

Articles

LAW, ECONOMICS, AND ACCOMMODATIONS IN THE INTERNAL LABOR MARKET

Seth D. Harris*

I. INTRODUCTION

The U.S. Government's statistical agencies have not yet perfected a way of measuring which workers have both a "disability" and a job.¹ Yet,

* Professor and Director of Labor & Employment Law Programs, New York Law School. I benefited from presenting earlier versions of this article to the Law & Society Association's 2005 Annual Conference and New York University School of Law's Labor and Employment Law Colloquium, as well as to faculty workshops at New York Law School, Seton Hall Law School, and Hofstra Law School. I am grateful to Elizabeth Chambliss, Ken Dau-Schmidt, Steve Ellmann, Alan Hyde, Leandra Lederman, Carlin Meyer, Michael Stein, and Charles Sullivan for their valuable comments. This article would not have been possible without the diligent research assistance of Marisa Baldaccini, Daniel Goldberger, Leanne Hamovich, and Christopher Neely, and the eclectic assistance, too valuable and extensive to detail in this small space, of Jamie Wenger and Melissa Stevenson. Nonetheless, all errors are mine. New York Law School's continuing and generous support of my research supported this project and many others. For my mother, Martha, *sine qua non*.

1. The federal government's four principal sources for data about the employment of people with disabilities are the Survey on Income and Program Participation (SIPP), the Centers for Disease Control's National Health Interview Survey (NHIS), the Current Population Survey (CPS) and the Census Bureau's American Community Survey (ACS). Both the CPS and the SIPP are administered jointly by the Census Bureau and the Bureau of Labor Statistics. Yet, these survey instruments each use different definitions of "disability." Compare ERIKA STEINMETZ, U.S. CENSUS BUREAU, AMERICANS WITH DISABILITIES: 2002, CURRENT POPULATION REPORTS P70-107, 2 fig.1 (2006), available at <http://www.census.gov/prod/2006pubs/p70-107.pdf> (describing the definitions used in the SIPP), with PATRICIA F. ADAMS & PATRICIA M. BARNES, M.A., U.S. DEP'T OF HEALTH & HUMAN SVCS., CTRS. FOR DISEASE CONTROL, SUMMARY HEALTH STATISTICS FOR THE U.S. POPULATION: NATIONAL HEALTH INTERVIEW SURVEY, 2004 (2006) (Vital and Health Statistics Series 10 No. 229) (displaying data definitions used in the NHIS), with U.S. Census Bureau, Disability Data from the Current Population Survey (CPS) ASEC, <http://www.census.gov/hhes/www/disability/disabcps.html> (last visited Jan. 31, 2007)

there is little debate that the measures show that working-age Americans with disabilities are employed at a much lower rate than working-age Americans without disabilities.² There is also a general consensus that the employment rate among all working-age people with disabilities has declined over the past fifteen years or longer.³ There is a substantial scholarly debate, however, over whether the Americans with Disabilities Act (ADA)⁴ has contributed to these trends. Daron Acemoglu and Joshua

(listing questions used by the CPS to identify a person as having a disability) with U.S. Census Bureau, Disability—American Community Survey (ACS), <http://www.census.gov/hhes/www/disability/acs.html> (last visited Jan. 31, 2007) (listing definitions of disabilities used by the ACS). However, ten years after President Bill Clinton ordered the involved agencies to work together, it appears that significant progress has been made toward implementing an accurate employment measure for people with disabilities. See generally Terence McMenamin, Stephen M. Miller, & Anne E. Polivka, *Discussion and Presentation of the Disability Test Results from the Current Population Survey* (U.S. Bureau of Labor Statistics Working Paper No. 396, 2006) (discussing the testing of new screening questions to be used in the CPS).

2. According to CPS data, the employment rate for working-age people with a “work disability” was 22%, while the employment rate for working-age people without a disability was 76%. U.S. Census Bureau, Hous. & Household Econ. Statistics Div., Disability - Selected Characteristics of Persons 16 to 64: 2005, tbl.2, <http://www.census.gov/hhes/www/disability/cps/cps205.html> (last visited Nov. 10, 2007). The ACS found employment rates for working-age people with and without disabilities in 2005, respectively, of 38% and 78%. REHAB. RESEARCH & TRAINING CTR. ON DISABILITY DEMOGRAPHICS & STATISTICS, CORNELL UNIVERSITY, 2005 DISABILITY STATUS REPORTS UNITED STATES No. 2 (2005), available at <http://www.ilr.cornell.edu/edi/disabilitystatistics> (follow “get pdf” hyperlink under “2005 Disability Status Report”). The SIPP found that 45% of working-age people with “severe disabilities” were employed in 2002 compared with 87.7% of working-age people without disabilities. STEINMETZ, *supra* note 1, at 24.

3. See, e.g., Richard V. Burkhauser et al., *Accounting for the Declining Fortunes of Working-Age People with Disabilities*, in THE AMERICANS WITH DISABILITIES ACT: EMPIRICAL PERSPECTIVES (Michael Ashley Stein & Samuel Estreicher, eds., forthcoming 2007) (discussing the decline in the relative employment of working-age persons beginning in the mid-1980’s); THE DECLINE IN THE EMPLOYMENT OF PEOPLE WITH DISABILITIES: A POLICY PUZZLE (David C. Stapleton & Richard V. Burkhauser, eds. 2003) (compiling several articles discussing this topic) [hereinafter POLICY PUZZLE]. I have emphasized “all” working-age people with disabilities here because a debate exists over whether the employment rate among those working-age people with disabilities who are most likely to be covered by the ADA—a subset of all working-age people with disabilities—has declined. See, e.g., Peter Blanck et al., *Calibrating the Impact of the ADA’s Employment Provisions*, 14 STAN. L. & POL’Y REV. 267, 268 (2003) (claiming that prior studies used measures of disability that deviate from the ADA’s definition); Douglas Kruse & Lisa Schur, *Employment of People with Disabilities Following the ADA*, 42 INDUS. REL. 31 (2003) (explaining that problems in measurement may have lead to a perceived decline in employment among those reporting work disabilities). But see Samuel R. Bagenstos, *Has the Americans with Disabilities Act Reduced Employment for People with Disabilities?*, 25 BERKELEY J. EMP. & LAB. L. 527, 539-55 (2004) (critiquing these analyses).

4. Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 327 (1990). The ADA initially covered only employers with 25 or more employees. Beginning in 1994, the ADA covered employers with 15 or more employees. 42 U.S.C. § 12111(5)(A)

Angrist, along with Thomas DeLeire, sparked this debate with their respective studies of data from the Current Population Survey and the Survey of Income and Program Participation. Acemoglu & Angrist found a decline in the employment rate among both men and women with disabilities between the ages of 21 and 39 beginning in the two years immediately after the ADA took effect in 1992.⁵ DeLeire found a substantial decline in the employment rate of men with disabilities beginning in 1990—immediately after the ADA was passed, but two years before it took effect.⁶ The proximity of the ADA's passage to the employment-rate decline, and analyses which purported to exclude other potential causes for the decline, led Acemoglu & Angrist and DeLeire to infer a causal relationship between the ADA and the decline. Richard Burkhauser and several co-authors recently revisited the Acemoglu & Angrist study and found substantial reason to doubt its conclusions.⁷ Nonetheless, the debate had begun and it continues to play an important role in disabilities law scholarship. This article joins that debate.

The debate surrounding the effect of the ADA on the employment rate of individuals with disabilities pits a “rational choice” view of employers and accommodations against a “discriminatory choice” view. Rational

(1994).

5. Daron Acemoglu & Joshua D. Angrist, *Consequences of Employment Protection? The Case of the Americans with Disabilities Act*, 109 J. POL. ECON. 915, 917 (2001).

6. Thomas DeLeire, *The Wage and Employment Effects of the Americans with Disabilities Act*, 35 J. HUM. RESOURCES 693, 701-05 (2000); see also Thomas DeLeire, *The Americans with Disabilities Act and the Employment of People with Disabilities*, in POLICY PUZZLE, *supra* note 3, at 259 (analyzing empirical studies that attribute the decline in employment among people with disabilities to the ADA rather than other policy inputs).

7. See Burkhauser, *supra* note 3. This reconsideration of the same data found equivalent declines in the employment rate of working-age people with disabilities at similar points in earlier business cycles; therefore, economic recession may explain the employment-rate decline better than the ADA's effects on employer behavior. *Id.* at 16-17. The time horizon in the Acemoglu & Angrist study was too narrow to account for this other potential cause of the employment-rate decline. In addition, Burkhauser and his co-authors found that the Acemoglu & Angrist results were contingent upon a particularized definition of “work disability.” Changing the definition—that is, looking at people who self-identified themselves as having a work disability over two years rather than only one—eliminated the evidence of a sharp post-ADA employment-rate decline. *Id.* at 27-28. Both of these criticisms would apply equally well to the DeLeire study, which is subject to the additional criticism that it sought to measure the ADA's employment effects before employers were legally subject to the law. Earlier critics argued that other potential causes that were not accounted for in these studies, such as increases in Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI) benefits reciprocity rates, might have caused the employment-rate decline observed by Acemoglu, Angrist and DeLeire. See, e.g., John Bound & Timothy Waidmann, *Accounting for Recent Declines in Employment Rates Among the Working-Aged Disabled*, Nat'l Bureau of Econ. Research, Working Paper No. 7975, 2000 (presenting evidence suggesting that the growth in the SSDI program can account for much of the decline in the employment of the disabled); Kruse & Schur, *supra* note 3 (arguing that those placed on SSDI or SSI face strong disincentives for returning to work).

choice scholars—including Acemoglu & Angrist, DeLeire, Richard Epstein,⁸ Christine Jolls,⁹ and John Donohue,¹⁰ among others¹¹—suggest that the ADA’s mandate that employers provide “reasonable accommodations”¹² to workers with disabilities makes these workers more expensive than workers without disabilities. The ADA requires employers to accommodate any “qualified individual with a disability” as long as the accommodation is “reasonable” and does not impose an “undue hardship” on the employer.¹³ An accommodation can be any change to a physical environment, work schedule, or job responsibility that allows a worker with a disability to perform the essential functions of his job or to enjoy the same privileges and benefits as his co-workers.¹⁴ Rational choice scholars

8. RICHARD A. EPSTEIN, *FORBIDDEN GROUNDS: THE CASE AGAINST EMPLOYMENT DISCRIMINATION LAWS* 487-88 (1992).

9. *See, e.g.*, Christine Jolls, *Accommodation Mandates*, 53 *STAN. L. REV.* 223, 230-42, 273-82 (2000) (laying out a theory that the effect of the ADA’s accommodation mandate and other such mandates is for the protected group’s employment rate to decline); *see also* Christine Jolls & J.J. Prescott, *Disaggregating Employment Protection: The Case of Disability Discrimination*, (Nat’l Bureau of Econ. Research, Working Paper No. 10740, 2004) (comparing state-level employment rates among working-age people with disabilities before and after the ADA took effect, but also comparing states in which the ADA’s accommodation mandate was an innovation with states that had existing state laws imposing an equivalent accommodation mandate, and finding that the ADA effected a decline in the employment rate among working-age people with disabilities for two years after the law was passed, but did not effect a decline thereafter). *But see* Jolls, *Accommodation Mandates*, *supra*, at 280 (suggesting that the post-ADA employment-rate decline among working-age people with disabilities may have been due to this group investing more time in school because of a higher expected return on those investments); Christine Jolls, *Identifying the Effects of the Americans with Disabilities Act Using State-Law Variation: Preliminary Evidence on Educational Participation Effects*, 94 *AM. ECON. REV. (PAPERS & PROC.)* 447, 448 (2004) (offering preliminary evidence of Jolls’s theory posited in *Accommodation Mandates* that the post-ADA employment decline was due to an increase in working-age people with disabilities seeking educational opportunities).

10. *See* John J. Donohue III, *Employment Discrimination Law in Perspective: Three Concepts of Equality*, 92 *MICH. L. REV.* 2583, 2608-09 (1994) (explicitly endorsing the thesis that as accommodation costs rise employment rates necessarily decline); John J. Donohue III, *Understanding the Reasons for and Impact of Legislatively Mandated Benefits for Selected Workers*, 53 *STAN. L. REV.* 897 (2001) [hereinafter *Legislatively Mandated Benefits*] (reviewing Jolls, *Accommodation Mandates*, *supra* note 9) (endorsing Jolls’s theoretical analysis, but raising concerns about the equilibrium model on which she relied).

11. *See, e.g.*, Thomas H. Barnard, *Disabling America: Costing Out the Americans with Disabilities Act*, 2 *CORNELL J.L. & PUB. POL’Y* 41, 58 (1992) (noting that employers usually do not benefit from accommodating an employee with a disability).

12. *See* 42 U.S.C. § 12111(8) (2000) (defining “qualified individual with a disability” to be “an 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”).

13. *See id.* § 12112(b)(5)(A) (2000).

14. *See* 29 C.F.R. § 1630.2(o)(2) (2006) (illustrating the Equal Employment Opportunity Commission regulations’ definition of “reasonable accommodations”).

assume that accommodations impose new and additional costs on employers and, as a result, employing a worker with a disability who requires an accommodation is more costly than employing a worker without a disability because those without disabilities do not need an accommodation. Given the choice between workers who are equally productive, these scholars expect that rational employers will choose to hire the less costly worker—that is, the worker without a disability—because that worker’s net productivity (i.e., productivity minus labor costs) will be higher. In economic terms, the ADA’s accommodation mandate makes each unit of labor supplied by workers with disabilities more costly and, therefore, employers demand less of it.¹⁵ The ADA’s accommodation mandate prices working-age people with disabilities out of the labor market and, thereby, depresses their employment rate.¹⁶

This Article does not offer a direct critique of the rational choice position.¹⁷ Rather, it joins the debate in support of the discriminatory choice view of the relationship between the costs of the accommodation mandate and the employment rate of working-age people with disabilities. The discriminatory choice position is more implicit than explicit in the work of the scholars who promote it. Peter Blanck, often writing with Helen Schartz, D.J. Hendricks, and other co-authors, has produced several empirical studies of the costs and benefits of accommodations.¹⁸ These

15. This conclusion assumes, as it must, that labor demand is elastic. I make related assumptions below about labor supply. *See infra* note 101.

16. Jolls’s position in this debate is more complex than this brief discussion suggests. *See, e.g., Jolls, Accommodation Mandates, supra* note 9, at 242-61 (discussing different assumptions regarding the binding nature of employment and wage protections and differing conclusions depending upon whether accommodations imposed fixed or incremental costs). Jolls has also argued that accommodation mandates overlap with traditional anti-discrimination mandates found in employment discrimination laws other than the ADA to the extent that both types of mandates impose additional costs on employers. *See* Christine Jolls, Commentary, *Antidiscrimination and Accommodation*, 115 HARV. L. REV. 642 (2001). Samuel Bagenstos and Michael Stein have also made related arguments. *See* Samuel R. Bagenstos, “Rational Discrimination,” *Accommodation, and the Politics of (Disability) Civil Rights*, 89 VA. L. REV. 825 (2003); Michael Ashley Stein, *Same Struggle, Different Difference: ADA Accommodations as Antidiscrimination*, 153 U. PA. L. REV. 579 (2004).

17. I offer such a critique in Seth D. Harris, *The Mis-Directed Debate over the Economics of Disabilities Accommodations*, in HUMAN RESOURCES ECONOMICS AND PUBLIC POLICY: ESSAYS IN HONOR OF VERNON M. BRIGGS, JR. (Charles J. Whalen, ed., W.E. Upjohn Inst. 2008) (forthcoming).

18. *See* Peter David Blanck, *The Economics of the Employment Provisions of the Americans with Disabilities Act: Part I—Workplace Accommodations*, 46 DEPAUL L. REV. 877, 901-08 (1997) [hereinafter *Economics of Employment Provisions*] (discussing PETER D. BLANCK, COMMUNICATING THE AMERICANS WITH DISABILITIES ACT, TRANSCENDING COMPLIANCE: A CASE REPORT ON SEARS, ROEBUCK AND CO. (Annenberg Washington Program Report 1994) and PETER D. BLANCK, COMMUNICATING THE AMERICANS WITH DISABILITIES ACT, TRANSCENDING COMPLIANCE: 1996 FOLLOW-UP REPORT ON SEARS, ROEBUCK AND CO. (Annenberg Washington Program Report 1996)); Peter Blanck et al.,

studies found that accommodations frequently impose no added cost and, when they have a cost, are inexpensive.¹⁹ They also found that employers often benefit from providing accommodations to their incumbent employees. Among other cost savings, employers who accommodate their incumbent employees with disabilities avoid searching for and training new employees and improve the accommodated employees' productivity and attendance.²⁰ Most important, Blanck and his co-authors have found that the benefits employers derive from accommodations frequently outweigh their costs—that is, accommodations actually benefit employers as well as their employees with disabilities.²¹

The explicit message of these studies is that rational employers should choose to accommodate their employees with disabilities because employers will often benefit from that choice. The implicit message is that the low and declining employment rate among working-age people with disabilities cannot be attributed to the ADA's accommodation mandate or, more precisely, its associated costs.²² The cause must lie elsewhere, perhaps with irrational, discriminatory choices made by employers who

Workplace Accommodations: Empirical Studies of the ADA, in ASSESSING THE EMPLOYMENT PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (Michael Ashley Stein & Samuel Estreicher eds., forthcoming 2008) [hereinafter *Workplace Accommodations*]; D.J. Hendricks et al., *Cost and Effectiveness of Accommodations in the Workplace: Preliminary Results of a Nationwide Study*, 25 DISABILITIES STUD. Q. 175 (2005); Helen A. Schartz, Kevin M. Schartz, D.J. Hendricks & Peter Blanck, *Workplace Accommodations: Empirical Study of Current Employees*, 75 MISS. L.J. 917 (2006) (exploring employer and employee factors in the employer's decision to make accommodations); cf. Heidi M. Berven & Peter David Blanck, *The Economics of the Americans with Disabilities Act Part II—Patents and Innovations in Assistive Technology*, 12 NOTRE DAME J.L. ETHICS & PUB. POL'Y 9, 84-87 (1998) (arguing that any cost-benefit analysis of the ADA is not complete without including the unanticipated economic benefits from a rapidly expanding assistive technology market).

19. See, e.g., Blanck, *Economics of Employment Provisions*, *supra* note 18, at 902; Schartz, *supra* note 18, at 926.

20. See, e.g., Blanck, *Economics of Employment Provisions*, *supra* note 18, at 902; Schartz, *supra* note 18, at 939.

21. See, e.g., Blanck, *Economics of Employment Provisions*, *supra* note 18, at 902-04; Schartz, *supra* note 18, at 939. But see Michael Ashley Stein, *The Law and Economics of Disability Accommodations*, 53 DUKE L.J. 79, 178-80 (2003) (expressing reservations about the collection of empirical studies and their ability to measure costs and benefits of accommodations).

22. This implicit message is consistent with some discriminatory choice scholars' argument that the employment rate among ADA-protected working-age people with disabilities has not declined. See *supra* note 3 and accompanying text. While I generally support the discriminatory choice view of the employment rate decline, I do not mean to endorse these scholars' related argument regarding the employment rate data. They are not inextricably linked. I consider it possible, even likely, that the ADA has not improved the employment rate among working-age people with disabilities, even though this outcome cannot be explained in large part or at all by employers responding rationally to added labor costs arising out of the ADA's accommodation mandate.

refuse to hire workers with disabilities. Thus, while demand for labor supplied by working-age Americans with disabilities is lower than it should be, discrimination—rather than accommodation costs—may be the cause of that depressed demand.²³

This Article provides the theory and analysis which together explain the results of the empirical studies supporting the discriminatory choice position. It discusses why accommodating employees with disabilities often imposes no costs on the employers providing accommodations and why accommodations may, in appropriate circumstances, yield net benefits for those employers. The analysis relies on “internal labor market theory,” an economic theory suggesting that barriers to competition can increase the efficiency of the relationships between employers and employees.²⁴ I will argue that efficient accommodations are not merely facilitated by the internal labor market’s competitive barriers, but rather that employers’ accommodations and employees’ impairments *are* competitive barriers which increase the efficiency of relationships between employers and their employees with disabilities.

