The Q-Word as Red Herring: Why Disparate Impact Liability Does Not Induce Hiring Quotas

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I. Introduction

The debates over the passage of Title VII of the 1964 Civil Rights Act[1] were marked by passionate disagreement: conservatives objected to the legislation as an unwarranted interference with employers' freedom of contract, while liberal supporters considered it a first step toward racial justice.[2] While disagreement about what employment discrimination law *should* do has continued—in much the same form—to this day,[3] there has been surprising consensus about *the mechanism* by which Title VII actually works:[4] whether it is thought of as inadequate or excessive, Title VII is

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1. 42 U.S.C. § 2000a (1994).

2. *See* ALFRED W. BLUMROSEN, MODERN LAW: THE LAW TRANSMISSION SYSTEM AND EQUAL EMPLOYMENT OPPORTUNITY 43 (1993) ("The common ground between [southern Democrats and conservative Republicans in the U.S. Senate] was the desire to minimize federal regulation. Conservative Republicans did not want business hobbled by extensive regulation, and the southern Democrats had the same conviction about the southern way of life [*i.e.*, segregation]."); Michael E. Gold, *Griggs' Folly: An Essay on the Theory, Problems, and Origin of the Adverse Impact Definition of Employment Discrimination and a Recommendation for Reform*, 7 INDUS. REL. L.J. 429, 503-08 (1985) (discussing the debates over the passage of Title VII of the 1964 Civil Rights Act in greater detail).

3. The debate has gone on more or less continuously since 1964, heightening in intensity when important changes to employment discrimination law—such as the 1972 and 1991 Civil Rights Acts— were considered by Congress. Recent attacks on the antidiscrimination principle by RICHARD EPSTEIN, FORBIDDEN GROUNDS: THE CASE AGAINST EMPLOYMENT DISCRIMINATION LAWS (1992) and DINESH D'SOUZA, THE END OF RACISM (1995), have received widespread notice.

4. Although commentators seem to agree about the mechanism by which antidiscrimination laws are supposed to function, they naturally disagree on the actual effects of these laws. On the right, James P. Smith and Finis Welch argue that relative economic gains by blacks began well before the passage of the 1964 Civil Rights Act and should be attributed not to the law but to improvements in the quantity and quality of black education and to migration out of the South—that is, to market-based processes. James P. Smith & Finis R. Welch, *Black Economic Progress After Myrdal*, 27 J. ECON. LIT. 519, 528-47, 552-57 (1989). On the left, Richard Delgado and other critics have suggested. that

usually presumed to promote the hiring of those it is designed to protect.[5] The logic underlying this presumption is simple: by making employers liable for failures to hire based on race (or other forbidden grounds), the law raises the price of such discriminatory activity and produces less of it than would occur if employers were left completely free to hire whomever they wished.[6]

As Donohue and Siegelman and others have recognized, however, there is a tension between protecting applicants against discrimination in hiring and protecting workers from discriminatory firing after they have been hired.[7] Antidiscrimination law forbids both kinds of conduct, but the two prohibitions are inherently at odds. By making it harder to *fire* certain workers, employment discrimination law tends to make these workers less

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the laws are little more than symbolic expressions of disapproval that make it easier for society to ignore the pervasiveness of discrimination. *See* Richard Delgado, *Recasting the American Race Problem*, 79 CAL. L. REV. 1389, 1397 (1991) (suggesting that the gains of the black middle class in the wake of antidiscrimination legislation "may have . . . contributed to white complacency and tokenism"). For a balanced empirical assessment, see John J. Donohue III & James Heckman, *Continuous Versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks*, 29 J. ECON. LIT. 1603-43 (1991) (suggesting that antidiscrimination laws have some effect, although less than they did when Title VII was first passed).

5. The notion of whom antidiscrimination law is designed to protect has broadened considerably with the passage of time. While the original laws were clearly designed especially with African-Americans in mind, the reach of the antidiscrimination principle now includes women, the disabled, older workers, and others. *See, e.g.*, Americans with Disabilities Act of 1990, 42 U.S.C. § 12101 (1994); Age Discrimination in Employment Act of 1967, 29 U.S.C. § 621 (1994). We concentrate on race discrimination in this Paper, although some of our insights could easily be extended to discrimination based on other attributes.

6. *See, e.g.*, Donohue & Heckman, *supra* note 4, at 1638 (noting that employers commonly respond to the threat of Title VII litigation with some remedial action in favor of minority workers); William Landes, *The Economics of Fair Employment Laws*, 76 J. POL. ECON. 507, 509 (1968) ("[T]he passage of a fair employment law adds an expected cost to firms and unions that are violating either the segregation or wage differential provision of the law, and induces a substitution away from discriminatory behavior."); Stephen A. Plass, *Arbitrating, Waiving and Deferring Title VII Claims*, BROOK. L. REV. 779, 825 (1992) (discussing the impact of arbitration on "the deterrence functions of antidiscrimination laws"); Michael Selmi, *Testing for Equality: Merit Efficiency, and the Affirmative Action Debate*, 42 UCLA L. REV. 1251, 1298 (1995) ("The threat of lawsuits and potential liability for damages are intended to deter employers from engaging in discriminatory behavior.").

7. John J. Donohue III & Peter Siegelman, *The Changing Nature of Employment Discrimination Litigation*, 43 STAN. L. REV. 983, 1015-21, 1023-32 (1991). To our knowledge, Richard Posner was the first to suggest the tradeoff between hiring and firing protection in the discrimination context, although he did not explore it in depth. *See* Richard A. Posner, *The Efficiency and the Efficacy of Title VII*, 136 U. PA. L. REV. 513, 519 (1987) (suggesting that Title VII makes the hiring of black workers more costly, but that the law has an even greater impact on the cost of firing black workers). Some of the story seems to have been developed independently by Mayer Freed and Daniel Polsby in the context of just cause firing protection. Mayer G. Freed & Daniel D. Polsby, *Just Cause for Termination Rules and Economic Efficiency*, 38 EMORY L.J. 1097, 1101-02 (1989) (suggesting that tenure protection, a purchasable guarantee of job security in the absence of just cause, would allow employers to offer lower salaries). The effects of firing costs on hiring behavior have been given considerable attention in the economics literature under the rubric of dynamic labor demand. For a comprehensive recent survey, see DANIEL S. HAMERMESH, LABOR DEMAND 205-329 (1993).

attractive prospects at the hiring stage. An employer would prefer to hire someone who can be easily fired (should that prove necessary) than an otherwise identical applicant whose firing would be subject to legal scrutiny. Thus, protection against discriminatory firing acts as a kind of tax on hiring those to whom it is extended.

While the tradeoff between "disparate treatment" hiring and firing protection has already been described,[8] this article extends the analysis to the effects of "disparate impact" liability.[9] Our major conclusion can be put succinctly: far from producing hiring quotas that induce employers to discriminate in favor of minorities, disparate impact liability may actually induce hiring discrimination against minorities (and other protected groups). Whether or not its net effect on minority employment is negative, disparate impact firing liability almost certainly blunts the positive incentives to hire minorities that Title VII was originally supposed to create.

Our thesis contradicts the common wisdom that disparate impact liability induces employers to hire "excessive" numbers of minorities. This quota theory of disparate impact liability has a long and distinguished pedigree. The Reagan administration sought to restrict disparate impact liability because of "its pressure toward quotas;"[10] George Bush vetoed the 1990 Civil Rights Act because it was a "quota bill;"[11] and a plurality of the Supreme Court in *Watson v. Fort Worth Bank & Trust* has enshrined the quota theory in its parsing of Title VII:

> Respondent and the United States are thus correct when they argue
> that extending disparate impact analysis to subjective employment
> practices has the potential to create a Hobson's choice for employers

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8. *See* Donohue & Siegelman, *supra* note 7, at 1023-28; Posner, *supra* note 7, at 518-20.

9. Title VII jurisprudence has divided along two main paths. The first is traditional disparate treatment analysis, in which plaintiffs allege that an employer explicitly or deliberately used race or some other forbidden category in reaching an employment decision such as hiring, firing, or promotion. *E.g.*, Texas Dep't of Community Affairs v. Burdine, 450 U.S. 248 (1981); McDonnell Douglas Corp. v. Green, 411 U.S. 792 (1973). In a disparate impact claim, by contrast, plaintiffs challenge an employment practice that is not explicitly designed to disadvantage a protected group. A classic example might be a requirement that job applicants have a high school diploma, which disqualifies more blacks than whites, who have a higher graduation rate. *E.g.*, Griggs v. Duke Power Co., 401 U.S. 424 (1971). Employers can avoid disparate impact liability if they can show that the challenged practice is justified by business necessity. *See* Teamsters v. United States, 431 U.S. 324, 336 n.15 (1977) (noting that disparate impact claims "involve employment practices that are facially neutral in their treatment of different groups but that in fact fall more harshly on one group than another and cannot be justified by business necessity").

10. CHARLES FRIED, ORDER & LAW: ARGUING THE REAGAN REVOLUTION—A FIRSTHAND ACCOUNT 119 (1991).

11. In vetoing the 1990 Civil Rights Act, President Bush claimed that the bill "employs a maze of highly legalistic language to introduce the destructive forces of quotas into our national employment system." Steven A. Holmes, *President Vetoes Bill on Job Rights; Showdown is Set*, N.Y. TIMES, Oct. 23, 1990, at A1.

and thus to lead in practice to perverse results. *If quotas and preferential treatment become the only cost-effective means of avoiding expensive litigation and potentially catastrophic liability, such measures will be widely adopted.*[12]

Our thesis is that commentators have erred by only considering the effects of disparate impact *hiring* liability. There are strong theoretical and empirical reasons to believe that disparate impact *firing* liability is likely to have a much greater impact on employer behavior, and that this effect, far from inducing hiring quotas in favor of minorities, may induce hiring discrimination against these traditionally disadvantaged groups.

Our argument is developed in three Parts. In Part II, we examine the evolution of disparate impact law and the kinds of incentives it provides employers. Since 1990, only about one out of four disparate impact decisions involves hiring,[13] and it is now considerably easier to establish a prima facie *firing* case than a *hiring* case. The reason is that the former requires only a simple comparison of the percentage of minorities fired with the percentage of minorities who are employed by the defendant. In contrast, plaintiffs seeking to establish disparate impact in hiring have a more difficult time establishing the relevant baseline because the Supreme Court has rejected the use of general population statistics and requires proof of the *qualified* applicant pool.[14] Accordingly, plaintiffs in disparate impact firing litigation can more easily prove a prima facie case and survive a defendant's summary judgment motion.

Part III explores how employers might behave if the stylized facts of Part II are indeed true. That is, assuming disparate impact in firing is scrutinized more closely than disparate impact in hiring, how are employers likely to respond? Specifically, this Part solves a simple model of probationary hiring, in which an employer screens heterogenous prospective employees, hires some for a probationary period, and retains only those whose actual productivities are above the (fixed) wage. If one makes the plausible assumption that black workers are more variable in their productivity on the job than are whites,[15] the model predicts that blacks will have higher firing rates in the absence of any law forbidding disparate impact in firing.

When disparate impact liability constrains the employer to fire the same proportion of whites and blacks, however, she will respond by *hiring*

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12. Watson v. Fort Worth Bank & Trust, 487 U.S. 977, 993 (1988) (emphasis added).

13. *See infra* at subpart II(B).

14. Wards Cove Packing Co. v. Atonio, 490 U.S. 642, 650-51 (1989) ("It is such a comparison—between the racial composition of the qualified persons in the labor market and persons holding at-issue jobs—that generally forms the proper basis for the initial inquiry in a disparate-impact case.").

15. For the reasoning behind this assumption, see *infra* notes 41 and 42 and accompanying text.

fewer blacks and more whites than she otherwise would have.[16] By making it harder to fire protected workers, disparate impact liability discourages probationary employment generally, and might even lead employers to deliberately discriminate against protected workers at the hiring stage. In this model, disparate impact liability does produce a quota effect, but unlike the traditional theories, disparate impact liability induces a firing quota with an inverse (anti-minority) quota at the hiring stage.

Our basic insight can also be put in other terms: probationary employment offers employers the equivalent of a financial option on the workers they hire. An employer's downside risk is limited because an applicant who is hired and then turns out to produce less than the wage can be discharged quickly, limiting losses to the probationary period. A worker who is revealed to have high productivity can be retained for an additional period, at the same fixed wage. This means that employer profits are an increasing function of the variability of worker marginal product, because variability increases upside potential without proportionately increasing downside risk. Employers therefore have a preference for risk: given two workers of equal expected productivity, a profit-maximizing employer will prefer the one whose productivity is more variable. This suggests that probationary hiring is especially likely to work to the advantage of black applicants, about whom employers may have more uncertainty.

Part IV of the Paper explores some normative implications of our analysis. We suggest a range of policies that illuminate the tradeoff between hiring and firing liability. None of our policy alternatives furthers all the goals underlying disparate impact liability. Nevertheless, we highlight some important factors that argue in favor of one or another of the policies we describe.

