

THE LAW AND ECONOMICS OF DISABILITY ACCOMMODATIONS

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The Americans with Disabilities Act provides a clear mandate that disabled workers be provided with “reasonable” accommodations, but does not meaningfully articulate the standards by which reasonableness ought to be measured. Until now, neither courts nor commentators have provided a systematic model for analyzing accommodation claims. This Article articulates an initial law and economics framework for analyzing disability-related accommodations. In doing so, it demonstrates how accommodations span a cost continuum that can be divided into areas of Wholly Efficient and Semi-Efficient Accommodations to be funded by private employers, Social Benefit Gain Efficient Accommodations where the costs should be borne by the public fisc, and Wholly Inefficient Accommodations that ought not be provided. It also delineates the boundaries between each category, and explains why the entities designated should bear the accommodation costs assigned to them. The analysis of disability accommodations uses, questions, and at times goes beyond the neoclassical economic model of the labor market, and also engages arguments from the jurisprudence of social justice. By utilizing both these fields, this Article stakes out a unique perspective on disability accommodations, and provides an avenue for continued discussion and debate over how disability accommodations ought to be measured.

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INTRODUCTION

Title I of the Americans with Disabilities Act (ADA)¹ requires employers to provide “reasonable” accommodations to “qualified” workers with disabilities.² Yet, in spite of this very clear mandate to provide reasonable accommodations, the statute leaves as a “great unsettled question” the matter of what can or should be considered a reasonable accommodation.³ Specifically, Title I delineates the boundary between reasonable and unreasonable as an otherwise undefined point at which a requested accommodation engenders an “undue hardship” to the providing employer.⁴ In determining whether a given disability-related accommodation is reasonable, interested parties⁵ are advised to take into consideration the totality of an employer’s circumstances. These include its size, location, economic condition, and the number of people it employs.⁶ The ADA does not, however, provide any further guidance as to how these considerations ought to be weighted or balanced.

Not surprisingly, courts have failed to expressly utilize a balancing approach that enunciates what values, if any, they assign to these factors. Instead, federal judges usually rule as a matter of law on whether particular ADA-requested accommodations were reasonable without articulating how they reached those decisions.⁷ At the district court level, this is mainly due to the prevalence of summary judgment and other pretrial motions that are granted overwhelmingly in defendants’ favor.⁸ Consequently, cases reaching the courts of appeals predominantly focus on whether district court judges abused their discretion in granting pre-jury dismissal motions, and do not engage in *de novo* balancing tests of reasonability.⁹ This is true even for Judges (nee Professors) Richard Posner and Guido Calabresi, who in

1. 42 U.S.C. §§ 12,111–12,117 (2000).

2. *Id.* § 12,112(b)(5)(A).

3. Pamela S. Karlan & George Rutherglen, *Disabilities, Discrimination, and Reasonable Accommodation*, 46 DUKE L.J. 1, 8 (1996). This prescient work is examined in greater detail *infra* in Part II.B.1.

4. *See* 42 U.S.C. § 12,111(10)(A) (defining “undue hardship” as “an action requiring significant difficulty and expense”).

5. These parties can include a worker with a disability seeking an accommodation, an employer considering the viability of its provision, or a court rendering a determination of reasonability in the event that a conflict arises between the two.

6. 42 U.S.C. § 12,111(10)(B).

7. *See infra* Part I.B.

8. *See infra* Part I.B.

9. *See infra* Part I.B.

their academic roles are among the more august doyens of law and economics scholarship. For although both Judges Posner and Calabresi have opined that an assessment of an accommodation's reasonableness necessitates application of cost-benefit analysis,¹⁰ neither has enunciated how, in practical terms, such a standard should be applied. Their analyses, however, do offer valuable insights into some factors that a judge or policymaker might consider when assessing accommodations through a cost-benefit framework.¹¹

Moreover, very few empirical studies and almost no legal scholarship exist regarding what in fact constitutes a reasonable ADA accommodation. Professor Peter Blanck conducted the leading empirical study of accommodation costs, which found the majority of those studied reasonable,¹² and has subsequently argued for this phenomenon being typical of other employers. As for legal scholarship, four theoretical estimations have been published that provide some useful thoughts about determining the reasonableness of Title I accommodations. First, Professors Pamela Karlan and George Rutherglen raise the possibility of applying negligence analysis to disability-related accommodations.¹³ Second, Professor J.H. Verkerke argues that the ADA acts efficiently in matching disabled workers with reasonably accommodated jobs appropriate to their skill sets.¹⁴ Third, Professor Christine Jolls avers that the ADA's reasonable accommodation mandates act as a disincentive to increasing employment among the disabled.¹⁵ Most significantly, Professors Stewart Schwab and Steven Willborn offer a tort-like proposal based on Judge Learned Hand's classic BPL balancing test for how employers might model their hiring preferences and thus reasonably accommodate workers with disabilities.¹⁶ These scholars,

10. *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 542–43 (7th Cir. 1995) (Posner, J.); *Borkowski v. Valley Cent. Sch. Dist.*, 63 F.3d 131, 138–39 (2d Cir. 1995) (Calabresi, J.).

11. See *infra* Parts I.C.1–2.

12. Peter David Blanck, *Communicating the Americans with Disabilities Act, Transcending Compliance: 1996 Follow-up Report on Sears, Roebuck and Co.* (1996), at <http://www.annenberg.nwu.edu/pubs/sears/> (last visited Oct. 30, 2003) (on file with the *Duke Law Journal*).

13. Karlan & Rutherglen, *supra* note 3, at 31–32.

14. J.H. Verkerke, *Is the ADA Efficient?*, 50 UCLA L. REV. (forthcoming 2003) (on file with the *Duke Law Journal*).

15. Christine Jolls, *Accommodation Mandates*, 53 STAN. L. REV. 223, 276–77 (2000).

16. Stewart J. Schwab & Steven L. Willborn, *Reasonable Accommodation of Workplace Disabilities*, 44 WM. & MARY L. REV. 1197, 1269 (2003). Judge Hand enunciated this standard in *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947).

however insightful their work, nonetheless do not offer comprehensive guidance on how a judge (or, in theory, a policymaker) ought to go about balancing accommodation costs, and who should bear those costs when assessing the reasonableness of ADA accommodations.

By the same token, very little scholarship has looked beyond the ADA's boundaries (however they are fixed) to examine what types of disability-related accommodations society, rather than employers, ought to support, and why. Two recent articles provide some clues to this dilemma in the course of arguing from *within* the ADA's precincts that employers ought to bear part of the responsibility of helping people with disabilities avoid welfare dependence.¹⁷ Professor Samuel Bagenstos maintains that a motivating factor of the Supreme Court's ADA decisions is the desire to keep people with disabilities in the workplace rather than on welfare.¹⁸ This normative goal of dependency avoidance, he argues, was likewise one of the prime considerations that impelled the statute's passage.¹⁹ Professor Amy Wax advances this normative goal of independence by averring that employer-provided workplace accommodations can improve overall social utility so long as disabled workers are somewhat productive.²⁰ Nevertheless, she believes that minimum wage and equal pay legislation will ultimately prevent employers from hiring and retaining those workers with disabilities, even though it is economically beneficial to society as a whole to do so.²¹ The arguments that Bagenstos and Wax make are extremely thought-provoking on the general notion of avoiding dependency, as well as useful in understanding some reasons why ADA accommodations are viewed as desirable. At the same time, they do not adequately delineate the reasons that society ought to provide disability-related accommodations that are otherwise inefficient for private employers,

17. Along with the article by Schwab & Willborn, *supra* note 16, these two articles are the product of a symposium I had the pleasure of convening. See generally Symposium, *Disability and Identity*, 44 WM. & MARY L. REV. 907 (2003).

18. Samuel R. Bagenstos, *The Americans with Disabilities Act as Welfare Reform*, 44 WM. & MARY L. REV. 921, 976–85 (2003).

19. *Id.* at 954.

20. See Amy L. Wax, *Disability, Reciprocity, and "Real Efficiency": A Unified Approach*, 44 WM. & MARY L. REV. 1421, 1423 (2003) (analyzing "the cost-effectiveness of the ADA").

21. *Id.* at 1424.

or where the line should be drawn between private inefficiency and public efficiency.²²

Stepping into the breach left open by judges and commentators, this Article will offer some suggestions on how to economically conceptualize disability-related accommodation costs. It will then suggest who should bear the costs for each of the possible circumstances. I hope that in offering some thoughts on the matter this Article will provoke further dialogue on this overlooked area of legal analysis. When making my assessment of disability-related accommodations both within and without the ADA's provenance, I will utilize, question, and at times go beyond the neoclassical economic model of the labor market, as well as engage arguments from the jurisprudence of social justice. By using both economic and social justice arguments, this Article stakes out a unique perspective on the ADA.

Part I sets forth what the ADA requires in the provision of accommodations and describes the usual manner in which claims for ADA accommodations are handled by federal courts. It then analyzes two cases decided by Judges Posner and Calabresi, respectively, in which neither engaged a detailed reasonable accommodation analysis, but where each provided insight into some of the considerations that could inform a cost-benefit analysis.

Part II reviews empirical work tending to show that accommodation costs are either minimal, nonexistent, or even cost-effective. It then sets forth pertinent analyses provided by Pamela Karlan and George Rutherglen, J.H. Verkerke, and Christine Jolls. Next, Part II details a proposal by Stewart Schwab and Steven Willborn which suggests the application of the classic BPL balancing standard for negligence liability to ADA accommodations, but also leaves much unresolved. Last, Part II adumbrates articles by Samuel Bagenstos and Amy Wax that, respectively, lay the groundwork for reasoning that ADA-type accommodations can enhance social welfare beyond the statute's confines.

Part III begins by explaining the methodology employed in my proposed law and economics framework for assessing disability-

22. Nor do they need to in order to achieve their goals, which they do admirably. I have made two very preliminary attempts. See Michael Ashley Stein, *Empirical Implications of Title I*, 85 IOWA L. REV. 1671, 1684 (2000) [hereinafter Stein, *Empirical Implications*]; Michael Ashley Stein, *Labor Markets, Rationality, and Workers with Disabilities*, 21 BERKELEY J. EMP. & LAB. L. 314, 325-28 (2000) [hereinafter Stein, *Labor Markets*].

related accommodations. Operating primarily within the boundaries of the neoclassical economic model of the labor market, I nevertheless diverge from previous scholarship by challenging three of the baseline presumptions adopted by scholars who have written on the topic: (1) the belief that employers' hiring and retention practices relating to disabled workers are efficient; (2) the assumption that disabled workers are less productive than their nondisabled counterparts; and (3) the overall perception that the existing labor market status quo is an equitable one. I thus go beyond the precincts of typical neoclassical economic schemas. Finally, as a prelude to the accommodation cost continuum presented in Part IV, Part III describes the measuring variables that will be used in the framework, respectively, willingness to pay, disabled profit, average profit, and social benefit gain.

Part IV conceptualizes disability-related accommodation costs as existing on a continuum. These expenses range from Wholly Efficient Accommodations (some of which are provided voluntarily and others which would be provided voluntarily barring a market failure), to Socially Efficient Accommodations (including Semi-Efficient Accommodations coerced through ADA litigation because they extract a differential cost from employers, and Social Benefit Gain Efficient Accommodations where individual workers and general society benefit, but employers do not), to Wholly Inefficient Accommodations (where the only economically feasible option is exclusion of these workers from the labor market). In setting forth the accommodation cost continuum, Part IV organizes thematically the various disability-related accommodations into the following categories: Pareto Optimal Accommodations, where the accommodations are wholly efficient to employers; Kaldor-Hicks Welfare Enhancement Accommodations, which include both Semi-Efficient Accommodations and Social Benefit Gain Efficient Accommodations; and Wholly Inefficient Mandates. At the same time, Part IV also delineates who should bear the costs for each type of these accommodations, and why. I conclude by canvassing areas for future research as a means of facilitating what I hope will become a rich and ongoing debate. An Appendix sets forth the value assumptions used in Part IV's proposed accommodation cost model.

I. THE ADA AND THE COURTS

The ADA requires employers to provide “reasonable” accommodations to “qualified” employees with disabilities.²³ In so doing, the statute defines reasonableness as something less than an undue hardship, a figure calculated in the context of an employer’s financial circumstances.²⁴ Although application of this standard would seem to mandate detailed factual analyses, Title I claims are routinely dismissed on defendants’ motions before they reach a jury or other factfinders, through the determination that accommodations are unreasonable as a matter of law.²⁵ Because courts of appeals do not review these rulings *de novo*,²⁶ the appellate courts have not provided much guidance on the subject. Contrary to this trend, however, a pair of opinions by Judges Posner and Calabresi provide insight on the type of analyses that might be used when assessing ADA accommodation claims.

A. *ADA Accommodation Requirements*

Title I of the ADA governs the conduct of “covered entit[ies],” defined as private employers, employment agencies, labor organizations, and joint labor-management committees.²⁷ These entities, which for the sake of convenient reference I will call “employers,” are prohibited from discriminating against qualified individuals with disabilities in all aspects of the employment relationship.²⁸

Congress defined a person with a disability²⁹ as one who has “a physical or mental impairment that substantially limits one or more of

23. 42 U.S.C. § 12,112(b)(5)(a) (2000).

24. *Id.* § 12,111(10)(B).

25. *See infra* Part I.B.

26. *See infra* Part I.B.

27. 42 U.S.C. § 12,111(2).

28. Specifically, the hiring, promoting, firing, and “other terms, conditions, and privileges of employment.” *Id.* § 12,112(a). Employers of fewer than twenty-five workers, federal government or Native American-owned corporations, and private membership clubs are excluded from coverage. *Id.* § 12,111(5)(B)(i)–(ii).

29. Congress adopted the definition of disability whole cloth from the Rehabilitation Act, Pub. L. No. 93-112, 87 Stat. 355 (1973) (codified as amended at 29 U.S.C. §§ 701–796 (2000)), in part as the result of a political compromise among cross-disability rights groups and groups who represented people with specific disabilities. Anita Silvers & Michael Ashley Stein, *Disability, Equal Protection, and the Supreme Court: Standing at the Crossroads of Progressive and Retrogressive Logic in Constitutional Classification*, 35 U. MICH. J.L. REFORM 81, 85 (2002).

the major life activities of such individual,”³⁰ who has a history of such impairment,³¹ or who is regarded as having one.³² The subject of who is an individual with a disability, let alone a “qualified” individual with a disability, has been the focus of much case law³³ and legal scholarship,³⁴ and is likely to continue as a source of contention.³⁵ For now, it suffices to say that Supreme Court decisions require disabilities to be significant ones,³⁶ as measured in their mitigated states,³⁷ with any attendant limitations impairing a wide range of functional activities.³⁸

To be covered by the ADA, individuals with disabilities must also be “qualified.” This means that only those individuals capable of performing the essential job functions of the respective positions sought, either with or without provision of reasonable

30. 42 U.S.C. § 12,102(2)(A). *See generally* Robert L. Burgdorf, Jr., “Substantially Limited” Protection From Disability Discrimination: The Special Treatment Model and Misconstructions of the Definition of Disability, 42 VILL. L. REV. 409 (1997) (maintaining that the definition of disability is deleteriously misconstrued).

31. 42 U.S.C. § 12,102(2)(B). Breast cancer survivor Patricia Garrett, the named plaintiff in *Board of Trustees of the University of Alabama v. Garrett*, 531 U.S. 356 (2001), an employment action precluded on sovereign immunity grounds, *id.* at 360, is one example. *See generally* Jane Byeff Korn, *Cancer and the ADA: Rethinking Disability*, 74 S. CAL. L. REV. 399, 440–52 (2001) (arguing for the construction of past and present incidents of cancer as a disability).

32. 42 U.S.C. § 12,102(2)(C). *See generally* Michelle A. Travis, *Perceived Disabilities, Social Cognition, and “Innocent Mistakes”*, 55 VAND. L. REV. 481 (2002) (applying cognitive psychology literature to describe how and why members of society, including employers and judges, might consider a nondisabled person disabled).

33. *See, e.g.*, *Sutton v. United Air Lines*, 527 U.S. 471, 475 (1999) (“[T]he determination of whether an individual is disabled should be made with reference to measures that mitigate the individual’s impairment . . .”).

34. *See, e.g.*, Symposium, *supra* note 17 (collecting articles and notes analyzing the ADA).

35. *See, e.g.*, Samuel R. Bagenstos, *Subordination, Stigma, and “Disability”*, 86 VA. L. REV. 397, 445–84 (2000) (arguing that disability should be conceived as subordination resulting from the stigmatization of an individual on the basis of a physical or mental impairment); Mark Kelman, *Market Discrimination and Groups*, 53 STAN. L. REV. 833, 877–91 (2001) (proposing that norms are best enforced as group, rather than individual, protections because the larger societal benefits stemming from the prevention of market discrimination relate to the incorporation of those groups into the social and economic mainstream).

36. *See, e.g.*, *Sutton*, 527 U.S. at 483–89 (holding that severely myopic twins who were precluded from positions as global airline pilots were not disabled within the meaning of the ADA because their visual impairment was commonplace).

37. *Id.* In fact, one commentator gleans from *Sutton* a duty to reasonably mitigate one’s own disability. Jill Elaine Hasday, *Mitigation and the Americans with Disabilities Act 18–42* (2003) (unpublished manuscript, on file with the *Duke Law Journal*).

38. *See, e.g.*, *Toyota Motor Mfg. v. Williams*, 534 U.S. 184, 198 (2002) (“[T]o be substantially limited in performing manual tasks, an individual must have an impairment that prevents or severely restricts the individual from doing activities that are of central importance to most people’s daily lives. The impairment’s impact must also be permanent or long term.”).

accommodations, are covered by the Act.³⁹ Thus, a completely blind applicant would not be qualified for a position as a truck driver, where the essential job function is the ability to drive.⁴⁰ She would, however, be qualified for a position as a molecular biochemist, where the essential job function of miscerating substances is either achievable through the applicant's own abilities, or through provision of accommodation in the form of Braille or other coded indicators.⁴¹

Reasonable accommodations can encompass a wide range of individualized adjustments to existing workplace conditions, but are mainly conceptualized as falling into one or both of two categories. The first category requires the alteration or provision of a physical plant,⁴² such as ramping a stair to accommodate the needs of an employee who uses a wheelchair. These type of accommodations involve "hard" costs, meaning that they invoke readily quantifiable out-of-pocket expenses.⁴³ Purchasing and installing a ramp, for example, is usually a one-time expenditure with a fixed and knowable cost.

The second type of accommodation involves the alteration of the way in which a job is performed.⁴⁴ This might mean not requiring a wheelchair-using store clerk to stack high shelves. These sort of accommodations bring into play "soft" costs, which are more difficult to quantify.⁴⁵ This hypothetical employee might require a fellow

39. 42 U.S.C. §12,111(8) (2000).

40. Nonetheless, in *Albertson's, Inc. v. Kirkingburg*, 527 U.S. 555 (1999), the Supreme Court upheld the dismissal of a driver with monocular vision, whose driving competence was not in question, on the ground that his functional method of seeing violated Department of Transportation regulations. *Id.* at 567-78 (1999).

41. The nexus between these standards was described in the Senate report on the ADA as follows:

If a person with a disability applies for a job and meets all selection criteria except one that he or she cannot meet because of a disability, the criteria must concern an essential, non-marginal aspect of the job, and be carefully tailored to measure the person's actual ability to do an essential function of the job However, the criteria may not be used to exclude an applicant with a disability if the criteria can be satisfied by the applicant with a reasonable accommodation.

S. REP. NO. 101-116, at 37-38 (1989).

42. See 42 U.S.C. § 12,111(9)(A) (requiring an employer to make "existing facilities used by employees readily accessible to and usable by individuals with disabilities").

43. See Stein, *Empirical Implications*, *supra* note 22, at 1677 (noting that most ADA studies focus on these "hard" costs).

44. See 42 U.S.C. § 12,111(9)(B) (allowing job restructuring or modification, variation in existing methods of administration, and the provision of readers or interpreters).

45. See Stein, *Empirical Implications*, *supra* note 22, at 1677 (claiming that existing "studies do not adequately appraise 'soft' costs, including nonphysical plant expenses [] such as educating human resource personnel").

worker to stack the high shelves while she staffed the register. Her circumstance might also necessitate that a human resource manager meet with other employees to explain the change in their daily duties, or that a supervisor be required to learn how to take these alterations into consideration when evaluating overall job performance.

Two overlooked systemic points are worth noting. First, disability-based accommodations, when required,⁴⁶ can involve hard costs, soft costs, or both.⁴⁷ Second, because ADA Title III requires that places of public accommodation be made readily accessible,⁴⁸ some employment-related accommodation costs should be subsumed by employers in their guise as owners or operators of those venues if they are otherwise ADA-compliant.⁴⁹ In this case, assuming that the store did not fall within any Title III exception,⁵⁰ the owner would have been required to install an entry ramp as a reasonable modification even without the presence of a disabled employee.⁵¹

Workplace accommodations become an undue hardship upon employers when they require “significant difficulty or expense,”⁵² as measured against the totality of an employer’s financial

46. Sometimes disability-based accommodations are not required. Just as with nondisabled persons, people with disabilities vary in their productivity. In Part III.B.2, I discuss the misperception among economic commentators that all disabled workers are inherently less productive than their nondisabled counterparts. Nevertheless, as explained below, because this Article addresses the reasonability of accommodations, I address this possibility parenthetically and in footnotes.

47. See generally Stein, *Empirical Implications*, *supra* note 22.

48. 42 U.S.C. §§ 12,181–12,189.

49. However, barring suit, many venues are not readily accessible. For example, the Empire State Building complied with the ADA’s regulations only after being targeted for litigation by the Department of Justice. Lindsey Gruson, *Getting to Top of Empire State: Opening the Way for Disabled*, N.Y. TIMES, Mar. 4, 1994, at B3. The confluence of Titles I and III is not a point that I have seen referenced in any scholarship assessing ADA accommodations.

50. Most of the exceptions are predicated on size, although there are also exclusions for historical buildings (when fundamentally altered), places of worship (unless a space that is rented to the public is involved), as well as ecumenical defenses that undue burdens or direct threats were created. 42 U.S.C. §§ 12,181–12,189.

51. *Id.* § 12,181. At the same time, the confluence between Title I and Title III access is incomplete. Absent the presence of a disabled employee, employers are not under a duty to make areas not open to the public accessible. So although the store owner might have to ramp the entry, he would not have to make the storeroom accessible. The disparity is intended to shield public accommodation owner/operators until such time that they become employers. See generally Robert L. Burgdorf, Jr., *The Americans with Disabilities Act: Analysis and Implications of a Second-Generation Civil Rights Statute*, 26 HARV. C.R.-C.L. L. REV. 413 (1991) (discussing some of the political compromises which facilitated the ADA’s passage).

52. 42 U.S.C. § 12,111(10)(A).

circumstances.⁵³ Beyond the actual cost of an accommodation,⁵⁴ considerations include the following: “the overall financial resources,” “size,” and “number of persons employed” at the facility;⁵⁵ “the effect on expenses and resources,” location, structure, “and functions of the workforce”; as well as the general “impact” of the accommodation.⁵⁶ More concretely, these factors could include the actual cost of the ramp, the amount of store space lost to the ramp, the profitability of the store, the number of employees, and the job modification’s impact on the store’s day-to-day operation. If the store was part of a larger organization, an assessment of reasonableness could also take into account the store’s other locations, and whether it made sense to have the wheelchair-using employee work full time at another location (for example, one with lower shelves or an abundance of clerks to stack the higher ones), or alternate between locations (while operating the register or meeting customers at each).

Thus, the ADA provides a large number of factors to be considered when assessing the reasonableness of any given accommodation. At the same time, however, the law fails to offer substantial guidance as to how an employee, employer, judge, or policymaker ought to balance those factors beyond the proviso that an accommodation is reasonable until it engenders an undue hardship.⁵⁷

B. The Usual Course of ADA Accommodation Litigation

As a result of the requirement that disabled individuals be “qualified” to receive protection,⁵⁸ ADA claimants have the burden of pleading *prima facie* cases of discrimination to survive defendants’ summary judgment motions and proceed to trial.⁵⁹ This procedural

53. *Id.* § 12,111(10)(B).

54. *Id.* § 12,111(10)(B)(i).

55. *Id.* § 12,111(10)(B)(ii)–(iv).

56. *Id.*

57. Accordingly, there is truth to Justice O’Connor’s extrajudicial statement that the central difficulty with the scope of ADA coverage is the “uncertainties as to what Congress had in mind,” Charles Lane, *O’Connor Criticizes Disabilities Law as Too Vague*, WASH. POST, Mar. 15, 2002, at A2, although not for the reasons she proffered.

58. 42 U.S.C. § 12,111(8).

59. *See, e.g.,* Heilweil v. Mount Sinai Hosp., 32 F.3d 718, 722 (2d Cir. 1994) (holding that a *prima facie* case of discrimination requires that a plaintiff establish that her physical impairment “substantially limit[ed] one or more . . . major life activit[y]”); Barth v. Gelb, 2 F.3d 1180, 1186 (D.C. Cir. 1993) (“[T]he requirement of only a minimal *prima facie* showing strips the

device authorizes federal trial judges to dismiss cases only when there exists “no genuine issue as to any material fact.”⁶⁰ However, following the Supreme Court’s *Celotex* trilogy,⁶¹ some commentators have argued that it is improper to grant summary judgment in employment discrimination cases,⁶² a proposition with which some courts agree.⁶³

Although the Supreme Court held in *McDonnell Douglas Corp. v. Green*⁶⁴ that the burden of persuasion required for Title VII⁶⁵ plaintiffs to survive motions for dismissal is minimal,⁶⁶ in actual practice the parallel burden appears higher for Title I plaintiffs.⁶⁷ This is so despite language in the ADA indicating that Congress defined discrimination as, among other causes,⁶⁸ the denial of reasonable accommodations⁶⁹ in order “to provide clear, strong, consistent,

defendant of the ability to remain silent as to its motive while recognizing the plaintiff’s ultimate obligation to prove that motive’s illegality.”). The same is true for those proceeding under the Rehabilitation Act. *See* *Pushkin v. Regents of Univ. of Colo.*, 658 F.2d 1372, 1387 (10th Cir. 1981) (“The plaintiff must establish a prima facie case by showing that he was an otherwise qualified handicapped person *apart from* his handicap, and was rejected under circumstances which gave rise to the inference that his rejection was based solely on his handicap.”).

60. FED. R. CIV. P. 56(c). In deciding whether to grant motions for summary judgment, it is axiomatic that courts view the facts in the light most favorable to the nonmoving party. JACK H. FRIEDENTHAL ET AL., *CIVIL PROCEDURE* 458–65 (3d ed. 1999).

61. *Celotex Corp. v. Catrett*, 477 U.S. 317 (1986); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242 (1986); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 477 U.S. 574 (1986).

62. Deborah C. Malamud, *The Last Minuet: Disparate Treatment After Hicks*, 93 MICH. L. REV. 2229, 2234–35 (1995); Ann C. McGinley, *Credulous Courts and the Tortured Trilogy: The Improper Use of Summary Judgment in Title VII and ADEA Cases*, 34 B.C. L. REV. 203, 203–06 (1993). For a general indictment of the device, see Samuel Issacharoff & George Loewenstein, *Second Thoughts About Summary Judgment*, 100 YALE L.J. 73, 118–19 (1990) (exploring the deleterious effects of summary judgment on the litigation process, its pro-defendant bias, and the possibility of its abuse by defendants).

63. For example, the Eleventh Circuit held in an ADEA case that, “[a]s a general rule, summary judgment is not a proper vehicle for resolving claims of employment discrimination.” *Delgado v. Lockheed-Georgia Co.*, 815 F.2d 641, 644 (11th Cir. 1987); *see also* *Lynn v. Deaconess Med. Ctr.*, 160 F.3d 484, 486 (8th Cir. 1998) (chastising the district court on the ground that “summary judgment should seldom be used in discrimination cases”).

64. 411 U.S. 792 (1973).

65. 42 U.S.C. §§ 2000(e)–2000(e)17 (2000).

66. *Id.*

67. The characterization is premised on the statistical evidence presented below, *infra* notes 74–78. The qualification reflects the absence of a Supreme Court ruling on point. *See generally* Lucinda A. Castellano, *Surviving Summary Judgment in the ADA Employment Case (Part 1)*, 24 COLO. LAW. 1301 (1995); Lucinda A. Castellano, *Surviving Summary Judgment in the ADA Employment Case (Part 2)*, 24 COLO. LAW. 1785 (1995).

68. 42 U.S.C. § 12,112(b)(1)–(7) (2000).

69. *Id.* § 12,112(b)(5)(A).

enforceable standards addressing” disability-related discrimination.⁷⁰ This practice also contravenes circumstances which appear from a common sense perspective to necessitate just the type of factual inquiry that should defeat motions for summary judgment, namely a determination by a jury based upon the set of facts presented by the opposing parties.⁷¹ Additionally, this practice oftentimes prevents the type of functional inquiry that appears to be envisioned by the statute.⁷²

At least partly in consequence of district courts’ procedural practice of granting defendants’ motions for summary judgment and other pre-jury dismissal devices,⁷³ an American Bar Association report found that employers prevailed in more than 92 percent of Title I cases between 1992 and 1997,⁷⁴ a rate only exceeded by defendants in prisoners’ rights claims.⁷⁵ A primary result of this propensity to use summary judgment and other procedural devices is that federal district courts avoid applying the factors enumerated by the ADA when assessing the reasonableness of accommodations: when issuing rulings the typical memorandum, often unpublished,

70. *Id.* § 12,101(b)(2).

71. FRIEDENTHAL ET AL., *supra* note 60, at 458–65.

72. *Id.*

73. There is likely to be more going on here than “only” the judiciary’s alleged aversion to Title I cases. The inquiry is especially pertinent to the quasi-voluntary portion of the accommodation cost continuum, *see infra* Part IV.A.2, wherein the ADA is intended to act as a corrective to cognitive market failure, but empirically does not.

74. *Study Finds Employers Win Most ADA Title I Judicial and Administrative Complaints*, 22 MENTAL & PHYSICAL DISABILITY L. REP. 403, 403 (1998). A subsequent study of 1998 outcomes indicates that the employers’ win rate increased to 93 percent. Ruth Colker, *The Americans with Disabilities Act: A Windfall for Defendants*, 34 HARV. C.R.-C.L. L. REV. 99, 100 (1999). The empirical study by Colker substantiates these findings, but with greater nuance, concluding that a large measure of plaintiff losses under the ADA are because “[c]ourts are abusing the summary judgment device” by “refusing to send normative factual questions” to juries. *Id.* at 101. This is especially true, she avers, of the presumably factual question of whether a given accommodation was reasonable. *Id.* at 101–02; *cf.* Jeffrey A. Van Detta & Dan R. Gallipeau, *Judges and Juries: Why Are So Many ADA Plaintiffs Losing Summary Judgment Motions, and Would They Fare Better Before a Jury? A Response to Professor Colker*, 19 REV. LITIG. 505, 508–10 (2000) (arguing, based on empirical studies, that Title I claimants would fare dramatically better if their claims reached a jury). For a follow-up study on jurors’ positive sensitivity to ADA claims, see Daniel R. Gallipeau, *Juror Perceptions and the ADA*, in ALI-ABA, 2 ADVANCED EMP. LAW. & LITIG. 485, 488 (2000).

75. *See* Theodore Eisenberg, *Litigation Models and Trial Outcomes in Civil Rights and Prisoner Cases*, 77 GEO. L.J. 1567, 1578 (1989) (setting forth data establishing the low success rate of prisoner plaintiffs in civil rights litigation).

grants the moving party's motion (usually, the defendant's)⁷⁶ and tersely dismisses the case.⁷⁷ In turn, the cases brought to the courts of appeals primarily focus on the propriety of the district court judges' grants of summary judgment and similar dismissive motions.⁷⁸ Because the standard of appellate review of these orders is abuse of discretion, the determination of which is predicated upon the established trial court record, appellate court judges do not engage *de novo* in tests of reasonability.⁷⁹ Therefore, the initial aversion of district court judges to articulate, quantitatively, the grounds for their decisions continues as the litigation ascends the procedural ladder.⁸⁰ Thus, what differentiates disability claims in degree (rather than in kind) from, say, negligence claims, is that while each applies a balancing test to individual circumstances to assess alleged liability,⁸¹ the incidence of pre-jury dismissals in the former has helped preclude the development of predictive standards.⁸²

A good illustration of this phenomenon may be seen in the procedural history and rulings underlying the Supreme Court's decision in *U.S. Airways, Inc. v. Barnett*.⁸³ After injuring his back handling baggage for U.S. Airways, Robert Barnett transferred to a then-vacant, less physically strenuous position in the airline's mailroom.⁸⁴ When that position opened up to bidding under the airline's seniority-based system, it became apparent that employees senior to Barnett would seek the position.⁸⁵ Accordingly, Barnett

76. *But see, e.g.*, *EEOC v. Prevo's Family Mkt.*, No. 1-95-CV-446, 1996 WL 604984, at *2-4 (W.D. Mich. Aug. 27, 1996), *rev'd in part, vacated in part*, 135 F.3d 1089 (6th Cir. 1998) (granting plaintiff's motion for summary judgment as to defendant's liability for disability discrimination for conditioning his continued employment upon an HIV examination).

77. Colker, *supra* note 74, at 119-25.

78. *Id.* at 108. Between 1992 and 1997, for instance, 87 percent of all Title I decisions appealed were from pro-defendant dismissals or grants of summary judgment.

79. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 595-98 (1986).

80. To be fair, this method of adjudication is not unique to disability discrimination claims, and is in fact the result of a standard convention for clearing cases from the trial calendar on motions days. Stephen C. Yeazell, *The Misunderstood Consequences of Modern Civil Process*, 1994 WIS. L. REV. 631, 631-39; *Proceedings of the Seminar on Procedures for Effective Judicial Administration*, 29 F.R.D. 191, 202 (1961).

81. The negligence standard, and its potential analogue for accommodation claims, is discussed *infra* in Part II.B.2.

82. A basic tenet of Anglo-American jurisprudence is the creation of predictable standards so that future litigants can have a sense of their respective rights and duties. 1 JAMES KENT, COMMENTARIES ON AMERICAN LAW 442-43 (1971) (1826).

83. 535 U.S. 391 (2002).

84. *Id.* at 394.

85. *Id.*

requested permanent assignment to the mailroom as a reasonable accommodation under the ADA.⁸⁶ U.S. Airways refused to so reassign Barnett (presumably on the grounds of undue hardship), and Barnett lost his job.⁸⁷ He subsequently sued the airline alleging disability-based discrimination for failure to reasonably accommodate his disability.⁸⁸

The district court granted U.S. Airways's motion for summary judgment on the ground that "the uncontroverted evidence shows that the U.S. Airways seniority system has been in place for 'decades,'" hence "any significant alteration of that policy would result in undue hardship."⁸⁹ In making this ruling, the trial judge made no representation that he had given any weight to the factors enumerated in the ADA for assessing the reasonableness of accommodations. A non-exhaustive list of considerations that he could have weighed, several of which were presented in evidence, are the following: the airline's financial resources; the out-of-pocket cost, if any, of the accommodation; the number of the airline's employees, including those affected by the seniority system; the relative geographical location of the airline's employees; the situs, number, and functions of U.S. Airways's mailrooms; the actual impact, financial and otherwise, of Barnett's jumping the seniority queue; and the likelihood of other employees requesting similar accommodations. Instead of weighting these considerations, the trial judge opined that even had he accepted *arguendo* Barnett's contention that the ADA required a "case-by-case approach," he would still have issued the same ruling.⁹⁰ According to the court, this was because a seniority system was "fundamental," and so any alteration to it would inherently prove an undue hardship.⁹¹ The district court also ruled that the requested accommodation would constitute an undue hardship upon U.S. Airways's "non-disabled employees,"⁹² but did not explain why this was so.⁹³

86. *Id.*

87. *Id.*

88. *Id.* at 394-95.

89. U.S. Airways, Inc. v. Barnett, No. C-94-3874, (N.D. Cal. July 29, 1996), *reprinted in* App. to Pet. for Cert., at 96a (on file with the *Duke Law Journal*).