More specifically, I will argue that accommodations and workers’ impairments tighten the bonds between the employer and the employee and thereby make possible a range of cost-cutting and productivity-enhancing behaviors that yield larger dividends for the employer. Thus, the cost of an accommodation is not the only factor that is relevant to determining whether an employer will benefit from providing an accommodation to an incumbent employee with an impairment. The willingness of the parties to seize the opportunity to make their relationship more productive and cost efficient—an opportunity created by the accommodation and impairment—is a critical factor in determining whether an employer benefits from accommodating an employee with an impairment.

In pristine market conditions, rational economic actors should not need encouragement to engage in beneficial behavior.²⁵ Assuming that such conditions ever exist, internal labor market theory explains that many employment relationships operate in a non-competitive environment—

23. For the classic work on employers indulging a “taste” for discrimination, see GARY S. BECKER, *THE ECONOMICS OF DISCRIMINATION* (2d ed. 1971).

24. I have previously used internal labor market theory to analyze the Supreme Court’s interpretation of the ADA in *U.S. Airways v. Barnett*. See Seth D. Harris, *Re-Thinking the Economics of Discrimination: U.S. Airways v. Barnett, the ADA, and the Application of Internal Labor Market Theory*, 89 IOWA L. REV. 123 (2003). I argued that *Barnett* signaled that the Supreme Court had been influenced by internal labor market theory in its analysis of the role of seniority systems in the workplace. *Id.* at 126-28.

25. For a discussion of reasons why a mandate may be needed to provide such encouragement, even in a competitive labor market, see Jolls, *Accommodation Mandates*, *supra* note 9, at 246-47.

really, a bilateral monopoly²⁶—in which the parties are bargaining over the division of a surplus. As a result, there is room for the ADA to play a role in enhancing efficiency. In particular, the ADA encourages employers to accommodate their incumbent employees with impairments through a system of incentives. Perhaps the most effective of these incentives is the accommodation mandate,²⁷ which subjects noncompliant employers to added costs.²⁸ The ADA's accommodation mandate not only defines the standard for appropriate treatment of workers with disabilities in American society, it also either requires or strongly encourages employers to engage in an interactive process with their employees to find a cost-effective means of satisfying that standard.²⁹ In sum, this Article tells the story of

26. See *infra* text accompanying note 52 (discussing how the bilateral monopoly affects the actions of the employee and employer).

27. See 42 U.S.C. § 12112(b)(5)(A) (2000) (defining “discriminate” to include “not making reasonable accommodations to the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or employee, unless such covered entity can demonstrate that the accommodation would impose an undue hardship on the operation of the business of such covered entity”).

28. See *infra* Part III.B (discussing litigation costs associated with reasonable accommodations claims under the ADA).

29. During the interactive process, workers with disabilities propose accommodations and employers either accept workers' proposals or offer alternatives. And, as its descriptive title suggests, the interactive process contemplates the employer and the worker exchanging information and possible solutions in a collaborative effort to find the least costly, effective accommodations. See 29 C.F.R. § 1630.3(o)(3) (2006) (illustrating the procedures of an interactive process); S. REP. NO. 101-116, at 34 (1989) (“A problem-solving approach should be used to identify the particular tasks or aspects of the work environment that limit performance and to identify possible accommodations. . . . [E]mployers first will consult with and involve the individual with a disability in deciding on the appropriate accommodation.”); H.R. REP. NO. 101-485, pt. 2, at 65 (1990), as reprinted in 1990 U.S.C.C.A.N. 303 (echoing the Senate Report). Courts disagree about whether a failure to engage in the interactive process is a violation of the ADA. Compare *Rehling v. City of Chi.*, 207 F.3d 1009, 1015-1016 (7th Cir. 2000) (holding that an employer's failure to engage in the interactive process is not sufficient to show that the employer violated the ADA's accommodation mandate) with *Garcia-Ayala v. Lederle Parenterals*, 212 F.3d 638, 648 n.12 (1st Cir. 2000) (considering that an employer's failure to engage in the interactive process may be evidence of a violation of the ADA). Even if it is not, the ADA created a significant incentive for employers to engage in the interactive process by exempting from compensatory and punitive damages those employers that demonstrate “[a] good faith effort[], in consultation with the person with the disability . . . to identify and make a reasonable accommodation” 42 U.S.C. § 1981a(a)(3) (2000). Similarly, the ADA urges the parties to use alternative disputes resolution systems, like mediation, to assist their negotiations over accommodations. See 42 U.S.C. § 12212 (2000) (“Where appropriate and to the extent authorized by law, the use of alternative means of dispute resolution, including settlement negotiations, conciliation, facilitation, mediation, fact-finding, minitrials, and arbitration, is encouraged to resolve disputes arising under this chapter”) (emphasis added); see also H.R. REP. NO. 101-485, pt. 3, at 76-77 (1990), as reprinted in 1990 U.S.C.C.A.N. 445, 499-500 (further discussing Congress' encouragement of voluntary alternative dispute resolution in ADA cases).

how the ADA's accommodation mandate improves efficiency in the workplace. At the same time, this Article does not attempt to define what is a "reasonable accommodation" or "undue hardship" under the ADA. As explained more fully below, an employer's obligation to provide accommodations does not depend upon proof that he or she will benefit, or that the accommodation will produce a net benefit after taking all effects on all parties into account.³⁰

In reality, the rational choice and discriminatory choice views address different labor markets. Proponents of the rational choice position focus on the external labor market—that is, a market free of the competitive barriers that define the internal labor market. In a properly functioning external labor market, employers and job applicants buy and sell labor according to terms largely set by supply and demand.³¹ By contrast, the empirical studies supporting the discriminatory choice position focus principally on incumbent employees.³² The flaw in the rational choice argument is the assumption that competitive labor markets are the ordinary case.³³ This Article's econo-legal analysis considers incumbent employees in non-competitive internal labor markets.

Several data points suggest that accommodation issues frequently arise in internal labor markets. A large majority of the ADA charges filed with the EEOC relate to incumbent employees, not job applicants.³⁴ In

30. Even jurists identified with the law and economics movement do not endorse that approach. See *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 542 (7th Cir. 1995) (delivering the opinion of the court, Judge Posner stated: "It would not follow that . . . an accommodation would have to be deemed unreasonable if the cost exceeded the benefit however slightly. But, at the very least, the cost could not be disproportionate to the benefit."); see also *Borkowski v. Valley Cent. Sch. Dist.*, 63 F.3d 131, 138 (2d Cir. 1995) (interpreting the Rehabilitation Act, Judge Calabresi held, "an accommodation is reasonable only if its costs are not clearly disproportionate to the benefits that it will produce.").

31. See *infra* text accompanying notes 38-39 (discussing the request for accommodation in the internal and the external labor market).

32. See, e.g., Blanck et al., *Workplace Accommodations*, *supra* note 18 (explaining that roughly 75% of the accommodations being discussed with survey respondents were to be provided to incumbent employees) (manuscript at 6, on file with author).

33. See *infra* note 129 and accompanying text (citing evidence that many scholars believe that accommodations issues are resolved in a competitive labor market).

34. See Stewart Schwab et al., *Comparison of Employment Disability Discrimination Claims with Other Statutes Across U.S. Equal Opportunity Commission and Fair Employment Practice Agencies Nationally*, in *THE AMERICANS WITH DISABILITIES ACT: EMPIRICAL PERSPECTIVES* (Michael Ashley Stein & Samuel Estreicher eds., forthcoming 2007) (manuscript at 5-6, on file with authors) (assuming that any charge relating to "discharge," "terms and conditions," and "harassment" necessarily comes from an incumbent employee, and all "reasonable accommodation" and "hiring" charges come from job applicants, nearly 70% of charges relate to incumbent employees. However, assuming the more likely but still very conservative result that half of "reasonable accommodation" charges come from incumbent employees, then roughly 80% of charges relate to incumbent employees).

2004, 1.3 million incumbent employees in the private sector suffered workplace illnesses or injuries requiring recuperation away from work beyond the day of the incident.³⁵ A survey of Americans between the ages of 51 and 61 in the 1992 Health and Retirement Study found that 36% of people in that age range with work-limiting impairments acquired those impairments because of an accident, injury, or illness at work. Thirty-seven percent (37%) of Social Security Disability Insurance beneficiaries in the same age group were disabled because of an accident, injury, or illness at work.³⁶ Even these surveys do not take into account employees whose disabilities were present, but hidden, when they were originally hired.³⁷ The rational choice story of the external labor market, even if it is accurate, is only one part of a much larger story about accommodations and the employment of workers with disabilities. This Article joins the debate to contribute another important chapter to that larger story.

Part II begins by describing internal labor market theory and how internal labor markets benefit both employees and employers outside the context of a discussion over disability accommodations. It also briefly addresses the controversy over the continuing vitality of internal labor markets. Then, looking at three different scenarios in which incumbent employees might request accommodations, Part II will go on to describe how employees' disabilities can affect the efficiencies of the internal labor market. It will also explain how an accommodation can restore an efficient employment relationship and, in some circumstances, yield additional productivity benefits for the employer. Part III considers other benefits an employer derives from accommodating an employee with a disability. That Part identifies costs which an accommodation allows the employer to avoid—that is, the “opportunity benefits” of providing an accommodation. Adding up all of the costs and benefits of an accommodation, the article concludes that employers can, and often will, derive economic benefits from providing accommodations to their incumbent employees with disabilities. This conclusion is consistent with the empirical studies of accommodations' costs and benefits discussed above.

II. LABOR MARKETS, IMPAIRMENTS, AND ACCOMMODATIONS

From the employer's perspective, the perspective with which this Article is concerned, an accommodation produces a net benefit if the

35. See ISHITA SENGUPTA ET AL., NAT'L ACAD. OF SOC. INS., *WORKERS' COMPENSATION 2006: BENEFITS, COVERAGE, AND COSTS* 30 (2004).

36. See Robert T. Reville & Robert F. Schoeni, *The Fraction of Disability Caused at Work*, 65 SOC. SECURITY BULL. 31, 31 (2003-04).

37. See *infra* Part II.D (discussing the possible effects of hidden disabilities on the internal labor market relationship).

productivity increase resulting from the accommodation plus any costs avoided as a result of providing the accommodation exceeds the cost of the accommodation. The next Part analyzes the avoidability of costs by examining accommodation costs and how accommodations can increase productivity. It offers a general and theoretical model for assessing the economic benefits of workplace accommodations. Of course, different inputs will produce different results. Therefore, it is not possible to declare categorically that accommodating every employee with a disability will benefit each employer. Rather, this Part concludes only that there are many circumstances in which accommodating an employee with a disability can benefit her employer. The model presented in this Part describes those circumstances and provides a framework for assessing the costs and benefits of accommodations.

A. Internal Labor Markets and External Labor Markets

The job applicant and the incumbent employee are situated differently. As a result, requests for accommodations may arise in either of two labor markets. An employer's incumbent employee may request an accommodation in the "internal labor market" or a job applicant may request an accommodation in the "external labor market."³⁸ The external labor market, where employers and job applicants bargain over the terms and conditions of employment, is a competitive market. Job applicants are generally mobile, since they offer general skills that may benefit many employers. As a result, employers can choose from among many fungible job applicants. Similarly, job applicants can choose from among many fungible employers. Neither party has invested in the relationship before a job has been offered and an acceptance rendered, so there are few transaction costs associated with the choice of one employer or one worker. As a result, economists expect the external labor market to be competitive and for supply and demand to set the terms and conditions of employment.³⁹

This Article is not principally concerned with the external labor market. Instead, it focuses on incumbent employees who bargain with their

38. The ADA's protections extend to job applicants. See 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") (emphasis added); see also 42 U.S.C. § 12112(b)(5) (2000) (requiring reasonable accommodations for applicants as well as employees).

39. See Michael L. Wachter & George M. Cohen, *The Law and Economics of Collective Bargaining: An Introduction and Application to the Problems of Subcontracting, Partial Closure, and Relocation*, 136 U. PA. L. REV. 1349, 1353 (1988).

employers in the “internal labor market.”⁴⁰ The internal labor market is characterized by barriers to competition that may have several sources. The human capital theory of the internal labor market identifies firm-specific skills and knowledge as the principal barriers to competition.⁴¹ Incumbent employees acquire firm-specific skills and knowledge either through experience, formal training, or relationships developed in the workplace.⁴² These firm-specific skills and knowledge make incumbent employees more productive than otherwise qualified workers who could be hired from the external labor market.⁴³ They also make the incumbent employees more productive with their current employer than they would be working for another employer. As a result, both parties are willing to invest in the employee’s acquisition of firm-specific skills and knowledge since they will share the productivity dividends of those skills and knowledge. The employer yields greater profits generated by the employee’s increased productivity. The employee benefits because her greater productivity allows her aggregate wages (i.e., career compensation) with her current employer to exceed the compensation that any other employer could provide.⁴⁴

Firm-specific skills and knowledge differ from general skills and knowledge. General skills and knowledge would benefit any employer. Like firm-specific skills and knowledge, they increase an employee’s

40. See generally RONALD G. EHRENBERG & ROBERT S. SMITH, *MODERN LABOR ECONOMICS: THEORY AND PUBLIC POLICY* 26 (8th ed. 2003) (defining “internal labor market”).

41. See Oliver E. Williamson et al., *Understanding the Employment Relation: The Analysis of Idiosyncratic Exchange*, 6 *BELL J. ECON.* 250, 253 (1975); see also EHRENBERG & SMITH, *supra* note 40, at 159 (“Firms most likely to decide that the benefits of using an internal labor market outweigh the costs are those whose upper-level workers must have a lot of firm-specific knowledge and training that can best be attained by on-the-job learning over the years.”). For an early definition of “human capital theory,” the leading version of internal labor market theory, see Gary Becker, *Investment in Human Capital: A Theoretical Analysis*, 70 *J. POL. ECON.* 9, 9 (1962) and Walter Oi, *Labor as a Quasi-Fixed Factor*, 70 *J. POL. ECON.* 538 (1962).

42. See Williamson et al., *supra* note 41, at 253-257; Becker, *supra* note 41, at 11-18.

43. See EHRENBERG & SMITH, *supra* note 40, at 153-156; Becker, *supra* note 41, at 11-20; Williamson et al., *supra* note 41, at 253.

44. See Stewart J. Schwab, *Life-Cycle Justice: Accommodating Just Cause and Employment at Will*, 92 *MICH. L. REV.* 8, 15 (1993) (“Because the parties share the costs and benefits of training throughout the employee’s work life, both parties want to continue the relationship. The employer pays employees less than their full value later in their career. This protects employees from discharge because a discharge would harm the employer as well. The late-career wage exceeds, however, the outside wage the employee could receive, thereby discouraging the employee from quitting.”). Empirical evidence supports the view that wages in internal labor markets are set according to different standards than those typically considered relevant to the external labor market. See, e.g., George Baker & Bengt Holmstrom, *Internal Labor Markets: Too Many Theories, Too Few Facts*, 85 *AM. ECON. REV.* 255, 258-59 (1995).

productivity, but employers face a significant risk if they invest in their employees' general skills. Employees may quit and sell their general skills and knowledge to other employers in the external labor market. No employer wants to pay for skills and knowledge that will generate productivity returns for a competitor.⁴⁵ Thus, employers may be willing to forego the productivity benefits generated from investing in greater general skills and knowledge in order to avoid the risk of losing their investment.

The job-match theory posits that a different set of competitive barriers define the internal labor market. According to this theory, an employer systematically underpays its employee in the early stages of her career because the employer sets the entry-level wage with inadequate information about the employee's productivity in the job. As the employer learns more about the employee's productivity over time, the employer becomes better able to pay higher wages to employees who are well-matched to their jobs and, therefore, highly productive. Longer job tenure exposes better information to the employer. As a result, the employer becomes better able, over time, to pay the employee commensurate with her productivity and to compensate her for earlier underpayments.⁴⁶ In addition, having better information about an employee's capabilities allows the employer to match the employee with her "optimal assignment"—that is, the job in which the employee will be most productive.⁴⁷ In turn, the employee's higher productivity permits the employer to pay the employee higher wages. Better matched workers are more productive and tend to remain with their firms longer, in part because they earn high wages that other employers will not match.⁴⁸ All of this results in a virtuous cycle, where the incumbent employee is more valuable to the employer than workers from the external labor market and, in turn, the employer remunerates the employee more richly than other employers would.

The "supervision" or "efficiency wage" theory of the internal labor market, on the other hand, suggests that employers defer wage payments—that is, they increase employees' wages as the employees' tenure

45. See Schwab, *supra* note 44, at 13 n.18.

46. See Boyan Jovanovic, *Firm-Specific Capital and Turnover*, 87 J. POL. ECON. 1246, 1246-47 (1979) (setting forth the job match theory); Boyan Jovanovic, *Job Matching and the Theory of Turnover*, 87 J. POL. ECON. 972, 974 (1979) [hereinafter *Job Matching*] (discussing how the model implies that the average wage of the cohort increases with tenure).

47. See Jovanovic, *Job Matching*, *supra* note 46, at 974 (assuming that "imperfect information exists on both sides of the market about the exact location of one's optimal assignment. Following an initial assignment, new information becomes available, and reassignment becomes optimal in certain cases").

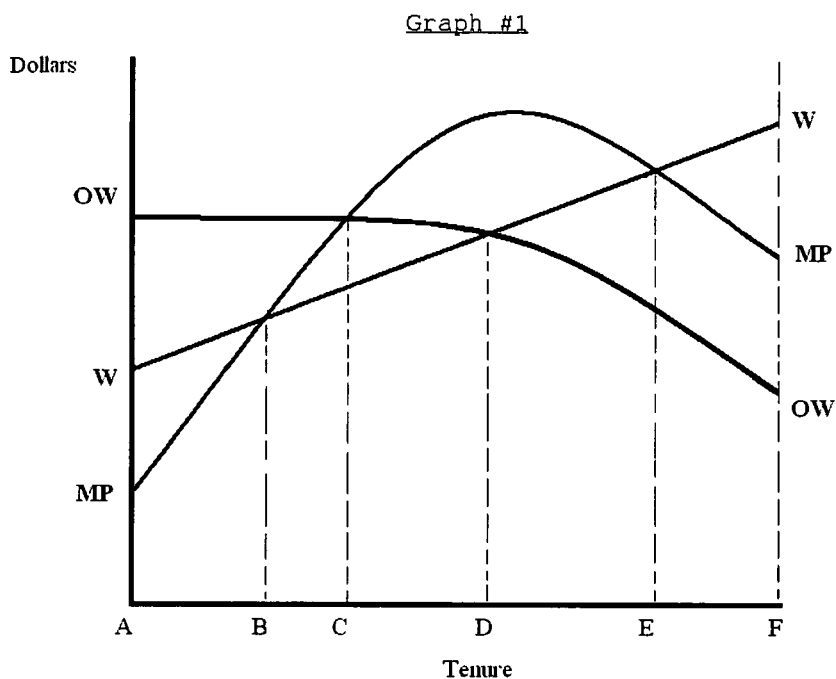
48. See Jacob Mincer & Boyan Jovanovic, *Labor Mobility and Wages*, in STUDIES IN LABOR MARKETS 21, 26-27 (Sherwin Rosen, ed. 1981); Jovanovich, *Job Matching*, *supra* note 46, at 974.

increases—as a means of encouraging employees to sustain their productivity early in their careers. Although higher wages do not reward incumbent employees directly for their present productivity, incumbent employees work harder in the near term to earn their reward in the long term. In other words, higher wages in the later stages of employees' careers are a reward for employees' earlier diligence.⁴⁹ Thus, incumbent employees' expectations based on employers' implicit (or perhaps explicit) promises make the employees more productive than workers from the external labor market.

