82] Black et al. (2003).

[83] Allegretto and Arthur (2001) uses 1990 Census data and finds that gay men in unmarried partnered relationships earned 15.6 percent less than similarly qualified married heterosexual men and 2.4 percent less than similarly qualified unmarried, partnered heterosexual men.

labor that probably leads to higher earnings for men and lower earnings for women as husbands focus more on work and wives concentrate on family matters.[84]

Thus, it may be unsurprising that lesbians earn more than married women, but why they earn more than unmarried women is potentially more puzzling (one assumes discrimination is not the explanation). Perhaps, the anticipation of the marriage effect by single women who plan to marry (and therefore feel less of a need to invest in their careers) explains why they earn less than gay women. It is also worth speculating whether being gay influences preferences in ways that might impact earnings. For example, one could examine the collegiate educational choices of gay and straight individuals to see if lesbians choose majors more often selected by straight men than straight women (e.g., more business and economics and less art and sociology), and, conversely, whether gay men choose undergraduate majors more like straight women than straight men. The bottom line is that an analysis will need many steps of elaboration before a finding of disparity can be taken as proof of discrimination.

V. Measuring the Extent of Discrimination

Psychologists have argued that the aforementioned implicit attitudes test reveals that most Americans harbor unconscious bias against blacks. Experimental studies in which individuals were put in situations in which they needed help reveal that both whites and blacks frequently are more likely to give aid to their own race than to the opposite race.[85] Researchers have tested for the presence of discrimination in an enormous array of settings, and typically conclude that some discrimination against blacks (and perhaps against Hispanics) is present. For example, discrimination has been uncovered in car buying, access to kidney transplants, and tipping in taxicabs.[86] In general, as we saw earlier, raw (or unadjusted) disparities across racial groups are often considerable. Nonetheless, because of the difficulties in trying to control for legitimate nondiscriminatory factors in regression analyses, most crude documentations of racial (or other) disparities probably overstate the presence of discrimination.

A. Regression Studies

Regression analysis is frequently used to ascertain whether earnings disparities can be fully explained by various explanatory variables. These efforts to control for some of the non-discriminatory reasons for such disparities (such as lower levels of human capital attainment) tend to shrink the disparities considerably. This leaves the researcher with the nagging concern that any remaining disparities after adjustment may not reflect discrimination, but only the imprecision of the controls. For example, many studies use earnings regressions of the following form to test for discrimination:

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[84] Posner (1989) argues that because women and men are economically linked (through marriage or relationships), the shortfall in earnings of women is less problematic than, say, the shortfall in earnings experienced by blacks who do not have the same strong economic interdependency with whites. While Posner's point may lessen the sting of lower earnings for women it does not eliminate the impact on women if bargaining within the family is influenced by each partner's individual contribution to family wealth or if, in the (common) event of marital dissolution, divorce law inadequately protects women's contributions to family well-being.

[85] Crosby, Bromley, and Saxe (1980).

[86] Ayres and Siegelman (1995), Ayres (2001) and Ayres, Vars, and Zakariya (2005).

$$\ln(earnings) = \alpha + \beta X + \delta(black = 1 \text{ or } sex = 1)$$

where X is a vector of explanatory variables including observable traits such as age and years of education. If the observable controls can capture all the factors that both influence earnings and are correlated with race or sex, then δ provides a consistent estimate of the percentage shortfall in earnings resulting from discrimination. But the observable variables are crudely measured in a way that overestimates the likely human capital of women and minorities so that the estimate of δ is likely more negative than is in fact the case. For example, age may not be a good proxy for work experience for those (such as women) who may have spent many years out of the labor market. Indeed, the enormous increase in the incarceration of blacks means that age may considerably overstate years of human capital accumulation for blacks vis-à-vis whites. Similarly, years of education may not be an ideal proxy for human capital in estimating racial disparities if whites are attending substantially higher quality schools. In both cases, the coefficient δ on the race or gender dummy may be statistically significant, but its value might drop to insignificance (or conceivably even reverse sign) if better controls for years of job experience and for quality of education could be found. Indeed, statistical tests for discrimination confront researchers with the vexing and opposing problems of omitted variable bias (where it is impossible to capture all of the factors that affect productivity and thus unexplained residuals in earnings functions cannot be taken as establishing discrimination) versus multicollinearity (where many of the included variables that proxy for productivity are highly correlated with race or sex). Many factors that could lead to greater productivity and that are correlated with race or gender may be left out of standard earnings equations. As a result, most regression studies only succeed in generating an unexplained residual in the earnings equations rather than identifying with precision the shortfall in wages caused by discrimination.[87]

B. The Debate over the Current Degree of Discrimination

The competing positions in the vigorous debate concerning the significance of race and sex discrimination in the contemporary labor market were well-captured in an excellent symposium in the *Journal of Economic Perspectives* (JEP). In that exchange, William Darity and Patrick Mason aligned with Kenneth Arrow in arguing that discrimination is still widespread and significantly diminishes the economic opportunities of women and minorities, while James Heckman disagreed with this assessment. Many non-economists are highly resistant to Heckman's position because they heard this claim made by earlier University of Chicago economists at a time when it clearly was not true. The view was that the market would eliminate discriminators so discrimination can't be a substantial problem. This was analogous to arguing based on principles of aerodynamics that bumble bees can't fly, and the economics profession was probably justly given a black eye for elevating selected theory over unassailable empirical evidence. It must be remembered, though, that Heckman did not accept the Chicago orthodoxy when the

[87] For example, these earnings equations rarely control for choices that workers make that may not maximize their own earnings, such as the decisions of many wives to focus more on the family than their husbands do. This may reflect intra-family discrimination against women in some instances, rather than labor market discrimination.

empirical evidence refuted it, and he has written some of the major papers establishing the burdens of discrimination on blacks during the Jim Crow period and beyond, as discussed in Section II (A) above and Section VII (A) below. Therefore, simply because discrimination was once a major impediment to economic advances by blacks and women does not necessarily mean that it remains so in the very different legal and economic environment that exists today. (Conversely, even if the current impact of existing labor market discrimination is small, one cannot simply assume that this would be the case if antidiscrimination laws were eliminated.) Heckman does not believe that market discrimination substantially contributes to the black-white wage gap as it once clearly did and therefore doubts that at present discrimination is a first-order problem in the United States. Rather, Heckman looks to other factors (i.e., those that promote skill formation) to explain the black-white earnings gap – a theme that he builds on in Carneiro, Heckman, and Masterov (2005). The following discussion will summarize the competing evidence amassed in the JEP symposium.

Darity and Mason (1998) cite articles that estimate earnings functions using Census data that show unexplained disparities for women and minorities, which they interpret as a measure of discrimination. For the reasons discussed above, Heckman is skeptical that regression analysis of Census data is able to discern the extent of labor market discrimination against black workers.[88] Heckman also notes the disparity between the list of human capital characteristics used to measure a difference in earnings that are available in standard data sets, such as those provided by the Census, and the more complete list of characteristics available to employers when they make their employment decisions. According to Heckman, Darity and Mason's empirical evidence using Census data is incapable of supporting the conclusion of employer discrimination. Of course, even if current labor market discrimination is not a major impediment to blacks, discrimination in public education or housing could still be a factor, as could a set of choices by blacks that would not have been made in a non-discriminatory environment.

In arguing for the relative unimportance of labor market discrimination in effecting black economic outcomes today, Heckman (1998) instead relies on an important set of articles that correct for the problem of omitted productivity variables by adding to the earnings functions the Armed Forces Qualifying Test (AFQT) to measure an important dimension of worker quality. These articles have found that the previously unexplained earnings disparities are eliminated by the inclusion of this human capital measure. Heckman contends that the studies purporting to show the existence of racial discrimination are flawed by their failure to adequately control for underlying racial differences in human capital attainment.

Darity and Mason remain unconvinced by these articles, arguing that "the results obtained by O'Neill (1990), Maxwell (1994), Ferguson (1995), and Neal and Johnson (1996) after using the AFQT as an explanatory variable are, upon closer examination, not robust to alternative specifications and are quite difficult to interpret."[89] Specifically, Darity and Mason contend that there is a conceptual flaw in Neal and Johnson's earnings equation in that it controls for age and the AFQT but does not control for education.

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[88] Heckman (1998).

[89] Darity and Mason (1998).

Both Darity and Mason as well as Lang and Manove (2004) have found that when the control for education is added to the earnings equation a black-white wage gap reemerges. The contrasting findings, then, are not in dispute but there is debate over their proper interpretation. If the AFQT measures aptitude and years of schooling measures additional productivity attributes such as acquired skill or knowledge, (as well as motivation or perseverance), then both the AFQT and years of schooling should be included in the regression. In this case, the racial gap in earnings is significant. But, Heckman supports Neal and Johnson in the view that the AFQT score captures the contribution to productivity of intelligence and education and that therefore it is inappropriate to also include years of education in these earnings functions. The Neal and Johnson specification that Heckman endorses eliminates the racial gap in earnings.

Similarly, Darity and Mason argue that measures of psychological well-being should be included in wage equations. They claim that their inclusion again causes the black-white wage gap to resurface. They also find that the results of the above-cited "AFQT studies" are not robust since using the math and verbal subcomponents of the AFQT leads to conflicting implications for discriminatory differentials. Given these flaws, Darity and Mason do not trust the results of studies based on the AFQT data. Even though the results may suggest that there has been a decrease in the black-white wage gap, the authors assert that blacks still suffer from discrimination in the employment market.

In addition to their claim that the aggregated regression data document the existence of race and sex discrimination, Darity and Mason argue that the evidence from selected discrimination lawsuits and audit pair studies further buttress this conclusion. They highlight the 1996 *Texaco* case as the most notorious in recent years in which top corporate officials were caught on tape making highly demeaning remarks about blacks, which then translated into discriminatory employment practices. Similar evidence existed about the language and behavior of Ray Danner who was the CEO of the restaurant chain Shoney's.[90]

Darity and Mason summarize the findings of five separate audit-pair studies assessing race and sex discrimination, noting:

- The Urban Institute audits from the early 1990s found that both black and Hispanic males were three times as likely to be turned down from a job as white males.
- Bendick, Jackson, and Reinoso (1994) found that whites were 10 percent more likely to receive job interviews than blacks, half of the white interviewees received job offers versus 11 percent of the black interviewees, and blacks who did receive jobs were offered 15 cents per hour less than whites.
- The Fair Employment Council found that both Hispanic and black women were three times as likely to encounter discrimination when compared to Hispanic or black males, respectively.
- To address the methodological complaints of Heckman and Siegelman (1993) that audit pairing fails to adequately hold constant all relevant traits, Neumark, Bank, and Van Nort (1995) designed a study to eliminate

[90] See Steve Watkins, "Racism du jour at Shoney's," excerpted in Donohue (2003).

personality and appearance variables by relying on manipulated resumes sent to selected employers (restaurants). The results show that a man always had a higher probability of receiving a job offer, and Darity and Mason interpret this to mean that within a particular occupation, gender discrimination is still prevalent.

- Goldin and Rouse (1997) found that hiding the identity of orchestra applicants (behind a screen) raised the probability that a female musician was selected by 50 percent.

Heckman emphasizes that the evidence from the audit studies must be evaluated in light of the distinction between market discrimination and individual discrimination. He stresses that the "impact of market discrimination is not determined by the most discriminatory participants in the market nor by the average level of discrimination among firms, but rather by the level of discrimination at the firms where ethnic minorities or women actually end up buying, working, and borrowing." That is, market discrimination occurs at the margin. While the audit studies can establish that a certain percentage of employers are discriminatory, this does not imply that there will be any effective market discrimination in an active labor market. If lots of employers refuse to hire Jews, but there are others who don't share this view, Jews may suffer no shortfall in earnings. Therefore, since Heckman concludes from the AFQT studies that blacks are receiving wages consistent with their productivity, he is skeptical of the importance of the audit study findings that some percentage of employers harbors discriminatory attitudes towards blacks.