90. *Id.*

91. *Id.*

92. *Id.*

93. One plausible explanation for the court's ruling is that it believed that allowing disabled employees to jump the seniority queue would raise the airline's labor costs. This would be true,

The Ninth Circuit affirmed the district court's grant of summary judgment on the ground that violating U.S. Airways's "legitimate seniority policy" was per se unreasonable.⁹⁴ Like the district court that preceded it, the appellate panel did not explain why altering the seniority system in this individual circumstance was unreasonable. At the same time, the court noted that the case was one of first impression, and hence one that offered the opportunity to delineate an area of law.⁹⁵ Sitting en banc, a panel of the Ninth Circuit⁹⁶ vacated the initial appellate panel decision⁹⁷ and reversed the district court, holding that the seniority system was only one "factor in the undue hardship analysis."⁹⁸ It held, moreover, that "[a] case-by-case fact intensive analysis is required to determine whether any particular reassignment would constitute an undue hardship to the employer."⁹⁹ Such an assessment could, presumably, require trial courts to balance the factors required in the ADA, although the Ninth Circuit did not explicitly call for this appraisal.¹⁰⁰

Once before the Supreme Court, the issue of whether the specifically requested accommodation was reasonable became

for instance, if nondisabled workers would in turn demand higher wages to offset diminution in seniority rights. For a discussion of "sunken labor costs" in this context, see Seth D. Harris, *Re-Thinking the Economics of Discrimination: US Airways v. Barnett, the ADA, and the Application of Internal Labor Market Theory*, 89 IOWA L. REV. (forthcoming 2003) (on file with the *Duke Law Journal*). Such reasoning could also explain why the court considered the interests of the nonjoined third party employees to be relevant. This last point is not strictly parenthetical. From a purely economic perspective, the interests of certain third parties could be construed as valid externalities to be considered in an efficiency calculus. Whether any of the above motivated the court is only a matter of conjecture in the absence of an articulated reason.

94. *Barnett v. U.S. Airways, Inc.*, 196 F.3d 979, 983 (9th Cir. 1999), *rev'd en banc*, 228 F.3d 1105 (9th Cir. 2000).

95. *Id.* at 988.

96. Employing a panel, rather than the entire court, is a practice unique to the numerically large and geographically dispersed Ninth Circuit, whereas the other circuits require that all sitting judges participate. See generally RESTRUCTURING JUSTICE: THE INNOVATIONS OF THE NINTH CIRCUIT AND THE FUTURE OF THE FEDERAL COURTS (Arthur D. Hellman ed., 1990); Richard A. Posner, *Is the Ninth Circuit Too Large? A Statistical Study of Judicial Quality*, 29 J. LEGAL STUD. 711 (2000).

97. This is the usual procedural course, the theory being that the larger constituted tribunal then "speaks" for the entire circuit. See generally Michael Ashley Stein, *Uniformity in the Federal Courts: A Proposal for Increasing the Use of En Banc Appellate Review*, 54 U. PITT. L. REV. 805 (1993). For a novel proposal that a rotating en banc court be empanelled so as to ensure uniform as well as apolitical decisions, see Michael Abramowicz, *En Banc Revisited*, 100 COLUM. L. REV. 1600, 1618-22 (2000).

98. *Barnett v. U.S. Airways, Inc.*, 228 F.3d 1105, 1120 (9th Cir. 2000).

99. *Id.*

100. *Id.*

tangential,¹⁰¹ with the Court ruling as a matter of law that a requested accommodation that conflicts with a seniority system is ordinarily unreasonable.¹⁰² At the same time, the Court also held that an employee could endeavor to show special circumstances where it might be reasonable to make an exception to an established seniority system, thus compelling his employer to grant an accommodation (in *Barnett*, reassignment).¹⁰³ Even so, the Court's ruling begs the very question of what factors might come into consideration and how they are to be weighted by a court when taking into account the reasonableness of an accommodation.¹⁰⁴

Two points are worth emphasizing at this juncture. First, owing at least in part to the incidence of summary judgment and other pretrial procedural devices, neither federal trial court nor appellate court judges have engaged in the type of systematic balancing analysis provided by the ADA and encouraged in this Article.¹⁰⁵ Second, in the two cases discussed in the next Section, the respective appellate courts adopted opposing views as to whether the Title I claimants should have survived motions for summary judgment.¹⁰⁶ Hence, the federal courts have not provided predictive guidance on how to construe the reasonableness of ADA-required accommodations.

C. *Judges (nee Professors) Posner and Calabresi*

A pair of opinions by Judges Posner and Calabresi, respectively, held that a proper assessment of what is a reasonable accommodation under the ADA (or the Rehabilitation Act, whose provisions, as well as jurisprudence, were adopted by the ADA) requires a cost-benefit analysis. Although neither applied such a test quantitatively, their opinions limn some of the issues to be considered when making such assessments. These insights are especially useful coming from

101. This is surprising because certiorari was granted on this very question. Br. for Pet'r at i, *U.S. Airways, Inc. v. Barnett*, 535 U.S. 391 (2002) (No. 00-1250).

102. *U.S. Airways, Inc. v. Barnett*, 535 U.S. 391, 394 (2002).

103. *Id.* at 406.

104. The ruling, contrary to the assertions of some disability rights advocates, also "indicate[s] that the Court would consider some accommodations reasonable, even if the Justices are currently unwilling to elaborate upon the actual standard in either their rulings or dicta." Michael Ashley Stein, *Disability, Employment Policy, and the Supreme Court*, 55 *STAN. L. REV.* 607, 629 (2002).

105. *See infra* Part IV.

106. *See infra* Parts I.C.1-2.

individuals who are not only judges, but also venerable law and economics scholars.

1. *Vande Zande v. Wisconsin Department of Administration*. Lori Vande Zande, a paraplegic wheelchair user, was employed by the State of Wisconsin as a program assistant in the housing division of the Department of Administration (DOA).¹⁰⁷ Her duties covered a range of tasks, including compiling fact sheets, administratively assisting the director of the department, and, ironically, working on disability-related issues.¹⁰⁸ Her responsibilities were apportioned flexibly, depending on work availability.¹⁰⁹

Early in Vande Zande's tenure, the DOA twice moved to facilities that were not generally accessible to physically disabled persons. Both times, the DOA modified some of the plant,¹¹⁰ and provided accommodations specifically for Vande Zande.¹¹¹ Although DOA continued to seek Vande Zande's input on a number of accommodations issues,¹¹² an intractable sticking point was the design of a kitchenette with a thirty-six-inch high counter that was too high for Vande Zande to use.¹¹³ Ultimately, the DOA installed a thirty-four-inch high counter across the hall near the accessible bathroom, because rebuilding the kitchenette would have cost as much as \$2,000.¹¹⁴

Another issue of contention was Vande Zande's requests to work at home, stemming from her development of pressure ulcers, an

107. *Vande Zande v. Wis. Dep't of Admin.*, 851 F. Supp. 353, 355 (W.D. Wis. 1994), *aff'd*, 44 F.3d 538 (7th Cir. 1995).

108. *Id.* at 355.

109. *Id.* However, Vande Zande was not permitted, for reasons unexplained in the opinion, to devote more than 5 percent of her time to disability-based issues. *Id.*

110. These accommodations included retrofitting a women's bathroom, installing a ramp into the office, relocating and redesigning the women's locker room, providing a smaller conference room table, installing a full-length mirror in the bathroom, mounting paddle handles on one sink, and placing a grab bar on a cot. *Id.* at 356–57.

111. These accommodations included providing her with a door on her office so that she could telephone her physician in privacy, purchasing customized furniture, and altering its policy on photocopier use. *Id.* at 355–56.

112. One facilities designer spent more than sixty hours discussing and researching building design with Vande Zande; a second consulted with her fifteen times on her personal office furniture. *Id.* at 356.

113. *Id.*

114. *Id.* at 357.

ailment common to paraplegics.¹¹⁵ On three occasions, Vande Zande's doctor recommended that she remain at home for four to six weeks to allow the ulcers to be open to the air.¹¹⁶ After the first request, Vande Zande was allowed by the DOA to work at home.¹¹⁷ On the second occasion, Vande Zande's supervisor stated that he did not believe there was sufficient work to occupy her full time at home.¹¹⁸ On the third occasion, her manager again determined that "he could not foresee" having that type and quantity of work that could be performed from Vande Zande's home.¹¹⁹ Vande Zande responded with a written request for reasonable accommodation in the form of work-at-home.¹²⁰ For the next eight weeks, Vande Zande worked at home full time and was paid full time wages by the DOA for all but sixteen and one-half hours, during which she used paid sick leave.¹²¹ About midway during this interval, Vande Zande informed her supervisor that she could perform a wider range of activities if, in lieu of the laptop computer previously provided, the DOA would issue her a desktop computer and laser printer.¹²² The DOA refused because of the expense involved.¹²³ Soon thereafter, Vande Zande transferred to the Department of Social Services and initiated suit against the DOA and her immediate supervisors under both the ADA and the Rehabilitation Act for failure to accommodate her disability.¹²⁴ Specifically, she contended that the refusal to modify the

115. See generally STEDMAN'S MEDICAL DICTIONARY 1903 (27th ed. 2000) (describing symptoms and diagnosis of decubitus ulcers).

116. *Vande Zande*, 851 F. Supp. at 357.

117. *Id.*

118. *Id.* The inference is that Vande Zande continued to work at the office, but the opinion is vague on this point.

119. *Id.* at 358.

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.* at 359. Parenthetically, in *Board of Trustees of the University of Alabama v. Garrett*, 531 U.S. 356 (2001), the Supreme Court held that Congress did not validly abrogate state sovereign immunity in enacting Title I of the ADA as it applied to states in their role as employers. *Id.* at 360. Hence, Vande Zande could not now bring this suit in federal court unless the state waived its sovereign immunity. Furthermore, *Alden v. Maine*, 527 U.S. 706 (1999), appears to erect a substantial barrier to redress in state court. See *id.* at 712 ("[T]he powers delegated to Congress under Article I of the United States Constitution do not include the power to subject nonconsenting states to private suits for damages in state courts."). Some exceptions to this general prohibition may exist, but those appear to rely on peculiarities of state law. See *Erickson v. Bd. of Governors of State Colls. and Univs. for N.E. Ill. Univ.*, 207 F.3d 945, 952 (7th Cir. 2000) (ruling on the same issue, Judge Easterbrook included state courts in the list

kitchenette and to permit work at home constituted unfounded denials of reasonable accommodation requests, and thus comprised disability-related discrimination.¹²⁵

In an opinion laudable for its inclusion of detail, but representative of other decisions in avoiding an empirical weighting of relevant factors, Chief Judge Crabb granted the DOA's motion for summary judgment.¹²⁶ In pertinent part, she found that the DOA's failure to make the entire kitchenette accessible did not violate the ADA as a matter of law because Vande Zande had complete use of the facility with the exception of the kitchen sink, and because a sink was readily available in the accessible restroom.¹²⁷ Judge Crabb also held, as a matter of law, that the DOA had reasonably accommodated Vande Zande even if the "accommodation fell short of perfection" in not covering two days' work over an eight-week period.¹²⁸ In so ruling, the court elucidated and analyzed the competing legal arguments made by the parties (namely, whether the accommodation claims were reasonable), but did not empirically evaluate the evidence presented in light of the standard mandated by the ADA.¹²⁹

The Seventh Circuit affirmed the district court in a unanimous opinion by Chief Judge Posner.¹³⁰ Noting that the concept of what constituted a reasonable accommodation was "at the heart of this case,"¹³¹ Judge Posner set out to define the term. For Posner, the meaning of "accommodation" was evident: an alteration to the workplace that enabled an employee with a disability to work. It was

of other possible avenues for plaintiffs seeking such relief because of Illinois's approach to sovereign immunity waiver and Illinois state law).

125. *Vande Zande*, 851 F. Supp. at 360–61. She also contended that the state had engaged in a pattern or practice of disability-based discrimination by failing to accommodate her, and that the state had discriminated against her in its hiring and promotion policies. *Id.* at 354. The former is not relevant to the discussion of what constitutes a reasonable accommodation; the latter was voluntarily abandoned. *Id.*

126. *Id.* at 363.

127. *Id.* at 361–62.

128. *Id.* at 360–61.

129. *Id.* The Chief Judge's opinion was nonetheless considerably more detailed and informative than the vast majority of its analogues.

130. *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 546 (7th Cir. 1995). Joining the Chief Judge were Judge Engel, sitting by designation from the Sixth Circuit, and Judge Easterbrook, who five years later wrote the opinion in *Erickson v. Board of Governors of State Colleges and Universities for Northeastern Illinois University*, 207 F.3d 945 (7th Cir. 2000), shielding state entities from Title I suits on the ground of sovereign immunity. *Id.* at 951.

131. *Vande Zande*, 44 F.3d at 543.

the term “reasonable” that caused difficulties.¹³² Vande Zande maintained that the term “mean[t] apt or efficacious” in reference to her particular disability, but not in reference to any absolute cost.¹³³ Although accommodations must be efficacious (they would otherwise not be accommodations), Judge Posner opined that the remainder of Vande Zande’s definition could not be correct.¹³⁴ Its application, in his view, would require Wisconsin to expend unlimited resources (even to the extent of raising taxes) for what might be “a trivial improvement.”¹³⁵

Instead, drawing an analogy to the law of negligence, Judge Posner held that the term “reasonable requires something less than the maximum possible care,”¹³⁶ unless it becomes an undue burden “in relation to the benefits of the accommodation to the disabled worker as well as to the employer’s resources.”¹³⁷ Nor was it necessary to quantify an undue hardship ceiling on such costs. So long as the cost was proportionate, it could, in theory, be one which “exceeded the benefit however slightly.”¹³⁸ Turning to the two issues on appeal, the court held that the request to wholly reconstruct a kitchenette was not reasonable because the impact upon Vande Zande’s work was trivial.¹³⁹ As for Vande Zande’s request to work at home, the DOA had already far exceeded any ADA accommodation requirement. Placing the DOA under any further obligation would punish the state “for its generosity” and ultimately “hurt rather than help disabled workers.”¹⁴⁰

Thus, by requiring a workplace alteration to be expedient and proportionate to the benefits conferred, even if the cost slightly exceeds the benefits, Judge Posner’s opinion offers insight as to what

132. *Id.* at 542.

133. *Id.*

134. *Id.*

135. *Id.* at 542–43.

136. *Id.* at 542. This negligence analogy was taken up by Karlan and Rutherglen, *supra* note 3, at 31–32, and further developed by Schwab and Willborn, *supra* note 16, at 1269. *See* discussion *infra* Parts II.B.1–2.

137. *Vande Zande*, 44 F.3d at 543.

138. *Id.* at 542.

139. *Id.* at 545–46.

140. *Id.* at 545. Although it was not explained in Judge Posner’s opinion how this might happen, one effect he might have had in mind was creating a deterrent against hiring future workers with disabilities. This is one of the possibilities that Verkerke explores. *See supra* note 14, at 921–23. Jolls explores the even wider implication that the very existence of the ADA, even absent actual accommodations, likewise creates such deterrence. *See supra* note 15, at 280.

constitutes a reasonable accommodation. At the same time, he did not indicate where those lines ought to be drawn.

2. *Borkowski v. Valley Central School District*. In *Borkowski v. Valley Central School District*,¹⁴¹ a public school teacher with a disability who had been denied tenure sued the school district under the Rehabilitation Act.¹⁴² As a result of a motor vehicle accident prior to her employment, Kathleen Borkowski suffered serious neurological damage that limited her memory, concentration, balance, and mobility.¹⁴³ She discussed these impairments with school district officials when interviewing for a library teacher position.¹⁴⁴

Borkowski was appointed to a routine three-year probationary position and assigned to two elementary schools within the district. Her duties also included teaching library skills.¹⁴⁵ During the provisional period, Borkowski's performance was regularly evaluated by three of the district's personnel, one of whom reported positively. Conversely, one negative assessment concluded that Borkowski had trouble controlling her class and that she sat during the lesson.¹⁴⁶ Having reached the end of her probationary term without the grant of tenure, Borkowski resigned.¹⁴⁷ She initiated suit to challenge the district's decision.¹⁴⁸ The district court granted summary judgment for the defendant, and Borkowski appealed.¹⁴⁹

The Second Circuit vacated the grant of summary judgment on the ground that material issues of fact remained unresolved, and remanded the case back to the district court.¹⁵⁰ Writing for a unanimous panel, Judge Calabresi¹⁵¹ rhetorically asked much the same question as had Judge Posner: “[W]hat is a *reasonable* accommodation, and what is an *undue* hardship?”¹⁵² He agreed with

141. 63 F.3d 131 (2d Cir. 1995). The district court opinion was unpublished, hence all citations are to the Second Circuit's decision.

142. *Id.* at 135.

143. *Id.* at 134.

144. *Id.*

145. *Id.*

146. *Id.*

147. *Id.*

148. *Id.* at 135.

149. *Id.* at 134.

150. *Id.* No subsequent decision is reported.

151. He was joined in the decision by Judge Walker and by Chief Judge Newman, who also wrote a separate concurring opinion. *Id.* at 144.

152. *Id.* at 136.

Judge Posner that the term “reasonable” was a relational one that “evaluates the desirability of a particular accommodation according to the consequences” it will engender, both as to benefits and to costs.¹⁵³ It was thus reasonable “only if its costs are not clearly disproportionate to the benefits that it will produce.”¹⁵⁴ Moreover, the concept of undue hardship was likewise a relational term that “looks not merely to the costs that the employer is asked to assume, but also to the benefits to others that will result.”¹⁵⁵ Consequently, employers are required “to perform a cost/benefit analysis.”¹⁵⁶ It was not clear what the essential job functions of Borkowski’s position were,¹⁵⁷ whether the provision of a reasonable accommodation (for example, a teacher’s aide) would have assisted her performance of those duties,¹⁵⁸ and whether she was denied tenure solely due to her disability.¹⁵⁹ In addition to these three unresolved factual issues, the district had not presented any evidence as to undue hardship.¹⁶⁰ As a result, Judge Calabresi held that the grant of summary judgment was premature.¹⁶¹

Judge Calabresi’s opinion in *Borkowski* corroborates the opinion of Judge Posner in *Vande Zande*. Both opinions agree as to the necessity of engaging in a cost-benefit analysis regarding the reasonableness of a given accommodation, and about some of the boundaries that could be applied. However, like Judge Posner, Judge Calabresi did not apply those standards empirically to the case at issue. The next Part evaluates existing empirical data and academic analysis of the costs of disability-related accommodations.

II. EMPIRICAL STUDIES AND ACADEMIC THEORIES

Empirical studies of accommodation costs suggest that many of the engendered expenses are either nominal, or even cost-effective, because of the concomitant external benefits that are captured by providing employers. The results of these studies are, however,

153. *Id.* at 138.

154. *Id.*

155. *Id.* at 139.

156. *Id.*

157. *Id.* at 140.

158. *Id.* at 141.

159. *Id.* at 143.

160. *Id.* at 142.

161. *Id.* at 143. As an initial matter, the Second Circuit acknowledged that Borkowski might not be able to prove her assertions, but remanded the case for further factual inquiry. *Id.* at 134.

qualified by their flaws. Theoretical analyses of disability accommodations by legal academics offer some insight on accommodations, especially as to how an ADA balancing test could parallel that of negligence actions. At the same time, these treatments do not fully address how to ascertain the reasonableness of accommodations.

A. *Accommodation Studies*

Very few empirical studies have examined what constitutes a reasonable accommodation. This is especially surprising in view of the established field of employment antidiscrimination laws that regularly receive analytical attention, the ability to extend existing research models to the ADA, and the sizable number of people that Title I affects. However, the analyses that have been conducted suggest that the quantifiable costs of accommodation are negligible. These studies also raise the possibility of external benefits to employers that might make the provision of accommodations cost-effective, and even profitable. The studies are not without flaw, and so their findings should be treated with caution.

1. *Quantifiable Costs.* The leading empirical study of accommodation costs, conducted by Professor Peter Blanck, concluded that many of these expenses were recurrently nonexistent or minimal.¹⁶² Specifically, Blanck's examination of some 500 accommodations made by Sears, Roebuck and Co. from 1978 to 1997 established that the company provided nearly all of the accommodations at minimal cost. From 1978 to 1992, the average out-of-pocket expense for an accommodation was about \$120.¹⁶³ From 1993 to 1996 that average dropped to \$45.¹⁶⁴ Overall, 72 percent of accommodations required no cost, 17 percent carried an expenditure of less than \$100, one-tenth cost less than \$500, and only 1 percent

162. Blanck and his colleagues from The Law, Health Policy, and Disability Center at the University of Iowa continue to study the costs of accommodation, especially as these interact with corporate cultures. Most of their results are available at <http://disability.law.uiowa.edu/lhpdc/civilrights/ada.html> (last visited Sept. 25, 2003) (on file with the *Duke Law Journal*).

163. Blanck, *supra* note 12, at 19.

164. *Id.*

required inputs of between \$500 and \$1,000.¹⁶⁵ A handful of other surveys have borne similar results.¹⁶⁶

2. *External Benefits.* Some studies go even further than the results reported by Blanck, suggesting that employers capture tangible benefits when they provide accommodations. Essentially, these studies argue that the provision of accommodations are often profitable for employers. One federal agency, for example, found that, on average, for every dollar spent on accommodation, companies saved \$50 in net benefits.¹⁶⁷ Thus, although more than one-half of accommodations cost less than \$500, in two-thirds of those cases companies enjoyed net benefits exceeding \$5000.¹⁶⁸ This is based on quantitative evidence finding that disabled workers receiving accommodations had lower job turnover rates¹⁶⁹ and

165. *Id.*

166. For example, the Job Accommodation Network reported to Congress that the typical accommodation cost was \$200. President's Committee on the Employment of People with Disabilities, Report to Congress on the Job Accommodation Network (July 26, 1995) (on file with the *Duke Law Journal*) [hereinafter President's Committee]; see also Peter David Blanck, The Emerging Role of the Staffing Industry in the Employment of Persons with Disabilities: A Case Report on Manpower Inc. 29 (1998), at http://disability.law.uiowa.edu/lhpdc/publications/documents/blancketaldocs/Manpower_report.pdf (on file with the *Duke Law Journal*) (reporting that accommodation costs were "minimal"); Rita Thomas Noel, *Employing the Disabled: A How and Why Approach*, 44 TRAINING & DEV. J., Aug. 1990, at 26, 31 (reporting that over 80 percent of accommodations cost less than \$500).

167. See President's Committee, *supra* note 166.

168. *Id.*; see also James G. Frierson, *The Legality of Medical Exams and Health Histories of Current Employees Under the Americans with Disabilities Act*, 17 J. REHABILITATION ADMIN. 83, 86 (1993) (describing how one company saved \$4 million annually and another \$310,000 annually by providing necessary accommodations).

169. Blanck reports that 60 percent of workers with disabilities remained in their jobs, as opposed to 40 percent of able-bodied ones. Moreover, the cost of each job turnover averaged \$2,800. Blanck, *supra* note 12, at 29.

equivalent or lower absenteeism rates,¹⁷⁰ thus saving their employers replacement expenses.¹⁷¹

In addition to more readily calculable benefits, Blanck has also described “ripple effects” emanating from the provision of accommodations,¹⁷² including economic benefits that may be difficult to quantify initially, but which are eventually internalized by employers. Among these desirable consequences are purported higher productivity,¹⁷³ greater dedication,¹⁷⁴ and better identification of qualified candidates for promotion.¹⁷⁵ Employers may also enjoy fewer insurance claims, reduced post-injury rehabilitation costs,¹⁷⁶ an improved corporate culture,¹⁷⁷ and more widespread use by workers

170. See 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 (finding no statistically significant difference in rates of absenteeism between janitorial workers with mental retardation and their nondisabled peers); Rick A. Lester & Donald W. Caudill, *The Handicapped Worker: Seven Myths*, 41 TRAINING & DEV. J., Aug. 1987, at 50, 51 (“[H]andicapped workers have lower absenteeism . . . than nonhandicapped people.”); J.E. Martin et al., *Work Attendance in Competitive Employment: Comparison Between Employees Who Are Non-Handicapped and Those Who Are Mentally Retarded*, 23 MENTAL RETARDATION 142, 145 (1985) (“[A]ttendance records of . . . workers who are mentally retarded are at least as good as [those of] their nonhandicapped peers.”); Dolores Ondusko, *Comparison of Employees with Disabilities and Able-Bodied Workers in Janitorial Maintenance*, J. APPLIED REHABILITATION COUNSELING, Summer 1991, at 19, 22–23 (“There was no indication that the number of absences is different between able-bodied employees and . . . employees with disabilities.”).

171. See Peter David Blanck & Mollie Weighner Marti, *Attitudes, Behavior and the Employment Provisions of the Americans with Disabilities Act*, 42 VILL. L. REV. 345, 378 (1997) (arguing that these positive benefits of employing disabled workers are widespread).

172. BLANCK, *supra* note 12, at 29.

173. Patricia M. Owens, Editorial, *Manager’s Journal: Employee Disabilities Needn’t Impair Profits*, WALL ST. J., June 7, 1999, at A22 (“Savvy employers have figured out that a can-do attitude for employees with impairments is good for profits and productivity.”).

174. See, e.g., Stuart Silverstein, *Work & Careers: On the Job with More Help from New Technology, More Disabled Join the Work Force*, L.A. TIMES, Oct. 25, 1998, at C5 (quoting EarthLink’s vice president: “What you find are employees who probably are more focused and more dedicated to doing quality work.”).

175. See Thomas W. Hale et al., *Persons with Disabilities: Labor Market Activity, 1994*, MONTHLY LAB. REV., Sept. 1998, at 3, 3 (relating that the disabled are less likely to work in high paying positions relative to the nondisabled).

176. Blanck, *supra* note 12, at 26–27.

177. See *id.* at 8 (quoting Sears Chairman and CEO: “When Sears hires, works with, and accommodates qualified employees with disabilities, Sears enhances its . . . employee morale”). For fun, compare the account of corporate culture in HARVEY MACKAY, SWIM WITH THE SHARKS WITHOUT BEING EATEN ALIVE: OUTSELL, OUTMANAGE, OUTMOTIVATE, & OUTNEGOTIATE YOUR COMPETITION (1988), with SCOTT ADAMS, DILBERT AND THE WAY OF THE WEASEL (2002).

without disabilities of efficiency-enhancing technologies previously utilized exclusively by their peers with disabilities.¹⁷⁸

Beyond these ripple effects, accommodations may also result in “positive externalities,” which may (eventually) in turn benefit employers, but that are even more difficult to quantify. One such externality is public cost savings,¹⁷⁹ including the reduction of disability-related public assistance obligations, which is currently estimated at \$120 billion annually.¹⁸⁰ Although studies show that hiring people with disabilities can lower taxpayers’ general burdens¹⁸¹ and benefit the national economy,¹⁸² the specific effects upon individual employers as taxpayers remain unclear.

More attenuated as far as their impact (if any) upon individual employers, as well as being increasingly difficult to quantify, are the benefits to society that can issue from employing disabled workers.¹⁸³ These benefits can include placing people with disabilities in a position to exercise the responsibilities of citizenship,¹⁸⁴

178. For instance, the nonvisually impaired employees of a large insurance company assimilated voice-recognition technology originally provided as an accommodation. See 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, 85–89 (1998) (discussing faults of cost-benefit paradigms in determining whether employers suffer undue hardship and explaining the “ripple effect”).

179. These, however, are directly to the public, and not to employers. Conceivably, though, the savings eventually inure to firms in the form of lower taxes, including those accommodations intended to support workman’s compensation, disability insurance, and support programs.

180. DAVID I. LEVINE, REINVENTING DISABILITY POLICY 1 (Inst. of Indus. Relations, Working Paper No. 65, 1997) (on file with the *Duke Law Journal*). One report estimated that for every one million disabled people employed, “there would be as much as a \$21.2 billion annual increase in earned income; a \$1.2 billion annual decrease in means-tested cash income payments; a \$286 million annual decrease in the use of food stamps; a \$1.8 billion decrease in Supplemental Security Income payments; 284,000 fewer people using Medicaid and 166,000 fewer people using Medicare.” See Patricia Digh, *People with Disabilities Show What They Can Do*, H.R. MAGAZINE, June 1998, at 140, 144 (citing Rutgers University economist Douglas Kruse).

181. See, e.g., Taxpayer Return Study California Department of Rehabilitation Mental Health Cooperative Programs (Oct. 1995) (on file with the *Duke Law Journal*) (finding that for every disabled person employed, California taxpayers saved an average of \$629 per month in costs); The JWOD Program: Providing Cost Savings to the Federal Government by Employing People with Disabilities (Feb. 6, 1998) (on file with the *Duke Law Journal*) (listing survey results and reporting that the federal government saved \$1,963,206 over the course of the study by employing 270 people with disabilities).

182. See generally Thomas N. Chirikos, *Aggregate Economic Losses from Disability in the United States: A Preliminary Assay*, 67 MILBANK Q., Supp. 2, at 59 (1989).

183. Admittedly, I am unsure if these benefits are possible to quantify.

184. See JUDITH N. SHKLAR, AMERICAN CITIZENSHIP: THE QUEST FOR INCLUSION 63–101 (1991) (exploring the connection between work and citizenship in a democracy); Vicki Schultz,

acknowledging that capable individuals have either a “right” or an imperative to work,¹⁸⁵ permitting the disabled to achieve dignity through labor and productivity,¹⁸⁶ and realizing the values of a diverse society.¹⁸⁷ The value of these gains, as well as what any of them are worth to individual employers, is not necessarily negligible, even if it is unclear. The expenses extracted for achieving these benefits therefore must be evaluated closely when determining whether to place such costs upon employers, as opposed to spreading the costs among the public through taxes or other state-governed devices.¹⁸⁸

Nevertheless, individual employers arguably benefit from a collective climate in which citizens value the identities they achieve from being productive more than they value the relief of being excused from productivity. How and when to allocate the costs of maintaining a culture of productivity raises a host of issues, including criticisms of those law and economics studies utilizing wealth as a value,¹⁸⁹ the continuing commodification debate,¹⁹⁰ questions about the perspective

Life's Work, 100 COLUM. L. REV. 1881, 1886 (2000) (noting the importance of work as “constitutive of citizenship”).

185. See Gregory S. Kavka, *Disability and the Right to Work*, 9 SOC. PHIL. & POL'Y 262, 264 (1992) (arguing for a morally- and economically-based right to work for disabled citizens).

186. See Mark C. Weber, *Beyond the Americans with Disabilities Act: A National Employment Policy for People with Disabilities*, 46 BUFF. L. REV. 123, 129 (1998) (“Work contributes to self-esteem by conferring a sense of mastery over the environment and reaffirming to the worker that he or she is making a contribution to society.”).

187. Cynthia L. Estlund, *Working Together: The Workplace, Civil Society, and the Law*, 89 GEO. L.J. 1, 3–4 (2000) (arguing for the workplace as a “vehicle of civic engagement”).

188. The impact of dignitary benefits exceeds the scope of this Article.

189. The critiques were heralded by several professors. See, e.g., JULES L. COLEMAN, *MARKETS, MORALS AND THE LAW* 95, 111–22 (1988) (critiquing the adoption of wealth maximization as a benchmark for efficiency); Henry S. Richardson, *The Stupidity of the Cost-Benefit Standard*, in *COST-BENEFIT ANALYSIS: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES* 135 (Matthew D. Adler & Eric A. Posner eds., 2001).

190. See generally Richard Craswell, *Incommensurability, Welfare Economics, and the Law*, 146 U. PA. L. REV. 1419 (1998) (noting the difficulty of evaluating, in monetary terms, certain values and goals).

of policymakers,¹⁹¹ and differences of opinion on the advantages (and possible obligations) of investing in human capital.¹⁹²

Regardless of the resolution, if any, that is reached as to what types of hard-to-quantify benefits are to be accorded significance, an account that incorporates some of the more difficult-to-quantify benefits listed above is far more encompassing and informative than the existing, narrower approach.

3. *Limitations.* Although propitious for those wishing to advocate on behalf of the inherent reasonableness of ADA accommodation, reliance upon the studies set forth in the above Section requires a good deal of caution. Because corporate cultures and economies differ, the conclusions drawn from studies of specific corporations may not be representative of other enterprises. Results are unlikely to be representative if unexamined enterprises are dissimilar in size or economic prowess, or engage in unrelated business activities. Therefore, it may be inaccurate to extrapolate very small sample group results from particular enterprises onto employers in general.¹⁹³

191. See SUSAN WENDELL, *THE REJECTED BODY: FEMINIST PHILOSOPHICAL REFLECTIONS ON DISABILITY* 117–28 (1996) (discussing the social alienation resulting from the failure of doctors and medical science to diagnose—or fail to diagnose—an illness or medical condition which can result in the loss or denial of governmental assistance and other benefits); Susan Rose-Ackerman, *Law and Economics: Paradigm, Politics, or Philosophy*, in *LAW AND ECONOMICS* 233, 237–46 (Nicholas Mercuro ed., 1998) (exploring the effects of political and philosophical biases on the discipline of law and economics and its applications under two different approaches: the Chicago School and the Reformist School).

192. Compare, e.g., Gary S. Becker, *Investment in Human Capital: A Theoretical Analysis*, 70 *J. POL. ECON.* 9 (1962) (praising investment in human capital because it will “improve the physical and mental abilities of people and thereby raise real income prospects”), with Ruth Colker, *Hypercapitalism: Affirmative Protections for People with Disabilities, Illness and Parenting Responsibilities under United States Law*, 9 *YALE J.L. & FEMINISM* 213, 217–20 (1997) (“[T]he United States has not facilitated long-term investment in human capital through social market protection. If our choices were based on a careful study of the experience of other countries rather than unexamined rhetoric, we might make different and more humane choices.”). For an international perspective, see RUTH COLKER, *AMERICAN LAW IN THE AGE OF HYPERCAPITALISM* 62–99 (1998) and CLEMENT FUEST & BERND HUBER, *WHY DO COUNTRIES SUBSIDIZE INVESTMENT AND NOT EMPLOYMENT?* 1–21 (Nat’l Bureau of Econ. Research, Working Paper No. 6685, 1998).

193. See generally DIANA C. PHEYSEY, *ORGANIZATIONAL CULTURES: TYPES AND TRANSFORMATIONS* (1994); EDGAR H. SCHEIN, *THE CORPORATE CULTURE SURVIVAL GUIDE: SENSE AND NONSENSE ABOUT CULTURE CHANGE* (1999). For an interesting, context-specific study of which cultural conditions lend themselves to success, see G. Mitu Gulati et al., *When a Workers’ Cooperative Works: The Case of Kerala Dinesh Beedi*, 49 *UCLA L. REV.* 1417, 1427–28 (2002).

In addition, the studies do not report the costs of sought-after accommodations that were ultimately not provided, presumably due to expense. As a result, the median cost of accommodations might be meaningfully higher than those reported.¹⁹⁴ Finally, the studies focus on “hard” costs: expenses engendered by altering physical plant (for instance, providing stair-free access).¹⁹⁵ Such studies do not adequately appraise “soft” costs, including nonphysical plant expenses, such as educating human resource personnel.¹⁹⁶ Because soft cost outlays can be significant, or even predominant, the actual costs of accommodation might be greater than those described by the above analyses.

Ultimately, the accuracy of the few studies assessing the costs of providing accommodations to workers with disabilities have to be verified, refuted, or debated further through subsequent empirical testing. These studies may show accommodation costs to be more or less expensive than they are currently perceived, but additional and rigorous analysis is necessary in order to better understand the impact of accommodations costs.

B. Accommodation Scholarship

Although existing legal scholarship on the ADA raises some valuable points for considering accommodations as a whole, it offers little guidance on how to ascertain the reasonableness of accommodations. A recent publication by Professors Schwab and Willborn proposes one approach to this issue,¹⁹⁷ while a pair of articles by Professors Bagenstos¹⁹⁸ and Wax,¹⁹⁹ respectively, lend insight into why extra-reasonable accommodations ought to be provided.

1. *General Accommodation Scholarship.* Although not directly on point as far as evaluating the reasonableness of ADA accommodations, three articles are worth noting to the extent that

194. See, e.g., President’s Committee, *supra* note 166.

195. See *supra* note 42 and accompanying text.

196. Set forth above in text, these accommodation expenses originate in 42 U.S.C. § 12,111(9)(B) (2000). See *supra* note 44.

197. See Schwab & Willborn, *supra* note 16, at 1264–65 (advocating the adoption of a tort law reasonableness standard in determining what constitutes reasonable accommodation under the ADA).