The relationship between wages, firm tenure, productivity in the internal labor market, and productivity and wages in the external labor market has been depicted by the following graph:⁵⁰

49. See Erling Barth, *Firm-Specific Seniority and Wages*, 15 J. LAB. ECON. 495, 496 (1997) (discussing whether deferring worker wages increases productivity); see also Robert M. Hutchens, *Seniority, Wages and Productivity: A Turbulent Decade*, 3 J. ECON. PERSP. 49, 60-61 (1989) (discussing delayed compensation and the "supervision" theory); see generally Edward P. Lazear, *Agency, Earnings Profiles, Productivity, and Hours Restrictions*, 71 AM. ECON. REV. 606, 606 (1981) (advocating paying workers less than their value of marginal product (VMP) when they are young and paying them more than their VMP when they are old).

50. See, e.g., Wachter & Cohen, *supra* note 39, at 1362-63 fig.1 (offering this graph to depict the internal labor market relationship). This graph best describes the internal labor market relationships posited by human capital theory and job match theory. Both of these theories assume a relationship between productivity rising with tenure and wages rising with tenure. Supervision theory disconnects the employee's productivity from her wages; therefore, a graphical representation of this theory would look different. The wage curve would be roughly similar to the wage curve found in the graph below. In supervision theory's purest form, the employee's productivity curve would be close to horizontal, with a slow, steady declining slope like that of the opportunity wage curve.



In this graph, W (wage) represents all forms of compensation paid by the employer to its employee; MP (marginal productivity) represents the employee's productivity with her current employer; and OW (opportunity wage) represents the worker's wage in the external labor market—that is, the wage the worker would earn from the next best employer. Because the external labor market is competitive, the opportunity wage also tracks the worker's productivity with the next best employer. Tenure A is the point at which the worker enters the internal labor market. Tenure F represents the employee's retirement from her career with the employer.

The employee invests in her relationship with the employer from Tenure A to Tenure D . This investment results from the employee accepting a wage from her employer that is lower than her opportunity wage. After Tenure D until Tenure F the employee earns dividends because her wage exceeds her opportunity wage. As long as the difference between the present value of the employee's wage and the present value of her opportunity wage after Tenure D (i.e., $PV(W_{D-F} - OW_{D-F})$) exceeds the difference between the present value of the opportunity wage and the present value of the wage prior to Tenure D (i.e., $PV(OW_{A-D} - W_{A-D})$), the employee will reap a net dividend from her sunk investments (i.e., $D_{ee} = PV(W_{D-F} - OW_{D-F}) - PV(OW_{A-D} - W_{A-D})$). If this net dividend is greater than zero (i.e., $D_{ee} > 0$), then the employee benefits from her relationship with her employer. Further, since the employee earns dividends until

retirement at Tenure F, the employee has an incentive to remain in the relationship with her employer as long as possible, all other things being equal.

The employer invests between Tenure A and Tenure B and again between Tenure E and Tenure F. During these periods, the employee's wage exceeds her productivity. The employer earns dividends between Tenure B and Tenure E when the employee's productivity, higher because of her implicit contract with the employer, exceeds her actual wage. Once again, as long as the difference between the present value of the employee's productivity and the present value of the employee's actual wage from Tenure B to Tenure E (i.e., $PV(MP_{B-E} - W_{B-E})$) exceeds the difference between the present value of the wage and the present value of the productivity from Tenure A to Tenure B and from Tenure E to Tenure F (i.e., $PV(W_{A-B} - MP_{A-B}) + PV(W_{E-F} - MP_{E-F})$), the employer will reap a net dividend from its investments (i.e., $D_{er} = PV(MP_{B-E} - W_{B-E}) - [PV(W_{A-B} - MP_{A-B}) + PV(W_{E-F} - MP_{E-F})]$). If the net dividend is greater than zero (i.e., $D_{er} > 0$), then the employer benefits from the relationship with the employee in the internal labor market.⁵¹

Regardless of whether the barrier to competition is created by the firm-specific skills and knowledge of incumbent employees (human capital theory), the effects of more accurate job matching on productivity (job match theory), or the employer's productivity incentive system (supervision theory), the internal labor market creates a bilateral monopoly. Under ordinary circumstances, the parties will try to continue their relationship because each party reaps dividends that are not available elsewhere and each party sinks investments into the relationship which they do not want to forfeit. Thus, the employer will be disinclined to discharge the employee. The employer will also avoid behaviors that might cause the employee to quit. Similarly, the employee will be disinclined to quit because no other employer would compensate her at a level equal to that paid by her current employer.⁵² In sum, the benefits derived by the parties from continuing their relationship create incentives for a long-term relationship. The boundary between the external labor market and the

51. This model is subject to caveats. Perhaps most importantly, employers have great difficulty isolating an individual worker's productivity or measuring it with the precision suggested by this graph. One important cause of this measurement problem is that employees rarely work in isolation, but measuring an individual's contribution to a group's product may not be possible. Accordingly, discussions of productivity should usually be preceded by a warning that most productivity measures are rough estimates, at best. See Stein, *supra* note 21, at 139-42.

52. See EHRENBERG & SMITH, *supra* note 40, at 132-161, 332-35; see also Schwab, *supra* note 44, at 15 (showing that wages differing from market rates can encourage continuing working relationship).

internal labor market is the point at which there are sunk investments and prospective dividends which the parties do not want to lose.

Yet, there is no formal, explicit, legally enforceable contract codifying this arrangement. Implicit agreements broadly set the terms for a long-term employment relationship but do not mandate specific behaviors throughout the life of the agreement.⁵³ The type of detailed, long-term, written contract that would be needed to produce this result is impractical and uncommon. Among other reasons, the transaction costs associated with negotiating and enforcing a formal, detailed, complex, and contingent contract would be prohibitive.⁵⁴ Furthermore, specific agreements regarding future behaviors (i.e., the amount of work expected from the employee, the amount of pay required of the employer) subject the parties to the risks associated with changing circumstances. The parties' inability to predict every contingency that might arise over the life of their employment relationship—that is, “bounded rationality”—requires preserving flexibility to take into account changing circumstances.⁵⁵ Less specificity and greater flexibility, however, make the agreement difficult to enforce at law.⁵⁶ As a result, after the worker is hired, the parties engage in rolling renegotiations and reinterpretations of their relationship to recalibrate the distribution of investments and dividends.⁵⁷

Without a legal enforcement mechanism, a danger arises that one party will engage in “strategic” or “opportunistic” behavior which expropriates some of the other party's benefits or shifts the costs onto the other party.⁵⁸ For example, an employer may be tempted to engage in strategic behavior between Tenure E and Tenure F. The employer has already reaped all of its dividends, but the incumbent employee awaits a portion of her dividend because the employer is expected to pay the

53. See EHRENBERG & SMITH, *supra* note 40, at 132-161, 332-35; see also Schwab, *supra* note 44, at 15.

54. See Michael L. Wachter & Randall D. Wright, *The Economics of Internal Labor Markets*, in THE ECONOMICS OF HUMAN RESOURCE MANAGEMENT 86, 97 (Daniel J.B. Mitchell & Mahmood A. Zaidi eds., 1990) (“If the parties inside the firm attempt to maximize the coalition's surplus, they must obviously attempt to reduce transaction costs as much as possible (or, more accurately, as much as it is efficient to do so). Since negotiating, writing, and enforcing contracts often incur high transaction costs, complex state-contingent contracts might not be joint profit maximizing.”).

55. Oliver D. Hart, *Optimal Labour Contracts Under Asymmetric Information: An Introduction*, 50 REV. ECON. STUD. 3, 23 (1983) (discussing the role of bounded rationality in contracting).

56. Seth D. Harris, *Coase's Paradox and the Inefficiency of Permanent Strike Replacements*, 80 WASH. U. L.Q. 1185, 1212 (2002).

57. Hart, *supra* note 55, at 23 (“In reality, there exist few contracts between firms and workers containing the amount of detail which . . . [may be] appropriate. . . . [C]ontracts tend to be in force for limited periods of time, and are then renegotiated.”).

58. See Wachter & Cohen, *supra* note 39, at 1359-60 (discussing potential for opportunistic behavior).

employee a wage in excess of her productivity during this phase of her tenure. So, the employer might fire the employee. The discharge allows the employer to avoid paying wages that will exceed the employee's productivity. The employer thereby "usurp[s] some of the employee's dividend."⁵⁹ On the other hand, the employee might be tempted to engage in strategic behavior during the period between Tenure B and Tenure E when the employee's productivity exceeds her wage. If the employee "shirks" during this period, and thereby reduces her productivity, she usurps some of the employer's dividend and transforms it into leisure time for herself. Further, the employer must pay the costs of monitoring the employee's work more closely to minimize her shirking and, perhaps, risk disciplining the employee and undermining their relationship further.⁶⁰

Strategic behavior may benefit the party that engages in it, but it threatens the efficiencies made possible by the internal labor market. It may also have effects beyond the instant parties which, in turn, deprive the party engaging in the strategic behavior of its benefits. For example, an employer's strategic behavior with respect to one worker might cause other incumbent employees to doubt the reliability of their relationship with the employer.⁶¹ These co-workers might shirk, quit, or demand a costly and specific written agreement that assures them their expected dividends. These costs may exceed the appropriated dividends.⁶² Workers in the external labor market might also learn of the employer's reputation and shy away from entering into an agreement with the employer or demand additional guarantees.⁶³

It would be disingenuous, at least, to end this general discussion of internal labor market theory without acknowledging that there has been a substantial debate over whether any internal labor markets remain in the American economy and, therefore, whether internal labor market theory remains relevant. Katherine Stone, Peter Cappelli, and Paul Osterman, among others, have described a series of shocks to the American economy

59. Harris, *supra* note 56, at 1208. Other scholars have offered a similar analysis to argue that the Age Discrimination in Employment Act, by deterring this kind of employer opportunism, defends the internal labor market's efficiencies. See, e.g., Gary Minda, *Opportunistic Downsizing of Aging Workers: The 1990s Version of Age and Pension Discrimination in Employment*, 48 HASTINGS L.J. 511, 528-30 (1997) (arguing that older employees subject to opportunistic behavior are protected by the ADEA); Schwab, *supra* note 44, at 15-20.

60. See Wachter & Cohen, *supra* note 39, at 1358.

61. See Harris, *supra* note 56, at 1208 (demonstrating that opportunism decreases the total value of the benefit).

62. See Wachter & Cohen, *supra* note 39, at 1364.

63. See George M. Cohen & Michael L. Wachter, *Replacing Striking Workers: The Law and Economics Approach*, in PROCEEDINGS OF NEW YORK UNIVERSITY 43RD ANNUAL NATIONAL CONFERENCE ON LABOR 109, 118 (Bruno Stein ed., 1990) (stating that workers avoid investment in a firm exhibiting opportunistic behavior in the past).

during the 1980s and 1990s wrought by globalization, technological developments, deregulation, declining union density rates, and other factors. These scholars have argued that these shocks substantially weakened internal labor markets and reduced their relevance.⁶⁴ Other scholars, most notably Sanford Jacoby, acknowledge these economic shocks to the American economy and their importance, but argue that their effects on internal labor markets have been overstated and that they signal little more than evolutionary change.⁶⁵

This debate is too substantial and important to resolve in a few brief paragraphs. Nonetheless, it is worth noting that no scholar has argued that internal labor markets have entirely disappeared from the American economy. The better argument is that internal labor markets have survived but with some modifications that do not match the traditional expectations of how they will operate. Michael Piore, whose seminal work with Peter Doeringer defined internal labor markets⁶⁶ for a generation of labor economists and scholars in law, industrial relations, management, human resources, and organizational theory, explained the state of the debate in this way:

The world into which we are moving is a [sic] not a world in which the pricing and allocation of labor will be wholly governed by market forces, unmediated by administrative rules and social

64. See, e.g., PETER CAPPELLI, *THE NEW DEAL AT WORK* (1999) (showing that long-term career arrangements have given way to flexibility during the past twenty years); PAUL OSTERMAN, *SECURING PROSPERITY* (1999) (showing American transformation into a flexible workforce); KATHERINE V. W. STONE, *FROM WIDGETS TO DIGITS: EMPLOYMENT REGULATION FOR THE CHANGING WORKPLACE* (2004) (describing change in the twentieth century employment market from a focus on long-term employment to flexibility); Peter Cappelli, *Career Jobs Are Dead*, 42 CAL. MGMT. REV. 146 (1999) (explaining the declining internal labor markets and rising external markets in recent years). See generally PAUL OSTERMAN ET AL., *WORKING IN AMERICA: A BLUEPRINT FOR THE NEW LABOR MARKET* (2001) (taking a more ambiguous position on the viability of internal labor markets, likely reflecting the book's authorship by committee).

65. See SANFORD M. JACOBY, *EMPLOYING BUREAUCRACY: MANAGERS, UNIONS, AND THE TRANSFORMATION OF WORK IN THE 20TH CENTURY* (rev. ed. 2004) (arguing that the current institutional labor market has its roots in the New Deal); Sanford M. Jacoby, *Melting into Air? Downsizing, Job Stability, and the Future of Work*, 76 CHI.-KENT L. REV. 1195 (2000) (arguing that the "welfare capitalist" state remains in place despite recent economic changes); Sanford M. Jacoby, *Are Career Jobs Headed for Extinction?*, 42 CAL. MGMT. REV. 123 (1999) (responding to arguments that long-term employment no longer exists); see also Gary Charness & David I. Levine, *Changes in the Employment Contract? Evidence from a Quasi-Experiment*, 47 J. ECON. BEHAV. ORG. 391 (2002) (finding that employee attitudes have not shifted in a manner that is consistent with a decline in internal labor markets); Erica L. Groshen & David I. Levine, *The Rise and Decline (?) of U.S. Internal Labor Markets* (July 1998) (unpublished manuscript, on file with author) (finding no evidence of decline in internal labor markets).

66. See PETER B. DOERINGER & MICHAEL J. PIORE, *INTERNAL LABOR MARKETS AND MANPOWER ANALYSIS* (1971).

customs. We will, in other words, continue to have internal labor markets in the broad sense of the term. But the particular forms these internal labor markets will take are extremely varied. No single form will be dominant in the way in which the bureaucratic organization was dominant earlier in the post-war period.⁶⁷

Recent data tend to support Piore's conclusion. Stone and other scholars who argued that the internal labor market weakened have relied heavily on the decline in men's job tenure rates as evidence of a purported decline in internal labor markets. Like Acemoglu & Angrist and DeLeire,⁶⁸ these scholars looked at data within a time horizon that is too narrow.⁶⁹ Data that became available after their studies were published strongly suggest a return to relative stability in job tenure rates for men and stability for women after a long-term increase.⁷⁰ The purported rise of alternative work arrangements has also been an important reference point in the debate over internal labor markets, but the percentage of the American workforce engaged in alternative work arrangements has been generally stable since the Bureau of Labor Statistics began collecting these data.⁷¹ In sum, despite the scholarly debate, there is a great deal of evidence that internal labor markets and, therefore, internal labor market theory remain relevant

67. Michael J. Piore, *Thirty Years Later: Internal Labor Markets, Flexibility and the New Economy*, 6 J. MGMT. & GOVERNANCE 271, 273 (2002).

68. See *supra* note 7 (criticizing the studies of Acemoglu & Angrist and DeLeire and finding a causal relationship between the passage of the Americans with Disabilities Act (ADA) and the declining employment rate of working-age people with disabilities).

69. See *supra* note 7.

70. See U.S. BUREAU OF LABOR STATISTICS, TABLE 1. MEDIAN YEARS OF TENURE WITH CURRENT EMPLOYER FOR EMPLOYED WAGE AND SALARY WORKERS BY AGE AND SEX, SELECTED YEARS, 1996-2006, <http://www.bls.gov/news.release/tenure.t01.htm>, (last visited Jan. 21, 2007); see also Ann Huff Stevens, *The More Things Change, The More They Stay The Same: Trends in Long-Term Employment in the United States, 1969-2002* (Nat'l Bureau of Econ. Research, Working Paper No. 11878, 2005) available at <http://www.nber.org/papers/w11878> (finding stability in the prevalence of men's long-term employment relationships during the period studied); William P. Bridges, *Age and the Labor Market: Trends in Employment Security and Employment Institutions*, in SOURCEBOOK OF LABOR MARKETS: EVOLVING STRUCTURES AND PROCESSES, 319, 320-326 (Ivar Berg & Arne L. Kalleberg eds., 2001) (explaining that declining job tenure rates for older workers does not signal the demise of internal labor markets).

71. See U.S. BUREAU OF LABOR STATISTICS, CONTINGENT AND ALTERNATIVE EMPLOYMENT ARRANGEMENTS, FEBRUARY 2005, <http://www.bls.gov/news.release/conemp.nr0.htm> (last visited Nov. 10, 2007) (disclosing that, apart from a small increase in the percentage of workers who are "independent contractors," there has been no change in other types of "alternative work arrangements" since 2001); see also Arne L. Kalleberg, *Evolving Employment Relations in the United States*, in SOURCEBOOK OF LABOR MARKETS: EVOLVING STRUCTURES AND PROCESSES 187, 191-195 (Ivar Berg & Arne L. Kalleberg eds., 2001).

in the American economy and for American workers. This Article's argument proceeds on those grounds.

B. Efficient Accommodations in the Internal Labor Market: The After-Hiring Impairment

The preceding section described the general context—the internal labor market relationship—in which an incumbent employee may request an accommodation. An accommodation request may arise in any one of three scenarios in the internal labor market. In the first scenario, the employee develops a physical or mental impairment after being hired which interacts with her current job to limit the employee's productivity (i.e., an “after-hiring impairment”).⁷² For example, an industrial accident might have caused the employee to suffer a permanent partial impairment that must be accommodated for her to perform her job.⁷³ This section will consider after-hiring impairments.

The second scenario actually involves two different factual situations which, for the purposes of this analysis, can be considered together. An incumbent employee may be promoted or transferred out of one job for which she did not need an accommodation into a differently structured, second job that she cannot perform without an accommodation (i.e., “promotion or transfer”). For example, an employee with a bad back might be transferred from a sedentary job in an airline's mail room to a cargo-moving job requiring heavy lifting.⁷⁴ Alternatively, an incumbent employee's job may be modified to include new and different functions (i.e., “job redesign”). For example, an employee with carpal tunnel syndrome and tendinitis in her arms and shoulders might be newly required to hold blocks of wood for several hours at shoulder-level.⁷⁵ The next section will consider promotions, transfers, and job redesigns.

A third scenario would involve an employee with an unobservable or “hidden” impairment that interacts with her current job to reduce her

72. Going forward, I will adhere more closely to the ADA's lexicon and refer to the employee's “impairment” rather than the employee's “disability.” The ADA defines “disability” as “a physical or mental impairment that substantially limits one or more of the major life activities of such individual” 42 U.S.C. § 12102(2) (2000). Thus, the employee has an impairment, while the interaction of the impairment and the employee's environment creates a “disability.” See Seth D. Harris, *Introduction: Understanding the Context for the “Coelho Challenge”*, 48 N.Y.L. SCH. L. REV. 711, 721 (2004).