II. The Evolution of Disparate Impact Litigation

A. The Increasing Difficulty of Establishing a Disparate Impact in Hiring

Early disparate impact cases had two important characteristics. They were predominantly challenges to hiring practices, and they focused on relatively objective practices such as "aptitude" tests, height or weight requirements, drug testing, criminal record checks, or high school graduation requirements.[17]

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16. Of course, the employer also *fires* fewer blacks (and more whites), and we will demonstrate that disparate impact liability may increase the expected black wage bill—even as it reduces the amount of entry level probationary hiring.

17. New York City Transit Auth. v. Beazer, 440 U.S. 568, 582-87 (1979) (concluding that the transit authority's drug testing policy was job-related); Albemarle Paper Co. v. Moody, 422 U.S. 405, 425-26 (1975) (disallowing non-job-related aptitude testing); Griggs v. Duke Power Co., 401 U.S. 424, 433-36 (1971) (striking down a high school graduation requirement for the hiring of manual laborers).

Over time, however, plaintiffs had increasing difficulty establishing prima facie evidence of disparate impact in hiring for two reasons. First, employers had an incentive to respond to the early hiring cases by abandoning testing and other objective practices in favor of subjective hiring standards that are less likely to give rise to disparate impact liability.[18] Second, courts toughened the requirement for establishing the relevant baseline against which disparities are to be assessed. Plaintiffs could no longer use the proportion of minorities or women in the general population as a benchmark. Instead of pointing to a simple population statistic, the Supreme Court in *Hazelwood* and subsequent opinions required plaintiffs to calculate the racial composition of "the *qualified* . . . population in the relevant labor market"[19] or the "otherwise-qualified applicants."[20]

In several respects, there are striking parallels between the evolution of disparate treatment and disparate impact law and the responses to each.[21] As Donohue and Siegelman have shown, early disparate treatment cases were virtually all allegations of hiring discrimination.[22] Relatively quickly, however, employers stopped engaging in obviously discriminatory hiring practices; either they continued to discriminate but covered their tracks, or they actually cleaned up their act. In the absence of an obvious motive or a relevant comparison group, potential plaintiffs have a difficult time recognizing that disparate treatment in hiring has occurred, let alone convincing a court of that fact. Disparate treatment *firing* cases, however, typically do offer plaintiffs a relevant and accessible comparison group— other workers at the same firm who were not fired.

For an extended discussion, see Mark Kelman, *Concepts of Discrimination in "General Ability" Job Testing*, 104 HARV. L. REV. 1157 (1991).

18. Even though subjective disparate impact claims are cognizable, Watson v. Fort Worth Bank & Trust, 487 U.S. 977, 989-91 (1988), plaintiffs have an easier time establishing a prima facie case when they can point to a specific obstacle such as a test or employment requirement that is generating the disparity. This is because the Supreme Court requires plaintiffs to point to a *particular* employment practice which produces a disparate impact. *See* Ramona L. Paetzold & Steven L. Willborn, *Deconstructing Disparate Impact: A View of the Model Through New Lenses*, 74 N.C. L. REV. 325, 346 (1996).

19. Hazelwood Sch. Dist. v. United States, 433 U.S. 299, 308 (1977) (emphasis added). This was a disparate treatment case, but the same principles apply to disparate impact suits.

20. *Beazer*, 440 U.S. at 585; Wards Cove Packing Co. v. Atonio, 490 U.S. 642, 651 (1989).

21. Tightening the standards for defining the relevant population baseline increasingly blurs the distinction between disparate impact and disparate treatment. In the extreme case, a disparate impact plaintiff would have to show that minorities were disproportionately represented in the class of *equally qualified*, but rejected candidates, where a showing of "equally qualified" would require a *McDonnell Douglas*-like proof that the fired minorities were better qualified than the retained whites. In this extreme case, if the plaintiff could not meet this burden, the defendant would argue that there was not disproportionate firing, because minorities were a larger percentage of the most unproductive workers.

22. Donohue & Siegelman, *supra* note 7, at 1015-16 (documenting a dramatic reversal over the last 30 years from a predominance of hiring charges to an overwhelming majority of termination charges).

Much the same story can be told about disparate impact. In the early post-*Griggs*[23] era, plaintiffs had a relatively easy time mounting disparate impact challenges to objective hiring practices such as tests and high school graduation requirements. Over time, employers responded to the threat of liability with defensive measures that made it harder for plaintiffs to devise a disparate impact hiring suit that could survive a motion for summary judgment. For example, it is relatively easy to substitute a subjective interview for an aptitude test at the hiring stage. Employers also have considerable latitude in defining the "qualified applicant pool" in such a way that the alleged hiring disparity disappears.

Given the current state of the law, however, it appears to be much harder for employers to avoid disparate impact in discharging workers.[24] The racial composition of hired workers forms a clear baseline against which disparities in firing rates can easily be compared. An employer whose workforce is five percent black but whose fired workers are ten percent black is thus likely to be an easy target for a disparate impact suit.[25] This disparity constitutes powerful prima facie evidence that will almost certainly survive a summary judgment motion by the defendant. By contrast, an employer whose flow of newly hired workers is ten percent black in an area where the population is fifteen percent black can always argue that the "relevant" population (those who are qualified for and interested in the job under scrutiny) has a different racial composition from the overall population.

In sum, just as with the history of disparate treatment, it has become increasingly difficult for plaintiffs to prove a prima facie case of disparate impact in hiring.[26] To the extent that employers today face a threat of

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23. Griggs v. Duke Power Co., 401 U.S. 424, 433-36 (1971) (striking down a high school graduation requirement for the hiring of manual laborers because it had a disparate impact on blacks).

24. Discharges might come *en masse*, as during a reduction in force, a plant closing, or a recession-induced layoff. Alternatively, a series of individual-specific discharges can have a cumulative disparate impact, even if race were not a factor in any of them.

25. *See, e.g.*, Council 31 v. Ward, No. 87-C0356, 1995 U.S. Dist. LEXIS 3040, at *1-2 (N.D. Ill. Feb. 28, 1995) (considering black workers' allegation of a disparate impact after a reduction in force at a state agency). Even for firings by a single employer, however, there are still important questions about what constitutes the appropriate baseline. Is it the full-time workforce, or are part-time workers included? Should all jobs be included, or only some? Which of the employer locations (plants) should be included? And so on.

Under current law, an employer cannot avoid liability at the firing stage by her behavior at the hiring stage. Consider an employer hiring from a pool that is 10% black, and suppose that her newly hired workers and overall workforce are both 20% black. If the flow of fired workers over some period is 30% black, plaintiffs will have a prima facie case of disparate impact in firing. An employer who hires disproportionate numbers of blacks cannot use this "bottom line" defense against a charge of disparate impact in firing. Connecticut v. Teal, 457 U.S. 440, 451 (1982). If any part of the employer's personnel practices has a disparate impact, considered on its own, then the whole employment regime is subject to disparate impact liability.

26. Disparate impact and disparate treatment cases do differ in some important ways. Plaintiffs who are fired for specific acts of (alleged) misbehavior are more likely to bring disparate treatment

disparate impact liability, it will not be for failing to hire a quota of minorities, but rather for firing a disproportionate number of those they have already hired.

B.   The Changing Nature of Disparate Impact Litigation: An Empirical Assessment

This subpart attempts to quantify the number of disparate impact hiring and firing cases brought in federal courts between 1971 and 1995.[27] If our analysis of the changing doctrine and circumstances is correct, we would expect to see a shift in the composition of suits over time similar to that observed by Donohue and Siegelman in the disparate treatment con- text: hiring suits should fall and firing suits should increase.

Figure 1 plots the share of hiring and firing cases among all disparate impact cases by year. These shares bounce around over time, so the figure shows the data in smoothed form by plotting three-year moving averages. The figure demonstrates that the relative importance of hiring cases among all disparate impact cases has fallen substantially since the early 1970s; by contrast, the proportion of firing cases has increased over this period. Although the total number of cases in any given year is relatively small, the overall trends are as predicted. The bottom line is that disparate impact firing cases have outnumbered hiring cases in every year since 1986, and since 1990, there have been almost three firing cases for every hiring case filed.

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suits. They have a psychological investment in clearing their names and an obvious reference group (their retained coworkers) against which their own conduct can be compared to detect discrimination on the part of the employer. The typical disparate *impact* firing suit seems more likely to be brought by a group of workers, perhaps involving a plant closing, layoff, or other multiworker action by the employer. Detecting disparities in firing (or hiring) rates is also different from detecting a bad motive by the employer. The former inherently requires that plaintiffs or their attorneys look to aggregate hiring or firing statistics, which are not available to potential plaintiffs in the ordinary course of events.

27. Our sample was generated from the Westlaw DCT (federal district court) database using the following search request: "78I(B) & 'DISPARATE IMPACT' 'DISPROPORTIONATE IMPACT' 'ADVERSE IMPACT' & DA(1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995)." Under West's Key Number System, 78 is civil rights; I is rights protected and discrimination prohibited; and B is employment practices.

This search produced 409 documents (as of 12/7/95); not all of them were disparate impact cases, however. Any case in which a disparate impact claim was alleged, or where the court com- mented or ruled on a disparate impact claim, was included in our analysis. We excluded those, for example, which stated "this is not a disparate impact case," leaving us with 294 cases. The case year was coded as either the year in which the incident complained of occurred, or the year in which the case was filed.

Ideally, we would have liked to look at all filed cases, not just those that produced written opinions and showed up on WESTLAW. In the absence of a written opinion, however, it is not possi- ble to distinguish disparate impact from disparate treatment claims except by going back to the original complaints. Such research is extremely costly because disparate impact cases are quite rare, and it would require a major effort to uncover enough such cases to determine if there is any trend in their composition. This and other methodological and interpretive problems are discussed at length below. *See infra* text following note 29.

Figure 1: Moving Average Shares of Hiring and Firing Opinions Among
All Disparate Impact Opinions, N=294

—×— Hiring Cases —□— Firing Cases

To further substantiate our claim that firings produce the most im-
portant form of disparate impact liability, we also calculated the proportion
of cases that plaintiffs won. (Winning was liberally defined to include any
decision in which the plaintiff preserved a right to go forward with his or
her case.[28]) Overall we found that plaintiffs succeeded in 30.9% of the
disparate impact firing cases—which seems high enough to suggest that em-
ployers cannot simply ignore this increasingly important source of
liability.[29]

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28. This definition would include surviving a defendant's motion to dismiss.

29. Because our definition of plaintiff success is broader than that used in other empirical studies,
we find a higher success rate. *Cf., e.g.,* Peter Siegelman & John J. Donohue III, *The Selection of
Employment Discrimination Disputes for Litigation: Using Business Cycle Effects to Test the Priest-Klein
Hypothesis*, 24 J. LEGAL STUD. 427, 428, 434 fig. 1 (1995) (including as plaintiff wins only those
cases that are "ultimately adjudicated" with judgment in favor of the plaintiff).

We also checked to see whether the plaintiff win rate in firing cases was falling over time.
Given the relatively small number of cases and the substantial amount of noise, it was impossible to
discern an obvious trend in the win rate. Plaintiffs won roughly 39% of cases between 1970 and 1982,

While these results suggest that hiring liability is less of a threat to employers than firing liability, they should be treated with caution for four reasons. First, the data come from a selected sample: only those cases that generate a written opinion are eligible for inclusion in WESTLAW. And the decision to write an opinion is not random.[30] Non-random selection is only a problem when the selection criterion (whether or not to publish) is correlated with the variable(s) of interest (hiring versus firing case) as they evolve over time, however. There is no reason to think that hiring cases are differentially likely to generate written opinions over time in a way that could bias our results. Nevertheless, we also attempted to investigate the prevalence of hiring and firing disparate impact cases among unpublished cases, using a data set of some 1,200 unpublished employment discrimination cases collected by the American Bar Foundation.[31] Unfortunately, the 1,200-case sample contained only six identifiable disparate impact cases, so the data are essentially useless for these purposes.

A second caveat might be termed the "denominator problem." What employers care about is the probability of suit conditional on the practice being challenged. If firings are very common and hirings very rare, the mere fact that there are more firing than hiring suits is not very meaningful. Lacking data on the number of potential suit-generating incidents, it is hard to say anything concrete about how disparate impact liability actually affects employers. It is inconceivable that the total volume of new hiring has fallen substantially over the past twenty-five years, however, which implies that the number of disparate impact hiring suits *per person hired* has indeed fallen.

Third, the observed low proportion of hiring suits may be an endogenous artifact of the very quota effect that we argue is not present. Firms may have been so concerned about disparate impact hiring liability that they adopted minority hiring quotas to avoid it. While theoretically plausible, this explanation does not account for the high proportion of firing suits.[32] Moreover, the low participation rate of minorities in such

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and roughly 30% of those between 1983 and 1994. This suggests that win rates may be falling over time, but the win rate still seems high enough to warrant concern on the part of employers.

30. For an extensive discussion of the differences between published and unpublished employment discrimination cases, see Peter Siegelman & John J. Donohue III, *Studying the Iceberg From Its Tip: A Comparison of Published and Unpublished Employment Discrimination Cases,* 24 LAW & SOC'Y REV. 1133 (1990).