198. See Bagenstos, *supra* note 18.

199. See Wax, *supra* note 20.

each raises issues that will later become pertinent to my proposed law and economics framework.²⁰⁰

In an early and prescient article addressing the ADA, Professors Pamela Karlan and George Rutherglen suggest the possible extension of Title I's accommodation mandate to members of other, more traditionally protected groups.²⁰¹ As a result, employers might be required to "offer increasingly flexible scheduling options that would enable more women with childcare responsibilities to undertake particular jobs,"²⁰² and members of racial and ethnic groups would receive individualized training and education to mitigate socially based shortfalls.²⁰³ As a "profound" innovation,²⁰⁴ they argue, the ADA's reasonable accommodation requirement created an "opportunity to rethink employment discrimination law more generally."²⁰⁵ In divining the parameters of accommodations, whether ADA or more broadly extended, Karlan and Rutherglen elaborate on Judge Posner's reasoning in *Vande Zande*²⁰⁶ and conclude that all factors involved in assessing reasonableness suggest a comparison to negligence law.²⁰⁷ In weighing competing interests, negligence assessment "requires reasonable conduct, and implicitly requires no undue burden; it, too, is usually applied on the facts of each case; and it, too, is usually enforced through individual claims."²⁰⁸

Professor J.H. Verkerke maintains in a recent article that the ADA acts efficiently in placing disabled workers with jobs appropriate to their skill sets.²⁰⁹ Applying a theory he previously articulated in the context of sex- and race-based discrimination,²¹⁰

200. See *infra* Part IV.

201. See Karlan & Rutherglen, *supra* note 3, at 38.

202. *Id.* at 39.

203. *Id.* at 40.

204. *Id.* at 41.

205. *Id.* at 38.

206. *Id.* at 32 & n.100 (citing *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 542–53 (7th Cir. 1995)).

207. Among the parallels noted were "the substantive standard for reasonable accommodation, the wide range of factors that are relevant to the issue of undue hardship, and the procedures for enforcement through individual claims in court." *Id.* at 32.

208. *Id.*

209. Verkerke, *supra* note 14, at 903.

210. J. Hoult Verkerke, *Legal Regulation of Employment Reference Practices*, 65 U. CHI. L. REV. 115, 133–54 (1998) (sex-based discrimination); J. Hoult Verkerke, *Notice Liability in Employment Discrimination Law*, 81 VA. L. REV. 273, 361–83 (1995) (race-based discrimination).

Verkerke examines the dynamic upon disabled workers of the phenomenon of “matching, churning, and scarring,” by which he means the hiring into an inappropriate position, discharging from that position, and precluding the individual from retaining such position.²¹¹ Verkerke argues that the presence of people with disabilities in the workplace “creates precisely the conditions necessary” for these inefficient circumstances to occur, especially when a disability is not readily visibly apparent and is concealed from an employer.²¹² Nevertheless, he avers that the ADA acts as “a significant legal intervention” to compel efficiency in the labor market.²¹³ By according reasonable accommodation protection to qualified individuals with disabilities, the statute “constrains employers whose private gains from discharging disabled employees” would in the ordinary course of business compel them to pass those workers onto other employers or onto public assistance programs.²¹⁴ Finally, Verkerke offers five principles to aid the interactive process in determining the labor market efficiency of corresponding accommodations to workers with disabilities. These include distinguishing between high and low risk jobs, imposing “reasonable limits” on accommodation costs, encouraging workers to share common accommodation costs, reducing accommodation expenses through better matching devices, and creating “presumptions that generalize by occupation.”²¹⁵

Finally, and perhaps most globally, Professor Christine Jolls identifies the circumstances under which an accommodation mandate,²¹⁶ including the disability-related one contained in the ADA, is theoretically likely to reduce a given group’s employment level or wages, the conditions under which both employment levels and wages are prone to be reduced, and those under which neither is likely to occur.²¹⁷ The degree to which antidiscrimination restrictions on employment and wage differentials are apt to bind both accommodated and nonaccommodated groups is pivotal to Jolls’s

211. Verkerke, *supra* note 14, at 941.

212. *Id.* at 957. For a cursory discussion of two interesting issues not raised by Verkerke, i.e., the timing of notice for individuals with not readily discernable (but highly prejudiced) disabilities and the attendant question of constructive notice, see *infra* note 414.

213. Verkerke, *supra* note 14, at 903.

214. *Id.*

215. *Id.* at 941.

216. *E.g.*, Pregnancy Discrimination Act, 42 U.S.C. § 2000e(k) (2000).

217. Jolls, *supra* note 15, at 254.

model.²¹⁸ In the case of workers with disabilities, Jolls posits that restrictions on employment differentials are unlikely to be binding, while restrictions on wage differentials are likely to bind.²¹⁹ Thus, Jolls's model predicts that Title I's reasonable accommodation mandates will reduce the relative employment rate of workers with disabilities while either increasing their wage levels or leaving them unchanged.²²⁰ In reaching this conclusion, Jolls confirms the findings of two empirical studies of the post-ADA employment effects on workers with disabilities. These two studies find a relative reduction in the employment rate of workers with disabilities concurrent with either a neutral or beneficial effect on wages.²²¹ Although the underlying studies can be challenged for a number of reasons,²²² as

218. Jolls finds that where restrictions on wage and employment differentials are binding, the relative wage and employment level of disadvantaged workers to non-disadvantaged workers will rise or remain the same. *Id.* Where restrictions on wage differentials are binding but restrictions on employment differentials are not binding, the relative wage level of the disadvantaged worker will rise or remain the same while the relative employment level will fall. *Id.* Where restrictions on wage differentials are not binding, regardless of the presence or absence of binding restrictions on employment differentials, relative wages will fall while the relative employment levels will rise where the value of the accommodation exceeds its cost, remain the same where the value of the accommodation equals its cost, and fall where the value of the accommodation is less than its cost. *Id.*

219. *Id.* at 273–81.

220. *Id.* at 288–90.

221. See Daron Acemoglu & Joshua D. Angrist, *Consequences of Employment Protection? The Case of the Americans with Disabilities Act*, 109 J. POL. ECON. 915, 931 (2001) (providing statistical results of post-ADA employment and wage effects for workers with disabilities); Thomas DeLeire, *The Wage and Employment Effects of the Americans with Disabilities Act*, 35 J. HUM. RESOURCES 691, 700–05 (2000) (concluding that the ADA resulted in a relative employment decrease for workers with disabilities). The studies employ harmonious frameworks to explain their results. Professor DeLeire uses data panels of men aged eighteen to sixty-four from the Study of Income and Program Participation (SIPP) from 1986 to 1993. See DeLeire, *supra*, at 705. DeLeire concludes that the ADA's passage resulted in an average 7.2 percent decrease in the employment levels of men with disabilities relative to that of men without disabilities. *Id.* Over the same time, DeLeire reports no relative change in workers with disabilities' relative earnings. *Id.*

Professors Acemoglu and Angrist's results, culled from the 1988–1997 Current Population Study (CPS) data for both men and women aged twenty-one to fifty-eight, generally corroborate DeLeire's findings, but provide more nuanced detail. See Acemoglu & Angrist, *supra*, at 930. Acemoglu and Angrist find that across the twenty-one to thirty-nine age group, the relative employment levels of workers with disabilities declined by 10 to 15 percent with respect to hours worked per week. *Id.* at 932. For the forty to fifty-eight age group, they conclude that there was no effect upon women with disabilities relative to their peers without disabilities. *Id.* However, men's employment levels decreased significantly. *Id.* The relative wage levels of workers with disabilities appeared to remain unchanged. *Id.*

222. See, e.g., Susan Schwochau & Peter David Blanck, *The Economics of the Americans with Disabilities Act, Part III: Does the ADA Disable the Disabled?*, 21 BERKELEY J. EMP. &

can Jolls's conclusions,²²³ the point to bear in mind is that several very capable economists believe that ADA accommodations act as a disincentive to the voluntary hiring of people with disabilities.

2. *BPL Balancing: Schwab and Willborn.* In an article entitled *Reasonable Accommodation of Workplace Disabilities*,²²⁴ Stewart Schwab and Steven Willborn highlight what they view as distinctions between the ADA and Title VII.²²⁵ The authors see the ADA's accommodation mandates as extending beyond the more traditional type of antidiscrimination requirements contained in Title VII.²²⁶ This is because the ADA requires not only "soft preferences" (meaning the rendering of equally situated people equally),²²⁷ but also "hard preferences" (by which they mean something beyond equality; for instance, affirmative action)²²⁸ for people with disabilities.

To assess which accommodations are reasonable, Schwab and Willborn take up the analogy to negligence law first noted by Judge Posner in *Vande Zande*²²⁹ and later briefly discussed by Karlan and Rutherglen.²³⁰ They propose applying Judge Learned Hand's seminal statement of competing duties of care.²³¹ In *United States v. Carroll Towing Co.*,²³² Judge Hand balanced the burden (B) of care against the potential of a resulting injury (L), reduced by the probability (P) of the likelihood that an injury would occur.²³³ When $B < PL$ a person

LAB. L. 271, 293–312 (2000) (presenting detailed econometric challenges to the two post-ADA employment studies).

223. For example, John Donohue questions parts of Jolls's work on the ground that a central theoretical underpinning of her accommodation model is simple partial equilibrium theory. John J. Donohue III, *Understanding the Reasons for and Impact of Legislatively Mandated Benefits for Selected Workers*, 53 STAN. L. REV. 897, 909–12 (2001). This theory has been brought under fire by another empirical study of minimum-wage analysis which seemed to disprove the assumption that minimum-wage laws reduce employment levels. *Id.* at 909–10. Because these latter results call partial equilibrium theory into question, it also calls Jolls's accommodation model into question. *Id.* at 910.

224. Schwab & Willborn, *supra* note 16.

225. *Id.* at 1233–37.

226. *Id.* at 1200.

227. *Id.* at 1209.

228. *Id.* at 1211–12.

229. *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 542 (7th Cir. 1995) (discussed *supra* Part I.C.1).

230. Karlan & Rutherglen, *supra* note 3, at 32; see also *supra* notes 201–08 and accompanying text.

231. Schwab & Willborn, *supra* note 16, at 1268–71.

232. 159 F.2d 169 (2d Cir. 1947).

233. *Id.* at 173.

who does not take precautions is liable in negligence. In the event that $B > PL$, a person who did not take precautions will not be liable for harm even if an accident arose from that failure.²³⁴

As an example of how the BPL criteria could be applied to ADA accommodations, Schwab and Willborn offer the following hypothetical:

The reviewing court would compare the burden of the accommodation to the employer (B) against the gains to the disabled worker (L), discounted by the likelihood of the accommodation achieving its goals (P). Thus, if the accommodation would cost the employer \$200 and have an eighty percent chance of benefiting the person with a disability by \$1000, the BPL analogy would label the accommodation reasonable and require it. On the other hand, if the accommodation would cost the employer \$2000 and have an expected benefit of \$800, the accommodation is unreasonable and need not be undertaken.²³⁵

Notwithstanding the elegant simplicity of BPL analysis,²³⁶ and despite very strong contributions of law and economics analysis to tort law analysis,²³⁷ Schwab and Willborn recognize several attendant

234. *Id.* On the larger question of duty as social contract, which goes beyond the boundaries of this Article, see generally John C.P. Goldberg & Benjamin C. Zipursky, *The Moral of MacPherson*, 146 U. PA. L. REV. 1733 (1998), and Gregory C. Keating, *Reasonableness and Rationality in Negligence Theory*, 48 STAN. L. REV. 311 (1996).

235. Schwab & Willborn, *supra* note 16, at 1269.

236. Successive, economic-based treatments have been presented, most prominently, by Richard Posner. See Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 32–33 (1972) (arguing that the BPL formula presents an economically efficient method of applying negligence law). *But see* Richard W. Wright, *Hand, Posner, and the Myth of the “Hand Formula”*, 4 THEORETICAL INQUIRIES IN LAW 145, 145 (2003) (criticizing Posner’s advocacy in support of an increased use of the BPL formula on the ground that Hand himself did not regularly utilize it).

237. See generally Robert Cooter & Ariel Porat, *Does Risk to Oneself Increase the Care Owed to Others? Law and Economics in Conflict*, 29 J. LEGAL STUD. 19 (2000) (discussing the contributions of economic efficiency to tort law and proposing that “courts reconceptualize negligence in order to take account of risk to everyone”); William M. Landes & Richard A. Posner, *A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 535 (1985) (discussing “whether the principal doctrines of products liability law are consistent with the hypothesis that the common law is best understood as an endeavor (which need not be conscious) to promote economic efficiency”); William M. Landes & Richard A. Posner, *The Positive Economic Theory of Tort Law*, 15 GA. L. REV. 851 (1981) (introducing the “positive economic theory” and then showing how its model “can be used to decide whether negligence or strict liability is the more efficient liability standard in particular circumstances”); A. Mitchell Polinsky, *Optimal Liability When the Injurer’s Information About the Victim’s Loss is Imperfect*, 7 INT’L REV. LAW & ECON. 139 (1987) (explaining that a “central result in the economic theory of liability is that if an injurer’s liability equals the victim’s loss, then either the rule of strict

issues that would have to be addressed in determining the reasonability of accommodations.²³⁸ For example, the P portion of the BPL analysis is at risk of underestimation in circumstances where the accommodation does not achieve its intended result.²³⁹ Of greater significance is settling on a uniform measure by which to compare costs and benefits. Specifically, one must consider how to quantify and select the external benefits to be used in the calculus raised earlier in this Article.²⁴⁰ In addition, Schwab and Willborn assert that the ADA itself may act as an impediment to the provision of accommodations, because it places the entire cost on employers and does not allow disabled workers to pay for all or part of their accommodations.²⁴¹ As a result, they conclude that “BPL analysis seems to be missing something” and suggest that the scope of the ADA be expanded so as to allow disabled workers to bear some or all of their own accommodation costs.²⁴²

3. *Toward Independence: Bagenstos and Wax.* Two recent articles, by Samuel Bagenstos²⁴³ and Amy Wax,²⁴⁴ respectively, examine, as a policy matter, the way in which employer-sponsored ADA accommodations for people with disabilities can be generally beneficial for society. Both articles operate from within the boundaries of the ADA. Thus, both of these scholars, writing separately, endorse the notion of dependence-avoidance by the disabled as advantageous both for that group of individuals as well as for society at large. In addition, each article operates on the

liability or the rule of negligence can induce the injurer to behave properly”); Steven Shavell, *Strict Liability Versus Negligence*, 9 J. LEGAL STUD. 1 (1980) (comparing “strict liability and negligence rules on the basis of the incentives they provide to ‘appropriately’ reduce accident losses”); Steven Shavell, *Torts in Which Victim and Injurer Act Sequentially*, 26 J.L. & ECON. 589 (1983) (studying “the effect of liability rules on accident avoidance in situations where potential victims and potential injurers act sequentially”).

238. For instance, is what is relevant in this analysis the gain to the disabled worker, or the gain to the employer in terms of the worker’s productivity? See Schwab & Willborn, *supra* note 16, at 1269–71. Both seem relevant to me, but it is unclear how to incorporate that in the formula.

239. Schwab & Willborn, *supra* note 16, at 1269.

240. See *supra* Part II.A.2.

241. Schwab & Willborn, *supra* note 16, at 1271.

242. *Id.* This is a frequently made economic argument, and one to which I will return *infra* Part III.B.3.

243. Bagenstos, *supra* note 18, at 967.

244. Wax, *supra* note 20, at 1423.

assumption that employers, rather than society, ought to bear the costs of such accommodations.²⁴⁵

Attempting to explain the Supreme Court's ADA jurisprudence,²⁴⁶ Samuel Bagenstos suggests that a motivating factor in the Court's decisions is the desire to keep people with disabilities in the workplace rather than on welfare.²⁴⁷ Dependency-avoidance, he argues, was likewise one of the prime considerations that impelled the statute's passage, which was "sold to a significant extent as a means of welfare reform."²⁴⁸ Supporting this assertion with a wealth of evidence,²⁴⁹ Bagenstos concludes that overreliance on this notion of dependence-avoidance by disability rights advocates ultimately engenders risk to their cause because it acts to vitiate counterarguments in favor of governmental interventions on behalf of unemployed workers with disabilities.²⁵⁰

Continuing her research cycle on welfare rights and reciprocity,²⁵¹ Amy Wax advances her own theory about the ADA's normative goal of independence for people with disabilities.²⁵² Employer-provided

245. See Bagenstos, *supra* note 18, at 954 ("[M]any of the [ADA's] strongest supporters . . . sold the statute as a means of avoiding the social costs of dependency by moving people off of benefits rolls and into the work force."); Wax, *supra* note 20, at 1425–26 ("[T]he ADA [may] be seen as a way for taxpayers to unload some of the costs of supporting the disabled population onto employers . . .").

246. This is a common theme in his writing. See Samuel R. Bagenstos, *The Americans with Disabilities Act as Risk Regulation*, 101 COLUM. L. REV. 1479, 1492 (2001) (suggesting that the Court's decisions can be viewed through the lens of risk regulation, with the Justices deferring to technocratic, scientific risk regulation); Bagenstos, *supra* note 35, at 484–532 (proposing that the Court's definition of disability could be seen as extending ADA protection only to those individuals subject to disability-related stigma).

247. Bagenstos, *supra* note 18, at 976–85.

248. *Id.* at 927.

249. Bagenstos relies on legislative findings, case law, and the history of the Disability Rights and Independent Living Movements. *Id.* at 953–1000.

250. See *id.* at 1016 ("[T]he effort to use welfare reform arguments to reframe 'independence' as being essentially coextensive with agency and antipaternalism becomes increasingly strained as people with disabilities must rely on more and more outside assistance to achieve that 'independence.'").

251. See Amy L. Wax, *A Reciprocal Welfare Program*, 8 VA. J. SOC. POL'Y & L. 477, 501–16 (2001) (arguing for conditional reciprocity as an appropriate basis of social welfare policy); Amy L. Wax, *Rethinking Welfare Rights: Reciprocity Norms, Reactive Attitudes, and the Political Economy of Welfare Reform*, 63 LAW & CONTEMP. PROBS. 257, 261 (Winter/Spring 2000) (exploring the possibility and potential impact of constitutional recognition of economic welfare rights, both in regards to social insurance and need-based transfers).

252. See Wax, *supra* note 20, at 1423 (arguing that one can defend the ADA without assuming that the productivity levels of a disabled person and an otherwise qualified able-bodied person are or can be made the same).

workplace accommodations, she argues, can improve overall social utility so long as disabled workers are able to perform the “core elements”²⁵³ of the job at issue.²⁵⁴ For even if “many disabled persons” are less productive than nondisabled ones,²⁵⁵ Wax argues that the alternative of labor market exclusion resulting in social welfare expenditures is ultimately more expensive to society as a whole.²⁵⁶ Nevertheless, Wax asserts that minimum wage and equal pay legislation prevent employers from hiring and retaining workers with disabilities, even though it is economically beneficial to society as a whole to do so.²⁵⁷

These two articles offer very thoughtful treatments on the issue of why avoiding welfare dependency for people with disabilities is a laudable, congressionally endorsed, socially efficient goal that should influence one’s thinking about disability-related work accommodation. At the same time, because they both operate within the confines of Title I’s boundaries, they do not delineate under what circumstances the general tax base ought to provide disability-related accommodations that are otherwise inefficient for private employers, or where the line should be drawn between private inefficiency and public efficiency.

In sum, Karlan and Rutherglen briefly explore the possibility of applying a negligence analysis to the ADA-type accommodations that they propose extending to members of protected groups. Verkerke claims that in allocating accommodations, the ADA serves as an efficient hiring and termination device for the labor market. And, in examining the effects of accommodation mandates, Jolls concludes that the legislation of ADA accommodations acts as a disincentive to hiring disabled workers. Schwab and Willborn offer the most concrete analysis by proposing that accommodation costs be measured using a BPL type standard, while articles by Bagenstos and Wax offer reasons for why extra-reasonable accommodations should be provided to disabled workers. Collectively, these scholars have contributed valuable insights to understanding ADA-type

253. *Id.* at 1421.

254. *See id.* at 1426 (noting that given sufficient productivity by the disabled employee, the result for society as a whole may be “net positive”).

255. *Id.* at 1423.

256. *See id.* at 1424 (arguing that if labor markets tailored for marginal productivity force employees to hire disabled persons at excessive wages, the result may be costly for taxpayers).

257. *See id.* (demonstrating that labor markets may be distorted when minimum wage and equal pay statutes set a floor on compensation).

accommodations and employment discrimination law more generally, but have not proffered a means by which to define the boundaries of reasonableness.²⁵⁸ Building on this scholarly framework, Part III sets forth the methodological assumptions underlying the proposed accommodation cost framework established in Part IV.

III. METHODOLOGICAL ASSUMPTIONS

Working mainly within the framework of the neoclassical economic model of the labor market,²⁵⁹ but with some reservations, the methodology and assumptions I describe in this Part differ from existing treatments in three ways.²⁶⁰ First, the proposed framework questions the neoclassical labor market model presumption that employers act efficiently in regard to employees with disabilities. Second, the model does not assume that disabled workers are per se less productive than nondisabled ones, although it certainly recognizes and provides for this eventuality. Third, the model challenges the received wisdom of the equitable nature of the labor market status quo. Moreover, the framework offered in Part IV also goes beyond the boundaries of the traditional labor market model in acknowledging that some accommodations can be reasonable from an ADA point of view while at the same time not necessarily prove cost-efficient from an employer's perspective.²⁶¹ This is the area I denote as "semi-efficient," wherein the reasonableness of any given

258. I wish to stress that this comment is descriptive rather than critical. The above articles succeed on their own merits and did not need to address this issue.

259. A note on nomenclature is warranted at this point. Some economists, as well as a few law professors, might consider the use of the term "neoclassical economic model of the labor market" as overly expansive. For example, some commentators might equate "neoclassical economics" or "price theory" or "neoclassical price theory" with what is referred to as the "perfect competition model." Thus, when Robert Bork argued that antitrust enforcement should rest on "price theory," he was criticized for claiming that reliance on price theory implied reliance on all of the assumptions of the perfect competition model. It is certainly true that the perfect competition model is a neoclassical model, and thus an application of price theory, but there are also lots of economic models that are forms of neoclassical price theory—models that depart in one or more ways from the perfect competition model. In sum, "neoclassical" may be said to encompass a fairly large expanse of economic theory. Nonetheless, I am in good company in using the concept monolithically. See generally John J. Donohue III, *Discrimination in Employment*, in 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 615, 615–23 (Peter Newman ed., 1998).

260. By contrast, the variables set forth in the Appendix are consistent with general law and economics notions.

261. Additionally, within a Kaldor-Hicks welfare enhancement scheme, these accommodations are also socially inefficient. See *infra* Appendix, Section D.

accommodation is measured (as the ADA requires) against the totality of an employer's resources. Thus, moving away from an absolute cost-benefit analysis, there are areas of contingent reasonableness in which the same accommodation can be reasonable for some employers, but not for others. This section of the continuum is incongruent with traditional neoclassical economic analysis, yet nonetheless is to a large extent exactly what constitutes reasonable ADA accommodations.

A. *The Neoclassical Economic Model*

The comprehensive normative goal of neoclassical economics is to design efficient legal regimes.²⁶² As such, the model begins from the premise that markets for goods and services operate efficiently. As part of this postulate it is assumed that markets determine prices, free bargaining is the norm, and knowledge is completely and symmetrically disseminated, resulting in prices based on production.²⁶³ Under this theory, market forces also discipline employers with irrational (and thus inefficient) tastes against particular groups by driving those employers from the market.²⁶⁴ This economic Darwinism occurs because employers' discriminatory hiring practices add to business costs, and result in comparative losses by diminishing profit margins.²⁶⁵ Exercising distaste (or socially negative preferences)²⁶⁶ also raises the net-product margin of nondiscriminatory competitors who engage same-group employees at reduced wage levels.²⁶⁷ Resting on this foundation, the neoclassical economic paradigm posits that in the context of an efficient and properly functioning labor market, employers hire workers with the greatest net productivity. This utility is calculated by subtracting total labor cost from total production benefit (a calculation that I adopt below).²⁶⁸ Because workers with disabilities are viewed as requiring

262. See MARK PERLMAN & CHARLES R. MCCANN, JR., *THE PILLARS OF ECONOMIC UNDERSTANDING: IDEAS AND TRADITIONS* 301 (2000) (describing the market as a "model of allocative efficiency").

263. WILLIAM J. BAUMOL & ALAN S. BLINDER, *ECONOMICS: PRINCIPLES AND POLICY* 185, 226–28, 313–14 (7th ed. 1998).

264. See BARRY CLARK, *POLITICAL ECONOMY: A COMPARATIVE APPROACH* 196 (1991) (describing how discriminating employers incur higher wage costs by bypassing otherwise qualified workers, thus losing market share).

265. *Id.*

266. The seminal writing on "distaste" is by Nobel Prize-winning economist, and now journalist, Gary S. Becker, *THE ECONOMICS OF DISCRIMINATION* 39–45 (2d ed. 1971).

267. CLARK, *supra* note 264, at 196.

268. See *infra* Appendix, Section B.

costly inputs in the form of accommodations, an employer, if sufficiently unconstrained by regulations so that she can act of her own preference, would rationally choose nondisabled employees.²⁶⁹

As a result of these two premises, the neoclassical economic model concludes that when employers are forced to hire disabled employees against their own considered judgment, these employers bear costs that they would not have otherwise borne. Consequently, Title I accommodations are inherently inefficient because they reduce the utility an individual employer is able to achieve. Title I's requirements are also undesirable because they compel private employers (as opposed to, say, the general tax base) to bear the costs of an inefficient social policy. Thus, exclusion of people with disabilities from the employment sphere is the result of rationally efficient decisionmaking, not overt discrimination, or a more benign discrimination resulting from the reliance on statistical discrimination.²⁷⁰

The most thorough evaluation (and concise criticism) of Title I from a neoclassical economic perspective was published by Professor Richard Epstein after passage of the ADA, but prior to promulgation of its regulations.²⁷¹ Although therefore somewhat precipitate,²⁷² it was also prescient in that successive literature closely followed his analysis in

269. If this employer was also unconstrained as to wage regulations, then it could be that disabled employees would sort down to a level beneath their abilities, either by being placed at less valuable positions or by accepting lower wages at equally valuable places of employment. As an example, a disabled lawyer from Harvard might end up either at a less prestigious (and remunerative) firm than a comparable, nondisabled lawyer, or end up at an equally prestigious firm than that of the comparable nondisabled lawyer by accepting lower wages. Both firms might well be happy to have Harvard graduates, especially if the less prestigious one ordinarily is unable to attract those alumni. These scenarios engage *inter alia* some of the assertions that Jolls, *supra* note 15, at 232–33, raises about the binding nature of wage regulations. See also RICHARD A. EPSTEIN, FORBIDDEN GROUNDS: THE CASE AGAINST EMPLOYMENT DISCRIMINATION LAWS 487–88 (1992); Colker, *supra* note 192, at 217–19 (mentioning similar concepts in regard to investment in human capital); Schwab & Willborn, *supra* note 16, at 1271 (raising similar assertions in the context of disabled workers self-accommodating through reduced wages).

270. As one commentator put it, the statute “would not be necessary if these [accommodations] were beneficial to employers as they automatically act in ways that promote their self interests.” Thomas H. Barnard, *Disabling America: Costing Out the Americans with Disabilities Act*, 2 CORNELL J.L. & PUB. POL’Y 41, 58 (1992).

271. EPSTEIN, *supra* note 269, at 480–94. I am grateful to Professor Epstein for his courtesy and friendship. Although I disagree with almost all his views on employment discrimination law, and have therefore utilized his work as a counterpoint to my own, he has always been open to exchanging ideas and I have learned much from him. For an elegant evaluation of the above work, see John J. Donohue III, Book Review, 31 J. ECON. LITERATURE 1477 (1993).

272. Epstein recently reprised many of his arguments in RICHARD A. EPSTEIN, EQUAL OPPORTUNITY OR MORE OPPORTUNITY? THE GOOD THING ABOUT DISCRIMINATION (2002).

applying the neoclassical economic labor market model to the ADA.²⁷³ This is equally true of the recent scholarship described above²⁷⁴ to the extent that it also adopts methodological assumptions common to the neoclassical economic model.

Not all the assumptions impelling Epstein's analysis are adopted whole cloth by everyone utilizing law and economics schemas. Moreover, other variations and interpretations of the neoclassical model (whether or not applied to the labor market) exist.²⁷⁵ Additionally, two major factors distinguish Epstein's take on ADA accommodations from that of other economically inclined authors. The first differentiating feature is his normative solution to the difficulties raised by Title I. A longtime advocate of libertarianism,²⁷⁶ Epstein argues that the ADA (as well as all other regulations governing the labor market) ought to be abrogated on efficiency and autonomy grounds.²⁷⁷ This is not a position currently taken by any of the other authors in the field, although some concur with a corollary of that proposition, namely, that disabled workers should be allowed to underbid their services.²⁷⁸

The second major notion that separates Epstein from more traditional neoclassical economic analysis is his recommendation that

273. See, e.g., Steven B. Epstein, *In Search of a Bright Line: Determining When an Employer's Financial Hardship Becomes "Undue" Under the Americans with Disabilities Act*, 48 VAND. L. REV. 391, 397 (1995) (criticizing the undue hardship standard as it relates to employee accommodation); Mark A. Schuman, *The Wheelchair Ramp to Serfdom: The Americans with Disabilities Act, Liberty, and Markets*, 10 ST. JOHN'S J. LEGAL COMMENT. 495, 500–02 (1995) (arguing that the ADA imposes severe liberty restrictions through its employer accommodation mandates); Ron A. Vassel, *The Americans with Disabilities Act: The Cost, Uncertainty and Inefficiency*, 13 J.L. & COM. 397, 406–10 (1994) (promoting a free market solution to disability based employment discrimination); Christopher J. Willis, *Title I of the Americans with Disabilities Act: Disabling the Disabled*, 25 CUMB. L. REV. 715, 725–50 (1995) (proposing the repeal of the ADA on the grounds that it is economically inefficient, decreases societal net wealth, and is harmful to its intended beneficiaries).

274. See *supra* Part II.B.

275. See Michael Ashley Stein, *Disability and Employment: Alternative Approaches to Traditional Empirical Research*, in EMERGING WORKFORCE ISSUES: W.I.A., TICKET TO WORK, AND TRANSITION 95–96 (L. Robert McConnell ed., 2001) (describing some alternative metrics).

276. See generally Symposium, *The Works of Richard A. Epstein*, 19 QUINNIPIAC L. REV. 655, 783–803 (2000) (noting Epstein's marriage of utilitarian and libertarian thought).

277. See EPSTEIN, *supra* note 269, at 484 (arguing that "successful enforcement under the guise of 'reasonable accommodation' necessarily impedes the operation and efficiency of firms").

278. That is, disabled workers may accept salaries below equivalent values. This latter proposal, which also animates Schwab and Willborn's treatment, see *supra* Part II.B.2, is discussed *infra* Part III.C, in the context of questioning the equitable nature of the labor market's status quo.

deference be paid to the prejudicial tastes of employers and third parties (in the form of customers and/or other employees) when assessing the cost of a given accommodation.²⁷⁹ This is an unusual proposal from a methodological standpoint. Although law and economics assessments are expected to account for all possible costs and benefits when assessing the efficiency of any given policy,²⁸⁰ it is atypical when calculating social good to give weight to preferences arising from socially undesirable criteria.²⁸¹ These can include tastes that are illegal, such as murder, or objectionable, like sadism.²⁸² Imagine, for example, an economic analysis in which value was accorded to the tastes of Ku Klux Klan customers who object to interacting with Asian-American account executives; or, to use a less extreme example, customers who are not members of an infamous hate group, but who nonetheless feel that they can better relate to account executives whose native language (they presume) is English.²⁸³

Moreover, another difficulty with accepting irrational preferences as they relate to disabled workers is that doing so incorporates a misperception that disability is central to determinations that can also be universally human. Thus, the “awkward” feelings that Epstein imagines will be engendered in nondisabled individuals who have to

279. Epstein would require this deference even under his preferred regime, one in which the ADA was ultimately abrogated. EPSTEIN, *supra* note 269, at 486–88.

280. See generally COST-BENEFIT ANALYSIS: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES 2 (Matthew D. Adler & Eric A. Posner eds., 2001).

281. In response to this concern, Professors Adler and Posner create the welfare equivalents (WE) measure, or the amount of money that would be paid to or by an individual so that on the *right* theory of well-being that individual is as well off there as she would be in the status quo. *Id.* at 270. Accordingly, because an employee’s preference to work only with a given class of persons is not based on a valid theory of well-being, it would not be included in the calculus. This is because inclusion of an invalid preference would result in upholding undesired prejudices that, even if extant in the status quo, are detrimental to society. *Id.* at 269 (describing “distorted” preferences as those which do not “enhance [a] person’s well-being”).

282. Besides Epstein, one article avers that additional externalities, all negative, should be considered at greater length when weighing the reasonableness of Title I accommodations. See Jason Zarin, *Beyond the Bright Line: Consideration of Externalities, the Meaning of Undue Hardship, and the Allocation of the Burden of Proof Under Title I of the Americans with Disabilities Act*, 7 S. CAL. INTERDISC. L.J. 511, 519 (1998) (arguing that considering the effect of externalities “improves the accuracy” of a cost-benefit analysis of the burden of an accommodation). Harlan Hahn addresses this distaste on a sociological level. Harlan Hahn, *Advertising the Acceptably Employable Image: Disability and Capitalism*, 15 POL’Y STUD. J. 551, 566 (1987).

283. This is not to be confused with workplace rules (illegal under Title VII) that forbid the speaking of any language other than English at the worksite, as was the case in *EEOC v. Synchro-Start Prods., Inc.*, 29 F. Supp. 2d 911, 911 (N.D. Ill. 1999). See also S. Craig Moore, *English-Only Rules in the Workplace*, 15 LAB. LAW. 295, 295–308 (1999).

interact with a disabled worker.²⁸⁴ Yet, a worker's attitude, personality, and demeanor are factors irrespective of disability that ultimately determine the comfort of interaction. Without a doubt, Oscar the Grouch would associate poorly with his peers and function poorly in a customer relations department (or, worse still, as an anger-management consultant). This would, however, be because of his attitude, rather than his physical difference of being green and furry.²⁸⁵ Similarly, it can be expected that the rational responses of others will ultimately be influenced by whether individuals with disabilities conduct themselves in the ways that disagreeable people without disabilities do, or whether they behave agreeably.²⁸⁶

In spite of these two significant departures, to date the analyses grounded in the neoclassical economic paradigm otherwise dovetails with Epstein's view. In sum, Epstein (and through him as a proxy, other economic commentators) relies on three main assumptions from which flows the conclusion that the potential benefits to employers associated with reasonable accommodations are economically inefficient. Respectively, these are the overall efficient functioning of the labor market, the inherently lower productivity of disabled workers, and, accordingly, the equity of the labor market's status quo.²⁸⁷

B. Challenges to the Neoclassical Economic Model

Although this Article utilizes the general neoclassical economic model of the labor market, it challenges three basic assumptions of the framework as it pertains to workers with disabilities: (1) the notion that the labor market functions efficiently in allocating employment opportunity to disabled workers; (2) the underlying assumptions that

284. EPSTEIN, *supra* note 269, at 486–87.

285. A display at the National Museum of American History's Behring Center is available at <http://www.si.edu/resource/faq/where/oscar.htm> (on file with the *Duke Law Journal*). By contrast Grover, who is blue and furry, would be very good at either job. That Cookie Monster, who is also blue and furry, would not, only underscores the individual nature of job matching.

286. Consequently, as far as academic assessments go, deferring to prejudicial irrationalities about disabled workers, in contrast to acknowledging and then discounting those preferences, is a controversial method of applying otherwise conventional law and economics criteria and should not be impugned to other writers from that field. Such inclusion would also result in continuation of the same biases that the ADA was meant to counteract. Thus, at the very least, justification is required for such atypical accession to irrational preferences. See Michael Ashley Stein, *Market Failure and ADA Title I*, in AMERICANS WITH DISABILITIES: EXPLORING IMPLICATIONS OF THE LAW FOR INDIVIDUALS AND INSTITUTIONS 193, 200–01 (Leslie Pickering Francis & Anita Silvers eds., 2000) (arguing that reacting negatively to the difference of disability is “not inherently different” from other responses of exclusion now viewed as prejudicial).

