IS THE ADA EFFICIENT?

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The Americans with Disabilities Act (ADA) is a significant legal intervention designed to improve outcomes for people with disabilities. An informal model of worker-firm matching provides the organizing framework for this Article to explore the economic effects of disability discrimination law in the workplace. The framework shows how the presence of individuals with disabilities in the labor market creates precisely the conditions—incomplete and asymmetric information—that can lead to inefficient mismatching, "employee churning," and "scarring." In contrast to the conclusions of more conventional economic analyses of disability discrimination law, I argue that the statutory duty of reasonable accommodation can promote labor market efficiency by combating both churning and scarring. The duty to accommodate constrains employers whose private gains from discharging disabled employees often produce social losses which are borne by other employers and by public disability insurance schemes. The framework thus sheds new light on how disability discrimination law influences labor market efficiency. It is important to remember, however, that arguments based on distributive justice and the dignitary interests of people with disabilities have always been—and will no doubt remain—a critical part of the policy debate. Nevertheless, an efficiency defense of accommodation mandates bolsters these noneconomic arguments offered in support of the ADA. It also challenges the conventional conclusion that a statutory duty of accommodation most closely resembles an implicit tax and transfer scheme with purely redistributive effects. On the other hand, my analysis of comparative accommodation costs illustrates some areas of tension between dignitary and efficiency approaches to accommodation. We can pursue complete freedom of occupational choice for individuals with disabilities only if we are willing to compromise significantly the economic objective of matching. By identifying more clearly the diverse ways in which accommodation promotes both economic and noneconomic goals, we can hope that legal doctrine will tend to express a more orderly balancing of these values.

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INTRODUCTION

Defenses of the laws prohibiting employment discrimination on the basis of disability come in two basic flavors. The first group of arguments rests largely on dignitary concerns and emphasizes that equal access to employment is essential for personal fulfillment.[1] With the general import of these arguments I have no quarrel. It seems to me undeniable that individuals with disabilities benefit from being employed and that denying them employment opportunities often impinges on their personal dignity. But this dignitary argument is an incomplete defense of laws barring disability dis-

1. *See, e.g.*, Jonathan C. Drimmer, *Cripples, Overcomers, and Civil Rights: Tracing the Evolution of Federal Legislation and Social Policy for People with Disabilities*, 40 UCLA L. REV. 1341, 1344–45 (1993) (advocating a "civil rights model" under which people with disabilities would be guaranteed "full citizenship [and] equal participation in the community"); Harlan Hahn, *Disability and Rehabilitation Policy: Is Paternalistic Neglect Really Benign?*, 42 PUB. ADMIN. REV. 385, 387 (1982) (arguing that disability arises from interaction with an environment designed for the nondisabled rather than from inherent functional limitations).

crimination. Concern for human dignity and self-fulfillment provides no stopping point, no indication of when it might be permissible to deny an employment opportunity to someone with a disability, perhaps even because of that person's disability. And yet, at an intuitive level, almost everyone seems to understand that the law must contain limits, qualifications, and exceptions. In short, disability discrimination is sometimes morally and politically legitimate.

One might hope that a second group of arguments, resting on economic concepts such as efficiency and productivity, would fill this lacuna. However, simplistic economic arguments fail for similar reasons. The Americans with Disabilities Act of 1990[2] (ADA), for example, recites that "people with disabilities, as a group, occupy an inferior status in our society, and are severely disadvantaged socially, vocationally, economically, and educationally."[3] Disability discrimination "costs the United States billions of dollars in unnecessary expenses resulting from dependency and nonproductivity."[4] Thus, we are told, the goal of the statute is "to assure equality of opportunity, full participation, independent living, and economic self-sufficiency."[5] These lofty goals and empirically accurate generalizations about economic disadvantage surely warrant sympathy and have mobilized social and political concern for the plight of the disabled. However, statements such as these share with dignitary arguments an inability to determine which expenses of dependency are "unnecessary" and when legal mandates might improve productivity.

Partly in reaction to these failings, economists have taken more sophisticated theories, commonly used to analyze race and sex discrimination,[6] and adapted them to explain discrimination on the basis of disability. The theory of discriminatory animus, for example, accurately models certain types of disability bias.[7] Thus, employers sometimes discharge or refuse to hire productive individuals with disabilities because managers, coworkers, or customers feel uncomfortable with or hostile to-

2. Pub. L. No. 101-336, 104 Stat. 327 (codified as amended in scattered sections of 42 U.S.C.).

3. 42 U.S.C. § 12101(a)(6) (2000).

4. § 12101(a)(9).

5. § 12101(a)(8). All three of these statements appear in the Americans with Disabilities Act's (ADA's) recitation of congressional findings and purpose.

6. For discussions of this enormous body of work, see Glen G. Cain, *The Economic Analysis of Labor Market Discrimination: A Survey*, *in* 1 HANDBOOK OF LABOR ECONOMICS 693 (Orley Ashenfelter & Richard Layard eds., 1986), and J. Hoult Verkerke, *Free to Search*, 105 HARV. L. REV. 2080 (1992) (reviewing RICHARD A. EPSTEIN, FORBIDDEN GROUNDS: THE CASE AGAINST EMPLOYMENT DISCRIMINATION LAWS (1992)).

7. The first formal statement of what later became known as the animus theory appears in GARY S. BECKER, THE ECONOMICS OF DISCRIMINATION (2d ed. 1971).

wards disabled employees. In this model, antidiscrimination law accelerates the tendency of a competitive market to drive these discriminatory employers out of business[8] or overcomes market forces that tend to perpetuate discriminatory practices.[9] Similarly, disability discrimination law could combat statistical discrimination,[10] or it might undermine discriminatory social norms that confine persons with disabilities to subordinate roles in the labor market.[11] These models provide a firm theoretical justification for prohibiting employers from discriminating against a disabled worker whose job performance equals that of a nondisabled worker.

In making judgments about equally productive workers, however, economic arguments simply provide a more rigorous way of expressing widely shared intuitions about legitimate decisionmaking. An overwhelming majority of Americans already condemns discrimination on the basis of characteristics they deem irrelevant to employment decisions. Of course, protection against sexual-orientation discrimination remains controversial,[12] and discrimination on the basis of physical characteristics such as attractiveness and weight are rarely considered civil rights issues.[13] But applying the basic

8. *See* John J. Donohue III, *Is Title VII Efficient?*, 134 U. PA. L. REV. 1411, 1423–30 (1986) (applying this argument to race discrimination).

9. *See* Cass R. Sunstein, *Why Markets Don't Stop Discrimination*, 8 SOC. PHIL. & POL'Y 22, 33–34 (1991).

10. *See generally* William G. Johnson, *The Rehabilitation Act and Discrimination Against Handicapped Workers: Does the Cure Fit the Disease?*, *in* DISABILITY AND THE LABOR MARKET: ECONOMIC PROBLEMS, POLICIES, AND PROGRAMS (Monroe Berkowitz & M. Anne Hill eds., 1986) (applying the theory of statistical discrimination to disability); Stewart Schwab, *Is Statistical Discrimination Efficient?*, 76 AM. ECON. REV. 228 (1986) (analyzing statistical discrimination on the basis of race).

11. *See* James J. Heckman & J. Hoult Verkerke, *Racial Disparity and Employment Discrimination Law: An Economic Perspective*, 8 YALE L. & POL'Y REV. 276, 278–79 (1990) (arguing that civil rights laws displaced "informal social codes" that constrained individuals and employers and sustained employment segregation in the South); Richard H. McAdams, *Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination*, 108 HARV. L. REV. 1003, 1049–62 (1995) (using a theory of relative "status production" to explain the relationship between race discrimination and social and economic subordination); Verkerke, *supra* note 6, at 2089–94 (analyzing the role of social norms in maintaining segregationist employment practices in the Jim Crow South).

12. *See, e.g.*, Employment Non-Discrimination Act of 2001, S. 19, 107th Cong.; *Sexual Orientation: Gay Rights Legislation Introduced in Congress with Bipartisan Support*, BNA EMP. POL'Y & L. DAILY, June 28, 1999; *Discrimination: Senate Rejects by 50-49 Bill to Ban Job Bias Based on Sexual Orientation*, BNA EMP. POL'Y & L. DAILY, Sept. 12, 1996.

13. *See* Cook v. R.I. Dep't of Mental Health, Retardation, & Hosps., 10 F.3d 17, 20–21 (1st Cir. 1993) (affirming a jury verdict under the Rehabilitation Act of 1973, 29 U.S.C. § 794(a) (2000), for a plaintiff whose application to become an "institutional attendant" at a mental health facility was rejected because the employer characterized her as "morbidly obese"); Jeff E. Biddle & Daniel S. Hamermesh, *Beauty, Productivity, and Discrimination: Lawyers' Looks and Lucre*, 16 J. LAB. ECON. 172, 172–73 (1998) (providing empirical evidence that physical appearance influences attorneys' income); Elizabeth Kristen, Comment, *Addressing the Problem of Weight Discrimi-*

nondiscrimination principle to protect individuals with disabilities comports quite well with broader social attitudes towards employment bias. As a result, the real challenge for economic analysts is not to defend provisions that merely extend conventional antidiscrimination law to disability.[14] Instead, economists need to develop a theoretical approach to the ADA's distinctively demanding duty of reasonable accommodation. This Article takes up that challenge.

The ADA requires employers to bear any "reasonable" cost or inconvenience associated with employing "qualified individuals with a disability" that does not impose an "undue hardship."[15] This regulatory directive implies that at least some employers will have to hire and retain workers whose disabilities make them less productive than other workers who would be willing to perform the same job. A fairly obvious economic interpretation of this situation casts the costs of accommodation as a mandated benefit funded by an implicit payroll tax on employers. Predictable objections follow from this characterization—to providing in-kind rather than cash benefits, to creating significant off-budget taxes and appropriations, and to imposing burdensome new regulations on employers.[16] Moreover, the conventional economic analysis of mandated benefits concludes that the costs of any mandate are normally shifted to workers in the form of reduced wages or employment levels, or both.[17]

Defenders of the ADA's accommodation mandate might well respond that having a job provides important intangible benefits, which cash transfer payments tend to undermine, and that employers are uniquely situated to provide the necessary jobs.[18] A few commentators have also addressed the budgetary and regulatory objections by proposing public funding for the costs of accommodation.[19] And in a recent article, Christine Jolls challenges the conventional economic wisdom concerning the distributional ef-

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nation in Employment, 90 CAL. L. REV. 57, 81–108 (2002) (detailing the limited antidiscrimination protection afforded to "fat" people).

14. *See* Americans with Disabilities Act of 1990 § 102(b)(1)–(4), (6)–(7), 42 U.S.C. § 12112(b)(1)–(4), (6)–(7) (2000) (setting forth the definitions of "discriminate," as used in the ADA).

15. § 12112(b)(5).

16. *See, e.g.*, Sherwin Rosen, *Disability Accommodation and the Labor Market*, in DISABILITY AND WORK: INCENTIVES, RIGHTS, AND OPPORTUNITIES 18, 29 (Carolyn L. Weaver ed., 1991).

17. *See* Lawrence H. Summers, *What Can Economics Contribute to Social Policy? Some Simple Economics of Mandated Benefits*, 79 AM. ECON. REV. 177, 180–81 (1989).

18. *Cf.* Verkerke, *supra* note 6, at 2085–86 (making the same point in the context of race discrimination).

19. *See* Scott A. Moss & Daniel A. Malin, Note, *Public Funding for Disability Accommodations: A Rational Solution to Rational Discrimination and the Disabilities of the ADA*, 33 HARV. C.R.-C.L. REV. 197, 219–31 (1998).

fects of mandated benefits. She identifies a number of empirically important situations in which disabled workers are likely to benefit from an "accommodation mandate" at the expense of nondisabled employees.[20] Her results thus contradict the customary prediction that disabled workers will pay the full cost of any legally mandated benefit.

Whatever the outcome of this debate, however, the mandated-benefit model frames the issue in distributional terms that replicate the stark political confrontation between supporters and critics of the ADA. In order to bridge the gap between these opposing camps, we need an economic analysis that reaches beyond the politics of redistribution. Claims based on distributive justice will undoubtedly remain an important part of the public debate over disability rights. However, we should also explore the possibility that key provisions of the ADA may play a role in promoting labor market efficiency. At the very least, an efficiency argument for the duty of reasonable accommodation might cause some economic analysts to reexamine their reflexively negative reaction to this regulatory mandate.

Pam Karlan and George Rutherglen have sketched a promising approach that defends the duty of reasonable accommodation as a form of insurance against the risk of being or becoming disabled.[21] Following Ronald Dworkin's arguments concerning equality,[22] they posit that individuals placed behind a "veil of ignorance" concerning their disability status would choose to insure themselves against that risk. In this idealized world, Karlan and Rutherglen suggest that disabled persons would receive insurance payments according to the extent of their disability. Recipients who were able to work might often use these payments to purchase workplace accommodations. In this way, they could obtain many of the occupational choices available to nondisabled individuals. Under the ADA, however, individual employers rather than a social insurance fund must bear the burden of accommodations. These focused costs offset some of the risk-spreading gains for the disabled. In light of this political reality, Karlan and Rutherglen conclude that the insurance theory supports only a more limited program of mandated accommodation.[23] Conversely, they observe that the costs of accommodating federal employees are spread broadly, and relatively equitably, among all taxpayers.[24] It therefore follows that the federal gov-

20. *See* Christine Jolls, *Accommodation Mandates*, 53 STAN. L. REV. 223, 272–82 (2000).

21. Pamela S. Karlan & George Rutherglen, *Disabilities, Discrimination, and Reasonable Accommodation*, 46 DUKE L.J. 1, 26–29 (1996).

22. *Id.*; *see* Ronald Dworkin, *What Is Equality? Part 2: Equality of Resources*, 10 PHIL. & PUB. AFF. 283, 296–304 (1981).

23. *See* Karlan & Rutherglen, *supra* note 21, at 28.

24. *Id.* at 28–29.

ernment should be subject to a more rigorous duty of accommodation than private employers.[25]

A significant advance over more conventional theories, the insurance model offers a plausible account of some general features of disability discrimination law. For example, it helps to explain why the duty of reasonable accommodation leaves disabled workers far short of Dworkin's ideal of full equality of opportunity. It also provides a ready justification for the special affirmative action obligations that section 501 of the Rehabilitation Act of 1973[26] imposes on the federal government.[27] In its present form, however, the insurance theory offers little insight into more specific features of disability discrimination law. What factors should determine whether an accommodation is "reasonable" and not an "undue hardship" within the meaning of the ADA? How should a court decide what constitute the "essential functions" of a job? What is the proper purpose of the statutory "direct threat" defense? To these sorts of questions, the insurance theory has no answer.

In order to understand how disability discrimination law functions, we need a theory that works closer to the ground, an analysis that is connected more closely with the operation of the labor market. In Part I of this Article, I develop such a theory. Adapting an informal economic model of employee turnover that I have used in prior work, I show how incomplete and asymmetric information about disabling conditions can produce the labor market inefficiencies of mismatching, churning, and scarring.[28] Part II applies this analytic framework to the task of justifying and interpreting the ADA's duty of reasonable accommodation. The framework illuminates both the reasons for imposing a duty of accommodation and the circumstances in which that duty should be diminished or eliminated entirely. No one will be surprised that it is impossible to implement legal rules that can ensure a theoretically optimal assignment of workers throughout the economy. However, I derive a set of second-best principles for analyzing accommodation claims and demonstrate that these principles are fully consistent with the statutory text and existing case law. Indeed, a more nuanced accommodation doctrine might also help to reverse an unfortunate tendency of current ADA decisions to adopt unduly narrow readings of what constitutes a covered disability under the statute.

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25. *Id.*
26. 29 U.S.C. §§ 701–796 (2000).
27. *See id.* § 791; Karlan & Rutherglen, *supra* note 21, at 28.
28. For an application of this model to problems surrounding employment references, see J. Hoult Verkerke, *Legal Regulation of Employment Reference Practices*, 65 U. CHI. L. REV. 115 (1998).

I. DISABILITY AND EMPLOYEE TURNOVER

This part develops an economic framework for analyzing the relationship between disability discrimination and efficiency. My analysis highlights the importance of job matching. I also integrate the dynamic process of employee turnover with a careful consideration of how employers obtain information about current and prospective employees. The framework reveals three potential labor market inefficiencies associated with employers' efforts to maximize profits when they confront incomplete and asymmetric information. In the disability context, this informational focus also leads me to distinguish "hidden" and "observable" disabilities. The part concludes by considering how the problems of mismatching, churning, and scarring can interact with one another.