31. The cases were coded from the original complaints and other documents and were sampled randomly from all filed employment discrimination cases in seven cities (New York, Philadelphia, Atlanta, New Orleans, San Francisco, and Chicago). For a fuller description of the data, which are available for public use, see Siegelman & Donohue, *supra* note 30.

32. If firing grows faster than hiring, and if all other factors (such as the labor force participation rate) remain equal, then we would expect to see an increase in unemployment. Even if the overall volume of firing has increased, the denominator effect cannot account for the high proportion of firing

a large number of job classifications is inconsistent with any widespread quota effect.[33]

Finally, there are problems of weighting. Most disparate treatment suits are brought by individuals, and from an employer's point of view are roughly similar in their effect on overall profits: we can be fairly sure that the effect on employers is roughly proportional to the number of suits filed. Disparate impact suits are much more heterogeneous, however. They may be brought by individuals or plaintiff classes of varying sizes to challenge a wide variety of practices and generate substantial or minimal litigation expenses. The raw number of suits filed is therefore not as good an indicator of the importance of disparate impact to employers as it would be for disparate treatment suits.

C. Conclusion

As with disparate treatment, early disparate impact suits were largely easy-to-win hiring cases. Once the disparate impact principle was articulated, an almost mechanical application was sufficient to strike down a whole host of hiring practices. These certain losses gave employers an incentive to change their hiring practices in a variety of ways to avoid such liability. Avoiding liability for disparate impact in firing, however, is more difficult because of the baseline and subjectivity problems we discussed earlier.

The empirical evidence, limited though it is, does support our thesis. Disparate impact hiring cases have become less common over time relative to others, while disparate impact firing cases have become more frequent, in a strong parallel with the evolution of disparate treatment cases. As a result, disparate impact firing suits are now more numerous than hiring suits by a substantial margin.

Our conclusion is that rational employers have more to fear from racial disparities in firing than in hiring. Although an irrational fear of hiring liability could still force employers to react by hiring quotas of minorities,[34] we attribute rational expectations to employers (at least in the

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suits unless we assume that employers respond to (the fear of) hiring liability by adopting quotas while maintaining practices that would also give rise to disparate impact liability. This requires employers to be misinformed or irrational. While both are of course possible, neither is likely over the long run.

33. For evidence of the low minority participation rate, see James E. Jones, *The Genesis and Present Status of Affirmative Action in Employment*, 70 IOWA L. REV. 901, 917 (1985) (tabulating data of the occupational distribution and penetration rates of nonwhite and female workers in various job classifications).

34. There is evidence that during the debates around the 1991 Civil Rights Act (and in recent debates after the *Adarand* decision), at least some larger businesses lobbied for continuation of their ability to engage in affirmative action, perhaps as a way to retain hiring quotas that exempted them from disparate impact (hiring) liability. *See, e.g.,* Fred Barnes, *White House Watch: Last Laugh*, NEW REPUBLIC, Dec. 16, 1991, at 9, 10 (saying of a particular provision in the 1991 Civil Rights Act that

long run).[35]   Accordingly, the next Part models disparate impact liability as a constraint on employers' ability to fire workers.

III. The Effects of Disparate Impact Firing Liability in a Simple Probationary Employment Model

A.   An Overview of the Model

The actors in our model are a risk-neutral employer and two groups of workers of different races (black and white) with heterogeneous productivities.   An extensive form representation of the timing of events in the model is depicted in Figure 2.   In period zero, before the game starts, "Nature" (N) determines each worker's productivity.   In the first period, the employer (E) forms an estimate of each applicant's productivity, compares it to the wage—which is fixed for all workers—and decides which applicants to hire.[36]   In the second period, the employer (E) learns the true value of the worker's productivity, and either fires the worker or retains her for an additional period at the constant wage.   By assumption, there are no costs to monitoring worker productivity, and there is no discounting. Workers are assumed to have no alternative occupation (except unemployment at a wage of zero), which means that the employer's offers will always be accepted.[37]   The model thus depicts a stylized form of probationary employment, in which the worker is retained or fired depending on her productivity during an initial screening period.   While we have chosen this model to highlight the influence of disparate impact liability on probationary employment, our general conclusion—that disparate impact firing liability could induce discrimination against minorities in hiring— would emerge from any labor demand model.[38]

"business lobbyists opposed it.   They thought it might make corporate affirmative action programs . . . illegal").
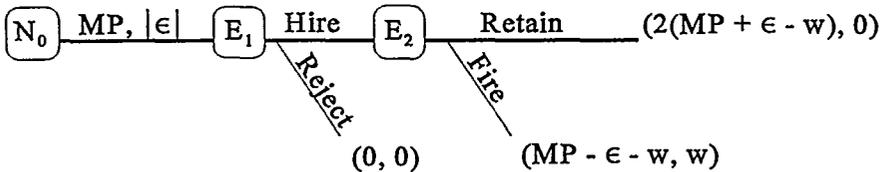
35.   If anything, employers seem to have an irrationally exaggerated fear of (wrongful discharge) *firing* liability.   *See* Lauren B. Edelman et al., *Professional Construction of Law: The Inflated Threat of Wrongful Discharge*, 26 LAW & SOC'Y REV. 47 (1992).

36.   The fixed-wage assumption may strike some readers as odd, but it is necessary in any model that is capable of predicting that some workers will be fired.   In a world with completely flexible wages, an employer would simply lower the wage for any worker until it was no greater than her contribution to his profits (marginal revenue product), at which point he would always be willing to retain her for an additional period.   For a clear discussion of the importance of the "suppression of renegotiation" in employment contracts, see Robert E. Hall, *Lost Jobs*, [1995] 1 BROOKINGS PAPERS ON ECON. ACTIVITY 221 (1995).

37.   While this assumption may seem controversial, the wage paid by the probationary employer can be interpreted without loss of generality as being simply a premium over the workers' next best wage opportunity.

38.   *See* HAMERMESH, *supra* note 7, at 302 (noting that *"both hiring and layoff costs* impose a wedge between a potential new hire's marginal product and wage rate," thus reducing hiring (emphasis in original)).

Figure 2: Game Tree for Probationary Hiring Model
(Employer's, Worker's Payoffs)

$$\boxed{N_0} \xrightarrow{MP, |\epsilon|} \boxed{E_1} \xrightarrow{Hire} \boxed{E_2} \xrightarrow{Retain} (2(MP + \epsilon - w), 0)$$

Reject

(0, 0)

Fire

(MP - ϵ - w, w)

In our model, a worker's productivity on the job is the sum of two components, a known marginal productivity, *MP*, and an uncertain element ϵ. *MP* is observable to both the applicant and employer before hiring; ϵ is, however, not known by either player unless the worker is actually hired. However, the employer *can* observe the absolute value of ϵ before a hiring decision is made.[39] In other words, the decision to hire is made on the basis of $MP + |\epsilon|$, while the decision to fire or retain is made on the basis of $MP + \epsilon$, where the realized value of ϵ is equally likely to be $\pm |\epsilon|$. This highly stylized characterization of uncertainty means that only the sign of ϵ is unknown before the worker is hired. As there is an equal probability (*PR*) of ϵ being positive or negative ($PR(\epsilon = + |\epsilon|) = PR(\epsilon = - |\epsilon|) = \frac{1}{2}$), it follows that the expected value (*E*) of ϵ is zero ($E(\epsilon) = 0$) and that the expected value of *MP* will be unchanged ($E(MP + \epsilon) = MP$). In this stylized example, we also assume equal numbers of black and white applicants.

We assume separate and independent distributions for both *MP* and ϵ, for blacks and for whites. In order to simplify both exposition and calculation, all parameters are taken to follow uniform distributions. Specifically, the observable marginal productivity component of whites is distributed uniformly over a range from 0 to 100, and that of blacks over a range from 0 to 75. Whites' $|\epsilon|$ varies uniformly between 0 and 5, and that of blacks between 0 and 6⅔. ($MP_w \sim U[0,100]$, $MP_b \sim U[0,75]$, $|\epsilon_w| \sim U[0,5]$, and $|\epsilon_b| \sim U[0,20/3]$, where w and b subscripts refer to

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39. For completeness, we assume that the employee knows everything the employer does as soon as the employer knows it. But nothing in our model turns on the employee's knowledge because the employer makes all the decisions.

There are other models of probationary employment in which an information asymmetry between workers and employers plays a crucial role. For example, Eng Seng Loh hypothesizes that workers know their own productivity and propensity to quit better than employers do. Eng Seng Loh, *Employment Probation as a Sorting Mechanism*, 47 INDUS. & LAB. REL. REV. 471, 485 (1994). Employers who need better workers offer higher wages and a probationary period, inducing applicants to self-select. The model is tested and confirmed using data from a nationwide employer survey.

whites and blacks, respectively.) Blacks therefore come from a population with lower mean productivity and greater uncertainty than whites.[40] Our assumption that black applicants have a lower mean productivity is controversial[41] but not strictly necessary because a greater variance in ϵ is, by itself, sufficient to generate higher black firing rates. This greater black variance might plausibly be explained by two factors: First, affirmative action in education means that any given level of achievement is a less precise signal for blacks than it is for whites. Second, since most employers are likely to be white, they may be unfamiliar with the relationship between qualifications and performance for minority job applicants.[42]

B. Solving the Model: The Unconstrained Case

A solution to the employer's problem takes the form of two optimal decision rules specifying which workers to hire, and of those hired, which to fire. To derive such a solution, we use the standard technique of solving backwards. In the last period, the employer must decide which workers to retain and which to fire in order to maximize his profits. Since the decision to fire or retain takes place after the first period, there is no longer any uncertainty about ϵ. We can therefore express the employer's profit (π) from any given worker i at a given wage w as:

$$\pi_i = (MP_i + \epsilon_i) - w.$$

Clearly, the employer should keep all workers for whom $\pi > 0$ (or $MP + \epsilon > w$), and fire the rest.[43] Knowing this optimal second-period firing policy, which applicants should the employer decide to hire in the first period? Consider an applicant with an observable MP and $|\epsilon|$; the employer knows that if hired, this applicant is equally likely to have a productivity of $MP + |\epsilon|$ or $MP - |\epsilon|$. It is obvious that anyone for whom $MP + |\epsilon| < w$ should never be hired, since even in the best case, such an applicant will produce less than she costs the employer. Similarly,

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40. The amount of information that employers learn about applicants after they have been hired (as opposed to the information available before hiring) can be measured by the relative sizes of the expected values of $|\epsilon|$ and MP. For whites, this value is $[(5-0)/2]/[(100-0)/2] = 5\%$. For blacks, it is $[(20/3-0)/2]/[(75-0)/2] = 8.8\%$. Black productivities are thus more uncertain than whites, in that an employer learns more about the average black worker than about the average white worker after hiring.

41. One legacy of past and continuing discrimination is that minority job applicants may have had impaired opportunities to acquire human capital and hence have a lower expected mean productivity.

42. For a survey and analysis of employer attitudes towards race, see Joleen Kirschenman & Katherine M. Neckerman, "We'd Love to Hire Them, But . . . ": The Meaning of Race for Employers, in THE URBAN UNDERCLASS 203, 231 (Christopher Jencks & Paul E. Peterson eds., 1991) (finding that white employers rely heavily on stereotypes in assessing the qualifications of black applicants and use a variety of heuristics—of unknown reliability—to distinguish between "good" and "bad" applicants).

43. Any profit or loss incurred in the first period is regarded as a sunk cost by the second period, and thus does not enter into the employer's second period calculations.

any applicant for whom $MP - |\epsilon| > w$ should obviously be hired—even in the worst case, this applicant will earn the employer a positive profit, and can be retained for the second period. For those applicants with intermediate values of $(MP + |\epsilon|)$, the employer's decision is somewhat more complicated. If, after hiring, the worker turns out to have a positive realization of ϵ, then the employer will earn positive profits and will want to keep the worker for an additional period. If the worker turns out to have a negative realization of ϵ, however, the employer will earn negative profits, but only for one period, as the worker can be terminated at the end of the probationary period. It is this ability to fire after the first period if the worker turns out to have an unfavorable realization of ϵ (and to retain the worker for an additional period if ϵ turns out to be positive) that drives the probationary hiring decision.

The optimal first period hiring rule can thus be derived by simply noting that the employer should hire all applicants with a positive expected profit, given optimal firing behavior in the second period.[44] The employer has the option of firing employees who turn out to have low productivities ($\epsilon < 0$); this means the employer should hire anyone if the expected profit from two good periods (if $\epsilon > 0$) is greater than the expected loss from one bad period (if $\epsilon < 0$). In algebraic terms, this translates into hiring anyone for whom $MP_i > w - |\epsilon_i| / 3$.[45] For example, this rule implies that with a fixed wage of 50, the employer should be willing to hire an applicant with $MP = 48$ and $|\epsilon| = 7$. Even though this applicant has a one-period expected output (48) that is less than the wage, the employer would expect to earn half a dollar profit from such an employee, because the employer has an equal (50%) chance of a single-period loss of $(48 - 7 - 50) = -9$ and a two-period gain of $[2 \times (48 + 7 - 50)] = 10$.