73. See, e.g., *Allen v. Ga. Power Co.*, 980 F. Supp. 470, 472 (N.D. Ga. 1997) (“Plaintiff injured his back when he and a co-worker attempted to lift cross-ties onto a truck. . . . Subsequently, [he] experienced leg pain, in addition to the back pain, and was not able to perform numerous job tasks that [employees at the plant] were required to perform.”).

74. See, e.g., *U.S. Airways v. Barnett*, 535 U.S. 391, 394 (2002) (5-4 decision).

75. See, e.g., *Toyota Motor Mfg., Ky. v. Williams*, 534 U.S. 184, 187-189 (2002).

productivity or performance to a level lower than what the employer expected when the employee was hired. For example, an employee may have an undisclosed hearing limitation which makes him unable to distinguish different alarm signals, a function that is critical to his job.⁷⁶ Section D will consider hidden impairments.

Before proceeding to a discussion of these scenarios, however, some definition of “benefit” is needed to assess this Article’s claim that employers can “benefit” from providing accommodations to its employees with disabilities. I will use two measures. First, the employer may be better off accommodating the employee than continuing the relationship with that employee absent an accommodation. In other words, the employer is better off with the accommodation than without it. Second, the employer may be better off accommodating the employee than if the employee did not have an impairment; that is, the employer may be better off with the accommodation *and* the impairment than without the impairment.⁷⁷ This Article will argue that accommodating incumbent employees with impairments can benefit employers according to both of these measures, although satisfying the first measure will prove easier than satisfying the second.

1. Isolating the After-Hiring Impairment’s Effects

The first scenario arises when an incumbent employee suffers an injury or otherwise develops a physical or mental impairment for which the employee needs accommodation to perform her current job at the expected level of productivity.⁷⁸ I will assume, as a preliminary matter, that the

76. See e.g., *Schmidt v. Methodist Hosp. of Ind.*, 89 F.3d 342, 343 (7th Cir. 1996) (describing plaintiff, who was “seriously hard of hearing” and accepted a job as a nurse in the hemodialysis unit at Methodist Hospital. Due to his hearing impairment, he could not hear and distinguish between the different alarms from the dialysis machines.).

77. I acknowledge a moral hazard associated with this argument—that is, it suggests a risk that employers would benefit from inflicting some kind of harm on their employees, resulting in an impairment. This risk is actually quite small, if it exists at all. First, this article does not argue that every employer will benefit from accommodating every impairment; thus, a baseball-bat wielding employer would bear the risk of deriving no benefit or suffering a loss in some cases. Second, this article argues that employers benefit from accommodating impairments through cooperation with their employees with impairments. Presumably, an employee would be less willing to cooperate with an employer who intentionally caused her harm. Finally, and most obviously, employers intentionally inflicting harm on their employees subject themselves to various kinds of civil and criminal liability.

78. I do not mean to suggest that people with disabilities are inherently less productive than people without disabilities. They are not. See Stein, *supra* note 21, at 130-34. Rather, the factual predicate for this analysis is that an employee with an impairment requests an accommodation that affects her productivity by adapting her work environment to her impairment.

accommodation would allow the employee's productivity to return to its pre-impairment level and increase as expected over time.⁷⁹ I will also assume that the accommodation entails some cost, at least in the first instance.⁸⁰ Absent accommodation, and assuming no change in the employee's compensation in the first instance,⁸¹ it is possible to assess the impairment's effects on the employee's and the employer's dividends and investments.

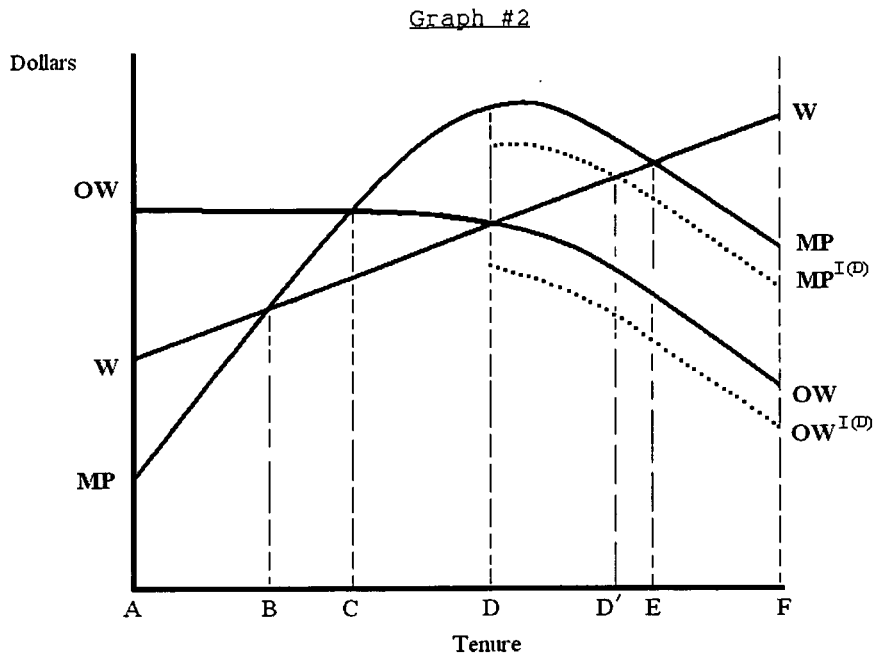
On Graph #1, the incumbent employee's productivity with her current employer is illustrated by the marginal productivity curve (MP). The employee's productivity with the next best employer is depicted by the opportunity wage curve (OW). When the impairment occurs, both the MP curve and the OW curve will shift down because the impairment interacts with the employee's job in a manner that reduces the employee's productivity.⁸² The consequences of the after-hiring impairment are depicted in the following two graphs. In each graph, the solid lines represent the productivity curves that would have been observed absent the impairment (MP, OW), while the dotted lines depict the productivity curves observed with the impairment ($MP^{I(B)}$, $OW^{I(B)}$).

79. This result is suggested by the ADA's definition of "qualified individual with a disability." See *supra* note 12 (giving the ADA's definition of "qualified individual with a disability"). Thus, it is reasonable to assume that employees with disabilities who have been accommodated can perform at the level expected of an unimpaired worker. Some accommodations may not produce this result. Nonetheless, making this assumption allows for the creation of a model which can take into account circumstances that do not fit this assumption.

80. As noted above, many accommodations impose no new costs on employers. In those cases, the employer is more likely to derive a net benefit and, at worst, will suffer no loss from providing the accommodation.

81. See *infra* Part II.C (discussing transfers, promotions and job-redesigns).

82. The analysis in this section assumes that the impairment's productivity effects are the same in the internal and external labor markets. Once again, I do not mean to suggest that this assumption is always true; however, this model can be easily modified to relax this assumption and predict the effects there from. See generally J. Hoalt H. Verkerke, *Is the ADA Efficient?*, 50 UCLA L. REV. 903, 910-15 (2003) (discussing how workers with impairments may find better and more productive matches in different jobs if the impairment is observable). Also, this discussion assumes that the employee's opportunity wage is a direct function of her productivity. The opportunity wage may be disconnected from and lower than the employee's actual productivity because of market failures, including discrimination. Finally, the depiction of the impairment's effects on the employee's productivity in all of the graphs in this paper assumes that the employee's condition does not change over time. Of course, this assumption will not hold true for people with multiple sclerosis and other degenerative conditions. In these circumstances, the gap between the unadjusted MP and OW curves and the adjusted MP and OW curves would grow over time.



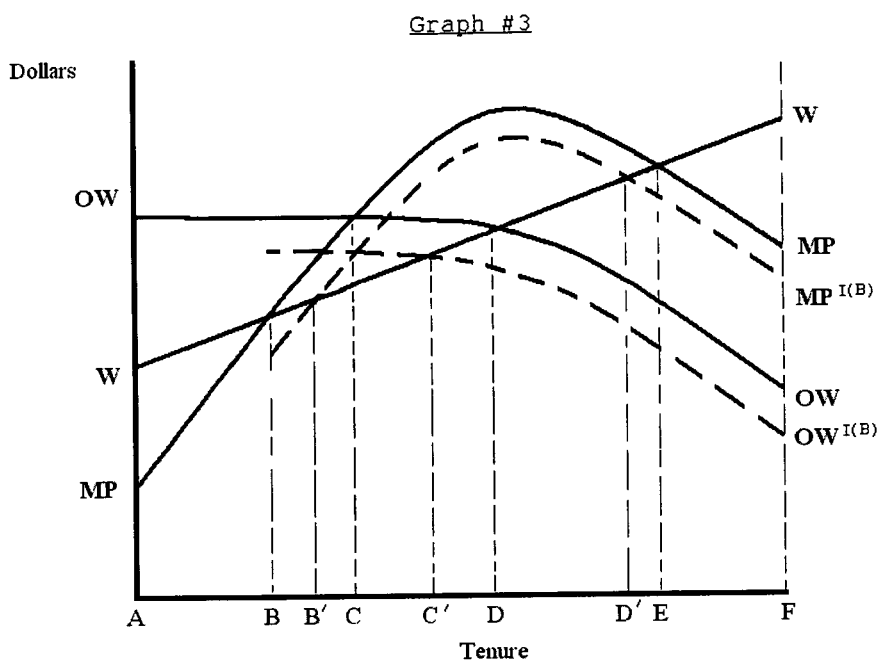
On Graph #2, the impairment occurs at Tenure D. One very important effect of the impairment is that the employee's dividend increases. The relationship between the employee's wage and her opportunity wage remains unchanged from Tenure A to Tenure D, so the employee does not make any larger investment as a consequence of the impairment. Yet, the employee reaps a larger dividend from Tenure D to Tenure F because the wage remains unchanged while the opportunity wage is lower as a result of the impairment. A larger dividend results because the employee's actual wage exceeds her opportunity wage by a larger amount during this period than it would have absent the impairment.

The incumbent employee does not realize this increased dividend. She receives no greater compensation, for example. Instead, the larger dividend is an additional competitive barrier in the internal labor market that more tightly binds the employee to the employer. Moving from an internal labor market to the external labor market ordinarily causes a worker without a disability to suffer a loss in career compensation.⁸³ The employee with an after-hiring impairment would suffer an even greater wage loss if she were required to seek alternative employment in the

83. See *supra* note 52 and accompanying text (explaining that the internal labor market provides above-market compensation which encourages continuity in the employer-employee relationship).

external labor market. The additional loss would be equal to the value of the productivity lost as a consequence of the impairment. The incumbent employee's relationship with the employer, therefore, becomes far more valuable to the employee.

On Graph #2, the impairment causes the employer to reap smaller dividends than expected from its relationship with this employee. The employer makes the same level of investment in the employee between Tenure A and Tenure B and reaps the same dividend between Tenure B and Tenure D because the employee's wage and marginal productivity have not changed during periods preceding the impairment. The employer reaps a smaller dividend after Tenure D than it would have received absent the impairment because of the employee's lower level of productivity. Also, the dividend period no longer extends to Tenure E. As a result of the shift in the marginal productivity curve, the employer's dividend period ends at Tenure D'. For the same reasons, the employer makes a larger investment between Tenure D' and Tenure F. This larger investment further discounts the employer's net dividend. As a result, the employer has a weaker economic rationale for sustaining a relationship with the incumbent employee with an impairment. At best, the employer will reap some dividends from its larger investments. At worst, the employer's increased investments will exceed the smaller dividends and the employer will suffer a loss. Thus, the relationship may remain profitable for the employer after the impairment, but this result is less likely than it would have been absent the impairment.



In Graph #3, with the impairment occurring at Tenure B, the employer's net dividends are even smaller. The employer receives a smaller dividend—that is, marginal productivity in excess of wage—for a shorter period of time (i.e., Tenure B' to Tenure D' rather than Tenure B to Tenure E). The employer also makes the same larger investment between Tenure D' and Tenure F as was depicted in Graph #2. Only the investment between Tenure A and Tenure B remains unaffected because the employee's marginal productivity does not change during this period. As a result, the employer's dividend is smaller when the impairment occurs at Tenure B than when it occurs at Tenure D. With the impairment occurring earlier in the employee's career, all other things being equal, after the impairment it becomes even less likely that the employer will benefit from a long-term relationship with the employee.

If the impairment occurs at Tenure B, the effect on the employee's opportunity wage means that the employee makes a smaller investment for a shorter period of time (i.e., the investment period begins at Tenure A, but ends at Tenure C' rather than Tenure D). The employee also reaps a larger dividend, and the dividend period begins sooner and has a longer duration. This period begins at Tenure C', rather than Tenure D, and lasts until Tenure F.⁸⁴ No change occurs between Tenure A and Tenure B. As a

84. There remains a short period at and after Tenure B when the employee's post-impairment opportunity wage exceeds her actual wage. Seeking employment in the external

result, the employee reaps a dividend that is larger by the amount of the change in her opportunity wage. The employee's total dividend is also greater than it would have been with a later-occurring impairment because the aggregate decrease in the opportunity wage is greater. Thus, an earlier impairment—that is, Tenure B rather than Tenure D—further increases the employee's dividend. The effect of this larger dividend is to bind the employee with an after-hiring impairment even more tightly to the employer's internal labor market.

The preceding analysis demonstrates that the effects of an after-hiring impairment on the economic relationship between the employer and the incumbent employee vary according to the timing of the impairment. But timing does not change the conclusion that the impairment causes the employer's dividend to shrink and the employee's dividend to grow. These are the background conditions for determining whether employers can benefit from accommodating workers with after-hiring impairments. The next sub-section introduces an accommodation into the equation.

2. Assessing the Accommodation's Costs and Benefits

Both parties' dividends are derived by considering the relationship between the employee's wage and the employee's productivity; however, the wage is compared to different productivity measures to yield these dividends. The employer compares the wage to the employee's productivity. The employee compares the wage to her opportunity wage. Also, the effective wage—the value which each party assigns to the wage—may differ for the employee and the employer. This section will explain how these differences create the opportunity for an accommodation to produce a Pareto superior result. Disabilities accommodations are not necessarily a zero-sum game and, as a result, they may benefit the employers that provide them.

Accommodation costs have been treated as wage increases because they purportedly increase the employer's cost of employing the worker with a disability (i.e., the "effective wage").⁸⁵ But care must be taken

labor market at this point may benefit the employee in the short term. In the long term, however, the employee's aggregate compensation will be lower.

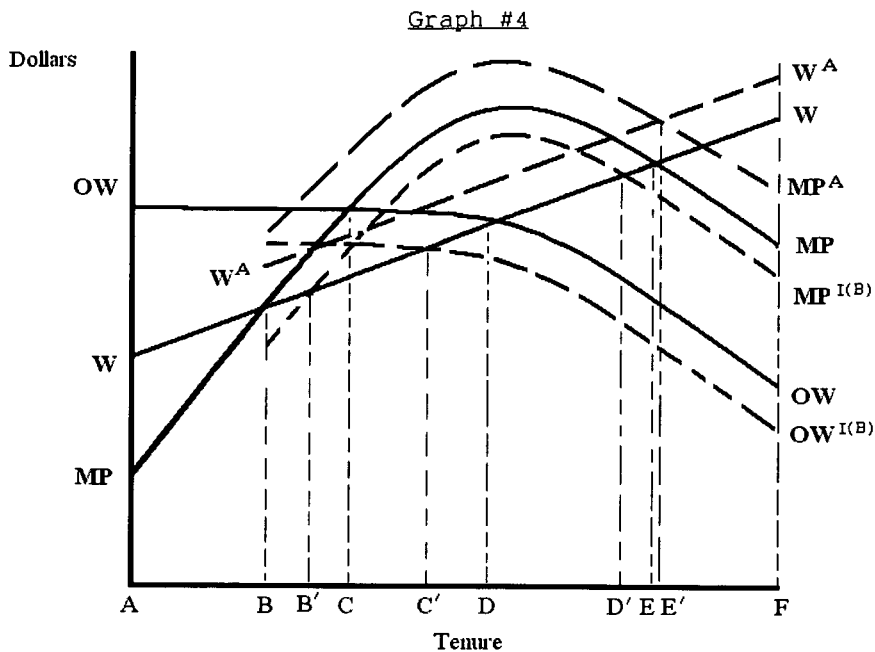
85. Although this Article's analysis relies on this assumption, the assumption is troubling. It may mask a policy choice. Workers without disabilities also need accommodations. Workers without wheelchairs need office chairs. Workers with sight need lights. Workers who can hear need earplugs in some loud environments. Yet, the costs of these accommodations are typically treated as capital investments when they benefit workers without disabilities, not wage increases. An argument has been made that the policy choice to treat accommodations for workers with disabilities differently suggests bias. See, e.g., Harlan Hahn, *Accommodations and the ADA: Unreasonable Bias or Biased Reasoning?*, 21 BERKELEY J. EMP. & LAB. L. 166, 167 (2000) ("Such judgments have

before assigning an accommodation's costs to an employee's wages. At a minimum, it may be inappropriate to charge the entire cost of an accommodation to an individual employee with an impairment. The ADA's Title III requires any employer providing a "public accommodation" to make their facilities accessible to people with disabilities; therefore, a workplace accommodation may also satisfy the employer's obligation to accommodate the public.⁸⁶ For example, installing a ramp for an employee using a wheelchair also makes the employer's facilities accessible to motion-impaired customers. Although there is no legal obligation in this regard, a ramp also makes the employer's facility more accessible for caregivers pushing strollers, bicyclists, and others.⁸⁷ The employer may benefit as a result. Thus, the cost of the ramp should be amortized across all of its users and reduced by these other benefits, rather than charged in its entirety to the employee with a wheelchair. In addition, an accommodation may benefit many employees. For example, providing a text-only feature on an employer's intranet would benefit many employees with vision impairments, not merely the employee who requested it. The cost of the software needed to make an employer's intranet accessible should be spread across any employee whose productivity increases due to the intranet's new presentation. All of these factors should be taken into account before assigning an accommodation's costs to an employee's wage.

ignored the many advantages conferred on the non-disabled and the disadvantages imposed on people with disabilities by features of the environment that are virtually invisible or taken for granted. In fact, judicial opinions have increasingly seemed to suggest that the protection granted Americans with disabilities constitutes a kind of unreasonable bias which extends beyond the guarantees bestowed on other individuals. No attention is devoted to the *biased reasoning* produced by the failure to consider the benefits bequeathed to the non-disabled or the penalties inflicted on disabled citizens by the existing milieu."); Stein, *supra* note 16, at 604-09 ("The canonical treatment of ADA accommodations views the source of whatever extra cost their provision engenders as arising from the endogenous, inherent inability of the disabled, rather than through the exogenous, constructed social environment.").

86. 42 U.S.C. § 12132 art. III (2000).

87. See Susan Stefan, "You'd Have to be Crazy to Work Here": *Worker Stress, The Abusive Workplace, and Title I of the ADA*, 31 LOY. L.A. L. REV. 795, 823 n.164 (1998) ("For example, curb cuts and ramps benefit people on bicycles, people with strollers, people on skates, as well as people with mobility or visual impairments."); see also Vicki Shultz, *Life's Work*, 100 COLUM. L. REV. 1881, 1931-32 (2000) ("Once again, making way for 'them' helps make way for all of us. The ADA requires both structural transformations—such as building ramps—and individual accommodation—such as allowing employees to work around their treatment schedules. These changes can benefit all of us, not simply those of us who meet the legal definition of 'persons with disabilities.' People who push baby strollers or ride bicycles appreciate ramps along with people in wheelchairs; and almost everyone can benefit from flexibility in scheduling.").