In addition, Heckman argues that the audit pair studies may not correctly achieve even the more limited goal of identifying individual examples of discriminatory conduct. Heckman notes the following weaknesses in the audit studies:

- Audit pair studies have primarily been conducted for hiring in entry-level jobs in certain low skill occupations using overqualified college students during summer vacations.
- Audit pair studies do not sample subsequent promotion decisions.
- Since only jobs found through newspapers clippings are audited, other avenues of securing work are underrepresented.

Heckman is also uncomfortable with some of the methodological assumptions that underlie the audit pair methodology. It is quite unlikely that all characteristics affecting productivity can be perfectly matched between two job candidates. If the researcher assumes because of the effort required to match the candidates that they both have equal strength on *all* characteristics, she can mistakenly assume discrimination where there is none. For example, if the black auditors are better at Skill X but the white auditors are better at Skill Y, an audit researcher who equalizes blacks and whites only on Skill X will find discriminatory practices in firms (that are in fact looking for Skill Y workers) even when there is no discrimination.

In the end, Heckman believes that more strenuous enforcement of civil rights laws will henceforth be a costly and ineffective way to narrow the black-white wage gap. Rather, efforts should focus on enriching family and preschool environments so that skills are strengthened before job candidates enter the market. The need for early intervention is highlighted by the recent findings of Fryer and Levitt (2005: 5): "By the

end of third grade, even after controlling for observables, the black-white test score gap is evident in every skill tested in reading and math…. The largest racial gaps in third grade are in the skills most crucial to future academic and labor market success: multiplication and division in math, and inference, extrapolation, and evaluation in reading. Any initial optimism is drowned out by the growing gap."

C. Some New Audit Pair Studies

A recent study by Devah Pager concludes that the degree of discrimination in employment is so great that blacks without criminal records are treated as badly as whites with criminal records.[91] The Pager study has been widely cited as establishing the existence of a high level of discrimination, but there are some reasons for caution in interpreting this work. This study employs an experimental audit approach, varying only criminal record, to chronicle the success of candidates' interviews in Milwaukee. Using matched pairs of individuals, the author is able to control for other characteristics and isolate the effect of the criminal record alone. Pager finds that a criminal record has a substantial effect on employment opportunities, particularly for black applicants.

Pager's audit experiment involved four male participants, two blacks and two whites, applying for entry-level job openings. The auditors formed two teams such that the members of each team were of the same race.[92] The teams applied to 15 jobs per week and the final data included 150 applications by the white pair and 200 by the black pair.[93] The auditors applied to the jobs and advanced as far as they could during the first visit. The application was considered a success only if the auditors were called back for a second interview or hired.

The results showed that 34 percent of whites with no criminal record were called back while only 17 percent of those with a criminal record were; 14 percent of blacks without a criminal record were called back while only 5 percent with a criminal record were. Notably, the black auditor without a criminal record received a smaller percentage of callbacks than the white auditor with a criminal record, suggesting the presence of substantial discrimination against blacks in general. But there is a potential problem with this last conclusion because it is unclear from the paper whether comparisons could be made between testing groups (i.e. blacks and whites), because the same-race pairs were matched to each other but not necessarily to the opposite-race pairs. Furthermore, the extent of the disparity that Pager found was quite a bit higher than that found in other audit pair studies in the employment realm. When the variables of interest, i.e. race and

[91] Pager (2003).

[92] The auditors were chosen based on similarity of characteristics, and all background information was made similar for the job applications. The only difference in the application was that one of the testers in each team was assigned a criminal record, a felony drug conviction, and 18 months of prison. The member of each team with the criminal record was rotated on a weekly basis to control for any unobserved differences. Both members of a team would apply for the same job, one day apart with the order determined randomly.

[93] The job openings were all within 25 miles of downtown Milwaukee and were selected from the classified section of a Milwaukee newspaper and a state-sponsored internet job service. The project occurred between June and December 2001 and focused on a range of entry-level jobs, such as restaurant workers and production workers.

criminal record, are known to the auditors, there is potential for bias if the person conducting the study signals even subtly what the study hopes to accomplish.[94]

A closely related technique is used in Bertrand and Mullainathan (2004) to measure the extent of race-based labor market discrimination. Employing a so-called correspondence test methodology, they submitted about 5,000 fictitious resumes in response to nearly 1,300 employment advertisements posted in *The Boston Globe* and *The Chicago Tribune*. Their experiment was designed to estimate the racial gap in response rates, measured by phone calls or emails requesting an interview. The authors deliberately chose a correspondence test in order to circumvent some of the weaknesses associated with audit studies, such as the confounding effects of human interaction in a face-to-face interview and the difficulty of "matching" two different individuals. Randomly assigning traditionally black or white names to resumes, on the other hand, ensures 1) race remains the only component that varies for a given resume and 2) heterogeneous responses to behavior or appearance do not affect outcomes (as often occurs with human auditors).

The Bertrand and Mullainathan paper also differs from specific features of Pager's audit study. First, they analyze hiring practices for two large cities in different regions of the country. In addition, they submitted four applications to each employer, one for each race/quality cell.[95] The range of jobs for which applications were submitted, including sales, clerical services and administrative support, casts a wider net than the entry-level positions sought by Pager's auditors. Finally, and perhaps most important, differences in race can only be *inferred* by the employer. Since no personal contact with the potential employer ever takes place, Bertrand and Mullainathan randomly assign names that are typically or exclusively associated with blacks or whites.[96] As the authors note, the correspondence test—like most audit studies—captures only the initial stage of the hiring process and excludes other important sources of employment news such as social networks.

Bertrand and Mullainathan find significant differences in callback rates for whites and blacks: "applicants with White names need to send about 10 resumes to get one callback whereas applicants with African-American names need to send about 15 resumes."[97] Put differently, the advantage of having a distinctly white name translates into roughly eight additional years of experience in the eyes of a potential employer. Whites also appear to benefit much more than blacks from possessing the skills and attributes of a high-quality applicant and from living in a wealthier or whiter neighborhood.[98]

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[94] This is the "experimenter" effect that Heckman and Siegelman (1993) discuss in the context of the Urban Institute audit studies and that social psychologists have long recognized and stressed.

[95] Quality, which can either be "high" or "low," refers to a subjective classification of attributes across a range of standard resume components. For example, a high-quality applicant might possess (among others) an email address, computer skills, honors and volunteer or military experience.

[96] Bertrand and Mullainathan express concern that employers might not recognize racial identities based on distinctive names and that such labeling may not reflect the identity of the average African-American. However, an informal survey of Chicago residents confirmed that people associate their list of distinctive names with the expected race.

[97] Bertrand and Mullainathan (2004).

[98] The difference in callback rates between high and low quality whites is 2.3 percentage points, while for blacks the difference is a meager one half of one percentage point.

Although these results represent compelling evidence of labor market discrimination, it is important to bear in mind the study's underlying assumptions, particularly the likelihood that distinctive names map as expected to racial identity in the minds of potential employers. The results of Fryer and Levitt (2004) also indicate that distinctive names do not disadvantage blacks for a variety of adult outcomes. They offer three potential arguments for reconciling their findings with those of Bertrand and Mullainathan (2004). First, if names are considered a noisy initial indicator of race, then they should have no effect once a candidate arrives for the interview.[99] Second, the self-selection of black names may impart valuable signs of human capital to employers. Finally, the coarse dependent variable measurements in Bertrand and Mullainathan's regression analysis may prevent them from detecting any causal impact on employment outcomes.

The combination of the audit studies and the better regression studies seems to tell us that there are enough discriminators around that blacks do have to search harder to find employment, but that the resulting unexplained earnings shortfall is not terribly high. Eliminating discrimination could bridge that earnings gap and remove the added search costs, but this would still leave a substantial unadjusted disparity in black and white earnings. Heckman is trying to emphasize that current black earnings shortfalls should be thought of as emanating more importantly from lower levels of human and cultural capital, and that efforts to address those deficits will yield greater rewards than further heightened antidiscrimination measures in the labor market. Heckman fears that efforts to aid groups that have been languishing in socio-economic attainment will be more impeded rather than advanced by a predominant focus on discrimination.

VI. Antidiscrimination Law in Practice

Rather than a focus on ability enhancement, which Heckman would prefer, in theory, the goal of antidiscrimination law is the attainment of the equilibrium that would exist in the counterfactual world in which every individual retained his or her same abilities but the employer (or purchaser) was somehow prevented from observing any of the prohibited traits (such as race or sex). This equilibrium is given by point A in Figure 1.[100] In effect, this implies that the legislation is premised on the view that discriminatory preferences should not be registered in the social calculus and that any benefits that occur from taste-based or even statistical discrimination should be foregone. Since the antidiscrimination regime is implemented largely through private litigation, it is encumbered by all of the costs of any litigation-based scheme in which motives are highly relevant to determining liability. Thus, post hoc decision-makers must determine whether protected workers have been fired because of their protected

[99] Fryer and Levitt also hint at the possibility that discrimination at the resume submission stage against individuals with distinctively black names will reduce the search costs of those applicants and perhaps direct them more rapidly toward employers that prefer to hire blacks.

[100] This conclusion depends on the assumption that the law is pursuing the color-blind view of discrimination. To the extent that the law is seeking to pursue another goal -- such as, providing preferences for a disadvantaged group -- then the demands of the law might be to generate a more favorable level of wages and employment than would exist in a wholly nondiscriminatory environment. See Donohue (1994).

race/gender/age/disability or for some other legitimate reason such as their shortcomings relative to other available workers. Obviously, this type of litigation is costly and prone to error.

The effort to discern the motive of employers may be particularly difficult because (as considerable psychological evidence suggests) much discrimination is unconscious. This implies that an employer might believe that he or she has not discriminated even when discrimination has occurred. The difficulty this poses for a trier of fact is clear: if the employer doesn't know that he or she has acted in a discriminatory way, how easily can the jury discern this fact? Certainly demeanor evidence at trial would be misleading if an employer who sincerely believes there has been no discrimination did in fact discriminate. The inability to readily and accurately identify intentional discrimination provides a rationale for the disparate impact doctrine and reliance on statistical proof of discrimination. Statistical models are informative about the probability that an observed disparity would occur if workers were selected in a random process. Statistically significant disparities therefore suggest that the likelihood that the observed employment patterns emerged from a random process is low. Such a finding, however, does not always provide useful evidence that the non-random process was discriminatory: underlying differences in productivity may be correlated with race yet not accounted for in the statistical model. Therefore, reliance on statistical models to prove intentional discrimination will likely generate too high a level of Type I error (where the innocent employer is wrongfully found to have discriminated). Assuming reverse discrimination lawsuits are possible, the standard level of statistical significance (5 percent) would indict 5 percent of all employers, even with purely random employment selection. Not using statistical evidence, though, increases the risk of Type II error (where the unlawfully discriminating employer avoids sanction). Presumably, markets will provide some discipline on employers who engage in unconscious discrimination, so in evaluating the costs and benefits of antidiscrimination law the imperfect market sanction needs to be compared with the imperfect legal remedy.

Antidiscrimination law may also undermine the efficient use of statistical discrimination, thereby lowering overall wealth to the extent that statistical discrimination has real cost advantages to employers seeking to minimize the cost of selecting their workforce.[101] Moreover, the prohibition on statistical discrimination can potentially turn antidiscrimination law into a mechanism for generating preferential treatment of protected workers. For example, the law clearly prevents an employer from acting on the knowledge that most women will leave the labor market when they have children. If women and men were otherwise identical, then burdens of childbearing would imply that, on average, the marginal product of men would be higher than that of women. Requiring that employers ignore this fact tends to increase the demand for female workers beyond what it would be if the outcome could be reached in which all animus against women was absent. This highlights a difference between an economic

[101] A fascinating recent paper revealed that the introduction of a personality test into the hiring process for a large retail firm did not reduce the employment of blacks even though black workers did score lower on the test. The authors conclude that "these results imply that employers were… statistically discriminating prior to the introduction of employment testing -- that is, their hiring practices already accounted for expected productivity differences between minority and non-minority applicants." See Autor and Scarborough (2004).

and a legal definition of discrimination, since economists would say that an employer who pays a class of workers $*x* less because on average the members of that class impose $*x* greater costs on the employer is not discriminating. Indeed, the economist would likely say that in this scenario, if the employer did *not* pay less to this class of workers, then the employer would be discriminating *in favor* of this group. Thus, the legal definition would mandate economic discrimination by requiring that male and female workers must receive equal compensation and employment despite this productivity differential. Similar issues arise for racial and ethnic minorities (their relative poverty has led to less desirable school options and hence lower human capital attainment), the elderly (on average they are slowing down), and the disabled (at the very least they require reasonable accommodation).