Figure 3 depicts our analysis graphically. As derived above, the hiring line has a slope of $-\frac{1}{3}$. It represents those combinations of ϵ and MP

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44. Note the important difference between optimal and naive behavior. The naive profit maximization rule would be to hire those for whom $E(MP_i + |\epsilon|) > w$; this is equivalent to $MP > w$, since $E(|\epsilon|) = 0$. The distinction between optimal and naive behavior highlights the option value of probationary employment, an idea we discuss further below. This insight has by now been utilized in a variety of economic contexts. *See, e.g.,* Bradford Cornell, *The Incentive to Sue: An Option-Pricing Approach,* 19 J. LEGAL STUD. 173 (1990); Robert S. Pindyck, *Irreversibility, Uncertainty, and Investment,* 29 J. ECON. LIT. 1110, 1113-42 (1991); Martin L. Weitzman, *Sequential R&D Strategy for Synfuels,* 12 BELL J. ECON. 574, 582-88 (1981).

45. Letting "Good" denote the condition $\epsilon > 0$, and "Bad" the condition $\epsilon < 0$, we can write the employer's two-period expected profits for applicant i as:

$E(\pi_i(MP_i, |\epsilon_i|, w)) = PR(\text{Good}) \times (\text{Length of Employment if Good}) \times (\text{Profit per period if Good}) + PR(\text{Bad}) \times (\text{Length of Employment if Bad}) \times (\text{Profit per period if Bad})$.

Substituting in the appropriate values yields:

$E(\pi_i) = \frac{1}{2} \times 2 \times [MP_i + |\epsilon_i| - w] + \frac{1}{2} \times 1 \times [MP_i - |\epsilon_i| - w]$.

After some simple algebra, we then have:

$E(\pi_i) = 3/2[MP_i + |\epsilon_i|/3 - w]$.

Hence, $E(\pi_i)$ will be positive whenever $MP_i > |\epsilon|/3 - w$.

for which the employer can expect to earn zero profits under optimal behavior. Applicants with $(MP, |\epsilon|)$ combinations below the line are not hired, while those above the line are.

Figure 3: Unconstrained Hiring and Probationary Lines, for Both Races

——— Probationary Line— — Hiring Line
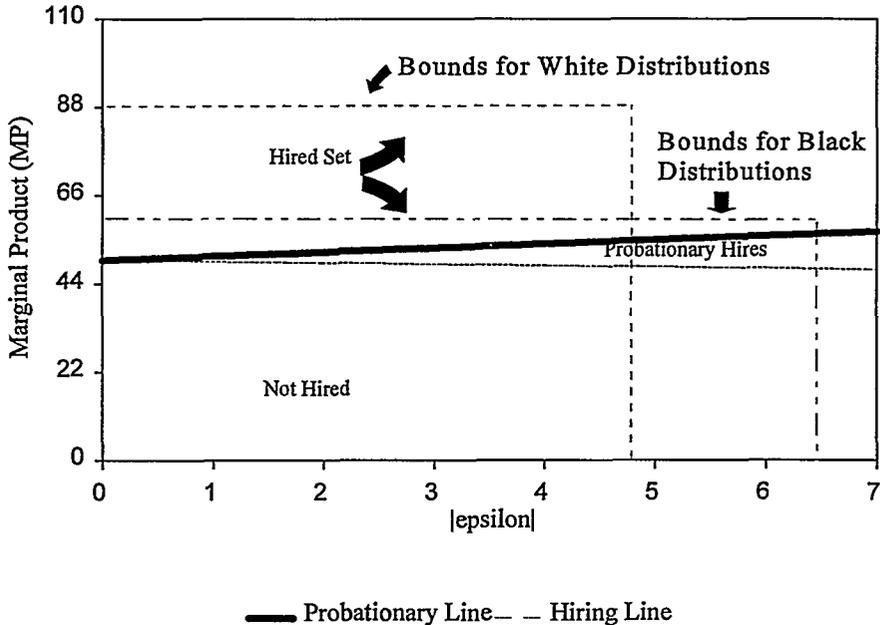
The probationary line divides those initially hired into two groups:[46] employees above the line will have such high MPs that they will be retained (rehired in the second period) even if their ϵ turns out to be negative—we refer to these as the "Set" workers; those below this line are the true probationary hires, because they will be fired after the first period if the employer learns that their ϵ is negative.

Table 1 presents a numerical illustration of the model for the hypothetical parameter values listed earlier. The Table describes equilibria both with and without the disparate impact firing constraint.[47] For the moment, we focus on the unconstrained equilibrium in column 1.

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46. The line has a slope of 1 and an intercept of $w = 50$ because this represents the group of employees that the employer would be just willing to rehire even if the realized value of ϵ is negative. For example, an employee with $MP = 60$ and $|\epsilon| = 10$ would still produce a non-negative profit (60 - 10 - 50) even if there is an unfavorable realization of ϵ.

47. *See infra* subpart III(C).

Table 1: The Effect of Disparate Impact Firing Liability on Employer Hiring and Firing Decisions

	Unconstrained Employer Behavior	Employer Behavior Constrained By Disparate Impact Firing Liability
% of White Applicants who are Hired	50.83%	51.29%
% of White who are Hired-Set	47.50%	46.50%
% of White who are Hired-Probation	3.33%	4.39%
% of White who are Hired-Doomed	0.00%	0.39%
% of Black Applicants who are Hired	34.81%	34.23%
% of Black who are Hired-Set	28.89%	30.77%
% of Black who are Hired-Probation	5.93%	3.46%
% of Black who are Hired-Doomed	0.00%	0.00%
% of Hired who are Black	40.65%	40.03%
% of Fired who are Black	64.00%	40.03%
% of Hired Whites who are fired	3.28%	5.05%
% of Hired Blacks who are fired	8.51%	5.05%
Expected Periods of Employment for Whites[*]	1.0000	0.9998
Expected Periods of Employment for Blacks[*]	0.6667	0.6673
Expected Wage Bill For Whites[*]	50	49.9875
Expected Wage Bill For Blacks[*]	33.3375	33.365
Expected Employer Profits	33.427	33.4127

Hired-Set = Hires with a 100% probability of being retained
Hired-Probation = Hires with a 50% probability of being retained
Hired-Doomed = Hires with a 0% probability of being retained

[*] Includes applicants who are not hired.

Given our assumption that whites' productivity has a lower variance and a higher mean, white applicants are more likely to be hired initially: although the labor force is 50% black, the hired workforce is only 40.6% black. Among those fired, however, blacks constitute a disproportionately large share, amounting to 64%. The reason for this disparity lies in the greater uncertainty surrounding black productivities. Since the typical black worker has a higher value of $|\epsilon|$, she is more likely to be hired on probation, and hence more likely to be fired.

C. Solving the Model: The Constrained Case

Until now, we have modeled behavior as if it were not subject to any employment discrimination law. For reasons discussed earlier, we propose that disparate impact liability can best be thought of as a constraint on employer *firing* behavior that nevertheless leaves the employer considerable leeway in making hiring decisions.[48] To highlight the effects of disparate impact firing liability, we model disparate impact law as a restriction whose only effect is to forbid employers from disproportionately firing their minority workers. That is, if an employer's workforce is $X\%$ black, then her fired workers must also be no more than $X\%$ black.[49] Put in the simplest possible terms, we are assuming that disparate impact liability requires employers to adopt minority firing quotas. The unconstrained equilibrium in our numeric example violates this mandate, because blacks made up 40.7% of the initial workforce, but 64% of those fired. Our goal in this subpart is to explore how rational employers would respond to the imposition of such a firing quota.

To abstract away from problems of enforcement, we assume the law to be absolutely binding and examine how an employer would go about complying with the legal constraint.[50] The mathematics of this problem turn out to be complicated, without being particularly interesting. We therefore relegate the details to the Appendix and provide only a simple exposition here.[51] Figures 4 and 5 graph the optimal (profit-maximizing)

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48. As Daniel Hamermesh points out, *any* restriction on employers' flexibility to adjust their labor force will generate a reduction in labor demand at the hiring stage. HAMERMESH, *supra* note 7, at 329-30. While our model looks different from the standard description of dynamic labor demand, we chose this specific model so that we could explicitly consider probationary employment, a widespread practice that, we argue, is likely to be of special benefit to minorities. By analogy, the same kind of model could also apply to a firm considering whether to open a plant in an inner-city enterprise zone (where the expected costs are lower but more variable) or in the predominantly white Iowa countryside. An Iowa plant can be closed without fear of disparate impact liability, whereas one in an enterprise zone cannot; this works to the disadvantage of the enterprise zone. We are grateful to Henry Hansmann for this suggestion.

49. Since the racial makeup of the current workforce is a stock measure and the fired workers are a flow (per unit of time), the constraint, to be realistic, should also specify the unit of time over which the racial firing rates must be equal. We finesse this problem in our simple two-period model. The absence of *any* constraint at all on hiring is an extreme assumption which we make purely to simplify the exposition. Our results would not change qualitatively if employers faced some mild hiring constraint in addition to the strict firing constraint we hypothesize.

50. Because we are interested in long-run behavior, we ignore the intermediate case in which an employer with an existing workforce must decide how many of each type of workers to fire. The Appendix demonstrates that this intermediate case—in which the employer's labor force is already given and the only flexibility comes in adjusting firing rates—yields (1) greater adjustments in firing, and (2) lower profits than are obtained if the employer is allowed to adjust both hiring and firing decisions simultaneously, as seems reasonable.

51. If small numbers of applicants are being hired, then a profit-maximizing firm may face a complicated integer optimization problem. To simplify the analysis, therefore, we assume that the firm hires sufficiently large numbers of black and white applicants so that the integer problem does not arise.

hiring and firing rules for blacks and whites, subject to the constraint that the employer must fire the same percentage of blacks and whites.

These figures show that an employer constrained by disparate impact firing liability will change her hiring and firing rules for both types of workers. To comply with the equal firing rates mandate, the employer expands her probationary hiring of whites while decreasing her probationary hiring of blacks.

Figure 4: Constrained & Unconstrained Probation Hiring Lines, for Blacks

— — Probationary Line, Unconstrained _ _ _ Hiring Line, Unconstrained

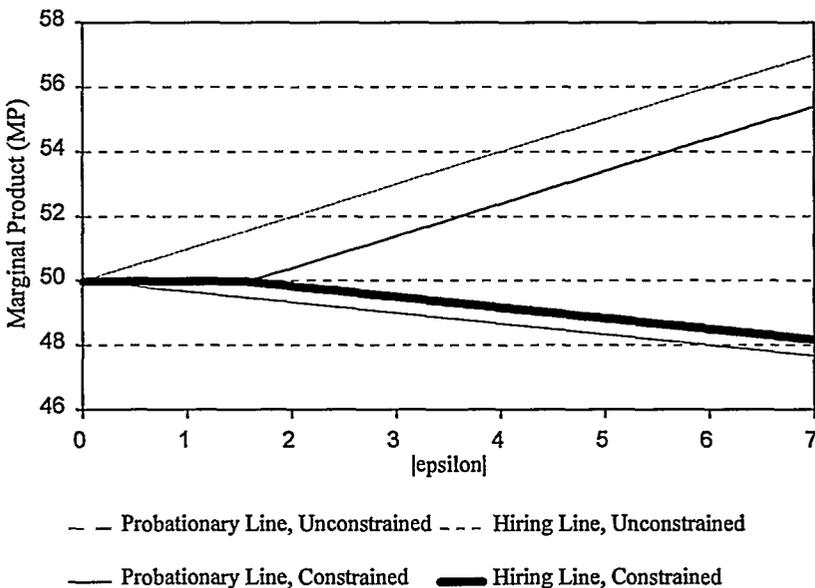——— Probationary Line, Constrained ▬▬▬ Hiring Line, Constrained

Figure 4 shows that probationary firing for blacks decreases in two ways: First, the employer *shifts up her hiring line*, which means that she will hire fewer blacks in the first place. Probationary hiring is generally valuable to employers because they have the option of firing employees who turn out to have low productivity. But the civil rights constraint reduces the employer's ability to exercise this option, so that some black employees who would have been hireable in a world without disparate impact firing liability are no longer worth hiring. The civil rights constraint has a second effect as well. Employers will also respond to the law by shifting down their probationary line. This increases the set of black workers who will be retained even if their ϵ turns out to be negative. To comply with the law, employers are even willing to retain some employees whose known productivity is less than the wage, because retaining these

employees will allow the firm to fire even less productive blacks and to retain more productive whites.