Labor market efficiency depends critically on matching workers to jobs for which they are well suited. Thus, auto mechanics need to know something about how to fix cars; customer service representatives should be able to solve problems cheerfully; and tax accountants ought to be good with numbers. Employee turnover—the process by which people move from one job to another—is an essential market mechanism for improving job matching. Turnover forces terminated workers to seek new jobs that better match their abilities.[29] In this way, employee turnover promotes efficiency. Under conditions of incomplete and asymmetric information, however, turnover may also cause three significant inefficiencies. "Mismatching" can occur whenever employers have inadequate information about the characteristics of current or prospective employees.[30] "Churning" results when employees move from one position to another without improving the quality of the match between worker and job.[31] And "scarring" occurs when

29. *See, e.g.*, ROBERT M. FEINBERG, THEORETICAL IMPLICATIONS AND EMPIRICAL TESTS OF THE JOB SEARCH THEORY (1984); BOYAN JOVANOVIC, JOB MATCHING AND THE THEORY OF TURNOVER 59–60 (1984); C.J. MCKENNA, UNCERTAINTY AND THE LABOUR MARKET: RECENT DEVELOPMENTS IN JOB-SEARCH THEORY 135–37 (1985).

30. For recent work concerning asymmetric information in the labor market, see generally Chun Chang & Yijiang Wang, *Human Capital Investment Under Asymmetric Information: The Pigovian Conjecture Revisited*, 14 J. LAB. ECON. 505 (1996); Robert Gibbons & Lawrence F. Katz, *Layoffs and Lemons*, 9 J. LAB. ECON. 351 (1991); Bruce C. Greenwald, *Adverse Selection in the Labour Market*, 53 REV. ECON. STUD. 325 (1986); Joan E. Ricart I Costa, *Managerial Task Assignment and Promotions*, 56 ECONOMETRICA 449 (1988); and Michael Waldman, *Job Assignments, Signalling, and Efficiency*, 15 RAND J. ECON. 255 (1984).

31. One recent article has used the term "churning" to refer to a type of turnover different from the inefficient pattern of discharge and rehiring I analyze here. *See* Simon Burgess et al., *Job Flows, Worker Flows, and Churning*, 18 J. LAB. ECON. 473, 474 (2000) (defining "churning flows" as the numerical difference between "all movements of workers into and out of jobs" and "the gross creation and destruction of jobs").

employers rely on labor market signals to refuse to hire workers who could be employed productively.[32]

The presence of workers with disabilities in the labor market can trigger the informational problems that cause mismatching, churning, and scarring. At the time of hiring, for example, an employer may not know how an observable characteristic such as wheelchair use will affect an applicant's productivity. This uncertainty is an example of incomplete information. When disabilities are hidden rather than observable, however, additional problems of asymmetric information arise. Job applicants often choose not to reveal conditions such as mental illness, back pain, high blood pressure, diabetes, and alcoholism. Thus, employers typically learn about these hidden disabilities only by observing their incumbent employees on the job. But when those same workers leave and apply for work elsewhere, most employers reluctantly reveal only the most limited information about their former employees.[33] As a result, prospective employers ordinarily know far less than former employers (and job applicants themselves) about the applicants' productivity. For this reason, information about hidden disabilities is also distributed asymmetrically.

What are the consequences of these informational problems? How do they affect efficiency in the labor market? As I have already suggested, incomplete and asymmetric information causes three significant inefficiencies. The next three parts relate each of these labor market failures to the physical and mental disabilities covered under the ADA.

A. Mismatching

The dynamic market process of employee turnover, driven by workers' preferences and employers' hiring and firing decisions, ultimately determines where each person will work. Thus, some people become dissatisfied with their jobs and quit while others learn new skills and seek promotions. Employers hire promising new applicants and lay off or discharge unproductive incumbent employees. The set of job assignments or "match" that

32. Although economists have recently begun to theorize about similar problems, I am unaware of any prior theoretical discussion of employee churning and scarring. Another strand of literature refers to the psychologically "scarring" effects of unemployment spells. *See, e.g.*, Andrew E. Clark et al., *Scarring: The Psychological Impact of Past Unemployment*, 68 ECONOMICA 221 (2001); Mary Gregory & Robert Jukes, *Unemployment and Subsequent Earnings: Estimating Scarring Among British Men 1984–94*, 111 ECON. J. 607, 607 (2001). My own analysis of scarring focuses more on the reaction of employers to labor market signals, though the two effects could certainly reinforce one another.

33. *See* Verkerke, *supra* note 28, at 134–37 (discussing barriers to obtaining negative information about prospective employees).

results from this highly decentralized process can be evaluated using a variety of economic criteria. One match could maximize physical output. Another match might maximize employers' total profit, and yet a third would maximize employee wealth.[34]

These competing concerns make determining labor market efficiency a subtle and complex issue. As is usually the case, the concept of Pareto efficiency provides virtually no leverage for analyzing real-world policy-making.[35] Any departure from the status quo is likely to decrease some people's welfare even as it increases the welfare of others. Imagine, for example, a newly promoted construction foreman whose incendiary personality makes him a poor manager.[36] Maintaining a peaceful and productive workplace may require relieving him of managerial responsibility. But there can be no doubt that demotion or discharge will leave him worse off than if he retained his position. Indeed, employees will seldom be assigned to the jobs they would most prefer, and reassignments that enhance productivity will often frustrate individual preferences. Thus, virtually any set of job assignments will satisfy the criterion of Pareto efficiency, and virtually no reallocation of positions will ever be able to produce a Pareto improvement.

As a theoretical matter, Kaldor-Hicks efficiency[37] offers a more realistic assessment of when we might agree that a reassignment would be socially beneficial. A particular match is Kaldor-Hicks-efficient if and only if there is no alternative match in which the gainers (whether employers or other workers) could compensate the losers and still come out ahead from the reassignment.[38] Subject perhaps to some distributional constraints, this approach may roughly correspond to our intuitive concept of labor market efficiency. In the case of the construction foreman, for example, I suspect that most people would agree that sacrificing the foreman's satisfaction in order to in-

34. *See* Alvin E. Roth, *Stability and Polarization of Interests in Job Matching*, 52 ECONOMETRICA 47, 56 (1984) (showing that for matches in the core of a noncooperative bargaining game between employers and employees, the most preferred match for employers will be the least desirable match for employees and vice versa).

35. An allocation of resources (or jobs) is Pareto-efficient if it is impossible to make anyone better off without making at least one person worse off. For a thorough discussion of the intricacies of Pareto efficiency and other concepts of welfare economics, see JULES L. COLEMAN, MARKETS, MORALS AND THE LAW 67–94 (1988).

36. *Cf.* Soileau v. Guilford of Me., Inc., 105 F.3d 12, 15–16 (1st Cir. 1997) (holding that an employee suffering from acute episodic depressive disorder was not protected by the ADA because the ability to get along with others is too amorphous a concept on which to base ADA protection as a major life activity); *accord* Breiland v. Advance Circuits, Inc., 976 F. Supp. 858 (D. Minn. 1997) (granting employer summary judgment on the claim of an employee who was discharged for offensive and confrontational behavior in the workplace); Palmer v. Circuit Ct. of Cook Cty. Soc. Serv. Dep't, 905 F. Supp. 499 (N.D. Ill. 1995) (same).

37. *See* Coleman, *supra* note 35, at 84.

38. *See id.*

crease workplace productivity would enhance overall social welfare. However, strict adherence to the Kaldor-Hicks efficiency criterion unfortunately requires information that no policymaker could ever hope to obtain. It is always theoretically possible that our foreman would be so traumatized by his demotion or discharge that not even a very large compensation payment could make him indifferent as between the old and new assignments. How could a regulator ever hope to determine the appropriate values? And what would stop the foreman from dramatically overstating the personal consequences of a reassignment?[39] In short, the subjective character of individual utility losses creates insurmountable informational problems, along with a very real risk of strategic holdups.

In the analysis that follows, I hope to sidestep these difficulties by appealing directly to a more intuitive theory of matching. Imagine for a moment that omniscient social planners could somehow maintain individual utilities at a constant level. What considerations would determine optimal job assignments in this world of utility equivalence? I suspect that the central social objective in such a world would be to match employees' strengths and weaknesses to the requirements of the work that they perform. Thus, a particular match would be more desirable when an employee had characteristics that enhanced productivity in that job. One's innate abilities, skills, training, and temperament all might contribute to making a good match. A match would become less attractive, however, as a result of employee characteristics that undermined productivity. Thus, we might well worry about an attorney who reads and writes significantly more slowly than average,[40] a school bus driver who suffers from uncontrolled diabetes,[41] or a police officer who abuses drugs and alcohol.[42] To varying degrees, each of

39. For further discussion of how individual preferences for particular jobs might be accommodated within the ADA's regulatory scheme, see *infra* notes 139–141 and accompanying text.

40. *See, e.g.*, Argen v. N.Y. State Bd. of Law Exam'rs, 860 F. Supp. 84 (W.D.N.Y. 1994) (denying the plaintiff accommodations on the bar exam despite the fact that he was accommodated in law school and had tested as learning-disabled on tests administered by private experts); *see also* Christian v. N.Y. State Bd. of Law Exam'rs, No. 94 CIV. 0949, 1994 WL 62797 (S.D.N.Y. Feb. 23, 1994); Pazer v. N.Y. State Bd. of Law Exam'rs, 849 F. Supp. 284 (S.D.N.Y. 1994).

41. *See, e.g.*, Arnold v. UPS, Inc., 136 F.3d 854 (1st Cir. 1998) (reversing the trial court's determination that diabetes controlled by insulin was not a disability); Daugherty v. City of El Paso, 56 F.3d 695 (5th Cir. 1995) (holding as a matter of law that insulin-dependent diabetics are not otherwise qualified to drive public buses because of the potential threat to public safety).

42. *See, e.g.*, Graehling v. Village of Lombard, 58 F.3d 295 (7th Cir. 1995) (considering the ADA and Rehabilitation Act claims of an alcoholic former police officer who was told that he was no longer fit for duty after damaging two police cruisers and demolishing two gas pumps, and who was given the option to resign or to go home on leave); EEOC v. Exxon Corp., 1 F. Supp. 2d 635, 641, 645 (N.D. Tex. 1998) (holding that a policy barring rehabilitated substance abusers from safety-sensitive positions can only be justified if the "individual[s excluded from the positions pose] a direct threat to the health or safety of others").

these situations involves a mismatch between an employee's productive characteristics and the job that he or she is performing.

More generally, mismatching occurs whenever workers are employed at jobs in which they are comparatively unproductive. The term thus describes a tendency along a continuum of undesirable economic outcomes. Sometimes reassigning large numbers of employees could produce a modest increase in overall productivity, but the intangible costs associated with the reassignment would overwhelm any potential gains. In these circumstances, there is little scope for private or public action to enhance efficiency. At the opposite extreme, the social losses associated with mismatching are most severe when the demands or risks of the job interact unfavorably with the worker's particular disability. Consider, for example, the case of substance abusers performing safety-sensitive jobs. An airline pilot, train engineer, or bus driver who abuses alcohol or drugs exposes his or her passengers to a serious risk of death with every trip. Severe mismatching of this sort warrants strenuous public and private remedial measures.

Mismatching most commonly occurs as the result of hiring mistakes. Diligent preemployment screening, including thorough background investigation and reference checking, can sometimes prevent such mistakes.[43] However, employers are often unable to obtain information about an applicant's hidden disabilities prior to hiring, and thus they may well hire someone who is comparatively unproductive.[44]

The most common remedy for mismatching is selective discharge. Employers observe workers' job performance and, over time, weed out those employees they consider low performers. In an ideal world, those who are terminated then search for new positions for which they are better suited. Thus, selective discharges are potentially an important mechanism for improving job matching.

The more difficult it is for prospective employers to obtain information about job applicants, however, the less likely it is that selective discharges will improve match quality. Somewhat perversely, employers have the greatest incentive to conceal information about former employees precisely when that information would be most useful to prospective employers. By remaining silent, the discharging employer reaps the benefit of returning an unproductive or dangerous employee to the general labor pool and simultaneously

43. *See, e.g.*, DIANE ARTHUR, RECRUITING, INTERVIEWING, SELECTING AND ORIENTING NEW EMPLOYEES 36 (2d ed. 1991); ROBERT D. GATEWOOD & HUBERT S. FEILD, HUMAN RESOURCE SELECTION 402–16 (Dryden 2d ed. 1990); JOHN B. MINER & MARY GREEN MINER, PERSONNEL AND INDUSTRIAL RELATIONS: A MANAGERIAL APPROACH 337–60 (4th ed. 1985).

44. *See* Verkerke, *supra* note 28, at 134–37 (discussing barriers to obtaining negative information about prospective employees).

avoids the risk of a defamation suit.[45] However, the employer's privately rational discharge decision increases the risk that another similar employer will unwittingly hire the same undesirable worker. Without adequate information about the worker, chances are good that match quality will not improve. Thus, the same impulse to discharge comparatively unproductive employees that ordinarily promotes efficient matching can also cause what I have elsewhere called "employee churning."[46]

B. Churning

Informational asymmetry causes employee churning. The fundamental problem is that former employers know far more than prospective employers know about job applicants' productivity. Employers continuously monitor job performance and are thus likely to observe when an incumbent employee's hidden disability causes an episode of substandard performance. For example, an employee suffering from depression or having chronic medical problems may miss work or find it difficult to concentrate on job tasks.[47] Employers faced with such problems often excuse absences and encourage improved performance. In time, however, this initially understanding reaction can give way to frustration, and that frustration often leads an employer to discharge workers whose disabilities interfere with their job performance.[48] Thus, the employer relies on information gained during the period of employment to assess productivity and then selectively terminates employees who appear to be comparatively unproductive.

In contrast, prospective employers must rely on application forms, job interviews, employment references, and publicly accessible records to assess

45. *See id.* at 135.

46. *Id.* at 140–47.

47. *See, e.g.*, Gaul v. Lucent Techs., Inc., 134 F.3d 576 (3d Cir. 1998) (involving an employee suffering from depression and anxiety disorders, who requested a low-stress working environment as an accommodation and holding that the employee's proposed accommodations were unreasonable as a matter of law and that the district court properly granted summary judgment for the employer); Breiland v. Advance Circuits, Inc., 976 F. Supp. 858, 865 (D. Minn. 1997) (holding that the ADA does not require an employer to ignore an employee's emotional and verbally abusive confrontations with coworkers, even though the employee was diagnosed with a major depressive disorder).

48. *See, e.g.*, Hypes v. First Commerce Corp., 134 F.3d 721, 726 (5th Cir. 1998) (rejecting the claim of an employee suffering from chronic obstructive lung disease, who was discharged for frequent absenteeism and who had requested flex-time accommodation that would not ensure his timely presence at work); Barfield v. Bell South Telecomms., Inc., 886 F. Supp. 1321, 1327 (S.D. Miss. 1995) (holding that an employee's position required regular and predictable attendance, which her severe migraine headaches prevented).

productivity.[49] As I have already suggested, they will often fail to discover applicants' hidden disabilities. Of course, applicants themselves benefit from this lack of information. They have a far greater chance of obtaining a job comparable to their former position than they would if full information about their productive characteristics were available to all employers. However, this informational asymmetry has a more troubling impact on overall labor market efficiency.

Imagine, for example, a medical secretary who suffers from chronic back pain and severe migraine headaches.[50] These conditions interfere with her productivity on the job and also require her to be absent at unpredictable times for treatment and recuperation. All doctors would prefer not to have such a secretary. Her unpredictable absences and occasional lapses of attention significantly detract from her ability to perform her job reliably. With complete information, no one would hire her. In the real world of incomplete and asymmetric information, however, a prospective employer is likely to hire her and discover her hidden disabilities only sometime later. At some point, this new employer too will become frustrated with her performance and terminate her or encourage her to find a new position. As this process is repeated again and again, the employee moves from job to job, but there is no improvement in match quality. She is no more productive at each new job than she was at the preceding one.

Like the churning of investment accounts for which it is named,[51] employee churning is inefficient turnover. First, the costs of recruitment, screening, and training at both firms are wasted. The new employer's productivity loss exactly offsets the former employer's productivity gain. Second, each employment termination "destroys" valuable information that might be relevant to avoiding significant social losses. Suppose that rather than learning about an unproductive clerical employee, an airline discovers that a pilot has a drinking problem, or a bus company discovers that a driver has uncontrolled diabetes, and the employer terminates the problem employee. In each of these cases, a new employer, unlike the former employer, does not know

49. For discussion of the shortcomings of these information sources, see Verkerke, *supra* note 28, at 134–37.

50. *See, e.g.*, Brickers v. Cleveland Bd. of Educ., 145 F.3d 846 (6th Cir. 1998) (describing a school bus driver suffering from chronic back pain, who requested a transfer to work as a bus attendant with a waiver of a state-mandated lifting requirement); Carlson v. Inacom Corp., 885 F. Supp. 1314, 1320 (D. Neb. 1995) (holding that a former executive secretary established that her debilitating migraine headaches substantially limited major life activities).