The previous discussion suggests an inherent tension in employment discrimination law. If, in the economist's terms, employers are appropriately paying members of a certain group less because on average the members of that group are either less productive or more costly to employ, then the legal requirement not to discriminate will be in tension with the economic incentives faced by employers. In essence, a tradeoff emerges between the equal hiring requirement and the equal wage requirement. If, as is generally believed, the latter is more binding, then the law may actually dampen employment while raising wages (the "minimum wage" scenario). There is empirical support for the view that antidiscrimination laws may help those who keep jobs while reducing the total number of jobs. In general, the minimum wage effect predicts higher wages and lower employment for protected workers, while the equal hiring component suggests that protected workers will experience some demand stimulus. The bottom line is that both factors predict higher wages for protected workers but the employment effects are ambiguous depending on whether the demand stimulus offsets the incentive to cut back on more costly workers.

VII. The Impact of Antidiscrimination Law on Black Economic Welfare

A. Title VII of the Civil Rights Act of 1964 and Black Employment

As previously noted, the major law prohibiting employment discrimination on the basis of race, sex, religion, and national origin was Title VII of the Civil Rights Act of 1964. Congress later broadened the coverage of this statute when it enacted the Equal Employment Opportunity Act (EEOA) of 1972, and then further expanded federal antidiscrimination law (primarily in providing greater damage remedies for successful sex discrimination plaintiffs and workers discharged because of their race) in passing the Civil Rights Act of 1991. The 1964 Act has received the most scholarly attention for it was clearly the most momentous piece of antidiscrimination law ever enacted. Initially, James Smith and Finis Welch attempted to carry the mantle of Milton Friedman by arguing that the Civil Rights Act of 1964 had not advanced black economic welfare.[102] The thrust of the argument was simply that blacks had low skill levels and little education and as they secured more human capital their wages rose appropriately. Smith and Welch argued that the economic gains of blacks were no different during the period from

[102] Smith and Welch (1989).

1940 through 1960 than they were in the following two decades. They took this as evidence against the view that Title VII generated any benefits for black workers.

More nuanced examinations of this issue have now confirmed that Title VII did indeed generate economic gains for blacks, although these gains were largely concentrated in the first ten years after adoption and in the South. As Donohue and Heckman (1991) note:

> "the evidence of sustained economic advance for blacks over the period 1965-1975 is not inconsistent with the fact that the racial wage gap declined by similar amounts in the two decades following 1940 as in the two decades following 1960. The long-term picture from at least 1920-1990 has been one of black relative stagnation with the exception of two periods – that around World War II and that following the passage of the 1964 Civil Rights Act."

It is now widely accepted that in helping to break down the extreme discriminatory patterns of the Jim Crow South, Title VII did considerably increase the demand for black labor leading to both greater levels of employment and higher wages in the decade after its adoption.[103]

B. The Equal Employment Opportunity Act (EEOA) of 1972

As the literature examining the effects of Title VII illustrates, attempts to estimate the impact of a federal law that has universal application at a single date in time are difficult, since any perceived changes may at least arguably be the product not of law but of broader shifts in the economy or society that either led to the legal change or just happened to coincide with it. Differential geographic impact turned out to strongly buttress the conclusion that Title VII mattered. The area of the country that had no antidiscrimination law in 1964 and that fought desperately against the passage of the 1964 Civil Rights Act was the South, and it was this region that experienced the most profound narrowing of the black-white wage gap after the federal law took effect. A recent, interesting effort addresses these issues in attempting to determine whether the EEOA, which broadened the coverage of Title VII in 1972, provided additional independent stimulus beyond that provided by the initial Civil Rights Act of 1964. Ken Chay used the fact that the EEOA had a predictably different impact across industries and between the South and the non-South as a way to estimate the economic consequences for blacks of this strengthening in the federal antidiscrimination law.[104] Prior to 1972, Title VII's prohibition against employment discrimination only applied to firms with 25 or more employees. The Equal Employment Opportunity Act (EEOA) of 1972 lowered this threshold to include employers with 15 to 24 employees. Moreover, many states already had fair employment practice (FEP) laws that covered these employers, so if the legal prohibition in these states was as effective as the federal prohibition, then the EEOA would be redundant in those states. Of the nine states that did *not* have FEP laws before 1972, eight were in the South.

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[103] Freeman et al. (1973), Donohue and Heckman (1991), Conroy (1994), and Orfield and Ashkinaze (1991).
[104] Chay (1998).

Chay analyzes CPS data for the years 1968-1980 in order to assess the relative trends in black and white earnings at the two-digit industry level. Using the fraction in each industry-region employed by establishments with fewer than 25 employees (note: this is not limited to 15-24 employee establishments), Chay is able to divide the industries into three groups for both the South and the non-South: industries with high, medium, and low fractions of workers in establishments with fewer than 25 employees. Chay's "treatment group" consists of the high fraction group (H-Group) industries in the South, since these were the most affected by the EEOA. The low fraction (L-Group) industries are essentially considered unaffected by the EEOA and serve as the control group.

Chay estimates the share of black employment by industry, region (South or one of five non-South regions), and year while controlling for region-specific economic measures, black-white relative demographic characteristics, and a time trend.[105] The variables of interest are the post-policy effects for each region-industry group, which were defined to equal zero before March 1973 and are captured by a trend term thereafter. Chay calculates two estimates: 1) a difference-in-differences estimator comparing the post-policy changes for the South H-Group to the changes for the South L-Group; and 2) a "triple differences" estimator that compares the difference-in-differences estimate (H-Group vs. L-Group) for the South relative to the one for the non-South. Both sets of estimates indicated that the relative employment of blacks grew more after March 1973 in industries and regions with a greater proportion of small firms.[106] Chay concludes from this that the EEOA strongly increased relative black employment shares and earnings: "black employment shares grew 0.5 – 1.1 log points more per year and the black-white earnings gap narrowed, on average, 0.11 – 0.18 log points more at newly covered than at previously covered employers after the federal mandate." The evidence on the increasing relative wages of blacks is important to help exclude the possibility of white disemployment or simple black re-shuffling of employment. As a result, Chay concludes that the evidence suggests that the EEOA increased the demand for black workers among small employers not previously covered by FEP laws.

The Chay paper is persuasive, and in fact may *understate* the boost to black employment from the 1972 law for two reasons. First, Chay's control group contains some employers who had 15 to 24 employees, and were not covered by a state antidiscrimination law. Thus, Chay's control group would contain some employers who shared whatever impact the EEOA had on black employment. Second, by the mid-1970s, the Supreme Court had interpreted Section 1981 of the Civil Rights Act of 1866 as providing another federal remedy for intentional discrimination without any explicit exemption for small firms. Both of these factors would lead Chay's estimates to *understate* the true impact of the law.

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[105] While conducting this analysis on states rather than regions would have provided more variation and greater precision of the estimates by enabling Chay to directly control for the establishments that were already covered by pre-existing FEP laws, the small sample size of the CPS made statewide analysis impossible.

[106] Instead of separating the industries into the three groups (H-, M-, L-Group), Chay might have experimented with interacting the post-1972 trend term with the fraction of establishments in that industry that had less than 25 employees. This technique would have allowed Chay to test whether black employment share and the fraction "treated" are directly related instead of dividing the industries into somewhat arbitrary groups.

C. The Civil Rights Act of 1991

1. Did the CRA Alter Terminations of Black and Female Workers?

In the summer of 1989, the Supreme Court cut back on a previous holding that enabled blacks to sue for compensatory and punitive damages when discharged because of their race. While such action was still unlawful after that decision, such discharged blacks were limited to remedies of reinstatement and back pay until the Civil Rights Act of 1991 restored the pre-1989 law on this issue. This Act also gave workers dismissed (or otherwise discriminated against) because of their sex the right, for the first time, to seek compensatory and punitive damages for such dismissals (although the damages that such sex discrimination cases could generate were subject to caps depending on the size of the discriminating firm's workforce). Paul Oyer and Scott Schaefer have tried to explore different effects generated by the Civil Rights Act of 1991 (henceforth "CRA") by examining whether the elevated penalties for discriminatory discharge might have altered employer behavior in predictable ways. If it is costly to fire minority and female employees because of legal restrictions such as federal and state antidiscrimination laws, then firms will have an incentive to find ways to get rid of *ex post* low-productivity protected workers that circumvent the legal prohibitions. Oyer and Schaefer (2000) suggest that one possible mechanism is to try to push such workers out the door in the course of a larger layoff, and if this strategy lowers the cost of discharge one might expect to see more firms relying on this approach as federal and state antidiscrimination laws become more stringent. To test this proposition, Oyer and Schaefer posit that the CRA would have increased employer concern about discharging minority and female workers and might prompt the hypothesized effort to use layoffs to avoid litigation.

The major findings of the paper are that:

a) black male full-time workers aged 21-39 were more likely to be fired than comparable non-Hispanic white men during the period from 1987 to 1991 (before the CRA of 1991 went into effect), but that this differential disappears over the period 1992-1994 (after the legislation). The paper notes, "These estimates are strongly consistent with our model's prediction that the firing rates of protected workers should go down when the potential costs of wrongful discharge litigation go up."
b) Among the black workers who were involuntarily separated from their jobs, the proportion fired went down by more than a third after the CRA of 1991 went into effect. The suggestion is that firms were shifting away from firing blacks to terminating them during layoffs: "While the overall rate of displacement for protected workers was unaffected by the law, the share of involuntary displacements coming in the form of firings fell significantly."

Layoffs provide a great opportunity to unload dead wood of any kind (with an added advantage of getting rid of protected workers who might sue if discharged for cause). But loading up the layoff with too high a percentage of blacks might draw the attention of plaintiffs' lawyers too readily. Oyer and Schaefer note a finding that would seem to cut against their theory: displacement patterns inside California (which had a very generous

state antidiscrimination law throughout the 1987-1994 period) were quite similar to those outside California, when the theory would have been better supported if the CRA of 1991 generated a differential response inside (no effect) and outside California. That is, if because of the application of state law, California employers were subject to the full penalties for terminating blacks throughout the study period, then no shift in minority termination behavior should have been observed after 1991. The fact that such a shift is seen in California (and elsewhere) suggests something other than the 1991 change in antidiscrimination law is at work.

It should also be noted that Oyer and Schaefer's before and after comparisons of the impact of the CRA are not entirely pristine because of certain judicial decisions in the pre-CRA period that were alluded to above. Federal antidiscrimination law afforded a somewhat restricted set of remedies to victims of race discrimination (damages limited to back pay and no right to jury trial) between 1965 (the effective date of Title VII of the Civil Rights Act of 1964) and 1976, when the Supreme Court ruled that a suit alleging intentional *racial* discrimination could be brought under a law passed at the end of the Civil War (Section 1981) without these restrictions. Thus in 1976, blacks could get to a federal court jury if they alleged intentional racial discrimination and sought not only back pay, but compensatory and punitive damages without limit. The Supreme Court then cut back on the sweep of the 1976 ruling in the June 1989 case of *Patterson v. McLean Credit Union*, which "held that claims of racial harassment on the job are not actionable under sec. 1981 and indicated that many promotions do not amount to the making of a new contract. Further, its decision clearly suggested that discharge for racial reasons is also outside the statute's purview."[107] The Civil Rights Act of 1991 then restored the pre-*Patterson* interpretation of Section 1981.