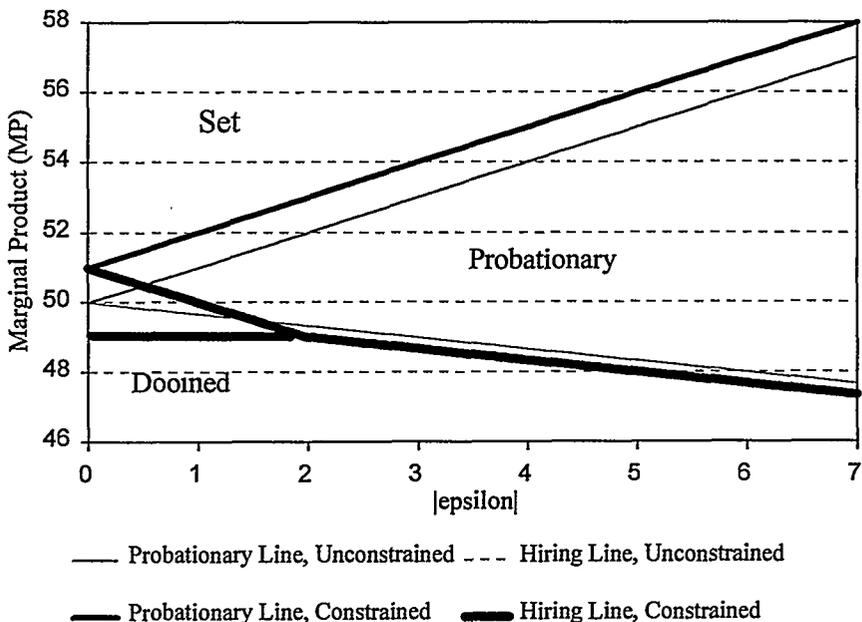Figure 5: Constrained & Unconstrained Probation Hiring Lines, for Whites

Figure 5 shows how firms change their hiring and firing decisions to increase the probationary hiring of whites. Initially, the firm lowers its hiring line to increase the number of white workers who are hired on probation. But the firm also changes its firing rules to comply with the civil rights constraint. The firm raises the probationary line, which increases the number of white employees who will be fired if their ϵ turns out to be negative. Figure 5 also shows that the constraint creates a new class of workers: the firm will hire some white workers merely so that they can be fired to help satisfy the civil rights constraint, even if these workers turn out have positive ϵs. Figure 5 and Table 1 refer to these workers as the "Doomed" because they have zero probability of being retained. Hiring whites who are certain to be fired helps satisfy the disparate impact constraint by raising the white firing rate,[52] and thus gives the firm more

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52. As a matter of algebra, as long as fewer whites are fired than are hired, hiring a white worker and then firing him will necessarily increase the white firing rate.

discretion to fire more unproductive black workers. All of these changes mean that the firm will be willing to fire white workers who turn out to have a known productivity higher than the wage,[53] because firing these white workers will allow the firm to fire more unproductive black workers and to retain even more productive white workers.

As noted earlier, Table 1 provides a numeric comparison of the constrained and unconstrained results for blacks and whites. The civil rights constraint forces the probability of being fired for blacks to equal the probability of being fired for whites (both are 5.05%), which implies that blacks make up the same proportion of hires as they do of fires (both are 40.03%). As expected, the civil rights constraint lowers the firm's expected profits (from 33.427 to 33.413).

What are the effects on black and white workers? The central result of the model is that disparate impact firing liability can induce disparate treatment against blacks in hiring. Firms responded to the constraint by hiring fewer blacks and by hiring more whites. The disparate shifts in the hiring lines in Figures 4 and 5 mean that similarly situated applicants will be treated differently because of their race. Specifically, blacks will be worse off at the hiring stage. But the model also suggests that disparate impact firing liability induces disparate treatment in *favor* of blacks in retention.

The changes in the firm's hiring and firing decisions mean that some blacks will benefit from the constraint while others will suffer. As shown in Table 1, the civil rights constraint reduces the proportion of black applicants who will be hired (from 34.81% to 34.23%), but those who are hired have a slightly higher probability of being retained for two periods. In general, it is impossible to know which effect dominates: in our example, the firing constraint increases the expected number of periods that an average black applicant will be employed (from 0.6667 to 0.6673), but for other parameter values the disemployment effect could outweigh the retention effect.

The constraint also has varying effects on white welfare. Somewhat surprisingly, disparate impact firing liability helps some white applicants by causing them to be hired when they would not be in the unconstrained equilibrium. It disadvantages other whites by increasing the probability that they will be fired. These effects are seen in Table 1: the constraint increases the percentage of white applicants who are hired (from 50.83% to 51.29%), but reduces marginally their expected length of employment (from 1.0000 to 0.9998 periods).

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53. This possibility can be seen graphically in Figure 5 from the fact that the "Doomed" region includes an employee with $MP = 51$ and $\epsilon = 0$. Since the wage is 50, this is a worker who will clearly yield positive profits for two periods, if retained.

D.   Some Cautions and Additional Evidence

1.   Empirical Evidence on Firing Rates.—The model analyzed above predicts a relatively small effect of firing liability on the hiring decision. For example, imposition of the equal firing rates constraint lowers the proportion of blacks hired by only about 1.7% (from 34.81% to 34.23%).[54] Thus, it is reasonable to ask whether disparate impact firing liability is actually a serious problem for employers. It is impossible to answer this question directly, but we suggest that the answer is "yes," for four reasons.

First, the magnitude of all of the effects in our model depends crucially on the highly unrealistic simplifying assumptions we made. We could have generated larger effects with different distributional and parametric assumptions.

Second, it is clear that if workers are only rarely fired, employers will not need to worry about firing liability at the time they make hiring decisions. But the best evidence suggests that a typical employer can expect to terminate roughly eight percent of her workforce each year in a manner that might give rise to disparate impact liability.[55]

Third, the evidence from Europe—where there has been more substantial experience with job security laws—suggests that firing costs do influence hiring behavior. Daniel Hamermesh summarizes the body of work on this subject as follows:

> Nearly all of the evidence shows that employment responds more rapidly to output or cost shocks in North America than elsewhere [Europe or Japan].
>
> . . . .
>
> There are many easy explanations of why employment demand reacts more rapidly in North America than elsewhere. The lack of restrictive laws and penalties against rapid dismissals is a common explanation . . . .[56]

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54. Similarly, in their "back-of-the-envelope" calculations, Donohue and Siegelman suggested that the hiring effect of disparate treatment firing liability should be quite small. *See* Donohue & Siegelman, *supra* note 7, at 1024, 1023-28 (proposing that "antidiscrimination laws may actually provide employers with a (small) net disincentive to hire women and minorities").

55. Gross turnover in the labor market is exaggerated because there are lots of very short term jobs. Ignoring these, Hall estimates that about 8-10% of workers separate from their employers each quarter: about 2-2.5% are quits and 2-2.5% are temporary layoffs. "Probably around 4 percent of workers lose jobs permanently each quarter. Something like half of these permanent, involuntary losses are sufficiently burdensome that a worker will identify the experience retrospectively as a displacement." Hall, *supra* note 36, at 236, 235-36.

56. HAMERMESH, *supra* note 7, at 273 (footnote omitted). One exception to this general body of work is Giuseppe Bertola and Samuel Bentolila, who find small effects of firing regulation on hiring in their elaborate dynamic model of employment with hiring and firing costs. Using "realistic parameters" to calibrate their model, they find that "firing costs do not have large effects on *hiring* decisions, nor do high firing costs reduce the *average* level of employment, . . . these results [are explained] by the role of discounting and labor attrition in the firm's dynamic optimization problem."

Finally, probationary employment regimes such as the one we describe—in which applicants are hired, evaluated for a relatively brief period, and discharged if their productivities turn out to be lower than the wage—appear to be quite common. Evidence on the prevalence of probationary employment comes from two studies. Harry Holzer uses data from a large Employment Opportunity Pilot Program (EOPP) survey.[57] He finds that sixty-four percent of the firms surveyed used probationary employment.[58] Groshen and Loh used the EOPP and two other data sets.[59] They find that seventy-two percent of firms in the EOPP sample had a "formal" probationary period.[60] Surveys by the Conference Board and the Federal Reserve Bank of Cleveland find seventy-six and sixty percent, respectively, of firms using probationary hiring.[61]

The possibility of future firing thus seems large enough to cast a shadow on the hiring decision, although the exact size of this effect is an empirical question. We are confident that disparate impact liability is more likely to constrain employers' firing decisions than their hiring decisions— hence our conclusion that firing quotas are much more likely than hiring quotas. But there remains a possibility that neither type of legal liability is salient enough to change employer behavior. While our analysis of the law and of the available evidence suggests that disparate impact firing liability is more salient than hiring liability, the threat of firing liability

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Samuel Bentolila & Giuseppe Bertola, *Firing Costs and Labour Demand: How Bad is Eurosclerosis?*, 57 REV. ECON. STUD. 381, 381-82 (1990) (emphasis in original). However, the discounting and voluntary turnover assumptions of this model seem less appropriate when studying probationary employment.

57. Harry J. Holzer, *Hiring Procedures in the Firm: Their Economic Determinants and Outcomes*, *in* HUMAN RESOURCES AND THE PERFORMANCE OF THE FIRM 243, 254, 257 tab. 1 (Morris M. Kleiner et al. eds., 1987).

58. *Id.* at 257 tab. 1. Among his other findings were that the prevalence of probationary employment varied across two-digit Standard Industrial Classification (SIC) codes, with construction and mining least likely to use it and manufacturing most likely. *Id.* at 262 tab. 3. Firms with more applicants per opening and more hours of on-the-job training were also more likely to employ probationary periods. Unions, education level, and wage levels were unrelated to the use of probationary employment. Overall, the explanatory power of Holzer's regressions were low: the R^2 was only 0.038. *Id.*

59. Erica L. Groshen & Eng Seng Loh, *What Do We Know About Probationary Periods?*, *in* INDUSTRIAL RELATIONS RESEARCH ASSOCIATION SERIES: PROCEEDINGS OF THE FORTY-FIFTH ANNUAL MEETING 10 (John F. Burton, Jr. ed., 1993).

60. *Id.* at 15 tab. 1. The difference between the two findings appears to be that Holzer weights firms by their employment, while Groshen and Loh do not. *Compare* Holzer, *supra* note 57, at 263 *with* Groshen & Loh, *supra*, at 15.

61. The authors point out a major problem with the survey data: firms with "infinite probation"— for example, those in which workers are subject to dismissal at will—are indistinguishable in these data from those with no probation at all. Among their other findings are these:

Of those firms with probationary periods, the median length was about 10 weeks in the EOPP study and about 20 weeks in the Cleveland Fed study. Higher wages tend to be linked to longer probationary periods. Half of firms in the Fed study say that dismissal standards are lower during probation, and 84% say that the reason for probation is to identify and fire unsatisfactory workers. Larger firms seem *less* likely to use probationary periods. Groshen & Loh, *supra* note 59, at 15 (Table 1: Characteristics of Employment Probationary Periods in Three Data Sets).

may not be sufficient to induce the perverse hiring behavior outlined in our model.[62]

IV. Policy Recommendations

A. *Firing Liability Does Not Further the Traditional Justifications for Disparate Impact*

Part II of this Paper suggested that, in practice, disparate impact liability tends to be invoked by plaintiffs largely to challenge employers' firing decisions. Part III demonstrated the plausible consequences of this pattern of enforcement: employers responding to a disparate impact firing constraint will fire fewer blacks (and more whites), but will also hire fewer blacks (and more whites) as well. This Part now takes up the difficult question of what, if anything, we ought to do about the situation we have just described.

We begin by inquiring about the theoretical justifications for disparate impact liability.[63] What is disparate impact law supposed to do; and if it works as we have just described it, how compatible is disparate impact with these objectives? The second half of this Part then takes up the question of how we might refocus the law of disparate impact so as to better achieve these goals.

For our purposes, it is convenient to think of two broad classes of justifications for disparate impact liability. The first sees it as a way of improving the economic opportunities of traditionally disadvantaged groups. The second sees it as a deterrent to disparate treatment, to be used as a supplement to the traditional attack on intentional discrimination when the latter is too difficult to prove.

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62. While the data on firing patterns by race are extremely skimpy, we do have compelling evidence of disparate impact (and possibly disparate treatment) in the probationary employment practices of one large employer. Craig Zwerling and Hillary Silver examined the complete employment records of 2141 newly hired workers at the U.S. Postal Service in a large Eastern city over a three-year period. Craig Zwerling & Hillary Silver, *Race and Job Dismissals in a Federal Bureaucracy*, 57 AM. SOC. REV. 651, 653 (1992). They found dramatically higher firing rates for blacks than for whites, controlling for a variety of worker characteristics. *Id.* at 657-58. An outside consultant hired by the authors reviewed the personnel file of each of the fired workers (with the worker's race deleted), and concluded that all of the firings appeared to be "justified." *Id.* at 658. This pattern is consistent with the kind of probationary employment regime we model—especially because the racial disparity gave rise to a disparate impact claim.

63. While some of these rationales may be more persuasive than others on jurisprudential grounds, we finesse such issues here. Thus, we ignore questions about which, if any, of the justifications best approximates the intent of Congress, or helps explain the disparate impact decisions of the Supreme Court, or is philosophically most sound. Our goal is simply to make suggestions of the form "if you believe X, then the appropriate thing to do is Y." For extended treatments of the philosophical under-pinnings of disparate impact, see EPSTEIN, *supra* note 3, at 182-241; Larry Alexander, *What Makes Wrongful Discrimination Wrong? Biases, Preferences, Stereotypes and Proxies*, 141 U. PA. L. REV. 149, 212-16 (1992); Owen M. Fiss, *A Theory of Fair Employment Laws*, 38 U. CHI. L. REV. 235, 236-49, 281-313 (1971).