51. *See* Norman S. Poser, *The Measure of Damages in Churning Actions*, INSIGHTS, May 1991, at 19 ("Churning occurs when a securities broker who controls his or her customer's account initiates transactions which are excessive in view of the character of the account and the customer's stated investment objectives, for the primary purpose of generating commissions or in reckless disregard of his or her client's interests.").

what precautions to take to avoid harm. The efficient response to the new employee's disability often may be to modify a job or to require periodic fitness for duty testing. Or particularly severe mismatching may indicate that the individual should find a new line of work. In either case, however, the new employer's lack of information frustrates the labor market's ability to adjust efficiently to a disabled worker's abilities and limitations. Employee churning thus sometimes causes severe mismatching and consequent social losses.[52]

We have seen that employee turnover under conditions of informational asymmetry can produce inefficient churning. However, discharge or layoff may still enhance efficiency if it (1) improves match quality, (2) deters misconduct, (3) incapacitates a dangerous person, or (4) efficiently signals workers' productive characteristics to prospective employers. Employee churning thus refers only to situations in which these desirable effects are nonexistent or negligible. In the remainder of this part, I explore when these beneficial consequences of discharge are most likely to be absent.

1. Match Quality

Churning occurs only when an employee moves between two jobs in which he or she is equally unproductive. Thus, by definition, turnover is not churning if it improves the quality of the match between worker and job. If, by some chance, our alcoholic pilot decides to become a filing clerk or an insurance salesman, then his discharge will have improved match quality and dramatically reduced the potential for social losses. If, on the other hand, he seeks and obtains another job as a pilot, the resulting turnover is churning.

The critical variable that determines whether turnover improves match quality is the ability of prospective employers to obtain adequate information about job applicants. Churning only infrequently affects workers with observable disabilities such as blindness or wheelchair use. Prospective employers invariably learn about such readily apparent conditions prior to hiring. However, they may be uncertain about the extent to which any individual applicant is able to overcome his or her physical limitations.

52. Consider, for example, *Randi W. v. Muroc Joint Unified Sch. Dist.*, 929 P.2d 582 (Cal. 1997), and *Jerner v. Allstate*, No. 93-09472 (Fla. Cir. Ct. Aug. 10, 1995), *discussed in Former Employer May Be Sued over Reference Letter*, BNA INDIVIDUAL EMP. RTS. NEWSL., Aug. 29, 1995. In *Randi W.*, despite reports of sexual misconduct, two schools gave positive references to a teacher who subsequently sexually assaulted a student at his new job. *Randi W.*, 929 P.2d at 1081–82. In *Jerner*, the employee was discharged for bringing a gun to work but subsequently got a neutral reference and new job. *Former Employer May Be Sued over Reference Letter*, *supra*. After his second employer fired him, he returned to the company cafeteria and shot and killed several members of company management. *Id.*

Churning, therefore, can occur for workers whose observable disabilities impair their productivity more than employers ordinarily expect for that condition. An employer could hire such a person believing that he or she will perform as well as the average person for that disability and terminate the employment relationship only after discovering a more extensive limitation. Prospective employers ordinarily would have no way of learning the person's true productive characteristics, and the cycle of churning could begin again.

Although observable disabilities may cause churning, the problem of inefficient turnover is far more likely to result from hidden disabilities. As it becomes more difficult for prospective employers to obtain negative information about job applicants, it becomes easier for terminated employees to find positions similar to those from which they have been discharged.[53] Hidden disabilities, including mental disorders, back problems, substance abuse, and many diseases, are often difficult or impossible for employers to discover during preemployment screening. These conditions normally become apparent to employers only after they affect an employee's productivity. Such an informational asymmetry decreases the chances that turnover will improve match quality and thus increases the risk of churning and its attendant social costs.

2. Deterrence

Discharge or the threat of discharge may sometimes deter employee misconduct. Employment termination imposes psychic and economic costs on an employee and therefore employers often use it as a disciplinary device.[54] However, the same informational asymmetry that undermines matching also tends to diminish the economic costs associated with discharge. Discharged employees who can rely on their former employers to disclose only their job title and dates of service may often be able to obtain a comparable job after only a short period of unemployment.[55] As the perceived cost of discharge declines, the prospect of effective deterrence diminishes as well.

Let us assume for the sake of argument, however, that the emotional consequences of involuntary employment termination and at least some risk of prolonged unemployment ensure that discharge almost always imposes a significant cost on terminated employees. In these circumstances, the fear of discharge can motivate employees to conform to workplace rules and to refrain from shirking. Although some commentators have questioned the impor-

53. For an exhaustive analysis of employers' difficulty in obtaining such information, see Verkerke, *supra* note 28.

54. *See, e.g.*, MINER & MINER, *supra* note 43, at 518–22.

55. *See* Press Release, Society for Human Resource Management, Reference Checking Leaves Employers in the Dark, SHRM Survey Says (June 26, 1995) (on file with author).

tance of such threats, many employers clearly remain convinced that workplace discipline enhances productivity.[56] Perhaps the best evidence for this assertion is the lengths to which most employers go to preserve the at-will status of their employees and thus to preserve marginally greater legal freedom to discharge.[57] It seems likely that employers' widely held belief about the disciplinary effects of discharge has at least some basis in reality. If so, then discharge sometimes efficiently deters misconduct and should not be considered churning.

For our present purposes, however, the question is whether persons with disabilities are likely to respond to these deterrent incentives. As the ADA's statement of findings and purposes recites, the statute covers disabilities that are largely "beyond the control" of the affected individual.[58] By definition, a lack of productivity that is truly beyond a disabled employee's control cannot be deterred. The threat of discharge will not make a blind man see, alleviate the effects of diabetes, or cure multiple sclerosis. However, an individual with a disability may be able to control (1) behavior that is a contributing cause of the disabling condition, or (2) adaptive and remedial measures that determine how much the condition limits his or her productivity.[59]

Many conditions covered by the ADA result at least in part from individual choices that increase the risk of becoming disabled. For example, smoking, a poor diet, and lack of exercise are contributing causes of heart disease and a variety of other ailments that significantly affect both one's productivity and longevity.[60] Back problems sometimes result from improper lifting or a sedentary lifestyle.[61] At least in theory, the rather remote threat

56. *See, e.g.*, Jack M. Beermann & Joseph W. Singer, *Baseline Questions in Legal Reasoning: The Example of Property in Jobs*, 23 GA. L. REV. 911, 933 (1989) ("To paraphrase Mark Kelman, it is only through a miracle, or quirky cultural differences, that workers in the rest of the industrialized world, where the at-will rule is not in force, work at all.").

57. *See* J. Hoult Verkerke, *An Empirical Perspective on Indefinite Term Employment Contracts: Resolving the Just Cause Debate*, 1995 WIS. L. REV. 837, 863–69.

58. 42 U.S.C. § 12101(a)(7) (2000).

59. The U.S. Supreme Court recently determined that courts deciding the critical legal question of whether a plaintiff is "substantially limited in a major life activity" under the ADA's definition of disability should take account of mitigating measures such as medication or eyeglasses. *See* Sutton v. United Airlines, Inc., 527 U.S. 471, 482–84 (1999); Murphy v. UPS, Inc., 527 U.S. 516, 521 (1999); Albertson's, Inc. v. Kirkingburg, 527 U.S. 555, 565 (1999).

60. *See* U.S. DEP'T OF HEALTH & HUMAN SERVS., NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION, WARNING LABEL FACT SHEET, http://www.cdc.gov/tobacco/sgr/sgr_2000/factsheets/factsheet_labels.htm (collecting various dire health warnings that have appeared on tobacco products) (last visited Feb. 14, 2003); AMERICAN ACADEMY OF FAMILY PHYSICIANS, HEART DISEASE: HOW TO REDUCE YOUR RISK (1999), http://familydoctor.org/healthfacts/358/ (last visited Sept. 22, 2002).

61. *See, e.g.*, Atul T. Patel & Abna A. Ogle, *Diagnosis and Management of Acute Low Back Pain*, 61 AM. FAM. PHYSICIAN 1779, 1784–85 (2000) (referring to the role of "appropriate postures

of discharge could have some marginal deterrent effect on an individual's decision to start smoking, eat fatty foods, forego regular exercise, or ignore instructions for safe lifting. I suspect, however, that these effects are negligible. Someone who makes risky choices despite the danger of major surgery, early mortality, or chronic pain seems unlikely to be influenced by the comparatively trivial threat of losing a job.

In contrast, it is quite plausible that the immediate prospect of enhancing her employment opportunities might motivate a person with a disability to invest in adaptive measures that improve productivity. Even a blind person, who has no control at all over the extent of her disability, can become more productive by learning Braille or by becoming more proficient at using a speech synthesizer to read electronic texts. A warehouse worker with back problems may develop techniques for lifting that do not aggravate his condition. In cases such as these, policymakers should at least consider whether legal rules governing disability could create a useful incentive to make such productivity-enhancing adaptations.

Finally, the deterrent incentive of discharge may induce some people to seek treatment who would not do so otherwise. The law might sensibly create special rules for any covered disability that fits this model. Substance abusers, for example, often seem to enter treatment only after "bottoming out."[62] Losing a job because of the effects of substance abuse thus may be an important precipitating cause of the decision to seek treatment. In these circumstances, discharge could conceivably promote efficiency.

3. Occupational Incapacitation

Discharge also imposes some period of occupational incapacitation on a terminated employee. Although keeping a substance abuser out of the cockpit is socially desirable, the informational asymmetries discussed earlier limit the effectiveness of discharge at achieving this goal. Even the most dangerous and unproductive individuals often seem able to find new positions.[63] For truly high-risk jobs, policymakers should probably consider a more direct

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for sitting, driving, and lifting," as well as aerobic exercise and weight loss, in preventing lower back pain), *available at* http://www.aafp.org/afp/20000315/1779.html.

62. *See, e.g.*, Douglas B. Marlowe et al., *Assessment of Coercive and Noncoercive Pressures to Enter Drug Abuse Treatment*, 42 DRUG & ALCOHOL DEPENDENCE 77, 81 (1996) (finding that informal psychosocial pressures such as job loss are the most significant influence on entering treatment); Carol S. North, *Alcoholism in Women: More Common—and Serious—Than You Might Think*, 100 POST GRADUATE MED. 221, 230 (1996) (stating that while alcoholic women often enter treatment voluntarily, most men tend to be coerced by legal, work, or marital sanctions).

63. *See, e.g.*, cases cited *supra* note 52.

regulatory response, such as mandatory disclosure regulations.[64] In most other situations, however, the cost of administering disclosure rules almost certainly outweighs the potential benefit.

We are thus left with the existing regulatory apparatus. Disability insurance programs identify and support those who cannot work.[65] Within this legal framework, discharge from employment seldom determines whether someone is or should be incapacitated. We may therefore safely ignore the countervailing influence of occupational incapacitation in analyzing the inefficiency of employee churning.

4. Signaling

Finally, discharge might provide a valuable signal to prospective employers that a particular employee is unproductive. Once again, the biggest obstacle to efficient signaling is asymmetric information. Most employers have no way of learning whether a job applicant left her last job voluntarily or involuntarily. Former employers routinely refuse to disclose that information.[66] Moreover, even an ostensibly candid reference may conceal more than it reveals. Formally voluntary employment terminations quite often occur under the threat of discharge.[67] And many involuntary terminations result from causes unique to a specific firm that have no bearing on the discharged employee's productivity with a different employer. Discharge thus sends an extremely imprecise signal about a former employee's productivity. For that reason, many employers are justifiably skeptical of the value of such signals.

C. Scarring

But suppose that employers take these labor market signals seriously. For example, they might refuse to hire an employee who has a blemished work history or any applicant who cannot provide positive references. These practices create a risk of scarring—the unproductive use of signals or proxies

64. *See* Verkerke, *supra* note 28, at 162–65 (discussing the potential value of mandatory disclosure regulations for high-risk occupations).

65. For a lucid account of some of the tensions between various federal policies towards individuals with disabilities, see Matthew Diller, *Dissonant Disability Policies: The Tensions Between the Americans with Disabilities Act and Federal Disability Benefit Programs*, 76 TEX. L. REV. 1003 (1998).

66. *See* Press Release, *supra* note 55.

67. *See, e.g.*, Fromm-Vane v. Lawnwood Med. Ctr., Inc., 995 F. Supp. 1471, 1473–74 (S.D. Fla. 1997) (describing how an employer gave its chief nursing officer, who was suffering from a depressive disorder, a choice between resigning and being fired); Rollison v. Gwinnett County, 865 F. Supp. 1564, 1568–70 (N.D. Ga. 1994) (describing how an alcoholic police officer, who was involved in domestic disputes with his wife, bar fights, and a hit-and-run accident, was forced to resign and was allegedly even told what to write in his resignation letter).

for true productivity. The information may be wrong (for example, an unjustified bad reference, or an unfounded stereotype about those with disabilities), or it may be a generally accurate statistical inference that is nevertheless wrong in particular cases. Scarring thus occurs when employers rely on labor market signals, such as prior employment history or employment references, to deny a job to someone who could be profitably employed. A potentially significant social cost of incomplete and asymmetric information is the greater difficulty that these individuals may have finding appropriate employment.

The problem of scarring is quite similar to statistical discrimination on the basis of race or gender.[68] It is undoubtedly inefficient as compared to an equilibrium in which information is costless. But once we acknowledge that employers must expend real resources to acquire information about job candidates, the argument for inefficiency is more tenuous. Of course, we might also object to statistical discrimination on distributional grounds, but the focus of my analysis here is on the efficiency implications of labor market practices. Relying on signals is a time-honored way to economize on information costs. Thus, we should not conclude that the practice produces inefficient scarring unless we can identify a cost-effective way to provide better information about applicants or unless employers have a socially excessive incentive to rely on these labor market signals.

For example, recall our earlier discussion of the medical secretary suffering from migraine headaches and back pain. Each new employer discovers her limitations only after hiring and decides to terminate the employment relationship. For a time, these movements are best described as employee churning. Eventually, however, her employment record will become so checkered that prospective employers begin to interpret her frequent job changes as a signal of low productivity. What typically follows in this last stage are extended periods of unemployment and chronic underemployment. Indeed, individuals who report having a physical or mental condition that limits their ability to work suffer consistently from exceptionally high rates of unemployment and low labor force participation rates.[69] This empirical evidence

68. *See, e.g.*, Shelly J. Lundberg & Richard Startz, *Private Discrimination and Social Intervention in Competitive Labor Markets*, 73 AM. ECON. REV. 340 (1983) (developing argument that statistical discrimination discourages investment in human capital and therefore harms efficiency); Schwab, *supra* note 10 (analyzing whether statistical discrimination—the practice of inferring worker productivity from characteristics such as race or sex—promotes or diminishes labor market efficiency).

69. *See* JOHN BOUND & TIMOTHY WAIDMANN, ACCOUNTING FOR RECENT DECLINES IN EMPLOYMENT RATES AMONG THE WORKING-AGED DISABLED 22 fig.1, 23 fig.2 (Nat'l Bureau of Econ. Research, Working Paper No. 7975, 2000). John Bound and Timothy Waidmann contrast employment rates of roughly 85–90 percent for men without work limitations, with employment rates of roughly 20–40 percent for men with work limitations, depending on which age cohort is

of staggeringly poor labor market performance is entirely consistent with the theoretical predictions of the churning and scarring model.

* * * *

In this part, we have seen that incomplete and asymmetric information about job applicants causes the labor market inefficiencies of mismatching, churning, and scarring. A better understanding of the informational problems that employers face when hiring new employees reveals how the dynamic process of employee turnover can fail to produce a good match between worker and firm. Although any disability that affects productivity may trigger these problems, hidden, rather than observable, disabilities create the greatest risk of employee churning. Moreover, the effects of mismatching fall along a continuum. Some hiring mistakes cause relatively innocuous reductions in productivity. However, severe mismatching in high-risk occupations can easily produce tragic social losses.

Before proceeding to apply this framework to disability discrimination law, it is important to understand that the problems of mismatching, churning, and scarring often interact with one another. Employee turnover normally improves matching, but prospective employers' lack of information can transform otherwise efficient turnover into churning. Similarly, employers' reliance on labor market signals sometimes may make churning less likely, but those same signals can produce scarring. Consider an employee with a hidden disability who has been discharged repeatedly. He suffers in the first instance from the problem of churning, but at some point his unstable employment history will almost certainly make him unemployable. Repeated churning thus may produce the additional danger of scarring. Bearing in mind these interrelated influences, we can now turn to consider the efficiency of the ADA.