287. EPSTEIN, *supra* note 269, at 484–85.

the paradigm uses when assessing those employees' productivity; and (3) the proposition that the status quo baseline of the existing labor market is an equitable one.

1. *Labor Market Efficiency.* The first flawed assumption in the neoclassical economic model of the labor market governing workers with disabilities is the unqualified acceptance of its efficiency. The paradigm posits that employers acting rationally will hire and maintain workers with the greatest net product, while those who act irrationally will be disciplined by market forces and driven from competition. This premise, which is taken as a standard economic assumption by many law and economics practitioners and should, in the normal course of events be accurate, has questionable factual and normative elements as applied to the reality of disabled workers' experiences in the labor market.²⁸⁸

A primary objection to categorically applying the neoclassical law and economics model to the labor market is factual. To begin with, the standard economic model of analysis is premised on complete and symmetrical distribution of information to all actors within a given market.²⁸⁹ Yet not all markets function equally in this respect. Although an economic account of how information is disseminated might be true of financial markets whose extensive reporting requirements are rigorously enforced by the Securities and Exchange Commission (SEC),²⁹⁰ no parallel structure exists in the labor market. A very clear example of information asymmetry in the context of disabled workers may be seen in a December 2002 study by the General Accounting Office (GAO),²⁹¹ which found that only a

288. In explaining this assertion, the scholarship of Professors Cass Sunstein and John Donohue is instructive in positing that competitive markets not only fail to eliminate discriminatory practices, but can also extend them. See John J. Donohue III, *Is Title VII Efficient?*, 134 U. PA. L. REV. 1411, 1423 (1986) (rejecting the argument that market forces will "restore the nondiscriminatory equilibrium by disciplining discriminators"); John J. Donohue III, *Prohibiting Sex Discrimination in the Workplace: An Economic Perspective*, 56 U. CHI. L. REV. 1337, 1348 (1989) (noting that although competitive market forces tend to discipline discriminators, the same market forces "do not always operate at the optimal speed"); Cass R. Sunstein, *Why Markets Don't Stop Discrimination*, in REASSESSING CIVIL RIGHTS 22, 36 (Ellen F. Paul ed., 1991) (illustrating how competitive markets may perpetuate discrimination through "economically rational response[s]" to the desires of third parties, "stereotyping," or "limited investments in human capital").

289. ANINDYA SEN, MICROECONOMICS: THEORY AND APPLICATIONS 159–60 (1999).

290. See THOMAS LEE HAZEN, THE LAW OF SECURITIES REGULATION § 9.6 (4th ed. 2002).

291. GENERAL ACCOUNTING OFFICE, BUSINESS TAX INCENTIVES: INCENTIVES TO EMPLOY WORKERS WITH DISABILITIES RECEIVE LIMITED USE AND HAVE AN UNCERTAIN

“very small proportion”²⁹² of businesses utilized either the two available federal tax credits for hiring disabled workers,²⁹³ or the barrier removal deduction,²⁹⁴ which would make their premises accessible to disabled customers (and, with some overlap, workers with disabilities).²⁹⁵ Respectively, the two hiring incentives provide for \$2,400 and \$5,000 (combinable) per annum, per eligible disabled worker;²⁹⁶ the public accommodation credit allows for as much as \$15,000 per year.²⁹⁷ Thus, a relatively simple vehicle to compensate employers for accommodation costs—one which, if the Blanck position outlined above is believed, could make accommodating disabled workers an even more profitable proposition²⁹⁸—was reported by the GAO as being severely underused.²⁹⁹ To remedy this informational failure, the GAO Report recommends “improving government outreach and education efforts.”³⁰⁰ Consider the possible ramifications if the GAO had suggested that the government parallel the SEC’s reporting requirements in reverse, with every corporate taxpayer receiving a document along with its annual tax return briefing it on the possible benefits of employing disabled workers. Furthermore, the liquidity of financial market commodities does not extend to almost any other market, including that for employment services,³⁰¹ where the value of individual

IMPACT (GAO-03-39 Dec. 2002), available at <http://www.gao.gov/new.items/d0339.pdf> (on file with the *Duke Law Journal*) [hereinafter GAO REPORT]. I thank my colleague Professor John Lee for bringing this study to my attention.

292. *Id.* at 2.

293. These tax cuts are, respectively, the Work Opportunity Tax Credit, 26 U.S.C. § 51 (2000), and the Disabled Access Credit, 26 U.S.C. § 44(a) (2000).

294. *See* 26 U.S.C. § 190 (2000) (providing a credit for “architectural and transportation barrier removal expenses”).

295. *See supra* notes 46–51 and accompanying text.

296. GAO REPORT, *supra* note 291, at 2.

297. *Id.*

298. *See supra* Parts II.A.1–2.

299. GAO REPORT, *supra* note 291, at 11–14. The availability of these measures is not, however, totally neglected. *See, e.g.*, Linda Nelsestuen & Mark Reid, *Coordination of Tax Incentives Associated with Compliance with the Americans with Disabilities Act*, 81 TAXES 37, 38–42 (2003) (reporting on the availability of the ADA tax incentives for eligible employers).

300. GAO REPORT, *supra* note 291, at 25. It also recommended two measures not related to informational asymmetry: increasing the amount of employer incentives and expanding the types of businesses eligible beyond the ADA’s floor of fifteen employees. *Id.*

301. The same liquidity does not extend to the absolute fungibility of those workers, although Verkerke’s article works from this very premise by positing the mobility of disabled workers (otherwise there would be no future mismatching opportunities). Verkerke, *supra* note 14, at 910–11. *But see* Marjorie L. Baldwin & Edward J. Schumacher, *A Note on Job Mobility*

workers may be more difficult (although certainly possible)³⁰² to determine.

Information asymmetry may also exist as to the possible tastes of employers and third parties toward workers with disabilities. Although empirical surveys of Fortune 500 executives,³⁰³ senior executives,³⁰⁴ and coworkers³⁰⁵ uniformly report favorable attitudes toward employing disabled individuals, available data fails to evince significant increases in the relative employment rate among disabled individuals.³⁰⁶ Two alternative conclusions can be drawn from this apparent paradox: either cognitive dissonance causes the individuals surveyed to believe they favor disabled employment when in reality they do not, or those interviewed truly do espouse pro-disabled sentiments, but because of an information asymmetry, this preference does not manifest itself when these individuals act on behalf of corporations.³⁰⁷ Judging from the shortage of disability awareness and management programs instituted by corporations as part of their business practices, the latter conclusion seems plausible.³⁰⁸ This scarcity further denotes a market failure; under

Among Workers with Disabilities, 41 INDUS. REL. 430, 433 (2002) (analyzing empirically the assumption of mobility among workers with disabilities).

302. See *infra* Part IV.A.2.

303. Joel M. Levy et al., *Attitudes of Executives in Fortune 500 Corporations Towards the Employability of Persons with Severe Disabilities: Industrial and Service Corporations*, 24 J. APPLIED REHABILITATION COUNSELING 19, 19–31 (1994).

304. A 1995 survey of senior corporate executives found that 89 percent supported plans to increase the number of workers with disabilities their companies employed. THE N.O.D./HARRIS SURVEY ON EMPLOYMENT OF PEOPLE WITH DISABILITIES 24 (1995).

305. In a 1991 survey, 68 percent of those polled said they would support policies that increase the number of disabled workers, 65 percent responded that they would not have any problems with disabled coworkers, and 77 percent said they would not be concerned if their boss was a seriously disabled person. LOUIS HARRIS & ASSOCS., PUB. ATTITUDES TOWARDS PEOPLE WITH DISABILITIES 23–28 (1991).

306. If anything, the data demonstrates moderate decreases, as reported by the studies of Acemoglu and Angrist, and DeLeire, set forth *supra* note 221.

307. *Id.* Alternatively, one could imagine a corporation in which the leadership polled feel positively about employing disabled workers, but the human resource managers engaged in the actual hiring processes feel differently.

308. SHEILA H. AKABAS ET AL., DISABILITY MANAGEMENT 248–49 (1992) (“The attitude of employers often interferes with bringing workers with disabilities into the workplace.”). *But see* THE ADA AT WORK: IMPLEMENTATION OF THE EMPLOYMENT PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT: A STUDY BY THE SOC’Y FOR HUMAN RES. MGMT. 5 (1999) (finding that 82 percent of organizations make existing facilities accessible to disabled employees, 79 percent are flexible in the application of HR policies, and 67 percent restructure jobs or modify work hours); Serbrenia J. Sims & Ronald R. Sims, *ADA and the Role of Human Resource Management in Managing the Diverse Workforce of the 1990s*, in HUMAN RESOURCE MANAGEMENT AND THE AMERICANS WITH DISABILITIES ACT 149, 157 (1995) (“Human rights,

a neoclassical economic model, companies with access to this information would act on whatever favorable economic incentives existed (through generated externalities,³⁰⁹ including tax breaks)³¹⁰ and employ greater numbers of disabled workers.

Next, contrary to the neoclassical labor market account, empirical studies conducted both before and after passage of the ADA clearly demonstrate the persistence of employment discrimination as an obstacle to labor market opportunities for workers with disabilities.³¹¹ In analyzing the effects of employer practices, these studies, which assume information asymmetry in the labor market, distinguish the effects of economically rational behavior from the effects of prejudicial behavior.³¹² In other words, they distinguish between decisions arising from the use of indicators that substitute reliable generalizations about group characteristics from those which either wrongly assume or overestimate the existence of those characteristics.³¹³ Although assertions of prejudice have long been raised by members of the

social justice, and diversity are increasingly valued in the workplace, as they are in society at large.”).

309. See *supra* Part II.A.2.

310. See *supra* note 293 and accompanying text.

311. See generally Marjorie L. Baldwin et al., *Gender Differences in Wage Losses from Impairments: Estimates from the Survey of Income and Program Participation*, 29 J. HUM. RESOURCES 865, 873–84 (1994); Marjorie L. Baldwin, *Estimating Wage Discrimination Against Workers With Disabilities*, 3 CORNELL J.L. & PUB. POL’Y 276, 276–90 (1994); Marjorie L. Baldwin & William G. Johnson, *Labor Market Discrimination Against Men with Disabilities in the Year of the ADA*, 66 S. ECON. J. 548, 556–62 (2000); Marjorie L. Baldwin & William G. Johnson, *Labor Market Discrimination Against Women with Disabilities*, 34 INDUS. REL. 555, 569–76 (1995); Marjorie L. Baldwin & William G. Johnson, *Labor Market Discrimination Against Men with Disabilities*, 29 J. HUM. RESOURCES 1, 6–15 (1994); William G. Johnson & James Lambrinos, *Wage Discrimination Against Handicapped Men and Women*, 20 J. HUM. RESOURCES 264, 270–76 (1985).

312. See, e.g., Baldwin & Johnson, *Labor Market Discrimination Against Men with Disabilities*, *supra* note 311, at 2 (noting that discrimination may result from “prejudice, differential information concerning the average productivity of majority and minority workers, or exploitation of workers”); Johnson & Lambrinos, *supra* note 311, at 265–66 (distinguishing prejudice from discrimination that arises when employers believe disabled persons to be “less productive” and “more costly to hire”).

313. For example, Baldwin & Johnson, *Labor Market Discrimination Against Women with Disabilities*, *supra* note 311, at 555–77, examined the extent of wage discrimination and its attendant employment effects against disabled women. They found, among other results, that although the absolute wage differential between women with and without disabilities is small, more than one-half of the wage differential was directly attributable to discrimination against the disabled cohort. *Id.* at 572.

disability rights community,³¹⁴ and were documented by Congress in the legislative findings section that it included in the ADA,³¹⁵ recognition of these asseverations, even when backed by the sort of empirical studies cited above,³¹⁶ has by and large eluded those commentators analyzing the ADA's accommodation mandates.³¹⁷

In the case of workers with disabilities, estimates of indicators that are meant to signal appraisals of productivity and accommodation cost are swayed by existing misconceptions about disabled workers that substitute for less easily obtainable, accurate information. This is because, excluding instances of purposeful prejudice, discrimination may also occur when a decisionmaker who lacks perfect information about the characteristics of the members of a given group bases her assessment on inaccurate "indicators" that she believes can evaluate those individuals' present or future performance.³¹⁸ Additionally, even if economically efficient indicators were substituted for empirically incorrect ones, a market failure would continue because employers' discriminatory behavior would be rewarded as efficient. Conversely, a system requiring economically empowered employers, rather than economically disempowered employees, to bear cost differentials incurred by disregarding rational economic discrimination may arguably be more efficient from a social welfare standpoint. Thus, although the baseline assumption that employers act in an efficient manner seeking to maximize their own profits usually appears correct, from at least one point of view, it is empirically invalid.

Moreover, the neoclassical economic model asserts that once discriminatory practices are observed, employers who exercise distaste are disciplined by market forces that reduce their profit margins while increasing those of their nondiscriminatory

314. For one of the earlier, as well as more elegant, assertions of prejudice, see Jacobus tenBroek & Floyd W. Matson, *The Right to Live in the World: The Disabled in the Law of Torts*, 54 CAL. L. REV. 809 (1966).

315. These findings are detailed in Burgdorf, *supra* note 51, at 422–27.

316. *See supra* Part II.

317. This is true to the degree that the empirical studies, which one would think central to economic analyses—even if ultimately rejected by them after consideration—are cited in only a handful of law review articles.

318. Anita Silvers & Michael Ashley Stein, *An Equality Paradigm for Preventing Genetic Discrimination*, 55 VAND. L. REV. 1341, 1382 (2002). Specific instances of statistical inaccuracies exist when excluding people from employment on the basis of genetic identity. *See id.* (noting that genetically atypical individuals with asymptomatic conditions may never exhibit symptoms for a particular illness, yet will remain excluded from some employment opportunities). General policy misassessments are described in Silvers & Stein, *supra* note 29, at 102.

competitors.³¹⁹ As with the first premise, this theory has not been empirically demonstrated. Indeed, logical application of the neoclassical economic paradigm would recount that prior to 1964,³²⁰ when federal antidiscrimination laws injected inefficiency into the dynamics governing private employment relationships,³²¹ discriminatory firms were either penalized or driven from competition. I am unaware of any empirical evidence that supports this position.³²² To the contrary, United States markets have historically evinced (and continue to evidence) various forms of discrimination.³²³

Finally, the assertion of market failure within the neoclassically governed employment market is not unique. Claims that imperfect information undermines the efficiency of hiring decisions have arisen from econometric,³²⁴ economic,³²⁵ and civil rights³²⁶ sources. Additionally,

319. BECKER, *supra* note 266, at 39–45.

320. That year heralded the passage of the Civil Rights Act of 1964, Pub. L. No. 88-352, 78 Stat. 241, which prohibited employment and other forms of discrimination on the basis of race, color, religion, sex, and national origin.

321. *See generally* THOMAS SOWELL, *MARKETS AND MINORITIES* (1981) (examining how economic forces and government intervention impact the success of racial and ethnic minorities).

322. In fact, if the work of one Nobel Prize-winning economist and his three colleagues is believed, even Title VII's promulgation did not eradicate disparities in wage and employment effects relative to race by itself. Instead, it was protracted governmental enforcement of that statute. Richard Butler & James J. Heckman, *The Government's Impact on the Labor Market Status of Black Americans: A Critical Review*, in *EQUAL RIGHTS AND INDUSTRIAL RELATIONS* 235, 252 (Leonard J. Hausman et al. eds., 1977); John J. Donohue III & James Heckman, *Continuous Versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks*, 29 J. ECON. LITERATURE 1603, 1637–40 (1991); James J. Heckman & Brook S. Payner, *Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina*, 79 AM. ECON. REV. 138, 167–73 (1989).

323. If needed, contemporary empirical proof as to the pervasiveness of minority-based prejudice is presented in IAN AYRES, *PERVASIVE PREJUDICE?* (2001).

324. *See, e.g.*, Baldwin & Johnson, *Labor Market Discrimination Against Men with Disabilities*, *supra* note 311, at 14 (“The extent to which the remaining employment differential reflects . . . employers’ lack of knowledge concerning the productivity of persons with impairments is an open question.”); Johnson & Lambrinos, *supra* note 311, at 265 (“Employers may believe that handicapped workers are less productive and more costly to hire and train than the nonhandicapped.”).

325. *See, e.g.*, DAVID NEUMARK, *LABOR MARKET INFORMATION AND WAGE DIFFERENTIALS BY RACE AND SEX* (Nat’l Bureau of Econ. Research, Working Paper No. 6573, 1998) (positing that employer misinformation about minorities and women account for wage discrimination); Sunstein, *supra* note 288 (arguing that competitive markets, far from eliminating discrimination, actually work to extend it).

326. *See, e.g.*, DERRICK BELL, *FACES AT THE BOTTOM OF THE WELL: THE PERMANENCE OF RACISM* 55 (1992) (critiquing civil rights laws and federal policy); Richard Delgado,

the issue of whether and when to characterize decisions made in the context of imperfect information based on indicators believed to accurately evaluate future performance as statistically efficient³²⁷ or empirically unpredictable³²⁸ is at the heart of a longstanding debate.³²⁹ There are also examples of employers failing to capitalize on other economically beneficial actions,³³⁰ which run contrary to what the neoclassical economic labor market model would suggest.³³¹ Consequently, although general acceptance of the neoclassical economic model is a valid departure point from which to begin an evaluation of the general labor market, unfettered belief in the self-corrective force of competitive market pressures within the labor field is, despite its popular currency, unproven.

2. *Disabled Worker Productivity.* A second systemic shortfall in the current neoclassical economic account is the tripartite assumption that (1) disabled employees require accommodations; (2) these accommodations are inherently costly; and (3) by nature, disabled workers are less productive than their nondisabled counterparts. Empirical studies have not established the prevalence of the need for accommodation among disabled workers across the labor market. It is

Rodrigo's Roadmap: Is the Marketplace Theory for Eradicating Discrimination a Blind Alley?, 93 NW. U. L. REV. 215, 231–42 (1998) (challenging the law and economics assertion that free markets will correct discrimination because there are motivators of human behavior, specifically racist behavior, that are not economic in basis and that cause people to make economically disadvantageous decisions).

327. See generally Dennis J. Aigner & Glen G. Cain, *Statistical Theories of Discrimination in Labor Markets*, 30 INDUS. & LAB. REL. REV. 175 (1976).

328. Richard A. Posner, *The Efficiency and the Efficacy of Title VII*, 136 U. PA. L. REV. 513, 516 (1987); Peter Norman, *Statistical Discrimination and Efficiency* (2000) (unpublished manuscript, on file with the *Duke Law Journal*).

329. See, e.g., Stewart J. Schwab, *Is Statistical Discrimination Efficient?*, 76 AM. ECON. REV. 228, 229 (1986) (examining the effect of statistical discrimination on allocative efficiency and arguing that it can reduce efficiency).

330. For instance, high-efficiency electrical equipment is available through negawatt acquisition programs. Bernard S. Black & Richard J. Pierce, Jr., *The Choice Between Markets and Central Planning in Regulating the U.S. Electricity Industry*, 93 COLUM. L. REV. 1339, 1354 (1993).

331. For additional examples of alleged market failure, see John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 728 (1984); Sherry A. Glied, *Health Insurance and Market Failure Since Arrow*, 26 J. HEALTH POL. POL'Y & L. 957, 957 (2001); Michael Klausner, *Market Failure and Community Investment: A Market-Oriented Alternative to the Community Reinvestment Act*, 143 U. PA. L. REV. 1561, 1574 (1995); Glynn S. Lunney, Jr., *Fair Use and Market Failure: Sony Revisited*, 82 B.U. L. REV. 975, 985 (2002); Lynn A. Stout, *Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation*, 81 VA. L. REV. 611, 618 (1995).

reasonable to assume that some percentage of employees with disabilities will require accommodations. The size of this group, however, depends upon the individual circumstances of present or prospective employees, the degree to which an employer's worksite and processes already are accessible, and how the term "disabled" is conceived³³² or measured.³³³ There is, however, no reason to suspect that every employee with a disability requires an accommodation, as counterexamples to any such broad generalization are abundant.³³⁴

Nor is it accurate to assume that disabled workers are by nature less productive than their counterparts who are free of disabilities. This may be true for some individuals with disabilities, just as certain nondisabled workers are less productive than the majority of disabled ones. Ultimately, individual productivity is a product of ability, aptitude, and attitude. Hence, Mr. Rogers might be more productively employed by a state motor vehicle office than by a time-sensitive, oil-changing garage. In terms of ADA protection, a disabled worker is not considered "qualified" under Title I unless she can perform the essential job functions of her chosen occupation, either with or without accommodation.³³⁵ A disabled employee who satisfies the requirements of her position (by reaching the average level of required productivity)³³⁶ without accommodation is clearly as productive as her nondisabled peers. When accommodations are needed to accomplish integral activities, the existence and degree of relatively lower net productivity is affected by the ability of that disabled worker to accomplish nonessential job functions, as well as the value of those supplementary services to her employer.³³⁷

Two points, however, bear noting. First, as an empirical matter, forty years of pre-ADA empirical studies indicate comparable overall

332. The definition of disability still has not been resolved more than a dozen years after the ADA's passage. Michael Ashley Stein, *Foreword: Disability and Identity*, 44 WM. & MARY L. REV. 907, 908-09 (2003).

333. This is an old and important debate which has yet to be resolved. *See generally* THE DECLINE IN EMPLOYMENT OF PEOPLE WITH DISABILITIES: A POLICY PUZZLE (Richard V. Burkhauser & David C. Stapleton eds., 2003); Alberto Martini, *Why Estimates of the Number of Persons with Disabilities Who Want to Work Diverge So Widely* (Mathematica Policy Research Paper No. 7984-001, 1991); Saad Z. Nagi, *The Concept and Measurement of Disability*, in DISABILITY POLICIES AND GOVERNMENT PROGRAMS 1, 14 (Edward D. Berkowitz ed., 1979).

334. Consider, for a moment, the political effect of making parallel assertions in respect to people based upon their sex or race.

335. 42 U.S.C. § 12,111(8) (2000).

336. *See infra* Part III.C.3.

337. This, of course, begs the question of what functions are or are not essential.

productivity levels between disabled and nondisabled workers.³³⁸ For example, statistics from the U.S. Office of Vocational Rehabilitation indicate that 91 percent of disabled workers were rated either “average” or “better than average,” matching the rating given to nondisabled workers.³³⁹ Of course, as with the accommodations studies critiqued above, the accuracy of these studies’ findings can be called into question on the grounds of sample size, contextuality, and inappropriateness for extrapolation.³⁴⁰ This last limitation is especially true in the case of these productivity studies because they tend to be examinations of how individuals with particular disabilities fare in certain employment circumstances, mostly having to do with mentally disabled individuals performing janitorial services.³⁴¹ Additionally, the studies predate the ADA, and mostly analyze efficiency in the context of the federal government as an employer.³⁴² Thus, extending these findings ecumenically across the broad spectrum of people with disabilities raises strong econometric-based reservations.³⁴³ At the same time, these studies have some probative value as the only (currently) available empirical evidence.³⁴⁴

The second issue to note³⁴⁵ is that these studies fail to address directly the circumstance of a disabled worker whose nonaccommodated productivity is lower than average, despite the subject’s occasional overlap with accommodation analysis. This confluence is important, especially in the semi-efficient phase of the accommodation cost continuum, because it raises instances in which application of the ADA creates a contrary result from applying

338. A good review of the literature is provided by Reed Greenwood & Virginia Anne Johnson, *Employer Perspectives on Workers with Disabilities*, J. REHABILITATION, July–Sept. 1987, at 37.

339. Lester & Caudill, *supra* note 170, at 50–51; George E. Stevens, *Exploding the Myths About Hiring the Handicapped*, 63 PERSONNEL 57, 58 (1986).

340. See *supra* Part II.A.3.

341. See Adams-Shollenberger & Mitchell, *supra* note 170, at 56; Lester & Caudill, *supra* note 170, at 50–51; Martin et al., *supra* note 170, at 146; Ondusko, *supra* note 170, at 19–24.

341. Presumably, or at least feasibly, with less concern about efficiency due to the resources available.

342. The literature is reviewed in Greenwood & Johnson, *supra* note 338.

343. See *supra* Part II.A.3.

344. Stein, *Empirical Implications*, *supra* note 22, at 1672.

345. This Article addresses disability accommodations as opposed to the even larger question of disability employment. For a discussion of that issue, see generally Bob Dole, *Are We Keeping America’s Promises to People with Disabilities? Commentary on Blanck*, 79 IOWA L. REV. 925 (1994); Mark C. Weber, *Beyond the Americans with Disabilities Act: A National Employment Policy for People with Disabilities*, 46 BUFF. L. REV. 123 (1998).

classical economic principles. Although the point will be adumbrated in further detail below,³⁴⁶ for now it suffices to point out that, from an economic viewpoint, there is no discernable difference between the equivalent lower net products generated by (1) a worker with a disability who does not require an accommodation but who is less productive than a nondisabled peer; (2) the equally productive disabled worker provided with a reasonable accommodation; or (3) the comparatively hyperproductive worker with a disability provided with a proportionately hyperreasonable accommodation expense.³⁴⁷ From the ADA's viewpoint, however, the first worker is never protected (because she is unable to perform the essential job functions),³⁴⁸ the second worker always is (because she *was* able to perform the essential job functions),³⁴⁹ and the third may be protected, depending upon the total resources of the providing employer.³⁵⁰

Therefore, although some disabled workers will ultimately be less productive than their nondisabled peers, others may be more productive. Some will indeed require accommodations, and others will not. The assumption that any of these particular circumstances is always the case is empirically unfounded. Instead, a proper treatment assessing disability productivity should account for both positive and negative value fluctuations.³⁵¹

3. *Equity of the Status Quo.* Another deviation from the wholehearted utilization of neoclassical economic principles in my model is normative. The traditional paradigm operates on the assumption that the labor market effectively disciplines irrational prejudicial behavior (in this instance, excluding equally productive workers), and thus maintains a nondiscriminatory equilibrium.³⁵² Consequently, the baseline assumption is that the labor market is an equitable one, and that deviations from its normal operation due to regulatory mandates are economically inefficient.

346. See *infra* Part IV.B.1.

347. See *infra* Part IV.B.1.

348. 42 U.S.C. § 12,111(8) (2000).

349. *Id.*

350. *Id.* § 12,111(10)(B). The standard is discussed *supra* Part I.A.

351. This is a point to which I will soon turn. See *infra* Part III.C.2.

352. CLARK, *supra* note 264, at 196.

However, the baseline of the neoclassical economic paradigm of the labor market is a status quo designed by an empowered majority that has already absorbed existing prejudices and made them endogenous to future decisionmaking.³⁵³ The existence of *artificial* barriers (in contrast to *natural* barriers),³⁵⁴ whether physical or administrative,³⁵⁵ to workplace participation, and their acceptance as natural, is a classic example of this inculcated bias.³⁵⁶ To illustrate, recall the example of the wheelchair-using shop assistant. Suppose now that the shop, which sells various articles for religious usage, is modeled after St. Patrick's Cathedral, with numerous stairs at its entrance. From a purely economic perspective, installing an elevator next to the stairs is an inefficient expense solely related to hiring the disabled worker because an equivalent worker without a disability would not require this accommodation; it is irrelevant whether the employer (or the previous building owner) should have installed an elevator upon construction, despite the public accommodation overlap noted above.³⁵⁷ But it should be recognized as well that such a conclusion operates on an assumption that validates the existence of the artificial barrier; in this case, the mobility-impairing stairs. By contrast, the expenses involved in eliminating a parallel artificial exclusion, say a racially restrictive covenant,³⁵⁸ would not be deemed a validly cognizable cost, because the latter is viewed as an irrational distaste (although the existence of the covenant would also, at least initially, be recognized as a cost).³⁵⁹

Hence, any analysis that assumes market neutrality (or equitability) has reflexively erected obstacles to antidiscrimination principles that are entrenched in the same stereotypes the ADA and

353. Stein, *supra* note 286, at 200–01.

354. Some workers with disabilities will have impairments that even reasonable accommodations will be unable to ameliorate. Although some disability rights advocates assert that all exclusions from the workplace are artificial, I do not.

355. The ADA covers both types of barriers. 42 U.S.C. § 12,112.

356. Anita Silvers, *Formal Justice*, in *DISABILITY, DIFFERENCE, DISCRIMINATION: PERSPECTIVES ON JUSTICE IN BIOETHICS AND PUBLIC POLICY* 13, 20 (James P. Sterba & Rosemarie Tong eds., 1998).

357. See Gruson, *supra* note 49, at B3 (listing modifications totaling \$1.8 million accepted by the manager of the Empire State Building as part of a settlement with the Justice Department).

358. See *Shelley v. Kraemer*, 334 U.S. 1, 22–23 (1948) (holding that state enforcement of racially restrictive covenants violates the Equal Protection Clause of the Fourteenth Amendment).

359. RICHARD O. ZERBE, JR., *ECONOMIC EFFICIENCY IN LAW AND ECONOMICS* 272–75 (2001).

other civil rights statutes seek to alter.³⁶⁰ Whether embracing these stereotypes is an unconscious,³⁶¹ semiconscious,³⁶² conscious,³⁶³ or cognitively biased³⁶⁴ decision remains hotly debated, as does the issue of whether preferences are fixed³⁶⁵ or malleable.³⁶⁶ For now, however, it is sufficient to say that totally accepting the neoclassical economic model's view that the existing prejudicial preferences built into the marketplace are neutral will only serve to continue those stereotypes.³⁶⁷

Whether an emendation to the labor market's status quo in the form of the provision of an accommodation is an equalizing measure or a measure which goes beyond equality is a contentious issue. Some disability rights advocates advance the theory that the provision of accommodations serves to ameliorate artificial exclusions from the workplace. They analogize, for example, designing workplaces with stairs to designing workplaces without restrooms for both sexes.³⁶⁸ In contrast, nearly every academic who takes an economic approach to analyzing the ADA maintains that Title I abluces from more traditional

360. Another example would be the expenses engendered by extending benefits normally reserved to heterosexual couples to same-sex couples. If the initial departure point is the provision of benefits to all individuals with life partners, then the types of relationship (and the sex identities) are irrelevant.

361. See, e.g., Charles R. Lawrence III, *The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism*, 39 STAN. L. REV. 317, 322 (1987) (offering two different psychological explanations for unconscious racism).

362. See, e.g., Kimberlé Williams Crenshaw, *Race, Reform, and Retrenchment: Transformation and Legitimation in Antidiscrimination Law*, 101 HARV. L. REV. 1331, 1331 (1988) (arguing that, in addition to unconscious thought, racism forms a hegemonic force in American society, one in which blacks have been created as a subordinated "other").

363. See, e.g., Alan David Freeman, *Legitimizing Racial Discrimination Through Antidiscrimination Law: A Critical Review of Supreme Court Doctrine*, 62 MINN. L. REV. 1049, 1051 (1978) (asserting that civil rights statutes are actually used by the white majority to legitimate the very racial inequality and oppression they were meant to remedy).

364. An especially perceptive approach is found in Linda Hamilton Krieger, *The Content of Our Categories: A Cognitive Bias Approach to Discrimination and Equal Employment Opportunity*, 47 STAN. L. REV. 1161, 1164 (1995), where Professor Krieger argues that many prejudiced, employment-based decisions result from categorization-related decision errors, not intentionally discriminatory motivations.

365. See George J. Stigler & Gary S. Becker, *De Gustibus Non Est Disputandum*, 67 AM. ECON. REV. 76, 76 (1977) (arguing that preferences are "stable over time").

366. AMITAI ETZIONI, *THE MORAL DIMENSION: TOWARDS A NEW ECONOMICS* 31-32 (1988) (arguing that preferences change "as the constraints under which [people] 'implement' them change").

367. For an application of this theory in another context, see generally William M. Landes, *The Economics of Fair Employment Laws*, 76 J. POL. ECON. 507 (1968).

368. The philosophical underpinnings of this theory are well stated in Silvers, *supra* note 356.

forms of antidiscrimination (typically, Title VII).³⁶⁹ Consequently, they view the provision of accommodations as going beyond what Professor Kelman describes as “simple” discrimination,³⁷⁰ and passing into redistribution or even, in extreme circumstances, affirmative action.³⁷¹

The disagreement over whether the ADA achieves an antidiscrimination medium, supersedes it, or achieves some combination of both, is more than merely academic.³⁷² Where a policymaker believes that the equality line falls, and hence where it is irrational behavior that is averted, will inform where she draws the lines between cost bearers. If accommodations effectuate equality, then it will seem appropriate to lay the costs for those accommodations at the feet of employers. On the other hand, if reasonable accommodations are really redistributive devices, however laudable, then it would be more apposite to have the general tax base bear those costs.³⁷³ Additionally, this issue is relevant to the debate over the undervaluation of disabled workers’ services. Just as was found when examining the nature of accommodations, the closer to the equality paradigm one gets, the less fitting it is to allow an equally valuable worker (who also happens to have a disability) to undervalue her services as the price of

369. See 42 U.S.C. § 2000e–2000e-17 (2000) (barring employment discrimination on the basis of race, color, religion, sex, and national origin); see also John J. Donohue III, *Employment Discrimination Law in Perspective: Three Concepts of Equality*, 92 MICH. L. REV. 2583, 2585–86 (1994) (documenting the evolution of the notion of equality over the twentieth century); Samuel Issacharoff & Justin Nelson, *Discrimination with a Difference: Can Employment Discrimination Law Accommodate the Americans with Disabilities Act?*, 79 N.C. L. REV. 307, 314–15 (2001) (noting that the ADA requires similarly situated individuals to be treated differently rather than more traditional requirements, exemplified by Title VII, that similarly situated individuals be treated similarly); Karlan & Rutherglen, *supra* note 3, at 3 (“[U]nder the civil rights statutes . . . plaintiffs . . . cannot insist upon discrimination in their favor; disabled individuals often can.”); Kelman, *supra* note 35, at 834–35, 851 (arguing that the law should prohibit “simple discrimination,” which is the focus of Title VII, without limit, but that accommodation requirements should also be limited when accommodation resources could be better spent on other societal priorities).

370. Kelman, *supra* note 35, at 840.

371. *Id.* at 852. As a normative matter, Kelman is agnostic about whether or not such redistribution is good or ill. MARK KELMAN, STRATEGY OR PRINCIPLE? THE CHOICE BETWEEN REGULATION AND TAXATION 81–93 (1999).

372. In *Erickson v. Board of Governors of State Colleges and Universities for Northeastern Illinois University*, 207 F.3d 945 (7th Cir. 2000), to give one example, Judge Easterbrook contrasted the ADA with “real anti-discrimination law[s].” *Id.* at 951. For an assessment of judicial attitudes toward the ADA and their implications, see Aviam Soifer, *Disabling the ADA: Essences, Better Angels, and Unprincipled Neutrality Claims*, 44 WM. & MARY L. REV. 1285 (2003), and Aviam Soifer, *The Disability Term: Dignity, Default, and Negative Capability*, 47 UCLA L. REV. 1279, 1328 (2000).

373. See *infra* Part IV.C.

gaining entry to the labor market; such underbidding would simply compound preexisting societal prejudices.³⁷⁴

C. *Measuring Variables*

In this Part, I set forth the variables used to measure the weighted factors in the proposed framework. Respectively, these are willingness to pay, disabled profit, average profit, and societal efficiency gains.

1. *Willingness to Pay.* Measuring and weighing the effect of variables under a Cost-Benefit Analysis (CBA) involves monetizing the outcomes of proffered policy changes.³⁷⁵ These calculations are frequently performed through the balancing of a “willingness to pay” (WTP) standard as against a “willingness to accept” (WTA) standard.³⁷⁶ The compensating variables (CV) test, developed by Professor Hicks,³⁷⁷ measures the efficiency of two welfare positions, normally, the status quo as against the resulting policy change. To determine an individual’s CV, her WTP for positive change is compared to her WTA for negative change. If the sum of all CVs for a policy change is positive, then the policy is considered efficient.³⁷⁸ To illustrate: suppose the person living in apartment *A* would be willing to pay his next-door neighbor in apartment *B* as much as \$500 not to play Lawrence Welk music for a year, while neighbor *B* is unwilling to accept less than \$2,000 for the same omission.³⁷⁹ Polka-averse neighbor *A* has a \$500 CV; polka-loving neighbor *B*’s CV is \$2,000.