If the *Patterson* case had been decided before the pre-CRA data period used by Oyer and Schaefer, then their conceptual approach of defining a before/after comparison of the legal regime relevant to blacks would provide a clean test of their hypothesized effects. Instead, for the period from 1987 to mid-1989, the legal regime concerning discriminatory discharge on grounds of race was exactly the same as the legal regime after 1991. Perhaps then, a more precise test of the Oyer-Schaefer hypothesis would only compare mid-1989 to 1991 as the "before" period to post-1991 as the "after" period. The bottom line is that the before and after comparisons are muddied because of the way in which the law concerning race discrimination in employment was weakened by the Supreme Court in 1989 and then restored by Congress in late 1991.

2. Did the CRA Affect Black and Female Employment Levels?

In another paper, Oyer and Schaefer compare CPS data for 196 three-digit SIC code industries for two four-year periods prior to the passage of the CRA of 1991 (1983-86 and 1988-91) and for the period from 1993-96 to determine if the CRA affected the employment of blacks and women.[108] The basic conclusion is that in the years leading up to the CRA of 1991, industries with relatively few women and blacks had been increasing their share of such workers (if one compares data from 1983-86 with that from 1988-91) but that this trend fades if one looks at data from 1993-1996. It is not all that surprising that the CRA did not enhance black employment since the only real changes it

[107] Zimmer et al. (1994).
[108] Oyer and Schaefer (2002b).

effectuated for blacks was the restoration of the law that had existed in June of 1989 with respect to discriminatory discharge and the standards for employer justification of practices with disparate racial impacts. The disparate impact standard (used to attack neutral acts that have an adverse impact on protected workers) was stringent until mid-1989, then virtually eviscerated by the *Ward's Cove* decision, and eventually restored by the CRA of 1991. Once again, though, the major difference in the law concerning racial discrimination was between mid-1989 – 1991 versus the end of 1991 on (when the CRA went into effect), so the Oyer-Schaefer comparison is somewhat muddied.

Moreover, to the extent that the boom of the 1990s was disproportionately driven by white and Asian males harnessing the opportunities of the internet, Oyer and Schaefer's finding that relative black employment growth slowed in the post-1991 period may be more the product of overall economic trends than the consequence of law. Note that, in any event, Oyer and Schaefer show, in their Table 2, that the percentage of blacks in overall employment was 7.8 percent for 1988-1991 as well as for the period 1993 - 1996, so that there was no "reversal" in black employment, even if there was a slowing of gains observed across the time periods in the 1980s. For women, the small percentage decline from 39.8 to 38.9 again may be more a product of internet-driven growth in male employment than a law-driven reversal in the hiring of protected workers.[109] Thus, while I am skeptical that the CRA hurt black and female employment, it is still important to recognize that there is little support for the view that the strengthening of federal antidiscrimination law in 1991 stimulated employment, as occurred with the federal laws passed in 1964 and 1972.

3. Did the CRA Change the Frequency of Discharge Complaints?

Oyer and Schaefer (2002b) present some interesting data on the frequency of EEOC complaints (in cases other than failure to hire) across two-digit SIC industries by race and gender: "in industries where women and blacks have relatively low representation, they file a relatively large number of complaints" per capita. While the subtitle to the Oyer-Schaefer paper suggests that the CRA acted as a drag on employment of protected workers because it led to too many wrongful discharge type suits, the possibly adverse impact on female hiring also could be caused by the sharp increase in sex harassment cases after the CRA was adopted or some other non-legal shift in the economy. There is again reason for concern that Oyer and Schaefer's findings might be the product of broad economic changes rather than legal developments. Specifically, as Donohue and Siegelman (1991) found, industries with lots of discharge complaints likely have large numbers of involuntary terminations.[110] Thus, the Oyer and Schaefer

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[109] One would have expected the CRA of 1991 to have had far more impact on gender discrimination cases than on race cases (since before and after the CRA of 1991 blacks could sue for failure to hire under Section 1981 and get compensatory and punitive damages with a right to a jury trial, while women could only do this afterwards). Thus, the pattern of no decline in black employment coupled with a modest decline in female employment is at least consistent with my reading of the extent of the legal change for race and sex discrimination generated by the CRA.

[110] In general, tight labor markets will reduce employer-initiated terminations and will also reduce the likelihood of filing employment discrimination complaints since, under such circumstances, the market remedy of seeking another job is often preferable to the legal remedies afforded by federal law. Donohue and Siegelman (1991, 1993). The fact that employers will discriminate less when labor markets are tight was illustrated during the American Revolution when George Washington countermanded the edict that

conclusion that an increase in the number of discharge suits has undermined black and female employment gains may have the wrong direction of causation. One might expect that a declining industry would experience lots of layoffs, which then lead to increased wrongful discharge claims filed by women and blacks (particularly, under last hired, first fired approaches). In other words, the apparently flagging employment of women and minorities that Oyer and Schaefer note may be the product of declining industries rather than the result of an increased likelihood of discharge litigation induced by the more stringent law.

Oyer and Schaefer (2002a) also explored whether the strengthening of wrongful discharge law brought about by the CRA altered the volume of discrimination suits and had broader impacts on black and female employment. They looked at actual EEOC filings from 1988 to 1995 and limited their analysis to sex cases brought by white women and race cases brought by black males (focusing only on those aged 20-40 to avoid the complications of age-based cases). They found that there were roughly 19,000 such wrongful discharge charges filed each year over their eight-year period. Importantly, they make two very interesting points concerning these cases brought by young white women: 1) if one looks at cases brought in a single year, the number of complaints brought per employee falls with age; so 20-year-old women are most likely to file such complaints and the number declines monotonically through age 40 (the last age in their data set); and 2) even though the age profile is the same in the years 1990 and 1993, there are substantially more cases brought in 1993 (after the adoption of the CRA). Neither of these facts (the downward sloping age-litigation profile and the jump in filings) is found for wrongful discharge cases brought by blacks. Black litigation rates (in terms of EEOC filings) actually rise from age 20 – 30 and then are flat or trend slightly down thereafter, and there is no obvious difference in filing rates between the two years. One can only conjecture about the reason why young women file wrongful discharge complaints at higher rates than somewhat older women. Might this reflect a harassment effect with the youngest women primarily targeted (a common pattern for harassment cases to reach the courts is that a harassed female quits and uses the harassment as the basis for a claim of constructive discharge)? Ordinarily, one would expect that older workers would be more likely to sue for wrongful discharge since the burdens of dismissal increase with tenure and increased acquisition of firm-specific human capital (which is exactly what we see for black males at least through age 30).[111]

Oyer and Schaefer note:

> The complaint rate is much higher for black men than for white women. Each year, the EEOC received a gender-based wrongful termination claim from approximately one out of every 2500 to 3500 employed white women, but the proportion is one out of 400 to 600 for black men.[112]

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blacks should not be allowed to survey in the Continental Army, not out of a sense of fairness, but out of the need for men to help fight the British. American blacks and whites would not fight side by side again until President Truman integrated the military almost 200 years later. Ellis (2004).

[111] All sex discrimination filings alleging disparate treatment would be expected to increase after the CRA owing to its authorization of compensatory and punitive damages.

[112] Oyer and Schaefer (2002a)

The lack of growth in black male wrongful discharge EEOC filings after the CRA is not surprising since the only element relevant to such cases that changed in 1991 was the increased ability to file Section 1981 discharge cases, which litigants were not required to file with the EEOC (since they could proceed straight to federal court).

VIII. Discrimination on the Basis of Sex

During the 1980s and 1990s, the male-female wage gap decreased substantially. Darity and Mason (1998), who are generally more sanguine about the impact of federal antidiscrimination law on female employment than Oyer and Schaefer, argue that three distinct factors contributed to this important change:

- First, two opposing trends were in motion. Men at or below the 78th percentile of the wage distribution experienced absolute decreases in their real wage rate. Meanwhile, women at all points on the wage distribution experienced wage increases.
- Second, the disparity in the level of human capital for men and women was shrinking.
- Third, the level of sex discrimination was decreasing.

Clearly, the fact that women bear children and tend to assume a larger role in child-rearing than men has an important impact on female labor market decisions and outcomes. Waldfogel (1998) finds that childless women aged 24 - 45 receive 81.3 percent of a man's pay whereas women of the same age with children receive only 73.4 percent. Waldfogel concludes that this pattern is caused by premarket factors that influence employment, as well as discrimination and institutional barriers in the workplace. But, of course, knowing whether and how to respond to this disparity requires an understanding of the relative importance of these factors.

Darity and Mason also contend that the index of occupational dissimilarity for both 1970 and 1990 demonstrates strong evidence of occupational crowding by gender. Although this index has decreased from 68 percent[113] to 53 percent over this twenty-year period, women are still highly concentrated in lower-paying jobs. Blau and Kahn (1996) looked at the economic performance of women in nine OECD countries and drew the following interesting conclusions: 1) in terms of human capital and occupational distribution, U.S. women compare favorably with women from the other countries; 2) the U.S. has had a longer commitment to employment equality; but 3) the U.S. gender gap in wages is larger than in any other country. Darity and Mason interpret this evidence as implying that the gender wage gap is governed by the overall degree of inequality in the national economy. Since the U.S. has a high level of income inequality, the wage gap will be high despite the existence of strong antidiscrimination measures. In the case of the United States, a decentralized system for setting wages, a low minimum wage mandate, and weak trade unions account for the greater inequality in wages in the U.S. Thus, policy measures other than enhanced antidiscrimination enforcement might have a greater impact on the earnings differential between male and female workers. Of course,

[113] A value of 68 percent implies that 68 percent of women (or men) would have to change occupations to have equal gender representation in all occupations.

as John Rawls argued, we don't want to enforce greater equality at the expense of those at the low end of the income distribution.[114]

Darity and Mason's discussion is largely focused on the over-representation of women at the low end of the earnings spectrum in the labor market. What more can be said about the under-representation of women at the high end of the market? The CRA of 1991 created the Glass Ceiling Commission whose mission was to identify "invisible, artificial barriers that prevent qualified individuals from advancing within their organization and reaching full potential."[115] The Commission hoped to explain phenomena such as the 90 percent male share of top managers at Fortune 500 companies. A recent survey of 120 CEOs, who were predominately male, and 705 female executives, who at the time held positions at the level of vice president and above at major corporations, illustrates the expressed beliefs of CEOs and high-ranking female executives about why so few women make it to the very top of the business pecking order.[116] The authors highlight the following survey results:

- Female executives responded that the following barriers exist: exclusion from informal networks, stereotyping, lack of mentoring, shortage of role models, commitment to personal or family affairs, lack of accountability in their position, and limited opportunities for visibility in the workplace.
- CEOs responded that the primary barriers for women workers were ineffective leadership and lack of appropriate skill sets for senior management positions.
- 79 percent of the female executives and 90 percent of the CEOs responded that the primary obstacle to gaining a top-level position is women's lack of line experience. According to the survey, women do not find themselves on the trajectory for senior management positions because they are not aware that such positions are available to them or they are discouraged from pursuing these roles by colleagues and superiors who do not feel that women can perform well in them. As a result, these women simply are not on the radar screen when succession decisions are made because they do not have the profit-and-loss experience that CEOs most value.
- Two-thirds of the female executives and more than 50 percent of the CEOs responded that a key barrier for women is the failure of senior leadership to assume accountability.
- Less than 1/3 of the total respondents considered a lack of desire by women to reach senior level positions to be a barrier to women's advancement.
- Of those executive women not already at the very top, 55 percent responded that they aspire to attain the most senior leadership positions.

The article closes with the suggestion that current CEOs must alter business strategies and human resources agendas to ensure that their female workers can gain the

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[114] Rawls (1971).
[115] See "About the Commission" at http://www.ilr.cornell.edu/library/downloads/keyWorkplaceDocuments/GlassCeilingAbout%20the%20Commission.pdf
[116] Wellington et al. (2003).

appropriate skill sets for senior level positions. These results helpfully describe what some highly talented individuals state is the problem, but, of course, in light of the public relations sensitivity on the part of the CEOs and the potentially self-serving responses of the female executives, one must be cautious before accepting these statements as having established the truth of the matters asserted.