II. JUSTIFYING AND INTERPRETING DISABILITY DISCRIMINATION LAW

The framework developed in Part I provides a new lens through which to analyze the provisions of disability discrimination law. My principal goal in this part is to show how the duty of reasonable accommodation may promote labor market efficiency by combating employee churning and scarring. The framework also indicates when the accommodation mandate itself could cause inefficient mismatching. It thus provides valuable interpretive guidance to courts struggling with the rather vague language of the ADA. I begin

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compared. *Id.* at 22 fig.1. The relative odds of employment for the nondisabled are about three times greater for men and two times greater for women. *Id.* at 23 fig.2.

by using the framework to justify the statute's basic nondiscrimination provisions, as well as the constraints it imposes on inquiring about disabilities. However, most of the discussion in this part explores potential efficiency justifications for an appropriately limited duty of reasonable accommodation.

A. Nondiscrimination and Restrictions on Inquiries

In the most general outline, the ADA imposes three significant constraints on employer behavior. First, the act broadly prohibits employers from making employment decisions on the basis of an individual's disability.[70] Second, the act bars employers from inquiring into whether an individual has a disability.[71] Finally, and most significantly, the ADA requires employers to accommodate any "qualified individual with a disability" unless the accommodations will cause "undue hardship."[72]

What, then, does the framework developed in Part I teach us about the efficiency of disability discrimination law? Consider first the problem of disabilities that are readily apparent when applying for a job. If employers use such observable disabilities as a signal of low productivity, then scarring may occur. The ADA's basic prohibition against disability discrimination requires employers to evaluate workers on the basis of their abilities rather than relying on potentially inaccurate signals. If employers' and coworkers' prejudice and use of stereotypes often cause discriminatory decisionmaking, then imposing such a ban might well be worth its administrative costs. Indeed, one can compare the ADA in this role to the federal laws that challenged race discrimination in the Jim Crow South. For example, Title VII of the Civil Rights Act of 1964[73] prohibited race-based employment decisions and gave many Southern employers an excuse to hire productive black workers despite

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70. 42 U.S.C. § 12112(a) (2000) ("No covered entity shall discriminate against a qualified individual with a disability because of the disability of such individual in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment."). Subsequent sections establish comprehensive prohibitions against both disparate treatment and disparate impact on the basis of disability. *See* § 12112(b)(1)–(4), (6)–(7).

71. § 12112(d)(2)(A)–(B). The statute provides:

> Except as provided in paragraph (3), a covered entity shall not conduct a medical examination or make inquiries of a job applicant as to whether such applicant is an individual with a disability or as to the nature or severity of such disability . . . [However, a] covered entity may make pre-employment inquiries into the ability of an applicant to perform job-related functions.

Id.

72. § 12112(b)(5)(A).

73. § 2000a.

powerful social norms that required strict occupational segregation.[74] The ADA's antidiscrimination provisions might similarly overcome existing norms and discriminatory attitudes that lead to the exclusion of productive disabled workers.

The statute also bars employers from inquiring about applicants' possible disabilities. Such a restriction arguably reinforces the ADA's general nondiscrimination rule by preventing employers from seeking information that would be irrelevant to obtaining a good worker-firm match. However, both the statute and Equal Employment Opportunity Commission (EEOC) regulations concerning employer inquiries permit employers to ask job applicants whether and how they can perform the essential functions of the position they seek.[75] The law also permits employers to administer post-offer medical examinations and to make any "job-related" inquiries.[76]

The framework readily explains policymakers' apparent ambivalence towards employer inquiries. The ADA's informational rules attempt to strike a delicate balance between prohibiting inquiries that will cause scarring and permitting inquiries necessary to avoid mismatching. Concerns about the risk of scarring clearly motivate lawmakers' efforts to prevent employers from learning facts that might trigger prejudice or stereotypes.[77] Before the enactment of the ADA, for example, almost all employment application forms included a series of questions that required applicants to disclose whether they suffered from any physical or mental disabilities. The statute now bans such questions and consequently protects a job applicant against the risk that employers will react unfavorably to a condition that would not affect his or her productivity.[78]

However, a competing desire to avoid mismatching justifies various provisions that allow employers to gather information about workers' productive characteristics. The statute thus expressly authorizes any "job-related" inquiries.[79] A natural interpretation of this term equates a job-related inquiry with one that is likely to produce information relevant to the quality of the match

74. *See* Donohue & Heckman, *supra* note 11, at 1603–05; Heckman & Verkerke, *supra* note 11, at 280–86.

75. Acceptable Preemployment Inquiry, 29 C.F.R. § 1630.14(a) (2001).

76. Employment Entrance Examinations, § 1630.14(b); Examination of Employees, § 1630.14(c).

77. *See* 136 CONG. REC. S9686 (1990) (statement of Sen. Harkin) ("The conferees reaffirmed the basic precept of the legislation that persons with disabilities . . . should be judged on the basis of their qualifications and the facts applicable to them and not on the basis of fear, ignorance, and prejudice.").

78. 29 C.F.R. § 1630.14(a).

79. 42 U.S.C. § 12112(d)(2)(B) (2000).

between worker and firm.[80] The ADA thus appears to protect precisely the set of inquiries that the framework identifies as critical for achieving labor market efficiency.

Beyond these comparatively straightforward observations, the framework also illuminates more subtle features of the law. For example, our earlier analysis of mismatching showed that its social costs can vary widely from trivial to extremely severe. Following that insight, we can usefully distinguish between high-risk and normal-risk occupations. The former category encompasses those jobs in which a mismatched employee can cause grave social harm or severely diminish workplace productivity. For the moment, it is convenient to group all other jobs somewhat loosely into the category of normal-risk occupations. The framework predicts that courts will tend to be somewhat more permissive about employer inquiries in high-risk situations. More is at stake. Accordingly, we would expect courts to weigh more heavily their fear of severe mismatching and to show diminished concern about the risk of scarring. Case law reveals at least some suggestive patterns consistent with this prediction.[81]

The law concerning medical examination of job applicants further confirms the pattern of ambivalence about regulating information flows. These provisions reflect a clever compromise between concern about scarring and the recognition that health information is sometimes a relevant job qualification. The ADA permits only post-offer medical exams.[82] It is, of course, quite easy to administer a distinction based on the timing of an exam. Moreover, permitting medical exams only after the employer has extended a conditional offer makes the reason for any subsequent decision to withdraw the offer trans-

80. *See, e.g.*, EEOC v. Woodbridge Corp., 263 F.3d 812, 815–16 (8th Cir. 2001) (holding that an employer may use a carpal tunnel syndrome screening test to disqualify applicants for certain specialized production jobs when those applicants are considered for other, less strenuous positions); EEOC v. Tex. Bus Lines, 923 F. Supp. 965, 981 (S.D. Tex. 1996) (distinguishing "morbid obesity" from other health conditions on the basis that inquiries about more serious conditions relate to the requirements of the bus driver position and therefore are job-related and consistent with business necessity).

81. *Compare* Albertson's, Inc. v. Kirkingburg, 527 U.S. 555, 577 (1999) (indicating, in dicta, that an employer may use compliance with applicable U.S. Department of Transportation safety regulations to justify its visual-acuity job qualification standard, despite the existence of an experimental program in which the standard could be waived in an individual case), *with* Hoehn v. Int'l Sec. Serv. & Investigations, Inc., 120 F. Supp. 2d 257, 265–66 (W.D.N.Y. 2000) (holding that a security guard terminated for failing to meet vision requirements under a new contract may seek a waiver, because there was no showing that the requirements were adopted out of concern for the safety of the general public); *see also* Judice v. Hosp. Serv. Dist. No. 1, 919 F. Supp. 978, 982–84 (E.D. La. 1996) (holding that an employer may require an alcoholic doctor to obtain two medical opinions certifying his fitness for reinstatement because he might otherwise pose a "direct threat" to patients).

82. 42 U.S.C. § 12112(d)(3)–(4) (permitting post-offer medical examinations and certain other examinations and inquiries).

parently obvious.[83] In essence, employers who might otherwise disguise the real—and discriminatory—reason for their decision are estopped from denying that they relied on the results of the medical examination. The rule thus requires employers to defend any adverse decision on the grounds that the newly discovered medical condition makes the applicant a poor match for the job.[84]

Informational limitations of the type we have been considering in this part principally protect individuals with hidden disabilities. By definition, an observable disability such as blindness or wheelchair use will be readily apparent to any interested employer. Restricting employer inquiries about hidden disabilities would seem, at first glance, to exacerbate the problem of churning by making information about workers even more difficult to obtain. In theory at least, a legal rule requiring full disclosure by both employers and employees could prevent churning. Fully informed employers would simply pay workers with disabilities according to their marginal revenue product.[85]

However, even if we ignore the question of whether wages are in fact flexible enough to make such an equilibrium possible,[86] the costs of administering a mandatory disclosure regime are substantial. Any disclosure regulation would have to solve at least three serious problems. First, precisely what information must employers and workers disclose? Second, how will litigants or government regulators prove that individuals had information they failed to disclose? And finally, what measures will guarantee the accuracy of any disclosed information?

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83. *See, e.g.*, Echazabal v. Chevron USA, Inc., 226 F.3d 1063, 1065 (9th Cir. 2000), *rev'd*, 536 U.S. 73 (2002) (describing how an employer extended a conditional job offer and then refused to employ the plaintiff after receiving the results of a post-offer medical examination and holding that an EEOC regulation permitting the defense that a worker's disability on the job would pose a direct threat to his health did not exceed the permissible scope of rulemaking under the ADA).

84. *See, e.g.*, EEOC v. UPS, Inc., 149 F. Supp. 2d 1115, 1156–58 (N.D. Cal. 2000) (holding that UPS may not use medical exams to screen out all applicants with monocular vision and must instead consider factors demonstrating an applicant's potential ability to perform safe driving positions that are not subject to DOT restrictions); Conant v. City of Hibbing, 131 F. Supp. 2d 1129, 1137–38 n.5 (D. Minn. 2000) (holding valid an employer's medical exam assessing prospective employees' ability to perform safely because the essential job functions for general laborers include lifting in excess of thirty pounds and repeated squatting or bending); Ingerson v. Healthsouth Corp., No. 96-6395, 1998 U.S. App. LEXIS 3133, at *1, *18–*19 (10th Cir. Feb. 26, 1998) (holding that the termination of a nurse was justified by a medical examination showing she was unable to do the heavy lifting required by the job).

85. *See* DANIEL S. HAMMERMESH & ALBERT REES, THE ECONOMICS OF WORK AND PAY 107–09 (4th ed. 1988) (discussing short-run labor demand using the equivalent concept "value of marginal productivity").

86. *See, e.g.*, Costas Azariadis, *Implicit Contracts and Underemployment Equilibria*, 83 J. POL. ECON. 1183, 1188–89 (1975) (modeling nominal wage rigidity that results from long-term contracts and customary practices that prevent wage and salary reductions).

As I argued in an earlier article on employment reference practices, the burdens of solving these problems almost certainly make mandatory disclosure regulations too costly for ordinary employment situations.[87] No feasible regulatory scheme can guarantee full and accurate information without imposing prohibitive costs on market participants. Nevertheless, lawmakers might wish to identify a narrow category of occupations in which the social costs of mismatching are especially high. For these high-risk jobs—which, as we have already seen, receive somewhat more permissive treatment under the ADA's informational regulations—it may be worthwhile to bear the administrative costs of a disclosure regime. Most existing reporting schemes focus quite narrowly on criminal convictions or substance abuse.[88] However, newly adopted programs intended to make records of malpractice claims against doctors more easily accessible show both the promise and the problems with mandatory disclosure regimes.[89] Consumer advocates have hailed these new sources of information,[90] but physician groups have objected that many malpractice claims are frivolous and might unjustifiably deter patients from visiting doctors against whom such claims are filed.[91] This conflict between accuracy and availability is an inevitable characteristic of any mandatory disclosure regime.

Before turning to consider the duty of reasonable accommodation, there is one last aspect of informational regulation that we should examine. My earlier analysis suggested that courts should—and almost certainly do—give employers greater freedom to make disability-related inquiries for high-risk occupations.[92] At the opposite end of the spectrum, efficiency may also

87. *See* Verkerke, *supra* note 28, at 162–63.

88. *See, e.g.*, 14 C.F.R. §§ 61.1–.217 (2002) (regulations concerning qualifications for flight crews).

89. State requirements for disclosure of medical malpractice settlements include CAL. BUS. & PROF. CODE § 801 (West Supp. 2002); FLA. STAT. ANN. § 627.912 (West 2001); 225 ILL. COMP. STAT. ANN. 60/23(A)(3) (West 1993); and W. VA. CODE ANN. § 30-3-14 (Michie Supp. 2002). Physicians' groups generally oppose such requirements on the ground that disclosure runs the risk of unfairly blemishing the professional reputation of skilled and careful doctors. *See, e.g.*, Bruce Bryant-Friedland, *Doctors Don't Like Such Public Records*, FLA. TIMES-UNION, Mar. 10, 1997, at 3 (reporting that Florida Medical Association President Richard Bagby called plans to make malpractice claim information available to health care consumers "dangerous"); William Carlsen, *Physicians' Files Could Be Unsealed*, S.F. CHRON., May 5, 1997, at A1; Jon Opelt, *Can't Blame Negligence Alone*, HOUSTON CHRON., May 22, 1994, at 3 (observing that high-risk procedures and high-risk patients produce larger numbers of bad outcomes).

90. *See, e.g.*, Carlsen, *supra* note 89 (quoting a supporter of pending disclosure legislation as saying that "'[p]eople have a fundamental right to know about their doctors . . . You can find out all kinds of information on the Internet—about lawyers, even car mechanics—yet vital background information on your doctor is not available.'").

91. *See* Bryant-Friedland, *supra* note 89.

92. *See supra* text accompanying notes 79–81.

demand that courts apply informational restrictions more strictly for comparatively low-risk occupations. In fact, we might even want to prevent employers from learning about hidden disabilities that affect a worker's productivity. Unless the information will produce better matching, there exists a significant risk of scarring. Individuals with disabilities will end up unemployed or underemployed. However, this argument for concealment applies only to jobs that pose little risk of severe mismatching and in which the consequences of diminished productivity are comparatively slight. A normative prescription follows from this analysis. Courts and regulators should apply informational restrictions more strenuously for comparatively low-risk occupations. Coupled with our earlier analysis of high-risk jobs, the framework thus supports comparatively restrictive rules for low-risk jobs and relatively permissive standards for high-risk occupations.

As we have seen in this part, the framework offers economic justifications for the ADA's central prohibition of discrimination and its more nuanced rules governing employer inquiries about potentially disabling conditions. The economic approach also illuminates some less obvious aspects of these regulatory efforts to control the flow of information in the labor market. But it is now time to turn our attention to the feature of the ADA that most clearly distinguishes it from other antidiscrimination statutes.

B. Justifying the Duty of Reasonable Accommodation

Although Title VII formally requires some accommodation for employees' religious practices, employers can defeat a claim for religious accommodation merely by showing that the requested accommodation imposes more than a "de minimis" cost.[93] In contrast, the ADA requires employers to bear any "hardship" that is not "undue" in order to accommodate a "qualified individual with a disability."[94] This part develops an economic analysis of the ADA's distinctively demanding duty of reasonable accommodation. As applied to *observable* disabilities, the duty to accommodate most closely resembles an implicit tax on employers. However, the framework developed in Part I shows how the legal obligation to accommodate *hidden* disabilities has the potential to promote labor market efficiency by combating employee churning and scarring.

93. *See* 42 U.S.C. § 2000e(j) (2000); Trans World Airlines, Inc. v. Hardison, 432 U.S. 63, 84 (1977).

94. § 12112(b)(5)(A).

1. Observable Disabilities

As a result of unjustified stereotypes and prejudicial attitudes, firms sometimes deny employment opportunities to individuals with observable disabilities. These cases involve discrimination against disabled workers who are just as productive as their nondisabled counterparts. We have seen that the ADA's conventional nondiscrimination principle provides a legal basis for attacking such straightforward disability bias.[95]

Reading the work of some disability rights advocates, however, one might easily get the impression that all actionable disability discrimination takes this form. According to these accounts, firms irrationally favor nondisabled workers over equally productive disabled workers.[96] What these advocates often fail to acknowledge is the fact that employers sometimes refuse to hire or to retain disabled workers simply because they are less productive than nondisabled applicants. In at least some circumstances, an observable disability accurately signals lower productivity. For example, an employee with a physical impairment such as blindness may require the services of a reader, special viewing equipment, or perhaps some rearrangement of her job duties.[97] Moreover, it would not be surprising to discover that some disabled employees work at a slower pace and accomplish fewer tasks during the workday because of the additional challenges presented by their impairments.[98] Indeed, the

95. *See supra* text accompanying notes 74–79.

96. For arguments that employers' accommodation costs are usually nonexistent or negligible, see FRANK BOWE, HANDICAPPING AMERICA: BARRIERS TO DISABLED PEOPLE 178 (1978) (noting that disabled workers are more reliable and more productive than ordinary workers); Peter David Blanck, *The Economics of the Employment Provisions of the Americans with Disabilities Act: Part I—Workplace Accommodations*, 46 DEPAUL L. REV. 877, 894–96 (1997); and Bonnie P. Tucker, *Section 504 of the Rehabilitation Act After Ten Years of Enforcement: The Past and the Future*, 1989 U. ILL. L. REV. 845, 912–13 ("[D]isabled employees often are found to be better workers than nondisabled employees.").

