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ACCOMMODATION MANDATES  
AND ANTIDISCRIMINATION LAW

Christine Jolls

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Harvard Law School  
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## Accommodation Mandates and Antidiscrimination Law

Christine Jolls\*

Legal requirements that employers provide specified benefits, such as workers' compensation and family leave, to their workers are virtually omnipresent in modern employment law. Some mandates are directed to workers as a whole, and many of these date back to the early part of the twentieth century (workers' compensation, for instance). But other, newer mandates are directed to discrete groups of workers, such as the disabled. These mandates are intended to accommodate the unique needs of those workers. These "accommodation mandates," and their relationship with antidiscrimination law and principles, are the central topics of this Article.

Since accommodation mandates regulate a market relationship—that of employer and employee—an obvious set of questions involves how such mandates affect the wages and employment levels of employees. There is an accepted economic framework, due principally to Lawrence Summers, for analyzing the effects of mandates directed to workers as a whole (such as workers' compensation), but accommodation mandates raise many distinct issues that have not been adequately addressed in the existing literature. Central among these is the way in which antidiscrimination law interacts with accommodation mandates; this interaction is simply not relevant when analyzing mandates directed to workers as a whole.

Accommodation mandates relate to antidiscrimination law on another level as well. While many commentators suggest that such mandates are fundamentally distinct from antidiscrimination law (so that, for example, a requirement to provide special accommodation for disabled workers is fundamentally distinct from a requirement not to "discriminate against" these workers), I argue that the economic analysis of the two forms of legal intervention supports the view that they are similar rather than distinct. The parallels I emphasize between accommodation mandates and antidiscrimination law have not previously been recognized in the literature.

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\* Assistant Professor of Law, Harvard Law School.

# Accommodation Mandates and Antidiscrimination Law

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## Introduction

Legal requirements that employers provide specified benefits, such as workers' compensation and family leave, to their workers are virtually omnipresent in modern employment law. Some mandates are directed to workers as a whole, and many of these date back to the early part of the twentieth century (workers' compensation, for instance).<sup>1</sup> But other, newer mandates are directed to discrete groups of workers, such as the disabled. These mandates are intended to accommodate the unique needs of those workers. These "accommodation mandates," and their relationship with antidiscrimination law and principles, are the central topics of this Article.

Since accommodation mandates regulate a market relationship—that of employer and employee—an obvious set of questions involves how such mandates affect the wages and employment levels of employees. There is an accepted economic framework for analyzing the effects of mandates directed

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\* Assistant Professor of Law, Harvard Law School. David Charny, John Donohue, Barbara Fried, Louis Kaplow, Eric Rakowski, Bill Stuntz, Steve Shavell, Michael Stein, and Cass Sunstein provided extremely helpful comments on earlier drafts. Ana Reyes and Gil Seinfeld provided exceptional research assistance and comments on drafts. I also benefited greatly from presenting drafts of this Article at the Distributive Justice Colloquium at Stanford Law School, the Faculty Workshop at the University of Virginia Law School, and law and economics workshops at Georgetown University Law Center, the University of California at Berkeley, and Yale Law School. The portions of the Article focusing on the Americans with Disabilities Act were also presented at the Americans With Disabilities Act Conference held at the University of Virginia School of Law on April 8, 2000, and I benefited very much from comments received there.

<sup>1</sup> See Price V. Fishback & Shawn Everett Kantor, *The Adoption of Workers' Compensation in the United States, 1900-1930*, 41 J.L. & ECON. 305, 305 (1998).

to workers as a whole (such as workers' compensation),<sup>2</sup> but accommodation mandates raise many distinct issues that have not been adequately addressed in the existing literature. Central among these is the way in which antidiscrimination law interacts with accommodation mandates; this interaction is simply not relevant when analyzing mandates directed to workers as a whole.

Accommodation mandates relate to antidiscrimination law on another level as well. While many commentators suggest that such mandates are fundamentally distinct from antidiscrimination law (so that, for example, a requirement to provide special accommodation for disabled workers is fundamentally distinct from a requirement not to "discriminate against" these workers), I argue that the economic analysis of the two forms of legal intervention supports the view that they are similar rather than distinct. The parallels I emphasize between accommodation mandates and antidiscrimination law have not previously been recognized in the literature.

Part I below offers a general framework for analyzing accommodation mandates. These mandates dot the landscape of modern employment law. Examples include:

a) The requirement that employers provide "reasonable accommodation" to disabled workers.<sup>3</sup> This requirement accommodates the special needs of disabled individuals.

b) The requirement that employer-provided disability plans include coverage for pregnancy-related disability if comparable forms of disability are covered.<sup>4</sup> This requirement accommodates the special needs of female employees of childbearing age.

c) The requirement (at least in some states) that employers not test for genetic predisposition to disease and not make employment decisions—including decisions about access to employment benefit plans and

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<sup>2</sup> See Lawrence H. Summers, *Some Simple Economics of Mandated Benefits*, 79 AMER. ECON. REV. (PAPERS & PROCEEDINGS) 177 (1989).

<sup>3</sup> See The Americans with Disabilities Act of 1990 § 102(a), (b)(5), 42 U.S.C. § 12112(a), (b)(5).

<sup>4</sup> See *Newport News Shipbuilding & Drydock Co.*, 462 U.S. 669, 678 (1983) (interpreting the Pregnancy Discrimination Act of 1978).

the terms of such access—based on genetic predisposition.<sup>5</sup> This requirement accommodates the special needs of those with genetic predisposition to disease, since these individuals are (among other things) more likely than other employees to be significantly dependent upon health and disability benefit plans.

d) The requirement that employers permit their employees to take unpaid leave in the event that they have a serious health condition or a newborn child or a family member who is ill.<sup>6</sup> The first requirement accommodates the special needs of disabled employees, who are more likely than other employees to need to take time off because of a serious health condition (although certain individual employees who are not disabled will also be accommodated by the law). The second requirement accommodates the special needs of female employees of childbearing age, since women who bear children will require at least some time off from work to recover from the temporary disability associated with giving birth. (Again, the requirement may also accommodate other needs and circumstances, as discussed more fully in Part II.C below.)

Since all of these accommodation mandates are targeted to groups that are protected under general antidiscrimination law, the mandates cannot be analyzed in isolation from antidiscrimination law. Therefore, Part I's framework, in contrast to much of the existing literature, emphasizes the importance of the restrictions on relative wages and relative employment levels imposed by antidiscrimination law to the analysis of accommodation mandates. This focus helps to clear up some of the confusion that presently exists regarding the effects of accommodation mandates.

More specifically, Part I reaches the following conclusions:

(I) At the most basic level, the existing literature tends to assume that desirable distributive effects of accommodation mandates are either extremely unlikely or (the polar opposite) virtually assured. In the first camp are many economically oriented commentators (both lawyers and nonlawyers), who

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<sup>5</sup> See, e.g., N.H. REV. STAT. ANN. § 141.H:3 (1997) (prohibiting genetic discrimination in employment); WIS. STAT. § 111.372 (1997) (similar); Melinda B. Kaufman, *Genetic Discrimination in the Workplace: An Overview of Existing Protections*, 30 LOY. U. CHI. L.J. 393, 404-18 (1999) (outlining arguments over the permissibility of genetic discrimination under federal law).

<sup>6</sup> See Family and Medical Leave Act of 1993 § 102(a), 29 U.S.C. § 2612(a).

uncritically apply the economic model of mandates directed to workers as a whole<sup>7</sup> to the distinct context of accommodation mandates and on this basis conclude that accommodation mandates will necessarily reduce the wages or employment levels of the accommodated group.<sup>8</sup> The second camp consists of the many commentators who hail the passage of laws with accommodation requirements, such as the Americans with Disabilities Act (ADA) and the Family and Medical Leave Act (FMLA), without any discussion whatsoever of the potential adverse effects of these laws on the wages and employment levels of the accommodated group.<sup>9</sup> The truth about accommodation mandates, I suggest, lies somewhere in between and, not surprisingly, is more complex, as elaborated in points (II) and (III) below.

(II) Of central importance to the effects of accommodation mandates is the degree to which legal restrictions on wage and employment differentials across different groups of workers are binding (in the sense of constraining employers' behavior in an effective manner). If such restrictions are binding, then an accommodation mandate is likely to make the accommodated group better off unless either the group is a large fraction of the population or the cost of the mandated accommodation greatly exceeds its value to the accommodated group. (See Part I.B.1 below.) This conclusion marks a striking contrast with the case of mandates directed to workers as a whole, for in that case the conditions under which a mandate can make workers better off are much narrower, and the extent of the potential gain is far smaller.<sup>10</sup>

(III) The analysis of mandates directed to workers as a whole also yields incorrect conclusions if only restrictions on wage differentials, and not restrictions on employment differentials, are binding. Often it is reasonable to assume that only the former restrictions bind, as numerous commentators have

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<sup>7</sup> See Summers, *supra* note 2.

<sup>8</sup> See, e.g., Christopher J. Ruhm, *The Economic Consequences of Parental Leave Mandates: Lessons from Europe*, 113 Q.J. ECON. 285, 286 & n.11, 288 (1998) [hereinafter *Parental Leave Mandates*]; Christopher J. Ruhm, *Policy Watch: The Family and Medical Leave Act*, 11 J. ECON. PERSP. 175, 178-80 (1997) [hereinafter *Policy Watch*]; Jane Waldfogel, *The Impact of the Family and Medical Leave Act*, 18 J. POL'Y ANALYSIS & MGMT. 281, 283 (1999).

<sup>9</sup> See, e.g., Peggy R. Mastroianni & David K. Fram, *The Family and Medical Leave Act and the Americans with Disabilities Act*, 9 LAB. LAW. 553, 553 (1993) ("The [FMLA] and the [ADA] are two of the most important employee protection laws of the last quarter century.").

<sup>10</sup> See *infra* Part I.A.1.

noted.<sup>11</sup> The analysis of mandates directed to workers as a whole suggests that whether workers gain from a mandate turns on whether the mandated benefit is worth more or less to workers than it costs employers to provide, and the precise measure of whether this “cost justification” condition is met is whether the employment level of workers rises or falls with the mandate.<sup>12</sup> By contrast, with binding restrictions on wage but not employment differentials, the employment level of the targeted group will fall with an accommodation mandate no matter how cost-justified the mandate is. Thus, and critically for policy evaluation purposes, negative employment effects can no longer serve as a proxy for failure to meet the cost-justification condition.

(IV) Since the effects of accommodation mandates vary significantly with the degree to which restrictions on wage and employment differentials are binding, it is important to be able to predict, at least roughly, when such restrictions are likely to be binding. At its best, the existing literature on accommodation mandates simply acknowledges the various possibilities with regard to whether restrictions on wage and employment differentials may bind.<sup>13</sup> (As already mentioned, most of the existing literature does not even go this far.) The framework developed in Part I identifies the factors that bear on which of the possible scenarios with regard to wage and employment restrictions is likely to obtain. The framework thus allows one to generate predictions about the effects of specific accommodation mandates—predictions that can be (and are, in Part II of the Article) tested against the existing empirical evidence on the effects of these mandates. The factors also allow one to generate predictions about new laws and their likely policy consequences.

A final contribution of Part I of the Article is to resolve a recurring puzzle about accommodation mandates: if these mandates have negative consequences for the wages or employment levels of accommodated workers

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<sup>11</sup> See, e.g., Richard A. Posner, *The Efficiency and Efficacy of Title VII*, 139 U. PA. L. REV. 513, 517-19 (1987); *supra* note 75 and accompanying text.

<sup>12</sup> See, e.g., Dwight R. Lee, *Teaching Tools Why Workers Should Want Mandated Benefits To Lower Their Wages*, 34 ECON. INQUIRY 401, 403-04 (1996).

<sup>13</sup> See Daron Acemoglu & Joshua Angrist, *Consequences of Employment Protection? The Case of the Americans with Disabilities Act 9* (Jan. 1999) (working paper); Carolyn L. Weaver, *Incentives Versus Controls in Federal Disability Policy*, in *DISABILITY AND WORK* 3, 11-13 (Carolyn L. Weaver ed., 1991).

due to the imperfectly binding nature of restrictions on wage and employment differentials, will the negative effects be felt in wages, employment levels, or both? Often negative effects on wages and employment levels are treated in an undifferentiated fashion; for instance, Samuel Issacharoff and Elyse Rosenblum describe the concern of some commentators that “requiring pregnancy leave will make female employees more expensive than male employees; therefore employers will respond by either hiring fewer women *or* paying females less than their male counterparts.”<sup>14</sup> The question, however, is *which* of these things will happen, and under what circumstances. I identify the factors that bear on these questions.

Part II below uses the economic framework developed in Part I to generate predictions about the effects of particular accommodation mandates, including most of the specific ones listed in this introduction. In broad terms, my framework predicts that accommodation mandates targeted to *disabled workers* will increase or leave unchanged the wages of these workers relative to the wages of nondisabled workers while reducing disabled workers’ relative employment levels; the framework also predicts that accommodation mandates targeted to *female workers* will reduce the relative wages of these workers (contrary to the case of disabled workers) and have ambiguous effects on their relative employment levels. These predictions match up well with the empirical evidence on the effects of accommodation mandates, as explained in Part II. The predictions and matching empirical evidence raise intriguing normative questions about the desirability of accommodation mandates: if these mandates depress the employment levels or wages of the targeted group (as the analysis and evidence suggest they often do), should they be abandoned? What might they be replaced with?

Part III of the Article draws on the analysis of Part I to question the sharp distinction that commentators often draw between accommodation mandates (viewed as requiring “special treatment”) and antidiscrimination law (thought to require only “equal treatment”).<sup>15</sup> As will be described, Part I’s economic

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<sup>14</sup> Samuel Issacharoff & Elyse Rosenblum, *Women and the Workplace: Accommodating the Demands of Pregnancy*, 94 COLUM. L. REV. 2154, 2196 (1994) (emphasis added).

<sup>15</sup> See, e.g., *id.* at 2155, 2196; Pamela S. Karlan & George Rutherglen, *Disabilities, Discrimination, and Reasonable Accommodation*, 46 DUKE L.J. 1, 3 (1996); Andrew Kull, *The Discrimination Shibboleth*, 31 SAN DIEGO L. REV. 195, 199 (1994); Jerry L. Mashaw, *Against First Principles*, 31 SAN DIEGO L. REV. 211, 219 (1994); Sherwin Rosen, *Disability Accommodation*



framework applies with equal force to accommodation mandates and antidiscrimination law. The two forms of legal intervention have the same sorts of economic consequences, and the same factors bear on their effects. Critically, both forms of legal intervention often require employers to ignore real financial costs associated with a particular group of workers—in effect, to accommodate these workers—and, in addition, the effects of both forms of legal intervention fundamentally turn on whether restrictions on wage and employment differentials across groups are binding. The parallels between accommodation mandates and antidiscrimination law are especially strong in the case of the “disparate impact” branch of antidiscrimination law,<sup>16</sup> so I give special emphasis to that case.

The Article has two central conclusions. First, accommodation mandates must be analyzed in light of antidiscrimination law and the factors that bear on the effectiveness of that law in constraining employers’ behavior. Much of the confusion in the existing literature stems from the failure to account properly for the economic pressures created by accommodation mandates, on the one hand, and the way in which the law may constrain those pressures, on the other. The second central conclusion of the Article is related to the first: accommodation mandates share many previously unrecognized parallels with antidiscrimination law, particularly its disparate impact branch.

## **I. An Economic Framework**

A decade ago, then Professor (now Treasury Secretary) Lawrence Summers proposed an economic framework for analyzing the effects of mandates directed to workers as a whole.<sup>17</sup> This Part builds on Summers’s approach to offer a framework for analyzing the effects of accommodation mandates, which are directed to subgroups of workers, such as the disabled, rather than to workers as a whole. I will also show that antidiscrimination law (a category that I will define more precisely below) may be analyzed within the same economic framework. The proposed framework is in the spirit of Summers’s initial treatment of mandates directed to workers as a whole; it

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*and the Labor Market*, in *DISABILITY AND WORK* 18, 21 (Carolyn L. Weaver ed., 1991); Stewart J. Schwab & Steven L. Willborn, *Reasonable Accommodation of Workplace Disabilities* (Mar. 21, 2000) (working paper).

<sup>16</sup> See *infra* Part I.A.3 (defining “disparate impact” discrimination).

<sup>17</sup> See Summers, *supra* note 2.

aims to illuminate the essential issues within a graphical framework and without the use of a complex mathematical model.

The challenge in performing this exercise for accommodation mandates and antidiscrimination law is that there is no longer a single employment market affected by the intervention. In addition, and critically (as we shall see below), legal restrictions on wage and employment differentials across different groups come into play. These features complicate the analysis of accommodation mandates and antidiscrimination law within a graphical framework. I show below how these forms of legal intervention can nonetheless be analyzed in a relatively simple way that is accessible to policy makers and legal commentators.

The focus throughout my analysis is on the distributive consequences of accommodation mandates, not their efficiency aspects. This orientation marks a contrast with the existing economics literature on mandates, which is focused almost exclusively on efficiency.<sup>18</sup> The efficiency orientation is peculiar for accommodation mandates, in contrast to mandates directed to workers as a whole, because in the former case the underlying motivation for the legal intervention seems (at least for most people) to be considerations of rights and distribution, and certainly not issues of efficiency. (Thus, for example, the reason that accommodation for disabled workers is mandated is not, for most people, that the mandate solves problems of “externalities” or “adverse selection” but that it is the “right thing to do.”) For this reason the analysis of accommodation mandates below focuses on distributive rather than efficiency consequences.

Of course, from a normative perspective one might ask whether distributive goals are better achieved through accommodation mandates or instead through tax-and-transfer systems.<sup>19</sup> But my analysis here is not normative in that sense: it does not seek to defend the use of accommodation mandates, as opposed to some alternative tool, to achieve distributive goals. Instead my focus is the positive effects of accommodation mandates and the

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<sup>18</sup> See, e.g., Jonathan Gruber, *The Incidence of Mandated Maternity Benefits*, 84 AM. ECON. REV. 622, 625-27 & n.9 (1994); Rosen, *supra* note 15, at 25-26; Ruhm, *Parental Leave Mandates*, *supra* note 8, at 288-90; Ruhm, *Policy Watch*, *supra* note 8, at 178.

<sup>19</sup> See, e.g., A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 119-27 (2d ed. 1989) (suggesting that redistribution through legal rules is inferior to redistribution through tax-and-transfer systems).

similarity of these mandates to, and their interrelationship with, antidiscrimination law.

## **A. Preliminaries**

This first section lays the groundwork for the analysis to follow. It provides a methodological orientation and explains the structure of the following analysis.

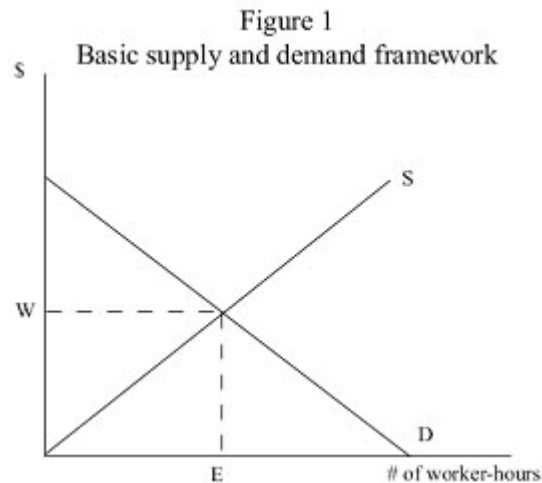
### **1. The Existing Framework: Mandates Directed to Workers as a Whole**

The standard supply and demand diagram for employment markets, which is the basis of Summers's approach and of the analysis to follow, is depicted in figure 1. A few points are necessary by way of background.<sup>20</sup> The supply of labor reflects employees' willingness to work at different wage levels; it slopes upward because employees will generally be willing to work more (provide more worker-hours) if wages are higher. (More worker-hours can result from more hours from each employee, more employees in the labor market, or some combination of these two factors.) The demand for labor reflects employers' demand for worker-hours at different wage levels; it slopes downward because employers will demand fewer worker-hours when wages are higher. The value of a given worker-hour to employers is given by the vertical distance between the horizontal axis and the demand curve; this distance is equal to the *marginal revenue product of labor*, or amount of revenue generated by that worker-hour. The greater the employment level, the lower the marginal revenue product of labor, due to the law of diminishing returns.

Labor supply and demand curves are for a single employment market—for instance, the market for entry-level clerical or office workers. (Sometimes the boundaries of an employment market will be clear; other times they will not be.) In this Article, supply and demand curves will be drawn as lines for ease of illustration, but nothing in the analysis changes if they are curves instead. The intersection of the supply and demand curves will give the wage ( $W$ ) and employment level ( $E$ ) for the employment market in question. See figure 1.

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<sup>20</sup> For a more in-depth discussion of the supply and demand framework for analyzing employment markets, see John J. Donohue III, *Is Title VII Efficient?* 134 U. PA. L. REV. 1411, 1412-15 (1986).



This simple supply and demand diagram is all that is necessary to analyze the wage and employment effects of a mandate directed to workers as a whole, as Summers showed. The mandate will shift the labor supply curve down by the value of the mandated benefit to workers, since they will be more willing to supply labor at any given wage when they receive the benefit in addition.<sup>21</sup> The labor demand curve will shift down by the cost of the mandated benefit, since workers' total marginal revenue product, or overall contribution to firms' revenue, will be lower by the cost of the benefit (which firms must now provide).<sup>22</sup> So the wage will fall with the mandate, and the employment level will rise or fall depending on the relative magnitude of the supply and demand shifts.<sup>23</sup>

Mandates directed to workers as a whole have very limited distributive potential within this framework. If the mandated benefit is worth less than its cost, then labor supply will shift by less than labor demand, and the wage will fall by more than the value of the benefit, while the employment level will fall.<sup>24</sup> (To see these effects, imagine a small downward supply shift and a large downward demand shift on figure 1, and recall that the downward shift in supply is equal to the value of the mandated benefit.) Workers are unambiguously worse off with the mandate. If, instead, the mandated benefit is worth more than its cost, then labor supply will shift by more than labor

<sup>21</sup> See Summers, *supra* note 2, at 180.

<sup>22</sup> See *id.*

<sup>23</sup> See *id.*; Lee, *supra* note 12, at 303-04.

<sup>24</sup> See Summers, *supra* note 2, at 180.

demand, and the wage will fall by less than the value of the mandated benefit, while the employment level will rise.<sup>25</sup> (Again, these effects can easily be seen in figure 1.) Here (but only here) are workers better off with the mandate. And even in this scenario the potential for gains is quite limited; workers' wage falls by more than the cost of the mandated benefit (as can easily be seen by imagining the supply and demand shifts in figure 1 and recalling that the downward shift in labor demand is equal to the cost of the benefit), and thus their wage gain and corresponding employment gain are limited by the extent of the gap between the value and the cost of the mandated benefit. If the value of the benefit is precisely equal to its cost, then workers experience no wage gains and no employment gains.<sup>26</sup> The basic intuition for why the potential for distributive gains from mandates directed to workers as a whole is so limited is well summarized by Dwight Lee: "[T]he more a mandated benefit is worth to workers, the more wages will decline when it is provided."<sup>27</sup> The above analysis illustrates this phenomenon. Even as the value of the mandated benefit rises, the absolute dollar amount of the cost that is borne by workers rises as well, limiting the possibility for distributive gains. As shown below, the situation is much different with accommodation mandates, as distinguished from mandates directed to workers as a whole.