Many of the survey comments suggested that women experienced disparate treatment, which would violate federal antidiscrimination law, but even this is not certain. Female executives, for example, apparently feel that they have been excluded from informal networks and were not mentored. Even if the feeling corresponds with reality, though, we still cannot conclude that disparate treatment of women had occurred unless we know that such mentoring occurred more frequently for men with no greater qualifications. Conceivably, the same percentage of men felt (and were in fact) excluded as well. Note that one of the cited "barriers" to female advancement to top managerial positions is "commitment to personal or family affairs," which would not violate current law because it is not a barrier created by employers. Arguments can be made that governmental action may be appropriate to address this situation but 1) this would be more a matter of affirmative action for women, rather than antidiscrimination law or policy, and 2) one may not want to promote policies that undermine women's "commitment to personal or family affairs."

It is unclear whether other aspects of this survey support a Beckerian notion of employer animus against having women in top jobs, or a view of statistical discrimination based on inaccurate -- or even accurate, if one believes Hakim's work discussed below -- views of female ability and desire for top jobs. Somewhat over half the women reported that they aspired to the highest level jobs. What was the comparable percentage for men (and can we trust the accuracy of self-reported aspirations)? In any event, one would expect that the market would penalize employer animus against women or inaccurate statistical assessments. Again, one might ask why businesses would not have the appropriate incentives to encourage this human capital development given the value of cultivating top corporate managerial talent. The survey might be thought to give support for an externality-based argument for affirmative action: if women saw more top corporate female role models, then they would pursue these jobs more assiduously, thereby expanding their human capital and the productivity of business. If so, a firm might find that hiring a woman for a top job creates a positive externality by stimulating the productivity of other women that will not necessarily accrue to the original hiring firm.

A. Differences in Male and Female Behavior and Preferences

Other recent academic studies have suggested that the plight of women in the labor market is strongly influenced by their own conduct and attitudes existing independent of the labor market. Babcock and Laschever (2003) argue that part of the failure of women to earn as much and advance as far as men stems from the fact that modern Western culture strongly discourages women from asking and negotiating for what they want in their careers. Specifically, women directly out of an MBA program were found on average to earn $4,000 less than their male counterparts in their first jobs because men were more adept at negotiating their starting salaries. This finding appears

to suggest that the requirements of the Equal Pay Act (designed to insure that women receive the same pay as men for identical jobs) are not being met. The finding also suggests that, assuming equal productivities, employers would have an added incentive to hire women because they are willing to work for less. If there is no added incentive, then women are not underpaid from the employer's perspective, either because they impose greater costs on employers (either from Beckerian discrimination or perhaps because of the expected penalty on the employer imposed by female workers who will leave the labor market for child-bearing/child-rearing), or because their modest bargaining strategy for a higher salary correlates with lower success on the job.

Note that an employer could not defend against a wage discrimination lawsuit on the ground that women are more likely to leave the workforce for child-rearing, but might be able to prevail on the second claim if the employer made individualized determinations that particular women did not possess the attributes associated with greater productivity. As a practical matter, however, an employer would be risking substantial civil liability by attempting to justify male-female disparities in earnings or hiring on this basis, even if they were economically justified. Note, too, that if culture or biology inhibits females from negotiating aggressively, women on average will have less success in positions where this trait is rewarded. There is also some evidence that women can be trapped in a Catch-22 situation: those women who do negotiate aggressively may be characterized as "pushy or bitchy or difficult to work with," and thus rejected on this basis.[117] In the absence of employment discrimination law, the market would respond to such non-productivity-based discrimination with greater gender segregation across firms without necessarily impairing the earnings or employment of women if Beckerian, rather than search, models of discrimination are correct. Segregation of women who are highly productive but viewed as "pushy" by fellow male workers could conceivably allow the firm to profit from hiring female workers without incurring the cost of having male workers feel discomfort at working with a pushy female executive. Query whether the existence of employment discrimination law reduces the ability of firms to engage in such efficient segregation, thereby impairing the prospects of female workers (and lowering male utility).[118]

Catherine Hakim, a sociologist at the London School of Economics, uses "preference theory" to argue that, contrary to the implicit premise of antidiscrimination

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[117] In *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989), a talented female accountant was denied a promotion in part because her conduct was deemed aggressive and abrasive under circumstances that raised a question whether these traits would have been acceptable for male accountants. The Court ruled that given the critical remarks about the woman's dress and makeup, the burden should be on the employer to prove that sex had played no part in the decision to reject her for partnership. This burden-shifting doctrine was legislatively endorsed in the CRA of 1991.

[118] The legal prohibition on such segregation is likely quite effective because complete segregation would be an easily spotted violation of Title VII and thus would presumably be rare. Title VII would also create incentives to expand the opportunities for women, but this incentive may be less potent because the attainment of the legally mandated nondiscriminatory equilibrium is harder to secure through private litigation. The result is that the law bars the segregation that could conceivably give women higher pay and better opportunities (albeit in gender segregated firms), and forces them into integrated workforces with the attendant friction between men and women, but not so effectively that the legal protections of Title VII compensate fully for the loss of the protections of the unregulated market. The more competitive the labor market, the greater confidence one would have in the market remedies, and the less one would need the remedies supplied by law.

law, women do not have the same work aspirations as men.[119] Hakim reports that men are three times as likely as women to view themselves as 'work-centered.'[120] She contends that while women in general want opportunities, they do not want a life dominated by work. According to Hakim, antidiscrimination policy has been premised on the inaccurate belief that both men and women desire full-time employment and that spouses will take equal shares of home responsibility. Instead, many women look for spouses who can provide them with the opportunity to remove themselves from the workforce as much as possible so that they can concentrate on home life. According to Hakim, women simply have different preferences than men and most would rather spend time with their families than in the office. In fact, only one-third of those women in dual-career families even regard their jobs as central to their identity. (Query what the corresponding percentage would be for men.) Hakim's preference theory states that "women's lifestyle preferences tend to determine the pattern of their lives, and that with the benefit of equal opportunities, women continue to make choices that are different from those made by men."

Some contend that Hakim is expressing an antiquated view of female preferences, which themselves have been shaped by the discriminatory practices of the labor market. But new social science research conducted by scholars at the University of Chicago business school has been offered to support the view that male workers seem to have a greater competitive drive, on average, than female workers.[121] In a set of controlled experiments involving rewards for solving a maze puzzle, the authors determine that competition between women and men tends to degrade the performance of women. The experiment, conducted in Israel, consisted of 324 engineering students over a span of 54 sessions. The authors targeted engineering students because they wanted women who were used to competing with men. The experiment consisted of five different treatments:

- *Treatment 1*: Piece Rate. Each participant was anonymously paid two shekels for each maze solved.
- *Treatment 2*: Mixed Competitive Pay. A group of three males and three females was told that the (anonymous) winner of the contest would be paid twelve shekels for each maze solved.
- *Treatment 3*: Mixed Random Pay. A group of three males and three females was told that at random, an anonymous participant would get paid twelve shekels for each maze solved.
- *Treatment 4*: Single Sex Competitive Pay. A group of six males or six females with the same setup as Treatment 2.
- *Treatment 5*: Single Sex Piece Rate. A group of six males or six females with same setup as Treatment 1.

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[119] Hakim et al. (2000), Hakim (2003) and Kirby (2003).

[120] Through a series of questions relating to work and home/life preferences, Hakim classifies women in the United Kingdom as work-centered, home-centered, or adaptive. Work-centered women account for 15-20 percent of the population, home-centered account for 15-20 percent, and adaptive women (those whose lives encompass both work and family responsibilities) account for 60-70 percent.

[121] Gneezy et al. (2003).

The authors found that in either mixed or single sex piece rate tournaments (i.e., each participant receives two shekels for each puzzle solved), no significant gender difference exists. However, in the mixed tournament scheme in which only one player would win, male participants outperformed females. The increase in this gender gap is driven by the competitive performance of males under competitive pay schemes (though the performance of men does not differ between Treatments 2 and 4). The performance of women does not drop in these mixed competitive treatments. When tournaments only consist of a single sex, the authors note an increase in the mean performance of women and a decrease in the gender gap in mean performance. Thus, women do in fact react to tournament incentives and compete in single sex groups. But, when women compete in a mixed group, they may have negative expectations about their relative ability that impair their performance.

In a second study focused on physical tasks, the same authors found that competition enhances the performance of boys but not of girls.[122] 140 fourth graders -- 75 boys and 65 girls -- were tested running on a track both alone and in pairs. When children ran alone, there was no difference in performance between the boys and the girls. However, in competition, boys but not girls improved their performance.[123] The authors chose younger subjects in this experiment (compared to an average age of 23 in the maze study) to determine if competitiveness is due to socialization or other characteristics that develop at a younger age or is instead shaped by the discriminatory workplace and is therefore something that could provide a basis for a claim of unlawful discrimination. No monetary reward was used in this second experiment in order to determine whether males only compete for an extrinsic reward. These results confirmed the authors' hypothesis that competition has a stronger effect on boys than on girls and that the gender composition of the group of competing subjects is important. One can imagine that such evidence in an unregulated market could provide yet another incentive towards greater sex segregation in the workforce. The research also suggests that certain ways of structuring the environment might be more effective for male, rather than female, workers and that, accordingly, an employer who allowed practices to remain in place that had this effect might be the subject of a disparate impact analysis. In such a case, the employer could be found to have violated Title VII unless the employer could establish that the practice was sufficiently justified by business necessity.

In his remarks at National Bureau of Economic Research (NBER) Conference on Diversifying the Science and Engineering Workforce, Lawrence Summers, the President of Harvard, enraged some when he suggested that the relatively small number of women to reach the very top levels in the various disciplines of science might have less to do with discrimination and more to do with drive or innate ability at the extreme tails of the distribution. After cataloguing potential explanations for disparate female performance, Summers concluded that "in the special case of science and engineering, there are issues of intrinsic aptitude, and particularly of the variability of aptitude, and that those considerations are reinforced by what are in fact lesser factors involving socialization and continuing discrimination." The point is a general one – if women and men have equal mean aptitude but men have higher variance, then there will be more men at each tail of

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[122] Gneezy and Rustichini (2004).

[123] When girls ran with girls, their performance was worse than when they ran alone. In contrasts, boys' time improved by a large margin when they ran with another.

the distribution. Employment as, say, a physicist at Harvard means that someone is at the far right tail of the distribution. It has long been observed that men in general seem to have higher variance life outcomes (men have more Nobel prizes but also more suicides, deaths due to homicide, and spells of incarceration), so the higher variance hypothesis is worthy of consideration.

John Tierney of the New York Times used Scrabble rankings as an indication that men were willing to put in prodigious effort to reach the top of a ranking scheme at a higher rate than women, even when the number of overall Scrabble players in the country included more women than men. Tierney, picking up on the work of Fatsis (2001), noted that to join the Scrabble elite intelligence and fluency with words is not enough: "you have to spend hours a day learning words like "khat," doing computerized drills and memorizing long lists of letter combinations, called alphagrams, that can form high-scoring seven-letter words." But he then cites the work of anthropologist Helen Fisher to establish the fact that men will be much more likely to engage in such behavior because of an evolutionary predilection. Thus, "women don't get as big a reproductive payoff by reaching the top. They're just as competitive with themselves - they want to do a good job just as much as men do - but men want to be more competitive with others."

The National Scrabble Association is the official organization for the nearly 10,000 competitive Scrabble players in North America, which supervises over 180 tournaments in the United States and Canada, including the National Scrabble Tournament held every other year. Before each official tournament, a new rating is calculated for each participant. This score, which currently ranges from 400 to 2100, is intended to serve as a relative benchmark with higher ratings indicating higher skill levels. As of June 2005, only 6 of the top 100 ranked Scrabble players are female, with the highest ranked at 45 (the others are ranked at 46, 48, 72, 89 and 100). A player's ranking simply represents their position in the national list of player ratings. The #1 player (David Gibson) has a rating of 2065 and #100 (Gail Wolford) has a rating of 1810. As Table 2 indicates, overall gender representation at the last two National Tournaments has been fairly even. But, interestingly, the premier Division 1 is dominated by male players (113 men versus 17 women in 2002; 145 men versus 25 women in 2004), while the middle divisions are more evenly matched, and women tend to outnumber men in the lower divisions. Once again, we see significant gender disparities at the most elite level of competition, but, at least in this case, while it is unclear whether this results from some greater competitive drive or some other human capital trait, it is hard to see how discrimination could play a significant role in success in the National Scrabble Tournament.