97. *See, e.g.*, Seisser v. Platz Flowers & Supply, Inc., 129 F. Supp. 2d 1130, 1132 (N.D. Ill. 2000) (noting that an employer provided a larger computer monitor for a legally blind employee); Hartsfield v. Miami-Dade County, 90 F. Supp. 2d 1363, 1365 (S.D. Fla. 2000) (noting that an employer provided a special closed-circuit television to magnify documents to allow an employee to read more quickly than with a hand-held magnifying glass); Holbrook v. City of Alpharetta, 911 F. Supp. 1524, 1541–42 (N.D. Ga. 1995) (rejecting a legally blind plaintiff's claim that the city must accommodate him by sending a second detective on investigative assignments, despite the normal practice of sending one detective to a crime scene); Nelson v. Thornburgh, 567 F. Supp. 369, 382 (E.D. Pa. 1983) (requiring an employer to hire readers as a reasonable accommodation for blind employees); Herring v. Dep't of Soc. & Health Servs., 914 P.2d 67, 72 (Wash. Ct. App. 1996) (noting that an employer converted its training manual to audio cassette tapes and purchased a telephone headset for a legally blind employee).

98. *See, e.g.*, Mole v. Buckhorn Rubber Prods., Inc., 165 F.3d 1212, 1215–16 (8th Cir. 1999) (discussing how a customer service worker was fired for frequent mistakes and reduced productivity attributable to multiple sclerosis and depression); *Seisser*, 129 F. Supp. 2d at 1133 (noting that a legally blind employee frequently misfiled items, injected typographical errors into correspondence,

statutory requirement that a covered disability must "substantially limit a major life activity"[99] singles out comparatively severe conditions and thus increases the chance that the impairment will affect productivity.[100]

For observable disabilities, the most natural economic interpretation of the duty of reasonable accommodation casts it as an implicit tax. Employers forced to retain comparatively less productive disabled workers suffer higher labor costs.[101] The duty to accommodate thus implicitly imposes a tax, the proceeds of which are used to subsidize employment for workers with disabilities. Without accommodation, these same workers would be prone to protracted periods of unemployment and might ultimately be driven to rely on Social Security Disability Insurance payments to survive.[102] Accommodation costs in the workplace often will be quite modest when compared to the financial cost of lifetime public support and the accompanying psychic costs of dependency.[103] Whether imposing such a duty to accommodate is good public policy thus depends crucially on how effectively it promotes the employment of workers with observable disabilities and on its distributional consequences.

Of course, the state could instead impose a direct tax and use the proceeds to subsidize employers who hire disabled workers.[104] Critics of unfunded

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miscoded bills, and performed tasks more slowly than prior to visual deterioration); Matthews v. Commonwealth Edison Co., 941 F. Supp. 721, 726–27 (N.D. Ill. 1996) (suggesting that the ADA does not require retaining a less productive employee).

99. 42 U.S.C. § 12102(2)(A) (2000).

100. *See, e.g.*, Toyota Motor Mfg. v. Williams, 534 U.S. 184, 201–03 (2002) (holding that the plaintiff's carpal tunnel syndrome was not sufficiently limiting to constitute an ADA disability but that a more severely limiting case could qualify as a disability); Maziarka v. Mills Fleet Farm, Inc., 245 F.3d 675, 680 (8th Cir. 2001) (finding that "chronic, incurable, and unusually severe" irritable bowel syndrome is a covered disability, although milder forms of the condition may not be); Weber v. Strippit, Inc., 186 F.3d 907, 914 (8th Cir. 1999) (finding that heart disease is not a covered disability unless it substantially limits a plaintiff's major life activities). *Compare* EEOC v. Sears, Roebuck & Co., 233 F.3d 432, 438–39 (7th Cir. 2000) (holding that a plaintiff's neuropathy might be so severe as to substantially limit her ability to walk), *with* Williamson v. Int'l Paper Co., 85 F. Supp. 2d 1184, 1192 (S.D. Ala. 1999) (holding that a plaintiff's diabetes and neuropathy did not constitute a disability when the only limitations he experienced were a need to use a "soft mat and jogging shoes" and to avoid "extreme heat and moisture" and his difficulties were "intermittent and mild during his employment with defendant").

101. For a careful analysis of who ultimately pays for this sort of mandate, see generally Jolls, *supra* note 20.

102. *See* Diller, *supra* note 65, at 1026–32 (discussing the interaction between employment and social insurance).

103. *See* Matthew Diller, *Entitlement and Exclusion: The Role of Disability in the Social Welfare System*, 44 UCLA L. REV. 361, 375–76 (1996) (describing the "social stigma" attached to receiving public assistance).

104. For proposals of this sort, see MARK KELMAN, STRATEGY OR PRINCIPLE? THE CHOICE BETWEEN REGULATION AND TAXATION 8–9 (1999), and Samuel Issacharoff, *Bearing the Costs*, 53 STAN. L. REV. 519, 537 (2000) (reviewing KELMAN, *supra*).

mandates such as the duty of reasonable accommodation argue that mandates tend to be less transparent to voters—and therefore more politically acceptable—than explicit tax increases.[105] Crass political calculation thus may explain why legislators imposed a duty to accommodate disabled workers rather than adopting a tax-and-subsidy scheme. However, the political advantage of an unfunded mandate diminishes considerably when members of a powerful interest group must bear its costs. In the first instance, the costs of an accommodation mandate fall on employers—undoubtedly a well-organized political force. In fact, business lobbying groups participated actively and energetically in the legislative process that produced the ADA.[106] Legislators thus may have had other, more benign reasons for choosing to impose the statute's accommodation mandate.

The ineffectiveness of existing employment subsidy policies is foremost among potentially public-spirited justifications for preferring a mandate. Various subsidies designed to encourage employers to hire the graduates of government training and rehabilitation programs have performed quite poorly.[107] Experience with these programs suggests that participation in government training or eligibility for employment subsidies may function as a negative signal of productivity and thus discourage employers from responding to the subsidy.[108] If firms would react adversely to efforts to subsidize the employment of disabled workers, legislators could quite legitimately seek other means to increase the

105. *See* DAVID OSBORNE & TED GAEBLER, REINVENTING GOVERNMENT: HOW THE ENTREPRENEURIAL SPIRIT IS TRANSFORMING THE PUBLIC SECTOR 276–77 (1992) (stating that "as the federal deficit widened, Congress increasingly turned to mandates"); ALICE M. RIVLIN, REVIVING THE AMERICAN DREAM: THE ECONOMY, THE STATES & THE FEDERAL GOVERNMENT 107–09 (1992); David R. Beam, *On the Origins of the Mandate Issue*, *in* COPING WITH MANDATES: WHAT ARE THE ALTERNATIVES? 23, 29–30 (Michael Fix & Daphne A. Kenyon eds., 1990). *But see* Julie A. Roin, *Reconceptualizing Unfunded Mandates and Other Regulations*, 93 NW. U. L. REV. 351, 354 (1999) (offering a qualified defense of the practice).

106. *See* 136 CONG. REC. S9685 (daily ed. July 13, 1990) (statement of Sen. Harkin) ("Leading the way were Republicans as well as Democrats, labor and business leaders."); 136 CONG. REC. S9681 (daily ed. July 13, 1990) (statement of Sen. Kennedy) (extolling the virtues of "2 years of cooperation between Democrats and Republicans, the Senate and the House, the Congress and the President, and the disability and business communities"); 136 CONG. REC. S9529 (daily ed. July 11, 1990) (statement of Sen. Harkin) (same).

107. *See, e.g.*, James J. Heckman et al., *The Effects of Government Policy on Human Capital Investment and Wage Inequality*, 1 CHI. POL'Y REV. 1, 6–13 (1997) (reporting that returns from government training programs are far lower than returns from private training); James J. Heckman et al., *U.S. Education and Training Policy: A Re-evaluation of the Underlying Assumptions Behind the "New Consensus,"* *in* LABOR MARKETS, EMPLOYMENT POLICY, AND JOB CREATION 83, 107–12 (Lewis C. Solmon & Alec R. Levenson eds., 1994) (outlining the shortcomings of government training programs).

108. *See, e.g.*, Gary Burtless, *Are Targeted Wage Subsidies Harmful? Evidence from a Wage Voucher Experiment*, 39 INDUS. & LAB. REL. REV. 105, 113 (1985) (speculating that subsidized workers are perceived as "damaged goods"); John J. Donohue III, *Diverting the Coasean River: Incentive Schemes to Reduce Unemployment Spells*, 99 YALE L.J. 549, 592–93 (1989) (noting that employers may have shunned workers who were eligible for subsidies).

number of positions for which workers with disabilities are eligible. In these circumstances, an accommodation mandate may be the most effective policy instrument available.[109]

Nevertheless, the ultimate incidence of accommodation costs lends some additional support to the theory that crass political calculation caused legislators to choose a mandate. Employers may object less strenuously to an accommodation mandate because they can reasonably expect to shift much or all of the costs to workers. Under the conventional economic analysis of mandated benefits, firms simply reduce wages by an amount equal to the value that workers receive from the mandate.[110] In a recent article, however, Christine Jolls has demonstrated that this conventional analysis applies only to mandates directed to workers as a whole.[111] Mandates targeted to benefit a specifically identifiable group of workers produce a more complex pattern of effects.

The ultimate incidence of burdens and benefits depends crucially on the extent to which a statute's nondiscrimination provisions are binding. Jolls speculates quite plausibly that the ADA's prohibition on wage discrimination is likely to bind while its prohibition against hiring discrimination will be more difficult to enforce.[112] Under these assumptions, an accommodation mandate can be expected to cause the relative wages of workers with observable disabilities to rise or stay the same and their relative employment level to fall.[113] However, some disabled workers will obtain jobs by virtue of the accommodation mandate. All workers in the firm will share the cost of those accommodations. In other words, nondisabled coworkers rather than employers tend to pay for any benefits that flow to employees with disabilities.[114] Thus, at least in the case of observable disabilities, the costs of accommodation are probably diffused across a broad and relatively unorganized group. Jolls's revisionist account of accommodation mandates thus may help explain why political opposition to the ADA has been rather muted.[115]

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109. *But see* John J. Donohue III, *Understanding the Reasons for and Impact of Legislatively Mandated Benefits for Selected Workers*, 53 STAN. L. REV. 897 (2001) (discussing reservations about whether the potential tradeoff between higher wages and lower employment levels may undermine the case for mandates).

110. *See* Summers, *supra* note 17, at 178.

111. *See* Jolls, *supra* note 20, at 240–42.

112. *Id.* at 274–75.

113. *Id.* at 275.

114. *Id.* at 249–50.

115. *See* Linda Hamilton Krieger, *Backlash Against the ADA: Interdisciplinary Perspectives and Implications for Social Justice Strategies*, 21 BERKELEY J. EMP. & LAB. L. 1, 1–2 (2000) (recounting the strong bipartisan support for the ADA and noting Republican co-sponsor Orrin Hatch's tearful endorsement of the bill on the Senate floor); sources cited *supra* note 106.

The analysis in this part has shown that the duty of reasonable accommodation imposes an implicit tax on the employers of workers with observable disabilities. It is unclear whether such an unfunded mandate is a more or less effective policy than alternative tax-and-subsidy schemes. However, such a mandate must be defended on distributional, rather than efficiency, grounds so long as it applies to observable disabilities. In contrast, as we will see in the next part, a duty to accommodate workers with *hidden* disabilities has the previously unrecognized potential to promote labor market efficiency.

2. Hidden Disabilities

The definition of disability under the ADA refers to a "physical or mental impairment" that "substantially limits [a] major life activity."[116] Many conditions that have no outwardly apparent manifestations fall within this definition. For example, individuals with such diverse impairments as depression, diabetes, heart disease, sleep apnea, and chronic lower-back pain may meet the statutory definition of disability.[117] In fact, so-called hidden disability claims are by far the most commonly filed under the ADA.[118] Turning our attention to the problems associated with accommodating these hidden disabilities, the value of the framework developed in Part I becomes more apparent.

Recall that the risk of churning arises precisely because employees have unproductive traits that firms can only detect after some period of employ-

116. 42 U.S.C. § 12102(2)(A) (2000).

117. *See, e.g.*, Snead v. Metro. Prop. & Cas. Ins. Co., 237 F.3d 1080, 1088 (9th Cir. 2001) (holding that stress and depression can be covered ADA disabilities); Kells v. Sinclair Buick-GMC Truck, Inc., 210 F.3d 827, 831 (8th Cir. 2000) (noting that insulin-dependent diabetes is a "recognized ADA impairment[ ]" and listing cases); Scott v. Montgomery County Gov't, 164 F. Supp. 2d 502, 506 (D. Md. 2001) (finding that a messenger clerk with sleep apnea was precluded from more than one type of job, such as those involving heavy machinery or driving, and thus was disabled under the ADA); Kalskett v. Larson Mfg. Co. of Iowa, 146 F. Supp. 2d 961, 975–81 (N.D. Iowa 2001) (finding that although chronic lower-back problems are a covered disability, the plaintiff was unable to perform the essential functions of the job); Thompson v. E.I. DuPont deNemours & Co., 140 F. Supp. 2d 764, 772 (E.D. Mich. 2001) (noting that a worker with hip and lower-back pain probably has an ADA disability); Wheaton v. Ogden Newspapers, Inc., 66 F. Supp. 2d 1053, 1062 (N.D. Iowa 1999) (holding that the plaintiff had established a genuine issue of material fact as to whether her severe permanent lower-back pain, which prevented her from standing for extended periods or lifting more than ten pounds, is a covered disability); Epstein v. Kalvin-Miller Int'l Inc., 21 F. Supp. 2d 400, 404 (S.D.N.Y. 1998) (finding that the plaintiff's heart disease and type-2 diabetes rose to the level of a disability under the ADA).

118. *See, e.g.*, H. STEPHEN KAYE, DISABILITY WATCH: THE STATUS OF PEOPLE WITH DISABILITIES IN THE UNITED STATES 13 (1997) (noting that the most common health conditions associated with disability are "hidden" conditions); EEOC, ADA CHARGE DATA BY IMPAIRMENTS/BASES-RECEIPTS (showing that mental disabilities and back problems lead the list of claims), http://www.eeoc.gov/stats/ada-receipts.html (last visited on Feb. 28, 2003).

ment. Churning is thus a significant risk for workers with hidden disabilities. Once employers discover a disability, it is often in their private economic interest to discharge the employee and to replace him or her with someone more productive. A terminated worker's hidden disability will, by definition, remain concealed from other firms. Without more complete information about job applicants, prospective employers' hiring decisions virtually guarantee that discharge and subsequent reemployment will do nothing to improve the quality of the match between worker and firm. And, as we have seen, discharging an employee with a disability will only rarely have any beneficial deterrent effect.[119]

Discharges that neither improve match quality nor enhance deterrence frequently cause inefficient employee churning. Alternatively, if prospective employers manage to infer from the signal of prior discharges that disabled employees are comparatively unproductive, then the same discharges create a risk of scarring and long-term unemployment. The statutory duty of reasonable accommodation thus may help to prevent both churning and scarring by forcing employers to retain rather than discharge a worker after they discover a hidden disability.

Under what conditions will the duty to accommodate have these desirable effects? A somewhat more rigorous statement of the necessary conditions will help to identify several important issues for further analysis. For the purposes of this part, I make the following assumptions:

(1) Individuals with hidden disabilities are more costly to employ but nevertheless produce enough to make employing them socially preferable to unemployment.

(2) Employers are unable to detect many disabling conditions until they observe workers on the job.

(3) Only the cost of accommodation makes these workers with hidden disabilities less appealing to employers.

(4) The cost of accommodation does not differ among firms or jobs.[120]

(5) Discharge serves no significant deterrent function for employees with hidden disabilities.[121]

119. *See supra* text accompanying notes 54–62.
120. I relax this assumption in Part II.C, *infra*.
121. In Part II.C.5, I discuss some circumstances in which this assumption may be unjustified.

Under these conditions, the duty to accommodate discourages employers from churning disabled workers. An employer who discovers that an incumbent employee has a disability may only discharge him or her by demonstrating that it would be an undue hardship to accommodate the disability. The legal duty to make reasonable accommodations therefore counteracts the employer's private incentive to discharge the more costly disabled employee. Such a discharge would necessarily involve churning because, by hypothesis, all firms face the same costs of accommodation and thus no improvement in match quality is possible. Moreover, as I explained in Part I, terminating a worker with a hidden disability will only rarely produce beneficial deterrence, incapacitation, or signaling.