The Summers framework provides a simple and parsimonious way to analyze the effects of mandates directed to workers as a whole. Because of its simplicity and parsimony, it does not reflect all of the complexities of the range of actual employment markets. The concern is not that the model makes heroic and unrealistic assumptions about human "optimizing" across the board<sup>28</sup> (indeed it makes relatively limited assumptions about the degree to which people optimize), but instead that institutional features of certain employment markets and certain employment mandates—for instance, the degree to which a mandate's effects can be fully characterized by the supply and demand shifts described above;<sup>29</sup> the degree to which workers are demanded and paid in accordance with their marginal revenue product of

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<sup>25</sup> See Lee, *supra* note 12, at 303-04.

<sup>26</sup> See Summers, *supra* note 2, at 180.

<sup>27</sup> Lee, *supra* note 12, at 402.

<sup>28</sup> See Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1487-89 (1998), for a general discussion of this problem.

<sup>29</sup> See David Charny, *Global Labor Standards 8-23* (March 2000) (working paper) for an account of different "rule types" in the context of labor standards and how these rule types may affect employment markets.

labor;<sup>30</sup> the degree to which there is heterogeneity among workers within a given category or group;<sup>31</sup> the degree to which a mandate's costs depend on the number of workers rather than the number of worker-hours;<sup>32</sup> and the degree to which some of a mandate's costs may be shifted to consumers rather than borne by employers and employees<sup>33</sup>—may not be fully captured within the framework. Nonetheless, the Summers framework is widely accepted for analysis of the effects of employment mandates.<sup>34</sup> For that reason it is taken as the basic building block for the framework developed here.

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<sup>30</sup> See David Charny & G. Mitu Gulati, *Efficiency-Wages, Tournaments, and Discrimination: A Theory of Employment Discrimination Law for "High-Level" Jobs*, 33 HARV. C.R.-C.L. L. REV. 57 (1998), for an analysis of antidiscrimination law under the assumption that workers receive an "efficiency wage" rather than a wage equal to the marginal revenue product of labor. For a recent review of theories of gaps between wage levels and the marginal revenue product of labor, see George Baker & Bengt Holmstrom, *Internal Labor Markets: Too Many Theories, Too Few Facts*, 85 AM. ECON. REV. (PAPERS & PROCEEDINGS) 255 (1995).

<sup>31</sup> Cf. Richard Craswell, *Passing On the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationships*, 43 STAN. L. REV. 361, 372-85 (1991) (discussing, in the context of consumer protection mandates, effects of heterogeneity across consumers within a given product market).

<sup>32</sup> See Summers, *supra* note 2, at 181 for discussion of this issue.

<sup>33</sup> For the view that such shifting to consumers occurs, see, e.g., RICHARD A. EPSTEIN, *FORBIDDEN GROUNDS: THE CASE AGAINST EMPLOYMENT DISCRIMINATION LAWS* 491 (1994). Summers's framework reflects a "partial equilibrium" approach in which employment market effects are examined while holding fixed other factors in the economy, including the price of the product the workers are producing. In this setting, all of the effects of a mandate will be felt by employers and workers. See, e.g., Lee, *supra* note 12, at 401. If some of a mandate's costs are shifted to consumers (as seems very likely to occur in practice, especially over longer time frames), then the effects predicted by the Summers framework will be quantitatively smaller than his framework would otherwise suggest, but they will be qualitatively the same, which is what is important for my purposes.

<sup>34</sup> In addition to the many academic articles discussed in the introduction and below that apply the Summers framework, Summers's article is excerpted in a number of leading employment law casebooks. See, e.g., MARIA O'BRIEN HYLTON & LORRAINE A. SCHMALL, *CASES AND MATERIALS ON EMPLOYEE BENEFITS LAW* 41 (1998); STEVEN L. WILLBORN, STEWART J. SCHWAB & JOHN F. BURTON JR., *EMPLOYMENT LAW: CASES AND MATERIALS* 921 (1998).

A final point about the Summers framework is important here. This framework assumes “worker sovereignty” in the sense that workers’ labor supply is assumed to shift in accordance with the underlying value of the mandated benefit to workers.<sup>35</sup> For purposes of normative analysis, this assumption is problematic for a host of familiar reasons: workers may lack adequate information about the benefit and also may “value” it differently depending on whether they have an initial legal entitlement to it.<sup>36</sup> But for purposes of the largely positive analysis undertaken here, these problems are not very troubling, since the shift in the labor supply curve may simply be interpreted as the “value” of the legal intervention as perceived by workers (correctly or incorrectly); because no normative analysis is undertaken to suggest that a mandate is desirable or not based on the comparison of this “value” to the cost associated with it, the relationship between the value as perceived by workers and the true “value” is simply not central for my purposes.

How can the Summers framework be adapted to the case of accommodation mandates?

## 2. Accommodation Mandates

The key difference between an accommodation mandate and a mandate directed to workers as a whole is that when an accommodation mandate is imposed, the willingness to supply labor rises exclusively or disproportionately for the group receiving the accommodation (for instance, disabled workers), and the total marginal revenue product of labor falls exclusively or disproportionately for this group. So the first innovation that will be necessary in analyzing accommodation mandates as opposed to mandates directed to workers as a whole is to separate out two distinct labor markets: the market for workers whom the mandate accommodates and the market for the remaining workers. Each market will have its own labor supply and demand curves (although the demand curves may end up being

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<sup>35</sup> Cf. Craswell, *supra* note 31, at 368-69 (describing assumption of “consumer sovereignty” in economic analysis of mandates in the consumer context).

<sup>36</sup> See Jolls, Sunstein & Thaler, *supra* note 28, at 1506-08 (role of the initial legal entitlement); Samuel A. Rea, Jr., *Workmen’s Compensation and Occupational Safety Under Imperfect Information*, 71 AM. ECON. REV. 80, 80 (1981) (informational problems).

comparable, for the reason discussed in the following paragraph). And, since the demand for workers of one type will depend, among other things, on the demand for workers of the other type, it will no longer be possible to represent everything of interest on a single, two-dimensional supply and demand diagram, as in the economic analysis of mandates directed to workers as a whole. A more general analytic framework for the analysis of accommodation mandates is the primary goal of this Part.<sup>37</sup>

The second (and critical) innovation that will be necessary in analyzing accommodation mandates is that laws against discrimination will come into play. As noted above, accommodation mandates are directed to groups protected under general antidiscrimination law. As a result, legal restrictions will prohibit employers from paying less to workers to whom accommodation mandates are directed and from refusing to hire or retain these individuals. Thus, for example, employers cannot (lawfully) respond to the mandate of reasonable accommodation of disabled workers under the Americans with Disabilities Act (ADA) by paying these workers less or refusing to hire them in the first place. (If these restrictions are binding on employers, then workers

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<sup>37</sup> Richard Craswell has analyzed a problem with some structural similarities to the present one. *See* Craswell, *supra* note 31, at 372-85. In particular, he analyzes the effects of consumer protection “mandates” in situations in which consumers are heterogeneous. *See id.* This scenario has some parallels with the case of accommodation mandates, in which there are two distinct groups of workers. But there are a number of differences between my analysis and Craswell’s. First, Craswell assumes that different consumers must receive the same treatment, *see id.* at 373 & n.19, whereas a critical point of my framework is that the effects of legal intervention depend precisely on whether differential treatment of differently situated groups is feasible, *see infra* Part I.B. Second, in Craswell’s model the party subject to legal protection is the *buyer*, whereas in my analysis it is the *seller* (of labor services). (This should not, however, significantly alter the conclusions.) Third, Craswell assumes that buyers are distinguished not into two groups (for instance, uninformed and informed, or in my context accommodated and nonaccommodated), but instead are distinguished along a continuum, with some consumers “marginal” and some “inframarginal.” Thus there are not two distinct markets, as there are in my analysis. For these reasons, Craswell’s analysis ultimately bears relatively few similarities to the analysis offered here. As noted above, however, his analysis does suggest how my analysis might be extended to account for heterogeneity of workers *within* a given group. *See supra* note 31.



in the two groups will face comparable labor demand curves despite the difference (noted above) in their total marginal revenue products of labor. See Part I.B.1 below for an elaboration of this point.) As described in the introduction, the implications of legal restrictions on wage and employment differentials for the consequences of accommodation mandates have been overlooked by many commentators, who typically generalize from the Summers model of mandates directed to workers as a whole.<sup>38</sup>

The framework developed below reflects each of the two innovations just described. I will refer to the group of workers to whom the mandate is directed as the “disadvantaged workers,” and to the remaining workers as the “nondisadvantaged workers.”

What are the effects of imposing an accommodation mandate? The labor supply curve for disadvantaged workers will shift down by the value of the accommodation, just as, in the case of a mandate directed to workers as a whole, the labor supply curve will shift down by the value of the mandated benefit.<sup>39</sup> Meanwhile, with regard to labor demand, the effect on the labor

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<sup>38</sup> See, e.g., Ruhm, *Parental Leave Mandates*, *supra* note 8, at 286 & n.11, 288; Ruhm, *Policy Watch*, *supra* note 8, at 178-80; Waldfogel, *supra* note 8, at 283 (1999). In previous work, Cass Sunstein, Richard Thaler and I likewise applied the Summers framework to an accommodation mandate. See Jolls, Sunstein & Thaler, *supra* note 28, at 1505-08. It was only in the course of further thinking about this topic that I came to see that the prevailing approach in the literature, under which the Summers framework is uncritically applied to accommodation mandates, may be incomplete. As discussed below, however, the correct approach ultimately yields the same qualitative conclusions as the Summers framework for the specific context of accommodation mandates targeted to female workers, which was the context we addressed in our earlier piece. See *infra* Parts II.B and II.C (discussing accommodated mandates targeted to female workers); Jolls, Sunstein & Thaler, *supra* note 28, at 1505-08. But it yields very different conclusions in other contexts, such as disability, as discussed in detail below.

<sup>39</sup> See Summers, *supra* note 2, at 180 (discussing the case of mandates directed to workers as a whole). The reasoning for accommodation mandates is precisely the same as the reasoning given by Summers. My analysis assumes for expositional ease that the accommodation required by the accommodation mandate has no value to nondisadvantaged workers, so that there is no shift in their labor supply curve. However, the conclusions below would remain qualitatively unchanged if the benefit had some value (although

demand curve for each type of worker will depend on whether there are binding restrictions on wage and employment differentials between disadvantaged and nondisadvantaged workers, as discussed in Part I.B below. Because of the importance of this factor, the analysis in Part I.B is organized with reference to it. The same analytic structure can be used to analyze antidiscrimination law, as the following section explains.

### 3. Antidiscrimination Law

The existing economic analysis of antidiscrimination law, like the existing economic analysis of mandates directed to workers as a whole, focuses on a single supply and demand diagram.<sup>40</sup> However, as John Donohue notes, “[a] more complete analysis should consider the effects [of antidiscrimination law]. . . on the [separate] market for white workers as well as on the market for black workers.”<sup>41</sup> The framework developed below analyzes the effects of antidiscrimination law on (and taking account of) *both* the market for the disadvantaged group and the market for the nondisadvantaged group; in this respect it marks an important methodological advance over the existing approach to analyzing antidiscrimination law from an economic perspective.

Antidiscrimination law targets situations in which workers who possess a particular trait—race, sex, or disability, as relevant here—are disadvantaged in employment markets as a result of that trait.<sup>42</sup> In one scenario, employers directly disfavor workers with a particular trait (the disadvantaged workers); this is so-called “disparate treatment” discrimination. In another scenario, employers engage in facially neutral employment practices that cause disproportionate harm to disadvantaged workers; under certain circumstances,

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less than the value to disadvantaged workers; this is the essence of the definition of an accommodation mandate) to nondisadvantaged workers. I make a parallel assumption, with parallel implications, when analyzing the effects of antidiscrimination law.

<sup>40</sup> See, e.g., Donohue, *supra* note 20, at 1415-20.

<sup>41</sup> *Id.* at 1427 n.39.

<sup>42</sup> This Article does not address the important context of age discrimination, since, as I argued in a symposium piece published by the *Texas Law Review*, the category of age raises many distinct issues and is most sensibly considered within an efficiency framework rather than the distributive framework used in this Article. See Christine Jolls, *Hands-Tying and the Age Discrimination in Employment Act*, 74 TEX. L. REV. 1813, 1813-14 (1996).

this constitutes “disparate impact” discrimination. The law prohibits both forms of discrimination.<sup>43</sup> I discuss the two in turn.

**a. “Disparate Treatment” Discrimination**

For disparate treatment discrimination, it is useful to unpack the notion of employer “disfavor” toward a particular group. Employers may be reluctant to employ workers from a particular group for three distinct reasons:

- (1) Employer animus toward the group.
- (2) Customer or coworker animus toward the group.
- (3) Employer beliefs (correct or incorrect) that group members are lower quality employees on average.

The last category of behavior is commonly referred to as “statistical discrimination.”<sup>44</sup>

In each of these three cases, employing disadvantaged workers imposes costs (perceived or actual) on employers. In the first case, it does so by forcing them to associate with persons against whom they have animus. In the second case, it imposes costs in the form of lost business or reduced prices (for customer animus) or reduced productivity or higher wages (for coworker animus). In the third case, the cost to employers of employing disadvantaged workers is the (perceived or actual) reduction in worker quality. I use the concept of a “generalized discrimination coefficient” to capture these costs. This concept is a generalization of Gary Becker’s notion of a “discrimination

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<sup>43</sup> See Title VII of the Civil Rights Act of 1964 § 703(a), (k), 42 U.S.C. § 2000e-2(a), (k); Americans with Disabilities Act of 1990 § 102(a), (b)(1), (6), 42 U.S.C. § 12112(a), (b)(1), (6).

<sup>44</sup> This typology is similar to, although less textured than, that offered by Charny & Gulati, *supra* note 30, at 61-67; a significant difference is that I group customer animus with coworker animus. As Charny and Gulati note, the general concept of animus discrimination, which derives from Gary Becker’s seminal work on employment discrimination, is an oversimplification, but, as was true for Charny and Gulati, it captures the essential features for purposes of my analysis. *See id.* at 62 n.19.

coefficient,” which measures the cost to employers of associating with workers against whom they have animus.<sup>45</sup>

Economic analysis suggests that in certain circumstances markets, unaided by antidiscrimination law, will drive out employers who disfavor particular groups of workers.<sup>46</sup> Thus the analysis “predicts the absence of the phenomenon it was designed to explain.”<sup>47</sup> But a large literature has explored the many circumstances in which markets do not drive out discrimination.<sup>48</sup> Much empirical evidence suggests that, in fact, discriminatory behavior is alive and well in many employment markets.<sup>49</sup> This evidence suggests (if there was any doubt) that the reason for antidiscrimination law has not vanished with the operation of market forces (and thus that there is substantial scope for this law to affect employers’ behavior).

Antidiscrimination law prohibits each of the three forms of disparate treatment discrimination listed above.<sup>50</sup> And it forbids not only differential

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<sup>45</sup> See GARY S. BECKER, *THE ECONOMICS OF DISCRIMINATION* 14-15 (2d ed. 1971).

<sup>46</sup> See *id.* at 44.

<sup>47</sup> Kenneth Arrow, *Some Mathematical Models of Race in the Labor Market*, in *RACIAL DISCRIMINATION IN ECONOMIC LIFE* 192 (A.H. Pascal ed., 1972), quoted in John J. Donohue III, *Discrimination in Employment*, in 1 *THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW* 615, 616 (Peter Newman ed., 1998).

<sup>48</sup> See, e.g., John J. Donohue III, *Employment Discrimination Law in Perspective: Three Concepts of Equality*, 92 *MICH. L. REV.* 2583, 2590-2601 (1994); David A. Strauss, *The Law and Economics of Racial Discrimination in Employment: The Case for Numerical Standards*, 79 *GEO. L.J.* 1619, 1631-43 (1991); Cass R. Sunstein, *Why Markets Don’t Stop Discrimination*, 8 *SOC. PHIL. & POL’Y* 22, 23-34 (1991).

<sup>49</sup> See, e.g., MARGERY AUSTIN TURNER, MICHAEL FIX & RAYMOND J. STRUYK, *OPPORTUNITIES DENIED, OPPORTUNITIES DIMINISHED: RACIAL DISCRIMINATION IN HIRING* (1991); Claudia Goldin & Cecilia Rouse, *Orchestrating Impartiality: The Impact of “Blind” Auditions on Female Musicians* (NBER Working Paper No. 5903, Jan. 1997); Judith K. Hellerstein, David Neumark & Kenneth R. Troske, *Wages, Productivity, and Worker Characteristics: Evidence from Plant-Level Production Functions and Wage Equations*, 17 *J. LAB. ECON.* 409 (1999); David Neumark, *Sex Discrimination in Restaurant Hiring: An Audit Study*, 111 *Q.J. ECON.* 915 (1996).

<sup>50</sup> See Strauss, *supra* note 48, at 1623.

treatment in terms of wages and employment levels, but also differential treatment in terms of conditions on the job—promotion policies, workplace environment, and so forth.<sup>51</sup> The prohibitions on differential job conditions will produce supply and demand effects similar to those of accommodation mandates, since they make disadvantaged workers more willing to supply labor *while increasing employers' costs of employing these workers*.

Consider first labor supply. How will disadvantaged workers respond to restrictions on discriminatory promotion policies, sexual harassment, and other differential job conditions? They are likely to be more willing to supply labor at any given wage with such restrictions in place, just as disadvantaged workers are likely to be more willing supply labor at any given wage with an accommodation mandate in place. Thus, just as an accommodation mandate will shift the labor supply curve for disadvantaged workers down by the value of the accommodation (see the previous section), antidiscrimination law's disparate treatment branch will shift the labor supply curve for disadvantaged workers down by the value of the restrictions on differential job conditions that it imposes.

Effects parallel to those of accommodation mandates also occur for labor demand. Restrictions on differential job conditions impose costs, just as do accommodation mandates; employers are subject to a potential lawsuit over every adverse outcome suffered by a disadvantaged worker. (In the existing literature, the notion that antidiscrimination law imposes costs on employers in connection with employing disadvantaged workers comes up in discussions of “firing costs”; the idea is that antidiscrimination law makes it difficult to fire disadvantaged workers and thus increases the cost of employing such workers.<sup>52</sup> But this form of cost increase is importantly distinct from the cost increase stemming from restrictions on differential conditions while on the job, since the latter cost increase, like the cost increase from a mandated accommodation, is not directly linked to the employment level (although it

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<sup>51</sup> See, e.g., *Kolstad v. American Dental Assoc.*, 527 U.S. 526 (1999) (promotion practices); *Harris v. Forklift Systems, Inc.*, 510 U.S. 17 (1993) (workplace environment).

<sup>52</sup> See, e.g., John J. Donohue III & Peter Siegelman, *The Changing Nature of Employment Discrimination Litigation*, 43 STAN. L. REV. 983, 1015-21, 1023-32 (1991); Posner, *supra* note 11, at 517-19. Ian Ayres and Peter Siegelman offer a good discussion of the “firing costs” idea. See Ian Ayres & Peter Siegelman, *The Q-Word as Red Herring: Why Disparate Impact Liability Does Not Induce Hiring Quotas*, 74 TEX. L. REV. 1487, 1488-89 (1996),

will indirectly affect it, as explored below). In the firing costs story, the legal intervention is directly linked to the employment level. Because it is not possible in general to determine how the competing effects on employment level—a potential increase in disadvantaged workers’ employment because of the barriers to firing, but a potential decrease in their employment because of the reduced incentive to hire—balance out,<sup>53</sup> I do not attempt to incorporate the firing costs idea into my analysis here.)

As with accommodation mandates, the degree to which restrictions on differential wages and employment levels across groups are binding will prove of great importance in analyzing the effects of the legal intervention on labor demand. Thus, as noted above, the analysis in Part I.B below is organized by reference to this factor.

Although this section has emphasized the similarities between accommodation mandates and the disparate treatment branch of antidiscrimination law, there is a potential distinction between them as well. In the context of accommodation mandates, it is possible that the two groups of workers were regarded similarly by employers prior to the legal intervention; it is possible that only the accommodation mandate made one group more costly, and thus potentially less attractive, than the other. (In fact, since accommodation mandates are targeted to groups protected under antidiscrimination law, it seems likely in practice that these groups will be viewed as more costly to employ even apart from the legal intervention.) In the case of disparate treatment discrimination, by contrast, the precise ground for the legal intervention is the fact that employers regard the disadvantaged group as more costly to employ wholly apart from any legal intervention. At the same time, this distinction (even if it exists today, about which I have my doubts, as already noted), may not exist in perpetuity, since a central purpose of the disparate treatment branch of antidiscrimination law is to change

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<sup>53</sup> See Francine D. Blau & Lawrence M. Kahn, *Institutions and Laws in the Labor Market*, in 3 HANDBOOK OF LABOR ECONOMICS 1399, 1412-13 (Orley Ashenfelter & David Card eds., 1999) (describing how “the impact of firing costs . . . depends on the shape of the marginal [revenue] product of labor curve and on the presence of discounting and voluntary turnover”). Blau and Kahn describe the effects under several alternative scenarios. *See id.*; *see also* Acemoglu & Angrist, *supra* note 13, at 7-9 (modeling the competing effects of firing costs and hiring incentives).

attitudes and views about the disadvantaged group.<sup>54</sup> (Note that even if underlying attitudes and views change, disparate treatment liability under antidiscrimination law will still impose costs in connection with the restrictions it imposes on differential job conditions (the key point for the parallel with accommodation mandates), since the very ability to sue an employer over an employment decision imposes costs even if the decision made was wholly free of any discriminatory influence. The point here is parallel to the observation that a general “good cause” standard for discharging employees imposes process costs even on employers who always obey the substantive standard.<sup>55</sup>)

#### **b. “Disparate Impact” Discrimination**

Antidiscrimination law’s prohibition on “disparate impact” discrimination, like its prohibition on “disparate treatment” discrimination, produces effects parallel to those of accommodation mandates. Indeed, here the parallel is particularly easy to see because disparate impact liability often can be immediately redescribed as an accommodation mandate. This point is often overlooked or not understood in the existing literature.<sup>56</sup>

A first example of the way in which disparate impact liability may operate as an accommodation mandate is that employers may be required to provide various forms of accommodation for pregnancy and childbirth (even if similar measures are not provided to similarly-situated but nonpregnant employees) as a matter of disparate impact law. Title VII of the Civil Rights Act of 1964 prohibits discrimination on the basis of sex, which is elsewhere in Title VII (as amended by the Pregnancy Discrimination Act (PDA)) defined to include pregnancy and childbirth.<sup>57</sup> Thus, neutral employer rules that disproportionately disadvantage workers who become pregnant are unlawful unless these rules are shown to be “job related” and “consistent with business

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<sup>54</sup> See, e.g., Lawrence Lessig, *The Regulation of Social Meaning*, 62 U. CHI. L. REV. 943, 965-67 (1995).