B. Sex Harassment

After the CRA of 1991 provided the first monetary remedy for this cause of action at the federal level, the total number of federal sex harassment cases rose sharply until

1995 and has since remained roughly stable. A number of studies have tried to estimate the prevalence of sex harassment. A 1995 survey of active duty women in the U.S. Armed Forces found that perceived sex harassment was rampant. The researchers distributed 49,003 questionnaires and collected 28,296 responses, of which 22,372 were from women.[124] The survey revealed that 70.9 percent of active duty women had faced some sort of sexual harassment over the previous year. Even adjusting for the response rate with the most conservative assumption that none of the women who did not respond had perceived sexual harassment, this is still a strikingly large perceived level of harassment, which has been corroborated by a second set of studies conducted by the U.S. Merit Systems Protections Board in 1980, 1987, and 1994. In 1994, 13,200 surveys went out to federal employees, with 8,000 returned; the results suggested that 44 percent of female employees and 19 percent of male employees had faced sexual harassment over the previous year. In 1980, the figures were 42 percent of women and 15 percent of men, while in 1987 the figures were 42 percent of women and 14 percent of men.[125] One might be tempted to interpret this time-series evidence as indicative of the ineffectuality of the federal ban on sex harassment, which developed in the 1980s and was bolstered by the enhanced capacity to secure damages in the CRA of 1991. This conclusion is unwarranted, though, in that it fails to appreciate the likely defects of this time-series data. Increased sensitivity to the issue of harassment has occurred over time, so it is likely that complaints of sex harassment rose even as the incidence of sex harassment declined.

Grafting the prohibition on sex harassment onto the antidiscrimination regime has the benefit of sanctioning clearly undesirable conduct but, of course, comes at a price. First, as this paper has stressed, litigation-based enforcement schemes are costly and subject to Type I and Type II errors. The social loss from high Type II errors (failing to punish actual harassers) is mitigated to the extent that the costly litigation does put at least some burden on wrongdoers. Nonetheless, Type II errors in sex harassment cases likely impose a considerable psychic if not monetary burden on victims -- the monetary burdens of the unsuccessful suits fall on the plaintiff's attorneys who typically get paid only when they win. Of course, without the legal prohibition, all wrongdoers go free. High Type I errors impose all of the same litigation costs but wrongfully sanction innocent conduct, which can have an inhibiting effect on unobjectionable workplace conduct (as workers try to avoid anything that might be misconstrued as harassment, presumably reducing both some unpleasant but not harassing conduct but perhaps reducing some pleasant and desired conduct). Moreover, if hiring a woman has some chance of imposing an erroneous large monetary penalty plus the stigma of sex harassment liability, that prospect will serve as another burden associated with hiring American workers in general and women in particular.

Second, there is the doctrinal issue of whether the sex harassment claim should be an independent tort or linked to antidiscrimination law where it does not always fit comfortably. Thus, we see an increasing number of sex harassment claims brought by men, many of which are same-sex harassment cases where the reason for the harassment may stem more from sexual orientation than from gender. Moreover, the sex

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[124] Antecol and Cobb-Clark (2002).
[125] USMSPB (1995).

discrimination framework fits uncomfortably when a boss harasses both male and female employees, which is not unknown since many harassers harass whoever they feel they have power to harass.

IX. Discrimination in Credit and Consumer Markets

A. Housing and Credit Markets

As noted previously, Congress enacted a number of statutes in the late 1960s and early 1970s extending the reach of antidiscrimination law beyond employment, public accommodations, and schooling. The Fair Housing Act (FHA), passed in 1968, prohibits housing providers and lending institutions from discriminating against consumers based on race, religion, sex, national origin, familial status or disability. The Equal Credit Opportunity Act (ECOA) of 1974 made it illegal, inter alia, for the extension of credit to be influenced by the racial composition of a neighborhood, and the Home Mortgage Disclosure Act (HMDA) of 1975—later amended in 1989—mandates that lenders report information on their lending activity and the disposition of individual applications. The HMDA has generated voluminous data that has been mined by researchers seeking – and according to Kenneth Arrow finding -- evidence of discrimination in lending practices.

HMDA data has been subjected to regression analysis designed to detect disparate treatment by showing that being a member of a protected class significantly reduces the probability of obtaining fair terms of trade after controlling for legitimate measures of creditworthiness, such as income, credit history, and existing debt.[126] At the same time, audit studies have attempted to reveal discriminatory business practices in housing and lending *as they occur*.

Yinger (1998) and Heckman (1998) stress that both standard regression and audit studies have strengths and weaknesses. Either omitting necessary variables that are correlated with the included vector of controls or including "illegitimate" controls can influence the ultimate findings of regression studies concerning the presence or absence of discrimination. However, as mentioned above, audit studies are prone to errors in design and management. For example, the decision to inform the auditors about the study's objectives or about the presence of his or her partner may influence their behavior and survey responses in ways that are likely to support a finding of discrimination if one assumes that test auditors would likely sympathize with the goals of the antidiscrimination organizations that usually initiate audit tests. Moreover, audit studies are typically narrower in focus than regression analysis; they highlight discrimination in isolated stages of economic transactions rather than reveal the experience of the average member of a protected class who may learn to find more reliable trading partners in active, competitive consumer markets.[127] Also, with the partial exception of the housing context where repeated studies have been undertaken, audit studies are not generally available in time series, which limits their usefulness in analyzing changes over time. As a result, inference and interpretation based on either type of study requires explicit consideration of their competing advantages and disadvantages.

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[126] As Yinger (1998) underscores, the economic status of credit applicants and consumers may itself be the legacy of previous discrimination.
[127] Yinger (1998).

Schafer and Ladd (1981) used data on mortgage applications in California during 1977-1978 and in New York from 1976-1978 to estimate the differential probabilities of loan denial by race, sex and marital status. Using a rich set of control variables, including loan-to-value ratio, income of secondary earners and neighborhood effects, Schafer and Ladd estimated that black applicants were anywhere from 1.58 to 7.82 times as likely to be denied loans as white applicants. Interestingly, they found that the disparate treatment of women subsided over time, whereas for minorities the trend seemed to persist. After the 1989 expansion of the HMDA, the Federal Reserve Bank of Boston analyzed newly available data containing all the components of a lender's information set at the time of the loan decision.[128] The resulting study -- published as Munnell et al. (1996) -- found that even the rich set of controls could not fully explain the differential treatment experienced by blacks and whites. The paper concluded that blacks experienced a denial rate that was almost twice as high as that for similarly situated whites.

A number of criticisms have been leveled against the Boston Fed finding of discrimination in the market for mortgages. Some (incorrectly) argued that coding errors could account for the results, while others, such as Stengel and Glennon (1994), attacked the Boston Fed's model specification. The debate has continued with Kenneth Arrow concluding that statistical discrimination was clearly occurring and Bostic (1996) continuing to argue against findings of discrimination.

Berkovec et al. (1996) and others have tried to look at the other side of the loan decision by examining the rate of loan default by race in order to detect or disprove discrimination in lending behavior. Taste-based discrimination would lead institutions to set higher credit thresholds for minorities thereby decreasing the probability of default relative to white borrowers. Results that point to higher minority default rates have therefore been interpreted as evidence against discrimination. As Ladd (1998) cautions, however, the use of default data is subject to important methodological limitations. She argues that, unlike the loan application data, which includes the full set of factors used by the lender when deciding to approve or deny, default data necessarily omits unobserved factors that contribute to the probability of default. Such unobserved heterogeneity, which can influence the probability of default in both directions, has made it difficult to generate an unassailable conclusion about the existence or nonexistence of discrimination from default data.

Using data from the 1989 Housing Discrimination Study, Yinger (1995) estimates the severity of discrimination according to the rate at which members of racial groups learn about housing opportunities through market interaction. He finds, consistent with discrimination, that "black home buyers learn about 23.7 percent fewer houses than do their white teammates, [and] black renters learn about 24.5 percent fewer apartments…"[129] These results imply that in addition to the psychic costs of discrimination blacks suffer, they are also burdened by higher search costs and the consequent potentially inferior housing.

B. Auto Sales

[128] This dataset contained crucial information on the credit history, employment stability and public record of defaults of applicants, all of which were missing from Schafer and Ladd (1981) and previous studies.
[129] Yinger (1998).

Ayres (1991, 1995) and Ayres and Siegelman (1995) have also used the audit approach to document the presence of discriminatory pricing in automobile sales. Carefully controlling for observable differences between audit pairs and instructing auditors on precise bargaining tactics, Ayres and Siegelman collected data from 306 cases at Chicago car dealers. They found that black, male customers paid approximately $1,000 more for cars than white men and black females paid $405 more than white males. Additional results from these car sales audit studies suggest that discriminatory practice does not depend on the race of firm employees and that car dealers statistically discriminate by assuming that black men and all women have higher reservation prices than white males.[130]

Goldberg (1996) uses regression analysis of CPS data from 1983 to 1987 to argue against the claim of discrimination in auto sales prices by arguing that car dealers did *not* significantly reduce the price of cars below list value for white males relative to minorities or women. Goldberg's sample of nearly 1,300 households included less than 5 percent minority males or females, which is probably a smaller amount of data than one would ideally like to have in resolving such an important question. Moreover, Goldberg's paper is not necessarily in direct conflict with the findings of Ayres and Siegelman because of their different geographic focus (national versus Chicago) and units of observation (households versus individuals). Finally, as Siegelman (1998) notes,

> "Even though Goldberg (1996, 624) characterized her results as 'quite different from the ones reported by . . . Ayres and Siegelman,' … Goldberg's estimates of the discriminatory premiums paid by white females and 'minority' females are virtually identical to ours. The only difference … is that Goldberg found black males paying a much smaller premium than we did, and none of her results are statistically significant, whereas ours were, at least for the black testers. Because there are at least six dimensions on which our audit data allowed for more precise measurement and better controls than the survey Goldberg used, her failure to obtain statistically significant results is not surprising and should not be taken as evidence against the existence of discrimination in new car sales."

X. Criminal Justice and Racial Profiling

As crime fell starting in the early to mid-1990s, the ACLU launched a highly successful campaign designed to reduce racial profiling in all aspects of American policing -- from drug enforcement by state troopers and customs and immigration officials to the implementation of the death penalty to local policing efforts to disrupt gang activity and simply to enforce motor vehicle laws and criminal law more generally. Racial profiling became a contentious political issue, and a number of prominent cases of apparent police targeting -- frequently of African-American men -- led to numerous consent decrees and massive increases in the number of departments that collect and retain data designed to ascertain whether their policing strategies were infected by discrimination. Again, some argued that any disparity in arrest rates across groups should be taken as evidence of discrimination but this, too, is simply another example of

[130] Yinger (1998).

the gap between proof of discrimination and evidence of disparities that was discussed earlier.

One pattern that exists in certain towns in the United States that has contributed to this racial profiling litigation is that a largely white suburban area with single family homes is changed in ethnic or racial composition when a low income housing project is built in the town. Suddenly, arrests rise sharply and on a per capita basis, arrests are far more numerous in the high-density area than in the single family part of town. Because of the racially diverse compositions of the two areas, however, evidence of strong statistically significant disparities in arrests rates by race are quickly marshaled as evidence of intentional discrimination.

Ideally, tests for discrimination would develop a behavioral benchmark that corrects for the underlying rate of participation in illegal conduct, which for many crimes is all but impossible. But what if it is shown that blacks commit *X* percent of a particular crime but make up substantially more than *X* percent of the arrests for that crime? This pattern could be consistent with intentional race discrimination, but it also could be the product of a neutral practice having a disparate impact. Consider the case where a war breaks out between two gangs vying to gain control over the crack trade in an inner city environment. If the city responds to the mayhem by flooding the area with police, the ability of the police to observe criminal activity in the inner city area will be elevated and may well lead to higher arrests across the board for the residents of the targeted inner city area, who may happen to be members of a racial or ethnic minority. The effect may be that the arrest rate data that are now being routinely collected may seem to show bias on the part of police because of the disproportionate arrest rates of minorities. Ironically, to the extent that the added police activity dampens crime in the flooded area, the benefits of the policing may be disproportionately targeted on law-abiding minority members of the community -- even though the political rhetoric may all focus on the discriminatory conduct of the police.[131] Still, where sentences for identical behavior can vary dramatically based on prior convictions, there is a concern about the consequences of severe disparate racial impacts in arrests.