The duty to accommodate hidden disabilities thus has the potential to prevent employee churning. By preventing churning, it also helps to combat the scarring that can result from repeated discharges. As in the case of accommodating observable disabilities, employers pay an implicit tax in the form of higher labor costs. For hidden disabilities, however, the justification for imposing this tax is to avoid the outright inefficiencies associated with churning and scarring. Thus, rather than relying exclusively on a distributional argument, the framework developed in Part I allows us to defend the duty to accommodate hidden disabilities on efficiency grounds.

C. Comparative Accommodation Costs

These theoretically plausible arguments, however, depend critically on the assumption that the costs of accommodation are uniform for all potential jobs. In fact, the burden of accommodating a particular employee's disability will often vary dramatically among occupations. A lifting restriction, for example, may be quite burdensome to accommodate in a warehouse or construction job but much less troublesome in retail or clerical employment.[122]

The ADA can be interpreted somewhat woodenly to require employers to accommodate employees wherever they may choose to work. Indeed, the

122. *See, e.g.*, Lucas v. W.W. Grainger, Inc., 257 F.3d 1249, 1258–59 (11th Cir. 2001) (finding that an employee with a back injury was not "otherwise qualified" for the position of distribution representative because performing physical labor on the packing station line was an essential function of the position); Burgard v. Super Valu Holdings, Inc., No. 96-1199, 1997 WL 278974, at *1, *3 (10th Cir. May 27, 1997) (dismissing the claim of an employee who injured his back and as a result was unable to perform his warehouse job, on the ground that the employee was not substantially limited in a major life activity); Bolton v. Scrivner, Inc., 36 F.3d 939, 943–44 (10th Cir. 1994) (granting summary judgment against a plaintiff whose lifting restrictions made him unable to perform his former job as an order selector in a grocery warehouse).

dignitary defense of disability discrimination law demands that workers with disabilities should be unconstrained in their choice of occupation.[123] However, this reading of the law ignores the potentially beneficial effects of matching. Society can economize on the total cost of accommodation by matching workers to jobs that more easily accommodate their disabilities—just as the market encourages other workers to seek out occupations that best match their abilities. The economic framework thus suggests that we ought to consider comparative accommodation costs in deciding whether a particular accommodation request will create an undue hardship.

I begin this part with an analysis of the theoretically optimal duty of accommodation. Because a number of practical obstacles make the optimal rule difficult to implement, I then consider second-best alternatives. These rules moderate their pursuit of optimal matching in return for greater ease of administration. I conclude on a doctrinal note and demonstrate how the statutory language and current case law could readily embrace comparative accommodation cost principles.

1. In Pursuit of an Optimal Match

The optimal assignment of disabled workers to jobs depends simultaneously on their skills, their impairments, their preferences among positions, and the requirements of those jobs. If we were somehow able to focus on disabled and nondisabled workers with identical skills and preferences, our goal would be to assign individuals with disabilities to the positions in which their impairments have the smallest possible effect on what they produce. An omniscient social planner thus would wish to encourage any reassignment that promises to increase overall productivity without frustrating individual preferences.

In the real world, however, job assignments arise spontaneously from worker and firm search behavior and the resulting employee turnover.[124] The ADA's legal duty to accommodate disabilities operates as a constraint on that process. An optimal duty of accommodation should incorporate all four of the primary factors that affect match quality—skills, impairments, preferences, and job requirements. According to the logic of the economic framework, a disabled employee's request for accommodation has the potential to prevent

123. WILLIE V. BRYAN, IN SEARCH OF FREEDOM 9 (1996) ("[B]eing denied meaningful employment that affords opportunity for personal growth . . . can be and often is debilitating."); U.S. COMMISSION ON CIVIL RIGHTS, SHARING THE DREAM: IS THE ADA ACCOMMODATING ALL? 20 (2000) (explaining that Congress intended to eliminate discrimination on the basis of disability).

124. *See supra* text accompanying notes 34–35.

churning if and only if there is no other available position that better matches his productive characteristics and preferences. Under this approach, a request should be denied whenever there is an equally appealing job in which the worker's net productivity would increase. A court would need to determine whether another position existed in which his impairment could be accommodated more cheaply or in which his skills would be used more productively. Even if such a job existed, however, a worker's strong subjective preference for his current position would militate in favor of granting his accommodation request.

Consider for a moment the nature of the information required to administer this theoretically optimal rule. An employer trying to comply or a court assessing that compliance would need to know how a particular impairment interacts with the demands of each and every available job. It is not enough to know merely the general characteristics of occupations and industries. Instead, the decisionmaker must learn the needs of specific positions in specific workplaces and couple that knowledge with detailed information about each individual worker. An optimal decision thus depends on knowing the precise nature of the impairment, the employee's productive skills, and the amount of psychic utility he derives from different possible jobs. It might be technically feasible, though exceptionally burdensome, to discover all of the necessary information about a worker's productive characteristics and the available positions. However, the very nature of subjective valuation creates a serious risk that workers will strategically misrepresent the strength of their preferences among jobs in order to obtain the accommodations that they desire.

These informational demands are so clearly overwhelming that sensible policymakers should consider adopting only more easily administered alternative rules. In Part III.C.3 below, I take up the task of identifying some potentially administrable, second-best rules. However, we must first examine the distributional effects of a duty to accommodate hidden disabilities.

2. Distributional Effects

Recent work by my colleague Chris Sanchirico has shown that economically oriented analysts are wrong to think that theoretically optimal legal rules should be determined solely on the basis of the efficiency criterion.[125] At the very least, a concern about equity requires policymakers to consider how the imposition of a duty to accommodate may affect the distribution of

125. *See* Chris William Sanchirico, *Deconstructing the New Efficiency Rationale*, 86 CORNELL L. REV. 1003, 1069 (2001).

wealth in the economy. Indeed, the distributional consequences of each individual accommodation decision could, in theory, be relevant to designing an optimal rule.

Christine Jolls's approach to the distributional effects of accommodation mandates provides valuable insight into how a duty to accommodate *observable* disabilities will affect different groups. However, Jolls's analysis depends on the ability of employers to identify disabled workers at the time of hiring. By their very nature, *hidden* disabilities are not revealed until they affect the productivity of incumbent employees. Only at that point could an employer react by discriminating in wages or employment on the basis of the newly discovered disability.

This fact requires us to reconsider Jolls's conjecture that the ADA will impose binding legal restrictions only on wage differentials between disabled and nondisabled workers but not on employment differentials between those groups.[126] Recognizing that the mandate to accommodate hidden disabilities affects only incumbent employees changes the point at which the law's nondiscrimination provisions operate. Legal constraints on employment differentials for hidden disabilities limit discharges rather than attempting to combat hiring discrimination. It is well known that the majority of discrimination claims involve discharge rather than promotion or hiring.[127] Terminated employees have comparatively less to lose by suing their former employer than do incumbent employees, and they have more to gain from a successful suit than do disappointed applicants. Discharge claims can also be somewhat easier to plead and prove than hiring claims. Fired employees often can produce evidence, such as satisfactory performance evaluations, or compare their job performance to the least productive among retained employees. In contrast, hiring claims depend on comparisons among prospective employees about whom employers and courts are ordinarily less well informed. As a result, most observers have concluded that antidiscrimination rules are likely to impose a more significant constraint on biased discharge than on discriminatory hiring.[128]

A new conjecture about the binding effect of nondiscrimination rules follows from these observations. Just as Jolls suggests, the statute's prohibition of wage discrimination is likely to be binding because disabled workers are not ordinarily segregated into specific jobs or employers. However, contrary to Jolls's original speculation, we would expect restrictions on employment differentials to be binding as well. The nature of a hidden disability

126. *See* Jolls, *supra* note 20, at 274–75.

127. *See* John J. Donohue III & Peter Siegelman, *The Changing Nature of Employment Discrimination Litigation*, 43 STAN. L. REV. 983, 984 (1991).

128. *Id.* at 1030–31.

creates a formidable informational obstacle to hiring discrimination. After hiring, employers must then worry about the greater propensity of discharged employees to bring suit challenging their termination. It seems fair to conclude that both restrictions on employment differentials and restrictions on wage differentials will be binding for workers with hidden disabilities.

What follows from this modified scenario is a new prediction about the distributional effects of accommodating hidden disabilities. Within Jolls's framework, accommodation mandates produce gains for disadvantaged workers through cost sharing with nondisadvantaged workers.[129] This analysis thus predicts that disabled workers will gain at the expense of their nondisabled counterparts.

Any redistribution from nondisabled workers to individuals who have physical and mental impairments seems likely to promote a more equal distribution of wealth. However, Sherwin Rosen has argued that accommodations will be most common among low-wage workers.[130] If that is so, then the distributional effects of the duty to accommodate are neither progressive nor regressive. Nevertheless, imposing the cost of accommodation in this manner might be legitimately criticized for imposing a broad social responsibility on a comparatively low-income segment of the population. Without presently unavailable data on the distribution of accommodated workers among jobs, it is impossible to know whether Rosen's speculation will be borne out by the evidence.

Yet, even if an accommodation mandate does not achieve the best possible distributional result, it may be the best feasible means of assisting workers with disabilities. We have already considered some of the problems that afflict tax-and-subsidy schemes.[131] Whatever advantages a tax-and-subsidy approach may have on distributional grounds could easily be outweighed by the relatively greater effectiveness of an accommodation mandate. At least as between workers with similar income levels, distributional considerations probably favor the disabled over the nondisabled. Thus, so long as the accommodation mandate does not have affirmatively regressive distributional effects, policymakers might legitimately prefer it to a comparatively ineffective, and perhaps even politically infeasible, tax-and-subsidy plan.

This part has defended the value of accommodation mandates against possible objections based on distributive justice. Although imposing a legal duty to accommodate is unlikely to improve dramatically the distribution of income, at the very least, we can be reasonably confident that such a duty will

129. *See* Jolls, *supra* note 20, at 243–54.
130. *See* Rosen, *supra* note 16, at 27.
131. *See supra* note 108 and accompanying text.

not cause regressive distributional effects. The economic case for accommodation is thus complete. In proper circumstances, requiring employers to accommodate individuals with disabilities will combat the labor market inefficiencies of employee churning and scarring. However, we have already seen that the theoretically optimal duty to accommodate imposes unreasonable informational demands on firms making primary employment decisions and on courts reviewing those decisions. We therefore need to explore alternative, more easily administered approaches to the problem of accommodation.

3. A Second-Best Approach to Accommodation

The economic framework of matching, churning, and scarring allows us to identify a number of principles that should guide accommodation decisions. This second-best approach recognizes that courts and employers must make decisions with limited information. However, the framework suggests five specific ways in which courts could encourage employers to make accommodation decisions that will promote labor market efficiency:

(1) Distinguish high-risk from low-risk jobs.

(2) Impose reasonable limits on the costs of accommodation.

(3) Encourage accommodation cost sharing by workers.

(4) Use improved matching to reduce accommodation costs.

(5) Create presumptions that generalize by occupation.

These principles begin to provide an intelligible structure for the duty to accommodate and push accommodation decisions, at least gently, in the direction of efficiency. The remainder of this part takes up each principle in turn.

a. Distinguish High-Risk and Low-Risk Jobs

A fundamental insight of the matching analysis is that courts should tailor the duty of accommodation in response to the social costs of poor performance.[132] In safety-sensitive positions such as airline pilot, bus driver,

132. *See supra* notes 87–92 and accompanying text.

or heavy-equipment operator, people's lives depend on unimpaired function.[133] It is extremely unlikely that a disabled person's unusual skill or subjective preference for a certain type of work will ever outweigh the risk of injury in these jobs. For this reason, only a minimal duty of accommodation should apply. Employers thus should rarely, if ever, be required to compromise their ordinarily applicable safety standards in order to accommodate an individual with a disability. Indeed, the ADA's special provision for situations involving a "direct threat" to the health or safety of others is a legislative expression of precisely this concern about high-risk jobs.[134]

Nevertheless, individuals with disabilities should always be free to offer evidence that their impairment has no effect on the safe performance of their job duties. In the language of the framework, they may argue that their particular impairment is irrelevant to the quality of the match between worker and job. An employer would therefore have no legitimate reason for using that impairment as the basis for an employment decision. Such proof would demonstrate that the case involved straightforward discrimination rather than the refusal to accommodate in a high-risk occupation.

Just as the matching analysis counsels caution in imposing accommodation duties on high-risk occupations, it also suggests that decisions to exclude disabled individuals from comparatively low-risk jobs should be subject to more stringent scrutiny. Of course, every job entails at least some degree of risk. However, when grocery store baggers, department store clerks, secretaries—and perhaps law professors—suffer lapses in job performance, they ordinarily cause comparatively minor workplace disruptions. The consequences of impaired performance are less severe, so the duty of accommodation can apply more stringently without fear of causing serious social losses.

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133. *See, e.g.*, Borgialli v. Thunder Basin Coal Co., 235 F.3d 1284, 1287, 1295 (10th Cir. 2000) (finding that a plaintiff with several physical problems and psychiatric disorders, including major depression, somatization, anxiety, and personality disorders, was not a "qualified person" to work as a blaster because he was a direct threat to others in the workplace); F.F. v. City of Laredo, 912 F. Supp. 248, 254 (S.D. Tex. 1995) (holding that a city employee with a mental disability, who was removed from a position as a bus driver, posed a significant safety risk to the public, regardless of whether he was taking his prescribed medication); Christopher v. Laidlaw Transit Inc., 899 F. Supp. 1224, 1226–27 (S.D.N.Y. 1995) (noting that a diabetic school bus driver was disqualified from his position after suffering an incident of hypoglycemic shock); 49 C.F.R. § 391.41(b)(3) (2001) (DOT regulations prohibit insulin-dependent diabetics from driving a commercial vehicle weighing more than ten thousand pounds or designed to carry sixteen or more passengers).

134. *See* 42 U.S.C. § 12113(b) (2000) ("The term 'qualification standards' may include a requirement that an individual shall not pose a direct threat to the health or safety of other individuals in the workplace."). A recent scholarly proposal to have courts use specific statistical benchmarks for evaluating "direct threat" defenses would help courts to focus more carefully on the expected social losses from mismatching. *See* Brian S. Prestes, *Disciplining the Americans with Disabilities Act's Direct Threat Defense*, 22 BERKELEY J. EMP. & LAB. L. 409, 409 (2001).

This is not to say that anyone who wishes to be accommodated in such a job should prevail. Nor do I suggest that employers should be required to ignore disabling conditions that produce an especially poor match, even in these comparatively low-risk positions. After all, the central lesson of the matching model is that the duty to accommodate should vary according to match quality. Instead, my more modest claim is that courts can and should scrutinize more closely employers' claims that an accommodation is unjustified. The comparatively low level of risk associated with these jobs reduces the cost of deciding erroneously that the benefits of continued employment warrant accommodation. Moreover, the social cost of repeated discharges from such low-risk positions frequently includes long-term unemployment and, perhaps ultimately, dependency on Social Security Disability Insurance. In these circumstances, the costs of accommodation and any resulting loss of productivity will often pale by comparison with the social costs of discharge.

However, as the next part explains, both utilitarian and informational considerations also support more general limits on the overall cost of any accommodation.

b. Limit Accommodation Costs

While we have just focused on the expected social *costs* of erroneous accommodation decisions, broader arguments for limiting the permissible burden of mandated accommodations flow principally from an analysis of the social *returns* that those accommodations produce. First, courts (and employers) are unable to determine reliably the subjective value that any person attaches to a particular position. The resulting uncertainty creates a social risk that undermines the case for requiring expensive accommodations.[135] Second, the net social returns from accommodation investments likely diminish as accommodation costs increase. Policymakers who wish to economize on scarce public and private resources thus might reasonably focus their legislative efforts on comparatively inexpensive accommodations that produce the greatest marginal social benefit.

At least in theory, it might sometimes be optimal to expend large sums or to tolerate significantly reduced productivity to accommodate a particular person in a specific job. For example, a recent law school graduate with severe dyslexia could value working as an attorney so highly that her gains would outweigh even the cost of extremely burdensome accommodations. In such a case, necessary accommodations might include providing a full-time

135. This uncertainty also makes accommodation cost sharing a potentially appealing method of revealing a person's subjective preference for a specific occupation. *See infra* text accompanying notes 139–141 (developing the argument for sharing accommodation costs).

personal assistant to read and prepare documents, significantly adjusting ordinary expectations about the pace of work, and ensuring that case assignments are always made with careful consideration for the attorney's limitations. Even the cost of these extensive accommodations might be justified if this person had a lifelong ambition to become a lawyer and would suffer abject despair and personal humiliation in the event that she failed to achieve that goal.

Despite the theoretical plausibility of this scenario, however, practical obstacles make the situation difficult to distinguish from other cases in which accommodation costs exceed their social value. Courts are always somewhat uncertain about the extent of a plaintiff's impairment, available alternative positions, and her level of productivity. But the economic justification for unusually expensive accommodations depends on knowing that this individual has an exceptionally strong preference for a certain type of work. However, neither employers nor courts have any realistic hope of determining the true subjective value that a worker places on a particular job. That value—known only to the individual herself—is not an objective fact that employer inquiry or litigation can reveal.