<sup>55</sup> See Richard A. Epstein, *In Defense of the Contract At Will*, 51 U. CHI. L. REV. 947, 970 (1984).

<sup>56</sup> See generally *infra* Part III.B (discussing many commentators who distinguish sharply between accommodation mandates and antidiscrimination law, including its disparate impact branch).

<sup>57</sup> See 42 U.S.C. §§ 2000e(k), 2000e-2(a).

necessity.”<sup>58</sup> (As discussed at some length in Part III.B below, this conclusion about disparate impact liability in the pregnancy context is not free of controversy, but, for the reasons I give below, I believe this is clearly the correct conclusion.) Under disparate impact law, an employer’s neutral policy that fails to permit a sufficiently long leave period for temporary disability (including childbirth), or excludes workers disabled by off-work causes (including pregnancy and childbirth) from a disability benefits plan, might constitute unlawful discrimination, since these facially neutral practices would often produce disproportionate harm for pregnant workers.<sup>59</sup> The law thus imposes accommodation requirements under the guise of disparate impact

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<sup>58</sup> See Title VII of the Civil Rights Act of 1964 § 703(k)(1)(A), 42 U.S.C. § 2000e-2(k)(1)(A).

<sup>59</sup> See *Abraham v. Graphic Arts Int’l Union*, 660 F.2d 811 (D.C. Cir. 1981) (reversing a grant of summary judgment for an employer because a pregnant worker had shown that the employer’s 10-day leave limitation had a disparate impact on women and was not justified on grounds of business necessity as a matter of law); *EEOC v. Warshawsky & Co.*, 768 F. Supp. 647 (N.D. Ill. 1991) (holding that an employer’s policy of discharging all first-year employees who requested long-term sick leave had a disparate impact on women and was not justified on grounds of business necessity); *Miller-Wohl Co. v. Commissioner*, 214 Mont. 238 (1984) (concluding, in the course of upholding a state law requiring leave for pregnancy, that an employer’s no-leave policy had a disparate impact on women), *vacated and remanded*, 479 U.S. 1050 (1987), *judgment and opinion reinstated*, 228 Mont. 505 (1987); *Lehmuller v. Village of Sag Harbor*, 944 F. Supp. 1087 (E.D.N.Y. 1996) (holding that an employer’s policy of limiting disability benefits to employees injured on the job had a disproportionately negative effect on pregnant employees and that a trial was required to assess whether the policy was justified by business necessity); 29 CFR § 1604.10(c) (1992) (“Where the termination of an employee who is temporarily disabled is caused by an employment policy under which insufficient or no leave is available, such a termination violates [Title VII] if it has a disparate impact on employees of one sex and is not justified by business necessity”). Note that the failure to provide a reasonable leave period, at issue in *Abraham* and *Warshawsky* and addressed by the Equal Employment Opportunity Commission (EEOC) in the regulation just quoted, would now be independently unlawful under the Family and Medical Leave Act. See 29 U.S.C. § 2612(a)(1).



liability; as Reva Siegel succinctly expresses it, “[D]isparate impact doctrine imposes a duty of reasonable accommodation upon the employer.”<sup>60</sup>

A second clear example of the way in which disparate impact liability imposes a requirement of accommodation is the Title VII case law requiring employers to excuse particular groups of workers from generally-applicable grooming rules when such rules have a disparate impact and are found not to be justified by business necessity. The leading example is no-beard policies maintained by employers; these policies may have an unlawful disparate impact on African-American males, a significant and disproportionate number of whom suffer from a skin condition, pseudofolliculitis barbae (PFB), that precludes shaving.<sup>61</sup> For instance, in one recent case, no-beard rule imposed by a Domino’s Pizza franchise was struck down on the ground that it had a disproportionately negative effect on African-American male workers and was not justified by business necessity, since the employer had not proven that Domino’s customers would order less pizza if delivered by bearded delivery personnel.<sup>62</sup> The relief granted was that the employer was required to exempt

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<sup>60</sup> Reva B. Siegel, Note, *Employment Equality Under the Pregnancy Discrimination Act of 1978*, 94 YALE L.J. 929, 946 (1984).

<sup>61</sup> Cases ruling in favor of employees on these sorts of claims include *Bradley v. Pizzaco of Nebraska, Inc.*, 939 F.2d 610 (8th Cir. 1991) (“*Bradley I*”); *Bradley v. Pizzaco of Nebraska, Inc.*, 7 F.3d 795 (8th Cir. 1993) (“*Bradley II*”); *Richardson v. Quik Trip Corp.*, 591 F. Supp. 1151 (S.D. Iowa 1984); *EEOC v. Trailways, Inc.*, 530 F. Supp. 54 (D. Colo. 1981).

<sup>62</sup> See *Bradley I*, 7 F.3d at 797-99 (8th Cir. 1993); *Bradley II*, 939 F.2d at 612-13. The court in *Richardson* similarly found a disproportionately negative effect on African-American men and rejected a business necessity defense. See 591 F. Supp. at 1155-56. By contrast, the courts in *Fitzpatrick v. City of Atlanta*, 2 F.3d 1112 (11th Cir. 1993), and *Woods v. Safeway Stores, Inc.*, 420 F. Supp. 35 (E.D. Virg. 1976), found (or assumed, in the case of *Fitzpatrick*) a disproportionately negative effect on African-American men but then accepted the employer’s asserted justification for the no-beard policy as a business necessity. See *Fitzpatrick*, 2 F.3d at 1118-21 (holding that a fire department’s no-beard policy was necessary because beards prevented firefighters’ respirators, which protected them against the effects of smoke-filled environments, from fitting properly); *Woods*, 420 F. Supp. at 42-43 (accepting store management’s position that a no-beard policy was necessary to retain customers in the highly competitive grocery store market). In *Trailways*, the court found a disproportionately negative effect on African-American men, and the employer failed to argue that its policy was justified

African-American males unable to shave from the no-beard policy.<sup>63</sup> Thus, under the guise of disparate impact liability, the employer was required to provide accommodation to African-American males.

The pregnancy and grooming examples illustrate the way in which Title VII imposes accommodation mandates through the vehicle of disparate impact liability. To the extent that disparate impact law imposes accommodation requirements, it will of course produce supply and demand effects identical to those of accommodation mandates. With regard to labor supply, the labor supply curve of disadvantaged workers will shift out with the imposition of disparate impact liability. And, once again, in analyzing the effects of the legal intervention on labor demand, the degree to which restrictions on differential wages and employment levels across groups are binding will prove critical; again, this feature explains and motivates the organization of Part I.B below.

A final word before proceeding is necessary regarding the distinction drawn in this section and in the previous section between restrictions on wage and employment differentials imposed by antidiscrimination law, and other sorts of restrictions imposed by antidiscrimination law, such as restrictions on differential job conditions (discussed in connection with disparate treatment discrimination) and restrictions on facially neutral practices that have a disparate impact on disadvantaged workers. Within the supply and demand framework used in this Article, restrictions *other than* those on wage and employment differentials can be reflected in supply and demand shifts, just as accommodation mandates can be reflected in such shifts. In both cases, the effect of the legal intervention is to change the willingness of disadvantaged workers to supply labor and the willingness of employers to demand disadvantaged workers' labor. Restrictions on wage and employment differentials, by contrast, cannot be analyzed in this way, since wages and employment levels are the axes in the supply and demand framework. For this reason their effects cannot be analyzed in terms of shifts in the supply and demand curves.

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by business necessity, so the court held the policy unlawful. *See* 530 F. Supp. at 55-57, 59.

<sup>63</sup> *See Bradley*, 7 F.3d at 799. Even if the court had struck down the no-beard policy in general, the end result would still be an accommodation mandate since African-American males would be disproportionately (though not exclusively) benefited by the rule.

## **B. Restrictions on Wage and Employment Differentials**

This section analyzes the effects of accommodation mandates and antidiscrimination law under alternative assumptions about whether antidiscrimination law's restrictions on wage and employment differentials across disadvantaged and nondisadvantaged workers are binding on employers. A major theme of the discussion is the way in which these restrictions on wage and employment differentials significantly alter the conclusions that obtain for mandates directed to workers as a whole. (As noted in the introduction and as discussed in more detail here, many commentators have uncritically applied the analysis for mandates directed to workers as a whole to the case of accommodation mandates.) Section C below turns to the critical question of the factors that bear on whether and when restrictions on wage and employment differentials are likely to be binding.

### **1. Restrictions on Wage and Employment Differentials Are Binding**

This first section analyzes the effects of accommodation mandates and antidiscrimination law under the assumption that restrictions on wage and employment differentials between disadvantaged and nondisadvantaged workers are binding. (As a warning—or an enticement, depending on the reader's perspective—this section contains by far the most involved economic analysis in the Article.) I interpret the existence of such binding restrictions to mean that there must not be any difference in the wages and employment opportunities of the two groups of workers within a given employment market. (See Part I.A.1 above for the definition of an “employment market.”) More particularly, employers cannot exhibit differential labor demand for disadvantaged and nondisadvantaged workers. The implication is that labor demand for each type of worker will be based on the total marginal revenue product of labor for all workers in the employment market in question.

The first effect of an accommodation mandate or antidiscrimination law in this setting will be to produce a downward shift (all else equal) in labor demand, since the intervention will produce a downward shift in the total marginal revenue product of labor in the employment market in question.<sup>64</sup> In

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<sup>64</sup> The analysis throughout Part I.B assumes for expositional ease that accommodation mandates and antidiscrimination law impose no cost on employers for nondisadvantaged workers. However, the conclusions would be

the case of an accommodation mandate, the downward shift in the total marginal revenue product of labor will occur because employers will incur costs for the mandated accommodation.<sup>65</sup> The magnitude of the downward shift will be equal to the average cost of the mandated accommodation across the employment market in question, just as in the case of a mandate directed to workers as a whole the magnitude of the downward shift is equal to the average cost of the mandated benefit across the relevant employment market.<sup>66</sup> The difference in the context of accommodation mandates is that the average cost will not simply be equal to the cost of the benefit in question; rather it will be equal to the cost of the benefit (accommodation) *multiplied by* the fraction of disadvantaged workers in the employment market, since only these workers must be accommodated.

In the case of antidiscrimination law, the downward shift in the total marginal revenue product of labor will result from the cost of the restrictions on differential job conditions and the rules against facially neutral employment practices that have a disparate impact. As to restrictions on differential job conditions, the cost arises in significant part from the fact that, as already noted, every adverse employment action is now the source of a potential antidiscrimination lawsuit. As to restrictions on neutral job practices, the cost arises from the fact that, as explained just above, they may function exactly as do accommodation mandates (hence the reasoning above for accommodation mandates applies directly here). The magnitude of the downward shift in the total marginal revenue product of labor from antidiscrimination law's restrictions on differential job conditions and facially neutral practices that have a disparate impact will be equal to the average cost of these restrictions across the employment market in question. The reasoning is the same here as it was for accommodation mandates. For ease of exposition I will refer to the cost of restrictions on differential job conditions and practices with a disparate impact as the "cost of the antidiscrimination law."

Thus, for both accommodation mandates and antidiscrimination law, one effect of the legal intervention will be to shift the total marginal revenue

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qualitatively unchanged if the mandate or law imposed some cost (less than the cost for disadvantaged workers) for nondisadvantaged workers.

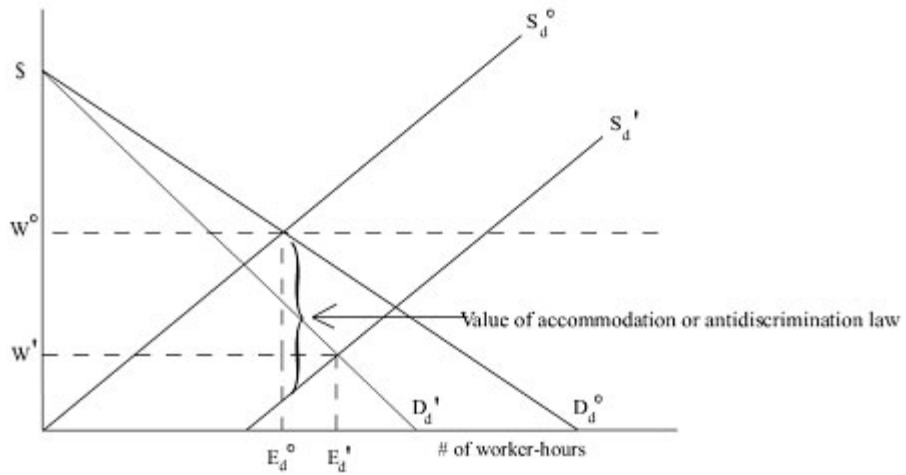
<sup>65</sup> Cf. Summers, *supra* note 2, at 180 (explaining why a mandate directed to workers as a whole shifts down the total marginal revenue product of labor by the cost of the mandated benefit).

<sup>66</sup> See *id.*

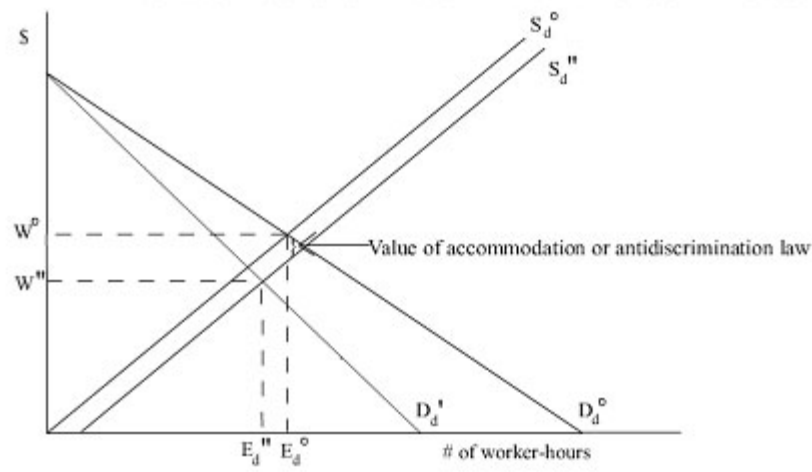
product of labor and, hence, the labor demand curve for each type of worker down by the average cost of the accommodation or the antidiscrimination law. This is depicted in figure 2 just below. Figure 2 shows the effects of an accommodation mandate or antidiscrimination law in the market for disadvantaged workers. The supply and demand curves in the figure are similar to the supply and demand curves in figure 1 above. The downward shift in disadvantaged workers' labor demand curve by the average cost of the accommodation or the antidiscrimination law is reflected in the gap between the curves  $D_d^\circ$  and  $D_d'$  in figure 2, just as in figure 1 a mandate directed to workers as a whole produced a downward shift in the labor demand curve. (For an explanation of why the curve  $D_d'$  is steeper than the curve  $D_d^\circ$  in figure 2, see the appendix to this Article.)

Figure 2  
 Effects of an accommodation mandate or antidiscrimination law --  
 Market for disadvantaged workers

Value of accommodation or antidiscrimination law equals or exceeds its cost



Value of accommodation or antidiscrimination law is less than its cost



A second, and separate, effect of the accommodation mandate or antidiscrimination law will be to decrease the employment level of *nondisadvantaged* workers. This is an unsurprising consequence of the downward pressure on labor demand. The wage falls, and, thus, marginal nondisadvantaged workers will exit the market. (A formal proof of the claim that the wage and employment level of nondisadvantaged workers will fall with the accommodation mandate or antidiscrimination law appears in the appendix.)

With a lower level of nondisadvantaged employment, the physical product of *disadvantaged* labor will be higher, all else equal (recall the law of diminishing returns). So the labor demand curve for disadvantaged workers will shift up (all else equal) relative to the curve  $D_d'$  in figure 2 (upper or lower panel). Thus, the post-intervention labor demand curve for disadvantaged workers will lie *above* the curve  $D_d'$ , and the post-intervention wage will be *above*  $W'$  (upper panel) or  $W''$  (lower panel).

As the division into two separate graphs in figure 2 suggests, it is useful to separate the remaining analysis into distinct cases based on the relationship between the value and the cost of the accommodation or the antidiscrimination law. (As with “cost of the antidiscrimination law,” I use “value of the antidiscrimination law” to refer to the value to disadvantaged workers of antidiscrimination law’s restrictions on differential job conditions and rules against facially neutral practices that have a disparate impact.)

A threshold question regarding Case 1 below, in which the value of the accommodation or the antidiscrimination law to disadvantaged workers equals or exceeds its cost to employers, is why legal intervention would ever be necessary in that circumstance. Economists and economically oriented commentators often assert that parties should bargain on their own for a benefit whose value exceeds its cost.<sup>67</sup> There are several responses to this argument that apply both to mandates directed to workers as a whole and to accommodation mandates.<sup>68</sup> However, the foregoing analysis provides an additional response for the specific context of accommodation mandates (and

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<sup>67</sup> See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 363 (5th ed. 1998).

<sup>68</sup> See Jolls, Sunstein & Thaler, *supra* note 28, at 1506-08 (endowment effect argument); Douglas L. Leslie, *Accommodating the Disabled*, [www.legalesays.com](http://www.legalesays.com), at 5 (public or collective good argument); Summers, *supra* note 2, at 178-79 (informational problems).

antidiscrimination law). With binding restrictions on wage and employment differentials, nondisadvantaged workers will bear part of the cost of providing accommodation or of the antidiscrimination law, so they will not wish to see these regimes put into place and may be able to block them even if the value of what is to be provided exceeds its cost. The basic difficulty here is that the cost is distributed evenly across the employment market in question, due to the binding restrictions on wage and employment differentials, while the value is concentrated on disadvantaged workers. For this reason, legal intervention may be necessary to achieve even an efficient accommodation or efficient antidiscrimination law. (A caveat here concerns side bargaining among workers: if disadvantaged workers can negotiate an appropriate “bribe” to nondisadvantaged workers to compensate them for the costs of an accommodation or antidiscrimination law, then the benefit should be provided without legal intervention if it is efficient. But the transaction costs of such bargaining seem likely to be very large.)

*Case 1—Value equals or exceeds cost.* If the value of the mandated accommodation or the antidiscrimination law equals or exceeds its cost, then the downward shift in the labor supply curve for disadvantaged workers will equal or exceed that cost. (As described above, the labor supply curve for disadvantaged workers shifts down by the value of the accommodation or the antidiscrimination law.) At the same time, as explained above, the labor demand curve will no longer shift down by the cost of the legal intervention (as was the case for a mandate directed to workers as a whole); instead, the labor demand curve will shift down by *less than* the product of the cost of the accommodation or the antidiscrimination law and the proportion of disadvantaged workers in the workforce. This last quantity, reflected in the gap between the curves  $D_d^\circ$  and  $D_d'$  in figure 2, will be less than or equal to the cost of the accommodation or the antidiscrimination law. It follows from the reasoning in this paragraph that the downward shift in the labor supply curve must exceed the gap between  $D_d^\circ$  and  $D_d'$ . See the upper panel of figure 2.

Since the actual post-intervention labor demand curve for disadvantaged workers must lie *above* the curve  $D_d'$  (as explained above), the legal intervention will cause the wage of disadvantaged workers to fall by *less than* the gap between  $W^\circ$  and  $W'$  in figure 2 (upper panel). This in turn is less than or equal to the value of the accommodation or the antidiscrimination law. So disadvantaged workers' wage will fall by less than the value of the legal intervention. And their employment level will rise by more than the gap between  $E_d^\circ$  and  $E_d'$ .



These conclusions are intuitive, but they mark a striking contrast with the results for the case of the case of mandates directed to workers as a whole. In that case, as explained in Part I.A.1 above, if the value of the mandated benefit exceeds its cost, the mandate is efficient, but there are no distributive gains to workers except to the extent that value exceeds cost, and even those gains stem from efficiency rather than distribution from another party. Jonathan Gruber extends this analysis to an accommodation mandate, mandated leave from work around the time of childbirth:

If the government is [acting efficiently] by mandating maternity leave, then women will pay for this valuable leave through lower wages. As a result, *there will be no net redistribution toward women*; they will be, in essence, buying the maternity leave. . . . [A]dvocates of maternity leave cannot have it both ways; either the government is increasing efficiency *or* it is redistributing toward women.<sup>69</sup>

The foregoing analysis shows that this reasoning is incorrect if restrictions on wage and employment differentials are binding. Even when the value of the accommodation exceeds its cost, there are purely distributive (as well as efficiency) gains to disadvantaged workers from the mandate, since the costs of the accommodation are shared across all workers. No such shifting is feasible in the context of mandates directed to workers as a whole, since there is no other group of workers to whom to shift costs. Of course, as described below, things will be quite different if restrictions on wage and employment differentials are not binding. In defense of Gruber's argument, the empirical evidence discussed in Part II.C.2 suggests that indeed these restrictions are not binding in the context of male-female differentials.

Shifting of the costs of legal intervention to other parties is often considered a negative consequence of mandates directed to workers as a whole.<sup>70</sup> But in the case of accommodation mandates, the precise *goal* of the legal intervention is to “level the playing field” between disadvantaged and nondisadvantaged workers, by removing from the former a burden not borne by the latter.

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<sup>69</sup> Jonathan Gruber, *Commentary*, in GENDER AND FAMILY ISSUES IN THE WORKPLACE 157, 158 (Francine D. Blau & Ronald G. Ehrenberg eds., 1997) (emphasis added).

<sup>70</sup> See, e.g., David Charny, *The Employee Welfare State in Transition*, 74 TEX. L. REV. 1601, 1615 (1996) (discussing “cross-subsidization” in the health insurance context).

Since disadvantaged and nondisadvantaged workers must receive the same wage with binding restrictions on wage differentials, the wage of disadvantaged workers *relative to* that of nondisadvantaged workers will either remain the same or rise in response to the legal intervention. It will remain the same if the two groups of workers were not differentially attractive to employers before the legal intervention. This would be true if disadvantaged workers become more costly than nondisadvantaged workers for employers to employ only as a result of the legal intervention. (In this case the “disadvantage” of these workers would stem from the need to finance their own accommodation prior to the legal intervention.) By contrast, the relative wage of disadvantaged workers will rise with the legal intervention if disadvantaged workers were earning a lower wage than nondisadvantaged workers before the intervention. This would be true in any case with a positive generalized discrimination coefficient (reflecting employers’ preference for nondisadvantaged workers wholly apart from any cost-imposing legal rule).