1. Enhancing Minority Economic Outcomes.—According to this view, disparate impact liability can be justified because the purpose of Title VII is either to ensure proportionate distribution of economic resources among groups or to remedy past discrimination.[64] For our purposes, the distinction between disparate impact as a forward-looking means of achieving a fairer division of the employment benefits controlled by employers or as a backward-looking remedy for past discrimination against a group is not particularly important. Under either principle, the goal of disparate impact liability is to enhance minority employment outcomes.

Does disparate impact, as we have described it, contribute to a more equal division of resources between blacks and whites? The answer is a qualified "no." As we have seen, Table 1 compares the equilibria with and without the disparate impact firing constraint. In particular, rows 9 and 10 show the expected wage bill, by race, with and without disparate impact.[65] The table reveals that disparate impact liability can lower the total earnings of whites (including both those who are unemployed and those who hold a job), but can increase the total earnings of blacks.[66] The reason is that although more whites are hired, more are also fired, so that the expected length of employment falls (row 7) when firms are subject to the disparate impact firing constraint. The reverse is true for blacks: fewer are hired when disparate impact firing liability constrains employers, but the expected length of employment increases by more than the hiring rate falls, leading to an increase in earnings for blacks as a group.[67]

Our analysis therefore suggests that disparate impact firing liability does reduce average inequality between black and white workers. But it does so at the cost of increasing inequality *within* the black community. As a result of disparate impact firing liability, fewer blacks are hired, but those who do find a job can expect to be employed for longer, and thus to

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64. This rationale for disparate impact would seem to be independent of whether one believed that the observed differences in group achievement were due to discrimination or other causes. On this view, Title VII (or at least disparate impact) is evidently to be thought of as a general inequality-reduction mechanism.

65. The expected wage bill for whites is calculated as:

PR(Not Hired) $\times$ $w_{\text{not hired}}$ + PR(Hired for 2 Periods — SET) $\times$ w $\times$ 2 +

PR(Hired for 1 Period — DOOMED) $\times$ w + PR(Hired—PROBATIONARY) $\times$ w $\times$ 1.5, where the first term of this equation, PR(Not Hired) $\times$ $w_{\text{not hired}}$, will of course always be zero.

The calculation for blacks is structurally similar. We normalize by assigning a wage of zero to those who are not hired in the regulated sector and a wage of 50 to those who are hired. The relevant probabilities are given in Table 1.

66. The effects are small—a 0.2% decrease for whites and a 0.08% increase for blacks—but this is in large part attributable to the specific (and unrealistic) parametric assumptions we made.

67. By looking only at the wage bill, we implicitly ignore any effects on employers. We know that profitability is lower as a result of the imposition of the disparate impact firing constraint; but if most employers are white, we do not change any of our results by ignoring them.

have higher earnings. While average black earnings are higher under the
disparate impact regime, the variance of earnings is also larger. If they are
risk neutral and have to vote before they know anything about what their
productivity will turn out to be, blacks should prefer the disparate impact
regime. But if they are sufficiently risk averse, blacks will prefer the
unconstrained equilibrium.[68] Put another way, if we care about differ-
ences in average *utility* rather than average earnings, disparate impact firing
liability may exacerbate black-white differences, rather than lessening
them.[69]

If disparate impact liability turns out in practice to be firing liability,
and if blacks are sufficiently risk neutral, then disparate impact may con-
ceivably be consistent with the "enhancing minority outcomes" justification
we have been discussing. But in reducing differences between average
black and white *earnings*, disparate impact simultaneously increases differ-
ences within the black community and may increase the inter-racial differ-
ences in average *utility*. As a method for equalizing outcomes between
blacks and whites, therefore, disparate impact (firing) liability is likely
critically flawed.

2. Deterring Disparate Treatment.—Even though motive is formally
irrelevant in establishing liability under a disparate impact standard, one
possible justification for disparate impact is as a means to create liability
in cases in which we believe an employer intended to discriminate but her
intent is impossible to prove. That is, when intentional discrimination is
difficult to prove directly, disparate impact suits might provide a more
viable way of establishing liability.[70] Disparate impact might then serve

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68. A true Rawlsian analysis proceeds from behind the "veil of ignorance," but also assumes an
extremely conservative (risk averse) "maximin" utility function, in which people assign the highest
priority to raising the welfare of the worst-off person in society. *See* JOHN RAWLS, A THEORY OF
JUSTICE 136-42 (1971) (introducing the "veil of ignorance" in order to insure pure procedural justice,
i.e., as a means of nullifying the temptations parties would otherwise have to exploit social and natural
circumstances to their own advantage); *id.* at 152-57 (presenting the "maximin" rule as a heuristic
device for arranging arguments for principles of justice). Clearly, disparate impact, as we have
modeled it, does nothing for the worst-off blacks; its benefits derive entirely from its effects on those
who have jobs, and it actually increases the number of blacks who are not hired at all. Hence it would
clearly fail this Rawlsian test.

69. For a cogent examination of the various "spaces" or domains in which theories of equality
might be advanced (including income, wealth, utility, and "capabilities"), see AMARTYA SEN,
INEQUALITY REEXAMINED (1992).

70. *See* Paul N. Cox, *Substance and Process in Employment Discrimination Law: One View of the
Swamp*, 18 VAL. U. L. REV. 21, 108, 108-17 (1983) (describing disparate impact liability as an
approximation of the disparate treatment model that is justified by the "difficulty of establishing illicit
motive . . . in the litigation process"). The disparate treatment model embodies the proposition that
"race or gender is an unacceptable basis for decision." *Id.* at 37. The first sentence of Chief Justice
Burger's opinion in *Griggs* might be read as suggesting this is what he had in mind:
  We granted the writ in this case to resolve the question whether an employer is prohibited
  by the Civil Rights Act of 1964, Title VII, from requiring a high school education or

to deter at least some instances of explicit or intentional discrimination that could not be attacked via a "normal" disparate treatment claim.

Until now, we have taken disparate impact at face value by assuming that it occurred even though the employer had no intent to discriminate. There are obviously some discriminatory employers in the world, however, and it is useful to re-examine our model to see how the introduction of discriminatory motives might change our conclusions about how employers behave.   In doing so, we find it useful to distinguish between several different kinds of discriminatory behavior.

   a. "Non-Standard" Theories.—It might at first seem that firing discrimination is incompatible with rational behavior by employers. After all, why would an employer discriminate against someone at the firing stage, when she could more easily have done so by not hiring them in the first place?[71]

There are theories of disparate treatment that predict that employers will discriminate in firing, *even in the absence of hiring discrimination*, however. For example, suppose that discriminatory employers get pleasure from inflicting harm on black workers—such preferences have been termed "consequential animus" because employers care about the consequences of their behavior on those it is designed to harm.[72] Consistent with the large literature on the importance of endowment effects, it seems plausible that workers might suffer more from losing a job they already have than they would from not getting the job in the first place.[73] This implies that racist

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passing of a standardized general intelligence test as a condition of employment in or transfer to jobs when (a) neither standard is shown to be significantly related to successful job performance, (b) both requirements operate to disqualify Negroes at a substantially higher rate than white applicants, and (c) the jobs in question formerly had been filled only by white employees as part of a longstanding practice of giving preference to whites.
Griggs v. Duke Power Co., 401 U.S. 424, 425-26 (1971).

71. *See, e.g.*, Donohue & Siegelman, *supra* note 7, at 1017 ("Claims that employer animus exists in termination but not in hiring seem irrational: It hardly makes sense to hire workers from a gronp one dislikes (thereby incurring the psychological costs of associating with them), only to fire them once they are on the job. Such behavior seems doubly irrational given that the expected penalties for terminating a worker are probably much higher than for failing to hire her.").

72. Consequential animus can also be described as an interdependent utility function in which the level of a black worker's utility enters negatively as an argument in the utility function of the white employer. For more on consequential animus, see Ian Ayres, *Further Evidence of Discrimination in New Car Negotiations and Estimates of Its Cause*, 94 MICH. L. REV. 109 (1995) (discussing consequential animus as an explanation for why car dealers extract higher prices from disfavored groups).

73. *See, e.g.*, Daniel Kahneman et al., *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990) (reporting the results of various studies testing the theory of the endowment effect). In more traditional economic models, workers invest in job-specific or firm-specific human capital as they acquire experience in a given job. Firing would then eliminate these human capital investments, which would lower workers earnings and utility levels. This formulation does not seem particularly compelling for a probationary employment model, however, as workers are only employed for a short time before they are fired.

employers might find they could hurt blacks more effectively by hiring and then firing them than by not hiring them at all.[74]

Finally, an employer could practice what might be called "role-based" discrimination.[75]   Such an employer would be willing to hire black workers as long as they conformed to certain stereotypes or roles such as acting with "appropriate servility" or speaking with a white accent. Black workers who failed to play their "assigned" roles on the job would then be subject to discriminatory firing, even though the employer was willing to hire them in the first place.

In addition to these "non-standard" theories of discrimination, both of the traditional economic theories discussed below (associational animus and statistical discrimination) also predict that disparate treatment in firing is possible, although under these theories it only occurs in conjunction with hiring discrimination.

   b. Associational Animus.—Animus-based discrimination was first analyzed by Gary Becker, who modeled it as a psychological distaste on the part of white employers for associating with black workers.[76] Formally, this means that instead of a market wage of w, discriminatory employers see a wage of $w + \delta$ when they hire a black worker, with δ representing the psychological cost per period of associating with blacks. Although there are problems with this formulation,[77] it is worth thinking about its implications for firing discrimination.

   In our probationary employment model, employers with a distaste for associating with blacks behave identically to those who are race neutral, with one exception. An employer's associational animus shifts up the black firing and hiring lines, so that their new intercept is $w + \delta$ instead of w.[78]

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74. Richard McAdams's status-based model of discrimination might also predict firing discrimination even in the absence of hiring discrimination—especially if firing blacks is a way for a white employer to increase his own status. *See* Richard H. McAdams, *Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination*, 108 HARV. L. REV. 1003, 1044-63 (1995) (proposing a model of race discrimination based on status production).

75. *See* Ian Ayres, *Fair Driving: Gender and Race Discrimination in Retail Car Negotiations*, 104 HARV. L. REV. 817, 842 (1991) (discussing the possibility of role-based discrimination in the context of car sale negotiations, in which "dealers might have discriminated against buyers who acted in ways that diverged from the dealer's expectation").

76. GARY BECKER, THE ECONOMICS OF DISCRIMINATION 39-50 (2d ed. 1971).

77. *See, e.g.*, Glen C. Cain, *The Economic Analysis of Labor Market Discrimination: A Survey*, *in* 1 HANDBOOK OF LABOR ECONOMICS 693, 713-17 (Orley Ashenfelter & Richard Layard eds., 1986) (explaining how, in the long run, market forces will push δ to 0 in Becker's model, so only firms refraining from discrimination will survive in a competitive market); John J. Donohue III, *Is Title VII Efficient?*, 134 U. PA. L. REV. 1411, 1423-30 (1986) (arguing that Title VII supplements market forces pushing $w + \delta$ to zero); Richard McAdams, *supra* note 74, at 1036-43 (criticizing the associational preference model for both overpredicting and underpredicting discriminatory behavior).

78. This is a straightforward implication of the fact that the true wage faced by a discriminatory employer when hiring a black applicant is $w + \delta$, not w.

This upward shift of both the hiring and probationary lines lowers the number of blacks hired, leaves probationary employment unchanged, and lowers the number of "set" (guaranteed two-period) hires. A greater proportion of probationary hires obviously increases the firing rate for blacks, which in turn increases the disparity between black and white firing rates.

     c. Statistical Discrimination.—Employers might consider the race of applicants in making hiring decisions not because they care about race *per se*, but because race contains information about (is correlated with) some other characteristic that is not directly observable. In our model, race is correlated with the average marginal-productivity level (*MP*) and average $|\epsilon|$, but since both are directly observable, race does not convey any additional information to employers. Suppose, however, that we alter the model slightly and now think of *MP* as a test score that is observable to employers before hiring. Suppose further that for any observed value of *MP*, blacks' "true" productivity on the job will always be ten points lower than whites' with the identical score, but productivity itself is not directly observable until the end of the second period. In this case, race *would* tell the employer something useful about future productivity, so employers would have an incentive to make race-conscious hiring decisions. And they would also make race-conscious firing decisions: because race and the *MP* score perfectly predict true productivity, employers absent civil liability would fire some blacks in period one who would have been retained had they been white.[79]

     d.   Can Disparate Impact Firing Liability Deter Disparate Treatment?—If disparate treatment in firing is at least theoretically possible, we must then ask whether disparate impact firing liability is an appropriate or effective legal remedy for this problem. Briefly, the answer is,

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79. This is not the only way to model statistical discrimination, however. Depending on how uncertainty about productivity is resolved, some models predict that statistical discrimination may actually *ameliorate* disparate treatment in firing. For example, assume the same model as described in the text, but allow ϵ to be correlated with race as follows: Let $PR(\epsilon = +|\epsilon|) = \alpha$, and $PR(\epsilon = -|\epsilon|) = (1 - \alpha)$. Now assume that for whites, $\alpha = \frac{1}{2}$ (as before), while for blacks, $\alpha < \frac{1}{2}$. For $\alpha < \frac{1}{2}$, blacks will have a lower mean and smaller variance of ϵ than will whites with the same value of $|\epsilon|$. This modification leaves the probationary line for blacks unchanged because the firing decision is made after any uncertainty about ϵ has already been resolved. However, the black hiring line does change its slope because the chances of a "good" and "bad" draw post-hiring are no longer equal. The new hiring line for blacks has the equation
$$MP = w + [(1 - 3\alpha) / (1 + \alpha)]\epsilon.$$
For $\alpha < \frac{1}{2}$, the slope coefficient (in brackets) will be greater than its former value of $-\frac{1}{3}$; if $\alpha < \frac{1}{3}$, the hiring line will actually have a positive slope. In any case, this upward tilt of the hiring line reduces the total number of black hires, leaves the "set" (guaranteed two-period) workforce unchanged, and thus lowers the firing rate for blacks. Depending on the value of α, the black firing rate could be greater than, equal to, or even less than that for whites.