Graph #4, which is a further elaboration of Graph #3, depicts how an accommodation may increase the employer's dividends when an after-hiring impairment arises.⁸⁸ The adjusted wage curve (W^A) illustrates the effects on the employee's wage of an accommodation provided by the employer at or around Tenure B.⁸⁹ The employee's effective wage increases at Tenure B as a result of the accommodation's cost and remains at that higher level through Tenure F. In essence, the employee's effective wage shifts up and remains higher for the duration of the employment relationship. Because of the accommodation, the employee's productivity returns to the level expected prior to the impairment (i.e., to MP from $MP^{I(B)}$) for the duration of the employment relationship (i.e., until Tenure

88. An accommodation may be a one-time accommodation (e.g., the purchase of an assistive device, the modification of physical work space) or a continuing accommodation (e.g., hiring a reader for a vision-impaired employee, providing an employee with regular, intermittent medical leaves). This analysis assumes that an employer will amortize the accommodation's costs over the term of its relationship with the employee in either case; accordingly, the costs of a one-time accommodation last as long as the costs of a continuing accommodation.

89. The cost of the accommodation also could be expressed as the marginal productivity curve shifting down because the impairment requires the employer to invest more capital for the worker to achieve the same productivity. This would simply be another way to express the same general concept reflected in this section's treatment of the accommodation as a wage increase.

F). For the purposes of this discussion, I will assume that the accommodation has no greater productivity effects, although I will relax this assumption below.⁹⁰ If the improvement in the employee's productivity (e.g., from $MP^{(B)}$ to MP) exceeds the cost of the accommodation (i.e., $W^A - W$), then the employer benefits from the accommodation according to the first measure of "benefit" discussed above: the employer is better off with the accommodation than without it.⁹¹ The employer's dividend is larger than it would have been if the employee continued working without the accommodation. Yet, the employer's dividend will not return to the level it would have reached absent the impairment. It necessarily falls short by the amount of the accommodation's cost. The employer, therefore, does not benefit according to the second measure: the employer is not better off with the accommodation and the impairment than it would have been without the impairment. But further analysis is required before arriving at a firm conclusion about whether the second measure can be satisfied.

The effect of the accommodation on the employee's dividend is the sum of the difference between the effective wage and the actual wage (i.e., $W^A - W$) and the difference between the pre-impairment and post-impairment opportunity wages (i.e., $OW - OW^{(B)}$). The effective wage simply increases with the cost of the accommodation. As intuition might suggest, a more expensive accommodation yields a higher dividend for the employee because the difference between the aggregate effective wage and the aggregate actual wage is greater while the opportunity wage remains at its post-impairment level.

The opportunity wage may be the more intriguing factor. The accommodation provided by the current employer does not affect the employee's post-impairment opportunity wage ($OW^{(B)}$). Potential future employers neither reap productivity benefits nor pay higher wages because the employee's previous employer had provided an accommodation. Accommodations that involve modifications to the employee's physical work environment, like a ramp or expanded doorways that accommodate workers in wheelchairs, cannot be transferred from one employer to the next. It is also reasonable to assume that an employer would not consent to a departing employee's taking a mobile accommodation (e.g., specialized software or an assistive device) with her to a new employer. Strictly

90. For this reason, the MP^A is not relevant to the instant discussion. It becomes relevant below. Further, the assumption made here that the employee's productivity returns to MP as a result of the accommodation serves only to simplify this discussion and the attending graph. It is not essential to the conclusion discussed in the next paragraph.

91. This conclusion is correct whether or not the employee's productivity returns to MP or increases only to a level between MP and $MP^{(B)}$. As long as the difference between the employee's post-accommodation and pre-accommodation productivity exceeds the cost of the accommodation, this conclusion stands.

speaking, therefore, the current employer's accommodation should not affect the employee's opportunity wage. As a result, the opportunity wage will remain at the lower, post-impairment level ($OW^{(B)}$) after the accommodation is provided rather than returning to the pre-impairment level (OW). The employee's adjusted dividend, therefore, is larger after the accommodation.⁹²

An objection might be raised that, while it is literally true that the next best employer does not benefit from the current employer's provision of an accommodation, employers in the external labor market are also subject to the ADA's accommodation mandate. If the next best employer obeys this mandate, then the employee's productivity in the external labor market (and, therefore, her opportunity wage) should also return to its expected pre-impairment level (i.e., OW). However, this objection runs counter to the economics of the external labor market and the realities of employment discrimination practice. The external labor market is a competitive market in which prospective employees and employers are largely fungible.⁹³ As the rational choice scholars suggest, employers will not hire workers with impairments who are made more expensive by an accommodation's costs when they can hire comparatively cheaper workers without impairments who do not need accommodations.⁹⁴

Unfortunately, the ADA has not changed employers' decision-making in this regard. Like other statutes' efforts to outlaw hiring discrimination, the ADA's prohibitions on hiring discrimination are largely unenforceable, in part because hiring discrimination claims are very difficult to prove.⁹⁵ In

92. Some employers in the external labor market may have previously modified their workplaces to accommodate other workers with similar or identical impairments. If these accommodations would equally benefit employees working for other employers (e.g., a ramp for employees with wheelchairs would benefit any prospective employee using a wheelchair), then these employees' opportunity wages would not shift down to $OW^{(B)}$. This result will occur only with accommodations that are both easily shared and made widely available throughout the workforce. The same result would not apply to individualized accommodations tailored to bridging the gap between an employee's impairment and the workplace environment, like a particular assistive device or an alternative work arrangement like telecommuting.

93. See *supra* text accompanying note 38-39 (discussing the external labor market).

94. This analysis presumes that the worker's impairment is known. See *infra* Part II.D (discussing hidden impairments in the external labor market).

95. See Acemoglu & Angrist, *supra* note 5, at 916-17 (providing empirical evidence showing a post-ADA decline in employment of men and women aged 21-39 with disabilities); Jolls, *Accommodation Mandates*, *supra* note 9, at 276-77 (confirming the conclusions of Acemoglu & Angrist regarding the decline in employment of workers with disabilities with additional empirical evidence.). See generally John J. Donohue III, *Is Title VII Efficient?*, 134 U. PA. L. REV. 1411, 1426 n.26 (1986) (asserting difficulty in showing effects of discrimination in a labor market, where there exist differences in productivity and occupational choice); Richard A. Posner, *An Economic Analysis of Sex Discrimination Laws*, 56 U. CHI. L. REV. 1311, 1328 (1989) (asserting the difficulty of proving

addition, the worker has little or no investment in her relationship with any given prospective employer in the external labor market, so she has less incentive to incur the costs associated with a hiring discrimination claim.⁹⁶ In the absence of an enforceable prohibition on hiring discrimination that exposes the next best employer to a genuine risk of added costs, the next best employer cannot be expected to provide an accommodation. As a result, the employee's opportunity wage will not return to its pre-impairment level when the current employer provides an accommodation.

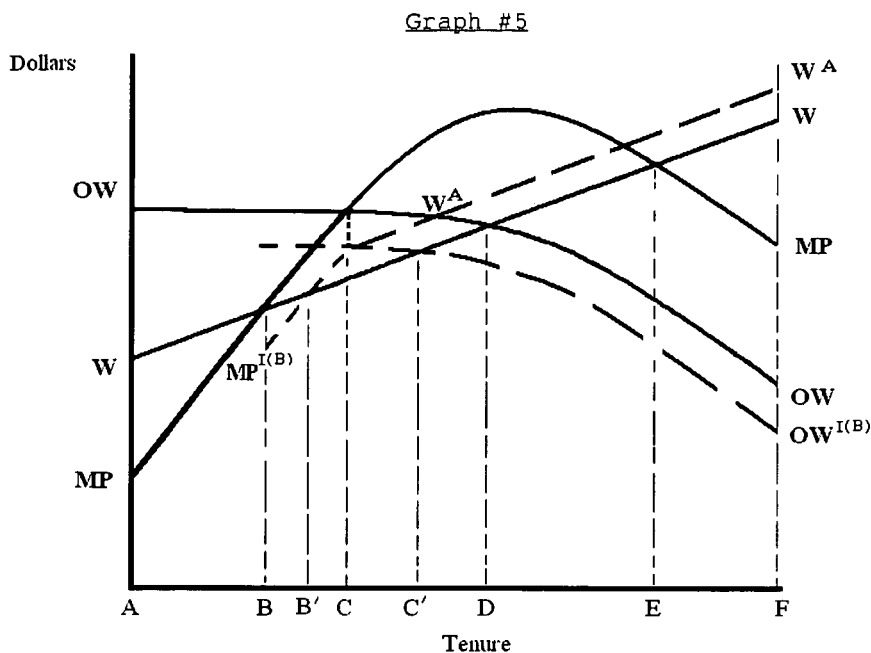
In sum, the accommodation and the impairment combine to raise the height of the internal labor market's competitive barriers. Like firm-specific skills and knowledge, the accommodation and the impairment increase the benefits of the internal labor market for the employee. As with the employee's unaccommodated impairment, the alternative to continuing her relationship with her current employer—that is, seeking employment in the external labor market—is less remunerative over the long term because of her lower opportunity wage. However, the introduction of the accommodation means that the employee also receives a higher effective wage from her current employer than she would receive from another employer. Thus, the competitive barrier is higher with the accommodation and the impairment than it would be without the accommodation, and it is significantly higher than it would be without the accommodation and the impairment.

The preliminary conclusion of this analysis, therefore, is that an accommodation can produce a Pareto-superior outcome when compared with an ongoing employment relationship in which the employer does not accommodate an incumbent employee with a disability. The result is an increase to both the employer's and the employee's dividend. Thus, accommodating an employee's after-hiring impairment can satisfy the first measure of providing a benefit to the employer: the employer's dividend is higher with the accommodation than it would have been without an accommodation. However, this preliminary conclusion is incomplete and does not answer the question of whether the employer would be better off according to the second measure—that is, whether the employer is better off continuing its relationship and accommodating the incumbent employee with an after-hiring impairment than it would have been if the employee did not have an impairment. The following sub-sections will add factors to the analysis that will help answer this question.

discrimination under Title VII); Richard A. Posner, *The Efficiency and the Efficacy of Title VII*, 136 U. PA. L. REV. 513, 517-19 (1987) (explaining the difficulty of enforcing the law's forbiddance of firing decisions based on race).

96. *See supra* text accompanying notes 38-63 (contrasting the nature of relationships in the external labor market with the shared investments found in the internal labor market).

3. The Consequences of Delaying the Accommodation



Graph #5 depicts the consequences for the employer of delaying an accommodation when the employee experiences an after-hiring impairment at Tenure B. A delay could result from difficulties with identifying an appropriate accommodation, protracted negotiations between the employer and employee in the interactive process,⁹⁷ or intransigence between the employer and employee.⁹⁸ If the employee were to file a charge with the EEOC, and certainly if that charge were to be litigated in federal court, then a significant delay would be likely.⁹⁹ Rather than providing the accommodation at Tenure B, this graph assumes that the employer provides

97. See *supra* note 29 and accompanying text (discussing the interactive process, during which an employer and a disabled employee negotiate reasonable accommodations).

98. See, e.g., Harris, *supra* note 24, at 132 (noting that US Airways took five months to respond to Barnett's request for an accommodation).

99. See Paul Steven Miller, *A Just Alternative or Just an Alternative? Mediation and the Americans with Disabilities Act*, 62 OHIO ST. L.J. 11, 20-22 (2001) ("When mediated, the average processing time for ADA complaints is nearly cut in half, as compared to the time it would take the EEOC to administratively address the complaint. This time frame includes the time from the charging party walking in the door of the EEOC to the time of resolution or impasse. On average, ADA charges take 286 days to reach a determination in the EEOC's administrative process. Where mediated ADA charges took on average 151 days to reach final resolution.").

the accommodation at Tenure C. It also assumes that the employee continues working for the employer between Tenure B and Tenure C, and that her productivity during this period is lower (i.e., $MP^{(B)}$) because of the impairment's interaction with the employer's unchanged work environment.

The delay effects a small reduction in the employee's dividend increase. The accommodation increases the employee's effective wage from W to W^A between Tenure C and Tenure F, rather than between Tenure B and Tenure F; therefore, the aggregate wage increase is smaller. The post-impairment opportunity wage is lower than the pre-impairment opportunity wage, and it remains unaffected by the accommodation. By contrast, the employer's situation is worse than if it had provided the accommodation at Tenure B. Not only does the employer's dividend period begin later (i.e., at Tenure B' rather than at Tenure B), but the employee's productivity is also lower from Tenure B to Tenure C than it otherwise would have been. Since the employee's effective wage does not change between Tenure B and Tenure C, the employer's dividend is larger than it would have been absent any accommodation. However, this is still smaller than it would have been if the employer had provided the accommodation as soon as possible after the impairment arose.¹⁰⁰

This analysis enriches the preliminary conclusion: the employer can benefit from providing an accommodation (at least according to the first measure), but it is more likely to benefit if it accommodates the employee as soon as possible after the impairment arises. However, timing is only one factor, along with cost, in the economic assessment of an accommodation. Even when an employer immediately accommodates an employee's impairment when it arises, such that the employee's effective wage shifts up and remains higher at Tenure B, the critical factor from the employer's perspective is the employee's productivity. If the employee's productivity merely returns to the level expected before the impairment (i.e., return from $MP^{(B)}$ to MP) for the remainder of the employment relationship, then the employer's dividend will be smaller than it would have been absent the impairment. The next sub-section examines the accommodation's effect on productivity.

100. This difference would be narrowed to the extent that the employer is insured against any losses that might occur during the period after the impairment and before the provision of the accommodation. For example, workers' compensation insurance or temporary disability insurance may provide full or partial wage replacement during this period. *See, e.g.,* N.Y. WORKERS' COMP. LAW §§ 1-401 (McKinney 1994 & Supp. 2005) (codifying New York State's workers' compensation law); N.J. STAT. ANN. §§ 43:21-25 to 21-65 (2004) (codifying New Jersey's temporary disability insurance law). However, because insurance bears costs, the general principle remains true even if the employer has insured itself against this risk.

4. The Accommodation's Enhanced Productivity Effect

The nature of the employee's relationship with her employer changes as a result of the employee's after-hiring impairment and the employer-provided accommodation. The employee reaps a larger dividend which raises the height of the competitive barrier in the internal labor market. The higher competitive barriers effectuate a tighter binding of the employee to the employer. This tighter bond creates an opportunity for the employer and the employee to reduce the employer's labor costs and increase the employee's productivity. Thus, the parties' response to the employee's impairment and the accommodation can influence, and even determine, the accommodation's effect on productivity. The parties are not passive observers of economic, physical, or mental phenomena unfolding before them. Accommodations create conditions in which the parties' behavior can change their efficiency calculi. This sub-section will discuss these changed conditions.

The change in the nature of the relationship between the employer and the accommodated employee requires relaxing the assumption that an accommodation's only productivity effect is to return the employee's marginal productivity to its pre-impairment level. By relaxing this assumption, it becomes possible to identify circumstances within which the accommodation will have an enhanced productivity effect that could make it possible to satisfy the second measure of whether an employer benefits from providing the accommodation. In other words, the employer may be better off providing an incumbent employee with an accommodation, than it would have been if the employee did not have an impairment.

More tightly binding the employee to the internal labor market may largely or entirely free the employer from potential risks of loss in its relationship with the employee. The employee's aversion to the external labor market increases as the opportunity wage decreases. The employee's commitment to the internal labor market increases with her effective wage which, as explained above, includes the accommodation's cost. As a result, the impairment and accommodation will reduce (or even eliminate) the risk that the employee will quit her job and seek employment elsewhere before the employer can reap its full dividends from their relationship.¹⁰¹ Also, the employee will avoid any productivity-reducing behaviors that might subject her to being discharged into the external labor market. Thus, the risk that the employee will shirk or engage in other strategic behavior will be significantly reduced or eliminated. Empirical evidence supports these conclusions. For instance, employees with disabilities receiving

101. This conclusion and others in this section are premised on the assumption that labor supply is elastic.

accommodations have lower job turnover rates and equivalent or lower absenteeism rates when compared with employees without disabilities.¹⁰²

Reducing the employer's risk that an incumbent employee with a disability will quit, shirk, or otherwise reduce her productivity may have two effects. First, the employee's productivity increases if she shirks less, or not at all. Second, the employer's costs of monitoring the employee to avoid shirking decline; therefore, the employee's cost to the employer—the effective wage—declines. However, these reductions in risk may be only the beginning of the beneficial effects that an accommodation can have on the productivity of an employee with an after-hiring impairment.

The employee's tighter bond to the internal labor market makes it possible for the employee and the employer to cooperate more fully for the purpose of increasing the employee's productivity to a level beyond what she might have achieved absent the impairment. At a minimum, an employee with a disability can be expected to undertake all necessary efforts to increase her productivity over the life of her relationship with the employer. She may, for instance, acquire firm-specific skills and knowledge or willingly accede to her employer's job match decisions.¹⁰³ In addition, employers may be more willing to invest in their employees' acquisition of general skills because of the reduced risk that the employee will quit. The accommodated employee with an after-hiring impairment is significantly less likely to quit for the purpose of selling her general skills to other employers. The employer can invest in the employee's acquisition

102. See PETER DAVID BLANCK, COMMUNICATING THE AMERICANS WITH DISABILITIES ACT, TRANSCENDING COMPLIANCE: 1996 FOLLOW-UP REPORT ON SEARS, ROEBUCK AND CO. 12 (1996) (finding a lower turnover rate among workers with disabilities than workers without disabilities); Rick A. Lester & Donald W. Caudill, *The Handicapped Worker: Seven Myths*, 41 TRAINING & DEV. J. 50, 50 (1987) (comparing absenteeism, turnover, productivity, and accident rates); J.E. Martin et al., *Work Attendance in Competitive Employment: Comparison Between Employees Who Are Nonhandicapped and Those Who Are Mentally Retarded*, 23 MENTAL RETARDATION 142, 145 (1985) (discussing attendance records, overtime, and vacation time of handicapped employees who are mentally retarded compared with nonhandicapped employees); Dolores Ondusko, *Comparison of Employees with Disabilities and Able-Bodied Workers in Janitorial Maintenance*, 22 J. APPLIED REHABILITATION COUNSELING 19, 22-23 (1991) (showing differences of turnover and absenteeism between persons with disabilities); Stein, *supra* note 21, at 104-05 (finding a lower absenteeism rate among workers with disabilities than workers without disabilities) (citing Gretchen Adams-Shollenberger & Thomas E. Mitchell, *A Comparison of Janitorial Workers with Mental Retardation and Their Non-Disabled Peers on Retention and Absenteeism*, J. REHABILITATION, July-Sept. 1996 at 56, 59).

103. See generally Verkerke, *supra* note 82, at 948 ("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.").

of productivity-enhancing general skills without fear that these investments will benefit a competitor.

Graph #4 details the progression of these steps that follow from an employer's accommodation at Tenure B. First, when the employee does not shirk and/or the employer and employee cooperate more fully in productivity-enhancing behaviors, the marginal productivity curve shifts up (i.e., from MP to MP^A). Second, the employer's costs of monitoring the employee to avoid shirking decline, causing the employee's cost to the employer—the effective wage—to shift down. These reduced monitoring costs may offset the increased costs of accommodation, resulting in the same effective wage as before the accommodation (i.e., returning to W from W^A). The combined effect of higher productivity and a lower effective wage would be to increase the employer's dividend and prolong the dividend period (i.e., until Tenure E' rather than Tenure E).