The relative employment level of disadvantaged workers will rise with the imposition of an accommodation mandate or antidiscrimination law. This follows directly from the fact that, as noted above, the absolute employment level of disadvantaged workers will rise while, again as noted above, the absolute employment level of nondisadvantaged workers will fall. These predictions about the relative wage and relative employment level effects of legal intervention will help to generate the empirical hypotheses tested in Part II below.

***Case 2—Value is less than its cost.*** If the value of the accommodation or the antidiscrimination law is less than its cost, then it is no longer certain that disadvantaged workers will gain from the legal intervention. The reason that certainty is no longer possible is that the labor supply curve for disadvantaged workers will shift down by less than the cost of the accommodation or the antidiscrimination law (since value is less than cost), so one can no longer say that this shift will necessarily exceed the gap between the labor demand curves  $D_d^\circ$  and  $D_d'$  in figure 2 (lower panel).

However, as long as the fraction of nondisadvantaged individuals in the qualified population is not too small, and the gap between value and cost not too large, an accommodation mandate or antidiscrimination law will always help disadvantaged workers. If, for example, nondisadvantaged individuals are ninety percent of the qualified population, then they will tend to constitute the vast majority of the employment market in question. (Their precise representation will depend on the shape of their and disadvantaged workers’

labor supply curves.) If nondisadvantaged workers constitute the vast majority of the employment market in question, then the fall in the total marginal revenue product of labor for all workers in that market with the imposition of an accommodation mandate or antidiscrimination prohibition will be small, since the average cost of the accommodation or antidiscrimination law across the workforce will be small. And the smaller the downward shift in the total marginal revenue product of labor, the smaller the downward shift in labor demand for disadvantaged workers, and hence the lower the likelihood that these workers' wage will fall by more than the value of the accommodation or the antidiscrimination law.

Regardless of whether disadvantaged workers' (absolute) wage falls by less than the value of the accommodation or antidiscrimination law, the *relative* wage of these workers will rise or stay the same. This follows directly from the reasoning given above for the case in which the value of the accommodation or antidiscrimination law equals or exceeds its cost. The relative wage conclusion is a direct consequence of the binding restrictions on wage differentials and does not depend in any way on the value-cost relationship.

The relative employment levels of disadvantaged workers will rise or fall depending on the relationship between the labor supply and labor demand shifts in response to the legal intervention. Since the employment level of nondisadvantaged workers will fall with the legal intervention, as noted above, the relative employment level of disadvantaged workers is certain to rise if their absolute employment level either rises or stays the same. That in turn will happen if their absolute wage falls by at least the value of the accommodation or the antidiscrimination law. (This follows from a visual examination of the lower panel of figure 2.)

This analysis suggests a possible distributive justification for accommodation mandates and antidiscrimination law even when the cost of the accommodation or the antidiscrimination law exceeds its value. In the case of mandates directed to workers as a whole, distributive considerations cannot justify legal intervention in this setting, since the workers will see their wages fall by more than the value of the benefit to them, as there is no other group to whom to shift costs.<sup>71</sup> But the case of accommodation mandates is different.

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<sup>71</sup> See Summers, *supra* note 2, at 180 (describing the effects of a mandate directed to workers as a whole where the value of the mandated benefit is less than its cost).

Even if the value of the accommodation (or the antidiscrimination law) is less than its cost, the legal intervention may make disadvantaged workers better off because nondisadvantaged workers will bear some of the cost. (Of course, as already noted, distributive goals might be accomplished more efficiently through government transfers.)

This point is especially important because the fact that the value of the accommodation or the antidiscrimination law is less than its cost may reflect precisely the undesirable distributive situation sought to be remedied by the law. The reason is that “value” in this economic framework is measured by workers’ willingness to pay for the benefit by accepting lower wages, and one’s distributive situation might preclude one from accepting lower wages.<sup>72</sup> (This is of course the familiar point that wealth matters greatly for determining willingness to pay and hence economic “value.”)

A further contrast between accommodation mandates and mandates directed to workers as a whole is that for the latter mandates, the precise measure of whether the parties to whom the mandate is directed are better off is (somewhat paradoxically) whether their wage falls by more than the cost of the benefit (which can only happen if the value of the mandated benefit exceeds its cost).<sup>73</sup> With an accommodation mandate, by contrast, disadvantaged workers may be better off even if (and perhaps because of the fact that) their wage falls by less than the cost of the accommodation; some of the cost is being shifted to the wage of nondisadvantaged workers.

Another important (and somewhat contrary) insight that comes from the economic framework here is that disadvantaged workers may be made worse off by an antidiscrimination law *even with fully binding restrictions on wage and employment differentials*. This possibility has been completely overlooked in the existing literature on antidiscrimination law. That literature links the claim that an antidiscrimination law may hurt disadvantaged workers to the idea that restrictions on employment differentials—and in particular hiring differentials—are not binding; therefore the costs associated with antidiscrimination law make it harder for disadvantaged workers to get jobs in the first place.<sup>74</sup> But, when the problem is analyzed in a more systematic way,

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<sup>72</sup> See generally Ronald M. Dworkin, *Is Wealth A Value?* 9 J. LEGAL STUD. 191, 196-201 (1980).

<sup>73</sup> See Lee, *supra* note 12, at 403-04.

<sup>74</sup> See, e.g., Acemoglu & Angrist, *supra* note 13, at 9; Donohue & Siegelman, *supra* note 52, at 1024-25; Scott A. Moss & Daniel A. Malin,

as here, it becomes clear that disadvantaged workers may be harmed by an antidiscrimination law even if restrictions on employment as well as wage differentials are fully binding. However, as already noted, this could only occur if either disadvantaged workers comprise a very large fraction of the qualified population or the cost of the mandated accommodation or antidiscrimination law greatly exceeds its value.

Even in this least optimistic possible scenario, where disadvantaged workers are not better off in an absolute sense after the legal intervention, outcomes are more *equal* with the accommodation mandate or antidiscrimination law in place. Thus, if one values equality per se (rather than the absolute situation of disadvantaged workers), then the legal intervention would be desirable despite the fact that it makes disadvantaged workers (as well as nondisadvantaged workers) worse off in an absolute sense.

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This discussion has been somewhat intricate at points (far more so than the discussion of the remaining cases will be), but the central conclusions are easy to distill. First, the economic framework used for analyzing mandates directed to workers as a whole yields misleading and incorrect conclusions when applied to accommodation mandates if restrictions on wage and employment differentials are binding. Even a mandated accommodation whose value exceeds its cost produces many of its gains to disadvantaged workers through distributive factors; at the same time, an accommodation whose value falls short of its cost may produce gains for disadvantaged workers due to such factors. Both of these conclusions are opposite those reached using the framework for mandates directed to workers as a whole. These conclusions are important because together they suggest that accommodation mandates have far greater potential than might otherwise be realized to achieve distributive gains for disadvantaged workers.

The other critical set of conclusions from the above discussion concerns the relative wage and employment effects of accommodation mandates and antidiscrimination law (important for purposes of Part II's empirical analysis). These conclusions are summarized in the first and second rows of table 1 below.

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*Public Funding for Disability Accommodations: A Rational Solution to Rational Discrimination and the Disabilities of the ADA*, 33 HARV. C.R.-C.L. L. REV. 197, 217-218, 219 (1998).

**Table 1: Effects of accommodation mandates and antidiscrimination law on disadvantaged workers**

		Effect on relative wage	Effect on relative employment level
Restrictions on wage and employment differentials are fully binding	Value of accommodation or antidiscrimination law equals or exceeds cost	Rises or stays the same	Rises
	Value of accommodation or antidiscrimination law is less than cost	Rises or stays the same	Probably rises
Restrictions on wage differentials are fully binding; restrictions on employment differentials are partially binding or nonbinding		Rises or stays the same	Falls (in all plausible scenarios)
Restrictions on wage differentials are fully nonbinding (irrelevant whether restrictions on employment differentials are binding)	Value of accommodation or antidiscrimination law exceeds cost	Falls	Rises
	Value of accommodation or antidiscrimination law is less than cost	Falls	Falls
Restrictions on wage differentials are partially binding; restrictions on employment differentials are partially binding or nonbinding		May rise or fall	Falls (in all plausible scenarios)

## **2. Restrictions on Wage and Employment Differentials Are Not Binding**

This section analyzes the effects of accommodation mandates and antidiscrimination law under the assumption that restrictions on wage and

employment differentials between disadvantaged and nondisadvantaged workers are not binding. One possibility is that restrictions on wage differentials are binding but restrictions on employment differentials are not; another is that neither restrictions on wage differentials nor restrictions on employment differentials are binding. In theory there is also a third possibility: that restrictions on employment differentials are binding, but restrictions on wage differentials are not. However, this case is unlikely to arise in practice. There is widespread agreement that, in practice, restrictions on employment differentials (particularly hiring differentials) are much harder to enforce than restrictions on wage differentials.<sup>75</sup> So if restrictions on employment differentials are binding, then restrictions on wage differentials are likely to be as well. For this reason I restrict attention to the first two cases.<sup>76</sup>

**a. Restrictions on Wage Differentials Are Binding, but Restrictions on Employment Differentials Are Not**

If restrictions on wage differentials across disadvantaged and nondisadvantaged workers are binding, then the two types of workers must receive the same wage, despite the fact that one group of workers—the disadvantaged group—will be more expensive to employ. Employers will thus have an incentive not to employ members of the disadvantaged group. Since restrictions on employment differentials are not binding, they will be able to get away with such behavior. (This is the critical contrast with the preceding section.)

*Restrictions on employment differentials are not binding at all.* Suppose first that there are no enforceable restrictions on employment differentials. So employers are completely free to refuse to employ disadvantaged workers.

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<sup>75</sup> See, e.g., Erling Barth & Harald Dale-Olsen, Monopolistic Discrimination and the Gender-Wage Gap 17 (NBER Working Paper No. 7197, June 1999) (arguing that restrictions on wage differentials are likely to bind); Posner, *supra* note 11, at 517-19 (arguing that restrictions on hiring differentials are difficult to enforce); Summers, *supra* note 2, at 182 (discussing the scenario in which wage differentials are precluded but refusals to hire particular categories of workers are not).

<sup>76</sup> The third possibility could easily be accommodated within my analytic framework, however.

What will happen? If they can meet all their needs with nondisadvantaged workers, then they will employ only these workers.

This will clearly be a change from the pre-legal-intervention situation if the two groups of workers were equally attractive to employers in the absence of the intervention, for then one would expect a mix of disadvantaged and nondisadvantaged workers in the employment market. But the same will be true even if disadvantaged employees were less attractive to employers in the absence of legal intervention. For in the absence of legal intervention, employers were completely free to pay these workers less to compensate for their relative unattractiveness, so we would still expect a mix of disadvantaged and nondisadvantaged workers in the employment market in question in the absence of legal intervention. Thus again the shift to hiring exclusively nondisadvantaged workers will mark a change with the imposition of the legal intervention.

So, according to this analysis, all disadvantaged workers will lose their jobs. It is critical to observe that this harm to disadvantaged workers occurs *regardless of the value of the accommodation or the antidiscrimination law to these workers*. Even if that value is incredibly high, so that they would be willing to work for far lower wages, employers are legally foreclosed from paying them lower wages, and thus the legal intervention ends up hurting them.

This conclusion contrasts strongly with the case of mandates directed to workers as a whole. In that setting, the greater the value of the mandate to the workers to whom it is directed, the more likely they are to gain from the mandate.<sup>77</sup> The same is not true in the case of accommodation mandates and antidiscrimination law if restrictions on wage differentials are binding while restrictions on employment differentials are not.

What if, contrary to the assumption above, employers cannot meet all of their needs with nondisadvantaged workers after the imposition of an accommodation mandate or antidiscrimination law? The results here look similar to the case discussed below, in which restrictions on employment differentials are imperfectly binding rather than not binding at all: some

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<sup>77</sup> See Lee, *supra* note 12, at 403-04; Summers, *supra* note 2, at 180.



disadvantaged workers will remain employed, but others who wish to work at the prevailing wage will not be able to find jobs.<sup>78</sup>

***Restrictions on employment differentials are partially binding.*** If restrictions on employment differentials are imperfectly binding rather than not binding at all—if, for example, there is some expected sanction for refusing to employ disadvantaged workers who wish to work at a given wage—then employers may decide to employ some disadvantaged workers. Imperfect enforcement of restrictions on employment differentials will therefore soften the conclusions reached above; but, still, as long as such restrictions are enforced only imperfectly, it will be the case that some disadvantaged workers who wish to work at the post-mandate or post-antidiscrimination-law wage will not be hired, while all nondisadvantaged workers who wish to work at this wage will be hired. (If too many nondisadvantaged workers wanted to work at the going wage, then there would be downward pressure on the wage until supply equaled demand for nondisadvantaged workers. But there will always be less demand for disadvantaged workers because they are more costly to employ and restrictions on employment differentials are only imperfectly binding, while restrictions on wage differentials are fully binding.) For this reason, we cannot be sure that an accommodation mandate or antidiscrimination law will benefit disadvantaged workers. And, again, this is true regardless of the value of the legal intervention to the targeted workers, in contrast to the case of mandates directed to workers as a whole.<sup>79</sup>

Where, as here, some disadvantaged workers remain employed after the legal intervention, the relative wage consequences of the accommodation mandate or antidiscrimination law will track those described above for the case in which both restrictions on wage differentials and restrictions on employment differentials are binding. This tracking is unsurprising in light of the fact that the assumption of binding restrictions on wage differentials is the same in both cases. Thus, as described above, the relative wage of disadvantaged workers will either stay the same (if they were not less

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<sup>78</sup> Donohue reaches similar conclusions in the case in which antidiscrimination law's restrictions on wage differentials but not employment differentials are binding. *See Donohue, supra* note 20, at 1426 n.36.

<sup>79</sup> These conclusions are stated informally. I do not set forth a rigorous model of imperfect enforcement of legal restrictions on employment differentials because there are many different ways to model that situation, and performing such a detailed exercise would take me far afield from my primary focus in this Article.

attractive to employers in the absence of the legal intervention) or rise (if they were less attractive to employers even before the legal intervention).

The key difference between the present case and the case in which restrictions on employment as well as wage differentials are binding is (not surprisingly) the effect of the legal intervention on the relative employment level of disadvantaged workers. While the relative employment level of those workers is likely to rise with the legal intervention when restrictions on employment as well as wage differentials are binding, here it will fall, as explained above.

A critical implication of the two preceding paragraphs is that, in contrast to the case of mandates directed to workers as a whole, one cannot infer efficiency consequences about legal intervention from movements in employment levels when restrictions on wage but not employment differentials are binding. One can make such inferences in the context of mandates directed to workers as a whole: if employment falls, then the mandated benefit must be valued at less than its cost.<sup>80</sup> The same is not true in the case of accommodation mandates. Reductions in (relative and absolute) employment levels may occur even if the value of the accommodation far exceeds its cost.

#### **b. Neither Restrictions on Wage Differentials nor Restrictions on Employment Differentials Are Binding**

I now consider the case in which neither restrictions on wage differentials nor restrictions on employment differentials are binding.

*Restrictions on wage differentials are not binding at all.* If restrictions on wage differentials are not binding at all, then employers will not have any reason to prefer one type of worker to the other; if too many of either type want to work at a given wage, then their wage will simply be lowered (since no legal restriction precludes this). It is thus irrelevant whether restrictions on employment differentials are imperfectly binding or not binding at all; the following analysis will apply equally to both cases.

Since employers are unrestricted in their ability to pay differential wages, each group of workers will face its own labor demand curve based on the

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<sup>80</sup> See, e.g., Lee, *supra* note 12, at 404.

unique total marginal revenue product of that group. The total marginal revenue product for disadvantaged workers will be lower than their total marginal revenue product prior to the legal intervention by the cost of the accommodation or the antidiscrimination law.<sup>81</sup> But the ultimate labor demand curve for disadvantaged workers will also depend on the employment level of nondisadvantaged workers, as discussed more fully just below.

The role of the employment level of nondisadvantaged workers in the labor demand curve for disadvantaged workers is, in fact, the *only* difference between the analysis of legal intervention here and the analysis of mandates directed to workers as a whole. For it is the only form of interdependence of the markets for the two types of workers. Since restrictions on wage differentials are not binding at all, each type of worker faces its own labor demand curve based on its unique total marginal revenue product of labor, and, as noted, it is irrelevant whether restrictions on employment differentials across two groups are binding. Since the two markets are largely independent, the analysis of the effects of legal intervention in this case largely tracks the analysis of the effects of a mandate directed to workers as a whole, a context in which only a single labor market is involved.

As noted in Part I.A.1 above, a mandate directed to workers as a whole will reduce the wage by less than the value of the mandated benefit, and increase the employment level, if the benefit is valued at more than its cost; by contrast, such a mandate will reduce the wage by more than the value of the benefit, and decrease the employment level, if the benefit is valued at less than its cost. The same two-tier set of results obtains here for disadvantaged workers. These workers' wage will fall by less than the value of the mandated accommodation or the antidiscrimination law, and their employment level will rise, if the value of the accommodation or antidiscrimination law exceeds its cost; conversely, disadvantaged workers' wage will fall by more than the value of the accommodation or antidiscrimination law, and their employment level will fall, if the value of the accommodation or antidiscrimination law is less than its cost. The reasoning in each case is the same as that offered by Summers for mandates directed to workers as a whole. The only difference in the context of accommodation mandates and antidiscrimination law is that the effects will be quantitatively larger than in the context of mandates directed to workers as a whole. The reason is that, as shown in the appendix, the

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<sup>81</sup> Cf. Summers, *supra* note 2, at 180 (explaining why a mandate directed to workers as a whole reduces the total marginal revenue product of labor by the cost of the mandated benefit).

employment level of *nondisadvantaged* workers will fall in the first case and rise in the second case. The fall in the first case shifts up the labor demand curve for disadvantaged workers, all else equal, and this means a smaller wage decrease and a larger employment gain; the rise in the second case has the opposite consequences.<sup>82</sup>

***Restrictions on wage differentials are imperfectly binding.*** If restrictions on wage differentials are imperfectly binding rather than not binding at all, then the wage and employment effects of accommodation mandates and antidiscrimination law will be very similar to their effects in the case in which restrictions on wage differentials are fully binding (see Part I.B.2.a above). Assume that the wages for the two groups of workers must be within some margin (less than what would occur in an unfettered market) of one another; the interpretation here is that wide divergences between the two groups' wages would attract regulators' attention. Since disadvantaged workers' wages will be "too high" relative to nondisadvantaged workers' wages compared to what employers would do in the absence of legal restrictions, employers will not want to hire disadvantaged workers unless they have no other alternative.

One possibility is that there are no restrictions on employment differentials and the supply of nondisadvantaged workers is adequate to meet employers' demand (the first case considered in Part I.B.2.a above). Here no disadvantaged workers will be hired. If, instead, the supply of nondisadvantaged workers is not adequate to meet employers' demand, or if

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<sup>82</sup> In light of the interrelationship between the two markets, even with fully nonbinding restrictions on wage and employment differentials, the analysis here takes issue with Craswell's assertion in the context of consumer mandates that "if sellers could charge different prices to [different buyers], each group of buyers could be analyzed as a separate submarket consisting of essentially homogeneous consumers," so that the conclusions for the case of a single market "could then be restated for each submarket." Craswell, *supra* note 31, at 373 n.19. In the present context, the conclusions are not precisely identical to the case of a mandate directed to workers as a whole, since the two submarkets for labor affect each other. It would seem that the same would be true in the consumer context, for reasons similar to those given in the text for employment markets, but I do not pursue the point here because it is quite distinct from my focus in the Article. In addition, as noted earlier, Craswell's model and analysis differ from the set-up here in several respects. See *supra* note 37.

restrictions on employment differentials are imperfectly binding rather than not binding at all, then some disadvantaged workers will remain employed, but others who wish to work at the prevailing wage will not be able to find positions. The implications for the relative wage and relative employment level of disadvantaged workers track those from Part I.B.2.a above.

Table 1 above provides a summary of all of this section's conclusions regarding the relative wage and relative employment effects of accommodation mandates and antidiscrimination law. This table will prove useful for the empirical discussion in Part II below.

### **C. When Will Restrictions on Wage and Employment Differentials Bind?**

The foregoing analysis shows the importance of whether restrictions on wage and employment differentials between disadvantaged and nondisadvantaged workers bind for determining the effects of accommodation mandates and antidiscrimination law. As described above, misimpressions often arise from an uncritical application of the model of mandates directed to workers as a whole to the distinct context of accommodation mandates. The present section takes the next step and describes when each set of circumstances with regard to whether restrictions on wage and employment differentials will bind is likely to obtain. It also discusses the important question of when the effects of legal intervention are likely to be felt in wages and when they are likely to be felt in employment levels.

#### **1. Scope of the Law**

Does the law always attempt to restrict wage and employment differentials between disadvantaged and nondisadvantaged workers in response to an accommodation mandate or antidiscrimination law? No one questions that the law attempts to restrict employment differentials; thus, employers cannot lawfully respond to the cost of a mandated accommodation or an antidiscrimination law by refusing to hire disadvantaged workers. Likewise, no one questions that employers cannot lawfully respond to the cost of an antidiscrimination law by lowering the wage earned by disadvantaged workers.

The question that requires a bit more discussion is whether wage adjustments are permitted in response to the cost of a mandated accommodation. It is clear that wage adjustments are *not* permitted based on the *average* cost of accommodating a member of the disadvantaged group. In *City of Los Angeles v. Manhart*,<sup>83</sup> the Court faced an antidiscrimination challenge to an employer's practice of charging women more than men for an employer-provided pension policy. The employer charged women more because women on average tend to live longer than men, and thus it costs more to provide women with a pension policy (holding fixed the annual payment). The extra charge was of course the functional equivalent of a lower wage due to the cost of the pension benefit. The Court held that the employer's practice of (in effect) adjusting women's wages in response to the cost of the pension plan violated Title VII.<sup>84</sup> *Manhart* stands for the proposition that an employer may not pay differential wages based on the average cost of employing members of two different groups, including when the cost differences stem from an accommodation mandate.

But is a wage adjustment permissible when it is clear that a *particular employee* is more costly to employ because of an accommodation mandate? Are there any examples of such cases? Most accommodation mandates do not fit this scenario, since the mandate increases the *average* cost of employing members of the disadvantaged group, but may not increase the cost of employing a given member of that group at all. For instance, the FMLA increases the average cost of employing disabled and female employees, but it will not increase the cost of employing certain individual disabled and female employees at all. The most obvious exception to this statement about the effects of accommodation mandates is the ADA's mandate of reasonable accommodation, since one could certainly imagine that in many cases it is reasonably clear that the cost of accommodating a given individual will be fairly well known in advance (based, for instance, on the employer's past experience in accommodating the individual's particular disability).

Perhaps because the issue seems most likely to arise in the ADA context (although for similar reasons one could imagine it arising in the pregnancy context too), the ADA context is the one area of which I am aware in which the question of the permissibility of wage adjustments has been addressed. The Equal Employment Opportunity Commission (EEOC) interpretive guidance under the ADA states that wage adjustments *are* permissible *if* a

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<sup>83</sup> 435 U.S. 700 (1978).