One can imagine a model in which officers have an opportunity to seek contraband or detect criminals by engaging in certain policing actions, such as stops and frisks. If for whatever reason the success rate in these police encounters is higher when blacks are targeted, the police may have an incentive to target blacks more intensively. Efficient policing would then focus on blacks until the success rate from an enforcement action against the marginal black citizen equaled that against the marginal non-black citizen. Indeed, if, say, blacks are more likely than non-blacks to commit crime, it might be rational for the police to focus all their enforcement activity on blacks, since a corner solution may actually define the efficient policing strategy in a particular case.

This is precisely the theoretical approach taken by Knowles et al (2001) in their study of motor vehicle searches along a Maryland highway. Their model of the search process includes a continuum of law enforcement officers and drivers, and the latter are identified by race $r \in \{B, W\}$. All other observable characteristics of motorists are bundled into the variable c. Police officers are free to search vehicles driven by any (r, c) profile and do so with probability $\gamma(c, r)$ but incur a cost of t_r. The event G denotes a

[131] The claim is frequently made, though, that the police under-enforce the law in black residential areas, and over-enforce against blacks when they are in white areas.

search in which drugs are found, and thus the expected payoff to the officer is $P(G|c,r)$. Similarly, drivers receive $v(c, r)$ if they carry drugs and are not searched or $-j(c, r)$ if contraband is found.[132] Therefore, their expected payoff is:

$$\gamma(c,r)[-j(c,r)]+[1-\gamma(c,r)]v(c,r) \tag{24}$$

Knowles et al define the event when $t_B \neq t_W$ as racial prejudice since the costs of search differ by race. On the other hand, if $\gamma(B) \neq \gamma(W)$ then there is evidence of statistical discrimination. The equilibrium constructed entails randomization by motorists and police. Setting equation (24) equal to zero, the equilibrium search rate is given by:

$$\gamma^*(c,r) = \frac{v(c,r)}{v(c,r)+j(c,r)} \tag{25}$$

Officers are willing to randomize whenever $P^*(G|c,r) = t_r$ for all c and r. In the absence of a taste for discrimination, the equilibrium probability of guilt is the same for both races. However, since equation (25) does not depend on that probability, black motorists will be stopped and searched more often if

$$\gamma^*(c,B) = \frac{v(c,B)}{v(c,B)+j(c,B)} > \frac{v(c,W)}{v(c,W)+j(c,W)} = \gamma^*(c,W) \tag{26}$$

Note that this inequality is satisfied when the value of transporting drugs is higher or when the cost of being found guilty is lower for blacks.

Even though data on c and γ^* are not readily accessible by the econometrician, the authors test for prejudice by calculating the probability of guilt by race *conditional on being searched*. If those probabilities are the same for whites and blacks at the margin, then there is no evidence to support a racial bias claim. Such a test could be implemented by testing the null hypothesis

$$\Pr(G=1|c,r) = \Pr(G=1) \quad \text{for all } c, r \tag{27}$$

In order to avoid specification problems with logit and probit models, Knowles et al opt for a nonparametric test based on the Pearson χ^2 statistic.

Their data set includes over 1,500 motor vehicle searches along Interstate 95 in Maryland between 1995 and 1999. Of those searches, 63 percent of the motorists were African-American, 29 percent were white and 6 percent were Hispanic. A first glance at the data also revealed that the percentage of African-American drivers searched had decreased in the late 1990s, while whites were searched more often in the same time period.

Tests for equality of guilt rates across race (as well as sex, time of day and car type) are carried out according to different thresholds for measuring guilt. Knowles et al

[132] If the driver is not transporting drugs, then his payoff is zero regardless of the officer's actions.

emphasize the criteria in which any form and amount of illegal substances found constitute guilt (Definition 1) or when seizures of less than two grams of marijuana are excluded (Definition 2). When guilt is measured according to Definition 1, the hypothesis of equal conditional guilt rates is not rejected for whites and blacks but is for Hispanics and the other two race categories. Likewise, Definition 2 yields the same results: no evidence of bias against African-American drivers. Interestingly, when the definition of guilt includes drugs in large quantities, Knowles et al find potential signs of bias against *white* drivers.

These results are interpreted as evidence of maximizing behavior on the part of law enforcement rather than racial prejudice. As suggested by their model, differences in search rates may arise even without discriminatory preferences. Indeed, they argue that "searching some groups more often than others may be *necessary* to sustain equality in the proportions guilty across groups."

In a recent extension of the Maryland search analysis, the model of Persico and Todd (2004) allows for heterogeneous payoffs for officers and drivers and then tests for bias using data from Wichita. This version permits drivers a third option of delegating criminal activity to a member of another (r, c) group and within each group there is a joint probability distribution over v, j and d, the cost of hiring a delegate. The racial bias of police officers p now enters through an extra benefit, $B(p)$, if a successful search involves an individual of the minority race.

If the police are unbiased and both race groups are searched in equilibrium, then Persico and Todd note that their respective crime rates must be equal, or $\kappa_r = \kappa_R$, where r and R represent the minority and majority race, respectively. However, if $B(p) > 0$, i.e. officers are prejudiced, then it must be the case that the crime rate of the group subject to bias is lower, or $\kappa_r < \kappa_R$. Although characterization of equilibrium in this model is more complex than in Knowles et al (2001), its implications for empirical analysis are just as straightforward. In fact, the simple analysis above of crime rates carries over into the fully specified model of interaction between police and drivers: the hit rate, or the success rate of searches, will be equal across races at the margin if police are unbiased, and the hit rate of the preferred race will be higher when police are biased.

Persico and Todd apply this test to over 2,000 vehicle searches between January and September 2001 conducted by the Wichita police department. As in the Maryland data, the percentage of blacks searched by law enforcement (32 percent) is higher than their share in the population of drivers (11 percent) while the opposite holds for whites (63 versus 65 percent). Their primary finding once again indicates that police officers are not biased in their search behavior: the hit rates for whites and blacks were 22.03 percent and 22.69 percent. Moreover, the Pearson chi-square test fails to reject the hypothesis of equal hit rates across all three race groups. Finally Persico and Todd summarize the results of 16 other city and state-level racial profiling studies, which hint at an empirical regularity of no police bias against black drivers. In contrast, Gross and Barnes (2002) conclude from their analysis of the Maryland data that the Maryland State Police do use race to decide who to stop and who to search. This disparate treatment stems from the police effort to increase the minute percentage of stops that lead to drug seizures, they conclude. Gross and Barnes view the discriminatory treatment to be pointless since it has no discernible impact on the drug trade.

In general, using race to target policing activity in the absence of a specific racial description of a perpetrator will violate constitutional doctrine of equal protection under the law, but the disparate impact standard will only govern certain types of policing activities – e.g., where Congress has instituted a broader definition of discrimination for those departments that receive federal funding. One consequence of the racial profiling movement is that far more data about the racial composition of stops and arrests is now collected by the police, which presumably has some opportunity cost since officers must devote time to filling out reports. In addition, the data is costly to evaluate and does create an opportunity for knowingly or unwittingly presenting results that appear to demonstrate racial bias when none in fact exists. The data may be most valuable in reining in the misconduct of particularly biased officers, but even then the fear remains that these bad apples can avoid detection simply by not filling out the forms when they stop but do not arrest blacks. Procedures are then implemented to address that problem, but one can see that rooting out discriminatory conduct is not a trivial task, whether it is in the workplace, the police force, or some other arena of social life.

The massive increase in incarceration of young black men clearly signals a social problem, although it may have less to do with discrimination in policing, than with the harsh war on drugs. Even if this war is conducted in a race neutral manner, it will enmesh into the criminal justice system a disproportionate number of young males with low socio-economic status and fewer options in the legitimate labor force. Of course, an anti-drug policy directed at the demand side (rather than the current supply-side approach) would have far less racial impact since blacks make up a much smaller share of drug users than of drug sellers.[133] The latest figures show that 12 percent of black men aged 20-34 are incarcerated while the comparable figure for white men is 1.6 percent.[134] No change in policing will radically alter these numbers, although a change in drug policy clearly would. It is worth asking whether our society has done enough to try to alter this situation, or whether it is willing to accept such high levels of black incarceration because of indifference emanating from discriminatory attitudes.

XI. Conclusion

We know that discrimination has been an enormous blight on the history of this country. The scholarly consensus is also clear that the enactment of the Civil Rights Act of 1964 was a major step towards addressing this problem, and, in particular, aided the employment and earnings of blacks relative to whites for the decade from 1965 to 1975. This tells us that law was needed to stimulate demand for black labor if society was to be true to the ideal that every person should be judged by their talents and not by the color of their skin. The market alone had not given this protection, despite the claims to this effect by some very prominent economists, such as Milton Friedman. Even the libertarian Richard Epstein now concedes that the Civil Rights Act was required to break the logjam of Jim Crow. Indeed, to the extent that this federal legislation reduced the discriminatory attitudes of southern (and even non-southern) racists, the efficiency gains from reducing these Beckerian costs would be enormous. Just as de Tocqueville writing in 1833 understood that slavery was not only cruel to the slave but deeply harmful to the

[133] Loury (2002).
[134] "Prison Rates among Blacks Reach a Peak, Report Finds" (2003).

masters, federal antidiscrimination law revealed a century and one-half later that lifting the oppression of intense discrimination from blacks helped the citizens of the South, both black and white, immensely.[135]

There is much less consensus, though, about where things stand today. As in so many areas of the law -- for example, medical malpractice, which kills more than the total victims of homicide and car accidents each year; and antitrust, where the costs of egregious acts in restraint of trade can be enormous -- it is easy to point out examples of objectionable conduct, but it is also easy to see that a system of private litigation creates many problems of costly lawsuits and high rates of error. The audit studies described in Section V and IX remind us that employers and housing agents acting in a discriminatory manner are still common, but by no means dominant. The Urban Institute study of Chicago employers found that black and white testers were treated identically 85.8 percent of the time, while whites were favored in 9.6 percent of the tests and blacks were favored in 4.5 percent of the tests.[136] When one compares those figures to the percentage of Chicago employers who held negative views about the work ethic of black, white, and Hispanic employees (37.7 percent ranked blacks last) one realizes that the combination of competition in the market and the existence of employment discrimination law leads to much lower effective discrimination than one might fear.[137] Ideally, one would like to know the relative importance of law in this equation. Clearly, the economy is more competitive today than ever before, which means that concerns about employer discrimination should be less pressing than might have been true even 20 years ago.

Heckman is almost surely correct that efforts to further ratchet up enforcement efforts of the current litigation-based system of antidiscrimination law would elevate costs far beyond likely benefits. In some instances, the best policy would be to direct resources more heavily into education and human capital development rather than further antidiscrimination activity or affirmative action, although Loury (2002) argues that the fully array of approaches will be needed to produce greater racial equality. It may be worth exploring whether it would be sensible to diminish the reliance on private litigation and place greater emphasis on programs such as the federal contract compliance program, under which government contractors are pressed to be sure to avoid "underutilization of women and minorities." Such efforts have the potential not only to redress overt imbalances in hiring procedures but also to mitigate negative, subconscious attitudes about race and sex of which people in positions of authority may not be aware. As suggested by the empirical findings of sociologists and psychologists, latent, negative attitudes toward racial minorities have persisted despite decades of antidiscrimination legislation.[138] It is therefore likely that the problem of racial discrimination will continue to be widespread and difficult to combat.

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[135] De Tocqueville found the comparison of the contiguous slave state of Kentucky and the free state of Ohio to be dispositive on this issue. The first was marred by poverty and idleness, the second hummed with industry, comfort, and contentment. See Donohue (2003) quoting de Tocqueville.