This informational barrier precludes courts from reliably identifying those rare situations in which a plaintiff's strong preferences might justify unusually large accommodation costs. Instead, uncertainty about the value of these accommodations increases the risk associated with the decision to require an employer to accommodate. Only exceptionally large psychic returns can justify expensive accommodations. But courts and employers are necessarily most uncertain about cases that rest so heavily on an employee's subjective preferences. This "informational risk" undermines the case for requiring employers to make costly accommodations.

Even if all of the necessary information about subjective preferences were readily available, however, the net social returns from investments in accommodation decrease as their costs increase. Costly accommodations produce no greater social benefit than comparatively inexpensive ones. To see why this is so, recall that the legal duty to accommodate disabled workers promotes labor market efficiency by combating churning and scarring. These economic benefits are just as great for cases involving comparatively trivial accommodations as they are for complex and costly ones. For example, the potential social costs of churning rise and fall primarily according to the risk and complexity of a job rather than the difficulty of accommodating any particular person. Similarly, scarring causes long-term unemployment, which imposes personal and social costs unrelated to the cost of accommodation. Investments in accommodation thus have the greatest marginal payoff when accommodation costs are low. Progressively more expensive accommodations produce concomitantly smaller social returns.

It follows from these observations that lawmakers and judges concerned about both enhancing labor market efficiency and conserving scarce public and private resources should limit the cost of mandated accommodations. Uncertainty about worker preferences and diminishing returns on accommodation investments provide mutually reinforcing economic justifications for legislative restraint. Of course, these arguments have no bearing on the redistributive objectives that also undoubtedly animate the ADA's accommodation mandate. However, concerns such as these help explain and justify provisions—most conspicuously the employer defense of "undue hardship"—that limit the statutory duty to accommodate.[136] Although there is no evidence that legislators thought of the issue in precisely these terms, the framework's economic rationale for limiting accommodation costs supports Congress's decision to impose only a qualified duty of accommodation.

Uncertainty and diminishing returns also provide a different, and complementary, explanation for the observation that disabled individuals are not "fully insured" against the effects of their disability.[137] Unlike the insurance theory discussed in Part I, however, these factors explain why both private and public employers have nothing approaching the accommodation obligation that full insurance would require. Moreover, case law draws little, if any, distinction between the accommodation duties of private firms and governmental agencies. This parallel treatment suggests strongly that courts and legislators limit the legal duty to accommodate disabled workers principally because of concern about the social returns from accommodation, not because of fear that accommodation costs will be distributed inequitably.[138]

c. Share Accommodation Costs

As we have seen, uncertainty about the strength of workers' subjective preferences makes it more difficult to determine optimal job assignments and undermines the case for requiring expensive accommodations. The problem is that neither employers nor courts have a reliable way to induce workers to reveal how much they value specific employment opportunities.[139] However, courts could easily adapt current law to facilitate negotiations between workers and firms about the possibility of sharing accommodation costs. Such

136. *See* §§ 12112(b)(5), 12111(10).

137. *See supra* notes 23–27 and accompanying text (discussing how Pamela Karlan and George Rutherglen's "insurance" theory explains this fact).

138. *Cf.* Karlan & Rutherglen, *supra* note 21, at 28–29 (relying on differences in cost distribution to explain special affirmative action obligations that apply to governmental employers).

139. *Cf.* Jason Scott Johnston, *Million-Dollar Mountains: Prices, Sanctions, and the Legal Regulation of Collective Social and Environmental Goods*, 146 U. PA. L. REV. 1327, 1347–50 (1998) (discussing problems of preference revelation in the context of public goods).

arrangements would allow at least some workers who strongly prefer a certain type of work to credibly signal their preference and therefore receive more extensive accommodations than the ADA would otherwise require.

Existing EEOC regulations provide that when a person requests an accommodation, "it may be necessary for [an employer] to initiate an informal, interactive process" to determine the appropriate reasonable accommodation.[140] The statute itself goes a bit further and creates a financial incentive for employers to engage in this interactive process. Special remedial provisions create an exemption from compensatory and punitive damages for employers who demonstrate "good faith efforts, in consultation with the person with the disability . . . , to identify and make a reasonable accommodation."[141] More recently, courts have debated whether employers' failure to engage in an interactive process should, without additional evidence of discriminatory conduct, trigger ADA liability.[142] Although these legal rules are somewhat equivocal, employment law practitioners routinely counsel employers to err on the side of caution and make the interactive process a part of their ADA compliance efforts.[143]

This interactive process could also become a valuable channel through which workers express their subjective preferences for particular jobs. A person with a disability who proposes to share accommodation costs with her employer signals credibly that she has an unusually strong preference for that position. Her willingness to share these costs also reduces the burden of accommodation borne by her employer and should make reviewing courts more likely to reject an employer's undue hardship defense. Although current

140. *See* 29 C.F.R. § 1630.2(o)(3) (2001).

141. *See* 42 U.S.C. § 1981a(a)(3) (2000). The statute provides:

> [D]amages may not be awarded under this section where the covered entity demonstrates good faith efforts, in consultation with the person with the disability who has informed the covered entity that accommodation is needed, to identify and make a reasonable accommodation that would provide such individual with an equally effective opportunity and would not cause an undue hardship on the operation of the business.

Id.

142. *See* Barnett v. U.S. Air, Inc., 228 F.3d 1105, 1113–14 (9th Cir. 2000) (en banc), *vacated*, 535 U.S. 391 (2002). The U.S. Court of Appeals for the Ninth Circuit held that "employers, who fail to engage in the interactive process in good faith, face liability for the remedies imposed by the statute if a reasonable accommodation would have been possible." *Id.* at 1116. "[S]ummary judgment is available only where there is no genuine dispute that the employer has engaged in the interactive process in good faith." *Id.*; *see also* Kvorjak v. Maine, 259 F.3d 48, 52 (1st Cir. 2001) (refusing to take a categorical stand like the Ninth Circuit, and preferring instead to decide the issue on a case-by-case basis).

143. *See, e.g.*, *New ADA Policy Will Include Specific Features*, 22 Disability Compliance Bulletin 3 (Jan. 11, 2002) (reporting that "pursuant to the agreement reached between the EEOC and Wal-Mart Stores, Wal-Mart agreed to implement a new ADA policy . . . under which managers will be required to engage in the interactive process of identifying reasonable accommodations, with respect to applicants and employees").

doctrine contains no rule prohibiting such arrangements, the EEOC and the courts have done little to encourage employees to make such proposals.[144] Broader use of cost-sharing agreements would permit a worker to "purchase" accommodations—beyond those that a straightforward analysis of productivity would require—by agreeing to receive lower wages. A disabled worker with a strong preference for a particular position thus would share the cost of accommodation in order to obtain higher psychic returns from her work.

An arrangement to share accommodation costs would be especially appropriate when a person's disability creates significant obstacles to becoming highly productive in her chosen occupation. Recall, for example, our hypothetical case of a severely dyslexic attorney.[145] She is unable to read and write documents as quickly or accurately as her peers. She may also be completely unable to perform some time-sensitive assignments. Such a disability goes to the core of productivity for her chosen occupation. A court would almost certainly conclude that a law firm is not obligated to accommodate her limitations while paying her the same salary that other, far more productive peers receive. By agreeing to share the costs of accommodation, however, she would provide credible evidence that her psychic returns from working as an attorney potentially counterbalance any loss of productivity.

The role of the interactive process in this context would be to facilitate negotiations and to create an incentive for the employer to consider an arrangement that it might otherwise dismiss out of hand. Of course, an employer would remain free to reject any cost-sharing proposal. However, such a decision could expose the employer to liability for failing to provide a reasonable accommodation. This risk of liability increases precisely as the cost-sharing

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144. For example, only in a somewhat obscure question-and-answer document does the EEOC offer a very narrow endorsement of cost-sharing. However, its discussion is explicitly limited to situations in which a needed accommodation would impose an undue hardship. Thus, the EEOC opines:

> Q. Do I have to pay for a needed reasonable accommodation?
>
> A. No. The ADA requires that the employer provide the accommodation unless to do so would impose an undue hardship on the operation of the employer's business. If the cost of providing the needed accommodation would be an undue hardship, the employee must be given the choice of providing the accommodation or paying for the portion of the accommodation that causes the undue hardship.
>
> Q. Can an employer lower my salary or pay me less than other employees doing the same job because I need a reasonable accommodation?
>
> A. No. An employer cannot make up the cost of providing a reasonable accommodation by lowering your salary or paying you less than other employees in similar positions.

EEOC, THE ADA: YOUR EMPLOYMENT RIGHTS AS AN INDIVIDUAL WITH A DISABILITY, http://www.eeoc.gov/facts/ada18.html (last modified Jan. 15, 1997).

145. *See supra* text accompanying note 135.

proposal appears to reduce the employer's burden of accommodation below the statutory threshold of undue hardship. By encouraging negotiations about cost sharing, the interactive process thus reveals valuable information about worker preferences and allows courts to tailor the duty of accommodation to better respect those preferences.

d. Use Matching to Reduce Accommodation Costs

While cost sharing responds to unusual worker preferences, efficient job assignments in more ordinary circumstances require matching workers to jobs in which they will be most productive. Indeed, one of the central lessons of the economic framework is that matching plays a critical role in promoting labor market efficiency.[146] The quality of each worker-job match also determines the cost of any required accommodations. Just as a staffing expert might analyze how well a candidate's knowledge, skills, and abilities match the requirements of a particular job,[147] so also courts can consider how a person's impairment affects her productivity in different positions. Finding a better match between a worker's disability and her job both improves productivity and reduces the total cost of accommodations.

The principle of matching is deeply embedded in existing statutory provisions.[148] The ADA extends its protection only to a "qualified individual with a disability" who "with or without reasonable accommodation, can perform the essential functions of the employment position that such individual holds or desires."[149] The doctrine of essential job functions captures a basic insight about accommodation and matching. Although formally framed as an issue of statutory coverage, the rule more clearly constrains the duty to accommodate. In short, no court may order an employer to provide an accommodation that includes eliminating or reassigning an "essential function" of the job.[150] The principle underlying this rule arises directly from considerations of match quality. When a person is completely unable to perform core job duties, he is an extremely poor match for that position. His impaired productivity raises an employer's labor costs and disrupts normal business operations. Although the statute clearly contemplates imposing some costs on employers, the doc-

146. *See supra* Part I.A.

147. *See* Herbert M. Greenberg, *Hiring Expertise: How to Find the Right Fit*, HR FOCUS, Oct. 1999, at 6.

148. *See supra* text accompanying notes 132–134 (discussing the "direct threat" defense and the role of safety considerations in accommodation decisions).

149. 42 U.S.C. § 12111(8) (2000).

150. Carr v. Reno, 23 F.3d 525, 529–531 (D.C. Cir. 1994) (rejecting the plaintiff's request for a scheduling accommodation because the job involved a strict daily production deadline that the court determined was an "essential function").

trine of essential functions promotes more efficient matching and thus reduces the overall burden of accommodation.

A less familiar application of matching principles arises when accommodation costs differ significantly among occupations. For example, a person suffering from a repetitive motion disorder is likely to require more extensive accommodations working on the production line of a manufacturing plant rather than serving as a retail clerk or delivery driver.[151] Even assuming that he can perform the essential functions of these jobs with the help of reasonable accommodations, comparative costs are relevant to determining whether it is efficient to require a manufacturer to accommodate him on the production line. Imagine for a moment that he can perform the production job only if his employer makes costly physical modifications to his work station and abandons a longstanding program of rotating employees among positions on the line. Our analysis of matching suggests that a court should consider whether he could be more easily accommodated in a different job. Finding negligible accommodation costs in an alternative occupation would undermine his claim for requiring a comparatively expensive accommodation on the production line.

As a general principle, the larger the gap in costs between alternative occupations, the weaker is the case for requiring the more expensive accommodation. However, several competing factors could justify mandating a comparatively costly accommodation. First, we have seen that a proposal for accommodation cost sharing might reveal an unusually strong individual preference for a job and eliminate any undue burden on the employer.[152] Second, changing occupations can be quite costly for late-career workers. When a long-term employee develops a disability and loses his job, he may suffer substantial losses of wages and retirement benefits. The prospect of such losses could sometimes justify imposing even comparatively expensive accommodation obligations. Finally, it makes no economic sense to consider moving workers to jobs for which their skills and abilities are unsuited. Courts thus should ignore accommodation cost comparisons to positions for which a plaintiff would be unqualified.

Comparative costs should never become a trump card for employers to play in opposition to workers' requests for reasonable accommodation. Nevertheless, when costs vary substantially among occupations, a court should be free to consider those differences. Careful analysis of comparative accommodation costs should sometimes lead courts to limit the duty to accommodate.

151. *See* Toyota Motor Mfg. v. Williams, 534 U.S. 184, 189 (2002) (noting that the plaintiff's carpal tunnel syndrome restricted her from performing line production jobs requiring certain types of movements).

152. *See supra* text accompanying notes 139–141.

Respect for the ADA's broad remedial objectives almost certainly implies that the necessary cost difference should be rather large. However, imposing such constraints would allow courts to carry out the ADA's statutory mandate more cost-effectively. One might reasonably hope that attention to matching would lower employers' labor costs and encourage job formation. Moreover, individuals with disabilities would also have greater incentive to seek jobs in which their impairments affect their productivity less severely. The resulting improvements in match quality would enhance labor market efficiency.

e. Generalize by Occupation

We have seen that carefully matching workers to the right jobs can reduce the cost of accommodation. However, determining the best possible match for a particular person requires detailed information about his productivity in specific jobs within specific workplaces. Such information is difficult and costly to obtain. Courts can economize on these information costs by adopting appropriate presumptions about how impairments affect productivity in certain occupations.

Working in tandem with the analysis of comparative accommodation costs, these presumptions could roughly determine whether differences in accommodation costs among various occupations will be large or small. Armed with that preliminary assessment, a court might shift the burden of producing evidence accordingly. Thus, an employee seeking what would ordinarily be a comparatively high-cost accommodation could be required to offer an appropriate justification.[153] Similarly, an employer challenging what would ordinarily be a comparatively low-cost accommodation would have to demonstrate why unusual circumstances make it an undue burden in this case.

Imagine, for example, an employer of warehouse workers facing repeated accommodation requests made by employees who suffer from back problems. The employer could argue that these employees should bear the burden of explaining why their requests to accommodate lifting restrictions should be granted because such an impairment could be accommodated at no cost in any occupation that does not require lifting. Although these employees may be able to perform the essential functions of their job with reasonable—though expensive and inconvenient—accommodations, the mismatch between their impairment and this particular position justifies some judicial reluctance to mandate the requested accommodations.

153. For a discussion of some potential efficiency justifications, *see supra* text accompanying note 152.

On the other hand, consider a clerical employee whose back problems require only comparatively minor ergonomic adjustments to his workstation and permission to stand briefly every hour. In this case, there is no reason to believe that the cost of accommodating the employee in a clerical job will be greater or less than in any other job. Thus, efficiency considerations suggest that a court should begin with a presumption in favor of accommodation. This employer should be obliged to explain why its accommodation costs will be unusually high. From an economic perspective, courts should require the employer to demonstrate why terminating such a person will improve match quality rather than simply produce inefficient employee churning.

These examples demonstrate that establishing presumptions about accommodation costs would help to focus ADA litigation on factors relevant to labor market efficiency. Contrary to the ordinary intuition about efficiency arguments, this approach would be equally likely to assist employee-plaintiffs as to protect employers from liability. Judges might rely initially on their own analysis of common employment situations to determine how presumptions should be set. However, one would expect both academic research and the adversarial process to quickly supplement judges' own resources. Existing research on accommodation costs might well be adaptable to the purpose of determining appropriate presumptions,[154] and one would expect scholars to be eager to investigate this newly relevant question. Litigants, too, would have substantial incentives to present expert opinion evidence to courts on the issue of accommodation costs. Thus, it is reasonable to suppose that the common law process would allow courts to refine substantially their initial speculations about comparative accommodation costs.

Establishing presumptions about how certain impairments interact with particular occupations would create at least superficial tension with some existing case law that emphasizes the importance of an individualized analysis of each accommodation request.[155] Nevertheless, other strands of legal analysis comport well with a burden-shifting approach. The statutory structure of the ADA seemingly requires plaintiffs to bear the burden of persuasion on the element of reasonableness and then shifts that same burden to employers arguing that an accommodation imposes an undue hardship or creates a direct threat to safety. Case law also includes more nuanced examples

154. *See, e.g.*, Blanck, *supra* note 96, at 898–910 (reviewing empirical evidence of accommodation costs).