<sup>84</sup> See 435 U.S. at 707-14.

particular accommodation would be “unreasonable” or an “undue burden” in the absence of such adjustments.<sup>85</sup> It seems a clear inference from this provision that wage adjustments are *not* permitted when an accommodation is reasonable and is not an undue burden, despite the clear costs the accommodation may entail.<sup>86</sup>

Thus, it seems fairly clear that the law restricts both wage and employment adjustments in response to the cost of both mandated accommodation and antidiscrimination law. But are these restrictions enforceable in practice?

## **2. Occupational Segregation**

### **a. In General**

The first question that must be asked in considering whether restrictions on wage and employment differentials between disadvantaged and nondisadvantaged workers will be enforceable is whether there is substantial occupational segregation between the disadvantaged and nondisadvantaged groups. If there is such segregation, then restrictions on wage and employment differentials will be of little force. This is so because the only comparisons that are drawn in the law are those between workers *within the same employment market* (or, more technically, those performing the same or similar work). So if disadvantaged and nondisadvantaged workers are significantly concentrated in different employment markets, then their relative wages and employment levels will be largely unconstrained by the law.<sup>87</sup>

The primary consequence of occupational segregation is that an accommodation mandate or antidiscrimination law will have negative effects on the wages (both absolute and relative) of disadvantaged workers and either positive or negative consequences on their relative employment levels

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<sup>85</sup> See EEOC Guidance to 29 C.F.R. § 1630.15(d).

<sup>86</sup> See EEOC Guidance to 29 C.F.R. § 1630.9 (“[T]he individual’s willingness to provide his or her own accommodation does not relieve the employer of the duty to provide the accommodation should the individual for any reason be unable or unwilling to continue to provide the accommodation.”).

<sup>87</sup> Donohue and Siegelman made a similar point. See Donohue & Siegelman, *supra* note 52, at 1012.

(depending on the value versus the cost of the legal intervention). This follows from the discussion in Part I.B.2.b of the scenario in which neither restrictions on wage differentials nor restrictions on employment differentials are binding.

A further consequence of occupational segregation is that the costs of antidiscrimination law's restrictions on differential job conditions and facially neutral practices that have a disparate impact are likely to be relatively small. This is so because, once again, the absence of a comparison group will make it difficult to prove discriminatory job conditions or disparate impact. The implication is that an antidiscrimination law is not likely to generate much of a fall in the wage of disadvantaged workers. (But the same would not be true for an accommodation mandate.)

The foregoing analysis suggests that in circumstances of substantial occupational segregation, restrictions on wage and employment differentials across disadvantaged and nondisadvantaged workers will have limited force, and thus that the effects of an accommodation mandate or antidiscrimination law will be felt in significant part in reduced wages, just as in the original Summers framework. Indeed, the effects will be felt exclusively in wages (the employment level of disadvantaged workers will rise or stay the same) unless the cost of the legal intervention exceeds its value.

#### **b. A (Brief) Caveat from Cognitive Psychology**

While a standard economic analysis suggests that in cases of substantial occupational segregation the effects of an accommodation mandates or antidiscrimination law will be felt most significantly in wages, cognitive psychology suggests a reason that this may not be true. Costs that are difficult to monetize—such as the cost of certain accommodation mandates—may be less likely to be felt in wages and more likely to be felt in employment levels.<sup>88</sup> Thus, for instance, a requirement that employers expend a particular sum on health insurance for particular employees might be relatively likely to be felt in wages in cases of occupational segregation, while a requirement that employers permit job sharing, disability leave, or the like would be less likely

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<sup>88</sup> See Olivia S. Mitchell, *The Effects of Mandating Benefits Packages*, in *LABOR ECONOMICS AND PUBLIC POLICY* 297, 309 (Laurie J. Bassi & David L. Crawford eds., 1990).



to be felt in wages, since the costs of these forms of intervention would be harder to monetize. (Olivia Mitchell develops this point in more detail.<sup>89</sup>)

### 3. Occupational Integration

In situations in which significant occupational segregation does not exist, binding restrictions on wage differentials are likely to exist. For, as noted above, these restrictions are generally fairly easy to enforce.<sup>90</sup> And even apart from legal restrictions, employers have incentives to adhere to norms of pay equity because of morale problems that may result from paying different groups in the same employment market differently.<sup>91</sup>

The problem arises with enforcement of restrictions on *employment* differentials, which, as noted above, are notoriously harder to police. There is in fact a broadly held view that such restrictions are significantly limited in their enforceability.<sup>92</sup> This seems particularly likely to be true when disadvantaged workers comprise a relatively small proportion of the qualified labor pool for the relevant employment market. For in this case it will be difficult or impossible to make a statistical showing of differential hiring or firing by any but the very largest firms.

A numerical example will illustrate this point. Suppose that disadvantaged workers comprise .5% of the qualified labor pool for a given employment market. And consider an employer with 200 employees in that market. Suppose none of its workers are from the disadvantaged group. This could reflect differential treatment of disadvantaged workers, or it could reflect pure chance. On average a 200-employee division should have one disadvantaged worker, but random deviations from this result would be expected purely as a matter of chance. Now suppose that the employer has 400 employees in the relevant category and still no disadvantaged employees. This looks worse for the employer, but still the result could easily happen as a matter of chance. Only with a firm that has a very large number of employees in the relevant employment market will an outsider be able to draw reliable inferences from

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<sup>89</sup> *See id.*

<sup>90</sup> *See, e.g.,* Barth & Dale-Olson, *supra* note 75, at 17.

<sup>91</sup> *See, e.g.,* Truman F. Bewley, *Why Not Cut Pay?* 42 EUR. ECON. REV. 459 (1998).

<sup>92</sup> *See, e.g.,* Posner, *supra* note 11, at 517-19. Karlan & Rutherglen, *supra* note 15, at 33-34, give an account for the specific context of disability.

disparities between the number of disadvantaged workers in the employer's workforce and the number of such workers in the qualified population.

The point here is that the size of the disadvantaged group interacts with the size of the relevant employer division in determining how difficult it is to establish differential employment patterns for disadvantaged and nondisadvantaged workers. There are of course ways to attempt to deal with the problem of small firms (or small divisions within firms),<sup>93</sup> but these will not make the problem go away or even reduce it to a significant degree. Thus, the proportion of disadvantaged individuals in the qualified population, particularly in relation to the typical employer division size at issue, will be a critical factor in determining whether restrictions on employment differentials between disadvantaged and nondisadvantaged workers will bind. An implication of this discussion is that, for example, restrictions on employment differentials will be more likely to bind for African-American workers than for workers with disabilities.

Here too, also, we get some purchase on the question of whether the effects of an accommodation mandate or antidiscrimination law will be felt in wages or in employment levels. Regardless of the representation of disadvantaged workers in the qualified population, it will be easy to prove wage differentials. The problem is the difficulty of proving employment differentials. So if disadvantaged workers are a small proportion of the qualified population, we should expect the effects of legal intervention to be felt in employment levels and not in wages.

## **II. Applications**

The framework developed in Part I yields testable predictions about the wage and employment effects of accommodation mandates and antidiscrimination law. This Part tests those predictions by reference to empirical evidence on existing accommodation mandates and antidiscrimination laws. I consider four specific laws (or sets of laws): the ADA; laws governing employee benefit plans; the FMLA; and Title VII of the

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<sup>93</sup> See Michael J. Piette & Paul F. White, *Approaches for Dealing with Small Sample Sizes in Employment Discrimination Litigation*, 12 J. FORENSIC ECON. 43 (1999), for a recent discussion.

Civil Rights Act (as applied to race discrimination). The empirical evidence matches up well with the analytic predictions generated by the framework.<sup>94</sup>

## **A. The Americans with Disabilities Act of 1990**

### **1. Analysis**

The ADA creates a protected class of individuals who have an “impairment that substantially limits one or more . . . major life activities,” have a record of such an impairment, or are regarded as having such an impairment.<sup>95</sup> The ADA protects this class of disabled individuals through both an accommodation mandate—disabled individuals must be provided with “reasonable accommodation” in the workplace<sup>96</sup>—and a set of antidiscrimination prohibitions.<sup>97</sup>

What will the wage and employment effects of the ADA be? Under the framework developed in Part I, a critical factor in determining these effects is the degree to which restrictions on wage and employment differentials between disabled and nondisabled workers will be binding. If such restrictions are binding, then the ADA’s accommodation mandate and antidiscrimination prohibitions will leave unchanged or increase the relative wages of disabled workers and are almost certain to increase these workers’ relative employment levels (see Part I.B.1 above).

At least some of the gains to disabled workers from the ADA with binding restrictions on wage and employment differentials in place would come at the expense of nondisadvantaged (nondisabled) workers in the same employment market, as described more fully in Part I.B.1. Sherwin Rosen makes the cogent point that the nondisabled workers in the employment markets containing the greatest number of disabled workers are disproportionately

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<sup>94</sup> This Part examines all of the accommodation mandates mentioned in the introduction to the Article except for requirements that employers hire and retain employees regardless of their genetic make-up notwithstanding the higher average costs associated with individuals with an unfavorable genetic make-up. In contrast to the laws discussed in the text, these laws have not been subjected to empirical analysis.

<sup>95</sup> 42 U.S.C. § 12102(2).

<sup>96</sup> *See id.* § 12112(a), (b)(5).

<sup>97</sup> *See id.* § 12112(a), (b)(1)-(4), (6)-(7).

likely to be unskilled workers.<sup>98</sup> Rosen contends that it is inappropriate to place the burden of employing and accommodating the disabled on their shoulders.<sup>99</sup> This is an interesting and conceptually important point, but I do not think it is practically significant, since the scenario in which there are binding restrictions on both wage and employment differentials between disabled and nondisabled workers is unlikely to obtain in practice.

The reason it is unlikely to obtain in practice is *not* that neither binding restrictions on wage differentials nor binding restrictions on employment differentials will exist. This would occur with large-scale occupational segregation of disabled and nondisabled individuals, as described in Part I.C.2 above. But it does not seem to be the case that some employment markets are populated heavily or exclusively with disabled individuals while others are populated heavily or exclusively with nondisabled individuals; rather, all (or virtually all) employment markets are populated heavily or exclusively with nondisabled individuals, simply because disabled individuals are a relatively small proportion of the overall labor force. (And, indeed, a premise of Rosen's argument is that disabled and nondisabled workers are found in the same employment markets.)

Rather the issue is that there are unlikely to be binding restrictions on *employment* differentials between disabled and nondisabled workers. The reason is that, as noted in Part I.C.3 above, it is generally quite difficult for workers to establish that they were unlawfully refused employment by an employer. The difficulty is particularly acute for disabled workers, since they comprise a relatively small fraction of the qualified population (and the Supreme Court has made clear its reluctance to expand the size of the class of disabled individuals<sup>100</sup>); in this setting, the usefulness of statistical methods, comparing the number of disadvantaged workers hired to their representation in the qualified labor pool, is quite limited. The problem is likely to be even more acute under the ADA than it would be under a statute protecting a more homogenous, although equally sized, group of workers, since an individual with a particular disability might well have to show a disparity between the employer's workforce and the qualified population with respect to that disability, not "disability" in general. (A contrary approach could encourage "cream-skimming" by employers, since by hiring a sufficiently large number of people with relatively less serious disabilities they could immunize

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<sup>98</sup> See Rosen, *supra* note 15, at 27, 29; see also Weaver, *supra* note 13, at 15.

<sup>99</sup> See Rosen, *supra* note 15, at 27, 29.

<sup>100</sup> See, e.g., Sutton v. United Air Lines, 119 S. Ct. 2139, 2147-49 (1999).

themselves against challenges by rejected individuals with more serious disabilities.<sup>101)</sup>

The hypothesis then is that binding restrictions on wage differentials are likely to exist (since this is not a case of high occupational segregation), but binding restrictions on employment differentials are not likely to exist. In this scenario, legal intervention in the form of the ADA is predicted to increase or leave unchanged the relative wages of disabled workers while decreasing their employment levels, as explained in Part I.B.2.a. How well do these predictions about the wage and employment effects of the ADA match up with the data?

## 2. Empirical Evidence

The most comprehensive study of the empirical effects of the ADA is by M.I.T. economists Daron Acemoglu and Joshua Angrist, who compare wages and employment levels of disabled and nondisabled workers before and after the ADA went into effect.<sup>102</sup> Acemoglu and Angrist find that the wages of disabled workers exhibited no change relative to those of nondisabled workers, while employment levels fell significantly for disabled workers aged 21-39 relative to nondisabled workers in this same age cohort.<sup>103</sup> (They also find a significant decrease in employment levels for disabled men aged 40-58 relative to nondisabled men in this same age cohort, but the decline may be explained by increases in federal disability benefits receipts.<sup>104</sup> Acemoglu and Angrist find no effect at all on the employment levels of disabled women aged 40-58 relative to those of nondisabled women in this same age cohort.<sup>105</sup>) Acemoglu and Angrist's results are similar to, although more qualified than, those of an earlier paper by Thomas DeLeire, who found that the ADA had no negative effect (and indeed a slight positive effect) on the wages of disabled

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<sup>101</sup> See Richard V. Burkhauser, Robert B. Haveman, & Barbara L. Wolfe, *How People with Disabilities Fare when Public Policies Change*, 12 J. POL'Y ANALYSIS & MGMT. 251, 264-65 (1993).

<sup>102</sup> Acemoglu & Angrist, *supra* note 13.

<sup>103</sup> See *id.* at 13.

<sup>104</sup> See *id.* at 17-18.

<sup>105</sup> See *id.* at 13.

workers and a significant negative effect on the employment levels of these workers (with no distinctions across age groups).<sup>106</sup>

These results are consistent with the predictions generated above. The relative wages of disabled workers stayed the same or rose, while their relative employment levels fell in some or all instances. By contrast, if restrictions on both wage and employment differentials were binding, as Rosen's analysis of the ADA assumes, then the relative wage of disabled workers would stay the same or rise (as the empirical evidence shows), but the relative employment level of these workers would rise (contrary to the empirical evidence). Meanwhile, if neither restrictions on wage differentials nor restrictions on employment differentials were binding, then the relative wage of disabled workers would fall, again contrary to the empirical evidence.

In Acemoglu and Angrist's study, and also in DeLeire's work, the definition of a "disabled" worker is based on the individual's response to a government survey question about disability status. For instance, Acemoglu and Angrist identify disabled workers by the question, "Does [the individual] have a health problem or a disability which prevents him/her from working or which limits the kind or amount of work he/she can do?"<sup>107</sup> An affirmative answer to this question clearly does not map perfectly onto the ADA's definition of disability; someone could give a negative answer to the question yet be disabled within the meaning of the ADA (for instance, a person with asymptomatic HIV<sup>108</sup>), and, conversely, someone could give an affirmative answer and yet not be disabled within the meaning of the statute (for instance, someone whose poor vision precludes certain jobs in the transportation industry<sup>109</sup>). But it seems clear that the survey question measures something sufficiently close to the actual definition of disability under the ADA to be telling us something meaningful about the effects of the statute. In other words, if we learn that those who answer "yes" to the survey question experienced reduced relative employment levels and no reduction in relative

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<sup>106</sup> Thomas DeLeire, *The Wage and Employment Effects of the Americans with Disabilities Act* 2, 33 (1997) (working paper) (summarizing findings); *see also id.* at 24-32.

<sup>107</sup> Acemoglu & Angrist, *supra* note 13, at 10.

<sup>108</sup> *See Bragdon v. Abbott*, 524 U.S. 624 (1998) (holding that such a person is disabled within the meaning of the ADA).

<sup>109</sup> *See Sutton v. United Air Lines*, 119 S. Ct. 2139 (1999) (holding that such a person is not disabled within the meaning of the ADA).

wage levels in the aftermath of the ADA, I believe we learn something important about the effects of the ADA.

Definitional issues aside, a general problem with time series evidence such as that offered by Acemoglu and Angrist and by DeLeire is that other things relevant to the employment situation of disabled workers may have changed at the same time that the ADA went into effect. This makes it difficult to be certain that the changes in the employment situation of disabled workers resulted from the ADA rather than from these other factors. Acemoglu and Angrist offer several tests to distinguish between the effects of the ADA and the effects of other forces. First, they control for increases in federal disability benefits receipts, since such increases would obviously tend to cause reductions in disabled employment levels.<sup>110</sup> (Some individuals might not bother to work with more generous benefit levels.) Second, they examine reductions in disabled employment levels in states with a large number of ADA-related discrimination charges versus reductions in employment levels in states with fewer such charges, and they find much larger reductions in the former states.<sup>111</sup> (It should be noted, however, that variation in charge levels may not be an exogenous variable,<sup>112</sup> which weakens the strength of Acemoglu and Angrist's conclusion.) Third, Acemoglu and Angrist examine the change in disabled employment levels at small firms (many of which are not subject to the ADA) relative to medium-sized firms that are both subject to the ADA and likely to have relatively high compliance costs (compared to still larger firms), and they find that the employment declines are greater at the medium-sized firms.<sup>113</sup>

Acemoglu and Angrist also find that employment declines are greater at the medium-sized firms than at larger firms.<sup>114</sup> This finding provides important indirect support for the idea that enforcement of restrictions on employment differentials is a central issue in this context. Recall that enforcement is likely to be easier against large employers than against more modest-sized ones, since establishing that an observed disparity is unlikely to be a random event is far easier in the case of a large employer. This would

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<sup>110</sup> See Acemoglu & Angrist, *supra* note 13, at 16-18.

<sup>111</sup> See *id.* at 22.

<sup>112</sup> See Kenneth Y. Chay, *The Impact of Federal Civil Rights Policy on Black Economic Progress: Evidence from the Equal Employment Opportunity Act of 1972*, 51 INDUS. & LAB. REL. REV. 608, 612 (1998).

<sup>113</sup> See Acemoglu & Angrist, *supra* note 13, at 21.

<sup>114</sup> See *id.*

suggest that restrictions on employment differentials are more likely to be binding for large employers than for smaller ones. Acemoglu and Angrist's findings are consistent with this suggestion.

### 3. Normative Ramifications (Briefly)

From a normative perspective, the analytic predictions and empirical evidence on the ADA obviously raise troubling issues. If the ADA is likely to reduce the employment levels of disabled workers, is it undesirable, and should it be abandoned? A full answer to this question would obviously require extended discussion and would take me far afield from the central purposes of this Article, which are quite distinct from that normative issue. However, this short section will briefly describe some possible responses to the negative employment effects that the ADA may produce.

One response, frequently advocated by commentators, is to replace the ADA's prohibitions with a subsidy scheme encouraging employers to employ (and compensating them for employing) disabled workers.<sup>115</sup> But if one is troubled by the idea of a subsidy scheme in the context of race or sex discrimination (as many people are, on grounds of stigma and symbolism<sup>116</sup>), then the parallels between accommodation mandates and traditional antidiscrimination law suggested in this Article may render the subsidy alternative to the ADA problematic. A different alternative is to preserve the ADA while significantly increasing the damages available for violations (to improve employers' incentives to conform to restrictions on employment differentials between disabled and nondisabled workers). Under the Civil Rights Act of 1991, compensatory and punitive damages are potentially available in ADA actions but are subject to caps that vary with the size of the firm.<sup>117</sup> Even for the largest firms, the maximum amount of damages recoverable is \$300,000, far smaller than damages in many successful tort and

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<sup>115</sup> See, e.g., EPSTEIN, *supra* note 33, at 493-94; DeLeire, *supra* note 106, at 43; Moss & Malin, *supra* note 74, at 998.

<sup>116</sup> See, e.g., DERRICK BELL, *FACES AT THE BOTTOM OF THE WELL* 47-64 (1992); Donohue, *supra* note 47, at 619. Bell and Donohue were responding to proposals offered by Robert Cooter and David Strauss for the abandonment of Title VII in favor of a subsidy (and fine) system. See Robert Cooter, *Market Affirmative Action*, 31 *SAN DIEGO L. REV.* 133, 144-49 (1994); Strauss, *supra* note 48, at 1654-56.

<sup>117</sup> See 42 U.S.C. § 1981A(a)(2), (b)(3).



other civil actions.<sup>118</sup> Moreover, there are special limits on the availability of damages in cases that involve issues of reasonable accommodation.<sup>119</sup> Changing these restrictive rules could help to improve the degree to which the ADA's restrictions on employment differentials effectively constrain employers' behavior. Such a strategy could be usefully complemented by attending to the incentives and operations of institutions devoted to protecting employees' legal rights and to ways to enhance such institutions' effectiveness.<sup>120</sup>

## **B. Laws Governing Employee Benefit Plans**

### **1. Analysis**

This section analyzes the effects of accommodation mandates relating to employee benefit plans. These mandates typically involve accommodating the needs of female workers relative to male workers.

Consider an employer-provided health insurance plan that covers both male and female workers. For women of childbearing age, the medical expenses of childbirth substantially increase the cost of health insurance.<sup>121</sup> Prior to the enactment of the PDA (Pregnancy Discrimination Act) in 1978, many employers responded to this brute economic fact by excluding childbirth expenses from coverage altogether or by limiting coverage for them dramatically.<sup>122</sup> The PDA, however, made such measures unlawful.<sup>123</sup> The PDA thus imposed an accommodation mandate: female employees of

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<sup>118</sup> *See id.* § 1981A(b)(3)(D) (maximum damage cap).

<sup>119</sup> *See id.* § 1981A(a)(3).

<sup>120</sup> *See generally* Christine Jolls, An Empirical Investigation of Employee Advocacy Groups (working paper prepared for MacArthur Foundation Initiative on Emerging Labor Market Institutions).

<sup>121</sup> *See, e.g.,* Mark B. McClellan & David A. Wise, Where the Money Goes: Medical Expenditures in a Large Corporation 14 (NBER Working Paper No. 5294, Oct. 1995).

<sup>122</sup> *See* Gruber, *supra* note 18, at 623.

<sup>123</sup> *See* *Newport News Shipbuilding & Drydock Co. v. EEOC*, 462 U.S. 669, 678 (1983) (“When Congress amended Title VII in 1978, it unambiguously expressed its disapproval of both the holding and the reasoning of the Court in the *Gilbert* decision [upholding an exclusion of pregnancy from an otherwise-generally-applicable benefits plan].”).

childbearing age must be given additional benefits to accommodate their unique needs relative to male workers.

Another form of employee benefit that is more costly for female workers (of childbearing age) than for male workers is disability coverage (paid benefits for time out of work due to disability). Under the PDA, employers cannot exclude pregnancy and childbirth from a general plan that provides disability coverage to workers.<sup>124</sup> Thus, again, employers must accommodate the greater needs of female workers by providing an additional benefit.