[136] Donohue (2003).

[137] Donohue (2003).

[138] The experimental study of implicit attitudes in Cunningham et al. (2001) provides some interesting evidence of this phenomenon. Test subjects were shown faces of black and white individuals on a computer screen followed by words that were clearly positive or negative in connotation. In one trial, subjects pressed the same key to identify white faces and "good" words and another for black faces and "bad" words. In a second trial the key for black faces was the same as for good words while bad words

The first phase of federal antidiscrimination law was designed to achieve color blind treatment of all workers. In its second phase, however, antidiscrimination law was harnessed as a means of improving the economic status of those who would remain disadvantaged in the marketplace by color-blind treatment: blacks, women, Hispanics, the elderly, and the disabled.[139] This was done in a way that was, arguably, less socially divisive than explicit welfare legislation that could more efficiently target benefits to these groups. Supporters of this implicit affirmative action will assert that it was social welfare-enhancing even if no longer efficient and even if somewhat disingenuously couched in the language of discrimination (instead of fairness). Over time, however, the opponents of such policies will become increasingly unhappy with the perceived excesses of such aggrandized antidiscrimination law, and we have begun to witness this trend in recent legislative initiatives designed to cut back on affirmative action in education and other governmental functions.[140]

Another goal of antidiscrimination law is to prevent the type of racial and ethnic conflagrations that persistently lead to such unhappy consequences around the world. Wise antidiscrimination law and policies may serve to dampen down such antagonisms and prevent the rigid forms of segregation that can allow biased attitudes to percolate into an unhealthy brew. On the other hand, social science evidence suggests that when affirmative action programs are pushed too aggressively, they can generate angry backlashes. Finding the correct balance, then, becomes an important element of antidiscrimination law. These tensions are always bubbling beneath the surface as evidenced by the fact that Timothy McVeigh, who blew up the Oklahoma City federal building, was involved with the Aryan Republican Army and supported its white supremacist agenda.

The economic analysis of law, especially with respect to antidiscrimination measures, has endured much criticism for its "reduced form" approach to complex social and legal issues. In his denunciation of the neo-classical paradigm, Ramirez (2004) argues that the field of law and economics promotes a "truncated microeconomic analysis of race that is founded on what can only be termed pseudo-economics"[141], citing the arguments of Arrow (1998) as justification for his position. Arrow does indeed believe that non-market-based accounts of discrimination such as social networks deserve more attention, but this is not to say that economics has little to offer those studying antidiscrimination law. In fact, Ramirez's skepticism of the field echoes precisely the issues that motivated economists like Arrow to formulate alternatives to the Beckerian theory of discrimination, such as the models presented in Section II. There is even evidence of the multi-disciplinary approach to discrimination that Ramirez contends are

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were identified with the same key as white faces. Their results revealed a statistically significant slower response time in the second trial suggesting stronger associations between the pairings in the first test. However, participants scored below the midpoint of the Modern Racism Scale (suggesting lower than average levels of racism) based on a questionnaire on explicit attitudes toward race, which indicated a disconnect between implicit and explicit feelings.

[139] See Donohue (1994).

[140] As Card and Krueger (2004) noted: "Between 1996 and 1998, California and Texas eliminated the use of affirmative action in college and university admissions. At the states' elite public universities admission rates of black and Hispanic students fell by 30-50 percent and minority representation in the entering freshman classes declined."

[141] Ramirez (2004).

woefully missing.[142] Moreover, Ramirez opines that law and economics primarily consists of theoretical analysis. As this chapter has shown, though, empirical studies investigating the effect of legal interventions on racial prejudice and the actual behavior of economic agents have provided valuable insight into the causes and consequences of discrimination.

Indeed, economic analysis has helped to identify some of the unintended consequences of antidiscrimination law, such as the fact that, as employment discrimination litigation changed from being largely about failure to hire to being primarily about wrongful discharge, the law developed from a tool that opened up new areas for minority employment to one that created some incentives against hiring minorities due to the increased danger of hiring someone who might need to be fired at a later date.[143] Another example concerns the ability of employers to circumvent the demands of law: if a firm resides in an area with a 40 percent minority population, it may be able to drastically reduce its reliance on black labor by moving to another locale, with a black workforce of only, say, 2 percent. By doing so, both the prejudiced employer and the employer fearful of discrimination suits might be able to avoid the psychic or legal burden of hiring blacks altogether. In either event, the goal of increasing opportunities for blacks would be thwarted. Similarly, an impressive recent study has raised concerns about whether the "reasonable accommodation" requirements of disability law are harming the employment opportunities of disabled workers.[144] More empirical work is needed before we can state with assurance the full extent of the costs and benefits of antidiscrimination law in employment, housing, lending, medical care, and criminal justice policy.

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[142] A leading example is Lang (1986), which submits a theory of discrimination based on the transaction costs that accompany the emergence of distinct language or speech communities in the labor market. Lang clearly states his claim that this idea "is a distinct improvement over the existing theoretical literature on discrimination, which either relies on tastes…or on statistical discrimination having implications generally contrary to factual evidence."

[143] Donohue and Siegelman (1991).

[144] Jolls and Prescott (2004).

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TABLE 1

Median Income and Number of Full-Time, Year Round Workers for Selected Groups, 1962-2001

	Males							
	1962		**1975**		**1988**		**2001**	
White	29,774		38,374		40,635		40,790	
	-		(34.0)		(42.7)		(50.0)	
Black	17,768	*59.7 percent*	28,553	*74.4 percent*	29,786	*73.3 percent*	31,921	*78.3 percent*
	-		(2.8)		(4.1)		(5.5)	
Asian	-	-	-	-	40,369	*99.3 percent*	42,695	*104.7 percent*
	-		-		(1.2)		(2.7)	
Hispanic	-	-	27,804	-	26,154	*61.7 percent*	25,271	*58.5 percent*
	-		(1.5)		(3.6)		(7.6)	
White, non-Hispanic	-	-	-	-	42,364	-	43,194	-
	-		-		(39.3)		(42.8)	

	Females							
	1962		**1975**		**1988**		**2001**	
White	17,793		22,436		27,064		30,849	
	-		(15.1)		(26.3)		(33.4)	
Black	10,858	*61.0 percent*	21,436	*95.5 percent*	24,252	*89.6 percent*	27,297	*88.5 percent*
	-		(2.0)		(4.0)		(5.9)	
Asian	-	-	-	-	28,536	*105.4 percent*	31,284	*101.4 percent*
	-		-		(0.9)		(2.0)	
Hispanic	-	-	19,073	-	21,856	*79.4 percent*	21,973	*69.1 percent*
	-		(0.6)		(2.0)		(4.4)	
White, non-Hispanic	-	-	-	-	27,521	-	31,794	-
	-		-		(24.4)		(29.3)	

Notes:

(a) Data source is the U.S. Census Bureau.

(b) Full-time workers are defined as persons on full-time schedules include persons working 35 hours or more, persons who worked 1-34 hours for non-economic reasons (e.g., illness) and usually work full-time, and persons ``with a job but not at work'' who usually work full-time.

(c) Median income numbers are in 2001 dollars based on the CPI-U-RS price index of inflation.

(d) The figures in parentheses represent the number in millions of full-time, year round workers making up each group.

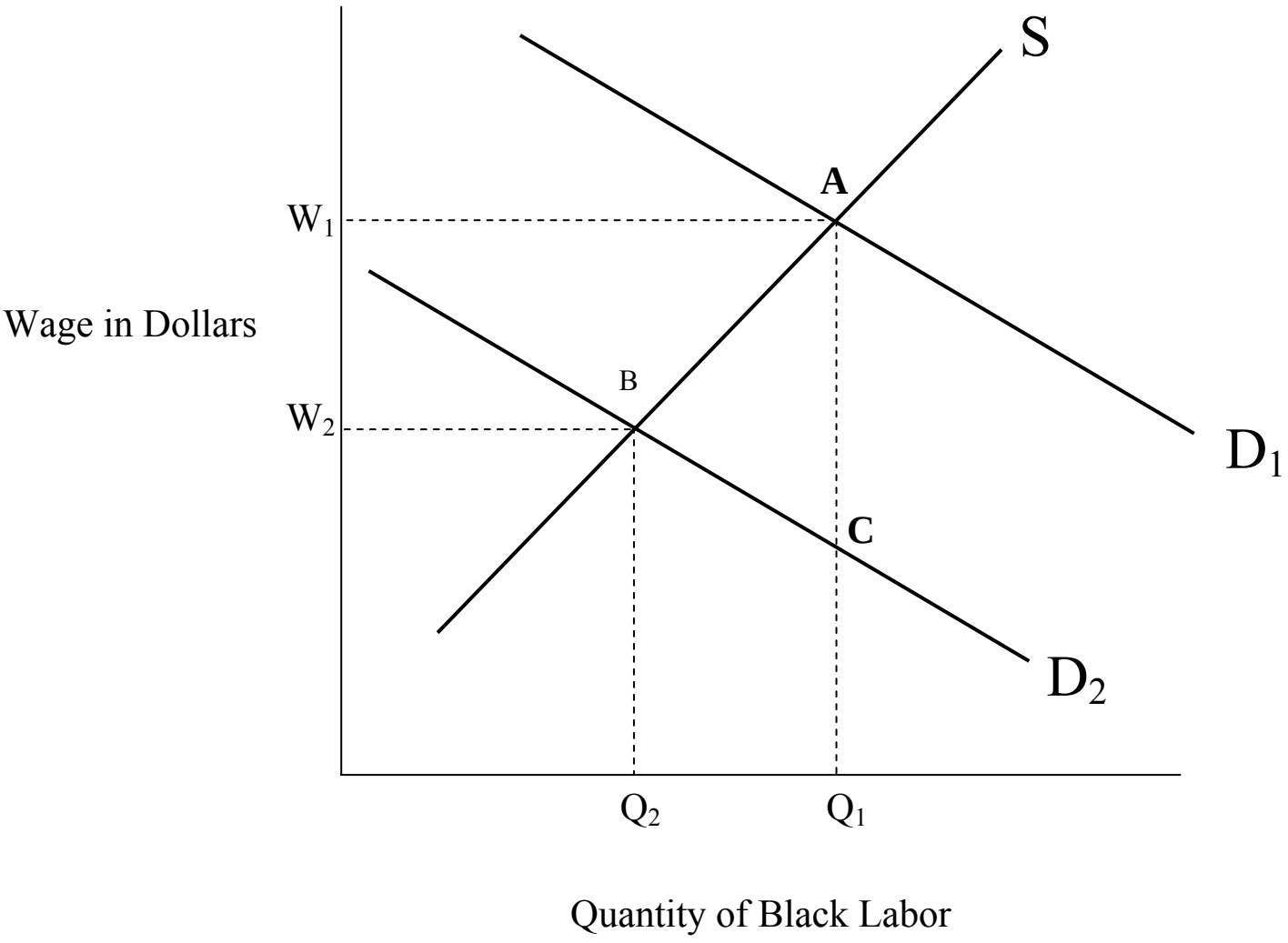
(e) For blacks and Asians, the percentage is the median income compared to the white median income.

(f) For Hispanics, the percentage is the median income compared to the white, non-Hispanic median income.

TABLE 2: COUNTS OF MEN AND WOMEN IN THE 2002 AND 2004 NATIONAL SCRABBLE TOURNAMENTS

		Men	Women
2004			
	Division 1	145	25
	Division 2	78	56
	Division 3	80	88
	Division 4	61	89
	Division 5	30	59
	Division 6	26	49
	Division 7	19	21
	Total	**439**	**387**
2002			
	Division 1	113	17
	Division 2	73	29
	Division 3	54	76
	Division 4	42	82
	Division 5	40	70
	Division 6	25	61
	Total	**347**	**335**

Sources: http://www.scrabble-assoc.com/tourneys/2004/nsc/registered.html and http://www.scrabble-assoc.com/tourneys/2002/nsc/roster.html

Figure 1

The Effect of Discrimination on the Wages and Quantity of Black Labor under the Becker Employer-Animus Model