"no." By forcing employers to fire fewer blacks and more whites than they would if they were given free rein, disparate impact firing liability does push employers towards nondiscriminatory conduct at the firing stage—but firing liability exacerbates the distorted *hiring* practices of discriminatory employers. At least under many of the theories surveyed above, these employers will already hire fewer black applicants because of their tastes for discrimination; in any case they will be prompted to hire even fewer because of the effects of disparate impact firing liability at the hiring stage. In short, disparate impact firing liability can protect workers who already have a job from discriminatory firing, but only at the cost of further reducing the ability of such workers to get hired in the first place. Moreover, if we believe that only some employers engage in intentional firing discrimination, disparate impact liability will be overbroad. It will influence the hiring behavior of all employers, including those who do not practice disparate treatment in firing.

B. Ameliorating the Perverse Effects of Current Disparate Impact Enforcement

The core perversity of the current enforcement regime is that forcing firms to discriminate in favor of minorities in deciding whether to rehire may induce firms to discriminate against minorities in deciding whether to hire originally. To ameliorate this legally induced disparate treatment in hiring, legal reforms might broadly attempt to:
- decrease the cost of firing minorities (relative to firing whites); or
- increase the cost of failing to hire minorities (relative to failing to hire whites).

A wide variety of legal instruments could be fashioned to further these goals, some by extending potential civil rights liability for hiring decisions and others by reducing potential civil rights liability for firing decisions. Changing firms' regulatory environment beyond Title VII might also mitigate the asymmetric enforcement effect. We will begin by simply cataloging a number of possible reforms that might mitigate the perverse effects of lopsided disparate impact enforcement. We then assess which reforms best advance the traditional justifications for our civil rights laws. Rather than thinking simply about antidiscrimination rules that would apply to all employment decisions, we would do better to distinguish between hiring and firing decisions in fashioning liability rules.

1. Decreasing the Cost of Firing Minorities.—The most direct way to reduce the perverse effects of disparate impact protection for minority firing would be to reduce firms' potential legal liability. Such a reduction could be accomplished by making it more difficult for plaintiffs to establish

the relevant pool of qualified candidates for firing,[80] or by making it easier for defendants to establish their business necessity defense to charges of discriminatory firing. A more modest, but strongly justified, reform would reduce potential liability by overturning a troubling aspect of *Connecticut v. Teal*.[81] Suppose a firm's qualified applicant pool is twenty percent black, its labor force is twenty-five percent black, but its fired workers during some period are thirty-two percent black. Perversely, the firm would probably be liable under *Teal*'s "no bottom-line defense" holding—even if the black share of the firm's labor force after the firing was still above twenty percent (the minority share of the qualified applicant pool).[82] A firm's very success in hiring minorities inequitably increases its exposure to disparate impact firing claims.[83] In place of the *Teal* standard, we propose allowing defendants a "stock" defense: a firm should be able to fire minority workers without fear of disparate impact liability as long as the minority proportion of its workforce stock remains above the minority share of the qualified applicant pool.[84]

A firm's expected legal liability might also be lowered by reducing the potential for disparate *treatment* firing suits. While disparate treatment is not the focus of this Paper, Table 2 shows that in the American Bar Foundation sample of recent Title VII suits, a substantial proportion of disparate treatment firing suits (more than one third) are brought by employees who were working for the defendant for less than two years (and more than one quarter are brought by those who have been employed less than a year).

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80. Just as the Supreme Court now demands that plaintiffs in a disparate impact hiring suit prove the minority representation in the qualified applicant pool, courts might reject the notion that all current employees were equally "well qualified" for firing. Even if the proportion of minorities fired is higher than the proportion of minorities employed at the firm, a court might require plaintiffs to show that the proportion of minorities fired was higher than the proportion of minorities among the class of the employees with the lowest productivity or poorest job performance. Requiring more detailed proof of the relevant benchmark in firing cases would move a plaintiff's burden in disparate impact firing cases toward what it would be in a disparate treatment case and hence would make it more difficult to establish a prima facie case.

81. 457 U.S. 440 (1982).

82. *Id.* at 442 (rejecting a "bottom-line" theory of defense to Title VII actions, under which "an employer's acts of racial discrimination in promotions—effected by an examination having a disparate impact—would not render the employer liable for the racial discrimination suffered by employees barred from promotion if the 'bottom-line' result of the promotional process was an appropriate racial balance").

83. *Teal*'s "no bottom-line defense" might be maintained in other areas, but eliminated only for charges of disparate impact in firing. For a pointed attack on the entire decision, see EPSTEIN, *supra* note 3, at 229, 226-29 ("The vice of *Teal* is that it dashes any effort to maintain quality while simultaneously increasing the percentage of black promotions."). For a defense, see Julie O. Allen et al., *A Positive Theory of the Employment Discrimination Cases*, 16 J. CORP. L. 173, 196, 195-96 (1991) ("[I]f the theory of the Title VII cases is that an individual may not be impeded in employment prospects for reasons related to invidious categories, then the majority's opinion is quite coherent.").

84. *See infra* section IV(B)(3) (discussing alternatives for regulating firms' "stock" of minority employment).

It is difficult to calculate the analogous percentage for disparate impact suits—both because disparate impact suits are more likely to be class actions with multiple plaintiffs and because there have been relatively few disparate impact filings. Nonetheless, the substantial proportion of firing suits brought by plaintiffs who might plausibly still be completing a probationary period might particularly deter firms from taking chances on minority hiring.

Table 2: The Proportion of Disparate Treatment Firing Suits Brought By Arguably Probationary Employees (Observed in a Random Sample of 396 Cases)[85]

Number of Months Plaintiff Was Employed Before Firing	Cumulative Percent
≤ 3	7.3
≤ 6	13.4
≤ 9	17.7
≤ 12	26.0
≤ 18	31.3
≤ 24	37.1

The large number of suits brought by recently hired employees gives us grounds to worry that the benefits of deterring discrimination in firing could be less than the costs of the disparate treatment in hiring that this firing protection may induce. To reduce the potential shadow that firing liability casts on probationary hiring, firms and their employees might be allowed to contract out of disparate impact or disparate treatment firing liability for a short period of time.[86] Such an opt-out provision would give firms the freedom to take chances with probationary employment of minorities without exposing themselves to the risk of civil rights liability for subsequent discharge.

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85. The cases were coded from the original complaints and other documents and were sampled randomly from all filed employment discrimination cases in seven cities (New York, Philadelphia, Atlanta, New Orleans, San Francisco, and Chicago). For a fuller description of the data, which are available for public use, see Donohue & Siegelman, *supra* note 7, at 988-1000. Of 562 disparate treatment firing cases, 166 cases had no information about the duration of the plaintiff's employment before firing. The percentages reported would be too low if cases brought by short-term employees were less likely to include the length of the plaintiff's employment. Given adversarial incentives, however, we see no reason to expect systematic exclusion of long- or short-term employment histories. One litigant or the other would have a strategic incentive to highlight a long or a short employment tenure.

86. The length of the waiver period could be determined in a number ways. First, the employer might be able to waive Title VII liability for a period up to some fraction—say, 10%—of the median length of job tenure. Alternatively, the waiver period could be based on pre-existing probationary employment practices, *see supra* notes 57-61 and accompanying text, or on evidence about the length of time over which the employer was still acquiring information about the worker's productivity.

2. *Increasing the Cost of Firing Whites.*—Another way for law to decrease the *relative* cost of firing minorities is to increase the cost of firing whites. One way to accomplish this would be to expand wrongful discharge liability. If discharged employees could generally challenge the firm's rationale for firing them, firms would have less reason to hire whites *or* minority workers on a probationary basis. Any law that enhances employees' job security generally (or white job security in particular) will tend to mitigate the effect of disparate impact firing liability on initial hiring decisions. Accordingly, a wide range of reforms such as plant closing laws or replacement worker regulations may affect firms' incentive to substitute toward white probationary employment. Paradoxically, minorities should find Title VII's "pseudo just cause" firing protection more attractive if whites also have such protection, because employers would no longer have an incentive to substitute away from blacks at the hiring stage.[87]

3. *Increasing the Cost of Failing to Hire Minorities.*—There are several alternatives that might raise an employer's cost of failing to hire a minority applicant. Employment audits that utilize matched pairs of minority/white testers, based on the Fair Housing model, have attracted considerable attention.[88] While there are legal and other problems with the use of employment testing, it holds considerable promise as a means of detecting hiring discrimination.[89] We might also consider adjusting the

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87. Alfred W. Blumrosen, *Strangers No More: All Workers are Entitled to "Just Cause" Protection Under Title VII*, 2 INDUS. REL. L.J. 519, 561-65 (1978), has argued that since whites are protected against reverse discrimination under Title VII, and since the *McDonnell Douglas/Burdine* test essentially requires employers to offer a valid, nondiscriminatory reason for firings, *all* workers now have the equivalent of just cause firing protection. While ingenious, this argument has a major flaw. The Supreme Court has recently concluded that in order to prevail in a disparate treatment employment discrimination case, the plaintiff may have to do more than merely refute the employer's proffered non-discriminatory reason for its actions—the plaintiff might actually be required to show that race explicitly influenced the employer's conduct. St. Mary's Honor Ctr. v. Hicks, 509 U.S. 502, 510-11 (1993). Thus, Title VII plaintiffs might have to do more than they would to challenge a discharge under a just cause standard. For an authoritative recent analysis of the shifting burdens of proof in Title VII cases, see Deborah C. Malamud, *The Last Minuet: Disparate Treatment After Hicks*, 93 MICH. L. REV. 2229 (1995).

88. *See, e.g.*, HARRY CROSS ET AL., EMPLOYER HIRING PRACTICES: DIFFERENTIAL TREATMENT OF HISPANIC AND ANGLO JOB SEEKERS (1990) (presenting an Urban Institute study of hiring practices in Chicago and San Diego, using hiring audit methodology); MARGERY A. TURNER ET AL., OPPORTUNITIES DENIED, OPPORTUNITIES DIMINISHED: RACIAL DISCRIMINATION IN HIRING (1991) (presenting an Urban Institute study of hiring discrimination in Washington, D.C. and Chicago, using the audit methodology of HUD). For an assessment of the strengths and weaknesses of these and other studies, see James J. Heckman & Peter Siegelman, *The Urban Institute Audit Studies: Their Methods and Findings*, *in* CLEAR AND CONVINCING EVIDENCE: MEASUREMENT OF DISCRIMINATION IN AMERICA 187 (Michael Fix & Raymond Struyk eds., 1993).

89. Among the legal questions not yet fully resolved are whether testers have standing to bring employment discrimination suits under Title VII. At least one lower court has held that they do. Fair

lodestar used to calculate attorneys' fees in hiring (but not firing) cases in order to make hiring cases more attractive to bring (and more expensive to defend). Finally, tax subsidies for hiring minorities would raise the costs of failure to hire.[90]

Many of these alternatives, if applied to disparate impact hiring liability, would push us towards the hiring quotas that conservatives have long decried. But now, the rationale behind a hiring quota would be to counterbalance the perverse effects of a firing quota. As hiring regulations become increasingly binding on employers, the combination of quotas on the flows of people hired and fired would in essence create a quota on the stock of minority employment.[91]

We have placed on the table a variety of reforms. Which of these policies one prefers will be informed by one's views of the purposes of disparate impact law and about the amount and kind of disparate treatment in the world.

For example, decreasing the costs of firing blacks will be much more problematic if one believes that this will unleash a great deal of disparate treatment in firing. While the prevalence of "pure" firing discrimination (without discrimination in hiring) is implausible under standard theories of discrimination based on statistical inference or associational animus, this threat may be much more salient under theories of consequential animus and role- or status-based discrimination.

Alternatively, enhancing disparate impact hiring liability would probably help blacks but would induce disparate treatment against whites in both hiring and firing, and would thus be inconsistent with the process rationale for disparate impact.

While it is hard to identify a silver bullet, we tentatively suggest that some movement on both the hiring and firing margins might be warranted. Besides repealing *Teal*, we suggest that augmenting attorneys' fees for disparate treatment hiring cases and state-sponsored testing might be combined with a reduction in disparate impact firing liability. This might be an appealing tradeoff for both advocates and opponents of the civil rights regime. But in the limited space allowed us in this Symposium, our goal is primarily to bury the hiring quota theory which has for too long

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Employment Council of Greater Washington, Inc. v. BMC Marketing Corp., 829 F. Supp. 402, 403-05 (D.D.C. 1993). Among the practical questions are how to use auditors to detect discrimination at a single firm, especially if the jobs in question require unusual skills.