What will the wage and employment effects of these accommodation mandates be? Again, a critical factor will be the degree to which binding restrictions on wage and employment differentials between disadvantaged and nondisadvantaged (here, female and male) workers exist. As described in Part I.C.1 above, with occupational segregation, neither restrictions on wage differentials nor restrictions on employment differentials are likely to bind. And in fact there is substantial occupational segregation by sex in employment markets.<sup>125</sup>

Accordingly, as described in Part I.B.2.b above, the relative wage of disadvantaged workers should fall with the imposition of a mandate, and their relative employment level should rise or fall depending on whether the value of the mandated accommodation exceeds or falls short of its cost. If value exceeds (or equals) cost, the relative employment level of disadvantaged workers will not fall at all; the whole effect of the intervention will be felt in wages. This view contrasts with the view of a Congressional committee concerned about imposing restrictions on wage differentials between men and women:

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<sup>124</sup> See *Newport News*, 462 U.S. at 678.

<sup>125</sup> See, e.g., Blau & Kahn, *supra* note 53, at 1439 (“[M]en and women are to a considerable degree segregated in different jobs.”); Francine D. Blau, Patricia Simpson, & Deborah Anderson, *Continuing Progress? Trends in Occupational Segregation in the United States Over the 1970s and 1980s*, 4 FEMINIST ECON. 29, 33-34 (1998) (proportion of members of one sex who would have to change occupations for the occupational distribution of men and women to be the same was over 50% in 1990); William A. Darity & Patrick L. Mason, *Evidence on Discrimination in Employment: Codes of Color, Codes of Gender*, 12 J. ECON. PERSP. 63, 69 (1998) (similar).

The cost of employing women is higher than the cost of employing men. If the effect of this bill [requiring equal pay] is to force them into a wage policy that will deny them the opportunity to make a wage differential, then it will surely follow that they will tend to employ men instead of women. It might then have the effect of destroying job opportunities for women rather than improving these opportunities.<sup>126</sup>

What this argument overlooks is the possibility that occupational segregation will mean that costs of employing women may be significantly or exclusively reflected in wage adjustments, despite the nominal existence of a legal prohibition on such adjustments. As discussed below, the empirical evidence supports this possibility. (Both the data discussed in this section and the data discussed in the following section, relating to the FMLA and other leave mandates, are relevant here.)

This analysis helps to shed light on the longstanding debate over whether provisions such as the accommodation mandates at issue here are or are not akin to the “protective” legislation that governed female workers earlier in the century (for instance, limitations on women’s work hours).<sup>127</sup> The economic framework developed in Part I reveals that one cannot sensibly analyze this question without first understanding the degree to which restrictions on wage and employment differentials between female and male workers are likely to bind. Whether legal intervention helps or hurts the targeted group, and to what degree, will depend critically on this factor. The analysis just above suggests that restrictions on wage and employment differentials frequently will not bind for female workers, due to occupational segregation, and, thus, that accommodation mandates targeted to female workers will be likely to be financed by those same workers in the form of lower wages. This is not to

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<sup>126</sup> Committee on Education and Labor, Legislative History of the Equal Pay Act of 1963, at 25, *quoted in* EPSTEIN, *supra* note 33, at 316 n.6; *see also* EPSTEIN, *supra* note 33, at 337-38 (suggesting that mandates of the sort discussed in the text would reduce the hiring of women of childbearing age). Note that between the passage of the Equal Pay Act in 1963 (the source for the legislative history quoted by Epstein) and the enactment of Title VII the following year, there was no legal prohibition on differential employment levels for men and women.

<sup>127</sup> *See generally* Issacharoff & Rosenblum, *supra* note 14, at 2172-89; Siegel, *supra* note 60, at 952-55; Wendy Williams, *Equality’s Riddle: Pregnancy and the Equal Treatment/Special Treatment Debate*, 13 REV. L. & SOC. CHANGE 325, 371-72, 377 (1984-85).

suggest a complete similarity with the old-style protective legislation; that legislation was based on stereotyped views of women's abilities and capacities rather than brute biological facts such as that it is women who bear biological children. The point, however, is that the two forms of legal intervention are similar in terms of ostensibly "protecting" women, but doing so to women's detriment in terms of wage or employment opportunities.

A corollary prediction stemming from the analysis here is that employers will not be particularly likely to respond to a mandate accommodating women by eliminating an employee benefits plan altogether. Justice Powell voiced a worry along these lines in his dissent in a case that extended *Manhart, Arizona Governing Committee v. Norris*;<sup>128</sup> Powell was concerned that employers would respond to the Court's ruling by curtailing their pension plans generally.<sup>129</sup> Richard Epstein makes similar arguments about *Manhart* and the PDA.<sup>130</sup> But the framework developed in this Article shows that these concerns are likely to be misplaced or, at a minimum, overstated. For what they overlook is the ability of *wages* to adjust in response to an accommodation mandate, due to the substantial occupational segregation of male and female workers. If the value of what is mandated equals or exceeds its cost, then the relative wage of disadvantaged workers will adjust by at least the cost of what is mandated, and thus the employer's overall costs will not change. Here there is absolutely no incentive to eliminate the employee benefits plan in response to an accommodation mandate. Even if the relative wage of disadvantaged workers falls by less than the cost of what is mandated, the fact that the wage can adjust in part reduces the incentive for the employer to drop the employee benefits plan altogether.

A complicating factor in the analysis of wage and employment effects of accommodation mandates in the health insurance context (which is not present in the case of disability benefits) is that it is not only the employee who may affect health plan costs but also the employee's spouse, who may be covered under the plan. Thus, while an accommodation mandate relating to health care plans imposes costs associated with female employees, it may also impose costs associated with *male* employees to the extent that those employees' spouses are covered by the plan. But this effect seems likely to be weaker than the direct effect related to female employees. (Certainly the empirical evidence discussed just below suggests that it is.)

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<sup>128</sup> 463 U.S. 1073 (1983).

<sup>129</sup> See 463 U.S. at 1098 & n.4 (Powell, J., dissenting).

<sup>130</sup> See EPSTEIN, *supra* note 33, at 326, 343, 347, 492-93.

Are the predictions offered here consistent with the evidence?

## 2. Empirical Evidence

The leading empirical study of the wage and employment effects of an accommodation mandate in the employee benefits context is Jonathan Gruber's well-known study of the effects of mandating health insurance coverage of childbirth expenses.<sup>131</sup> Gruber finds that mandating such coverage reduced the wages of married women of childbearing age relative to the wages of the workers least likely to be affected by the mandate (workers beyond childbearing age and unmarried male workers of childbearing age).<sup>132</sup> This is consistent with the prediction above. The magnitude of the fall is at least as large as the cost of the mandated benefit according to most of his estimates,<sup>133</sup> and the relative employment level of married women of childbearing age stayed the same or rose with the mandate;<sup>134</sup> both of these results support the conclusion that the value of the accommodation exceeded its cost. Thus, in all, the results support the prediction that the effects of the legal intervention will be felt in the wages of the accommodated workers.

Gruber's study focuses on the health insurance context. The wage and employment effects of accommodation mandates in the context of disability coverage have not, to my knowledge, been studied empirically. There is a recent empirical study of the effects of childbirth disability coverage *voluntarily provided* by employers (not mandated), and this study finds a *positive correlation* between having childbirth disability coverage and the

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<sup>131</sup> Gruber, *supra* note 18. Gruber examines the effects of state laws mandating health insurance coverage of childbirth expenses. *See id.* at 623. Such state mandates are preempted by Employment Retirement Income Security Act (ERISA) insofar as they attempt to regulate employers who self-insure, but they are fully applicable to insurer-provided health plans. *See Metropolitan Life Insurance Co. v. Massachusetts*, 471 U.S. 724 (1985).

<sup>132</sup> *See* Gruber, *supra* note 18, at 630-31, 633, 636.

<sup>133</sup> *See id.* at 630-31, 633, 636. Gruber performs a number of regressions; one set of regressions did not yield statistically significant results, *id.* at 638, while the others yielded statistically significant results along the lines described in the text.

<sup>134</sup> *See id.* at 623, 633, 637.

wage level (contrary to the prediction offered above).<sup>135</sup> However, the well-known difficulty with trying to estimate the effects of providing a benefit from differences between groups who do and do not receive it on a *voluntary* basis is that with voluntary provision, the two groups of workers receive different treatment precisely *because* they have opted into different jobs, and thus they may differ along many dimensions and may not be good comparison groups for one another.<sup>136</sup> The problem is similar to the one that plagues studies that find, for instance, that employees who receive pension benefits also receive higher wages.<sup>137</sup> No one thinks that it is reasonable to conclude from this evidence that pension benefits increase wages; rather the likelihood is that workers who are in the sorts of jobs that provide pension benefits have other qualities that also lead them to earn higher wages. The contrast with a mandate is that the employer does not choose to offer the benefit; all employers (or all those within certain categories, which are not particularly easy for employers to manipulate except very close to the margin) must offer the benefit in question.

Although there is not good empirical evidence on the effects of childbirth disability coverage mandates, there is good evidence on the effects of mandated unpaid leave for childbirth, the subject of Part II.C below.

### 3. Normative Ramifications (Briefly)

As in the ADA context, the analytic predictions and empirical evidence described above raise difficult normative issues. To the extent that the costs of rules governing employee benefit plans are fully borne by female workers, as the above discussion suggests, should those rules be abandoned or, at a minimum, subjected to rigorous efficiency scrutiny (since the distributive angle appears so unpromising in this context)? (As explained in Part I.B.2.b

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<sup>135</sup> See Jane Waldfogel, *Working Mothers Then and Now: A Cross-Cohort Analysis of the Effects of Maternity Leave on Women's Pay*, in GENDER AND FAMILY ISSUES IN THE WORKPLACE 92 (Francine D. Blau & Ronald G. Ehrenberg eds., 1997).

<sup>136</sup> See, e.g., Ruhm, *Parental Leave Mandates*, *supra* note 8, at 285; Ruhm, *Policy Watch*, *supra* note 8, at 179.

<sup>137</sup> Classic references include Charles Brown, *Equalizing Differences in the Labor Market*, 94 Q.J. ECON. 113 (1980), and Robert S. Smith & Ronald G. Ehrenberg, *Estimating Wage-Fringe Trade-Offs: Some Data Problems*, in THE MEASUREMENT OF LABOR COST 347 (Jack E. Triplett ed., 1983).

above, even with fully nonbinding restrictions on wage and employment differentials, disadvantaged workers will gain from an accommodation mandate if the accommodation is valued at more than its cost.)

As with the ADA, the existing regime could be replaced by a subsidy scheme under which employers would be compensated for the extra costs associated with female workers; but, as in the ADA context, this might be problematic on grounds of symbolism and stigma.<sup>138</sup> The other alternative discussed in connection with the ADA—attempting to enhance the enforcement of restrictions on employment differentials—will not help here, since, as suggested above, the central problem is occupational segregation. The difficulty in this context is *not* that the law as written is not enforced, but that the law simply does not apply to the treatment of workers across distinct employment markets. The “solution,” if one wanted to find one within the domain of employment law, would be to broaden the law to embrace notions of “comparable worth,” which would regulate male-female differentials across different employment markets.<sup>139</sup> Obviously a full assessment of the voluminous comparable worth debate is beyond the scope of this Article.<sup>140</sup>

## C. The Family and Medical Leave Act

### 1. Analysis

The Family and Medical Leave Act (FMLA), enacted in 1993, provides eligible employees with twelve weeks’ unpaid leave upon the birth or adoption of a child, the serious illness of the employee, or the serious illness of an immediate family member.<sup>141</sup> Permitting leave upon the birth or adoption of a child accommodates those workers who, for medical or family reasons, need or wish to take time off work during this period. This group will

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<sup>138</sup> See generally BELL, *supra* note 116, at 47-64; Donohue, *supra* note 47, at 619.

<sup>139</sup> See, e.g., AFSCME v. Washington, 770 F.2d 1401, 1404 (9th Cir. 1985).

<sup>140</sup> The literature here is enormous. For good overviews of competing views on the desirability of comparable worth from an economic perspective, see Daniel R. Fischel & Edward P. Lazear, *Comparable Worth and Discrimination in Labor Markets*, 53 U. CHI. L. REV. 891 (1986), and Barbara R. Bergman, *The Economic Case for Comparable Worth*, in COMPARABLE WORTH: NEW DIRECTIONS FOR RESEARCH 71 (Heidi Hartmann ed., 1985).

<sup>141</sup> 29 U.S.C. § 2612(a).

be composed disproportionately of women (at a minimum due to the period of disability following childbirth for women who bear biological children), so the leave mandate qualifies as an accommodation mandate.

But there is an important difference from the accommodation mandates discussed above. Here, at least part of the reason that the FMLA's leave requirement for new parents is accommodating of female workers is that for *social* reasons (or at least not reasons of biological necessity) female workers are more likely than male workers to take time off from work for parenting activities. While it is a biological necessity that a woman who bears a biological child miss at least a short period of work, it is not a biological necessity that a female worker spend twelve weeks at home caring for her newborn child. From a normative perspective, mandates that accommodate social rather than biological facts raise many distinct issues. (Of course, the dichotomy between social and biological factors is itself problematic.) But for purposes of the positive analysis in this section, the distinction between accommodation of biology and accommodation of social forces is not particularly significant.

The requirement under the FMLA that workers be given time off in the event of serious illness of an immediate family member accommodates those workers who wish to take time off in such circumstances. Again, this group will in today's society will probably be disproportionately composed of women (although again this is obviously a social phenomenon).

Finally, the requirement that workers be given time off in the event of their own serious illness accommodates those workers who face such illnesses. Since this group will be disproportionately (although of course not exclusively) composed of disabled workers, the requirement again qualifies as an accommodation mandate. Because the FMLA does not contain any "reasonableness" requirement or defense for "undue hardship" (apart from the limited exception along these lines for very highly compensated individuals<sup>142</sup>), the FMLA might entitle a worker to leave even if such leave were not required as a reasonable accommodation under the ADA.

What will the wage and employment effects of the FMLA be? With regard to the provisions that accommodate female workers (the first two provisions discussed above), the discussion of occupational segregation by sex from above applies here as well. As discussed above, with occupational segregation

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<sup>142</sup> See *id.* § 2614(b).



the effect of an accommodation mandate is to lower the relative wages of disadvantaged workers and to increase or decrease their relative employment levels depending on whether the value of the accommodation exceeds or falls short of its cost.

This analysis contrasts with the views expressed by other commentators. For instance, Issacharoff and Rosenblum write:

By assigning the costs of leave to firms . . . the FMLA reintroduces an incentive to discriminate against women at the hiring stage. For example, during testimony in 1989, the House Subcommittee on Labor-Management Relations was told in no uncertain terms: ‘Faced with mandated parental leave, a business owner choosing between two qualified candidates—one male and one female—would be tempted to select the male.’<sup>143</sup>

What this account overlooks is that in a labor market with substantial occupational segregation, the choice posited here—between a male and a female candidate—may be the real choice facing employers far less often than one would think. In an occupation such as nursing, elementary school teaching, hotel cleaning, plumbing, or construction (and obviously the list is much longer), that choice will rarely occur. And wages can adjust (making employment responses unnecessary) to the extent that there is not a significant comparison group of the other sex. As described below (and also in the previous section), there is empirical evidence of just such wage adjustments.<sup>144</sup> This is of course not to say that the effect of a mandate such as the FMLA will never be reflected in reduced employment opportunities rather

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<sup>143</sup> Issacharoff & Rosenblum, *supra* note 14, at 2192 (quoting Family and Medical Leave Act of 1989: Hearings Before the Subcomm. on Labor-Management Relations of the House Comm. on Education and Labor, 101st Cong., 1st Sess. 76, 102 (1989) (statement of Dr. Earl Hess, U.S. Chamber of Commerce)).

<sup>144</sup> The exception to the prospect of wage adjustments, even in a highly segregated labor market, is the case of a binding minimum wage. This might explain press reports that a newly enacted maternity leave law in Brazil reduced the hiring of women even in traditionally female occupations such as low-level office work, hotel staff and cleaning services. *See* Marlise Simons, *Brazil Women Find Fertility May Cost Jobs*, N.Y. TIMES, Dec. 7, 1988, at A11.

than reduced wages for female workers; it is just to say that this is not the most likely consequence.

There is, however, a cognitive-psychology caveat to the prediction of wage rather than employment level adjustments. While the accommodation mandates discussed in the previous section involved employee benefits whose costs were quite clear and tangible, the cost of unpaid leave is likely to be far more ambiguous. The employer is not confronted with an increase of \$X in the cost of its employee benefit plan. Rather it faces the hard-to-monetize disruption of losing an employee temporarily and having either to replace the employee or reassign the individual's tasks to others.<sup>145</sup> For reasons of cognitive psychology, as discussed in Part I.C.2, accommodation mandates that impose such hard-to-monetize costs are, all else equal, more likely to be reflected in reductions in the relative employment levels of disadvantaged workers and less likely to be reflected in reductions in their relative wages. To the extent that this is true, the worry about employment effects voiced by Issacharoff and Rosenblum becomes more plausible.

Turning now briefly to the FMLA's accommodation of the needs of disabled workers through the leave requirement for employees with serious illnesses, what are the wage and employment effects likely to be? As discussed in Part II.A.1 above, mandates that accommodate disabled workers are predicted to leave unchanged the relative wages of these workers while reducing their relative employment levels.

## 2. Empirical Evidence

The effects of the FMLA on disabled workers' relative wages and relative employment levels are likely to be difficult to disentangle from the effects of the ADA on these things. The ADA went into effect in July of 1992,<sup>146</sup> the FMLA in August of 1993.<sup>147</sup> The roughly contemporaneous effective dates of the two laws make it hard to tell what the effects of each on disabled workers are. Thus it is possible that the empirical studies of the ADA discussed above may reflect a mix of ADA effects and FMLA effects. To the extent that this is true, the empirical findings (no reduction in relative wages, and reductions in

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<sup>145</sup> Issacharoff & Rosenblum, *supra* note 14, at 2191 summarize the costs of short-term leaves for employers.

<sup>146</sup> See Angrist & Acemoglu, *supra* note 13, at 3.

<sup>147</sup> See Waldfogel, *supra* note 8, at 282.

relative employment levels) are consistent with the analytic predictions about the FMLA offered above.

More specific evidence exists on the effects of the FMLA on female workers. The most obvious approach, of course, is to examine female workers' relative wages and relative employment levels in the aftermath of the FMLA, much as Acemoglu and Angrist examined the relative wages and employment levels of disabled workers in the aftermath of the ADA. Jane Waldfogel takes such an approach.<sup>148</sup> She finds no consistent pattern of statistically significant results; many of her estimated coefficients are statistically insignificant, and in some cases where estimates are significant, they have surprising signs.<sup>149</sup> (For instance, Waldfogel finds significant post-FMLA wage declines for women of childbearing age employed by firms too small to be covered by the FMLA.<sup>150</sup>) The difficulty with Waldfogel's empirical approach is that many female workers were entitled to FMLA-type benefits even prior to the enactment of the FMLA.<sup>151</sup> This makes it hard to discern the effects of the FMLA. Indeed, it is not even clear that female leave-taking after the birth or adoption of a child increased in any discernible way after the FMLA's enactment. Waldfogel offers some evidence of an increase,<sup>152</sup> but Christopher Ruhm suggests a variety of difficulties with this evidence.<sup>153</sup> Probably for similar reasons, Jacob Alex Klerman and Arleen Leibowitz's study of earlier state-level leave mandates fails to uncover (with one exception noted below) statistically significant relationships between the mandates and either leave-taking behavior or employment levels of female

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<sup>148</sup> *See id.*

<sup>149</sup> *See id.* at 294-99.

<sup>150</sup> *See id.* at 299.

<sup>151</sup> *See id.* at 282.

<sup>152</sup> *See id.* at 289-94.

<sup>153</sup> Ruhm notes:

1) [T]he coefficients are frequently estimated imprecisely . . . ; 2) the growth in maternity leave is generally greater for persons working for large (500 or more employees) than medium (100-499 employees) employers, even though the smaller companies less frequently voluntarily provide leave benefits [prior to the FMLA]; and 3) there is no consistent indication that the FMLA had a larger effect in states without than in those with pre-existing maternity leave mandates.

Ruhm, *Policy Watch*, *supra* note 8, at 184.

workers with infants compared to a control group of female workers with older children.<sup>154</sup>

A potentially more reliable test of the effects of a law like the FMLA comes from looking at the effects of European laws mandating leave after the birth of a child. The leading study in this area is by Christopher Ruhm.<sup>155</sup> Ruhm examines the effects of laws that mandate paid parental leave, which is taken almost exclusively by female workers.<sup>156</sup> Although the leave is paid, the government covers most or all of the wage costs, so the only (or main) cost to employers is the same as the cost under the FMLA: the disruption in operations and need to rely on temporary replacements or substitutes among the existing workforce.<sup>157</sup> Ruhm finds that mandated leave is negatively related to the relative wages of female workers and positively related to their relative employment levels.<sup>158</sup> These results are precisely consistent with the predictions offered above.

Ruhm's results are robust across a range of specifications.<sup>159</sup> The only exception is that the effect of having some mandated leave versus none, as distinguished from the effect of having a short mandated leave versus a long

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<sup>154</sup> See Jacob Alex Klerman & Arleen Leibowitz, *Labor Supply Effects of State Maternity Leave Legislation*, in GENDER AND FAMILY ISSUES IN THE WORKPLACE 65, 79 (Francine D. Blau & Ronald G. Ehrenberg eds., 1997) (finding no significant effect of leave mandates on leave-taking); *id.* at 81 (finding no significant effect of leave mandates on leave-taking or employment levels). Ruhm claims that Klerman and Leibowitz's "main results" are increases in leave-taking and employment levels, see Ruhm, *Parental Leave Mandates*, *supra* note 8, at 181, but those results come from specifications that fail to use a control group and thus are subject to problems that Klerman and Leibowitz describe, see Klerman & Leibowitz, *supra*, at 79 (explaining reasons for using women with older children as a control group); see also Lawrence F. Katz, *Commentary*, in GENDER AND FAMILY ISSUES IN THE WORKPLACE 86, 87 (Francine D. Blau & Ronald G. Ehrenberg eds., 1997) (stating that the control-group results are "more methodologically convincing").

<sup>155</sup> Ruhm, *Parental Leave Mandates*, *supra* note 8.

<sup>156</sup> See *id.* at 286.

<sup>157</sup> See *id.* at 289-90; see also Issacharoff & Rosenblum, *supra* note 14, at 2214.

<sup>158</sup> See Ruhm, *Parental Leave Mandates*, *supra* note 8, at 303-05 & Table IV.

<sup>159</sup> See *id.* at 305-309 & Table V.

mandated leave, has no statistically significant effect, rather than a statistically significant negative effect, on relative wages of female workers; this may be because a short leave, as opposed to a long leave, imposes relatively few costs on employers, and thus provides little occasion for a wage adjustment.