374. For example, Epstein, *supra* note 269, and others like Schwab and Willborn, *supra* note 16, claim that workers with disabilities could either underbid the value of their services or forego health insurance benefits as a way of capturing accommodation costs. Also, working for lower remuneration or benefits might indeed be an inducement for nondiscriminatory employers to engage workers with disabilities. However, it would also reinforce the devaluation of those individuals beset by unfounded stereotypes, and so continue market failure. Acceding to employers’ tastes by bribing them through reduced compensation also reduces whatever social good and external benefits can arise from equal pay and occupational dignity. In addition, because the prospects of recovering the cost of education and training are influenced by prevailing market conditions, utility will be lost as a result of reduced willingness among the disabled to invest in their own human capital.

375. ZERBE, *supra* note 359, at 7.

376. *Id.*

377. COST-BENEFIT ANALYSIS, *supra* note 189, at 177–80.

378. ZERBE, *supra* note 359, at 7.

379. See generally COYNE STEVEN SANDERS & GINNY WEISSMAN, CHAMPAGNE MUSIC: THE LAWRENCE WELK SHOW (1985) (describing the pre-elevator music of this former mainstay of Saturday night television).

Although *A* would like a law passed to restrict *B*'s musical taste, because *B*'s net CV is \$1500 greater than that of *A*, no law would be passed in respect to *A*'s preference. However, if ten other mutual neighbors (or anti-polka activists) felt the same way as *A* does, the collective CV would be \$5,000. In that circumstance, a noise pollution ordinance would then be efficient under the CV test since the collective CVs exceed neighbor *B*'s CV by \$3,000.³⁸⁰

When measuring the reasonableness of accommodations, the operative CV is that of WTP, rather than WTA, for the practical reason that the ADA does not allow workers with disabilities to contribute toward the cost of their accommodations. This is for two inflexible, statutory reasons. First, the operative notion is that the accommodation requested is reasonable if it is expedient. Thus, accepting a lower-costing accommodation would be accepting an unreasonable accommodation.³⁸¹ Second, the cost of a reasonable accommodation cannot be borne by disabled employees through a reduction in their wages.³⁸² Both options are certainly plausible from an economic perspective, but fall outside the ADA, which prohibits wage reduction,³⁸³ and thus my analysis.³⁸⁴ Moreover, a vast quantitative gulf empirically divides WTP from WTA.³⁸⁵ For instance, in the context of environmental rights, researchers discovered that

380. If all this smells "Coasean," it should. *See generally* Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960) (applying this form of analysis in the context of negligence law). Coase's concept of transaction costs is discussed in greater detail *infra* Part IV.A.2.

381. *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 542-43 (7th Cir. 1995).

382. However, Epstein and Schwab and Willborn suggest exactly this. *See* EPSTEIN, *supra* note 269, at 484; Schwab & Willborn, *supra* note 16, at 1279.

383. *See* 42 U.S.C. § 12,112(b)(4) (2000) (including the denial of "equal jobs or benefits" in the construction of "discriminate").

384. It does, however, raise the important issue of whether restrictions on wage reduction (or, to be more accurate, mandates of wage equality), act as a disincentive for employers hiring disabled workers. This argument was initially articulated by EPSTEIN, *supra* note 269, at 361, but elaborated upon by Jolls, *supra* note 15, at 255-61. Combining their assertions (Epstein's was strictly theoretical; Jolls's contained an empirical model), the thrust of the argument is that employers may have already hired disabled workers—or, more likely, some of their able-bodied workers may have become disabled—in which case they are required by a well-enforced law to continue their wage equality. At the same time, these same employers, wishing to avoid taking on accommodation costs, will avoid hiring new employees with visibly detectable disabilities. This is especially so when the laws enforcing hiring decisions are as impotent as detailed above, *see supra* Part I.A and accompanying text.

385. *See, e.g.,* Daniel Levy & David Friedman, *The Revenge of the Redwoods? Reconsidering Property Rights and the Economic Allocation of Natural Resources*, 61 U. CHI. L. REV. 493, 506-15 (1994) (noting that in the context of environmental goods, the divergence might be significant).

WTA valuations ranged from three to nineteen times higher than WTP valuations.³⁸⁶ This type of deviation is exacerbated when the right in question is considered unique by the person valuing WTA, as might well be the case in employment.³⁸⁷

2. *Disabled Profit.* To properly capture the range of disabled workers, both those who will require accommodations and those who will not, I utilize a variable for disabled profit (DP). This variable reflects the total employer net profit on any given employee with a disability, calculated as the total profit gains produced by that individual disabled worker (DG), plus any quantifiable external benefits that accrue due to the provision of accommodation (QB), minus the disabled worker's salary (WS), her accommodation costs (AC), and any quantifiable costs (QC). Thus, algebraically: $DP = DG + QB - (WS + AC + QC)$.

DP, therefore, reflects the net benefit conferred upon the employer through the employment transaction and accounts for the possibility of the disabled employee capturing any amount of quantifiable external benefits, from negative to positive. In instances where no external benefit is engendered, QB has no value (so that $QB = 0$). This is also true where there are no external costs involved, ($AC = 0$). For the purposes of manageable hypotheticals, this Article assumes both QB and AC have zero values. In the real world, however, assessable external benefits and costs³⁸⁸ can both range from zero onwards, so that in reality ($QB \geq 0$) and ($AC \geq 0$). The DP variable is neutral, thereby accounting for high, low, and no accommodation costs, contingent upon what workplace alterations are requested in each individual circumstance. Thus, as a variable, DP allows for inclusion in the calculus the entire range of quantifiable accommodation costs, which will vary from employee to employee.

3. *Average Profit.* One weakness of the DP variable is that it is difficult to disaggregate the productivity of any given employee.³⁸⁹

386. Richard O. Zerbe, Jr. & Linda J. Graham, *The Role of Rights in Benefit Cost Methodology: The Example of Salmon and Hydroelectric Dams*, 74 WASH. L. REV. 763, 769 (1999).

387. *Id.*

388. *See supra* Part II.A.

389. Parenthetically, because my model assumes that employees are of equal value as they enter a given employment, DP does not capture two variables within the full range of "opportunity cost." Specifically, assuming profit maximization and a diminishing marginal

People frequently work in tandem with others, and their productivity is affected by this synergy,³⁹⁰ as well as by a myriad assortment of other considerations.³⁹¹ Unless a real life scenario mirrors a hypothetical one in which employees manufacture a particular item, say a widget, and the level of acceptable productivity is absolutely known, e.g., fifty widgets a day, it is difficult to accurately measure individual productivity.³⁹²

One way to address the issue of absolutely quantifying individual productivity is to assign a value for an employer's average yearly profit from each employee (AP). Doing so takes into account two realities of the workplace: first, that some employees are consistently

product of labor, a firm will hire workers until marginal cost (MC) is equal to the marginal benefit (MB). Assume that such a firm hires a disabled worker while MB is still greater than MC for every worker and that the marginal benefit of hiring a disabled worker (MBd) is less than that of a nondisabled worker (MBnd). Such a hire would be net profitable. The hiring of more workers, however, affects previously hired workers. At the point when $MC = MBnd$ (profit maximization), $MC > MBd$. This simply illustrates that in reality the net profitability standard effectively requires employers to endure extra *costs*. Secondly, it is conceivable that hiring an individual disabled worker could force a corresponding nondisabled worker onto public assistance, hence evoking a negative externality.

390. Much like any team (sports or otherwise), the total working group can exceed the sum of its parts and is affected by numerous, interconnected factors. See generally MURRAY AINSWORTH, *MANAGING PERFORMANCE, MANAGING PEOPLE: UNDERSTANDING AND IMPROVING TEAM PERFORMANCE* (2002) (examining factors relevant to workplace performance); BRIAN DIVE, *THE HEALTHY ORGANIZATION: A REVOLUTIONARY APPROACH TO PEOPLE & MANAGEMENT* (2002) (discussing how to develop a healthy organization); RONALD R. SIMS, *ORGANIZATIONAL SUCCESS THROUGH EFFECTIVE HUMAN RESOURCES MANAGEMENT* (2002) (explaining that management of human resources is the key to success).

391. What, exactly, makes people at work more productive remains both a mystery as well as a holy grail for human resource scholars. The theories paraded about, some of which seem more plausible than others, have an amazing range. See, e.g., John Philip Bachner, *Eliminate Those Glaring Errors: Adjust Quality, Not Quantity, of Light to Improve Worker Productivity and Reap Bottom-Line Benefits*, 43 *MANAGING OFF. TECH.* 16 (1998) (illuminating in more effective ways); James T. Berger, *Flower Power: Beyond Pure Aesthetics, Scientific Studies Show Interior Landscaping Cleans the Air and Provides a Catalyst for Worker Productivity*, 67 *J. PROP. MGMT.* 25 (2002) (providing interior plants); Shari Caudron, *Humor is Healthy in the Workplace*, 71 *PERSONNEL J.* 63 (1992) (increasing mirth); Elizabeth Danziger, *Minimize Office Gossip*, 67 *PERSONNEL J.* 31 (1988) (opening formal lines of communication); Terri Gutierrez & R. John Freese, *Dress-Down Days: Benefit or Burden?*, 69 *CPA J.* 32 (1999) (informalizing work-wear); Daniel McGinn, *No Place to Hide Stuff: Can Funky New Furniture Make Us More Productive?*, *NEWSWEEK*, May 26, 1997, at 50 (modernizing interior design).

392. Although this is precisely what law professors and economists, especially law and economics professors, do. On rare occasions, employers also do so. See *Fisher v. Transco Servs.-Milwaukee, Inc.*, 979 F.2d 1239, 1241-42 (7th Cir. 1992) (describing how the defendant used a "Measured Day Work Program" in its grocery warehouse to ensure that employees actively worked for four hundred seven of the four hundred eighty minutes in each workday).

more productive than others;³⁹³ and second, that even within the group of more productive employees, those workers are human.³⁹⁴ Using an average yearly net profit amount (in lieu of daily or weekly ones) as a variable recognizes that employers either have an overall fixed production objective to extract from its workforce that can then be divided by the number of its employees, and/or that employers seek a certain net productivity margin from any given employee that may vary from day to day, but will in the end average out to a certain level. Thus, the employer's AP is equal to the average productivity of employees less their average salary. This variable may thus be used as a baseline. An employer expects to get an average employee who will have average productivity and profitability. In the end, some will be better widget producers than others, but on average the absolute number of widgets can be calculated, minus the average salary for widget makers. The figure also assumes there are no accommodation costs or benefits associated with hiring or retaining the average nondisabled worker, which in all likelihood is an illusory assumption.³⁹⁵

4. *Social Benefit Gain.* Social Benefit Gain (SBG) is the total assessable benefit reaped by society in having an economically viable disabled worker employed instead of receiving social benefits. The utility inuring to society, called the SBG, is measured as the equivalent of the disabled worker's salary (WS), plus all quantifiable benefits (QB), including the savings of public assistance costs that would be engendered by having that worker excluded from the labor market, less the accommodation cost (AC) and any quantifiable negative externalities (QC). Algebraically, this can be stated as: $SBG = (WS + QB) - (AC + QC)$. To illustrate, compare two instances, the first involving an employable worker with a disability, and the second, an unemployable disabled worker.

393. Within the legal academy, one has only to look at the hundreds of dazzling articles and many books published by scholars Cass Sunstein and Richard Posner to grasp this point about human variation (and also feel humbled).

394. Put colloquially, everyone has good and bad days. *See generally* JON R. KATZENBACH, PEAK PERFORMANCE: ALIGNING THE HEARTS AND MINDS OF YOUR EMPLOYEES (2000) (arguing that worker satisfaction is critical to successful businesses).

395. Accommodation costs could include myriad circumstances, including allowing a worker to watch his daughter's soccer game. As to benefits, these can mirror those cited above with respect to hiring and retaining disabled employees. *See supra* Part II.A.2.

First, take the case of Sally, a severely hard-of-hearing worker. To perform the essential job functions of an office manager, a job that pays a \$50,000 salary, Sally requires a part-time American Sign Language (ASL) interpreter at an annual cost of \$10,000. If Sally does not obtain this job, she will receive public assistance at a yearly cost of \$12,000 (QB);³⁹⁶ if Sally is employed, she will contribute taxes at a rate that can be represented by the fraction (WS/T) .³⁹⁷ Depending on the size and resources of an employer, accommodating Sally may or may not be reasonable, and thus the economic efficiency of employing her as an office manager will be contextually specific to that employer. From a societal perspective, however, the efficiency gains of having Sally in the workplace will produce a significant SBG value. Sally has a SBG of $\$52,000 + \$50,000/T$; that is, her salary of $\$50,000 (WS) + (\$12,000 (QB) + \$50,000/T (QB)) - (\$10,000 (AC) + \$0 (QC))$. Otherwise, in the case of unemployment, Sally has a SBG of $-\$12,000 + \$0/T$; because $\$0(WS) + (\$0(QB) + \$0/T(QB)) - (\$0(AC) + \$12,000(QC))$. Under this analysis, it is in society's interests that Sally be employed, and that her requested accommodation be paid for.

Sally's hypothetical also raises a tangential issue that is likewise not directly addressed by the ADA, but is pertinent to this inquiry.³⁹⁸ Suppose that Sally can perform all the essential job functions as a proofreader without an accommodation, and could earn a salary of \$20,000. From a private employer's perspective, Sally is as economically efficient as a non-hearing impaired employee. But is the statute's purpose "merely" to place a worker with a disability in any achievable position of employment, or is it designed to maximize that particular individual's utility, as in the case of being an office

396. This is not, unfortunately, a far-fetched possibility. See Louis Uchitelle, *Laid-Off Workers Swelling the Cost of Disability Pay*, N.Y. TIMES, Sept. 2, 2002, at A1 (discussing the recent surge in Social Security disability rolls). For more empirically-based estimates of transfer populations, see *infra* note 538 and accompanying text.

397. The denominator variable, T , can vary depending on the graduated tax rate. In the scenario presented in the text that follows, it is possible (although not necessarily true) that the graduated tax rate will differ between two jobs which pay different salaries. The point to be taken away, however, is that a variable is provided which accounts for contributions back to the public fisc.

398. Professor Verkerke's article on "matching" also neglects this point, although it would seem that a basic tenet of matching would be how productive an employee ought to be. See Verkerke, *supra* note 14. To be fair, Verkerke's analysis still functions (albeit in a bit of a vacuum from reality) so that an answer to this question is not really necessary (but would have been helpful as well as stimulating).

manager? The framework that I propose allows for both alternatives.³⁹⁹ Where the private employer bears the reasonable accommodation costs, it is more likely (contingent upon the economy of the employer) that the disabled worker will have been ADA-matched as a proofreader. Where the employer is either a private employer and the calculus falls within Kaldor-Hicks welfare efficiency, or the employer is a state entity that can in turn redistribute costs, the disabled worker might have the option of being an office manager. Note that the circumstances wherein greater accommodation costs are borne by any provider dovetail with increasing social utility.⁴⁰⁰

In cases where the disabled worker is unemployable, the wholly inefficient SBG will equal zero or less (because any amount greater than zero is still a positive gain). In this circumstance, the only economically viable option is to exclude those individuals from workplace opportunity.⁴⁰¹ To achieve this status, a disabled individual would be unable to hold any position, even with the provision of an accommodation, and still produce a net social gain of \$1. As a result, this individual would receive payments from the government as a means of compensating her exclusion from the labor market.

An admitted shortcoming of this variable is that it limits itself to quantifiable benefits, whereas society also gains benefits that cannot be easily quantified (what Blanck called “ripple effects”⁴⁰²). When an unemployed disabled person is able to hold a job due to the provision of an accommodation, or an employed disabled person is able to find

399. I therefore agree with some of the arguments made by Paulette M. Caldwell. See Paulette M. Caldwell, *Reaffirming the Disproportionate Effects Standard of Liability in Title VII Litigation*, 46 U. PITT. L. REV. 555, 579–83 (1985) (arguing that Title VII enhances workplace efficiency by increasing the pool of qualified applicants of members of the protected class through the elimination of employment discrimination).

400. See generally John J. Donohue III, *Prohibiting Sex Discrimination in the Workplace: An Economic Perspective*, 56 U. CHI. L. REV. 1337 (1989) (supporting antidiscrimination legislation from an economic perspective).

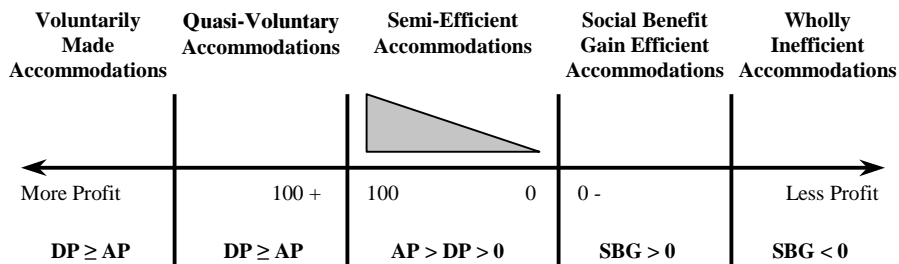
401. Although some might argue that, regardless of economic manifestations, workers with disabilities have a right to work and thus be productive (or at least active) members of society. E.g., Kavka, *supra* note 185, at 274. See also Wax, *A Reciprocal Welfare Program*, *supra* note 251 (arguing an interesting variation on this theme, that not only should individuals capable of any gainful employment be required to work, but that society has a duty to so assist them). I discuss Wax’s proposal within the context of Socially Efficient, Kaldor-Hicks Welfare Enhancing, *infra* Part IV.B.

402. Berven & Blanck, *supra* note 178, at 89.

and keep a better job, society gains in several intangible ways, including increased investment in human capital.⁴⁰³

IV. THE ACCOMMODATION COST CONTINUUM


The proposed law and economics model for assessing the reasonableness of disability-related accommodations spans a continuum of accommodation costs. These run the gamut from Wholly Efficient Accommodations (some of which are provided voluntarily and others that would be provided voluntarily absent a market failure), to Socially Efficient Accommodations (including Semi-Efficient Accommodations coerced through ADA litigation because they extract a differential cost from employers, and Social Benefit Gain Efficient Accommodations, where individual workers and general society benefit, but employers do not), to Wholly Inefficient Accommodations (wherein excluding workers with disabilities is the only economically feasible option). The accommodation cost continuum may be diagrammed as:



The accommodation cost continuum can also be conceived of schematically as covering a range of economic effects, from Pareto Efficient Accommodations (wherein both disabled employees and their employers benefit without loss) to Kaldor-Hicks Efficient Accommodations (encompassing an area of semi-efficient accommodations in which both disabled workers and their employers benefit but employers benefit less than if they discriminate against disabled workers, and SBG accommodations where disabled workers and society benefit, but not employers), to Wholly Inefficient Accommodations (wherein disabled workers benefit, but gains are

403. See *infra* Part IV.B.

not achieved by either employers or society at large). The accommodation cost continuum may be presented in chart form as:

Wholly Efficient Accommodations <i>Voluntarily Made Accommodations</i> <i>Quasi-Voluntary Accommodations</i>	PARETO OPTIMAL	 Greater Profit Lesser
Semi-Efficient Accommodations <i>(ADA Accommodations)</i>	KALDOR-HICKS WELFARE ENHANCING	
Socially Efficient Accommodations <i>(SBG Accommodations)</i>	KALDOR-HICKS WELFARE ENHANCING	
Wholly Inefficient Accommodations	WHOLLY INEFFICIENT MANDATES	

The following subsections discuss each phase of the continuum in turn, beginning with wholly efficient accommodations and proceeding through wholly inefficient accommodations.

A. *Wholly Efficient (Pareto Optimal) Accommodations*

1. *Voluntarily Made Accommodations.* The section of the continuum entitled “Voluntarily Made Accommodations” reflects instances in which employers voluntarily hire, retain, and accommodate disabled employees at their own expense.⁴⁰⁴ The reasons why an employer chooses to accommodate a worker can be fairly complex, including reasons that are typically considered to be economically inefficient:⁴⁰⁵ a strong relationship exists between an employer and an able-bodied employee⁴⁰⁶ prior to the

404. The same incentives that operate for the provision of accommodations in this section also apply to the hiring and retention of equally disabled workers who do not require accommodations.

405. Epstein characterizes these motivations as arising from “pity,” EPSTEIN, *supra* note 269, at 486, but they need not.

406. The transmogrification of able-bodied individuals into people with disabilities is, among minority groups, an almost unique phenomenon (the exceptions being those people of color who had previously “passed” as white or did not know their identities, see, e.g., Trina Jones, *Shades of Brown: The Law of Skin Color*, 49 DUKE L.J. 1487 (2000), and those few individuals who change their sex), and contributes to reducing the sense of “otherness.” It is for this reason that I have opposed proposals to narrow Title I’s definition of disability to the “seriously” disabled, even though to date the largest category of people asserting Title I claims are able-bodied individuals who conceive back-related maladies. Although grounded in anecdote, I believe that when a known and valued able-bodied employee transmogrifies into a known and valued employee with a disability, the disabled community as a whole benefits.

manifestation⁴⁰⁷ of the latter's disability;⁴⁰⁸ individual employers' motivations related to social justice and/or diversity;⁴⁰⁹ previously positive experiences with hiring disabled workers;⁴¹⁰ or simply employers' or human resource managers' good-natured willingness to give a member of a marginalized group a chance to demonstrate their abilities.⁴¹¹ For purposes of the economic analysis herein

Michael Ashley Stein, *Employing People with Disabilities: Some Cautionary Thoughts for a Second Generation Civil Rights Statute*, in EMPLOYMENT, DISABILITY, AND THE AMERICANS WITH DISABILITIES ACT: ISSUES IN LAW, PUBLIC POLICY, AND RESEARCH 51, 55 (Peter David Blanck ed., 2000) (publishing a speech given in 1997 at the University of Iowa).

407. Disabilities can manifest for a number of reasons. See generally Chung-Yi Li, *Longest Held Occupation in a Lifetime and Risk of Disability in Activities of Daily Living*, 57 OCCUPATIONAL & ENVTL. MED. 550 (2000) (examining "the association between the longest held occupation in a lifetime and the risk of disability in activities of daily living . . . among elderly people . . . in Taiwan"); Catherine A. Sarkisian et al., *Correlates of Attributing New Disability to Old Age*, 49 J. AM. GERIATRICS SOC'Y. 134 (2001) (documenting the attribution to old age of disability among women); Judith A. Turner et al., *Predictors of Chronic Disability in Injured Workers: A Systematic Literature Synthesis*, 38 AM. J. INDUS. MED. 707 (2000) (analyzing a variety of factors associated with chronic low-back injuries). As reported by the 1991–1992 Survey of Income and Program Participation, the average rates of disability by age are 18–44 years: 13.6 percent; 45–64 years: 29.2 percent; 65–74 years: 44.6 percent; 75–84 years: 63.7 percent; 85 years and over: 84.2 percent. John McNeil, *Disability*, in POPULATION PROFILE OF THE UNITED STATES 32 (1995), at http://landview.census.gov/prod/1/pop/profile/95/14_ps.pdf (on file with the *Duke Law Journal*). Additional census data is available at <http://www.census.gov/hhes/www/disability.html> (last visited Aug. 21, 2003) (on file with the *Duke Law Journal*).

408. See generally Morley Gunderson & Douglas Hyatt, *Do Injured Workers Pay for Reasonable Accommodation?*, 50 INDUS. & LAB. REL. REV. 92 (1996) (finding that newly disabled workers at large firms received accommodations under Canada's similar law); Nancy R. Mudrick, *Employment Discrimination Laws for Disability: Utilization and Outcome*, 549 ANNALS AM. ACAD. POL. & SOC. SCI. 53 (1997) (finding the same for American workers under the ADA).

409. Voluntarily provided accommodations are, unfortunately, the least reported aspect of the disability-related employment story. Although Blanck has examined the corporate cultures of a few large organizations, see *The Law, Health Policy, and Disability Center* at the University of Iowa Website, <http://disability.law.uiowa.edu/lhpdc/civilrights/ada.html> (last visited Sept. 25, 2003) (on file with the *Duke Law Journal*), it stands to reason that this phenomenon occurs in other businesses. It certainly seems to have motivated the exceedingly patient Wisconsin in *Vande Zande*, see *supra* Part I.C.1. For anecdotal examples, see David Nicklaus, *Three Trainees' Stories: Applicants with Disabilities Find Success, Challenges, in Seeking Jobs*, ST. LOUIS POST-DISPATCH, July 9, 2000, at B5; Joan Fleischer Tamen & Damian P. Gregory, *Meeting the Challenges: Many Employers Are Discovering the Rewards of Hiring Disabled Workers*, SUN-SENTINEL (Fort Lauderdale, FL), July 3, 2000, at 14.

410. This was one of the factors reported in Peter David Blanck et al., *The Emerging Workforce of Entrepreneurs with Disabilities: Preliminary Study of Entrepreneurship in Iowa*, 85 IOWA L. REV. 1583 (2000) ("[I]nvestigating the composition, quality, and competitiveness of the emerging workforce of persons with disabilities.").

411. The late disability-rights advocate, Paul Hearne, emphasized this strategy, first as president and founder of JOB (Just One Break), see <http://www.justonebreak.com>, (last visited

engaged, however, motivations beyond the strictly economically efficient are not addressed.⁴¹² Consequently, as stipulated under the neoclassical economic model of the labor market, employers act in their own interests and want to maximize their individual profits. In the normal course of events, they respond to economic pressures which stimulate them to either hire, retain, and/or accommodate disabled employees because Voluntarily Made Accommodations are wholly efficient (from both a net profit and a Pareto perspective) for the providing employer.⁴¹³

The primary reason for an employer to voluntarily hire, retain, and perhaps provide an accommodation to an employee with an immediately discernable disability (or one that is either revealed or manifests after a job offer has been extended)⁴¹⁴ is that that employee

Aug. 19, 2003) (on file with the *Duke Law Journal*), and afterwards as president of another organization with similar goals: the Dole Foundation for Employment of People with Disabilities.

412. These motivations, although laudable, are not predictable and thus not useful for building an economic model capable of repetition and certainty.

413. Sometimes employers also respond to a combination of incentives, for instance, hiring mentally retarded people to perform menial, low-paid tasks. The studies cited, *see supra* Part II.A.1., present the positive results of these actions, but there are also less happy endings. *See* EEOC v. CEC Entm't, Inc., No. 98-C-698-X, 2000 U.S. Dist. LEXIS 13934 (W.D. Wis. Mar. 14, 2000) (ordering CEC to rehire a mentally disabled former employee); EEOC v. Hertz Corp., No. 96-72421, 1998 U.S. Dist. LEXIS 58 (E.D. Mich. Jan. 6, 1998) (upholding the dismissal of two mentally disabled, job-coached workers on the grounds that making an accommodation does not concede reasonableness).

414. Pursuant to Title I, employers cannot inquire into the history, existence, or extent of a person's disability. 42 U.S.C. § 12,112(b)(4)(A) (2000); *see* Chai Feldblum, *Medical Examinations and Inquiries Under the Americans with Disabilities Act: A View from the Inside*, 64 TEMP. L. REV. 521, 531 (1991) (analyzing "the medical examinations and inquiries section of the employment title of the ADA" using legislative history). Conversely, when a person has a disability that is not readily ascertainable and does not disclose to her employer the existence of her disability, she will not be protected under the ADA's auspices. *Id.* Much as, under Title VII, if a person's religious convictions prevent her from performing her employment, she is not protected unless she had previously disclosed that limitation. *See, e.g.,* Johnson v. Angelica Unif. Group, Inc., 762 F.2d 671 (8th Cir. 1985) (denying recourse to an employee who was terminated for missing work on religious holidays because she had not informed her employer of the holidays). This raises a very interesting (but secondary) issue relating to individuals without discernable disabilities that I have not seen addressed in the literature. Professor Verkerke's article analyzes the circumstance of a not-readily knowable disability in the context of what happens when that nondiscernable impairment prevents the employee from fulfilling her essential job functions ("mismatching"), and discusses the implications for her firing ("churning") and possible exclusion from similar future employment ("scarring"). Verkerke, *supra* note 14. Not addressed was the flip side of this issue. First, for the purposes of attempting to enculturate within a firm and avoid prejudice, when should a person with a nonvisible disability disclose that disability? This is an especially pertinent question if the disability in question is an episodic one and/or a mental disability that is likely to encounter strong prejudice.

is considered to be equally as productive as, or more productive than (and hence net profitable), an alternatively available employee without a disability. Recall from the discussion above that to be protected under its auspices, the ADA stipulates that employees with disabilities must be qualified,⁴¹⁵ meaning that they are as productive as an equivalent, nondisabled employee either with or without the provision of a reasonable accommodation⁴¹⁶ (i.e., DP must always equal or exceed AP). Workers with disabilities can be at least as profitable as nondisabled workers and bring about Voluntarily Made Accommodations through three typical circumstances: (1) the disabled employee can be one who is hyperproductive and does not require an accommodation; (2) the worker with a disability can be hyperproductive to the extent that his higher-than-average productivity balances out or exceeds the cost of an accommodation; or (3) the employee with a disability can be of average productivity and not need a workplace accommodation. Note that only the second instance raises the prospect of an ADA accommodation.

Returning to the earlier example of widget production as a means of absolutely measuring and defining acceptable levels of production,⁴¹⁷ assume that Gidget, a person with the condition spina bifida,⁴¹⁸ applies for a job at Worldwide Widget Works (WWW). Assume further that the average output for any given employee at WWW is fifty widgets a day ($AP = 50$). Accordingly, any widget worker who will, at year's end, have achieved an AP of 50 or higher will be considered an acceptable laborer. Finally, for simplicity's sake, suppose that employing Gidget does not engender, either positively

See generally SUSAN STEFAN, HOLLOW PROMISES: EMPLOYMENT DISCRIMINATION AGAINST PEOPLE WITH MENTAL DISABILITIES (2002) (examining the implications of the ADA for persons with mental disabilities). Second, does the notion of constructive notice, which is not universally accepted as case law in the Title VII context, extend to disability discrimination?

415. 42 U.S.C. § 12,111(8).

416. *Id.*

417. *See supra* Part III.C.3.

418. Medically defined as an “embryologic failure of fusion of one or more vertebral arches,” STEDMAN’S MEDICAL DICTIONARY, *supra* note 115, at 1671, spina bifida can manifest a wide variety of functional limitations, and therefore presents a disabling condition especially conducive to the changing hypothetical utilized in this section. *See generally* Birgitte M. Blatter et al., *Heterogeneity of Spina Bifida*, 55 TERATOLOGY 224 (1997) (documenting the association of specific types of spina bifida with general risk factors for the disease); Ineke M. Pit-ten Cate et al., *Disability and Quality of Life in Spina Bifida and Hydrocephalus*, 44 DEVELOPMENTAL MED. & CHILD NEUROLOGY 317 (2002) (discussing “the impact of severity and type of condition and family resources on quality of life in children with spina bifida and hydrocephalus”).

or negatively, any externalities peculiar to her hiring (we assumed above the equally fictional circumstance of nondisabled workers also not engendering externalities) such that both ($QB = 0$) and ($QC = 0$).

In hypothetical (1), Gidget the widget-maker can produce on average some number higher than fifty widgets a day ($DG > 50$) and also does not require an accommodation ($AC = 0$). Thus her DP value is higher than fifty because ($DP > 50$) = ($DG > 50$) - ($AC = 0$). By producing a DP net of fifty-plus widgets, Gidget is, all in all, an exceptional WWW employee. This is because, regardless of her ultimate gross production value, Gidget's net profitability is greater than that of the average widget-maker, i.e., $DP > AP$. In hypothetical (2), Gidget is still hyperproductive. Assume that she generates fifty-five widgets a day ($DG = 55$), but requires an accommodation from WWW to do so. If the accommodation cost (AC) is six or more widgets a day, then Gidget will no longer fit the profile of a voluntarily accommodated worker at WWW. This is due to Gidget's net profit being lower than that of the average widget-maker, regardless of whether the accommodation costs six or any number higher than six. Mathematically, this is because ($DP < 50$) = ($DG = 55$) - ($AC > 6$); hence, since $AP = 50$, $AP > DP$.⁴¹⁹ Finally, in hypothetical (3), Gidget's productivity is average, such that $DG = AP = 50$, and she does not require WWW to provide her with any accommodation, so that $AC = 0$. In this circumstance, where $DP = AP$, Gidget is considered to be fungible with her nondisabled peers and should, all things considered, be voluntarily hired or retained.⁴²⁰

Although both positive and negative externalities have been assumed away, each of these possible scenarios can incorporate the type of externalities described above.⁴²¹ For instance, positive benefits could include increased productivity and lower job turnover rates. Negative externalities could include the accommodation, whether engendering hard or soft costs. Additionally, the negative costs

419. On the other hand, using this baseline, any accommodation that costs five or fewer widgets a day will place Gidget's economic production back under the first hypothetical of hyperproductivity.

420. Idiosyncratic occurrences—e.g., Gidget wore a bright orange shirt to her interview and the human resource manager has an aversion to the color orange and anyone who would wear a garment of that color—are discounted both in economic and in rights-based assessments due to their unlikely capability of repetition. For a discussion of why this is so, see Mark Kelman, *Does Disability Status Matter?*, in *AMERICANS WITH DISABILITIES: EXPLORING IMPLICATIONS OF THE LAW FOR INDIVIDUALS AND INSTITUTIONS* 91, 94 (Leslie Pickering Francis & Anita Silvers eds., 2000); Kelman, *supra* note 35, at 863–64.

421. See *supra* Part II.A.2.

related to litigation avoidance⁴²²—whether realistically in response to assessed nuisance value settlements⁴²³ or, alternatively, from fears of potential liability,⁴²⁴ including loss of reputation or good will—could tip the efficiency balance in favor of hiring or retaining a disabled employee.⁴²⁵ When viewed in light of the empirical data demonstrating the extent to which employers overwhelmingly win Title I cases,⁴²⁶ this argument would seem to carry less probative value. It does, however, bear noting.⁴²⁷

422. See Thornton H. Brooks et al., *Second Generation Problems Facing Employers in Employment Discrimination Cases: Continuing Violations, Pendent State Claims, and Double Attorneys' Fees*, 49 LAW & CONTEMP. PROBS. 25, 43–51 (Autumn 1986) (discussing the prospect of increased employment discrimination litigation).

423. See generally D. Rosenberg & S. Shavell, *A Model in Which Suits Are Brought for Their Nuisance Value*, 5 INT'L REV. L. & ECON. 3 (1985) (considering “a model of the legal dispute allowing for the occurrence of . . . nuisance suits”).

424. This is usually a standard argument in other civil rights contexts, despite changes in litigation incentives due to the manner in which the Supreme Court has interpreted the provision of attorneys' fees in *Marek v. Chesney*, 473 U.S. 1, 11–12 (1985) (interpreting Federal Rule of Civil Procedure 68 to include attorney's fees among the costs that can be shifted back to defendants when plaintiffs obtain a judgment that is less than that proffered pretrial where the statute under which they have litigated would have permitted plaintiff attorney fees). See generally Roy D. Simon, Jr., *Rule 68 at the Crossroads: The Relationship Between Offers of Judgment and Statutory Attorneys Fees*, 53 U. CIN. L. REV. 889 (1984) (analyzing the case before the Supreme Court in *Marek v. Chesney* and its possible ramifications). This has affected other types of cases as well. See Jean R. Sternlight, *The Supreme Court's Denial of Reasonable Attorney's Fees to Prevailing Civil Rights Plaintiffs*, 17 N.Y.U. REV. L. & SOC. CHANGE 535, 538 (1990) (“[M]any civil rights plaintiffs with colorable claims cannot find attorneys willing to represent them. The shortage of competent civil rights attorneys has reached crisis proportions, a fact which has been recognized by several state and federal courts.”).

425. It could also be one reason (among many, including better workplace relations) that the option of undergoing mediation through the EEOC has been a popular way of addressing Title I disputes. The last EEOC Report to Congress represented that “[a]n overwhelming majority of the participants (91 percent of charging parties and 96 percent of respondents) indicated that they would be willing to participate in the mediation program again if they were a party to an EEOC charge.” E. Patrick McDermott et al., *An Evaluation of the Equal Employment Opportunity Commission Mediation Program* (Sept. 20, 2000), available at <http://www.eeoc.gov/mediate/report/summary.html> (on file with the *Duke Law Journal*). Some commentators are (pleasantly) surprised that the EEOC can be at all effective in light of its dearth of resources. E.g., Kathryn Moss, *Unfunded Mandate: An Empirical Study of the Implementation of the Americans with Disabilities Act by the Equal Employment Opportunity Commission*, 50 U. KAN. L. REV. 1 (2001).