If the difference between the employer's new, higher productivity level and the productivity level expected before the impairment (i.e., $MP^A - MP$) equals the net costs of the accommodation (i.e., subtracting the reduced monitoring costs from the gross cost of the accommodation), then the employer will not merely reap a higher dividend through the accommodation than it would have yielded *after* the employee's impairment arose. Rather, the employer will yield the same dividend it expected from its relationship with the employee *before* the after-hiring impairment arose. If the present value of the difference between the effective wage curve W^A (or even W) and the adjusted productivity curve (MP^A) between Tenure B and Tenure E' exceeds the difference between the marginal productivity curve (MP) and the actual wage curve (W) from Tenure B to Tenure E, then providing the accommodation will generate a *larger* dividend for the employer than the employer could have expected before the after-hiring impairment arose.¹⁰⁴ Under these circumstances, the employer will be better off accommodating the employee with an after-hiring impairment than it would have been if the worker did not have an impairment. Of course, satisfying this higher standard necessarily means satisfying the first measure's lower standard.

Thus, accounting for the enhanced productivity effect of the accommodation enriches the preliminary conclusion. The cost and timing of the accommodation are not the only factors relevant to determining its economic consequences. The response of the employee and the employer to the impairment and accommodation—that is, their ability and willingness to cooperate and to exploit the opportunity presented to them—is an equally critical factor.

104. I have not discounted the cost of the accommodation to its present value because the cost arises at the time of the accommodation rather than over time or at a later point in time.

In sum, the enriched—but still preliminary—conclusion of this analysis is that employers can benefit from accommodating employees with after-hiring impairments according to both measures of employer benefits. The employer's dividend is likely to be higher than would have been expected after the impairment arose (i.e., the first measure). The employer's dividend may also be higher than would have been expected before the impairment arose; that is, the employer may be better off accommodating the employee with an impairment than if the employee did not have an impairment (i.e., the second measure). This result depends upon the accommodation's cost, which is partly a function of timing, and its effect on the employee's productivity. Most importantly, the parties' response to the employee's impairment and subsequent accommodation can influence, even determine, the accommodation's effect on productivity. The parties are not merely passive observers. Accommodations and impairments create conditions in which the parties' behavior can determine their economic fate.

C. Efficient Accommodations in the Internal Labor Market: Transfers, Promotions, and Job Re-Designs

The second scenario in which an incumbent employee might request an accommodation involves a promotion or transfer into a new position in which the employee cannot perform adequately without an accommodation. A job may also be re-designed to include new responsibilities that the employee will not be able to satisfy without an accommodation. While different in many respects, promotions, transfers, and job re-designs will all have the same effect on the relationship between an employer and an employee with an impairment.¹⁰⁵ Accordingly, this section will analyze them together.

Promotions and transfers are a predictable product of the rolling renegotiations that occur as the employee and the employer seek to yield both higher productivity levels and higher wages from their internal labor market relationship.¹⁰⁶ In fact, the job-match theory of the internal labor market presupposes promotions and transfers. As the employer learns more about an employee's abilities, the employer moves the employee into her optimal assignment.¹⁰⁷ Human capital theory would explain

105. Distinguishing this analysis from the preceding section's analysis does not require an assumption that the employee's impairment was present at the time she was hired. The only necessary assumption is that the impairment, regardless of when it arose, had no effect on the employee's productivity prior to the promotion, transfer, or job re-design.

106. See *supra* text accompanying note 57 (discussing the rolling renegotiations that occur in the internal labor market).

107. See *supra* text accompanying notes 47-48 (discussing how an employer can determine an employee's "optimal assignment," and how that assignment benefits both

promotions and transfers in much the same way. Over the course of the employee's tenure, the employee acquires firm-specific skills and knowledge. In order to reap the fullest benefits of the employee's firm-specific education, the employer may reassign the employee to a job that is best performed by someone who has attained these skills and knowledge.¹⁰⁸ In these circumstances, promotions and transfers can fulfill the employer's expectations of rising productivity and, derivatively, the employee's expectations of rising wages.

Promotions and transfers play a different role in supervision theory. Understanding this role requires re-defining "wages." This new meaning must take into account that employees may value non-pecuniary aspects of their working environment to the same extent they value cash wages. For example, employees may prefer to avoid strenuous physical labor, night work, or dangerous assignments. A job with these characteristics would impose "shadow prices" on the employee; that is, the employee values this job less than other jobs with the same cash wage.¹⁰⁹ In other words, the shadow prices reduce the job's effective wage for the employee. An employee's effective wage increases when the employee transfers from a job with shadow prices to a job without shadow prices, even if the employee's cash wages remain the same. Similarly, a transfer to a job with "shadow benefits"—for example, greater prestige or a larger office—would increase the employee's effective wage.¹¹⁰

Unlike human capital theory and job match theory, supervision theory detaches wages that rise with tenure from productivity that rises with tenure.¹¹¹ Supervision theory posits that rising wages are a reward deferred until later in the employee's career as an incentive for greater effort expended earlier in the employee's career.¹¹² The employer benefits, therefore, from finding a reward other than higher cash wages. The employer may increase an employee's effective wage over the course of the employee's tenure by promoting or transferring the employee from high shadow price jobs into either lower shadow price jobs or higher shadow benefit jobs.

parties).

108. See Harris, *supra* note 24, at 188 (positing that an employer learns more about the employee's qualifications over time and, relying on that knowledge, may reassign the employee to a more suitable position).

109. See Wim Groot & Maartje Verberne, *Aging, Job Mobility, and Compensation*, 49 OXFORD ECON. PAPERS 380, 382-83 (1997) (discussing how an employee's valuation of a job takes into account non-pecuniary characteristics of the position).

110. See *id.* at 381-82 (analyzing shadow benefits and prices in the context of elderly workers).

111. See *supra* text accompanying note 50 (pointing to a graph that explains the dynamics of the internal and internal and external labor market relationship).

112. See *id.*

For example, airline employees in cargo-handling jobs may prefer less physically strenuous work as they age. The airline might increase these employees' effective wages by reserving easier, lower shadow price jobs—like sedentary jobs in a mail room—for senior workers. Employers dangle these lower shadow prices as a delayed reward, intended to deter the cargo handlers from shirking earlier in their careers.¹¹³ The lower shadow prices of the less strenuous jobs replace higher actual wages as the enforcement tool.

Although an employer might use shadow prices and shadow benefits to reward employees for higher productivity in a manner consistent with human capital theory and job match theory, it is less likely. Human capital theory and job match theory both posit a causal—if not perfect—connection between rising productivity and rising wages throughout much of an employee's career.¹¹⁴ Rising productivity creates the additional resources necessary to pay rising actual wages. There is no need to find a non-cash substitute. However, if the employee agrees to accept lower shadow prices or higher shadow benefits in lieu of cash wages, an intriguing and important wage effect occurs: the employee and the employer experience different effective wages. The employee's effective wage is the actual wage plus the shadow benefit or minus the shadow price. The employer's effective wage is simply the cash wage. Thus, the introduction of a promotion, transfer, or job re-design that changes the values of shadow prices and benefits would cause a divergence of the employer's and employee's respective wage curves. This divergence will prove relevant to assessing the effect of an accommodation on the economics of the employment relationship.

Job re-designs will operate much like promotions and transfers. Consistent with human capital theory or job match theory, an employee's job might be reorganized to more effectively exploit her skills and knowledge, thereby increasing the employee's productivity. Consistent with supervision theory, a re-design might reduce shadow prices by removing unpleasant aspects of the employee's job.¹¹⁵ Thus, job-re-designs are included in the following analysis.

Of course, an employee's impairment may have no effect on her employer's decision to promote or transfer or to re-design a job. An employee with an impairment who is capable of performing the essential

113. Harris, *supra* note 24, at 163 (discussing shadow benefits and costs as incentives).

114. *See supra* note 50 and text accompanying notes 41-48 (describing internal labor market relationships and conjectural barriers to competition).

115. It is also possible to increase shadow prices with a job re-design. *See, e.g.*, Toyota Motor Mfg., Ky. v. Williams, 534 U.S. 184, 187-90 (2002) (involving a plaintiff with bilateral carpal tunnel syndrome and bilateral tendonitis that was newly required to open and close car doors on the assembly line, apply oil to the cars, and wipe them down at a speedy rate).

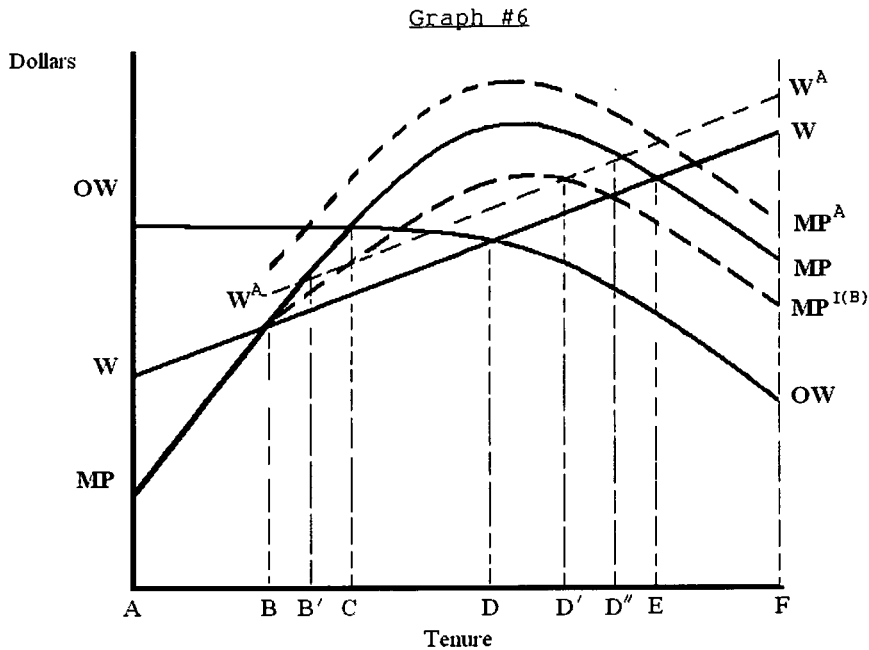
functions of one job may be perfectly capable of performing the essential functions of many jobs.¹¹⁶ In addition, internal labor market theory does not presuppose that each employee has a fixed career path laid out on the day she commences employment. Each employee may well follow an idiosyncratic career path.¹¹⁷ As long as wages exceed productivity and the opportunity wage, efficiencies result. It follows, therefore, that an employee's career path may not lead inexorably to a single promotion or transfer.¹¹⁸ An employee who is unable to accept one job because of her impairment might be more productive with rising wages in a different job without an accommodation. Accommodations also can be made in other circumstances besides the one required for this analysis. For instance, an employer may be accommodating the employee for the first time or may be required to replace an old accommodation that is inadequate for the employee's new or newly re-designed job. Nonetheless, the following analysis is concerned only with those circumstances in which the promotion, transfer, or job re-design: (1) necessarily precedes further increases in wages and productivity; and (2) cannot occur unless the employer accommodates the employee.

116. Cf. 42 U.S.C. § 12111(8) (2000) (providing the ADA's definition of "qualified individual with a disability").

117. See Joseph G. Altonji & Nicolas Williams, *The Effects of Labor Market Experience, Job Seniority, and Job Mobility on Wage Growth*, 17 RES. LAB. ECON. 233, 243 (1998) (discussing how the experiences of employees in the internal labor market can be unique and varied); see also Katharine G. Abraham & Henry S. Farber, *Returns to Seniority in Union and Nonunion Jobs: A New Look at the Evidence*, 42 INDUS. & LAB. REL. REV. 3, 4 (1988) (discussing heterogeneity among individuals and job matches); Joseph G. Altonji & Robert A. Shakotko, *Do Wages Rise with Job Seniority?*, 54 REV. ECON. STUD. 437, 438 (1987) (discussing the heterogeneity in turnover and wage growth).

118. See generally Harris, *supra* note 24, at 156-63 (discussing the role of promotions in the various internal labor market theories).

1. Promotions, Transfers, Job Re-Designs, and Actual Wages



Graph #6 depicts the effects of an accommodation that facilitates a promotion, transfer, or job-redesign when the employee receives higher actual wages as her tenure increases. In this situation, the employee and the employer have the same effective wage—that is, the actual wage. This graph assumes that the employee's impairment, without accommodation, would prevent her from being promoted or transferred, or her job re-designed at Tenure B. Without the accommodation, the productivity curve flattens as a result of the impairment (i.e., from MP to $MP^{I(B)}$). As compared with the employer's expectations of collecting a dividend from Tenure B to Tenure E, the employer would earn a smaller dividend lasting only from Tenure B to Tenure D'' . The employer would also invest more for a longer period of time (i.e., from Tenure D'' , instead of Tenure E, to Tenure F). The smaller dividend and the larger investment make it less likely that the employer's relationship with this employee will yield a dividend.

As with the after-hiring impairment scenario, the accommodation changes this result. Once again, the opening assumption is that the accommodation merely returns the employee's productivity to its expected level (i.e., back to MP from $MP^{I(B)}$). However, unlike with the analyses of an after-hiring impairment, the employee's opportunity wage curve (OW)

does not shift down as a consequence of the impairment. The employee's productivity with another employer would not be affected by her current employer's inability to promote or transfer the employee or redesign her job. This difference proves to be very important.

The remaining factor in this efficiency analysis is the employee's effective wage. The effective wage includes the costs of the accommodation. The adjusted wage curve (W^A) depicts the effect of an accommodation on both parties' effective wage. The effective wage shifts up at Tenure B and remains higher from Tenure B through Tenure F. The essential calculus has not changed. If the productivity increase (i.e., $MP - MP^{(B)}$) exceeds the cost of the accommodation (i.e., $W^A - W$), then the accommodation benefits the employer according to our first measure. The employer's dividend will be greater than it would have been if the employer did not provide the accommodation, which resulted in the employee being denied a promotion, transfer, or job re-design. Still, the question remains whether the employer would earn a higher dividend than he expected before learning that the impairment would inhibit the promotion, transfer, or job re-design—that is, whether the second measure can be satisfied. The answer to this inquiry depends upon whether this impairment and accommodation will effect a further increase in the employee's productivity.

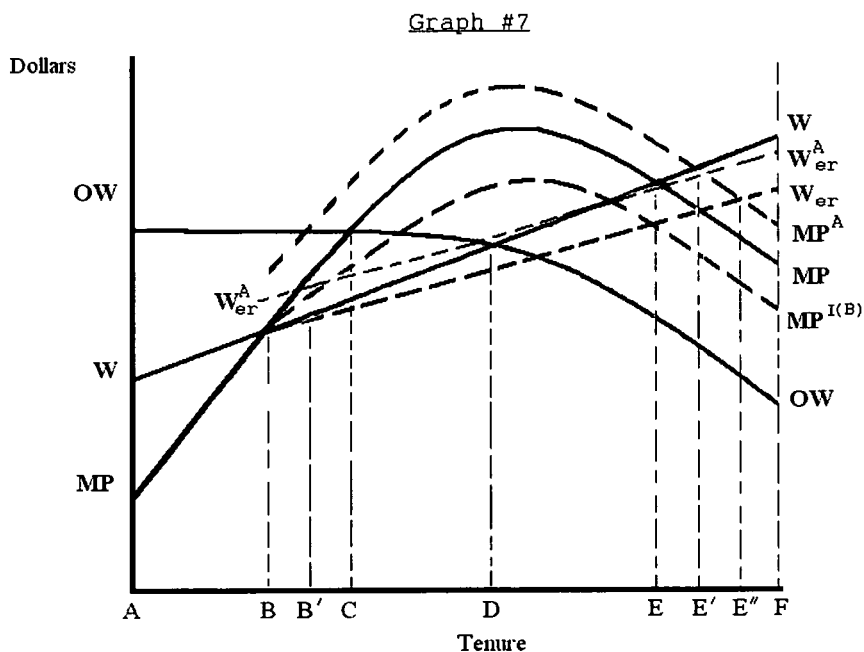
As the previous section explained, the enhanced productivity effect is a possible consequence of the increase in the employee's dividend. In the after-hiring impairment scenario, the employee reaped a larger dividend because her impairment drove her opportunity wage down and the accommodation drove her effective wage up. In this situation, however, the employee's dividend increases only by the amount of the cost of the accommodation. The impairment does not cause the opportunity wage to shift down; therefore, the dividend increases only in the amount of the effective wage minus the wage (the cost of accommodation, i.e., $W^A - W$), because the employer's opportunity wage (OW) remains constant. Thus, the employee's increased dividend is probably smaller than the dividends reaped from an after-hiring impairment, but is likely larger than it would have been in the absence of the impairment and accommodation.

This larger dividend more tightly binds the employee to the internal labor market, but to a lesser extent than in the after-hiring impairment scenario. Nonetheless, conditions will be created for less shirking, lower monitoring costs, and greater productivity-enhancing cooperation than would have been possible absent the impairment and accommodation.¹¹⁹ However, productivity may not increase and costs may not decrease as much as they might have with the accommodation of an after-hiring

119. Again, this assumes some elasticity of labor supply.

impairment. As a result, the possibility that the employer's dividend will increase beyond the expected dividend is smaller. This situation may satisfy the first measure of whether the employer benefits from the accommodation, but it is less likely that it will meet the second measure—that the employer is better off with the accommodation and impairment. Yet, some possibility of meeting the second measure remains.

2. The Role of Shadow Prices and Shadow Benefits



Graph #7 introduces shadow prices and shadow benefits into the analysis. Again, it is assumed that the accommodation and the promotion, transfer, or job re-design occur at Tenure B. The employer's position depicted in Graph #6 does not change, so it is not repeated on Graph #7; however, there is a different explanation for the changes in the employee's position. The employee's effective "wage" no longer consists merely of the actual wage or, after the accommodation, the actual wage plus the cost of accommodation. The effective wage takes into account the fact that the employee has been promoted or transferred into a job or had her job-re-designed so her resultant position has lower shadow prices or higher shadow benefits. Thus, the employee's effective wage curve (W^A) is the sum of the actual wage, the cost of the accommodation, and the jobs' shadow prices and benefits.

The employer's effective wage changes for the same reasons, but in a different way. Shadow prices and shadow benefits reflect employee preferences, but they do not contribute to the employer's effective wage curve. The employer's effective wage is merely the equivalent of the employee's actual wage; therefore, the employer's effective wage is lower than the employee's effective wage. On Graph #7, W illustrates the employee's effective wage absent the accommodation—meaning, the actual wage with shadow prices or benefits. The W_{er} curve illustrates the employer's effective wage without an accommodation if: (1) the employee could be promoted, transferred, or have her job re-designed; and (2) the promotion, transfer, or job re-design reduces shadow prices or increases shadow benefits. It is the employee's actual wage without shadow prices or benefits. The difference between W and W_{er} is the value of the shadow prices or shadow benefits to the employee.¹²⁰

The inability to promote or transfer the employee or re-design her job because of her impairment causes a reduction of the employer's dividend. Without the impairment, the employer had expected to earn dividends from Tenure B to Tenure E". The unaccommodated impairment will cause the employer to earn smaller dividends and over a shorter period, from Tenure B to Tenure E. Adding the accommodation into the calculus has two effects. First, the employee's productivity returns to either its expected course (i.e., from $MP^{I(B)}$ to MP) or to the higher curve (MP^A) that might result from the accommodation's enhanced productivity effect. Second, the effective wage curve shifts up to W_{er}^A . Once again, the question of whether the employer benefits can be answered by comparing the accommodation's productivity effect with its cost. If the productivity increase (i.e., $MP^A - MP^{I(B)}$ or $MP - MP^{I(B)}$) exceeds the cost of the accommodation (i.e., $W_{er}^A - W_{er}$), then the employer will reap a larger dividend as a result of the accommodation, thereby satisfying the first measure.