Ruhm's results also do not confirm the prediction based on cognitive psychology that the effects of difficult-to-monetize leave mandates will be felt in employment levels rather than in wages; his results instead support the traditional model of wage and employment effects in cases of occupational segregation. On the other hand, Klerman and Leibowitz find a statistically significant negative effect of recently-enacted (at the time of their study) state leave mandates on the employment levels of women with infants compared to a control group of women with older children.<sup>160</sup> It is possible that mandates are reflected in wage adjustments in European countries that have long experience with such intervention<sup>161</sup> (and hence where employers may be more capable of monetizing the costs of the intervention) but are reflected in employment level adjustments in the U.S., where such intervention is less familiar. On the other hand, the difference between Ruhm's results and those of Klerman and Leibowitz may simply reflect the difficulty of teasing out effects of leave mandates. (The latter possibility is given weight by the fact that an earlier, albeit more preliminary, study by Ruhm and Jackqueline Teague finds no difference between the employment effects of leave mandates on women and the employment effects of such mandates on men,<sup>162</sup> again suggesting the difficulty of getting robust results in this area.)

A further subtlety in discerning the effects of the FMLA or similar laws is that, as Waldfogel notes, these laws may have composition effects, moving women into better, higher-level jobs.<sup>163</sup> The analytic framework used here focuses on individual employment markets (recall the discussion above of the definition of an employment market), and the implicit assumption in the

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<sup>160</sup> See Klerman & Leibowitz, *supra* note 154, at 79.

<sup>161</sup> For a description of the history of the European programs, see Ruhm, *Parental Leave Mandates*, *supra* note 8, at 290-91.

<sup>162</sup> See Christopher J. Ruhm & Jackqueline L. Teague, *Parental Leave Policies in Europe and North America*, in *GENDER AND FAMILY ISSUES IN THE WORKPLACE* 133, 146-47 (Francine D. Blau & Ronald G. Ehrenberg eds., 1997).

<sup>163</sup> See Waldfogel, *supra* note 8, at 296; see also Ruhm, *Parental Leave Mandates*, *supra* note 8, at 290 (laws may increase firm-specific human capital).

empirical application of the framework is that the overall labor market is an aggregation of individual employment markets in each (or many) of which similar effects are observed. But if women move out of some markets and into others in response to the FMLA, the aggregate effects may be more mixed. On the other hand, to the extent that regressions control for individual demographic characteristics (as some but not all of the above analyses do), this issue is less likely to be significant.

### **3. Normative Ramifications**

Both the predictions and the evidence are somewhat less unambiguous in this section than in the two previous sections, but, to the extent that costs of accommodation mandates such as the FMLA tend to be largely or fully borne by female workers in the form of reduced wages, the normative ramifications are very similar to those discussed in the preceding section on employee benefit plans. Of special note in the FMLA context, however, is the fact that the subsidy alternative has been sketched out in some detail in a prominent article by Issacharoff and Rosenblum.<sup>164</sup> Issacharoff and Rosenblum recommend subsidies to employers for each woman who takes leave at the time of childbirth; the subsidies would be funded by a payroll tax similar to the tax that funds unemployment benefits.<sup>165</sup> As above, a central question about such an approach is the degree to which it is similar to or different from subsidy schemes advocated as alternatives to traditional prohibitions on race and sex discrimination, which are often regarded as problematic<sup>166</sup>

## **D. Title VII of the Civil Rights Act (Race Discrimination)**

### **1. Analysis**

The discussion until now has focused on accommodation mandates, but an important point of Part I was that there are significant parallels between accommodation mandates and antidiscrimination law. This section examines

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<sup>164</sup> Issacharoff & Rosenblum, *supra* note 14, at 2216-19.

<sup>165</sup> *See id.* at 2216-17, 2219.

<sup>166</sup> Again, Bell and Donohue (among others) raise questions about such schemes. *See* BELL, *supra* note 116, at 47-64; Donohue, *supra* note 47, at 619.

the empirically-most-studied antidiscrimination law—Title VII’s prohibition on discrimination on the basis of race.<sup>167</sup>

If binding restrictions on wage and employment differentials between minority and majority groups exist, Title VII’s prohibition on race discrimination will have the likely effect of increasing wages and employment levels of minority workers, as explained in Part I.B.1. But things are not necessarily so simple. As with disabled workers, and in contrast to the case of sex, the problem is not a large degree of occupational segregation (which would mean that *neither* restrictions on wage differentials nor restrictions on employment differentials would be likely to be binding), but rather that restrictions on employment differentials may not be binding. As already described, such restrictions are widely recognized to be difficult to enforce. At the same time, since minority workers are a larger proportion of the qualified population than individuals who possess any particular disability, restrictions on employment differentials are more likely to be binding in the case of minority workers than in the case of disabled workers.

Thus, in contrast to the above sections, here it is not possible to generate a strong a priori prediction about the effects of the legal intervention on employment levels. For *wages*, the prediction *is* unambiguous: the relative wages of minority workers will rise with Title VII. This is so because it is clear that minority workers’ wages were depressed relative to nonminority workers’ wages prior to the legal intervention. This prediction about wages holds whether or not restrictions on employment differentials are binding. But whether employment restrictions are binding is critical to the effects of Title VII on minority workers’ relative employment levels. Their relative employment levels will rise or fall with the enactment of the law depending on the degree to which restrictions on employment differentials are binding, and, as explained, this is harder to be confident about in the race context than in the context of disability.

## 2. Empirical Evidence

An enormous literature attempts to discern the effect of Title VII on the wages and employment levels of African-American workers. As with the ADA, the central difficulty is whether the changes that occurred in the aftermath of Title VII were caused by Title VII or instead by other factors that

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<sup>167</sup> See generally 42 U.S.C. § 2000e-2.

were changing at the same time that Title VII was enacted. The other factors include, most significantly, increasing levels of education and migration out of the South.<sup>168</sup> Although it is not possible to answer the question of causality definitively, my own view is that the weight of the evidence supports the claim that the changes that occurred after the enactment of Title VII were causally linked in substantial measure to the law's passage. In particular, I am persuaded by the arguments of John Donohue and Jim Heckman that the episodic nature of black progress and the match up of the timing with the enactment of Title VII support a causal interpretation<sup>169</sup> and also by the evidence assembled by Heckman and Brook Payner on the textile industry in South Carolina.<sup>170</sup>

How did wages and employment levels change in the wake of Title VII's enactment? The relative wages of African-American workers rose, as many studies have documented.<sup>171</sup> This is consistent with the prediction above.

There are fewer studies of employment effects, and they are more conflicting. Some studies conclude that the relative employment of African-American workers increased after the enactment of Title VII.<sup>172</sup> An interesting extension of this approach looks at the effect of expanding Title VII's coverage in 1972 and likewise finds positive relative employment effects for African-American workers.<sup>173</sup> But Donohue points to evidence of negative employment effects over the very long term and links this to the difficulty of

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<sup>168</sup> See John Smith & Finis Welch, *Black Economic Progress after Myrdal*, 27 J. ECON. LIT. 519 (1989).

<sup>169</sup> 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 (1991).

<sup>170</sup> James Heckman & Brook Payner, *Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina*, 79 AM. ECON. REV. 138 (1989).

<sup>171</sup> See, e.g., Donohue, *supra* note 47, at 621 (citing Donohue & Heckman, *supra* note 169, and John Bound & Richard Freeman, *What Went Wrong? The Erosion of Relative Earnings and Employment Among Young Black Men in the 1980s*, 107 Q.J. ECON. 201 (1992)); see also William Landes, *The Economics of Fair Employment Laws*, 76 J. POL. ECON. 507, 544 (1968) (state fair employment laws increased African-American workers' wages).

<sup>172</sup> See, e.g., Heckman & Payner, *supra* note 170.

<sup>173</sup> See Chay, *supra* note 112.



enforcing restrictions on employment levels.<sup>174</sup> Elsewhere, however, he notes the striking results of Heckman and Payner that suggest a positive effect on employment.<sup>175</sup> On balance, I believe that the weight of the evidence supports the view that Title VII improved the relative employment levels of African-American workers along with their relative wages. This suggests that not only restrictions on wage differentials but also restrictions on employment differentials are at least reasonably binding (or at least were at the time Title VII was enacted).

### 3. Normative Ramifications

The predictions and empirical evidence in this section suggest grounds for at least guarded optimism about the effectiveness of Title VII in achieving its desired objectives (in the context of race discrimination). Nonetheless, as already noted, there have been both calls for a replacement of employment discrimination law in this context with a subsidy scheme<sup>176</sup> and criticisms of such proposals.<sup>177</sup> The economic analysis offered above, along with the empirical evidence, seem to suggest that such proposals are less compelling in the context of laws against race discrimination than in the contexts discussed in the preceding sections.

## III. Accommodation Mandates and Antidiscrimination Law: The Parallels

This Part builds upon the analysis in Part I to offer a new set of reasons for viewing accommodation mandates as similar to, rather than fundamentally distinct from, antidiscrimination law. The relationship between the two forms of legal intervention is the subject of an old and large debate; some commentators claim that the two types of laws are similar,<sup>178</sup> while others claim that they are highly distinct.<sup>179</sup>

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<sup>174</sup> See Donohue, *supra* note 20, at 1426 n.36; Donohue, *supra* note 47, at 622 (citing Donohue & Heckman, *supra* note 169); see also Landes, *supra* note 171, at 544-45 & n.32 (state fair employment laws increased unemployment rates of African-American workers).

<sup>175</sup> See Donohue & Heckman, *supra* note 169, at 1615-16.

<sup>176</sup> See Cooter, *supra* note 116, at 144-49; Strauss, *supra* note 48, at 1654-56.

<sup>177</sup> See Bell, *supra* note 116, at 47-64; Donohue, *supra* note 47, at 619.

<sup>178</sup> See, e.g., CATHERINE A. MACKINNON, *SEXUAL HARASSMENT OF WORKING WOMEN* 113-14 (1979); Herma Hill Kay, *Equality and Difference:*

My goal here is certainly not to resolve every aspect of that large debate, and in particular I do not attempt to defend the broad claim that accommodation mandates and all aspects of antidiscrimination law are precisely alike from a comprehensive normative perspective.<sup>180</sup> Instead my more limited goal is to suggest the ways in which the analysis from Part I offers new insight into the relationship, and parallels, between accommodation mandates and antidiscrimination law. I do this in Part III.A below.

I also want to suggest a broader set of parallels between accommodation mandates and the disparate impact branch of antidiscrimination law. As explained briefly in Part I above, rules against employer policies with a disparate impact on disadvantaged workers often can be immediately redescribed as accommodation mandates. Part III.B below argues that this equivalence raises serious doubts about the validity of the argument that accommodation mandates are fundamentally distinct from antidiscrimination law.

#### **A. Economic Similarities**

A major point of Part I of this Article was that accommodation mandates and antidiscrimination law are sensibly analyzed within the same analytic framework. As described in Parts I.A.1 and I.A.2, the two forms of legal intervention have parallel effects on the supply and demand for disadvantaged workers' labor. Both accommodation mandates and antidiscrimination law tend to shift down the labor supply curve of these workers, since they make the employment market more attractive to these workers and thus increase their willingness to supply labor at any given wage. At the same time, both forms of legal intervention tend to shift down labor demand (all else equal),

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*The Case of Pregnancy*, 1 BERKELEY WOMEN'S L.J. 1, 31 (1985); Siegel, *supra* note 60, at 954-55.

<sup>179</sup> See, e.g., Issacharoff & Rosenblum, *supra* note 14, at 2155, 2196; Karlan & Rutherglen, *supra* note 15, at 3; Kull, *supra* note 15, at 199; Mashaw, *supra* note 15, at 219; Rosen, *supra* note 15, at 21; Schwab & Willborn, *supra* note 15.

<sup>180</sup> For a recent argument that the two forms of legal intervention are *not* similar from a normative perspective, see Mark Kelman, *Market Discrimination and Groups* (1999) (working paper). I do not agree with this view, but challenging it is beyond the scope of this Article.

since they both introduce new costs of employing disadvantaged workers. In the case of an accommodation mandate, the costs are those associated with providing the accommodation, while in the case of an antidiscrimination law, the costs are those associated with the law's restrictions on differential job conditions (under disparate treatment liability) and its prohibition on facially neutral practices that have a disparate impact.

The economic parallels between accommodation mandates and antidiscrimination law complement the usual reason for contending that the two forms of legal intervention are similar. The usual notion relies on the idea that accommodation is often necessary to achieve "equality of opportunity," which in turn is a component of nondiscrimination. As Herma Hill Kay writes in the context of pregnancy, "[E]quality of opportunity implies that [a] woman should not be disadvantaged as a result of that sex-specific variation [whereby women but not men bear children]."<sup>181</sup> "Since the man will not be disabled from work as the result of [having children], equal protection for the woman requires that she not be penalized if she does become disabled."<sup>182</sup> This may require providing "extra" protection or benefits (accommodation) for women; for instance, it may require "protection against disability resulting from pregnancy even in the absence of [general protection against disability]."<sup>183</sup> As the Supreme Court said in *California Federal Savings & Loan Assoc. v. Guerra*,<sup>184</sup> holding that the state of California could require additional benefits for pregnant workers, "[b]y 'taking pregnancy into account,' California's pregnancy disability-leave statute allows women, as well as men, to have families without losing their jobs."<sup>185</sup> The Court "shifted from a narrow workplace comparison to a broader comparison of men and women in their full familial roles."<sup>186</sup>

The economic parallels between accommodation mandates and antidiscrimination law add a new perspective to the claim that the two forms of legal intervention are similar rather than distinct. These parallels have not previously been recognized in the literature but follow directly from the economic framework in Part I.

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<sup>181</sup> Kay, *supra* note 178, at 31.

<sup>182</sup> *Id.*

<sup>183</sup> *Id.*

<sup>184</sup> 479 U.S. 272 (1987).

<sup>185</sup> 479 U.S. at 289.

<sup>186</sup> Martha Minow, *Forward: Justice Engendered*, 101 HARV. L. REV. 10, 41 (1987).

The economic parallels also question some of the arguments offered by proponents of the view that accommodation mandates are fundamentally different from antidiscrimination law. Consider the example of discrimination based on customer or coworker preference. In this setting, the employer is not treating one group of workers differently from another because of its own animus toward the disadvantaged group; rather, it is simply engaging in profit-maximizing behavior, just as is the employer who refuses to incur additional costs to provide accommodation to disadvantaged workers. In this setting, antidiscrimination law, like an accommodation mandate, will force the employer to incur additional costs in connection with the employment of the disadvantaged group.

In other words, it is obvious (and undisputed) that the law's definition of "discrimination" embraces actions that impose real financial costs on employers. The law does not reflect an ideal of forcing only "economic rationality" out of employers.<sup>187</sup> Indeed such an ideal would have, in the words of Senator Clifford Case, a floor manager of Title VII, "destroy[ed] the bill" due to the prevalence of customer and coworker discrimination.<sup>188</sup>

Commentators who distinguish sharply between accommodation and nondiscrimination contend that discriminatory treatment based on customer or coworker preference, unlike a failure to provide accommodation, constitutes "discrimination," even though both forms of behavior are profit-maximizing at least in a narrow sense.<sup>189</sup> The argument usually offered is that because the preferences of customers and coworkers here are based on animus, prohibitions on giving effect to such preferences through profit maximization by employers "count as" nondiscrimination rules. The difficulty with this argument is that it is not clear why the presence of animus *in some form* should be enough to place the behavior in the "discrimination" category rather than the "accommodation" category. Pam Karlan and George Rutherglen, for example, write that "discrimination occurs when individuals who are

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<sup>187</sup> For a powerful and eloquent recent defense of this claim, see Robert Post, *Prejudicial Appearances: The Logic of American Antidiscrimination Law*, 88 CALIF. L. REV. 1 (2000).

<sup>188</sup> See George Rutherglen, *Sexual Equality in Fringe-Benefit Plans*, 65 VIRG. L. REV. 199, 249-250 (1979) (quoting Senator Case).

<sup>189</sup> See, e.g., Karlan & Rutherglen, *supra* note 15, at 10; Kelman, *supra* note 180, at 14 n.18.

*fundamentally the same* are treated differently for illegitimate reasons.”<sup>190</sup> But what counts as “fundamentally the same”? Why should we say that two workers who will produce significantly different financial returns to the employer are “fundamentally the same”? Or, much more to the point, if we *are* going to say this (as I believe we should), then why isn’t a disabled worker who will produce significantly different financial returns, but only because of the worker’s disability (as much out of the worker’s control as race or sex), also “fundamentally the same”?

Karlan and Rutherglen go on to say that nondiscrimination requires employers to ignore “irrelevant characteristic[s]” that nonetheless upset or annoy customers or coworkers.<sup>191</sup> But why, or in what sense, are these characteristics “irrelevant” if they affect the employer’s profitability, and, if they *are* properly viewed by the law as irrelevant (as I would contend), then why aren’t other characteristics that affect the employer’s profitability, such as requiring accommodation, also properly viewed as irrelevant (as I would also contend)?

As already noted, an especially strong and comprehensive claim of equivalence of accommodation mandates and antidiscrimination law can be made for the special case of disparate impact liability. This topic is the subject of the next section.

## **B. The Special Case of Disparate Impact Liability**

As explained in Part I above, the requirements for liability under the disparate impact branch of antidiscrimination law can often be immediately redescribed as accommodation mandates.<sup>192</sup> In light of this fact, it is hard to see how accommodation mandates can be distinguished from disparate impact liability.

This insight into the equivalence of accommodation mandates and disparate impact liability suggests some obvious difficulties with the view that accommodation mandates are fundamentally distinct from antidiscrimination law. Many commentators have expressed such a view, and the argument has become especially commonplace since the enactment of the ADA, which

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<sup>190</sup> Karlan & Rutherglen, *supra* note 15, at 10.

<sup>191</sup> *Id.*

<sup>192</sup> *See supra* Part I.A.3.b.

imposes a facial accommodation requirement in the context of what otherwise looks like a traditional “antidiscrimination” law.

As a first example of the notion that accommodation mandates are fundamentally distinct from antidiscrimination law, Karlan and Rutherglen contend that the ADA’s accommodation requirement sets it fundamentally apart from Title VII (although it should be noted that Karlan and Rutherglen view both models as desirable from a normative perspective). The authors argue that “under the civil rights statutes that protect women [and] blacks . . . , plaintiffs can complain of discrimination against them, but they cannot insist upon discrimination in their favor.”<sup>193</sup> They contrast this approach with the approach under the ADA, which contains a facial accommodation requirement.<sup>194</sup> The authors later expand upon their notion that the ADA is unique in requiring accommodation in the following terms:

[T]he ADA declares it illegal to deny an individual an employment opportunity by failing to . . . chang[e] the job or physical environment of the workplace . . . .

This is a far different definition of ‘discrimination’ than the definition embraced in other areas of employment discrimination law. Title VII, for instance, essentially takes jobs as it finds them. It defines discrimination in a negative sense: employment practices are unlawful only if they prevent individuals from doing the job as the employer defines it. The failure to take positive steps to revamp the job or the environment does not constitute discrimination.”<sup>195</sup>

Stewart Schwab and Steven Willborn similarly contrast Title VII (nonaccommodating in their view) with the ADA (accommodating), as do Samuel Issacharoff and Justin Nelson.<sup>196</sup>

The difficulty with these views is that they fail to recognize the case law imposing accommodation requirements under the rubric of disparate impact

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<sup>193</sup> Karlan & Rutherglen, *supra* note 15, at 3.

<sup>194</sup> *Id.*

<sup>195</sup> *Id.* at 9.

<sup>196</sup> See Schwab & Willborn, *supra* note 15; Samuel Issacharoff & Justin Nelson, Discrimination with a Difference: Can Employment Discrimination Law Accommodate the Americans with Disabilities Act? (Mar. 24, 2000) (working paper).

liability under Title VII.<sup>197</sup> To be sure, duties of accommodation are unquestionably broader under the ADA's accommodation requirement than under Title VII; in the latter context an employer can avoid an accommodation by showing that its neutral practice is "job related" and "justified by business necessity," while in the former context it must be the case that the accommodation sought from the employer either is "unreasonable" or would cause "undue hardship."<sup>198</sup> As Karlan and Rutherglen correctly note, even a practice that survives the disparate impact test may be shown to be unlawful under the ADA's accommodation requirement: "As long as [a] heavy lifting requirement is job-related" (and presumably also consistent with business necessity, although Karlan and Rutherglen do not say this), "an employer may impose such a qualification even if it excludes a disproportionate percentage of female applicants."<sup>199</sup> But even if the requirement is job-related (and consistent with business necessity, although again the authors do not note this), "the employer may be compelled to modify it in order not to exclude a disabled applicant . . . ."<sup>200</sup> But this is purely a difference in degree between disparate impact liability and the ADA's accommodation requirement; it in no way detracts from the fact that *some* duties of accommodation are imposed as a matter of disparate impact law.

The notion that accommodation and nondiscrimination are fundamentally distinct is also a frequent theme in the work of other authors. Jerry Mashaw, for example, writes that "[b]ecause the disabled are not able, or are less able, to do certain things, things that the 'abled bodied' can do, it seems sensible to think that they usually will stand further back in the labor queue than do the nondisabled."<sup>201</sup> "That their employment and wage rates are lower would

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<sup>197</sup> In a footnote Karlan and Rutherglen note the availability of disparate impact theory of liability under antidiscrimination law, but they say that "an underlying assumption of the disparate impact case law is that it is the *selection procedures*, rather than the *elements of the job itself* as currently configured, that have caused the disparate impact." Karlan & Rutherglen, *supra* note 15, at 9 n.34 (emphasis added). But this view is inconsistent with the case law in contexts such as pregnancy and grooming discussed in Part I.A.3.b above; a rule prohibiting leave or requiring no facial hair is plainly an "element of the job itself" rather than a "selection procedure."

<sup>198</sup> See 42 U.S.C. § 2000e-2(k) (Title VII standard); *id.* § 12112(a), (b)(5) (ADA standard).

<sup>199</sup> Karlan & Rutherglen, *supra* note 15, at 4.

<sup>200</sup> *Id.*

<sup>201</sup> Mashaw, *supra* note 15, at 219.

seem to represent not discrimination, but the merit selection generally thought necessary in a competitive economy.”<sup>202</sup> In other words, requiring accommodation to enable the disabled to achieve rough parity in the labor market is not required as a matter of nondiscrimination. In a similar vein, Sherwin Rosen writes, “By forcing employers to pay for work site and other job accommodations that might allow workers with impairing conditions . . . to compete on equal terms, [the ADA] would require firms to treat unequal people equally, thus discriminating in favor of the disabled.”<sup>203</sup> Rosen’s view is consistent with Gary Becker’s broader notion that any requirement that employers hire workers in disproportion to their economic productivity (even if lower productivity is the result of animus on the part of coworkers or customers) is “discriminatory.”<sup>204</sup> Again, the ways in which disparate impact liability imposes accommodation mandates are simply not recognized or acknowledged by these authors.