426. See *supra* Part I.B.

427. There is another type of market failure that could be raised, one which might be called “the externality of public assistance.” Even if both employer and potential employee are fully informed and bargaining costs are zero, it may be that the employer will fail to hire, retain, or accommodate an individual despite such a decision increasing overall welfare. And, absent the hire, the individual may go on public assistance, as is described *infra* Part IV.B. Both of these steps might be seen as an “externality” in that these nonhiring/retaining firms do not internalize costs when making employment decisions. There is some precedent for treating such factors as

Consequently, this section of the accommodation cost continuum reflects instances when the provision of accommodations (as well as the hiring and retaining of disabled workers who do not require accommodations) is wholly efficient and brings about a state of Pareto optimality. In this dynamic, both the disabled employees and their employers gain, and no one loses.

2. *Quasi-Voluntary Accommodations.* This next phase of the accommodation cost continuum covers workplace decisions wherein an employer chooses not to employ or retain a disabled worker, even though that worker (whether or not needing an accommodation) is at least as profitable as an alternative nondisabled worker. Assuming once more that all positive and negative externalities have been accounted for (in this instance, both posited at zero), the disabled worker's productivity would encompass the same three possibilities as those in the previous continuum section on Voluntarily Made Accommodations. To reiterate, (1) the disabled employee can be one who is hyperproductive and does not require an accommodation (Gidget is both super-productive and cost-free); (2) the worker with a disability can be hyperproductive to the extent that her higher-than-average productivity balances out or exceeds the cost of an accommodation (Gidget needs an accommodation but makes up for its cost); or (3) the employee with a disability can be of average productivity and not require an accommodation (Gidget is an average worker).

Accordingly, this section of the accommodation cost continuum is concerned with market failure. This is because the Quasi-Voluntary part of the continuum captures cases wherein hiring or retaining disabled employees would achieve a wholly efficient, net profitable, Pareto optimal equilibrium wherein everyone gains and no one loses.

externalities to the employer. In fact, one justification for refusal to enforce contracts "in restraint of trade" at common law was that such contracts deprived individuals bound by them of the ability to work and support themselves and thus forced such individuals to turn to the state for their livelihood. The paradigm case was one in which an individual sold a business and then agreed not to pursue his chosen field in the whole kingdom or jurisdiction. Courts said that such an agreement would harm society by causing individuals to leave the jurisdiction or turn to the state to support themselves. Alan J. Meese, *Liberty and Antitrust in the Formative Era*, 79 B.U. L. REV. 1, 22-23 (1999). One could therefore make similar arguments in the ADA context: that is, that by failing to hire someone an employer imposes some costs on the State that would not otherwise be there. I have not included such an expense in this section of the accommodation cost continuum since I do not believe that it makes sense to speak of a "public assistance externality" so far as employers are concerned.

Nonetheless, these workplace opportunities do not manifest. In consequence, lawsuits and other remedial actions to remedy exclusion from the type of workplace participation raised in this part of the continuum seek to correct this market failure. In other words, abrogating individual employers' decisions, and thus their autonomy, in this part of the continuum corrects those employers who were previously inefficient. The ADA itself only briefly addresses the notion of market correction. While it characterizes the denial of reasonable accommodations to qualified workers with disabilities as a form of discrimination,⁴²⁸ and authorizes subsequent private and public action,⁴²⁹ it does not go any further. Although I agree with the statute's estimation, simply labeling these employers' activities as discriminatory does not bring one any closer to understanding and remedying, at least from an economically based, theoretical perspective, their source.⁴³⁰

Employers usually respond to the standard motivation posited in the neoclassical economic model of the labor market. When they do not, and as a result create a market failure, it is for three main reasons. In order of increasing likelihood these are (1) an employer's distaste for hiring or retaining disabled workers; (2) subjective ignorance of the true costs and benefits of such actions; and, relatedly, (3) reliance upon seemingly objective proxies in making these determinations that turn out to be empirically inaccurate.

An employer may have a "taste" for discrimination.⁴³¹ Thus, despite knowing that the potential or current employee with a disability (depending upon circumstances, either with or without an accommodation) will be at least as profitable as an alternative, nondisabled employee, the employer nonetheless hires or retains nondisabled workers. As with race or sex, the employer may wish to discriminate.⁴³² This systemic

428. See 42 U.S.C. § 12,112(b)(5)(A) (2000) (defining discrimination as, among other actions, "not making reasonable accommodations" absent the showing of an undue hardship).

429. The public action begins with filing a complaint with the EEOC, then in proceeding to court. 29 C.F.R. §§ 1640-1641 (2002); MICHAEL FAILLACE, *DISABILITY LAW DESKBOOK: THE AMERICANS WITH DISABILITIES ACT IN THE WORKPLACE* 2-13 (2003).

430. Nonetheless, successfully litigating these occurrences should bring about that information exchange. As seen above, *supra* Part I.B., the likelihood of victory is slight.

431. BECKER, *supra* note 266, at 39-45.

432. *Id.*; see also William M. Landes, *The Economics of Fair Employment Laws*, 76 J. POL. ECON. 507, 508 (1968) (investigating whether "fair employment laws improved the economic position of racial and religious minorities"); Edmund S. Phelps, *The Statistical Theory of Racism*

discrimination⁴³³ (which in a doctrinal analysis would fall under disparate treatment)⁴³⁴ can arise from the employer's own aversion to people with disabilities, or can result from similar feelings among the employer's clients or existing workers. It is irrelevant⁴³⁵ whether the source of such negative preferences is based in animus ("I don't like people with cerebral palsy"),⁴³⁶ discomfort ("I personally have nothing against people with cerebral palsy, but they give me the creeps"),⁴³⁷ or rational

and Sexism, 62 AM. ECON. REV., June 1972, at 659 (arguing that statistical analysis can be a basis for discrimination).

433. Systematic discrimination need not be intentional. This is because the employer's action is either "a formal, facially discriminatory policy" or one that identifies individuals within a particular protected group who are then excluded informally. *Hazen Paper Co. v. Biggins*, 507 U.S. 604, 610 (1993). This is true even when the motivation is itself unconscious because of stereotyping, social norms, or cognitive categories. Barbara J. Flagg, "Was Blind, but Now I See": *White Race Consciousness and the Requirement of Discriminatory Intent*, 91 MICH. L. REV. 953 (1993) (arguing that racism can be a result of whites not recognizing that some things which are uniquely white are not universal); Krieger, *supra* note 364, at 1161 (questioning "the premise that discrimination necessarily manifests intent or motive"); Lawrence, *supra* note 361, at 322 (arguing that "[t]raditional notions of intent do not reflect the fact that decisions about racial matters are influenced in large part by factors that can be characterized as neither intentional . . . nor unintentional"); David Benjamin Oppenheimer, *Negligent Discrimination*, 141 U. PA. L. REV. 899, 899 (1993) ("demonstrat[ing] that much employment discrimination is the result of tortious acts that are most appropriately described as negligent"). For precisely this reason, one commentator has argued from an economic perspective that such categories ought to be eliminated. *See generally* Amy L. Wax, *Discrimination as Accident*, 74 IND. L.J. 1129 (1999) (concluding that combating unconscious bias with a scheme modeled on Title VII is unlikely to be effective). A robust rebuttal to this proposal is provided by Michael Selmi, *Discrimination as Accident: Old Whine, New Bottle*, 74 IND. L.J. 1233 (1999).

434. This theory is demonstrated through the use of circumstantial evidence, as provided in *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 804 (1973), and *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989). Which test is used depends upon the circumstances involved. *See generally* Michael J. Zimmer, *The Emerging Uniform Structure of Disparate Treatment Discrimination Litigation*, 30 GA. L. REV. 563, 564 (1996) (arguing that the Civil Rights Act of 1991, along with several Supreme Court decisions, has "begun the development of a new, uniform structure for disparate treatment discrimination which will eliminate much of the complexity and confusion presently existing").

435. By this I mean that it is irrelevant from a doctrinal point of view. From an academic perspective, I have argued elsewhere that disability-based discrimination stems in greater measure from pity and paternalism than from animus, and so is more analogous to sex than to race. *See Silvers & Stein, supra* note 29.

436. Several examples of this perspective were compiled by Congress during the legislative hearings on the ADA in S. REP. NO. 101-116, at 6-7 (1989). The more compelling anecdotal evidence included testimony by a wheelchair-using future undersecretary of the Department of Education who was removed from an auction house for being reckoned "disgusting to look at." *Id.*

437. *See, e.g., id.* (relating how an academically competitive and nondisruptive child was barred from attending public school because of a teacher's allegation that his physical appearance "produced a nauseating effect" upon classmates).

economic preference (“I actually like people with cerebral palsy, but my workers and clients do not”). This situation is, interestingly enough, just the one that Epstein described in *Forbidden Grounds*.⁴³⁸ And although most economists would disagree with Epstein in so far as holding that such preferences should not, and normally are not, validated in a proper cost-benefit analysis, Epstein is absolutely correct in recognizing that such feelings exist.⁴³⁹ In sociological terms, this dynamic is described as one arising from “existential anxiety.”⁴⁴⁰

Second, employers are sometimes personally ignorant of the actual costs and benefits of accommodations.⁴⁴¹ An employer may overestimate the costs of an accommodation, may not be familiar with the potential benefits and costs that can be associated with providing accommodations, or may include unsubstantiated costs (or benefits) when calculating productivity.⁴⁴²

This form of market failure is caused by informational asymmetry.⁴⁴³ The basic point that should be recollected here is that

438. EPSTEIN, *supra* note 269, at 487.

439. Justice Kennedy recently recognized this fact. *See* Bd. of Treasurers of Univ. of Ala. v. Garrett, 531 U.S. 356, 375 (2001) (Kennedy, J., concurring) (“[P]ersons with mental or physical impairments are confronted with prejudice which can stem from indifference or insecurity as well as from malicious ill will.”).

440. The term originates with Professor Harlan Hahn, a political scientist at the University of Southern California and one of the founders of the Disability Studies movement, who asserted that repugnance to disabled bodily difference combined with fear of also attaining such variation in the future, results in a sociological desire to segregate people with disabilities from the mainstream. Harlan Hahn, *Antidiscrimination Laws and Social Research on Disability: The Minority Group Perspective*, 14 BEHAV. SCI. & L. 41, 45 (1996); Harlan Hahn, *Toward a Politics of Disability: Definitions, Disciplines, and Policies*, 22 SOC. SCI. J. 87, 93–96, 100 (1985).

441. *See generally* John F. Newman & Roxan E. Dinwoodie, *Impact of the Americans with Disabilities Act on Private Sector Employers*, 20 J. REHABILITATION ADMIN. 3 (1996) (reporting on a study of 20,000 private sector employers in Georgia, which found that employers lacked information about both the ADA and workers with disabilities).

442. An example from the academic realm is provided by Verkerke, *supra* note 14, who believes that the reasonableness of an accommodation will vary depending on whether the job in question is high- or low-risk. *Id.* at 941–43. His argument necessarily assumes that people with disabilities are at greater risk of danger and are also less capable of protecting themselves from those hazards. This is a proposition without any basis in empirical fact, although one could plausibly interpret the Supreme Court’s decision in *Chevron U.S.A., Inc. v. Echazabal*, 536 U.S. 73 (2002), to be in harmony with this presupposition. *See id.* at 76 (holding that a prospective employee who is a threat to his own safety may be denied an employment opportunity under the ADA).

443. Since the 1960s, economists have recognized the importance of information when modifying pre-existing economic models. The seminal article is by George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961) (analyzing economic organization in light of the search for information).

information itself also costs something to acquire. As such, real-world results might differ from those academic economists would observe under a perfect competition framework, such as that put forward in the neoclassical model, precisely because information costs something to acquire.⁴⁴⁴ Hence, business practices that may seem inexplicable in a world with perfect competition assumptions suddenly become explicable.⁴⁴⁵ In other words, a model that expressly makes room for information costs would come out differently from one that assumes perfect information symmetry. Consequently, when considering how to cure market failure due to informational asymmetry, it is crucial to consider as well the costs of the suggested corrective devices.⁴⁴⁶

The presence of information costs can also lead to a third type of market failure arising from statistical discrimination.⁴⁴⁷ When information costs are present, a firm might rely upon proxies, e.g., a college degree or past experience, when making employment decisions, instead of inquiring directly into a disabled person's skills. In this circumstance, the disabled employee may be part of a group of individuals that on average are either less productive, or are

444. Moreover, the perfect competition model (and its assumptions) is better reserved for addressing a firm's pricing and output decisions instead of their input-purchasing decisions. There also are some departures from perfect competition, e.g., product differentiation, that really have no impact on this analysis.

445. RONALD H. COASE, *THE FIRM, THE MARKET, AND THE LAW* 13–15 (1988).

446. One such problem is that the information costs to determine the true productivity of an individual with a disability may make that disabled worker less productive than an equivalent nondisabled worker, even if the disabled worker was hyperproductive to begin with. Thus, although originally $DP \geq AP$, information cost has now altered the equation so that $DP < AP$. When this happens, the disabled worker may drop from the Quasi-Voluntary phase of the continuum, where mandated solutions are still wholly efficient and Pareto optimal, to either the Semi-Efficient, or even in extreme cases, the Social Benefit Gain Efficient portions of the Kaldor-Hicks Welfare Enhancing phase where the employment option is only efficient from a social view. A similar problem occurs in lending policy. There, information asymmetry and/or statistical discrimination may cause minorities to underinvest in their own human capital and develop a credit history (in anticipation of being denied credit on account of their race). Nonetheless, just as banning statistical discrimination may force creditors to expend resources to try to distinguish between debtors, so too does eliding a parallel transaction cost argument in this context.

447. "Statistical discrimination occurs when two groups vary on average in terms of some relevant characteristic, and an employer treats all members of each group as if they all possess that average characteristic." Katherine V.W. Stone, *The New Psychological Contract: Implications of the Changing Workplace for Labor and Employment Law*, 48 *UCLA L. REV.* 519, 599 (2001). For example, if employers assume women will have short job tenure, and treat all women on the basis of that belief, then employers will avoid hiring women for jobs requiring longevity. This type of discrimination was best evidenced in the internal labor markets of the twentieth century. *Id.* at 599.

perceived to be less productive, than the average worker without a disability.⁴⁴⁸ The employer could investigate whether a particular applicant has productivity above or below that of the rest of the disabled category. That employer could also look into whether the worker with a disability requires an accommodation, and if so, of what type and expense. Yet the employer does not do so to avoid information costs. Thus, the employer uses the signal of disability, because he ends up believing, incorrectly, that an individual employee is also less productive than she really is. This is an event that that should be banned, because it is inefficient.⁴⁴⁹

Most commentators consider statistical discrimination to be a market failure and an inefficient event:⁴⁵⁰ in the absence of complete information about the characteristics of a particular group (whether related to race, sex, disability, or other observable characteristics),⁴⁵¹ an employer will utilize certain stereotypes as proxies of productivity.⁴⁵² When those signals do not accurately correlate with

448. See J. Hoult Verkerke, *An Economic Defense of Disability Discrimination Law* 20–21 (University of Virginia School of Law Legal Studies Working Paper No. 99-14, June 1999), available at <http://papers.ssrn.com> (on file with the *Duke Law Journal*) (arguing that employers who rely on signals or proxies for gauging productivity run the risk of relying on information which may be wrong or may be a generally accurate statistical inference that is often wrong in particular cases).

449. Perhaps there are other steps one can take to produce information that makes reliance on proxies less attractive. Or, maybe because of path dependence, firms will continue to rely on proxies even if it does not make a lot of sense to do so now. Alternatively, maybe the proxies, although perfectly rational, still create externalities because firms do not consider the full social cost of what they are doing.

450. See, e.g., David Charny & G. Mitu Gulati, *Efficiency-Wages, Tournaments, and Discrimination: A Theory of Employment Discrimination Law for "High-Level Jobs"*, 33 HARV. C.R.-C.L. L. REV. 57, 63–66 (1998) (arguing that statistical discrimination results in inefficient job assignments and reduces incentives for its victims to acquire human capital); Mark Kelman, *Concepts of Discrimination in "General Ability" Job Testing*, 104 HARV. L. REV. 1158 (1991); Richard H. McAdams, *Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination*, 108 HARV. L. REV. 1003, 1074–78 (1995) (pointing out that the deadweight loss of race discrimination consists of material sacrifices made by the original discriminators to lower the status of the victim and the investments made by the original discriminators). Not all commentators, however, agree with this position. Professor Peter Norman, for example, argues from the perspective of "a utilitarian social planner" that potential efficiency gains can extend from statistical discrimination in so far as reducing the "mismatch" between workers and jobs. By generating more precise information about specific workers, he argues, discrimination can result in a Pareto improvement when compared to a regulated state in which statistical discrimination is eliminated. Norman, *supra* note 328, at 1.

451. Religious observance may or may not be readily observable.

452. Although the word has taken on a pejorative tone, these stereotypes need not all be negative. Consider, for example, an employer who believes that Samoans make the best workers. When this happens, as in the case of word-of-mouth reputational hiring, members of

empirical reality, equally productive workers are shut out of workplace opportunity.⁴⁵³ As a result, those workers will then underinvest in their own human capital. Like other self-fulfilling prophecies, this is because of a Catch-22: certain workers are disadvantaged in the workplace because they are believed to have lower net productivity values. In turn, those workers invest less in their own human capital because they believe that they will be disadvantaged in the workplace.⁴⁵⁴

To address a market failure problem of the type represented in the Quasi-Voluntary phase of the accommodation cost continuum, one must first begin by defining a “perfect world,” and what results such a world would produce in the labor market. In this situation, a perfect world would be the one posited by the neoclassical regime, one with no transaction costs.⁴⁵⁵ In this transaction-cost-free world, private bargains move resources to their highest-valued use and thus maximize the wealth that can be obtained from society’s existing resources.⁴⁵⁶ In such a perfect world, employment practices would

the excluded group may nonetheless have a cause of action. *See, e.g.*, *EEOC v. Joe’s Stone Crab, Inc.*, 220 F.3d 1263, 1286–87 (11th Cir. 2000) (noting that a plaintiff may establish a pattern or practice claim under Title VII “through a combination of strong statistical evidence of disparate impact coupled with anecdotal evidence of the employer’s intent to treat the protected class unequally” (quoting *Mozev v. Am. Commercial Marine Serv. Co.*, 940 F.2d 1036, 1051 (7th Cir. 1991))).

453. Technically, those who are similarly situated. *See generally* Kenneth J. Arrow, *The Theory of Discrimination*, in *DISCRIMINATION IN LABOR MARKETS* 3, 24 (Orley Ashenfelter & Albert Rees eds., 1973) (noting that “[s]kin color and sex are cheap sources of information” for distinguishing between different groups of workers); Stephen Coate & Glen C. Loury, *Will Affirmative Action Policies Eliminate Negative Stereotypes?*, 83 *AM. ECON. REV.* 1220, 1224 (1993) (suggesting that “negative prior beliefs will bias the [work] assignment process”); *cf.* Glenn C. Loury, *Why Should We Care About Group Inequality?*, 5 *SOC. PHIL. & POL’Y* 249, 263 (1987) (pointing out “the danger that reliance on affirmative action . . . can have a decidedly negative impact on the esteem of the [beneficiary] groups, because it can lead to the general presumption that members of the beneficiary groups would not be able to qualify for such positions without the help of special preference”).

454. *See* David A. Strauss, *The Law and Economics of Racial Discrimination in Employment*, 79 *GEO. L.J.* 1619, 1640 (1991) (“[S]tatistical discrimination encourages minorities to underinvest in human capital, which in turn makes statistical discrimination rational.”).

455. This is true because “in classical economics, the market actors are viewed as having access to perfect information. All parties understand the benefits and detriments of the bargain and neither is under compulsion or duress.” Christopher K. Braun, *A Semiotics of Economics*, in *LAW AND ECONOMICS: NEW AND CRITICAL PERSPECTIVES* 435, 443 (Robin Paul Malloy & Christopher K. Braun eds., 1995).

456. *See* Guido Calabresi, *Transaction Costs, Resource Allocation, and Liability Rules: A Comment*, 11 *J.L. & ECON.* 67, 68 (1968) (“[I]f one assumes rationality, no transaction costs and no legal impediments to bargaining, all misallocations of resources would be fully cured in the

begin with an individualized determination of each potential employee's productivity, costs, and benefits (whether or not that person had a disability).⁴⁵⁷

The real (economic) world is not, however, wholly bereft of transaction costs in this sense—even Professor Ronald Coase⁴⁵⁸ didn't think so.⁴⁵⁹ Instead, in the real world, there are all sorts of transaction costs—generally bargaining costs and information costs—that prevent resources from moving to their highest use and ensure that social welfare is lower than it would be in a world with no such transaction costs.⁴⁶⁰ Put another way, in the real world, some or many markets fail in the sense that they do not replicate the allocation of resources (e.g., who works where, and for how much) that would occur in a transaction-cost-free world. Yet “market failure” is not an abstract or a permanent condition. It is, instead, a symptom of transaction costs which themselves are not necessarily natural, exogenous, or given.⁴⁶¹

market by bargains.”). Note, though, that this is the same allocation of resources that would occur under perfect competition. *Id.*

457. *Id.*

458. Author of the pathbreaking article *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960), which introduced the “Coase theorem,” Ronald H. Coase won the Nobel Prize in Economics, and in the process contributed to the founding of law and economics as a discipline. See generally STEVEN G. MEDEMA, COASEAN ECONOMICS: LAW AND ECONOMICS AND THE NEW INSTITUTIONAL ECONOMICS xi (Steven G. Medema ed., 1997). And, although the Coase theorem has been questioned (at times with great charm), e.g., A.W. Brian Simpson, *Coase v. Pigou Reexamined*, 25 J. LEGAL STUD. 53 (1996), it remains the fundamental pillar of that area of scholarship.

459. As explained by Epstein, “one of Coase’s great achievements was to stress the importance of thinking about zero transactions costs settings, not because we ever encounter these in our ordinary lives, but because thinking about them sets up a useful foil for thinking about the positive transactions cost world that is inescapably ours.” Richard A. Epstein, *Holdouts, Externalities, and the Single Owner: One More Salute to Ronald Coase*, 36 J.L. & ECON. 553, 555 (1993).

460. The most obvious example is the so-called “monopolistic competition” model, built in the 1930s, and applied ad nauseam by economists and others ever since. Although this model employs some of the assumptions of the perfect competition model, e.g., no barriers to entry, it also departs from perfect competition in other ways, e.g., it assumes that consumers have varying preferences, with the result that each firm responding to these preferences produces a slightly different product, thus leading each firm to obtain a modicum of market power, another departure from the perfect competition model. Another example is the theory of monopoly, which often assumes that monopolists reduce output below the competitive level. Note, however, that if the monopolist had perfect information about the preferences of all consumers, and if arbitrage were not possible, it could engage in price discrimination, and thus increase its output to the same level that would occur in a world of perfect competition.

461. As Professor Kenneth Arrow has said: “[M]arket failure is not absolute; it is better to consider a broader category, that of transaction costs, which in general impede and in particular cases completely block the formation of markets.” Kenneth J. Arrow, *The Organization of*

One implication is that by eliminating or attenuating transaction costs, one can sometimes cure a market failure, instead of “regulating” it in a more traditional sense.⁴⁶² Another implication—and this one is more important given the ADA—is the extent that a market failure is both defined and constrained by the sort of transaction costs at issue. Thus, if one sees a market failure, she needs to figure out what sort of transaction costs are causing it in order to determine the right remedy and limits of intervention.⁴⁶³

The ADA provides for three avenues through which to cure the information asymmetry causing individual employers to suffer from market failures, and to install a quasi-voluntary, wholly efficient, Pareto optimal equilibrium. First, as part of assessing the reasonableness of accommodations, employers are required to engage in an “interactive process” with disabled workers requesting those workplace alterations.⁴⁶⁴ Second, assuming that the interactive process does not result in a mutually acceptable solution, employees with disabilities can file disability discrimination charges with the Equal Employment Opportunity Commission (EEOC) and, afterwards, engage in EEOC-sponsored mediation with their employers.⁴⁶⁵ Third, those same disabled workers, if the mediation process has not proven

Economic Activity: Issues Pertinent to the Choice of Market Versus Non-Market Allocation, in PUBLIC EXPENDITURES AND POLICY ANALYSIS 59, 60 (Robert H. Haveman & Julius Margolis eds., 1970).

462. See, e.g., Alan J. Meese, *Regulation of Franchisor Opportunism and Production of the Institutional Framework: Federal Monopoly or Competition Between the States*, 23 HARV. J.L. & PUB. POL'Y 61, 78 (1999) (establishing that Sherman Act regulation of purported opportunism is unnecessary if “Sherman Act intervention depends upon the presence of transaction costs, and if states are capable of reducing such costs by changing the rules that make up the institutional framework”).

463. Or, to put things more technically, the “Institutional Structure of Production” needs to be changed to make sure that the resulting “play of the game” (contracting/production by private parties) produces the allocation of resources that would be produced in a low/zero transaction-cost world. See, e.g., Ronald Coase, *The Firm, the Market, and the Law*, in THE FIRM, THE MARKET, AND THE LAW 1, 27–28 (Ronald H. Coase ed., 1988) (showing that change in background rules can lower or increase transaction costs and thus affect the content of bargains people enter); Ronald Coase, *The Institutional Structure of Production*, 82 AM. ECON. REV. 713, 714 (1992) (describing how change in background rules can affect or alter the contracts that parties enter as well as the resulting allocation of resources); Alan J. Meese, *Price Theory, Competition, and The Rule of Reason*, 2003 U. ILL. L. REV. (forthcoming 2003) (manuscript at 78–82, on file with the *Duke Law Journal*) (noting that antitrust regulation alters the institutional framework so as to replicate the result that maximizes social welfare); Meese, *supra* note 462, at 70–77 (stating that change in background rules can alter transaction costs and thus eliminate market failures).

464. See *infra* notes 467–76 and accompanying text.

465. See *infra* notes 477–82 and accompanying text.

satisfactory (or even transpired, because it is voluntary), can sue their employers.⁴⁶⁶ Each of these measures in turn carries increasingly heavy transaction costs, but they are designed to correct information asymmetry through the coerced exchange of information. They can do so, but with varying success and cost. Each of these avenues is explored in greater detail below.

When faced with an accommodation request from a worker with a disability, the employer is required by the ADA to engage in an “interactive process” with that worker.⁴⁶⁷ This procedure is one that, in theory, should generate the information necessary to cure an informational asymmetry caused by market failure. During this process, employers and employees meet and exchange not only formal requests but, equally important, trade information and perspectives about the accommodation at issue. As a result, disabled workers inform their employers what accommodations, soft or hard, they feel they require to perform the essential job functions of their particular employment. In turn, employers can accede to these requests or explain to those workers why the accommodations requested would engender an undue hardship because of either hard or soft costs.⁴⁶⁸

One would think that profit-maximizing employers acting in their own self-interest would have already expended resources to find out general information on positive and negative externalities. Nonetheless, although employers might have general information on these effects, they may not have particular information related to individuals with disabilities because of lack of experience with, or exposure to, those workers.⁴⁶⁹ And, as was shown above, relying on statistical information as proxy has the potential to create false measures. Further, the disabled worker has information about himself or herself that may not be readily available or knowable by the employer, and thus an exchange of information during the interactive process can add to the employer’s calculus. At the same time, the employer has greater familiarity and knowledge about the workplace and its operation and may be able to

466. See *infra* notes 483–88 and accompanying text.

467. 29 C.F.R. §§ 1630.2(o)(3), 1630.9 (2002).

468. See generally Alysa M. Barancik, *Determining Reasonable Accommodations Under the ADA: Why Courts Should Require Employers to Participate in an “Interactive Process”*, 30 LOY. U. CHI. L.J. 513, 542–45 (1999); Amy Renee Brown, *Mental Disabilities Under the ADA: The Role of Employees and Employers in the Interactive Process*, 8 WASH. U. J.L. & POL’Y 341, 352–68 (2002).

469. Blanck et al., *supra* note 410, at 1593.

suggest less costly alternatives or other avenues toward achieving a mutually agreeable position. Note that this interactive process is intended to be a cooperative, informational exchange rather than a confrontational process.⁴⁷⁰

Nor must individual employees and their employers go through the interactive process blindly or in a vacuum. Well financed, federally funded centers facilitate the interactive process by providing concrete accommodation options and suggestions, and informing employers about existing federal and state tax incentives and credits.⁴⁷¹ These government-supported facilitators include the ten regionally located offices of the Job Accommodation Network,⁴⁷² as well as the President's Committee on Employment of People with Disabilities⁴⁷³ and the Social Security Administration's Employment Support Program.⁴⁷⁴ There also exist state-level equivalents.⁴⁷⁵ As each of these organizations facilitate the interactive process for free, very little transaction costs are invoked in their usage.⁴⁷⁶

In the event, however, that the interactive process fails to bring about satisfactory results, employees with disabilities (both those who were denied requested accommodations and those who feel aggrieved for other reasons)⁴⁷⁷ can file disability discrimination complaints with

470. See Sam Silverman, *The ADA Interactive Process: The Employer and Employee's Duty to Work Together to Identify a Reasonable Accommodation Is More Than a Game of Five Card Stud*, 77 NEB. L. REV. 281, 288 (1998) ("[B]oth parties can benefit if they are willing to place all their cards on the table in an effort to determine if a reasonable accommodation can be identified.").

471. Nor is it necessary to be physically present to engage this process. The Job Accommodation Network, see *infra* note 472, will facilitate the interactive process by telephone, mail, email, teleconference, or through the Internet.

472. The Job Accommodation Network, at <http://janweb.icdi.wvu.edu> (last visited Sept. 6, 2003) (on file with the *Duke Law Journal*).

473. The Office of Disability Employment Policy, at <http://www.dol.gov/odep> (last visited Sept. 6, 2003) (on file with the *Duke Law Journal*).

474. The Social Security Administration's Employment Support Program, at <http://www.ssa.gov/work> (last visited Sept. 6, 2003) (on file with the *Duke Law Journal*).

475. For instance, the Florida Governor's Alliance for Employment of Citizens with Disabilities provides an online job bank for disabled job seekers and potential employers, including a free CD-ROM generated by the privately funded Able Trust that profiles some 1200 college students with disabilities who are seeking internships or jobs upon graduation. The Able Trust, at <http://www.abletrust.org> (last visited Sept. 6, 2003) (on file with the *Duke Law Journal*); The Florida Alliance for Assistive Services and Technology, at <http://www.faast.org> (last visited Sept. 6, 2003) (on file with the *Duke Law Journal*).

476. The qualification reflects the fact that time, as well as the gathering of information to be exchanged, are, even if minimal, still transaction costs.

477. For instance, disability harassment is a cause of action recently recognized by the Fourth and Fifth Circuits. See, e.g., *Flowers v. S. Reg. Physician Servs.*, 247 F.3d 229, 232 (5th

local EEOC offices.⁴⁷⁸ Subsequently, either the employer or the employee can request mediation of their differences.⁴⁷⁹ The ADA does not require, but strongly advises mediation.⁴⁸⁰ Nevertheless, studies, including the EEOC's own internal report to Congress, have evidenced that mediation is an excellent vehicle through which to have employers and employees exchange information and perspectives.⁴⁸¹ Mediation as a process also engenders less psychic cost and emotional damage to the employment relationship than the third option, litigation (although the filing of a discrimination complaint is also unlikely to resound very well with employers). The possible souring of employer-employee relations is an important point to emphasize as job reinstatement is one of the primary remedies sought by Title I plaintiffs.⁴⁸²

Commencing a Title I lawsuit is the third, and certainly least efficient or effective, means of curing employers' market failure. In theory, the litigation of such claims should, in the course of events, provide the means by which to correct flawed assumptions held by both employers and employees as to the real costs of accommodations. As was shown earlier, however, as a practical

Cir. 2001) (“[T]he ADA embraces claims of disability-based harassment.”); *Fox v. Gen. Motors Corp.*, 247 F.3d 169, 176 (4th Cir. 2001) (“[T]he ADA, like Title VII, creates a cause of action for hostile work environment harassment.”). See generally Lisa Eichorn, *Hostile Environment Actions, Title VII, and the ADA: The Limits of the Copy-and-Paste Function*, 77 WASH. L. REV. 575, 577 (2002) (“[T]he circuit courts began their examinations of whether hostile environment harassment could be actionable under the ADA by noting that the statute explicitly prohibits discrimination related to the ‘terms, conditions, and privileges’ of employment.”); Holland M. Tahvonen, *Disability-Based Harassment: Standing and Standards for a “New” Cause of Action*, 44 WM. & MARY L. REV. 1489, 1494 (2003) (“[D]isability harassment as a cause of action is modeled after the Title VII harassment claim.”).

478. 42 U.S.C. § 2000(e)(5) (1964); 29 C.F.R. §§ 1601.6–1601.8 (2002) (establishing the guidelines for this process).

479. *Id.*

480. 42 U.S.C. § 12,212 (2000).

481. See McDermott et al., *supra* note 425 (finding “a high degree of participant satisfaction with the EEOC mediation program”); Philip Zimmerman, *The Equal Employment Opportunity Commission’s Mediation Program*, 71 CPA J. 66, 66 (2001) (acknowledging that the first year of the EEOC’s voluntary mediation pilot program was “highly successful”). EEOC mediation has continued in spite of inadequate funding; although the EEOC’s workload increased by over 40 percent due to the addition of ADA disputes, its budget remained the same. Moss, *supra* note 425, at 19. Nonetheless, the current EEOC chair has aggressively pursued increased mediation through a “proactive prevention” program. See *EEOC Chair Offers Updated Plan to Combat Discrimination*, 3 EMP. DISCRIMINATION L. UPDATE 6 (2002).

482. Cf. Ivan E. Bodensteiner & Rosalie B. Levinson, *Litigating Age and Disability Claims Against State and Local Government Employers in the New “Federalism” Era*, 22 BERKELEY J. EMP. & LAB. L. 99, 100 (2001) (explaining the difficulty of bringing civil rights claims).

matter, this result is precluded by the overwhelming rate of defendant victories, and especially those victories at the pre-jury stage.⁴⁸³ Parenthetically, it bears noting that in the circumstance of actually going before a jury, the circuit courts of appeals are divided as to which party bears the further burden of proving the reasonableness of a given accommodation. For example, the D.C. Circuit places both the burden of production and of persuasion on the plaintiff.⁴⁸⁴ In contrast, the Fifth and Ninth Circuits place the burdens of proving both the unavailability of a reasonable accommodation, as well as the undue hardship that one would cause, on defendants.⁴⁸⁵ The Second Circuit, as exemplified in *Borkowski*, takes a middle ground that alternates burdens.⁴⁸⁶ In doing so, its reasoning is persuasive. Although the disabled plaintiff may have personal knowledge of her own disability (and is therefore put under the initial burden of persuasion),⁴⁸⁷ in turn “the employer has far greater access to information” regarding “its own organization and, equally importantly, about the practices and structure of the industry as a whole.”⁴⁸⁸ This compromise steers a wise course between the intercircuit poles in that it duplicates, through coerced circumstances, the type of informational exchange that should have happened during the earlier stages of the interactive process.

Title I suits are not a random subset of ADA actions. Litigated cases may represent particularly strong or particularly weak cases for disability accommodations. The fact that the courts are so skeptical of these claims would seem to suggest that the latter may be true, and this introduces an interesting puzzle: why do plaintiffs bring so many losing accommodations claims?⁴⁸⁹ The Priest-Klein model of litigation

483. See *supra* Part I.B. These results are substantiated in the smaller sample size of the Eastern District of Pennsylvania in Louis S. Rulli, *Employment Discrimination Litigation Under the ADA from the Perspective of the Poor: Can the Promise of Title I Be Fulfilled for Low-Income Workers in the Next Decade?*, 9 TEMP. POL. & CIV. RTS. L. REV. 345, 365–66 (2000).

484. *Barth v. Gelb*, 2 F.3d 1180, 1186 (D.C. Cir. 1993).

485. *Mantolete v. Bolger*, 767 F.2d 1416, 1423–24 (9th Cir. 1985); *Prewitt v. United States Postal Serv.*, 662 F.2d 292, 308 (5th Cir. 1981).