The role of shadow prices in this calculus highlights how the parties might choose to resolve an accommodations dispute in a manner that the ADA does not approve: a wage concession by the employee. Without the accommodation, the promotion, transfer, or job re-design would confer

120. I have assumed that shadow prices would change the slope of the employer's effective wage curve (W_{er}) relative to the employee's effective wage curve (W). The slope would change if the employer prefers, as the employee's tenure increases, that shadow prices play an increasing role and actual cash wages play a declining role. It is reasonable to assume that employers would prefer lower labor costs over time. But this assumption is not essential to the analysis. If shadow prices play a constant role over the course of the employment relationship, the employer's effective wage curve (W_{er} and W_{er}^A) would be parallel to the employee's effective wage curve (W). Further, the difference between the employee's effective wage curve and the employer's effective wage curve would remain the value of the shadow prices and benefits associated with the job into which the employee has been promoted or transferred, or the job re-design.

lower shadow prices or higher shadow benefits on the employee in lieu of higher actual wages. The accommodation makes this substitution process less likely. The added real cost of the accommodation eliminates or reduces the employer's benefit from promoting or transferring the employee into a position with lower shadow prices or re-designing her job to reduce shadow prices. Thus, the employer will make the promotion, transfer, or job re-design only if it will receive something in return—that is, higher productivity or, perhaps, a wage concession from the employee. Higher productivity is possible, as the preceding analysis demonstrated; however, it may not be sufficient or it may not occur at all.

The question still remains: why would the employee agree to a wage concession, particularly when the law prohibits the employer from requiring it?¹²¹ The simple answer is that the employee faces a lower-than-expected wage if she is not promoted or transferred, or her job is not re-designed. The employee's actual wage, or her effective wage taking shadow prices and benefits into account, will not rise because the promotion, transfer, or job re-design is the pre-condition for higher wages. Yet, the promotion, transfer, or job re-design will occur only if the employer provides the accommodation. Thus, this employee must choose between: (1) agreeing with the employer to reduce the employee's future wage increases in exchange for an accommodation that leads to higher actual or effective wages; or (2) refusing to adjust her wages and being denied the promotion, transfer, or job re-design, without which she will receive no future increase in wage. Given this choice, the employee may well volunteer for smaller wage increases to help pay for an accommodation that will lead to a larger wage increase over time. An agreement of this sort might allow the employer to satisfy the second measure of employer benefits.

While the promotion/transfer/job re-design scenario may best illustrate the circumstances in which a wage concession is plausible, wage concessions may also change the economic calculus for after-hiring impairments. Any change of circumstances prompted by an accommodation that allows productivity increases to match or exceed increases in the effective wage resulting from an accommodation, sets the stage for a discussion about wage concessions between the parties. Once

121. See generally U.S. EQUAL EMPLOYMENT OPPORTUNITY COMMISSION, THE ADA: YOUR EMPLOYMENT RIGHTS AS AN INDIVIDUAL WITH A DISABILITY, <http://www.eeoc.gov/facts/ada18.html> (last visited Aug. 11, 2005) ("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."); cf. 42 U.S.C. § 12112(b)(5) (2000) (imposing the obligation to provide the accommodation on the employer with no reference to the employee).

again, the employer and the employee have the opportunity to determine the economic outcomes through discussions of productivity and wages.

Thus, the preliminary conclusion about whether an employer can benefit from accommodating an employee subject to a promotion, transfer, or job re-design differs slightly from the conclusion reached with respect to employees with after-hiring impairments. It is still possible that an employer could benefit according to both measures. The employer may be better off with the accommodation than without the accommodation (i.e., the first measure). As with the after-hiring impairment, this result principally depends upon the accommodation's cost and its effect on the employee's productivity. However, the employee's preferences, expressed in the form of shadow prices and shadow benefits, will also be relevant when determining whether the employer will benefit. The employer may also be better off with the accommodation than it would have been if the employee did not have an impairment (i.e., the second measure), although this result may be less likely in this scenario than in the other situation where the employee has an after-hiring impairment. The competitive barriers will not be as high in this scenario, but it is less likely that shadow prices and shadow benefits may expand the opportunity to reduce labor costs and increase the employee's productivity. Still, some opportunity does exist. An opportunity also exists for the parties to discuss other changes in their relationship, like wage concessions, that will affect the desired result. Once again, the parties can determine the outcome.

D. Efficient Accommodations in the Internal Labor Market: Hidden Impairments

J. Hoalt Verkerke provided a well-considered analysis of the consequences that unobservable or "hidden" impairments may have on workers' employment searches in the external labor market.¹²² His analysis provides a starting place for consideration of the effects of hidden impairments on internal labor market relationships.

Verkerke started with the premise that employee turnover can be efficient. An employee who changes jobs to improve the match between her job and her skills and knowledge, or even her impairment, increases her productivity and her wages.¹²³ Yet, hidden impairments frustrate the matching process. Verkerke posited that the worker's hidden impairment

122. Verkerke, *supra* note 82, at 910-11.

123. *Id.* Verkerke's assessment of turnover's role in the external labor market is consistent with the job match theory assessment of the role of intra-firm job change. See *supra* text accompanying notes 46-48; see also J. Hoult Verkerke, *Legal Regulation of Employment Reference Practices*, 65 U. CHI. L. REV. 115, 117 (1998) (discussing the role of job matching in labor market efficiency).

would effect a self-perpetuating series of failures in the matching process. Employer #1 learns about the worker's hidden impairment through its experience with the worker's failure to satisfy productivity expectations. Unconstrained by the ADA, Employer #1 discharges the worker into the external labor market. Employer #2 hires the worker without knowing that the worker has the hidden impairment because Employer #1, in order to avoid a defamation claim by the discharged worker, does not disclose that the worker has the impairment.¹²⁴ Employer #2, therefore, cannot assess the effects of the worker's impairment on her future productivity in the job into which she would be hired.¹²⁵ Thus, there will be a mismatch between the worker and the job with Employer #2. The cycle then repeats itself. Employer #2 will discharge the worker into the external labor market as it learns more about her deficient productivity, but it will not disclose the hidden impairment to Employer #3. Employer #3 will discharge the worker and fail to disclose her impairment, as well. The result will be serial discharges of the worker, or "churning," and subsequent "scarring" of the employer, in Verkerke's lexicon. The worker's record of serial discharges will eventually deter employers from hiring the worker regardless of the actual quality of the match between the worker's abilities and the prospective job.¹²⁶ Inefficiency and market failure will result.

The ADA's reasonable accommodation mandate serves as a brake on this process. The ADA encourages employees to disclose their impairments in return for the prospect of being accommodated.¹²⁷ Also, rather than immediately discharging the unproductive employee, the employer must endeavor to find a reasonable accommodation for her impairment. If an accommodation can be found that would allow the employee to increase her productivity to the expected level, then the employer may not discharge the employee and the inefficiencies of churning and scarring will be avoided.¹²⁸ In sum, Verkerke argues that the ADA facilitates the smooth and efficient operation of the external labor market. This section will explain how the ADA's accommodation mandate can have the same effects in the internal labor market.

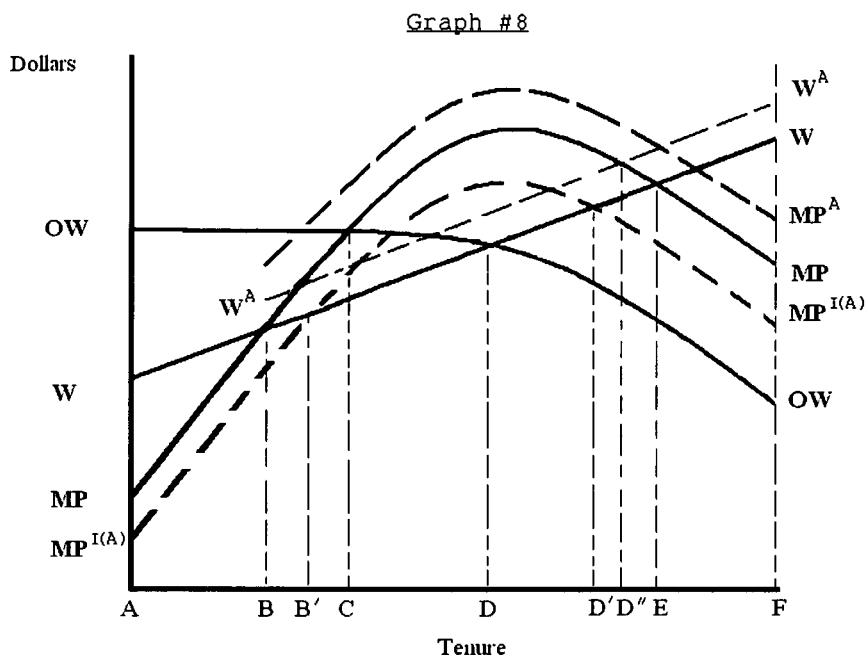
124. Verkerke, *supra* note 82, at 914-15.

125. Verkerke also correctly notes that the ADA prohibits the employer from seeking medical information that might disclose the hidden impairment before employment commences and limits such requests after hiring commences. *See id.* at 924-26.

126. *See id.* at 915-23 (describing the cause and effects of "churning" and "scarring").

127. *See id.* at 936.

128. *See id.* at 934-36.



Graph #8 depicts the internal labor market relationship between an employer and an employee with a hidden impairment. The employee is hired with the impairment at Tenure A, but the employer learns about the impairment at Tenure B. Absent the accommodation, the employee's entire productivity curve would be lower than the employer's pre-hiring expectations (i.e., $MP^{(A)}$ rather than MP) because the hidden impairment inhibits the employee's ability to perform. However, the opportunity wage does not change, because, even though the employee's actual productivity with the next best employer would be lower, the impairment would be hidden from all employers in the external labor market. Verkerke's analysis suggests that this market failure would cause other employers to pay the employee the same wage they would pay an employee without an impairment, at least at the outset of their relationship. The current employer pays the expected wage (W) to the employee.

The results are entirely predictable. The employee's dividend remains unchanged because its determinants—wage and opportunity wage—do not differ from the employer's and the employee's expectations. The employer's dividend, however, is smaller than expected and lasts for a shorter period of time (i.e., from Tenure B' to Tenure D' rather than Tenure B to Tenure E) because of the employee's unexpectedly low productivity.

The accommodation is introduced at Tenure B. The wage curve shifts up to reflect the cost of the accommodation. As before, W^A represents the

wage taking into account the accommodation's cost. At a minimum, productivity returns to its expected course (i.e., to MP from $MP^{(A)}$). The first measure of employer benefits asks whether the employer is better off than it would have been if it continued its relationship with the employee without providing an accommodation. Once again, if the value of the employee's increased productivity exceeds the accommodation's costs, then the employer benefits according to the first measure. In other words, if the employee's productivity returns to its expected level (i.e., to MP from $MP^{(A)}$), then the question of whether the employer derives a benefit can be answered by comparing the increase in productivity ($MP - MP^{(A)}$) to the increase in the effective wage ($W^A - W$).

The second measure of employer benefits asks whether the employer will get a larger dividend with the accommodation than it would have received without the accommodation and the impairment. In this scenario, a larger dividend would result only if the employee's productivity increased beyond its expected level (i.e., MP^A rather than MP) and, therefore, exceeded the accommodation's cost. However, an enhanced productivity effect is less likely in this scenario than in the after-hiring impairment scenario, and about as likely as in the promotion-transfer-job-redesign scenario. The opportunity wage explains the difference. In the after-hiring impairment scenario, the employee earned a larger dividend increased by the cost of the accommodation and the decreased value of the opportunity wage. In this scenario and the promotion-transfer-job-redesign scenarios, the employee's dividend increased only by the amount of the accommodation's costs. As a result, the competitive barriers are lower in the latter two scenarios than in the after-hiring impairment scenario. Any productivity benefits from the higher competitive barriers are likely to be smaller, if they occur at all. Thus, the productivity increase may exceed the cost of an inexpensive accommodation, like a one-time accommodation, but it is less likely to exceed the expense of a more costly, continuing accommodation. The employer is, therefore, less likely to benefit when compared with its position absent the employee's impairment.

This preliminary conclusion resembles the conclusions reached in the two preceding sections. An employer can benefit from accommodating an employee with a hidden impairment. Depending upon the accommodation's cost and its effect on the employee's productivity, the employer may be better off with the accommodation than without the accommodation (i.e., the first measure). It is somewhat less likely that the employer will also be better off with the accommodation than it would have been if the employee did not have an impairment (i.e., the second measure). As with the promotion-transfer-job-redesign scenario, the competitive barriers will not be as high in this scenario as in the after-hiring impairment scenario. But some increase will result from the employer's

provision of the accommodation, so some opportunity exists for the parties to use the interactive process to negotiate over labor costs, productivity, and other matters that will influence the economic results of the accommodation.

All three analyses in this part strongly suggest that employers can, and in some cases will, derive economic benefits from accommodating their employees with disabilities, even taking into account only the factors contained within the narrow boundaries of the employer-employee relationship. Assuming that this relationship will continue, this part has shown that the employer will often benefit from accommodating the employee. The more difficult question is whether the employer would be better off than it would have been if it had never hired the employee with a disability. This part has considered this issue in the guise of the hypothetical question of whether the employer is better off with the accommodation than it would have been if the employee did not have an impairment, and the results were decidedly mixed. However, these preliminary results have not yet taken into account the costs associated with substituting an employee without a disability for the employee with a disability. The next part will consider these costs and move the economic analysis of accommodation benefits for employers closer to a final conclusion.

III. THE OPPORTUNITY BENEFITS OF WORKPLACE ACCOMMODATIONS

Many of the scholars considering the economic effects of the ADA's accommodation mandate have assumed that accommodations issues are resolved in a competitive labor market.¹²⁹ This assumption presupposes that the employer makes a costless or low-cost choice between an employee with an impairment and an employee without an impairment. Relying on this assumption, these scholars would likely reject the analyses in the preceding part because the analyses presume that the employer would continue employing an individual with an impairment after the employee had requested an accommodation. In a competitive labor market, where costless exchanges of employees are possible, employers would

129. See, e.g., Acemoglu & Angrist, *supra* note 5, at 920 ("The theoretical consequences of the ADA are explored using a standard competitive model . . ."); Donohue, *Legislatively Mandated Benefits*, *supra* note 10, at 910-11; Jolls, *Accommodation Mandates*, *supra* note 9, at 233-42 (offering an analysis that is dependent upon supply and demand setting wages and employment levels, thereby implying a competitive labor market). By contrast, both Michael Stein and J. Hoalt Verkerke have argued that the ADA addresses significant market failures in the labor market, thereby suggesting that these markets are not entirely competitive. See Stein, *supra* note 21; Michael Ashley Stein, *Labor Markets, Rationality, and Workers with Disabilities*, 21 BERKELEY J. EMP. & LAB. L. 314 (2000); Verkerke, *supra* note 82. For a discussion of Verkerke's analysis, see Part II.D.

simply trade the old employee for a new employee. But exchanging an incumbent employee with an impairment in the internal labor market for a new worker without an impairment from the external labor market is not costless. This Part will discuss the costs of this exchange and how they should factor into the calculations of the potential accommodation benefits received by employers.

The preceding Part identified three scenarios in which an employee with an impairment might request an accommodation from her employer, and analyzed the economic benefits that an employer might derive from providing that employee with an accommodation. This Part will add the final piece to this cost-benefit analysis. An employer who provides an accommodation to an incumbent employee avoids certain predictable costs. Just as the wage an employee might earn in the external labor market is an opportunity cost of remaining with the employee's current employer (i.e., the "opportunity wage"), these avoided costs might be called the accommodation's opportunity benefits. These opportunity benefits are another important factor in determining whether an employer benefits from providing an accommodation.

The employer might not take opportunity benefits into account when an accommodation's benefits otherwise exceed its costs. Opportunity benefits are relevant in those situations in which the costs of the accommodation exceed its benefits, and most relevant where the difference is small. If an accommodation's opportunity benefits exceed the difference between the present value of an accommodation's costs (i.e., the difference between the employee's effective wage and actual wage) and the present value of the accommodation's productivity benefits (i.e., the difference between the employee's productivity with the accommodation and without it), then the economically rational employer should choose to provide the accommodation.

A. Opportunity Benefits and the Internal Labor Market's Efficiencies

Apart from the direct productivity dividends an employer derives from a long-term relationship with an incumbent employee in the internal labor market, the employer also benefits by not having to bear the transaction costs of searching for a new employee in the external labor market. Each step in a hiring process entails transaction costs. Among other benefits of retaining an incumbent employee, the employer need not solicit and screen resumes from applicants for the vacated job, review credentials and references, interview applicants, and decide which applicant to hire, among other hiring-related activities. But these opportunity benefits are only the beginning. This section will consider how an employer's failure to provide an accommodation to an incumbent employee with a disability might

indirectly sabotage its other employees' productivity, thereby increasing its labor costs and undermining the efficient operation of the internal labor market.

An employer's refusal to provide an accommodation may cause the employee to sever her relationship with the employer. The employee may be literally incapable of working without an accommodation in the job to which the employer has assigned her. For example, an employee who suffers a severe back injury may be unable to work in a job with heavy lifting responsibilities.¹³⁰ Or, the employee may simply quit out of frustration or anger. In both of these situations, the employer could suffer a loss. The employee with an impairment may have generated dividends (i.e., productivity in excess of wage) without the accommodation, even if those dividends would have been smaller than the employer expected. For example, an employee with a bad back might have been productive in a sedentary job that did not require lifting. Separation would cause these dividends to be lost. In addition, the employer would lose any unrecouped investments it has sunk into the worker's acquisition of skills and knowledge, or its own acquisition of information about the employee's optimal job match.

If the employee does not separate from the employer, she may feel that her expectational interests in promotions, transfers, job re-designs, or rising wages have been frustrated. Her frustration may cause her to shirk. Or, the employee may conclude that the employer's denial of her accommodation request is strategic behavior. For example, if the employer refused to provide an accommodation that the employee needs in order to accept a promotion that will result in higher wages,¹³¹ the employee may conclude that the employer has chosen to appropriate her expected wage increases for itself. The employee's response may be to shirk as a means of recovering her lost dividends. Even if the employee does not perceive the employer's action as strategic behavior, she may perceive that the employer has discriminated against her or treated her unfairly. As a result, her morale may suffer, which might also lead the employee to shirk.

Shirking for any reason decreases the employee's productivity. It would also force the employer to invest additional resources in monitoring the employee's performance.¹³² The failure to provide the accommodation,

130. See Harris, *supra* note 24, at 180-81 (describing how U.S. Airways refused to grant Barnett his accommodation thereby forcing him to quit and search for another employer).

131. See *supra* text accompanying notes 105-09.

132. "Shirking" is nothing more or less than the employee's failure to contribute actively to improving firm productivity. It might include slothfulness, a refusal to assist the employer with problem-solving, or any omission or commission that deprives the employer of the productivity benefits of the worker's firm-specific skills. See Alan Hyde, *In Defense of Employee Ownership*, 67 CHI.-KENT L. REV. 159, 183 (1991); Schwab, *supra* note 44, at 21; see generally Lisa E. Key, *Co-Worker Morale, Confidentiality, and the Americans with*

therefore, could cause the employee's productivity to decline and the effective wage to rise—that is, precisely the opposite effect that providing the accommodation might have had.¹³³ Yet, shirking entails risks for the employer and the employee beyond its direct effects on productivity and the employee's effective wage. If shirking causes the employee's productivity to decline sufficiently, the employer may be deprived of any remaining dividends it might have earned from its relationship with the employee. Lacking an economic rationale for continuing the relationship, the employer may discharge the shirking employee.¹³⁴ Both parties would lose any benefits that could have been derived from their relationship, and the employer would be required to invest in searching for a new employee. Thus, failing to provide an accommodation may lead to separation and all of the consequences associated with it, either by an immediate choice of the employee or indirectly as a result of shirking.