155. *See, e.g.*, PGA Tour, Inc. v. Martin, 532 U.S. 661, 688 (2001) ("To comply with [the ADA's] command, an individualized inquiry must be made to determine whether a specific modification for a particular person's disability would be reasonable under the circumstances as well as necessary for that person . . . ."); Sutton v. United Air Lines, Inc., 527 U.S. 471, 483 (1999) ("Whether a person has a disability under the ADA is an individualized inquiry.").

involving shifting burdens of production. For example, the U.S. Court of Appeals for the Seventh Circuit has spoken of requiring plaintiffs to make a threshold showing that an accommodation would be reasonable in ordinary circumstances.[156] The burden would then shift to the employer to demonstrate why the particular conditions in this workplace or position render the cost or inconvenience too great.[157] In any event, the use of rebuttable presumptions has a time-honored place in employment discrimination jurisprudence. Presumptions about appropriate accommodations would be no more or less problematic than the widely used *McDonnell Douglas* framework for individual disparate treatment cases.[158]

4. Towards a Doctrine of Comparative Accommodation Costs

As we have seen, existing law incorporates matching principles. Both "direct threat" analysis and the doctrine of essential functions identify situations in which mismatching makes accommodation inefficient. However, the potential influence of matching analysis goes far beyond these express statutory provisions. I have argued that the economic framework supports a broader doctrinal principle of comparative accommodation costs.[159] Thus, courts should be reluctant to find for a plaintiff when accommodation costs would be substantially lower in an alternative occupation. When acommodation costs are similar in all relevant positions, however, courts should tend to favor a plaintiff's claims for accommodation. This part shows how easily statutory language and existing case law can incorporate comparative acommodation cost analysis.

The ADA itself makes a broad range of factors relevant to deciding whether the law requires an employer to provide a particular accommodation. An employer must make a "reasonable" accommodation so long as it does not impose an "undue hardship" on business operations.[160] Unless

156. *See* Vande Zande v. Wisc. Dept. of Admin., 44 F.3d 538, 542–43 (7th Cir. 1995) (discussing how to allocate the burden of production and persuasion on the question of the costs and benefits of accommodations).

157. *Id.*

158. Under McDonnell Douglas Corp. v. Green, 411 U.S. 792, 802–03 (1973) and its progeny, plaintiffs bear an initial burden of establishing certain facts that give rise to an inference of potential discrimination. A defendant employer then bears the burden of producing admissible evidence of a legitimate nondiscriminatory reason for its adverse employment action. Finally, the plaintiff bears the burden of persuasion on the ultimate issue of discrimination. *See* St. Mary's Honor Ctr. v. Hicks, 509 U.S. 502, 507 (1993).

159. *See supra* Part II.C.3.d.

160. 42 U.S.C. § 12112(b)(5)(A) (2000) (requiring an employer to make "reasonable acommodations to the known physical or mental limitations of an otherwise qualified individual with a disability").

the qualifier "reasonable" is to become mere surplusage, allowing plaintiffs to demand any accommodation that is not an undue hardship, courts must give it some independent meaning. The widely accepted legal understanding of the term "reasonable" invites a court to analyze accommodations in light of all the surrounding circumstances. Absent any contrary language in other statutory provisions, considering comparative accommodation costs would appear to be fair game.

Far from contradicting this conclusion, a close reading of the ADA's lengthy definition of "undue hardship" tends to confirm the legitimacy of comparative cost analysis. No one could sensibly argue that the statutory text compels a comparative-cost interpretation of "undue hardship."[161] However, that term's amorphous multifactor definition leaves courts ample leeway to admit evidence of comparative accommodation costs. Repeated references to "cost," "expenses and resources," and "the impact otherwise" of a requested accommodation focus judicial attention on how burdensome and costly an accommodation will be. It is but a short step in such an open-ended analysis of accommodation costs to consider comparative data. Moreover, specific language directs courts to analyze the "composition, structure, and functions of the workforce"—an inquiry that implicitly invites courts to compare the characteristics of other workforces to help decide whether this particular employer should be compelled to accommodate this individual employee.

Existing case law tends to confirm the broad discretion that courts enjoy in analyzing accommodation cases. Recall the hypothetical case of a warehouse worker suffering from back problems. If a judge feels disinclined to

161. The ADA defines "undue hardship" in the following terms:

> (A) In general
>
> The term "undue hardship" means an action requiring significant difficulty or expense, when considered in light of the factors set forth in subparagraph (B).
>
> (B) Factors to be considered
>
> In determining whether an accommodation would impose an undue hardship on a covered entity, factors to be considered include—
>
> (i) the nature and cost of the accommodation needed under this chapter;
>
> (ii) the overall financial resources of the facility or facilities involved in the provision of the reasonable accommodation; the number of persons employed at such facility; the effect on expenses and resources, or the impact otherwise of such accommodation upon the operation of the facility;
>
> (iii) the overall financial resources of the covered entity; the overall size of the business of a covered entity with respect to the number of its employees; the number, type, and location of its facilities; and
>
> (iv) the type of operation or operations of the covered entity, including the composition, structure, and functions of the workforce of such entity; the geographic separateness, administrative, or fiscal relationship of the facility or facilities in question to the covered entity.

§ 12111(10).

require the worker's employer to make the necessary accommodations, current doctrine provides at least three distinct ways to reject the claim. The court could hold that the plaintiff is not disabled. Or the court could say that lifting is an essential job function and that any requested accommodation seeking to avoid lifting thus renders the plaintiff unqualified for the position. Finally, the court could decide that the requested accommodation imposes an undue hardship on the employer. As we have seen, the statutory language imposes few constraints, and provides little guidance, about how courts should analyze these questions.

Although judges determined to rule against plaintiffs have used all three approaches,[162] a remarkable number of ADA cases rely on restrictive definitions of disability to dismiss claims for accommodation.[163] District court judges appear to have seized on a doctrinal rule that allows them to grant summary judgment in those cases they deem unworthy. Judicial opinions repeatedly caution that the presence or absence of an ADA disability must be determined on a case-by-case basis.[164] Despite these admonitions, however, it has become clear that most judges consider the issue susceptible to categorical reasoning. Defendants have argued with great success that a wide range of impairments do not substantially limit plaintiffs' major life activities.[165] Granting summary judgment on this basis disposes of cases at a comparatively early stage.

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162. *See, e.g.*, Dropinski v. Douglas County, 298 F.3d 704, 709–10 (8th Cir. 2002) (granting summary judgment to employer because the job functions outlined in county employee's job description were essential and employee was unable to perform those functions given the activity restrictions imposed by his doctor as result of back injury; therefore, employee was not "qualified individual" under the ADA); Eckles v. Consolidated Rail Corp., 94 F.3d 1041, 1051–52 (7th Cir. 1996) (holding that plaintiff's proposed accommodation would impose an undue hardship because it conflicted with union seniority rights guaranteed by the collective bargaining agreement); Toyota Motor Mfg. v. Williams, 534 U.S. 184, 200–02 (2002) (establishing a more restrictive standard for proving an ADA disability on the basis of impairments that substantially limit the ability to perform manual tasks by requiring limitation of everyday tasks rather than job activities).

163. For other scholars' criticism of this tendency, see Chai R. Feldblum, *Definition of Disability Under Federal Anti-Discrimination Law: What Happened? Why? And What Can We Do About It?*, 21 BERKELEY J. EMP. & LAB. L. 91, 139–61 (2000); Tony R. Maida, *How Judicial Myopia Is Jeopardizing the Protection of People with HIV/AIDS Under the ADA*, 27 AM. J. L. & MED. 301, 301–04 (2001).

164. *See, e.g.*, Albertson's, Inc. v. Kirkingburg, 527 U.S. 555, 563–67 (1999) (holding that individuals with monocular vision are not per se disabled under the ADA but must instead prove their disability on a case-by-case basis); Katz v. City Metal Co., 87 F.3d 26, 32 (1st Cir. 1996) (stating that the determination of disability under the ADA should be made on a case-by-case basis); Ennis v. National Ass'n of Bus. & Educ. Radio, Inc., 53 F.3d 55, 59–60 n.4 (4th Cir. 1995) (asserting that the plain language of the ADA requires a case-by-case analysis).

165. *See, e.g.*, *Williams*, 534 U.S. at 199–202 (holding that carpal tunnel syndrome must substantially limit everyday manual tasks in order to be considered an ADA disability); Soileau v. Guilford of Me., Inc., 928 F. Supp. 37, 47–48 (D. Me. 1996) (holding that employee's depressive condition was a mental impairment but nevertheless failed to substantially limit a major life activity), *aff'd*, 105 F.3d 12 (Me. 1997).

By ruling that a plaintiff has no covered disability, courts avoid far more difficult and time-consuming litigation over the question of reasonable accommodation. The legal analysis of accommodation requests requires a comparatively complex situational assessment involving detailed information about the nature of the job, accommodation costs, employer resources, and a host of other facts about the workplace. Beyond its intrinsically fact-bound character, the question of accommodation has also received relatively little doctrinal elaboration. The statute's amorphous multifactor balancing test seems to have deterred courts from any sustained effort to make the inquiry more predictable. Lacking a clearly defined analytic structure, the doctrine of accommodation virtually compels courts to submit the issue of reasonable accommodation to a jury. Thus, it should come as no surprise that lower courts have been far more receptive to pre-trial motions focused on the more clearly categorical question of whether the plaintiff has a covered disability.

An important goal of this Article has been to lay the analytical groundwork for a more robust doctrinal elaboration of an employer's duty of reasonable accommodation. Some courts have already taken tentative steps in that direction. For example, Judge Richard Posner's opinion in *Vande Zande v. Wisconsin Department of Administration*[166] demands a rough proportionality between the costs and benefits of an accommodation.[167] Similarly, in *Borkowski v. Valley Central School District*,[168] Judge Guido Calabresi writes that a plaintiff must identify "an accommodation, the costs of which, facially, do not clearly exceed its benefits."[169] These decisions attempt to give some content to what it means for an accommodation request to be reasonable.

My hope is that courts will continue to develop the doctrine surrounding reasonable accommodation and undue hardship. None of the principles I have proposed to guide accommodation decisions would require courts to reverse prior decisions or to alter significantly their approach to disability discrimination cases. Instead, more explicit and careful consideration of factors such as comparative accommodation costs might well reduce courts' regrettable tendency to distort the statutory definition of disability.

5. Special Problems of Substance Abuse

As we have seen, failing to consider the comparative costs of accommodating disabled workers in different occupations makes the statutory duty of reasonable accommodation an unwisely inflexible policy instrument. The

166. Vande Zande v. Wis. Dep't of Admin., 44 F.3d 538 (7th Cir. 1995).
167. *See id.* at 542.
168. Borkowski v. Valley Cent. Sch. Dist., 63 F.3d 131 (2d Cir. 1995).
169. *Id.* at 138.

ADA's special provisions concerning recovering alcoholics and drug abusers appear to make the same error by ignoring the distinction between high- and low-risk jobs. If we assume for the sake of discussion that drug addiction and alcoholism would otherwise qualify as disabling conditions, the act would ordinarily require an employer to accommodate individuals with these disabilities. However, the statute contains a special exemption that permits employers to "hold an employee who engages in the illegal use of drugs or who is an alcoholic to the same qualification standards for employment or job performance and behavior that such entity holds other employees."[170] What are we to make of this blanket exception to the general rule?

I have argued that the proper interpretation of "reasonable accommodation" and "undue hardship" incorporates a comparative accommodation cost analysis. Under this approach, no protection would be afforded to substance abusers working in or applying for high-risk positions—those jobs for which alcohol or drug abuse creates a comparatively serious chance of harm or lost productivity. However, the risk of churning suggests that employable substance abusers should sometimes be protected from discharge when employee turnover is unlikely to improve match quality. Thus, at least in low-risk jobs, employers might often be required to accommodate substance abusers.

At first glance, the specific statutory exemption applicable to alcoholics and illegal drug users appears to promote churning by permitting even low-risk employers to discharge substance abusers for poor performance. However, careful consideration of the churning model may be able to justify this harsher treatment of substance abusers. In these cases, discharge may be a necessary catalyst in the process of acknowledging that substance abuse is a problem and seeking treatment.[171] Permitting discharges for poor performance thus may enhance long-run efficiency by improving deterrence.

Ancillary statutory provisions that bring recovering substance abusers within the coverage of the ADA are also amenable to interpretation through the lens of my proposed framework. The statute extends coverage to drug users who have been "rehabilitated successfully" and are no longer "engaging in the illegal use of drugs."[172] In keeping with the framework's emphasis on the value of matching, we should adjust the standard for successful rehabilitation according to the risk of loss associated with the job. The danger of severe mismatching indicates that high-risk employers should be permitted to demand

170. § 12114(c)(4).

171. *See* sources cited *supra* note 62.

172. § 12114(b) (providing coverage for a person who "has successfully completed a supervised drug rehabilitation program and is no longer engaging in the illegal use of drugs, or has otherwise been rehabilitated successfully and is no longer engaging in such use . . . [or] is participating in a supervised rehabilitation program and is no longer engaging in such use").

far more convincing evidence of rehabilitation than might be adequate for low-risk employment. There is at least some suggestion that courts applying section 504 of the Rehabilitation Act have adopted this approach to proof of rehabilitation.[173] The framework supports the extension of this approach to cases decided under the ADA as well.

CONCLUSION

My principal goal in this Article has been to explore the economic effects of disability discrimination law. An informal model of worker-firm matching has provided the organizing principle for this analysis. We have seen that incomplete and asymmetric information can produce the labor market inefficiencies of mismatching, churning, and scarring. Employee turnover ordinarily improves match quality by moving workers to jobs in which they will be more satisfied and more productive. However, informational problems sometimes interfere with this beneficial process and cause severe mismatching, excessive turnover, or chronic unemployment.

The presence of individuals with disabilities in the labor market creates precisely the conditions necessary for mismatching, churning, and scarring to occur. In particular, employers who discover employees' hidden disabilities are likely to discharge them. So long as their impairments remain hidden from prospective employers, however, these individuals often will obtain new positions quite similar to their old ones. This unproductive turnover, which I have called employee churning, wastes the resources that former and prospective employers devote to screening, recruiting, and training new employees. But, more significantly, it also creates the risk of severe mismatching in comparatively high-risk jobs and the possibility of scarring when repeated discharges make someone unemployable.

The ADA is a significant legal intervention designed to improve labor market outcomes for people with disabilities. The economic framework developed in this Article sheds new light on how disability discrimination law influences labor market efficiency. In contrast to the conclusions of more conventional economic analyses, the framework suggests that the statutory duty of reasonable accommodation promotes labor market efficiency by combating

173. *See* Teahan v. Metro-N. Commuter R.R. Co., 951 F.2d 511, 521 (2d Cir. 1991). Thus, the *Teahan* court wrote:

> Inasmuch as [plaintiff's] responsibilities bear on public safety concerns, any conduct demonstrated to be a manifestation of his handicap that is likely to occur in the future and which may implicate those public safety concerns is a matter the district court should consider in determining whether he is "otherwise qualified."

Id.

churning and scarring. The duty to accommodate constrains employers whose private gains from discharging disabled employees often produce social losses to be borne by other employers and by public disability insurance schemes.

This efficiency justification for mandating accommodations offers some hope of transcending the potentially divisive redistributive arguments often used to attack and defend special measures enacted on behalf of individuals with disabilities. It adds a new dimension to the debate to consider how the law might work to remedy a market failure. However, it is important to remember that arguments based on distributive justice and the dignitary interests of people with disabilities have always been—and will no doubt remain—a critical part of the policy debate. Neither advocates nor opponents of disability discrimination legislation will or should abandon the moral and rhetorical force of appeals to justice and theories of personhood.

My more modest claim is that economic reasoning complements those approaches. For example, an efficiency defense for accommodation mandates bolsters noneconomic arguments offered in support of the ADA. It also challenges the conventional conclusion that a statutory duty of reasonable accommodation most closely resembles an implicit tax-and-transfer scheme with purely redistributive effects. On the other hand, my detailed analysis of issues such as comparative accommodation costs illustrates some areas of tension between dignitary and efficiency approaches to accommodation. We can pursue complete freedom of occupational choice for individuals with disabilities only if we are willing to compromise significantly the economic objective of matching.

Only a robust and open public debate can resolve definitively how much these dignitary and redistributive objectives should give way to efficiency considerations. However, the ADA indisputably includes many provisions that rely on economic factors to limit an employer's duty to accommodate. The framework presented in this Article shows how courts might best interpret the economic limitations inherent in these statutory provisions. I have developed five principles that could encourage more efficient accommodation decisions and explained in some detail how both the statutory text and existing case law could embrace a doctrine of comparative accommodation costs. The framework particularly highlights the importance of matching and the role of accommodation mandates in reducing the risk of churning and scarring. By identifying more clearly the diverse ways in which accommodation promotes both economic and noneconomic objectives, we can hope that legal doctrine will tend to express a more orderly balancing of these values.