486. *Borkowski v. Valley Cent. Sch. Dist.*, 63 F.3d 131, 137 (2d Cir. 1995).

487. This parallels the duty of a Title VII plaintiff after *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 802 (1973) (“The complainant in a Title VII trial must carry the initial burden under the statute of establishing a prima facie case of racial discrimination.”). This symmetry was intentional. See *Burgdorf*, *supra* note 51 *passim* (describing which portions of the ADA were modeled after existing civil rights provisions).

488. *Borkowski*, 63 F.3d at 137.

489. See *Sharona Hoffman, Corrective Justice and Title I of the ADA 5* (unpublished manuscript) (on file with the *Duke Law Journal*) (arguing that the definition of disability is

suggests that about half of all litigated claims should be valid ones,⁴⁹⁰ but that theory then explores reasons why a different percentage may be valid.⁴⁹¹ Although a full explanation is beyond the scope of this Article, a few possible reasons are worth noting.⁴⁹² Several commentators from the disability rights community squarely lay the results at the feet of judicial resistance to the statute⁴⁹³ or toward

itself at least partially to blame, and proposing an amendment to the scope of coverage so that the protected class more closely resembles the type of minority classifications utilized in other civil rights areas); see also Gregory Todd Jones, *Testing for Structural Change in Legal Doctrine: An Empirical Look at the Plaintiff's Decision to Litigate Employment Disputes a Decade After the Civil Rights Act of 1991*, 18 GA. ST. U. L. REV. 997 (2002) (generally helpful on the subject of civil rights claims, but not on the ADA because the author does not differentiate his statistics).

490. George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1, 5 (1984). Of course, as with any theory, it is not universally embraced. See, e.g., Frank B. Cross, *In Praise of Irrational Plaintiffs*, 86 CORNELL L. REV. 1, 4–5 (2000) (noting that, because people do not always act rationally in their litigation choices, results outside the Priest-Klein theory can result); Steven Shavell, *Any Frequency of Plaintiff Victory at Trial is Possible*, 25 J. LEGAL STUD. 493, 495–501 (1996) (providing an econometric challenge to the Priest-Klein hypothesis).

491. Priest & Klein, *supra* note 490, at 52–54. The subsequent literature operates from within the Priest-Klein paradigm. See, e.g., Keith N. Hylton, *A Note on Trend-Spotting in the Case Law*, 40 B.C. L. REV. 891, 894 (1999) (modifying the Priest-Klein model to “explain[] the patterns of non-neutral evolution actually observed”); Daniel Kessler et al., *Explaining Deviations from the Fifty-Percent Rule: A Multimodal Approach to the Selection of Cases for Litigation*, 25 J. LEGAL STUD. 233, 234 (1996) (noting that “a ‘multimodal’ approach to the selection of cases for litigation can reconcile the validity of the selection hypothesis . . . with observed plaintiff win rates of less than 50 percent”); Peter Siegelman & Joel Waldfogel, *Toward a Taxonomy of Disputes: New Evidence Through the Prism of the Priest/Klein Model*, 28 J. LEGAL STUD. 101, 103–104 (1999) (comparing independent evidence gathered from the mode’s three parameters with a structural estimate of the model from data for six types of federal cases); Robert E. Thomas, *The Trial Selection Hypothesis Without the 50 Percent Rule: Some Experimental Evidence*, 24 J. LEGAL STUD. 209, 212 (1995) (using experimental data to extend “the [Priest-Klein] selection hypothesis . . . [to] explain[] why we should expect to observe a variety of plaintiff win rates when examining trial data”).

492. Not raised in the specific circumstance of Title I litigation, but perhaps informative, is Peter Siegelman & John J. Donohue III, *The Selection of Employment Discrimination Disputes for Litigation: Using Business Cycle Effects to Test the Priest-Klein Hypothesis*, 24 J. LEGAL STUD. 427 (1995), which argues that the effect of the business cycle is as determinative as any other factor in assessing in advance the likelihood of trial outcomes. *Id.* at 432–51. When the economy is weak, they argue, cases brought forward to a jury determination are less likely to win. *Id.* at 446–51.

493. To quote one example: “[M]any, perhaps most, courts are not enforcing the law, but instead are finding incredibly inventive means of interpreting the ADA to achieve the opposite result that the Act was intended to achieve.” Bonnie Poitras Tucker, *The ADA’s Revolving Door: Inherent Flaws in the Civil Rights Paradigm*, 62 OHIO ST. L.J. 335, 338 (2001). Tucker’s assertion is endorsed by many, although not all, of the articles in the following symposia: *Backlash Against the ADA: Interdisciplinary Perspectives and Implications for Social Justice Strategies*, 21 BERKELEY J. EMP. & LAB. L. 1 (2000), and *Defining the Parameters of Coverage*

people with disabilities.⁴⁹⁴ Also at work may be unfamiliarity with disabled people as a group⁴⁹⁵ and/or schemas that cause judges (as well as society at large)⁴⁹⁶ to react in particular ways to them as a class.⁴⁹⁷ Additionally, those workers with disabilities denied accommodations may feel particularly strongly about that denial and may therefore pursue claims even when they are not winners by the standards that the courts apply.⁴⁹⁸ Yet additional reasons could include the following: that there is a misunderstanding of how the courts will address Title I claims such that accommodation-related suits are an example of “negative expected value” litigation that is brought in the hope that the defendants will settle rather than litigate;⁴⁹⁹ that informational asymmetry clouds the litigation decision

Under the Americans with Disabilities Act: Who is ‘An Individual with a Disability?’, 42 VILL. L. REV. 327 (1997).

494. This is a line of argument that is well argued, often entertainingly, by Professor Soifer. See Soifer, *The Disability Term: Dignity, Default, and Negative Capability*, *supra* note 372, at 1328; Soifer, *Disabling the ADA: Essences, Better Angels, and Unprincipled Neutrality Claims*, *supra* note 372, at 1287.

495. This is a unique civil rights chronology. See generally JOSEPH P. SHAPIRO, NO PITY: PEOPLE WITH DISABILITIES FORGING A NEW CIVIL RIGHTS MOVEMENT 323–32 (1993) (recognizing that disabled people as a group were legally empowered prior to the emergence of a general social consciousness as to why such empowerment was needed).

496. RUTH O’BRIEN, CRIPPLED JUSTICE: THE HISTORY OF MODERN DISABILITY POLICY IN THE WORKPLACE 137–61 (2000). In sum, Professor O’Brien argues that modern disability employment practices are influenced by vocational rehabilitation policies that only integrate disabled workers who have fully adapted themselves to the workplace. One consequence of this normative schema, which O’Brien avers influences judicial attitudes towards people with disabilities, is Supreme Court resistance to disability rights—especially the ADA’s employment provisions. *Id.* See also *id.* at 205 (claiming that the “justices have rendered a narrow interpretation of Title I because, like many employers, they perceive disabled people as threatening”); Stein, *supra* note 104, at 619–26.

497. The judicial backlash explanations, however, seem to beg the question of why litigants do not anticipate that hostility in deciding whether to sue. If anything, one would expect those who have previously suffered discrimination to overestimate the chance of discrimination from other actors, such as courts. Perhaps this suggests that the Priest-Klein model does not do a very good job of predicting which disability-related suits are filed.

498. Some commentators assert that the standard, even if correctly applied, may not be the right one to begin with. See, e.g., Hoffman, *supra* note 489, at 5.

499. See Robert G. Bone, *Modeling Frivolous Suits*, 145 U. PA. L. REV. 519, 537–76 (1997) (explaining negative expected value litigation); see also Samuel Issacharoff, *The Content of Our Casebooks: Why Do Cases Get Litigated?*, 29 FLA. ST. U. L. REV. 1265, 1266 (2002) (explaining the limitations of “the Law and Economics model of why cases are litigated”); Russell Korobkin, *Aspirations and Settlement*, 88 CORNELL L. REV. 1, 61 (2002) (“[A]spirations have an indirect causal effect on settlement outcomes by directly affecting the ‘settlement levers’ recognized as relevant by the standard model of settlement.”).

making process;⁵⁰⁰ that poor lawyering may be at the root of some of these losses;⁵⁰¹ or that mediocre expert testimony contributes to the stilted win-loss rate.⁵⁰² Finally, the broad assertions made by media pundits like Walter Olson, namely, that ADA claimants are whingers, not even “really” disabled, or both,⁵⁰³ may have some plausibility.⁵⁰⁴

If one, as an economic policymaker, was to step beyond the confines of the ADA and engage in a thought experiment, it is also possible that information revelation mechanisms could be helpful in the circumstance of this kind of market failure. Disability accommodation claims are a context in which employers and employees probably each have good information (or at least much better information than courts) about the cost of accommodations and their likely benefits. Further, it is much easier for a court to estimate *ex post* whether a disability accommodation was successful than to guess *ex ante*. One way to harness that information, while also limiting courts to *ex post* analysis, would involve the following scheme: one allowed an employee to force the employer to make an accommodation, but then gave the employer the right to sue the employee afterwards to recover the difference between costs and benefits if the employer felt that the costs were higher. This would give the employee some incentive to request only those

500. See Robert H. Gertner, *Asymmetric Information, Uncertainty, and Selection Bias in Litigation*, 1993 U. CHI. L. SCH. ROUNDTABLE 75, 76 (1993) (demonstrating “the unique effects that the asymmetric information model has on selection bias”); Joel Waldfogel, *Reconciling Asymmetric Information and Divergent Expectations Theories of Litigation*, 41 J.L. & ECON. 451, 451 (1998) (noting that asymmetric information provides a possible explanation for why “parties fail to settle their cases and instead proceed to costly trials”).

501. See Van Detta & Gallipeau, *supra* note 74, at 517 (“Many ADA cases founder because counsel for plaintiffs have not prepared the minimum factual record necessary to provide the jury with a basis to conclude that the ADA protects their clients.”); Wendy Wilkerson, *Judicially Crafted Barriers to Bringing Suit Under the Americans with Disabilities Act*, 38 S. TEX. L. REV. 907, 908 (1997) (“[M]any cases have been poorly pleaded.”).

502. The latter was certainly central to *Chevron U.S.A., Inc. v. Echazabal*, 536 U.S. 73 (2002), a Title I case in which accommodation was not at issue, and in which summary judgment was ignominiously granted. *Id.* at 87.

503. See WALTER K. OLSON, *THE EXCUSE FACTORY: HOW EMPLOYMENT LAW IS PARALYZING THE AMERICAN WORKPLACE* 114 (1997) (“Employers’ biggest accommodation challenge may arise less from the gravely disabled, who are relatively few in number and often far from keen on forcing their services on reluctant hirers, than from the general working population . . .”).

504. However weigh the presentation. See Paula E. Berg, *Ill/Legal: Interrogating the Meaning and Function of the Category of Disability in Antidiscrimination Law*, 18 YALE L. & POL’Y REV. 1, 3–34 (1999) (arguing that the Supreme Court’s *Sutton* trilogy served to sift out people not “truly” disabled).

accommodations she was confident would be successful. There would be some complications—perhaps a requirement that the employee bond herself to avoid the judgment-proofing problem—but this scenario might produce a regime that could produce positive incentives. At the same time, one might allow negotiation, so that the employer could buy out the employee instead of making the accommodation. Instead of the employer having the property right and the employee having the right to sue, the employee would have the property right and the employer would have the right to sue.

As a second thought experiment, consider the possibility of creating a governmentally funded, private firm that was responsible for all disability accommodations nationally or, alternatively, in a particular geographic or industry-specific area. As a result, an employer and employee would apply jointly to that firm, requesting that it pay for the accommodation. If the firm refused, then litigation would ensue. Under this system, the employer-employee relationship would be less adversarial due to their common interest. Of course, the accommodation firm would have an incentive to maximize its profit, but this is no different a system than that found in many other areas of the economy, such as insurance companies, where private firms have an incentive not to pay but ordinarily will pay where they are legally required to do so.

B. Socially Efficient (Kaldor-Hicks Welfare Enhancing) Accommodations

The next phase of the continuum, Socially Efficient, Kaldor-Hicks Welfare Enhancing Accommodations, contains two parts. The first is Semi-Efficient Accommodations, which extract a differential cost from employers. Under this part, although both disabled workers and their employers benefit, those employers benefit less than if they were able to choose equivalent nondisabled workers. The second part, Social Benefit Gain Efficient Accommodations, involves disability-related accommodations that exceed ADA reasonableness. Because individual workers and general society benefit, but employers do not, this is an area appropriate for state subsidization.

1. *Semi-Efficient (ADA) Accommodations.* This part of the continuum, that of Semi-Efficient (ADA) Accommodations, is one wherein both disabled workers and their employers benefit, but employers benefit less than if they were able to choose equivalent nondisabled workers. The Semi-Efficient part, therefore, is still net

profitable for employers to the extent that employers will continue to profit from the presence of accommodated workers with disabilities.⁵⁰⁵ It is, however, in degrees less efficient and less profitable than the wholly efficient, completely profitable portion of the continuum that preceded it. This is because Semi-Efficient modifies the absolute nature of the Pareto principle (and its limitations) pursuant to the ADA's totality of the employer's financial circumstances formulation.

As a result, an accommodation would fall within the Semi-Efficient segment of the continuum if both the disabled worker and the employer benefit, but the employer's benefits are less than the optimal ones captured under a Pareto regime. In this regard, the Semi-Efficient segment is similar to Pareto in that the involved parties gain more than zero and are placed in net positive positions. The Semi-Efficient phase of the continuum differs from a Pareto position, however, in that a Pareto optimal state ensures that employers receive as much benefit by employing disabled workers as they would in employing fungible, equivalent, nondisabled workers. In a Semi-Efficient state the employer still achieves a net positive profit position, but his profits are less than they would be had he employed an equivalent, nondisabled employee.⁵⁰⁶ Hence, within the Semi-Efficient phase of the continuum, there exists a range of profit-capturing transactions, from slightly less than full profit to slightly more than no profit. Moving away from a straight cost-benefit analysis, within the Semi-Efficient phase, there are areas of contingent reasonableness in which the same accommodation can be reasonable for some employers, but not for others. Related to the issue of where to draw the line on reasonableness are two issues: first, the extent to which (if at all) accommodations effectuate equality, rather than redistribution; and second, the cross-dynamic of an

505. I stress accommodations because the ADA does not cover unaccommodated hypoproductive workers, even though standard economic analysis does not differentiate those individuals from other equivalently net profitable workers, including accommodated hyper and average productive workers with disabilities (as well as those without disabilities). *See supra* Part I.A.

506. For this reason, the Semi-Efficient state also differs from the state known as Pareto superior, because in that latter category no one is made worse off. By contrast, in the Semi-Efficient state, employers are made worse off to the extent that they are not left in a position equal to the equilibrium that would exist in Pareto optimality. Arguably, they are not worse off in the sense that their net profits, even when the margin has been reduced to one unit, are still profitable, but the difference between some profit and no profit, when both are less than full profit, is one of degree rather than of kind. *See generally* JEFFREY L. HARRISON, *LAW AND ECONOMICS* 32-33 (1995) (discussing Pareto superior allocations).

employer repeatedly providing accommodations, and how this affects the extent to which profitability ought to be compromised. As will be seen below, the Semi-Efficient phase of the continuum is uniquely modulated to the ADA and captures what the statute usually intends as reasonable accommodations.

Further, there is another way in which the Semi-Efficient segment of the continuum, by applying the ADA, does not necessarily dovetail well with classic economic analysis. Among the range of productivity levels there will be workers with disabilities whose productivity will be lower than that of their nondisabled equivalents. This would seem evident because there will also be nondisabled workers with lower productivity than their disabled counterparts, a point that will arise in the hypotheticals presented. Nonetheless, the ADA only considers as qualified those individuals with disabilities who, either with or without the provision of a reasonable accommodation, are able to perform essential job functions. In other words, to be protected under the statute's aegis, disabled workers' gross productivity must equal that of their nondisabled peers. By contrast, from an economic viewpoint, there is no difference between the equivalent lower net products generated by (1) a worker with a disability who does not require an accommodation but who is less productive than a nondisabled peer; or (2) the equally productive disabled worker provided with a reasonable accommodation; or (3) the comparatively hyperproductive worker with a disability whose extra-reasonable accommodation expense is such that his net productivity is less than that of the average worker.

To illustrate: Barry, an individual with muscular dystrophy whose condition limits the facility of his movements,⁵⁰⁷ applies for a position as a hamburger chef at Cholesterol City Burgers (CCB). The essential job functions of such a position at CCB are to fry 40 burgers an hour and place them in a heated pan from which CCB burger associates will later dress them with condiments, wrap them in CCB's trademark fuchsia wrappers, and prepare them for distribution by CCB sales associates. Thus, the average hourly productivity level is 40 units ($AP = 40$). Other than having muscular dystrophy, assume that Barry is no different than other applicants for the position of hamburger chef and carries neither costs nor benefits related to his disability, i.e., as before, both QB and QC are zero. Without an accommodation, Barry

507. See generally STEDMAN'S MEDICAL DICTIONARY, *supra* note 115, at 558.

can fry and place 35 burgers an hour, and is therefore not qualified under the ADA (because where $DP = 35$, it is less than $AP = 40$; and so $AP > DP$). From an economic point of view, Barry is also not equally net profitable, and given a choice CCB would not hire him. However, with the accommodation of a specially designed spatula more conducive to his physiology and costing the equivalent of 5 burgers per hour ($AC = 5$), Barry can flip 40 burgers. Thus $DP = 35$ (because $DP = DG + (QB(40+0) - AC(5))$). If the provision of the spatula is considered reasonable in light of the employer's total financial circumstances, then Barry is a qualified individual with a disability and protected by the ADA. At the same time, from an economic point of view, Barry's net productivity has not changed in CCB's eyes. Because $DP = 35$ in both cases, Barry is still not an equally productive burger flipper, and another hamburger chef would be sought out. If Barry was hyperproductive, flipping an amazing 60 burgers per hour ($DG = 60$), but required the extra-reasonable accommodation of a titanium spatula to achieve that level ($AC = 25$), he would not be ADA protected (due to the unreasonable nature of the accommodation), and would also be economically inefficient (because he achieved a net product lower than $AP = 35$). Thus, although the ADA protects Barry in the second example, an employer would view all three circumstances (with the same net product) as equally inefficient.⁵⁰⁸

Additionally, because the Semi-Efficient segment of the continuum is specially calibrated to capture scenarios arising from "typical" ADA accommodations, wherein an accommodated worker with a disability exacts a reasonable cost from her employer, two ADA-specific issues arise: the relative reasonableness of accommodations as antidiscrimination measures, and the effect upon individual firms subject to repeat accommodation mandates.

To begin with, in the Semi-Efficient stage, accommodation costs are relative rather than absolute. Consequently, if the same person with a disability requested identical accommodations from two different employers, the ADA might consider the first request reasonable (most likely if it was directed at an employer with greater resources) but not consider the second one to be so (especially if that employer had fewer resources). This is a calculus unique to the ADA

508. Assume, arguendo, that the 25 unit spatula *was* reasonable in light of the employer's total financial circumstances. In this situation, the ADA protects Barry under the second and third examples, while an employer would still view all three as equivalently inefficient.

and is caused by the statute's requirement that accommodations be reasonable as measured by the totality of a given employer's financial circumstances.⁵⁰⁹ By contrast, Title VII suits view as irrelevant the relative costs of bringing about a nondiscriminatory equilibrium.⁵¹⁰ In addition, the notion of relative reasonability, and the inconsistent results that it can engender, is economically counterintuitive unless the relative scale makes sense from (a) an administrative point of view, in that it is less costly for an employer rather than for the state to administer accommodations,⁵¹¹ and/or (b) a cost-spreading perspective, because the larger the financial resources of a firm, the easier it is for it to pass on accommodation costs to the public at large.⁵¹² Finally, because valid accommodation costs can vary according to the fiscal resources of providing firms, it is possible that an accommodation can diminish a given employer's profit margin in a worker with a disability down to almost no profit.⁵¹³ In other words, on a profit scale ranging from one unit to one hundred units of profit, where an employer expects to capture one hundred units of profit per employee, an accommodation could conceivably reduce the profit

509. 42 U.S.C. § 12111(10)(B) (2000); *see supra* Part I.A.

510. Title VII suits might, however, consider the absolute cost of a remedy by inference when an employer raises either business necessity as a defense or rebuts a claimant's assertion about the existence of an alternative business practice. *See generally* Thomas A. Cunniff, Note, *The Price of Equal Opportunity: The Efficiency of Title VII After Hicks*, 45 CASE W. RES. L. REV. 507 (1995) (suggesting that although courts have shifted the burdens in Title VII cases to make it more difficult for the plaintiff, this may be an efficient outcome as discrimination decreases over time); John J. Donohue III, *Further Thoughts on Employment Discrimination Legislation: A Reply to Judge Posner*, 136 U. PA. L. REV. 523 (1987) (employing a cost-benefit analysis to test the efficiency of Title VII).

511. This argument is a standard one for those commentators who favor regulation over subsidies. *See, e.g.*, Wax, *supra* note 20, at 1424–26. The tension between regulation and subsidy has invoked an ongoing and interesting debate. For recent contributions, see KELMAN, *supra* note 371, at 92–93; Anne L. Alstott, *Work vs. Freedom: A Liberal Challenge to Employment Subsidies*, 108 YALE L.J. 967 (1999); Louis Kaplow & Steven Shavell, *Should Legal Rules Favor the Poor? Clarifying the Role of Legal Rules and the Income Tax in Redistributing Income*, 29 J. LEGAL STUD. 821 (2000); and Chris William Sanchirico, *Taxes Versus Legal Rules as Instruments for Equity: A More Equitable View*, 29 J. LEGAL STUD. 797 (2000).

512. This is a standard argument in torts scholarship. *See, e.g.*, David Rosenberg, *Individual Justice and Collectivizing Risk-Based Claims in Mass-Exposure Cases*, 71 N.Y.U. L. REV. 210, 237–44 (1996) (arguing that collectivization meets both the deterrence and compensation goals of tort liability); John A. Siliciano, *Corporate Behavior and the Social Efficiency of Tort Law*, 85 MICH. L. REV. 1820, 1864 (1987) (“[T]ort rules are only capable of forcing manufacturers to behave somewhat efficiently, some of the time, under some conditions.”).

513. In the event an accommodation drives an employer's profit margin into a net loss position, such that the disabled workers gains but the employer loses, that circumstance will fall within the next section of the continuum, Kaldor-Hicks Welfare Enhancing Efficiency, if the social benefit still outweighs the social cost. *See infra* Appendix, Section D.

margin of an individual disabled worker to one unit and still be considered (contextually) reasonable.⁵¹⁴ This is because, so long as the employer reaps some profit from that worker, the provision of accommodation (given appropriate circumstances) could still fall within the Semi-Efficient portion of the continuum.

The second issue raised uniquely in the ADA context is a corollary to the idea that accommodation costs are relative. That is, will firms who either voluntarily provide accommodations or are coerced to do so in either the Quasi-Voluntary or the Semi-Efficient part of the continuum become magnets for attracting additional disabled workers who fit the Semi-Efficient profile,⁵¹⁵ and if so, is that circumstance one to be favored? According to Professor Epstein, the prospect of having workers with disabilities employed by the same firm is a positive event.⁵¹⁶ Rather than “handicap ghettoization,” the concentration of workers with disabilities at particular sites, according to Epstein, increases the likelihood that physical plant or equipment accommodations will see repeated usage.⁵¹⁷ Hence, it is an efficient mechanism by which to increase disabled employment.⁵¹⁸ Similarly, Professor Verkerke argues that employees ideally should be matched with a job in which they would be most efficient.⁵¹⁹ This goal can be achieved, in part, by placing a disabled worker with a company capable of minimizing accommodation costs.⁵²⁰ A larger sized employer, in his view, is more likely to have the ability to duplicate accommodations, for an economy of scale would ultimately bring down the cost of accommodation even if such an initial accommodation would appear sizeable in comparison to the profitability of the individual worker.⁵²¹ In contrast to these views, Professor Samuel Issacharoff and Mr. Justin Nelson argue that

514. Congress originally considered and then rejected a proposal during the ADA debate which would have defined undue hardship as threatening an employer's continued existence. Bonnie Poitras Tucker, *The Americans with Disabilities Act: An Overview*, 1989 U. ILL. L. REV. 923, 927 (citing *Americans with Disabilities Act of 1989: Hearing Before the Senate Comm. on Labor and Human Resources and the Subcomm. on the Handicapped*, 101st Cong. 90 (1989)).

515. When workers fit within the Wholly Efficient part of the continuum, whether as recipients of voluntary or semi-voluntary action, this is viewed as a positive effect; it is the less profitable, semi-efficient workers only who raise the question of desirability.

516. EPSTEIN, *supra* note 269, at 492–94.

517. *Id.* at 493–94.

518. *Id.* at 494.

519. Verkerke, *supra* note 14, at 948.

520. *Id.* at 949–50.

521. *Id.*

forcing employers repeatedly to accommodate workers with disabilities is a deleterious policy.⁵²² Because multiple accommodations have the potential of driving down gross profits, they argue that foisting disabled workers onto a particular employer can harm that entity.⁵²³ As a result, having more of those workers imposed onto their workforce might instead penalize employers who should be socially lauded for having previously accommodated a disabled worker.⁵²⁴

Overall, I agree with the view of social efficiency taken by Epstein and Verkerke.⁵²⁵ Recall that the reasonableness of ADA accommodations is determined by the totality of an employer's financial circumstances.⁵²⁶ Thus, on the positive side, an economy of scale should lessen the impact upon (and might even increase the overall) profits of an individual employer over the long haul. And, although repeatedly imposing disability accommodations on a single providing employer may well reduce its profit margin per worker on each occasion, and so will cause that employer to bear an unwanted financial obligation, whatever total reductions ensue will in the end be curbed by a standard of reasonableness.⁵²⁷ Accordingly, the costs of

522. Issacharoff & Nelson, *supra* note 369, at 344–47.

523. *Id.*

524. *Id.* at 350–51.

525. An important point that is tangential to this Article bears noting. When advocating in favor of the efficiency of repeated accommodations, Epstein and Verkerke each support, by inference, the notion of directed placements, meaning that they favor specific vocational placements for workers with disabilities who evidence certain skills. See EPSTEIN, *supra* note 269, at 493–94; Verkerke, *supra* note 14, at 937–38. To the extent that this policy either limits the development of disabled workers or shunts them into certain careers, I very strongly disagree with it and point to the parallel history among women. See generally Dawn Michelle Baunach, *Trends in Occupational Sex Segregation and Inequality, 1950 to 1990*, 31 SOC. SCI. RES. 77 (2002); Jo Anne Preston, *Occupational Gender Segregation: Trends and Explanations*, 39 Q. REV. ECON. & FIN. 611 (1999). For disabled people, these type of measures, even when well intentioned, have historically resulted in sheltered workshops and make-work that demean and isolate those individuals. See generally Mark C. Weber, *Disability and the Law of Welfare: A Post-Integrationist Examination*, 2000 U. ILL. L. REV. 889 (2000) (cataloging and analyzing welfare law's past treatment of disabled persons). However, to the extent that such a policy duplicates *some* of the gains made in the past through vocational rehabilitation that afforded the recipients job support and options, I would endorse it. See O'BRIEN, *supra* note 496, at 87 (chronicling the success of 1950s rehabilitation programs). For a more global view, see David A. Gerber, *Disabled Veterans and Public Welfare Policy: Comparative and Transnational Perspectives on Western States in the Twentieth Century*, 11 TRANSNAT'L L. & CONTEMP. PROBS. 77 (2001).

526. 42 U.S.C. § 12111(10)(B) (2000).

527. This situation raises the possibility of intradisability conflicts, i.e., the disabled person requesting the accommodation that will push an employer's profit margin near enough to the

repeat accommodations should not result in “ruinous” economic losses for any given individual employer.⁵²⁸

To reiterate, in a Semi-Efficient equilibrium, both workers and employers benefit, but the employers profit less than if they were unregulated. Modulated specifically to the ADA, the Semi-Efficient portion of the accommodation cost continuum includes a range of accommodations that are contextually reasonable and allow employers to capture variant profit margins. Semi-Efficient Accommodations also raise the potential situation of individual employers becoming the focus of repeat accommodation requests. This phenomenon, should it arise, is prevented from engendering an undue hardship on those individual employers because of the ADA’s intervening standard of reasonableness.

2. *Social Benefit Gain Efficient Accommodations.* The next section of the accommodation cost continuum, and still within the scheme of Kaldor-Hicks Welfare Enhancement, is that of Social Benefit Gain Efficient Accommodations.

In this phase, the profit to an employer is zero (or carries a negative cost), but the social benefit gain in having a less productive disabled worker employed exceeds the cost of compensating an employer for doing so. Thus, this area raises a circumstance in which both the individual worker with a disability and society in general benefit, but the employers lose. This portion of the continuum operates outside the boundaries of the ADA because the accommodations at issue are no longer reasonable.⁵²⁹ Accordingly,

undue hardship category so that no further workers can be accommodated has an interest adverse both to putative employees, as well as to currently able-bodied colleagues who might become disabled. For two thoughtful treatments on the implications of intragroup conflict within the context of gay and lesbian civil rights, see William B. Rubenstein, *Divided We Litigate: Addressing Disputes Among Group Members and Lawyers in Civil Rights Campaigns*, 106 YALE L.J. 1623 (1997), and Janet E. Halley, *The Politics of the Closet: Towards Equal Protection for Gay, Lesbian, and Bisexual Identity*, 36 UCLA L. REV. 915 (1989).

528. This reasonableness limitation remains despite complaints in the popular media that the ADA will bring American business to rack and ruin. See, e.g., OLSON, *supra* note 503, at 102–18 (arguing that costs of accommodation are higher than the acknowledged projections of the ADA’s supporters); Peter J. Riga, *Employers’ Litigation Horror Stories*, L.A. DAILY J., Dec. 19, 1994, at 6 (lamenting that, although the ADA was a good idea, it has been prone to abuse and has become a “lawyers’ employment service”).

529. The arguments made in this Section apply equally to circumstances of hypoproductive, non-accommodated disabled workers whose net output is the same as those disabled workers with average or hyperproductivity who engender accommodation costs.

this is an area where the state has the potential to compensate losing employers and should do so out of self-interest.⁵³⁰

When an employer cannot profit from retaining a worker with a disability due to her accommodation cost, there still may be reason to compel that employer to accommodate the disabled worker on the ground that society in general may benefit. In the preceding area of the continuum, that of Semi-Efficient Kaldor-Hicks Accommodations, it was assumed that a firm still benefited from employing the individual worker with a disability even if it was forced to take only one out of the potential one-hundred units of profit from that transaction.⁵³¹ When that profit is zero or less, i.e., when employing a person with a disability engenders no profit or even a negative cost, societal benefits may still be used as an additional reason to employ that individual because of Kaldor-Hicks concerns. Recall that under a Kaldor-Hicks regime, a policy is efficient so long as the winners can in theory, even if not in reality, compensate the losers.⁵³² Moreover, as the prime vehicle for assessing the costs and benefits of public policy choices, Kaldor-Hicks allows for involuntary transfers in the name of efficiency while not requiring that everyone affected by an action be agreeable to its consequences.⁵³³ The key to utilizing a Kaldor-Hicks model is that, assuming the benefits of a proposed program outweigh its costs, the policy will be upheld as valid if it will increase societal well-being.⁵³⁴

As used in the accommodation cost continuum, a Kaldor-Hicks welfare enhancing policy—as defined by the limits of Pareto optimality and semi-efficiency—will employ disabled workers who

530. I acknowledge that, from an economic perspective, a plausible argument could be made that the state ought to similarly compensate employers providing semi-efficient accommodations who reap less than full profits from their disabled workers. That may be so, although I argue elsewhere that there are reasons for resisting the reach of subsidies. Stein, *Empirical Implications*, *supra* note 22, at 1668–69. In any case, that assertion goes beyond the province of both the ADA and this Article.

531. In *Vande Zande*, Judge Posner opined that forcing an employer to bear a marginal loss could also be reasonable. *Vande Zande v. Wis. Dep't of Admin.*, 44 F.3d 538, 542 (7th Cir. 1995) (“It would not follow . . . that an accommodation would have to be deemed unreasonable if the cost exceeded the benefit however slightly.”). Posner may well be correct, but I have chosen to draw the line at no profit for prudential reasons.

532. See *infra* Appendix, Section D. See also Allan M. Feldman, *Kaldor-Hicks Compensation*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW, *supra* note 259, at 417.

533. *Id.*

534. DIANA FUGUITT & SHANTON H. WILCOX, COST-BENEFIT ANALYSIS FOR PUBLIC SECTOR DECISION-MAKERS 39 (1999); HARRISON, *supra* note 506, at 34.

are inefficient for private employers, but who are still socially efficient. In this circumstance, social efficiency is measured by any net positive gain to society. Specifically captured by this policy are disabled workers who can perform productive work through the provision of unreasonable (or, extra-reasonable) accommodations.⁵³⁵ Many of these individuals are from the group referred to in the economic literature as members of the “transfer” population, meaning that they are functionally capable of work (and thus avoiding welfare dependence), but do not have that opportunity.⁵³⁶ This argument is made more persuasive in light of what Bagenstos has pointed out, namely that disability policy, qua ADA, was motivated by the notion of dependence avoidance.⁵³⁷

A Kaldor-Hicks efficient equilibrium posits that the winners be capable of compensating the loser, but does not require that this eventuality actually transpire. Nonetheless, as I have briefly argued elsewhere, the point at which accommodating people with disabilities is no longer reasonable, but still socially beneficial, is an appropriate departure point from which to consider state-funded employment

535. This section of the continuum is, in essence, a type of disability accommodation that both Bagenstos and Wax would advocate, but with a significant variation from the arguments that each presents. Because he operates within the ADA, Bagenstos does not address unreasonable accommodations, although his arguments for dependence-avoidance are still meaningful in this phase of the continuum and I believe he would agree with it. *See* Bagenstos, *supra* note 18, at 1022–26. Wax, on the other hand, *does* endorse unreasonable accommodations. However, at least partly as the result of framing her arguments within the ADA, Wax argues for employers bearing these costs. Wax, *supra* note 20, at 1425. I diverge from Wax by maintaining that unreasonable yet socially beneficial accommodation costs ought to be borne by the state, although given the chance to respond, she might very well agree with that option.

536. *See generally* John Bound & Richard V. Burkhauser, *Economic Analysis of Transfer Programs Targeted on People with Disabilities*, in 3C HANDBOOK OF LABOR ECONOMICS 3417 (Orley Ashenfelter & David Card eds., 1999); Richard V. Burkhauser & Mary C. Daly, *Disability and Work: The Experiences of American and German Men*, 2 FED. RES. BANK S.F. ECON. REV. 17 (1998) (comparing patterns of employment, transfer receipt, and economic well-being of men with disabilities in the United States and Germany); Matthew Diller, *Dissonant Disability Policies: The Tensions Between the Americans with Disabilities Act and Federal Disability Benefit Programs*, 76 TEX. L. REV. 1003 (1998) (contrasting the divergent policies and assumptions about the employability of the disabled that underlie the ADA and other federal disability programs).

537. *See* THOMAS F. BURKE, LAWYERS, LAWSUITS AND LEGAL RIGHTS: THE BATTLE OVER LITIGATION IN AMERICAN SOCIETY 95 (2002) (“[T]he ADA was sold as a way to *reduce* governmental expenditures by getting people with disabilities off welfare.”); Bagenstos, *supra* note 18, at 1002 (“[I]n the campaign to enact the ADA . . . the adoption of an independent living/welfare reform frame served a number of purposes for disability rights leaders.”).

opportunities through the payment of subsidies to employers.⁵³⁸ By so advocating, I diverge from other legal commentators who have endorsed the notion of subsidies, because they do so for the funding of reasonable accommodations rather than for unreasonable ones.⁵³⁹ Although there are rights-based reasons that can be raised for holding this position,⁵⁴⁰ there is also an economic justification (beyond those of administrative efficacy and cost spreading)⁵⁴¹ that suggests that utilizing regulation instead of tax-and-spend subsidies in the antidiscrimination field can be more efficient.⁵⁴² At best, subsidies can balance out existing market inefficiencies by improving the labor market participation of a targeted group to a nondiscriminatory equilibrium. Subsidies will not, however, change the ingrained negative prejudices that caused those inequities, nor preclude similarly inefficient practices from repeating in the event that the subsidies are discontinued.⁵⁴³

Thus, Socially Efficient, Kaldor-Hicks Welfare Enhancing Accommodations capture circumstances in which the employer will not profit from hiring a worker with a disability, but both that worker and society will. When the societal gain in having a less productive disabled worker employed exceeds the cost of compensating an employer for doing so, this section of the continuum will govern disability accommodations.