The employer's response to one employee's accommodation request may also have consequences for its relationships with other workers. The group of workers most likely to be affected would be other incumbent employees. As a general matter, incumbent employees have good information about their co-workers' wages and productivity, and other matters that are relevant to their implicit contracts with the employer.¹³⁵ Simply, incumbent employees pay attention to the employer's treatment of their co-workers because the co-worker's relationship with the employer may be relevant to the employees' own relationships with the employer. Like the employee seeking an accommodation, other incumbent employees may perceive the employer's decision as a signal that the employer may engage in strategic behavior.¹³⁶ Some co-workers may also value a workplace culture of respect in which the employer searches for ways to allow every employee to make a contribution. Co-workers' most negative response would be to quit or shirk and thereby deprive the employer of

Disabilities Act, 46 DEPAUL L. REV. 1003, 1007-08 (1997) (discussing how lower employee morale might result in increased cost to the employer).

133. See *supra* text accompanying notes 78, 98-101, and 118 (showing the elasticity of the labor supply market and the overall benefits of providing accommodations for impaired workers).

134. See H. Lorne Carmichael, *Self-Enforcing Contracts, Shirking and Life Cycle Incentives*, 3 J. ECON. PERSP. 65, 67-68 (1989); Kenneth G. Dau-Schmidt, *A Bargaining Analysis of American Labor Law and the Search for Bargaining Equity and Industrial Peace*, 91 MICH. L. REV. 419, 432 (1992).

135. See Harris, *supra* note 56, at 1208-09. This general situation differs from the particular situation of accommodations and disabilities which is characterized by asymmetric information. Incumbent employees have the best information in a unionized workplace because the union becomes a repository for institutional history as the workers' representative on wages, hours, terms, and conditions of employment. See *id.* at 1210 n.91.

136. See generally *supra* text accompanying notes 58-63 (discussing "strategic" or "opportunistic" behavior).

some or all of his productivity. More likely, these incumbent employees would seek some kind of procedural protections against future acts of opportunism by the employer.¹³⁷ These protections could range from organizing a union to insisting on written contracts or explicit rules spelled out in an employee handbook. Any of these responses would entail potentially substantial additional costs for the employer.

These negative responses stand at one end-point on a spectrum of possibilities. A second, mid-range possibility is that incumbent employees without disabilities will view their employer's rejection of an accommodation request as entirely irrelevant to their work life. Employees without disabilities may not expect to need or request an accommodation. They may also view the employer's accommodation decisions as qualitatively different from other decisions that will affect their work lives like raises, promotions, training opportunities, or other workplace benefits. If the other incumbent employees draw these conclusions, then their relationships with the employer will not change and the employer will experience no additional costs.

A third possibility is that incumbent employees without disabilities will view the employer's denial of an accommodation request as a wholly appropriate refusal to provide a "special benefit" to the employee requesting the accommodation. This is the opposite end-point on the spectrum from the negative responses described above. Incumbent employees without disabilities may feel that, by withholding an accommodation, the employer has refused to engage in favoritism for an employee with a disability. Further, circumstances may arise in which incumbent employees without disabilities consider themselves to be competing with an employee with a disability for some workplace benefit (e.g., a promotion, a transfer, retention in a layoff). In this context, incumbent employees without a disability may perceive the accommodation as an unfair competitive advantage for the employee with a disability. In *U.S. Airways v. Barnett*,¹³⁸ for example, plaintiff Barnett sought to remain in his mail-room position as an accommodation for his weak back. According to the employer's seniority system, the mail-room position should have been open for seniority-based bidding by other employees. Two co-workers with more seniority than Barnett wanted to bid on the mail-room job.¹³⁹ It is entirely plausible, even likely, that these senior co-workers would have perceived the employer granting the

137. See Dau-Schmidt, *supra* note 134, at 431 (discussing how unions prevent employers from engaging in opportunistic behavior); Schwab, *supra* note 44, at 32-38 (discussing contract protections enforced by courts for the protection of workers throughout their life cycles).

138. 535 U.S. 391 (2002) (5-4 decision).

139. See *id.* at 394.

requested accommodation as an unfair advantage for Barnett.¹⁴⁰ In these circumstances, the incumbent employees without disabilities would applaud the employer's denial of the accommodation request and, perhaps, view it as evidence of the vitality of their internal labor market relationships. Once again, the employer would suffer no additional costs due to the co-workers' reactions to its accommodation decision.

Co-workers without disabilities may respond to an employer's denial of an accommodation in any of these ways, or variations thereof. Their responses will depend on whether they expect to need an accommodation in the future, whether they view accommodations decisions as representative of the employer's approach to other human capital issues, and their assessment of whether they are in competition with the employee with a disability. For these same reasons, co-workers with disabilities can be expected to judge matters differently. Depending upon the nature of their impairments and jobs, these employees are more inclined to view themselves as likely to need an accommodation at some point in the future. The employer's response to an accommodation request, therefore, would foreshadow future issues in these employees' own employment relationships.¹⁴¹ Further, the work experiences of employees with disabilities would likely cause them to view accommodations as necessary measures to facilitate performance and eliminate discriminatory barriers in the workplace rather than "special benefits." These employees may also be more likely to adopt the view that the employer's denial of an accommodations request is strategic behavior. Accordingly, incumbent employees with disabilities are more likely to respond to an employer's denial of an accommodation by seeking new employment or some form of assurance that they will receive their dividends from the internal labor market relationship. As a result, the employer may experience a loss of these employees' productivity, loss of its sunk investments, and higher labor costs.

The employer's denial of its employee's accommodation request may also affect the behavior of prospective employees in the external labor market, although this effect is less likely. In theory, prospective employees would learn of the employer's refusal to provide the accommodation and, in response, either refuse any job the employer might offer or demand written protections to codify the implicit contract that is formed upon entry

140. *Id.* at 395 (discussing alteration of the seniority system as an undue hardship for the employees that relied on the system). I have argued that this perception is partly the consequence of the employer's failure to explain the role of workplace accommodations to the co-workers. See Harris, *supra* note 24, at 169.

141. It is always perilous to make general statements about the attitudes of people with disabilities because the disability community is diverse and, at times, diffuse. See JOSEPH P. SHAPIRO, NO PITY: PEOPLE WITH DISABILITIES FORGING A NEW CIVIL RIGHTS MOVEMENT 323-24 (1994).

into the internal labor market.¹⁴² However, reputation has a weaker effect in the external labor market than in the internal labor market, if it has any effect at all. Simply, workers in the external labor market have significantly less information about the employer than incumbent employees have. Even outside the disabilities context, the relationship between an employer and a prospective employee is characterized by asymmetric information.¹⁴³ Thus, these workers may never learn about the employer's decision to deny the accommodation. If the information gets out, workers in the external labor market may be less interested. They tend to be younger than incumbent employees and would not necessarily be making a long-term commitment to that particular employer.¹⁴⁴ Thus, they are less concerned with issues related to job security and less likely to value or recognize a firm's reputation.¹⁴⁵

Just like in the internal labor market, workers with disabilities in the external labor market may be more attentive to an employer's accommodations policies and practices than workers without disabilities. Because an accommodation could determine whether the worker will reap the long-term benefits of an implicit contract with the employer, it may be the single most important piece of information for the worker's decision about which employment opportunity to pursue. Yet, the information may not be available, and the worker may be hesitant to inquire too deeply into the employer's accommodations policies and practices out of fear of losing a job opportunity. Some workers may have an informal network of contacts within the employer's organization which can provide information.¹⁴⁶ However, those who do not must depend upon some form of public disclosure to learn about how an employer treats its employees with disabilities.

Without public disclosure, most workers with disabilities in the external labor market will be unable to base their decisions on the employer's accommodations policies and practices. A mismatch may

142. See Cohen & Wachter, *supra* note 63, § 6.3 at 115-16 (explaining that certain provisions can be made that are explicit contracts protecting workers in the internal labor market).

143. See EHRENBERG & SMITH, *supra* note 40, at 234.

144. See Press Release, Bureau of Labor Statistics, Employer Tenure Summary (Sept. 8, 2006), available at <http://www.bls.gov/news.release/tenure.nr0.htm> (showing that median employee tenure is higher among older workers than younger ones). For example, in January 2004, the median tenure of workers age 55 to 64 (9.3 years) was more than three times that of workers age 25 to 34 (2.9 years). *Id.*

145. Schwab, *supra* note 44, at 31-32. See also PAUL C. WEILER, GOVERNING THE WORKPLACE 74-75 & n.53 (1990) (arguing that job candidates under appreciate the probability of their dismissal from the firm).

146. See Harris, *supra* note 56, at 1209. Workers may have social relationships with employees of the employer with whom the workers are negotiating. These social relationships, even acquaintanceships, may provide sources of useful information.

result if the worker accepts the employer's job offer. A better match would be a job with an employer that is willing to accommodate the worker's particular impairment, or an employer that would not need to accommodate the worker's impairment. The worker's lack of information, therefore, could lead to market failure and losses for the employer. On the other hand, public disclosure may cause workers with disabilities to shy away from seeking jobs with the employer or to insist upon some form of assurance that they will receive the accommodations they will need. Like Verkerke's "churning" and "scarring," the signal from the employer's accommodation decision could prevent a worker from being matched to a job with the employer in which she would be highly productive—a market failure that would also effect a loss for the employer.

Thus, the preliminary conclusions in the preceding Part that an employer can benefit from accommodating an employee with a disability must be enriched with an understanding of opportunity benefits. Opportunity benefits increase the likelihood that an employer will gain from an accommodation. If avoiding the costs of searching for a new employee represents the first category of opportunity benefits, then a second category relates to the employee's productivity, the productivity of her co-workers, and the transaction costs associated with maintaining productive employment relationships with all of these employees. Accommodations may avoid shirking, quitting, and demands for procedural protections that are not typical of the implicit contractual arrangements in the internal labor market. Accommodations may also avoid negative effects to the employer's reputation in the external labor market, although these effects are less likely and their consequences more difficult to measure. These potential opportunity benefits must be considered when determining whether an employer benefits from accommodating an employee with an impairment. The next section will discuss another category of costs that can be avoided by an employer who accommodates an employee with a disability: litigation costs.

B. Litigation Costs

The ADA, together with state and local anti-discrimination statutes, add the potentially substantial cost of a discrimination lawsuit to an employer's economic analysis of an employee's request for an accommodation. Simply, the employee who is denied an accommodation may bring a discrimination claim against the employer. The ADA defines "discrimination" to include the failure to provide a reasonable accommodation for a qualified individual's known physical or mental

impairment.¹⁴⁷ Thus, an employee who can demonstrate that she is a “qualified individual with a disability”¹⁴⁸ may initiate a lawsuit against her employer if it denies her accommodation request.

There is no assurance that an employee’s discrimination claim will succeed. To the contrary, there is evidence that employers have a disproportionately high success rate in ADA cases that proceed to final judgment in federal court.¹⁴⁹ The Supreme Court has reduced plaintiffs’ chances of success by significantly narrowing the scope of the ADA’s protected class¹⁵⁰ and interpreting the ADA’s defenses favorably for employers.¹⁵¹ Nonetheless, the employer bears some risk of losing, even if that risk may be small.¹⁵² Losing in litigation could subject the employer to the costs of the accommodation it refused to provide plus back pay, reinstatement, and other remedies.¹⁵³

Winning avoids court-imposed remedies, but it does not free the employer from the transaction costs of conducting litigation. The employer

147. 42 U.S.C. § 12112(b)(5)(A) (2000).

148. See 42 U.S.C. § 12111(8) (2000).

149. See Ruth Colker, *The Americans with Disabilities Act: A Windfall for Defendants*, 34 HARV. C.R.-C.L. L. REV. 99, 100 (1999) (showing that employers win more than ninety-three percent of the ADA cases brought against them); *Study Finds Employers Win Most ADA Title I Judicial and Administrative Complaints*, 22 MENTAL & PHYSICAL DISABILITY L. REP. 403 (1998) (discussing a report by the American Bar Association analyzing almost every reported and unreported case brought under Title I of the ADA and finding that employers won on average 92.1% of the cases).

150. See, e.g., *Toyota Motor Mfg., Ky. v. Williams*, 534 U.S. 184, 198 (2002) (holding that an employee must be prevented or severely restricted from doing tasks central to most people’s daily lives before she will be found to have a “disability”); *Albertson’s, Inc. v. Kirkingburg*, 527 U.S. 555, 565-66 (1999) (holding that whether an individual has a disability is determined by taking into account natural adjustments he has made to his impairment); *Murphy v. UPS*, 527 U.S. 516, 521 (1999) (holding that whether an employee has a “disability” is determined by taking into account the mitigating factors that he employs); *Sutton v. United Airlines*, 527 U.S. 471, 492-94 (1999) (holding that corrective and mitigating measures, including eyeglasses, should be considered in determining whether an individual is disabled under the ADA, and that for an employee to be “substantially limited” in the major life activity of “working,” she must be excluded from a broad class of jobs). See also *Bd. of Trs. of the Univ. of Ala. v. Garrett*, 531 U.S. 356, 374 (2001) (holding that states are immune from suit under the ADA’s Title I).

151. See, e.g., *Chevron U.S.A. v. Echazabal*, 536 U.S. 73 (2002) (employer may rely on “business necessity” defense when prohibiting an employee from working in a job that could jeopardize his health); *US Airways, Inc. v. Barnett*, 535 U.S. 391, 392 (2002) (5-4 decision) (holding that an employer’s showing that an accommodation request conflicts with seniority rules is sufficient to show that the accommodation is “ordinarily” not reasonable).

152. See N.J. STAT. ANN. § 10:5-12 (West 2007) (making it an unlawful employment practice for an employer, because of a person’s disability [or a host of other categories], to refuse to hire or continue to employ such an individual).

153. See 42 U.S.C. § 12117(a) (2000) (the ADA’s remedies provision); N.J. STAT. ANN. § 10:5-12.1 (West 2007) (illustrating New Jersey’s remedies provision for disabilities discrimination cases).

must retain lawyers, respond to an EEOC investigation of the employee's complaint, conduct and respond to discovery, and pay other litigation-related expenses. The employer must also bear the cost of any time which human resources personnel, managers, and other employees dedicate to depositions, document requests, meetings with lawyers, and appearances in court.¹⁵⁴ Litigation also publicly discloses the employer's decision to deny an accommodation and thereby increases the likelihood that prospective employees in the external labor market will learn about the decision.¹⁵⁵ The employer's costs will be lower if it can defeat the claim with a dispositive pre-trial motion, but litigation of any kind or duration will impose costs on the employer.

The most obvious way for the employer to avoid a discrimination claim and the attendant litigation costs is to provide the employee with an accommodation that she finds acceptable. The employer avoids liability if the accommodation is "reasonable." However, the employer avoids litigation costs, regardless of how a court might define "reasonable," only if the accommodation is sufficient to deter the employee from filing a claim. The employer need not provide the accommodation that the employee requested. The employer can provide a more cost-effective accommodation or an accommodation that is less helpful to the employee than a court might order.¹⁵⁶ As long as the employee agrees, the accommodation delivers the opportunity benefit of avoided litigation costs to the employer.

Accommodating the employee is not the only way for the employer to avoid litigation costs. The employer and the employee might agree to a work arrangement or career path different from that contemplated when the employer hired the employee. Similarly, the employee and the employer might separate in an amicable and efficient way, perhaps after a financial settlement or help from the employer finding a superior job match with another employer. The ADA does not contemplate amicable separations, but it also does not prohibit them. The economics of the employment

154. See, e.g., *Witnesses Debate Effects of ADA at Civil Rights Commission Hearing*, 67 U.S.L.W. 2294, Nov. 24, 1998 (arguing that, while employers win most ADA lawsuits brought against them, the average cost of these victories is \$150,000 per case).

155. See *supra* text accompanying note 142-46 (noting the information asymmetry between internal and external labor markets); see, e.g., Jill Hodges, *EEOC Sues Bloomingdale's, Alleging Store Refused to Accommodate Worker with Lupus-Suit Says Mall Store Violated Americans With Disabilities Act*, STAR TRIB. (Minneapolis, MN), Aug. 10, 1995, at 1D.; Sue Lindsay, *Ex-Worker Sues Zoo, Warns of Illness; 23-Year Veteran Got Lung Disease; Zoo Says It's Safe*, ROCKY MTN. NEWS, May 20, 2005, at 4A; Barbara Rose, *\$7 Million HIV-Bias Suit Hits Penneys*, CHI. TRIB., May 24, 2005, §3 at 1; L.M. Sixel, *Policy Falls as Deaf Teen Settles Case*, HOUS. CHRON., Nov. 9, 2004, at 1.

156. See Miller, *supra* note 99, at 21-22 (according to a July 2000 EEOC report, the average monetary settlement of an ADA charge resulting from mediated negotiations was \$11,000; other means of resolution produced an average result of \$29,391).

relationship may lead the parties to conclude that separation or a restructuring of their relationship is the most efficient solution. Again, any agreement that the employee finds acceptable will allow the employer to avoid litigation costs. The question for the employer is which resolution to the accommodation problem will result in benefits exceeding costs. Prospective litigation costs are a part of that calculus.

Avoided litigation costs are a third category of opportunity benefits that an employer might derive by accommodating an employee with an impairment. Losing in litigation may impose the greatest costs, but merely engaging in litigation imposes both direct and indirect costs. Avoiding these costs also provides opportunity benefits that may change the calculus of whether an employer benefits from accommodating an employee with an impairment. However, preventing litigation almost certainly will require the employer to enter into the interactive process with the employee who is requesting an accommodation to persuade the employee not to bring a discrimination claim.

IV. CONCLUSION

This Article joins the debate over the relationship between the ADA's accommodation mandate and the continuing decline in the employment rate of working-age people with disabilities. It offers an economic theory, and analyses built on that theory, which support the discriminatory choice view of that relationship—that is, the view that the low and declining employment rate among working-age people with disabilities cannot be blamed on the ADA's accommodation mandate and any costs it purportedly imposes on employers. In the absence of this explanation for the employment-rate decline, there is good reason for concern that its cause lies with irrational, discriminatory decision making by employers who will not hire workers with disabilities regardless of any cost-benefit analysis.

Using internal labor market theory, this Article has shown that accommodating employees with disabilities often imposes no costs on the employers providing accommodations and, in some circumstances, may yield net benefits for those employers. Accommodations and workers' impairments tighten the bonds between the employer and the employee and make possible a range of cost-cutting and productivity-enhancing behaviors that yield larger dividends for the employer. For this reason, employment of people with disabilities is not some predictable consequence of the operation of a competitive market. Rather, employers and their employees with disabilities control their economic destinies. Whether these economic actors take advantage of their opportunities to increase productivity, efficiency, and employment will play an important role in determining

whether an employer benefits from accommodating an employee with an impairment.

This conclusion must be tempered by the limited nature of this article's inquiry. I have not attempted to offer a global theory of accommodations and employment. To the contrary, this article warns that any such effort necessarily encounters the complication of taking into account important differences in labor markets. This Article addresses only accommodations issues that arise between incumbent employees and their employers if those employers have an internal labor market. Nonetheless, apart from several important empirical studies which this article seeks to explain with theoretical support, the internal labor market story has been largely ignored in the debate until now.