The distinction between accommodation mandates and antidiscrimination law is also made in the Title VII context. Issacharoff and Rosenblum, for example, argue that Title VII imposes the “symmetrical model” of “equal treatment” rather than the “asymmetrical model” of accommodation requirements.<sup>205</sup> Issacharoff and Rosenblum distinguish between avoiding “discrimination” against pregnant workers and providing “affirmative accommodat[ion]” for the special needs of pregnancy.<sup>206</sup> (From a normative perspective, however, they, like Karlan and Rutherglen, consider both to be

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<sup>202</sup> *Id.* Andrew Kull, writing in the same symposium, makes a similar point. *See* Kull, *supra* note 15, at 199.

<sup>203</sup> Rosen, *supra* note 15, at 21.

<sup>204</sup> *See* Becker, *supra* note 45, at 40 n.1. John Donohue, in his work on employment discrimination law, distinguishes between “intrinsic equality,” which requires that workers are treated in accordance with their actual physical productivity (and no more), and the broader notion of “constructed equality,” which embraces accommodation as a component of nondiscrimination. *See* Donohue, *supra* note 48, at 2585-86, 2605-09. But I do not read him to make the claim that the second form of equality should be distinguished from the first on a normative level (although he notes that the two differ in certain positive respects, *see, e.g., id.* at 2610).

<sup>205</sup> *See* Issacharoff & Rosenblum, *supra* note 14, at 2196.

<sup>206</sup> *Id.* at 2155.



desirable.<sup>207</sup>) Issacharoff and Rosenblum write, “The antidiscrimination model is at best a clumsy vehicle for addressing the difficult questions of resource allocation” that arise in the context of accommodating pregnancy.<sup>208</sup> These authors also contend that accommodation mandates are difficult to distinguish from protective legislation of the sort upheld in *Muller v. Oregon*,<sup>209</sup> which permitted a state to impose maximum hour requirements on women but not men.<sup>210</sup> They note the way in which a “pedestal” for women can become a “cage.”<sup>211</sup>

One might respond to my claim that antidiscrimination law itself imposes accommodation requirements by urging that this is only a marginal or unimportant feature of antidiscrimination law. A striking recent example of this sort of argument may be found in an opinion by Judge Frank Easterbrook holding that the ADA is not a valid exercise of Congress’s power under section five of the Fourteenth Amendment.<sup>212</sup> Easterbrook’s central reason for

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<sup>207</sup> *Id.*; see also *id.* at 2214 (“[W]orking women, either individually or as a group, are not the appropriate cost-bearers for what is at bottom a social and biological imperative.”).

<sup>208</sup> *Id.* at 2158.

<sup>209</sup> 208 U.S. 412 (1908).

<sup>210</sup> See Issacharoff & Rosenblum, *supra* note 14, at 2173.

<sup>211</sup> *Id.* at 2173. At a few points later in their article, Issacharoff and Rosenblum do seem to make statements that embrace a broader view of equality that incorporates accommodation. See *id.* at 2197-98 (“In order to compensate for the fact that only women must take time off to have babies, and thus only women are exposed to the risk of losing a job or rank and seniority, equality of opportunity dictates in the first instance that there be some form of pregnancy leave available to women of childbearing years”) (emphasis added); *id.* at 2198 (“Working from this premise [that all people should be able to work and have a family], accommodating the unique biological abilities of pregnant workers ceases to look like a violation of the . . . mandate of equal treatment, and is metamorphosed into a genuine effort to have real equality in the workplace”). But for another instance in which Issacharoff and Rosenblum seem to be embracing the contrasting view that nondiscrimination and accommodation are highly distinct, see *id.* at 2158 (“Instead of applying the antidiscrimination model, which predominates in American jurisprudence, European law affirmatively encourages and even mandates direct accommodation of the special pregnancy-based needs of working women.”).

<sup>212</sup> See *Erickson v. Board of Governors*, 2000 WL 307121 (7th Cir. 2000).

this conclusion is that the ADA contains both disparate impact rules and an accommodation mandate, and neither of those things, he says, is central to, or even necessarily included in, the concept of “antidiscrimination”.<sup>213</sup> Easterbrook’s opinion thus recognizes and endorses the commonality of accommodation mandates and disparate impact liability<sup>214</sup> but then goes on to deny that *either* of these things is a true part of antidiscrimination law.

Easterbrook draws support for the idea that accommodation mandates are separate and distinct from antidiscrimination law by claiming that the Pregnancy Discrimination Act (PDA) does not require accommodation, contrary to the claim offered in Part I.A.3.b above.<sup>215</sup> Others make such claims as well. For instance, it is sometimes asserted that (apart from the FMLA) firms need not offer leave for childbirth if such benefits are not offered for comparable health conditions.<sup>216</sup> Employers “can treat pregnant women as badly as they treat similarly affected but nonpregnant employees,”<sup>217</sup> according to a recent and oft-cited opinion by Judge Richard Posner. (This is the ground on which Easterbrook rests his argument.<sup>218</sup>) ““An employer [need not] do anything more for his pregnant employees than he does for any other employees.””<sup>219</sup>

This remarkably common notion about pregnancy discrimination overlooks the point that, at the most basic doctrinal level, disparate impact

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<sup>213</sup> See *id.* at \*6 (“Because the ADA requires accommodation [and] forbids practices with disparate impact, it is harder than the [Age Discrimination in Employment Act (ADEA)] to characterize as a remedial measure. The ADEA was a *real anti-discrimination law* . . . .”) (emphasis added).

<sup>214</sup> See *id.* at \*3 (“[T]he ADA . . . requires employers to consider and to accommodate disabilities, and in the process extends beyond the anti-discrimination principle. 42 U.S.C. sec. 12112(b)(5)(A), (6) (defining failure to accommodate, *and criteria with disparate impacts*, as ‘discrimination’).”)

<sup>215</sup> See *id.* at \*3.

<sup>216</sup> See, e.g., Waldfoegel, *supra* note 8, at 282 n.1.

<sup>217</sup> *Troupe v. May Department Stores Co.*, 20 F.3d 734, 738 (7th Cir. 1994).

<sup>218</sup> See *Erickson*, 2000 WL 307121, at \*3 (7th Cir. 2000) (citing *Troupe*).

<sup>219</sup> Issacharoff & Rosenblum, *supra* note 14, at 2181 n.116 (quoting 123 Cong. Rec. 29,663 (1977) (statement of Sen. Mathias)); see also *id.* at 2182 (similar); Maria O’Brien Hylton, “*Parental Leaves*” and *Poor Women: Paying the Price for Time Off*, 52 U. PITT. L. REV. 475, 506 n. 138 (1991) (“[A]n employer who promptly discharges an employee who becomes disabled may also fire the disabled pregnant employee.”); *id.* at 512 (similar).

liability—which makes unlawful even entirely neutral practices if they disproportionately burden one group and are not adequately justified—would seem to apply in full in the pregnancy context. The PDA provides in its first clause that discrimination because of pregnancy is discrimination because of sex,<sup>220</sup> and discrimination because of sex indisputably can be established by a showing of disparate impact.<sup>221</sup> To be sure, the second clause of the PDA provides that “women affected by pregnancy, childbirth, or related medical conditions shall be treated *the same* for all employment-related purposes . . . as other persons not so affected but similar in their ability or inability to work”<sup>222</sup>—language that seems to suggest no special accommodation for pregnant workers. But *California Federal Savings & Loan Assoc. v. Guerra*<sup>223</sup> suggests a resolution of the tension between the first and second clauses of the PDA in favor of the first, for the Court held that the second clause did not “impose a limitation” on any accommodation of pregnancy but rather was “intended to overrule” the result in *Gilbert v. General Electric Co.*,<sup>224</sup> holding that an employer could exclude pregnancy coverage from a generally applicable disability plan.<sup>225</sup> It should be noted, however, that *Guerra* did not require the Court to decide specifically whether disparate impact liability could arise from the failure to accommodate pregnancy.<sup>226</sup>

One commentator has trenchantly observed that the Court in *Guerra* may have wanted to duck the disparate impact question because some (although not all) of the legislative history of the PDA suggests the absence of this form of liability, yet such a conclusion (no disparate impact liability) would have been contrary to the thrust of the Court’s reasoning in *Guerra*.<sup>227</sup> Relying

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<sup>220</sup> See Title VII of the Civil Rights Act of 1964 § 701(k), 42 U.S.C. § 2000e(k).

<sup>221</sup> See Title VII of the Civil Rights Act of 1964 § 703(k), 42 U.S.C. § 2000e-2(k).

<sup>222</sup> Title VII of the Civil Rights Act of 1964 § 701(k), 42 U.S.C. § 2000e(k) (emphasis added).

<sup>223</sup> 479 U.S. 272 (1987).

<sup>224</sup> 429 U.S. 125 (1976).

<sup>225</sup> See *Guerra*, 479 U.S. at 285 (stating *Guerra* Court’s view of the PDA’s second clause); *Gilbert*, 429 U.S. at 145-46 (summarizing holding that exclusion of pregnancy from a general disability plan was permissible).

<sup>226</sup> See *Guerra*, 479 U.S. at 292 n.32.

<sup>227</sup> See Note, *The Supreme Court, 1986 Term—Leading Cases*, 101 HARV. L. REV. 119, 320, 328. For the competing argument that the legislative history of the PDA does not suggest disapproval of disparate impact liability, see

heavily on the same anti-disparate-impact pieces of legislative history, the Reagan Justice Department attempted to argue in the 1980s against the availability of disparate impact claims for pregnant workers.<sup>228</sup> But the argument was unsuccessful; the Seventh Circuit, in an important opinion, recognized the continuing availability of disparate impact liability in the pregnancy context.<sup>229</sup> (And, as Part I.A.3.b above described, a number of courts have ruled against employers on specific disparate impact claims in the pregnancy context.<sup>230</sup>) Indeed, even a Title VII minimalist such as Richard Epstein concludes that “on the face of matters, it appears that the full apparatus of disparate impact . . . would apply to pregnancy cases under the statute, as it does to ordinary cases of sex discrimination.”<sup>231</sup> In short, the better and more reasoned view by far, I believe (with Epstein), is that disparate impact liability is fully available in the pregnancy context.<sup>232</sup> And,

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Deborah A. Calloway, *Accommodating Pregnancy in the Workplace*, 25 STET. L. REV. 1, 41-42 (1995); Siegel, *supra* note 60, at 937-38.

<sup>228</sup> See *Scherr v. Woodland School Community Consolidated District No. 50*, 867 F.2d 974, 977-81 (7th Cir. 1988).

<sup>229</sup> See *id.*

<sup>230</sup> See *supra* note 59 (citing authority).

<sup>231</sup> EPSTEIN, *supra* note 33, at 348.

<sup>232</sup> Disparate impact liability in the pregnancy context is most easily defended in the context of employer policies governing leave and relief from burdensome job duties (such as lifting)—policies that go to the basic issue of whether a pregnant worker will be able to maintain her job despite the biological ramifications of pregnancy and childbirth. A broader application of disparate impact theory would also embrace employee benefit plans and say that women should be fully insured against the financial costs of pregnancy and childbirth (in their biological manifestations); thus, for example, employers would have to provide disability coverage for pregnancy and childbirth even if they did not provide it for other temporarily disabling conditions. Commentators who take this view include MacKinnon and Kay. See MACKINNON, *supra* note 178, at 111-16; Kay, *supra* note 178, at 31. But this application of disparate impact liability is more problematic than its application to leave policies and job duties, since it becomes hard to distinguish the broader application from the very broad argument that employers (if they do not provide fringe benefit plans) should have to pay higher wages to women than to men performing comparable work. Then-Justice Rehnquist exploited just this equivalence in *Gilbert v. General Electric Co.*:

on this view, antidiscrimination law as applied to pregnancy imposes accommodation mandates in favor of pregnant workers.

But even accepting disparate impact liability in pregnancy cases, there remains Easterbrook's notion that such liability, with its imposition of accommodation requirements, is simply not central to Title VII's antidiscrimination regime as a whole. A good way to test the truth of this contention is to ask whether it would matter if disparate impact liability were eliminated from Title VII, so that the Title VII standard mirrored the constitutional standard.<sup>233</sup> I think it is clear that it would matter a great deal if Title VII were altered in this way. Certainly Congress seemed to think it would matter, since it quickly responded to Supreme Court decisions cutting back on (although not even eliminating) disparate impact liability by statutorily codifying this form of liability, and its contours, in the Civil Rights Act of 1991.<sup>234</sup>

Thus it does not seem to me a cogent reply to the imposition of accommodation requirements through disparate impact liability to say that disparate impact liability is peripheral or unimportant to Title VII's antidiscrimination regime. And as long as disparate impact liability is a meaningful component of antidiscrimination law, the way in which such liability imposes accommodation requirements provides an important

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[T]he cost to insure against [disability] risks is, in essence, nothing more than extra compensation to the employees, in the form of fringe benefits. If the employer were to remove the insurance fringe benefits and, instead, increase wages by an amount equal to the cost of the 'insurance,' there would clearly be no gender-based discrimination, even though a female employee who wished to purchase disability insurance that covered all risks would have to pay more than would a male employee who purchased identical disability insurance, due to the fact that her insurance had to cover the 'extra' disabilities due to pregnancy.

429 U.S. 125, 140 n.17 (1976). For this reason disparate impact liability seems harder to defend in the special context of employee benefits than in other contexts, which were the primary focus of my discussion in this Article.

<sup>233</sup> See *Washington v. Davis*, 426 U.S. 229 (1976).

<sup>234</sup> See *Wards Cove Packing Co. v. Atonio*, 490 U.S. 642 (1989); 42 U.S.C. § 703(k) (altering certain elements of *Wards Cove*); see also *Watson v. Fort Worth Bank & Trust*, 487 U.S. 977 (1988) (plurality opinion the year before *Wards Cove* increasing the difficulty of making out disparate impact claims).

suggestion of the broader similarity of accommodation mandates and antidiscrimination law.

## **Conclusion**

Antidiscrimination law is an old and enormous topic; accommodation mandates provide newer and less well-explored terrain. Because they are relatively new, accommodation mandates have not been well understood, particularly insofar as the critical dimension of their effects on the wages and employment levels of the accommodated group is concerned. The framework developed in this Article provides a systematic way to understand those effects, and the empirical evidence discussed in Part II suggests the predictive power of the framework.

The wage and employment effects of antidiscrimination law should likewise be analyzed within this framework, as explained above. More broadly, accommodation mandates are hard to distinguish from applications of the disparate impact branch of antidiscrimination law; these similarities provide a new set of arguments for viewing the two forms of legal intervention as similar rather than distinct.

Because accommodation mandates and antidiscrimination law are for many advocates rooted in claims of rights rather than economics, it may upon first glance seem unnatural to examine them within the framework I have used here. But because, as shown above, these forms of legal intervention create costs, and because they operate against the backdrop of employment markets in which employers remain largely free to adjust wage and employment levels in response to such costs, it is critical to examine these laws from an economic perspective. Indeed, a failure to do so leaves one vulnerable to the arguments of opponents of such laws (often economists or economically oriented commentators) that the laws will tend to harm their intended beneficiaries—an argument that this Article has shown to be less valid in the context of accommodation mandates, which operate against the backdrop of antidiscrimination law, than in the context of mandates directed to workers as a whole.

## Appendix

This appendix contains formal proofs of the claims in the text that cannot be rigorously established with purely verbal reasoning. They are provided for the benefit of interested readers but are in no way necessary for a full understanding of the Article, all of whose conclusions are explained with verbal intuition in the text.

The proofs offered here make use of some notation. Let  $E_d$  denote the employment level of disadvantaged workers;  $W_d$  the wage level of this group;  $E_n$  the employment level of nondisadvantaged workers;  $W_n$  the wage level of nondisadvantaged workers;  $C (\geq 0)$  the cost of a mandated accommodation or antidiscrimination law;  $G (\geq 0)$  the generalized discrimination coefficient; and  $V$  the value of a mandated accommodation or antidiscrimination law. (These concepts are defined in the text.) Also let MRPL be the marginal revenue product of labor, a decreasing function of the total level of employment;  $S_d$  the labor supply of disadvantaged workers, a nondecreasing function of the wage earned by these workers;  $S_n$  the labor supply of nondisadvantaged workers, a nondecreasing function of the wage earned by them;  $D_d$  the labor demand for disadvantaged workers; and  $D_n$  the labor demand for nondisadvantaged workers.

Prior to the imposition of an accommodation mandate or antidiscrimination law, the wages earned by disadvantaged and nondisadvantaged workers will be given by the following equations:

$$W_d = \text{MRPL}(E_d + E_n) - G; \quad (\text{A1})$$

$$W_n = \text{MRPL}(E_d + E_n). \quad (\text{A2})$$

Disadvantaged workers' wage is lower than nondisadvantaged workers' wage whenever the generalized discrimination coefficient ( $G$ ) is positive.

The labor supply curves for the two groups of workers are given by

$$E_d = S_d(W_d);$$

$$E_n = S_n(W_n).$$

The system comprised of these four equations contains four unknowns. Let  $(W_d^\circ, W_n^\circ, E_d^\circ, E_n^\circ)$  denote a solution to the system. I assume an interior solution:  $E_d^\circ > 0$  and  $E_n^\circ > 0$ .

After the imposition of an accommodation mandate or antidiscrimination law, the labor supply curves for the two groups of workers are given by

$$E_d = S_d(W + V); \quad (A3)$$

$$E_n = S_n(W). \quad (A4)$$

For labor demand, the effects will depend on the degree to which restrictions on wage and employment differentials are binding. The following analysis first examines the case in which both sets of restrictions are binding and then examines the case in which neither set of restrictions is binding.

### Restrictions on Wage and Employment Differentials Are Binding

With binding restrictions on wage differentials, the two groups of workers must receive a common wage after the legal intervention. This common wage,  $W$ , will be given by the average total marginal revenue product of labor for the two groups, where the total marginal revenue product for each group is given by the marginal revenue product from production minus the cost of the accommodation or antidiscrimination law:

$$W = [E_d/(E_d + E_n)][MRPL(E_d + E_n) - G - C] + [E_n/(E_d + E_n)]MRPL(E_d + E_n).$$

Rewriting:

$$W = MRPL(E_d + E_n) - [E_d/(E_d + E_n)](G + C). \quad (A5)$$

This equation, together with the labor supply equations in (A3) and (A4), yields a system of three equations in three unknowns. Let  $(W^*, E_d^*, E_n^*)$  denote a solution to this system.

*Explanation of why  $D_d'$  is steeper than  $D_d^\circ$  in figure 2.*

The curve  $D_d^\circ$  is given by equation (A1), while the curve  $D_d'$  is given by

$$W = MRPL(E_d + E_n) - G - [E_d/(E_d + E_n)]C. \quad (A6)$$

For a given value of  $E_n$ , the slope of the curve  $D_d^\circ$  is given by the derivative of MRPL with respect to  $E_d$ , while the slope of the curve  $D_d'$  is given by the derivative of MRPL with respect to  $E_d$  minus the derivative of  $[E_d/(E_d + E_n)]C$  with respect to  $E_d$ . The latter derivative is equal to  $[E_n/(E_d + E_n)^2]C$ , which is



nonnegative. So  $D_d'$  is steeper than  $D_d^\circ$ . Intuitively, when  $E_d$  rises, the wage level falls under equation (A1) for a single reason: MRPL falls. By contrast, when  $E_d$  rises, the wage level falls under equation (A6) for two reasons: MRPL falls, and the proportion of workers for whom the cost of accommodation or an antidiscrimination law must be incurred rises.

*Proof of claim that the wage and employment level of nondisadvantaged workers fall with an accommodation mandate or antidiscrimination law ( $E_n^* < E_n^\circ$  and  $W^* < W_n^\circ$ ).*

(a)  $E_n^* < E_n^\circ$ . The proof is by contradiction. Suppose that  $E_n^* \geq E_n^\circ$ . It follows that  $W^* \geq W_n^\circ$ , since labor supply is nondecreasing in the wage.  $W^* \geq W_n^\circ$  implies  $W^* \geq W_d^\circ$ , since  $W_n^\circ = W_d^\circ + G$ .  $W^* \geq W_d^\circ$  in turn implies  $E_d^* \geq E_d^\circ$ , again because labor supply is nondecreasing in the wage. But if  $E_n^* \geq E_n^\circ$  and  $E_d^* \geq E_d^\circ$ , then

$$\text{MRPL}(E_d^* + E_n^*) - [E_d^*/(E_d^* + E_n^*)](G + C) < \text{MRPL}(E_d^\circ + E_n^\circ),$$

since the marginal revenue product of labor is declining in the total level of employment (and  $E_d^* > 0$  since  $E_d^\circ > 0$  by assumption). So  $W^* < W_n^\circ$  (using (A2) and (A5)). This yields the desired contradiction.

(b)  $W^* < W_n^\circ$ . This follows directly from  $E_n^* < E_n^\circ$ , since the labor supply function for nondisadvantaged workers is nondecreasing in the wage (and is not a correspondence).

#### Neither Restrictions on Wage Differentials Nor Restrictions on Employment Differentials Are Binding

If restrictions on wage differentials are not binding, then the following two equations characterize the labor demand curves for disadvantaged and nondisadvantaged workers (and these equations do not depend at all on whether employment differentials are binding):

$$W_d = \text{MRPL}(E_d + E_n) - G - C; \tag{A7}$$

$$W_n = \text{MRPL}(E_d + E_n). \tag{A8}$$

These equations, together with the labor supply equations in (A3) and (A4), yield a system of four equations in four unknowns. Let  $(W_d^{**}, W_n^{**}, E_d^{**}, E_n^{**})$  denote a solution to this system.

*Proof of claim that the employment level of nondisadvantaged workers falls with the accommodation mandate or antidiscrimination law ( $E_n^{**} < E_n^\circ$ ) if the mandated accommodation or antidiscrimination law is valued at more than its cost and rises with the accommodation mandate or antidiscrimination law ( $E_n^{**} > E_n^\circ$ ) if the opposite value-cost relationship holds.*

Suppose to the contrary that  $E_n^{**} \geq [\leq] E_n^\circ$  when  $V > [<] C$ . This requires  $W_n^{**} \geq [\leq] W^\circ$ , since labor supply is a nondecreasing function of the wage. Substituting using the labor demand curves,  $W_n^{**} \geq [\leq] W^\circ$  implies

$$\text{MRPL}(E_d^{**} + E_n^{**}) \geq [\leq] \text{MRPL}(E_d^\circ + E_n^\circ).$$

Since  $E_n^{**} \geq [\leq] E_n^\circ$ , this in turn requires  $E_d^{**} \leq [\geq] E_d^\circ$ , which itself requires  $W_d^{**} + V \leq [\geq] W^\circ$ . Since  $V > [<] C$ , it follows that  $W_d^{**} + C < [>] W^\circ$ . But  $W_d^{**} + C = W_n^{**}$  (see (A1) and (A7)), so it must be true that  $W_n^{**} < [>] W^\circ$ . This yields the desired contradiction.