90. Inner-city enterprise zones provide an example by analogy of how such programs could be implemented.

91. For an exploration of the benefits of such a regime, see David A. Strauss, *The Law and Economics of Racial Discrimination in Employment: The Case for Numerical Standards*, 79 GEO. L.J. 1619, 1644, 1643-47 (1991) (advocating a shift in focus away from disparate treatment towards a disparate impact system "seeking to induce employers to hire, promote, and compensate minority employees in proportion to their numbers in the relevant population").

distorted our discussion about disparate impact liability. Refocusing on firing liability changes the terms of the debate.

V. Conclusion

The disparate impact rhetoric of both liberals and conservatives traditionally focuses on hiring decisions: for example, the debate over the 1991 Civil Rights Act centered on disparate impacts in hiring.[92] The paucity of attention given to firing liability may be a result of the Supreme Court's reluctance to review disparate impact firing cases. Although we detailed the dominance of firing cases in the district courts' dockets, a similar analysis of the Supreme Court reveals a continuing focus on hiring decisions.[93] We suggest, however, that this focus on hiring is wrong-headed: disparate impact liability is likely to be more salient for firing decisions than hiring decisions. Among disparate impact opinions as a whole, there are four judicial opinions in firing cases for every one hiring opinion. This disparity is probably caused by the simple fact that it is much easier for plaintiffs to prove a prima facie case of disparate impact in firing than to prove disparate impact in hiring. While our data are not conclusive, the empirical and doctrinal evidence in support of this "asymmetric scrutiny" hypothesis at the very least warrants a refocusing of Title VII scholarship toward the likely effects of disproportionate judicial scrutiny of firing decisions.

An immediate by-product of this revised focus is the insight that disparate impact liability is unlikely to induce firms to increase the employment of traditionally disadvantaged groups. Far from pushing firms towards minority hiring quotas, the current salience of firing liability might induce employers to discriminate against minorities in hiring.

The implausibility of the hiring quota critique does not, however, suggest that the current pattern of disparate impact liability is well tailored to further Title VII's implicit goals. First, current disparate impact enforcement is not well suited to reduce disparate treatment. While the current emphasis on disparate impact firing liability may deter some pre-existing disparate treatment against minorities in firing, this will only come at the cost of increasing disparate treatment in hiring.

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92. *See* Michael Carvin, *Disparate Impact Claims Under the New Title VII*, 68 NOTRE DAME L. REV. 1153, 1153 (1993) (attributing the debate over the 1991 Civil Rights Act to the inherent tension between the notion of prohibiting disparate impact and the Bush Administration's desire to avoid quota hiring in the workforce).

93. The Supreme Court has relied on disparate impact analysis in five civil rights employment practices cases since 1971. Three of these were hiring cases: Wards Cove Packing Co. v. Atonio, 490 U.S. 642 (1989); Dothard v. Rawlinson, 433 U.S. 321 (1977); and Griggs v. Duke Power Co., 401 U.S. 424 (1971). The remaining two were promotion cases: Watson v. Fort Worth Bank & Trust, 487 U.S. 977 (1988), and Connecticut v. Teal, 457 U.S. 440 (1982).

Second, current disparate impact enforcement is not well suited to increase minority employment prospects. Although disparate impact firing liability is likely to increase the chance that hired minorities will be retained, we have shown that it decreases the probability that they will be hired initially. In many cases, this latter effect will dominate to reduce the minority wage bill or utility level. And even when the hiring effect does not dominate, disparate impact firing liability only succeeds by increasing the variance in minority outcomes. Some minorities are never hired so that others can achieve better job security.

These troubling side effects of the current disparate impact regime suggest two complementary strategies for legal reform: either to increase scrutiny of hiring decisions or to decrease scrutiny of firing decisions. We offered several means by which these strategies might be accomplished, and the reader can probably think of many more. In any case, the major point is that we need to begin thinking about hiring and firing liability as separate policy instruments with different effects. We should be wary of using the same rules to regulate discrimination in hiring and firing when the two kinds of behavior have such different consequences.

MATHEMATICAL APPENDIX

Optimal employer behavior in the probationary employment model without disparate impact firing liability was fully described in the text. Briefly, given a wage fixed at w for all workers, employers should hire all applicants for whom $MP - |\epsilon|/3 > w$. After learning the exact value of ϵ in the first period, employers should retain all workers for whom $MP + \epsilon > w$ for an additional period, and should fire all those for whom this condition is not met. These two rules were graphed in Figure 3; both are linear, and have an intercept of w, the wage; their slopes are -⅓ and 1 for the hiring and probationary lines, respectively. Even if, as we assume, the black and white population distributions of MP and $|\epsilon|$ are different, the unconstrained employer will choose the same hiring and firing rules for the two groups.

This appendix demonstrates the optimal hiring and firing rules when employers are constrained to fire the same proportion of white and black workers. The problem becomes more complicated with the addition of this constraint, because employers must now choose the same firing rates for both races, but are allowed to adjust their hiring behavior at the same time. We begin by defining four parameters that shift the hiring and firing lines for each race. Specifically:

New Parameter   Definition
x_1 Shifts *down* the (first-period) hiring line for whites.[94]
x_2 Shifts *up* the (second-period) firing line for whites.
y_1 Shifts the (first-period) hiring line for blacks.[95]
y_2 Shifts *down* the (second-period) firing line for blacks.

The shifts in the hiring and firing lines caused by these new parameters are illustrated in Figures 4 and 5.

We now show that the constrained optimum hiring and firing rules can be defined in terms of these four parameters.[96] Both the hiring and the probationary lines are iso-profit curves. The hiring line represents the set of applicants that an employer is indifferent between hiring and not hiring. In the unconstrained case, the indifference curve has an intercept of 50 and a slope of -⅓. But with the disparate impact firing constraint, this iso-profit hiring line will have a horizontal component for both blacks and

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94. As we will see, the displacement of the hiring line for whites is a function of x_1, but is not measured by x_1 directly.

95. Again, the displacement of the hiring line is complicated, and a priori could be either positive or negative.

96. It is relatively straightforward to show that in the *unconstrained* case, all four of these parameters are optimally set to zero.

whites. For blacks, the shifts in the firm's hiring and probationary lines mean that some of the marginal hires will be retained with probability 1. One can readily show that the expected profits from all employees on the new kinked hiring line are equal.[97] For whites, the shifts in the firms' hiring and probationary lines mean that in the constrained equilibrium some of the marginal hires will be retained with probability 0. Again one can show that the expected profits from all hires along this kinked hiring line are equal given the employer's optimal firing decisions in the second period.

Having demonstrated that the employer's optimal hiring and firing rules in the constrained case can be characterized by the (old) unconstrained rules with the four new shift-parameters just introduced, we now move to calculating the actual values of these new choice variables, given the distributional and other assumptions we made in setting up the model. To do so, we write down the (cumbersome but not theoretically difficult) expressions for expected profits on black and white hires, and then choose the values of x_1, x_2, y_1, and y_2 that maximize total profits, subject to the equal firing rates constraint. Since expected profits are a discontinuous function of MP and $|\epsilon|$, we need separate expressions for each relevant region in $(MP, |\epsilon|)$ space.[98] For whites, the employer's problem is:

$$Max\ \Pi_w(x_1,x_2) - \int_{\epsilon=0}^{5} \int_{MP-50+x_2+\epsilon}^{100} 2(MP - 50)(\tfrac{1}{5})(\tfrac{1}{100})\ dMPd\epsilon$$

$$+ \int_{\epsilon=0}^{x_1+x_2} \int_{MP-50+x_2-\epsilon}^{50+x_2+\epsilon} [MP - 50 + \epsilon + (\tfrac{1}{2})*(MP - w - \epsilon)](\tfrac{1}{5})(\tfrac{1}{100})\ dMPd\epsilon$$

$$+ \int_{\epsilon=0}^{5} \int_{MP-50-x_1+\frac{x_1+x_2-\epsilon}{3}}^{50+x_2+\epsilon} [MP - 50 + \epsilon + (\tfrac{1}{2})(MP - 50 - \epsilon)(\tfrac{1}{5})(\tfrac{1}{100})\ dMPd\epsilon$$

$$+ \int_{\epsilon=0}^{x_1+x_2} \int_{MP-50-x_1}^{50+x_2+\epsilon} (MP-50)(\tfrac{1}{5})(\tfrac{1}{100})dMPd\epsilon.$$

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97. For the horizontal portion (where the employee will be retained regardless of her ϵ), the expected profits are simply $2(MP* - w)$, where $MP* =$ the height of the horizontal portion. For the sloped portion (where the employee is only retained if her ϵ is positive), the expected profits are $(MP - \epsilon - w) + 2(MP + \epsilon - w)$. It can be shown that these expected profits are equal.

98. The symbolic and numeric integration (used below) were performed using *Mathematica*, a sophisticated mathematical software program.

Subject to

$$k = \cfrac{\frac{1}{2}\Phi_w + \int\limits_{e-0}^{x_1+x_2} \int\limits_{MP-50+x_1}^{50+x_2-e} (\frac{1}{5})(\frac{1}{100})dMPde}{\Phi_w + \int\limits_{e-0}^{x_1+x_2} \int\limits_{MP-w-x_1}^{w+x_2-e} (\frac{1}{5})(\frac{1}{100})dMPde + \int\limits_{e-0}^{5} \int\limits_{MP-w+x_2+e}^{100} (\frac{1}{5})(\frac{1}{100})dMPde}$$

where

$$\Phi_w - \int\limits_{e-0}^{x_1+x_2} \int\limits_{MP-50+x_2-e}^{w+x_2+e} (\frac{1}{5})(\frac{1}{100})dMPde + \int\limits_{e-x_1+x_2}^{5} \int\limits_{MP-50-x_1+\frac{(x_1+x_2-e)}{3}}^{50+x_2+e} (\frac{1}{5})(\frac{1}{100})dMPde$$

For blacks, the problem is:

$$Max\ \Pi_b(y_1,y_2) - \int\limits_{e-0}^{\frac{3(y_1+y_2)}{4}} \int\limits_{MP-50-y_2+\frac{3(y_1+y_2)}{4}}^{75} 2(MP-50)(\frac{20}{3})(\frac{1}{75})dMPde$$

$$+ \int\limits_{e-\frac{3(y_1+y_2)}{4}}^{\frac{20}{3}} \int\limits_{MP-50-y_2+e}^{75} 2(MP-50)(\frac{20}{3})(\frac{1}{75})dMPde$$

$$+ \int\limits_{e-\frac{3(y_1+y_2)}{4}}^{\frac{20}{3}} \int\limits_{MP-50+y_1-\frac{e}{3}}^{50-y_2+e} [(MP - 50 + e) + \frac{1}{2}(MP - 50 - e)](\frac{20}{3})(\frac{1}{75})dMPde$$

subject to

$$k - \cfrac{\Phi_b}{\Phi_b + \int\limits_{e-0}^{\frac{3(y_1+y_2)}{4}} \int\limits_{MP-50-y_2+\frac{3(y_1+y_2)}{4}}^{75} (\frac{20}{3})(\frac{1}{75})dMPde + \int\limits_{e-\frac{3(y_1+y_2)}{4}}^{\frac{20}{3}} \int\limits_{MP-50-y_2+\frac{3(y_1+y_2)}{4}+e}^{75} (\frac{20}{3})(\frac{1}{75})dMPde}$$

where

$$\Phi_b = \int_{e-\frac{3(y_1+y_2)}{4}}^{\frac{20}{3}} \int_{MP-50-y_2+\frac{3(y_1+y_2)}{4}-\frac{e}{3}}^{50-y_2+\frac{3(y_1+y_2)}{4}+e} (\frac{20}{3})(\frac{1}{75})dMPde$$

These two maximization problems yield expressions $\pi_w^*(k)$ and $\pi_b^*(k)$. To maximize profits subject to the constraint the firm must then maximize $\pi_w^*(k) + \pi_b^*(k)$ with respect to k, yielding an optimal k^*. Using *Mathematica* to solve the initial integrals, we performed a numeric grid search to locate the optimal shifts in the hiring and firing lines which maximized profits given this constraint. In equilibrium the optimum values of the 4 shift parameters are: $x_1 = .9824$; $x_2 = 1$; $y_1 = .5$; $y_2 = 1.6$. The effects of these shifts on the proportions of blacks hired and fired are reported in Table 1.

As a check on our results, we also considered, but do not report, the mathematics of the less-complicated intermediate case, in which the employer is assumed to be unable to adjust his hiring decisions, so that the constraint can only be satisfied by a change in firing behavior.[99] As one might expect, this intermediate or "naive" problem requires more of an adjustment in firing rates than is the case when the employer is free to adjust both hiring and firing policies in order to satisfy the disparate impact constraint.

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99. In terms of the parameters we introduced earlier, this means that the employer can only choose x_2 and y_2 in order to satisfy the equal-firing-rates constraint.