538. Stein, *Empirical Implications*, *supra* note 22, at 1684 (“Providing extra-reasonable accommodations could overcome existing market inequities borne by the most stigmatized among the disabled.”).

539. Scott A. Moss & Daniel A. Malin, *Public Funding for Disability Accommodations: A Rational Solution to Rational Discrimination and the Disabilities of the ADA*, 33 HARV. C.R.-C.L. L. REV. 197 (1998); Sue A. Krenek, Note, *Beyond Reasonable Accommodation*, 72 TEX. L. REV. 1969, 2009–13 (1994). For an appraisal of subsidy programs run previously under the Rehabilitation Act, see Alberto Martini & Sharon Arnold, Programs Providing Subsidized Employment to Disadvantaged Workers: A Review of their Effectiveness (Mathematica Policy Research Paper No. 7725-400, Feb. 1990) (unpublished manuscript, on file with the *Duke Law Journal*).

540. Briefly stated, funding all disability accommodations by subsidies rather than through private employers both detracts from the notion of people with disabilities being entitled, as equally valued human beings, to civil rights, and/or renders those subsidies vulnerable in the future to the political process. The latter point is underscored within the context of learning disabilities in MARK KELMAN & GILLIAN LESTER, *JUMPING THE QUEUE* 195–226 (1997).

541. See KELMAN, *supra* note 371, at 93 (concluding that an ordinary income or excise tax would be a more efficient means of funding ADA accommodations); Wax, *supra* note 20, at 1451 (“When putting more disabled persons to work makes economic sense, it may be better to try to find ways to help employers defray the costs of accomplishing that goal.”).

542. Stein, *Empirical Implications*, *supra* note 22, at 1684.

543. *Id.* at 1683–84.

C. *Wholly Inefficient Accommodations*

This last section of the accommodation cost continuum, that of Wholly Inefficient Accommodations, is merely the inverse of the preceding Kaldor-Hicks Social Welfare Enhancing Accommodations. When an employee with a disability is unprofitable to the extent that the social benefit of accommodating her is outweighed by all the weighted and quantifiable costs of maintaining her in the workplace, then she should be excluded from the labor market. In this circumstance, applying a Kaldor-Hicks framework of analysis reaches the conclusion that general social welfare would be diminished by employing and/or accommodating this worker. Instead, that person is an appropriate candidate to be excluded from the workplace through the receipt of disability-based welfare benefits. Once the costs of accommodation outweigh the benefits to society, then society would be made worse off by employing the worker in any capacity. Thus, even if the worker herself may still be made better off through her employment, because neither the employer nor society will benefit financially, the only viable *economic* option is to exclude her from workplace opportunity by providing her with social welfare benefits. Whether society ought to look beyond economics and instead be motivated by concerns for human dignity and well-being is an argument that goes beyond the scope of this Article, although one I would endorse.⁵⁴⁴

CONCLUSION

To fully pursue further discourse on disability accommodations, additional empirical research and theoretical thought need to be given to at least three inquiries. Initially, it is crucial to decide which people are, or ought to be, considered “disabled” under the ADA. Although the Supreme Court has decided fourteen ADA cases over the last four years, the scope of the ADA’s coverage remains unclear. Knowing who is included in the protected class is fundamental to the expectations that those individuals, their employers, the judiciary, and general society will have regarding the duty to provide accommodations. A clearer understanding of group identity would

544. See Kwame Anthony Appiah, *Liberalism, Individuality, and Identity*, 27 *CRITICAL INQUIRY* 305, 331–32 (2001) (asserting that the historical example of people with severe disabilities demonstrates the need “to find a reasonable middle way between demeaning handouts and forced labor”).

also improve the cohort that economists target when studying post-ADA employment effects, as well as the actual costs of accommodations. Without common ground for analysis, econometric findings lack a basis for meaningful comparison. Second, further research needs to be conducted into the actual cost of accommodations. Although reservations should be held about the results of the handful of existing studies, their findings indicate that there is a larger story to be investigated. So far, the analyses have focused on the hard costs of providing or amending the physical work environment, without also assessing the soft costs incurred by altering job requirements or methods of administration. At the same time, very little research has examined the potential benefits that employers can receive from hiring disabled workers. Regardless of the effect that these analyses will have on whether accommodations are viewed as economically net productive for employers, they will render a more balanced and appropriate calculus. Additionally, a great deal more thought needs to be given to the problem of how better to disseminate information about workers with disabilities. Because employers are not familiar with disabled workers, they may rely on statistical proxies of productivity that are inaccurate. Moreover, employers have not generally utilized the existing tax credits and incentives that could balance out or even exceed accommodation costs. Properly addressing this information asymmetry, however, requires engaging the attendant issue of what transaction costs are incurred in obtaining that information. Doing so requires that extralegal alternatives also be considered.

The ADA mandates that employers provide “reasonable” accommodations to “qualified” disabled workers, but it gives little guidance on how to determine reasonableness. To date, neither courts nor commentators have articulated a systematic economic model for analyzing employer-funded ADA accommodation claims. Similarly, very little has been written on what (if any) accommodations and/or subsidies society, rather than employers, ought to support for disabled workers beyond the ADA’s boundaries. This Article offers an initial law and economics framework for analyzing both these inquiries by demonstrating how disability-related accommodations span a cost continuum ranging from the Wholly Efficient Accommodations (where barring market failure accommodations are voluntarily provided by employers) to the Wholly Inefficient Accommodations (where the only economically feasible option is labor market exclusion and no one ought to provide

these accommodations). It illustrates how disability-related accommodations can be thematically organized into areas of economically viable Pareto and Kaldor-Hicks Semi-Efficient Accommodations (to be funded by employers) and Social Benefit Gain Kaldor-Hicks Efficient Accommodations (where the costs should be borne by the public fisc), delineates the boundaries between each category, and explains why the entities designated should bear the costs assigned to them. Finally, this Article explores when disability-related accommodations are totally inefficient and therefore not viable from even a social benefits perspective.

APPENDIX: VALUE ASSUMPTIONS

This Appendix sets forth the values used in measuring and weighting efficiency as part of the accommodation cost continuum described above.⁵⁴⁵ Respectively, these are: efficiency, cost-benefit analysis, Pareto optimality, Kaldor-Hicks welfare enhancement, and wholly inefficient mandates.

A. Efficiency

A common theme in the law and economics discipline, and one that is also utilized in this Article, is the focus on achieving the most “efficient” or optimal outcome, meaning the one having the greatest utility.⁵⁴⁶ However, it is in large part differences about how to determine what solutions are efficient that separates the various approaches within law and economics.⁵⁴⁷ Thus, the discipline encompasses several distinct strands of thought, including traditionally utilized wealth-maximizing law and economics, and the historically lesser used, but recently more controversial, welfare economics.⁵⁴⁸ It also includes several developing areas of enquiry within what may be loosely termed “progressive” law and economics,⁵⁴⁹ meaning branches of the field that question some of the accepted underlying assumptions of the discipline⁵⁵⁰ and seek

545. See *supra* Part IV.

546. For a general overview of efficiency mechanisms, see RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 1.2 (5th ed. 1998).

547. Professors Duncan Kennedy and Mario Rizzo push this assertion further, contending that methodological approaches can be maneuvered to yield desired outcomes. See Duncan Kennedy, *Cost-Benefit Analysis of Entitlement Problems: A Critique*, 33 *STAN. L. REV.* 387, 388–89 (1981); Mario Rizzo, *The Mirage of Efficiency*, 8 *HOFSTRA L. REV.* 641, 642–43 (1980).

548. See generally Allan M. Feldman, *Welfare Economics*, in 2 *THE NEW PALGRAVE: THE WORLD OF ECONOMICS*, *supra* note 259, at 889; WILLIAM J. BAUMOL, *WELFARE ECONOMICS AND THE THEORY OF THE STATE* (2d ed. 1965). Welfare economics has become controversial due to the work of Professors Louis Kaplow and Steven Shavell, as briefly discussed *infra* note 574.

549. See Susan Rose-Ackerman, Comment, *Progressive Law and Economics—And the New Administrative Law*, 98 *YALE L.J.* 341, 341–42 (1988) (urging “the development of a reformist law and economics, closely linked to administrative law and based on public finance theory, public policy analysis, and social choice theory”). This perspective of law and economics includes Duncan Kennedy’s scholarship, as well as the “liberal” law and economics of Professors Richard Markovits and Bruce Ackerman that Kennedy criticizes. See Kennedy, *supra* note 547 (articulating the weakness of efficiency as a reformist justification).

550. An early, and typically brilliant, take is by (Nobel Prize winner) Amartya Sen, *Rational Fools: A Critique of the Behavioral Foundations of Economic Theory*, 6 *PHIL. & PUB. AFF.* 317 (1977). See also Jeffrey Harrison, *Egoism, Altruism, and Market Illusions: The Limits of Law*

alternative ways for understanding economic rationality in human behavior.⁵⁵¹

How each branch confronts a given inquiry will depend upon the relevance and weight that it places on particular preferences as criteria.⁵⁵² Thus, Judge Posner's study of gender implications in the

and Economics, 33 UCLA L. REV. 1309, 1314–25 (1986) (analyzing the validity of the economics assumptions of self-interest and observable preferences); *see generally* Nicholas Mercurio & Steven Medema, *Schools of Thought in Law and Economics: A Kuhnian Competition*, in LAW AND ECONOMICS: NEW AND CRITICAL PERSPECTIVES, *supra* note 455, at 65 (arguing that law is no longer an autonomous discipline but is influenced by a variety of disciplines).

551. These fields include feminist law and economics, notably the work of Professor Gillian Hadfield, cited *infra* note 554, as well as those works featured in the publication FEMINIST ECONOMICS, available at <http://www.ruf.rice.edu/~femec/contents.html> (last visited Sept. 7, 2003) (on file with the *Duke Law Journal*), and environmental law and economics, *see generally* Daniel H. Cole, *Environmental Protection and Economic Growth: Lessons from Socialist Europe*, in LAW AND ECONOMICS: NEW AND CRITICAL PERSPECTIVES, *supra* note 455, at 295 (tracing the comparative failure of environmental protection in socialist Europe); Jeff L. Lewin, *Toward a New Ecological Law & Economics*, in LAW AND ECONOMICS: NEW AND CRITICAL PERSPECTIVES, *supra* note 455, at 250 (suggesting “the emergence of a new ‘ecological law and economics’ that will address such issues as ecological scarcity and environmental equity from a perspective that overcomes the limitations of the neoclassical approach”). Adding to this scholarship are the interesting and developing fields of behavioral law and economics (which questions some of the rationality assumptions underlying the traditional discipline). *See generally* Robert Cooter, *Expressive Law and Economics*, 27 J. LEGAL STUD. 585 (1998) (describing the role of law in the development of social norms, and socioeconomic law and economics (which seeks to inject psychological and social factors related to wealth and race into otherwise “neutral” economic analyses)); Alex Geisinger, *A Belief Change Theory of Expressive Law*, 88 IOWA L. REV. 35 (2002) (developing a “belief change” theory of law’s effect on social norms and preferences); Christine Jolls et al., *A Behavioral Approach to Law & Economics*, 50 STAN. L. REV. 1471 (1998) (envisioning how law and economics analysis may be improved by attention to insight about actual human behavior); Richard H. McAdams, *A Focal Point Theory of Expressive Law*, 86 VA. L. REV. 1649 (2000) (suggesting that law may be alternatively conceptualized for its expressive, as well as its traditionally acknowledged enforcement, functions); Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339 (2000) (highlighting the power of the approval or disapproval of law in shaping behavior); Symposium, *The Legal Implications of Psychology: Human Behavior, Behavioral Economics, and the Law*, 51 VAND. L. REV. 1495, 1583–1788 (1998) (analyzing the impact on contract negotiations of negotiator biases for the status quo and inaction, as well as expressive law and economics (which examines how legal norms can alter social norms)). Referring to themselves as “the radical middle,” these last scholars are represented by their own section in the American Association of Law Schools organization and contribute to the publication of the *Journal of Socio-Economics*, available at <http://www.jrlse.org> (last visited Sept. 7, 2003) (on file with the *Duke Law Journal*).

552. That this is the case has also led to criticisms of the discipline discussed below. Conversely, one commentator argues that this flexibility of weighting assumptions can lead to a more democratic process, at least in the context of administrative agency determinations, when regulators enunciate their preferences. Michael Abramowicz, *Toward a Jurisprudence of Cost-Benefit Analysis*, 100 MICH. L. REV. 1708, 1720 (2002). Abramowicz’s critique was in response to the position of Cass R. Sunstein, *THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY*

workplace⁵⁵³ is considered deficient by Professor Gillian Hadfield for not adequately inquiring into the impact on women's role determinations of regulating sexuality.⁵⁵⁴ Moreover, a recent and growing debate among law and economics practitioners⁵⁵⁵ has begun to parallel earlier critiques from those outside the discipline,⁵⁵⁶ namely, whether morality or fairness (in contrast to pure efficiency) is at all relevant to economic analysis.⁵⁵⁷

In presenting a law and economics model for assessing the reasonableness of ADA accommodations, I have elected to utilize a cost-benefit analysis and to frame the arguments in terms of efficiency. I weight all the relevant (and socially acceptable) external costs and values, while also questioning some of the received neoclassical assumptions, and so my analysis avoids many of the criticisms aimed at more traditional economic analyses.

B. Cost-Benefit Analysis

Regardless of the particular approach taken within the available range of law and economics scholarship, each engages in some form of cost-benefit analysis. In such a framework, all the positive effects of any proposed scheme are balanced against all its potential (and socially acceptable) deficiencies.⁵⁵⁸ Cost-benefit analysis (CBA) itself has lately come under a good deal of self-evaluation,⁵⁵⁹ mostly due to

PROTECTION 25–29 (2002), that these determinations ought to be more fluid and less overt. *Id.* As such, Abramowicz's arguments parallel those in this Article.

553. RICHARD A. POSNER, *SEX AND REASON* (1992).

554. Gillian K. Hadfield, *Flirting with Science: Richard Posner on the Bioeconomics of Sexual Man*, 106 HARV. L. REV. 479, 502–03 (1992) (reviewing POSNER, *supra* note 553). In a similar vein, Hadfield takes to task the circular reasoning used by those law and economics scholars who explain gender wage differentials by reference to the historical household structure without also questioning the existence of this arrangement. Gillian K. Hadfield, *Households at Work: Beyond Labor Market Policies to Remedy the Gender Gap*, 82 GEO. L.J. 89, 89–90 (1993).

555. This is addressed, both in the context of cost-benefit analysis, *infra* Appendix, Section B, as well as in the discussion of the Semi-Efficient segment of the continuum, *supra* Part IV.B.1.

556. *See, e.g., supra* note 189. It should be mentioned that those scholars outside the discipline also call into question the morality of the whole enterprise.

557. For two strong examples of this analysis, see Martha C. Nussbaum, *The Costs of Tragedy: Some Moral Limits of Cost-Benefit Analysis*, 29 J. LEGAL STUD. 1005, 1007–08 (2000), and Henry S. Richardson, *The Stupidity of the Cost-Benefit Standard*, in COST-BENEFIT ANALYSIS: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES, *supra* note 189, at 135.

558. However, deficiencies which accord weight to socially unacceptable values are not included in the evaluations. *See supra* note 281.

559. *See generally* ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 41–42 (2d ed. 1997); POSNER, *supra* note 546, at § 1.2 (defining the economic concepts of value, utility and

its professed goal of wealth maximization.⁵⁶⁰ This is especially so because of its agnostic acceptance of efficiency as a leitmotif irrespective of moral determinants. In addition, there are three main objections to CBA: income distribution, discounting, and moral shortcomings.⁵⁶¹

One objection to CBA is that it weighs all money equally, whereas not every person does so.⁵⁶² A very wealthy person, for instance, would value each additional dollar less due to diminishing returns. As a result, in CBA, the interests of the wealthy are arguably given greater preference than those people who are less wealthy.⁵⁶³ The uneven nature of income distribution and its effects upon determining efficiency⁵⁶⁴ are particularly clear in instances involving “environmental justice.”⁵⁶⁵ Although placing a toxic waste site in a wealthy neighborhood would engender a \$20 million loss of property values, placing the same dump in a poor neighborhood might only cause a loss of \$5 million. Although the waste dump poses an equal burden in the form of abrogating personal preferences to all citizens, according to CBA, placing it in the rich neighborhood is inefficient.⁵⁶⁶

efficiency); ZERBE, *supra* note 359, at 14–33 (suggesting principles to provide an ethical basis for cost-benefit analysis); Robert Frank, *Why is Cost Benefit Analysis So Controversial?*, in COST-BENEFIT ANALYSIS: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES, *supra* note 280, at 93–94 (utilizing moral theory to understand objections to cost-benefit analysis).

560. See Laurence H. Tribe, *Constitutional Calculus: Equal Justice or Economic Efficiency?*, 98 HARV. L. REV. 592, 596 (1985) (“Being ‘assigned’ a right on efficiency grounds . . . hardly satisfies the particular human need that can be met only by a shared social and legal understanding that the right belongs to the individual because . . . it [is] organically and historically a part of the person that she is . . .”).

561. Frank, *supra* note 559, at 77–81.

562. Matthew D. Adler & Eric A. Posner, *Rethinking Cost Benefit Analysis*, 109 YALE L.J. 165, 224 (1999).

563. This criticism of the compensating variable (CV) test provides much of the inspiration for the call that CV’s, which are based on willingness to pay (WTP) calculations, be replaced with a measure of welfare equivalence (WE). *Id.*; Frank, *supra* note 559, at 80–81.

564. Beyond wealth concerns, there are also (related) issues of power distribution. See generally Gerald Torres, *Environmental Burdens and Democratic Justice*, 21 FORDHAM URB. L.J. 431 (1994) (recognizing the existence of distributional inequalities and suggesting administrative approaches in the context of environmental justice).

565. See generally Vicki Been, *Environmental Justice and Equity Issues*, in ZONING AND LAND USE CONTROLS (Patrick J. Rohan ed., 1995).

566. Because the less wealthy individuals on the “losing” end of this equation frequently tend to be minorities, this phenomenon is also referred to by some advocates as “environmental racism.” See, e.g., Lynn E. Blais, *Environmental Racism Reconsidered*, 75 N.C. L. REV. 75, 119–20 (1996) (arguing that the disproportionate land use in poor and minority communities stems from cultural conditions sustaining wealth inequalities). For a discussion of income disparity in

Thus, the optimal CBA result would be to locate toxic sites in poor neighborhoods, even if, to achieve this result, enough funds were transferred to the poor population to make such determination palatable.⁵⁶⁷

A second criticism of CBA is that it values the present at the expense of the future by utilizing a discount rate.⁵⁶⁸ Money is worth less in the future than it is now due to inflation. The use of a discount rate (five percent is standard) can have profound effects. A \$10 million investment today to halt \$1 billion in far-off future pollution damage would be considered uneconomical.⁵⁶⁹ The objection raised to CBA in this context is that it is fixated on the present, hence mortgaging future needs and benefits.⁵⁷⁰ But this need not always be the case. Suppose, for example, that the United States sold the Grand Canyon to Japan for \$30 billion. Many might argue that in doing so the federal government has discounted the benefits that future generations would enjoy from having it under American control. But such an argument is highly dependent upon what is done with the proceeds. If they were dissipated through one long nationwide party, then that argument would hold true. On the other hand, if those funds were invested in biomedical research that ultimately finds cures for cancer, AIDS, or other feared maladies, then future generations might well be happy with the decision to trade in one asset for another.

economic analysis, see Jeffrey L. Harrison, *Class, Entitlement and Contract*, in LAW AND ECONOMICS: NEW AND CRITICAL PERSPECTIVES, *supra* note 455, at 221.

567. Of course, not everyone perceives this as a negative or undesirable result. See, e.g., Jill E. Evans, *Challenging the Racism in Environmental Racism: Redefining the Concept of Intent*, 40 ARIZ. L. REV. 1219 (1998) (objecting to the inclusion of “environmental racism” in the environmental justice movement); Thomas A. Lambert, *The Case Against Private Disparate Impact Suits (Environmental Racism)*, 34 GA. L. REV. 1155 (2000) (“Decisions that have disparate racial effects . . . unlike intentionally discriminatory decisions, are not always undesirable. . .”).

568. Frank, *supra* note 559, at 79–80; Derek Parfit, *The Social Discount Rate*, in POLITICS OF THE ENVIRONMENT 572–78 (Robert E. Goodwin ed., 1994); see also Richard L. Revesz, *Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives*, 99 COLUM. L. REV. 941, 950–51 (1999) (chronicling the debate over discounting future lives saved with respect to asbestos regulation).

569. If a billion dollar loss in today’s monetary values will not occur for another one hundred years, then at a 5 percent discount rate society should not spend \$10 million today to prevent it. 1 billion/ 1.05¹⁰⁰ equals roughly \$7.6 million. In Revesz’s example, the OMB discounted the value of a human life saved in ten years to just over \$22,000. *Id.* at 951.

570. Carried out to its most extreme implication, the discount rate devalues future human lives saved. See Lisa Heinzerling, *Discounting Life*, 108 YALE L.J. 1911 (1999) (challenging the use of discounting in the valuation of future lives).

The third, and most significant criticism of CBA, is that in assessing efficiency it does not take into account questions of morality.⁵⁷¹ As Judge Posner has pointed out with typical frankness, many socially undesirable results—for example, suicide pacts or baby selling—are not necessarily inefficient;⁵⁷² Professor Steven Shavell has even explicated the logical efficacy of selling one’s immediately unneeded organs.⁵⁷³ Thus, a typical CBA will not filter out those assumptions that are less fair than others. Nor does CBA itself provide normative guidance. The exclusion of any consideration of morality (expressed in terms of fairness) as a variable is at the center of Louis Kaplow and Steven Shavell’s controversial work.⁵⁷⁴ They argue that fairness should never trump social welfare (efficiency) when deciding upon legal rules, because utilizing a fairness justification may make everyone worse off.⁵⁷⁵ Kaplow and Shavell use the alternative tort liability theories of negligence and strict liability as an example which applies equally to everyone. Strict liability may increase social welfare, and yet due to concerns with fairness, negligence is used.⁵⁷⁶

571. See generally Nussbaum, *supra* note 557.

572. See, e.g., Richard A. Posner, *Comment on Donohue*, 22 LAW & SOC’Y REV. 927, 928 (1988) (“Abrogating the laws against selling babies for adoption would reduce, not increase, the price that adoptive parents must pay to acquire a child.”); Richard A. Posner, *The Regulation of the Market in Adoptions*, 67 B.U. L. REV. 59, 71–72 (1987) (noting that adoption today is “baby selling,” and “the question of public policy is not whether baby selling should be forbidden or allowed but how extensively it should be regulated”). Always a fluid thinker, Judge Posner’s more recent work has taken greater account of social norms. See, e.g., Richard A. Posner, *Social Norms, Social Meaning, and Economic Analysis of Law: A Comment*, 27 J. LEGAL STUD. 553, 564–65 (1998) (embracing a rational choice approach to norms as a component of law and economics).

573. Steven Shavell, *Why Not Sell Organs?*, N.Y. TIMES, May 11, 1999, at A22.

574. See Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 967–68 (2001) (published in book form as LOUIS KAPLOW & STEVEN SHAVELL, *FAIRNESS VERSUS WELFARE* (2002)) (“Notions of fairness . . . should receive no independent weight in the assessment of legal rules.”). The responses, sometimes emotional, arise from scholars who would not accept a legal regime lacking moral values. See, e.g., David Dolinko, *The Perils of Welfare Economics*, 97 NW. U. L. REV. 351, 393 (2002) (objecting that Kaplow and Shavell fail to “resolve this issue of whether the challenge arises from doubts about . . . philosophical propriety” or issues arising from “government basing its special actions on those notions”); Michael B. Dorff, *Why Welfare Depends on Fairness: A Reply to Kaplow and Shavell*, 75 S. CAL. L. REV. 847 (2002) (arguing that fairness ultimately determines policy outcomes, even if welfare economics is applied); Ward Farnsworth, *The Taste for Fairness*, 102 COLUM. L. REV. 1992 (2002) (advocating a role for fairness in setting the appropriate values for costs and benefits).

575. Kaplow & Shavell, *supra* note 574, at 1011.

576. *Id.* at 967.

Since everyone is made worse off in certain circumstances, a proposition that flies against the Pareto principle, Kaplow and Shavell argue that fairness is not a useful policymaking tool.⁵⁷⁷ By contrast, Professor Howard Chang asserts that fairness and the Pareto principle are not mutually exclusive.⁵⁷⁸ A fairness theory can comply with the Pareto theory because weight can be given to individuals' preferences.⁵⁷⁹ Chang's argument makes sense because fairness is also something which can be valued in terms of well-being. Chang also indirectly addresses other strikes against CBA, arguing that people are not always able to measure utility due to the lack and cost of information.⁵⁸⁰ Fairness in such a case makes for an attractive decisionmaking tool.⁵⁸¹ Of course it can be argued in reply, and Kaplow and Shavell do so, that there are innumerable theories of fairness that can be applied, whereas the notion of efficiency is much better defined, and hence predictable.⁵⁸²

Ultimately, as Professors Mathew Adler and Eric Posner have pointed out, CBA is merely a tool and can include whatever values a policymaker chooses.⁵⁸³ As such, CBA can be applied to different circumstances and, depending upon the values sought by the person applying CBA, to many different ends.⁵⁸⁴

C. Pareto Optimality

Despite the growing debate about the role of fairness, the least controversial law and economics scheme is that of Pareto optimality, wherein no one can be made better off without anyone being made worse off.⁵⁸⁵ The Pareto measure, however, is rarely acceptable as a policymaker's lone decision making tool, because Pareto optimality

577. See *id.* at 1015 (“[L]ogical consistency requires that one can give no weight in normative analysis to notions of fairness because doing so entails the contrary proposition that sometimes it is normatively desirable to adopt a policy that makes everyone worse off.”).

578. See generally Howard F. Chang, *A Liberal Theory of Social Welfare: Fairness, Utility, and the Pareto Principle*, 110 YALE L.J. 173 (2000).

579. *Id.* at 233–34.

580. *Id.* at 230–32.

581. *Id.* at 230–31.

582. Kaplow & Shavell, *supra* note 574, at 1306–14.

583. Matthew D. Adler & Eric A. Posner, *Implementing Cost-Benefit Analysis When Preferences Are Distorted*, in COST-BENEFIT ANALYSIS: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES, *supra* note 280, at 270.

584. See generally Eric A. Posner, *Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective*, 68 U. CHI. L. REV. 1137 (2001).

585. See *supra* Part IV.A.

denies interpersonal connections of welfare, and thus involuntary transfers. For example, one rich individual's \$100 loss could preclude vast wealth increases for a million starving destitutes. Because in reality, a proposed policy rarely has no economic losers, Pareto CBA is rarely the sole device used for social planning.

D. Kaldor-Hicks Welfare Enhancement

Under the Kaldor-Hicks test, a policy is efficient so long as the "winners" (meaning those benefiting from the policy change) could theoretically compensate the "losers" (i.e., those individuals for whom the policy change engenders a detriment).⁵⁸⁶ Kaldor-Hicks is the principal method of CBA, at least so far as public policy decisions are concerned, because it allows for involuntary transfers in the name of efficiency and also does not require that everyone affected by an action be agreeable to its consequences.⁵⁸⁷ Accordingly, Kaldor-Hicks welfare enhancing solutions are usually promulgated through governmental action, especially via administrative agencies.⁵⁸⁸

Utilizing a Kaldor-Hicks model, the costs and benefits of a proposed program are weighed, and the policy is accepted if it will increase societal well-being.⁵⁸⁹ Achievement of this goal is determined by whether there has been "wealth-maximizing," meaning an increase in "wealth" or "value" as units of measurement.⁵⁹⁰ Because the desirability of results are critiqued on individuals' ability to pay (and

586. See Feldman, *supra* note 532, at 417.

587. For very different perspectives on the import of this loss of autonomy, compare RICHARD A. POSNER, *THE ECONOMICS OF JUSTICE* 94-95 (1981), with Jules L. Coleman, *Efficiency, Utility, and Wealth Maximization*, 8 *HOFSTRA L. REV.* 509, 534-40 (1980).

588. See, e.g., Linda R. Cohen & Matthew L. Spitzer, *Judicial Deference to Agency Action: A Rational Choice Theory and an Empirical Test*, 69 *S. CAL. L. REV.* 431, 441-45 (1996) (suggesting that rational choice theory, which dictates how much deference the Supreme Court gives to lower court administrative decisions, enables the Court to shape regulatory policy); Posner, *supra* note 584, at 1138 (demonstrating "a trend toward greater recognition of cost-benefit analysis among the circuit courts as an appropriate and possibly even necessary part of the regulatory process"); see also Stephen M. Bundy, *Commentary on "Understanding Pennzoil v. Texaco": Rational Bargaining and Agency Problems*, 75 *VA. L. REV.* 335, 364 (1996) (proposing that, because agency problems often impede settlement for large corporations engaged in complex litigation, in-house counsel should intervene to help senior management control these problems).

589. Thus, the significance of how CBA ought to be utilized is discussed in the repartee between Sunstein and Abramowicz, *supra* note 552.

590. Although from a technical point of view, Kaldor-Hicks and wealth maximization need not be the same. A very concise treatment of Kaldor-Hicks is provided in JEFFREY L. HARRISON, *LAW AND ECONOMICS* 33-35 (1995).

thus potentially compensate those who “lose”), Kaldor-Hicks has been criticized as an insufficient surrogate for utility, particularly when applied to individual, rather than to systemically-based, transactions.⁵⁹¹ As used in the proposed framework, Kaldor-Hicks welfare enhancing policies have two variations.

Under a Semi-Efficient scheme, an accommodation would bring about a Semi-Efficient state if both the disabled worker and the employer benefit, but, in this case, the employer’s benefits are less than optimal. In this regard it is similar to Pareto in that both involved parties gain and are placed in net positive positions. However, it differs from Pareto in that, in a Pareto optimal state, the employer would receive as much benefit by employing the disabled worker as he would by employing a (fungible) nondisabled worker. With a Semi-Efficient Accommodation, the employer still achieves a net positive profit position, but his profits are less than they would be had he employed an equivalent nondisabled employee.⁵⁹² Hence, within the Semi-Efficient state, there exists a range of profit-capturing transactions, from slightly less than full profit to slightly more than no profit. Related to the issue of where to draw the line on reasonableness are two issues: first, the extent to which (if at all) accommodations effectuate equality, rather than distribution; and second, the cross-dynamic of an employer repeatedly providing accommodations, and how this affects the extent to which profitability ought to be compromised. As shown in Part IV,⁵⁹³ the Semi-Efficient phase is uniquely modulated to ADA accommodations.

The second part is Social Benefit Gain efficient, which operates outside the boundaries of the ADA as defined by the limits of Pareto and Semi-Efficiency, to employ disabled workers who are inefficient for private employers but still socially efficient.⁵⁹⁴ In this circumstance,

591. *Id.* at 34. Harrison offers the following hypothetical:

[S]uppose two individuals—one rich and one poor—both desire a gallon of milk. The poor person wants it desperately and is willing to give his or her last dollar for the milk. On the other hand, the rich person does not care for the milk but thinks it would be fun to . . . pour the milk into a storm drain and, therefore, is willing to pay \$1.50 for the milk. Under wealth maximization principles, the efficient allocation is to the rich person.

Id.

592. Put another way, the Semi-Efficient phase of the continuum is neither Pareto optimal, wholly efficient, or Kaldor-Hicks, and therefore needs to be cataloged and dealt with separately.

593. *See supra* Part IV.B.1.

594. *See supra* Part IV.C.

social efficiency is measured by any net positive gain to society.⁵⁹⁵ Captured by this policy are disabled workers who can perform productive work through the provision of unreasonable accommodations.⁵⁹⁶

E. Wholly Inefficient Mandates

When the costs of employing a worker with a disability exceed any net positive gain to society relative to the costs of providing for the worker through the social welfare system, these accommodations result in socially inefficient mandates. While an illustration of how a hypothetical worker with a disability would, in practice, fall within this sphere is provided below,⁵⁹⁷ it bears noting at this juncture that the phenomenon of disabled employment being socially inefficient raises two important issues.

First, where does a policymaker draw the line between Kaldor-Hicks welfare enhancement and a socially inefficient accommodation? As shown in Part II.B.3, two commentators portray disability-related employment as a means of avoiding dependence, although neither provide a formula for predicting when a given worker reaches this level or, because they operated from the ADA, how far society ought to go (if at all) in this respect. The formula provided for determining socially inefficient mandates offers one solution to this dilemma.⁵⁹⁸

The second connected issue, and one that goes beyond the scope of summary mention, is one that has been raised in economic analyses led by Professors Marjorie Baldwin⁵⁹⁹ and Richard Burkhauser:⁶⁰⁰ whether people with disabilities are expected to work after the ADA. Baldwin asserts that Title I is unlikely to bring about a substantial increase in the employment rates of workers with disabilities because the ADA does not adequately take into account the influence of

595. See generally DIANA FUGUITT & SHANTON J. WILCOX, COST-BENEFIT ANALYSIS FOR PUBLIC SECTOR DECISION MAKERS (1999).

596. See *infra* Appendix, Section E.

597. See *supra* Part IV.B.

598. See *supra* Part IV.C.

599. Marjorie L. Baldwin, *Can the ADA Achieve Its Employment Goals?*, 549 ANNALS AM. ACAD. POL. & SOC. SCI. 37 (1997); William G. Johnson & Marjorie Baldwin, *The Americans with Disabilities Act: Will It Make a Difference?*, 21 POL'Y STUD. J. 775 (1993).

600. Richard V. Burkhauser, *Post-ADA: Are People with Disabilities Expected to Work?*, 549 ANNALS AM. ACAD. POL. & SOC. SCI. 71 (1997).

prejudice.⁶⁰¹ Burkhauser criticizes the ADA's lack of conjoined work initiatives by contrasting various European policies directed toward "transferring" people with disabilities from social welfare networks into the workforce.⁶⁰² Burkhauser also points out that the success of these initiatives correlates directly to the degree that any given national policy provides incentives for, or harbors expectations about, participation in the workplace by individuals with disabilities.⁶⁰³ Although their arguments bring into question issues that are also beyond the scope of this Article,⁶⁰⁴ the assertions they make will help lend insight into how far accommodations beyond the ADA's scope ought to go.⁶⁰⁵

601. Marjorie L. Baldwin & William G. Johnson, *Dispelling the Myths About Work Disability*, in NEW APPROACHES TO DISABILITY IN THE WORKPLACE 39 (Terry Thomason et al. eds., 1998).

602. Richard V. Burkhauser & Mary C. Daly, *Disability and Work: The Experiences of American and German Men*, 2 FED. RES. BANK S.F. ECON. REV. 17 (1998); Richard V. Burkhauser & Petri Hirvonen, *United States Disability Policy in a Time of Economic Crisis: A Comparison with Sweden and the Federal Republic of Germany*, 67 MILBANK Q. 166 (1989).

603. Richard V. Burkhauser, *Policies to Make Work Pay for People with Disabilities*, in GROWTH IN DISABILITY BENEFITS: EXPLANATIONS AND POLICY IMPLICATIONS (Kalman Rupp & David C. Stapleton eds., 1998); Richard V. Burkhauser & Mary C. Daly, *U.S. Disability Policy in a Changing Environment*, 16 J. ECON. PERSP. 213 (2002); Richard V. Burkhauser et al., *How People with Disabilities Fare when Public Policies Change*, 12 J. POL'Y ANALYSIS & MGMT. 251 (1993).

604. Most prominently, the impact that factors exogenous to the statute have on its efficacy. To give just a few examples, these include the absence of job training programs and incentives for those with disabilities comparable to those directed at other groups historically dependent on public assistance, the lack of Department of Justice or EEOC enforcement funding, and the absence (until 2000) of a health insurance provision. Stein, *Empirical Implications*, *supra* note 22, at 1684-87. For detailed econometric studies demonstrating these effects, see generally Burkhauser & Stapleton, *supra* note 333.

605. See *supra* Part IV.C.