Hands-Tying and the Age Discrimination in Employment Act

Christine Jolls*

Title VII’s prohibitions on discrimination based on race, gender, religion, and national origin are typically justified on grounds other than economic efficiency. These prohibitions reflect, for many of us, a basic normative judgment that different outcomes for equally qualified employees of different races or other protected categories are simply wrong, wholly apart from their efficiency.¹ This argument is more difficult to sustain with regard to age discrimination, the subject of the Age Discrimination in Employment Act of 1967 (ADEA).² As the Supreme Court noted in Massachusetts Board of Retirement v. Murgia,³ holding that age is not a suspect classification under the Equal Protection Clause: “[O]ld age does not define a ‘discrete and insular’ group . . . in need of ‘extraordinary protection from the majoritarian political process.’ Instead, it marks a stage that each of us will reach if we live out our normal span.”⁴ Old age has a temporal and, most critically, a universal element (almost universal at least) that is lacking in the categories covered by Title VII. These features mean that distributive or other gains for older workers are likely to come at the expense of these same workers in earlier years, making rules against age discrimination difficult to justify on traditional distributive or rights-based grounds.

While the normative foundation of the ADEA remains uncertain, the Act is as important a feature of the employment discrimination landscape

---

* Assistant Professor of Law, Harvard Law School (on leave 1995-97) and Faculty Research Fellow, National Bureau of Economic Research. B.A. 1989, Stanford University; J.D. 1993, Harvard University; Ph.D. (Economics) 1995, Massachusetts Institute of Technology. I thank David Charny, Samuel Issacharoff, D. Bruce Johnson, Avery Katz, Richard Posner, David Reier, Alan Schwartz, Steven Shavell, Stephen Williams, and Jonathan Zittrain for helpful comments. I have also benefited from the suggestions of participants in the Texas Law Review Symposium on The Changing Workplace and workshop participants at George Mason University, George Washington University, Georgetown University, and the University of Toronto. Finally, I am indebted to Mike Offner and Brian Schafer for excellent research assistance.

1. Title VII may also be efficient. See John J. Donohue III, Is Title VII Efficient?, 134 U. PA. L. REV. 1411, 1430-31 (1986).
4. Id. at 313-14.
as is Title VII’s traditional antidiscrimination command. Age discrimination claims accounted for 51% of the monetary damages obtained in employment discrimination cases brought by the Equal Employment Opportunity Commission (EEOC) between 1984 and 1988 and for approximately 25% of the EEOC’s caseload over that period. Likewise, ADEA claims filed with the EEOC grew 34% between 1989 and 1993 and nearly 200% over the 1980-1984 period. Against the backdrop of the growing empirical significance of the ADEA, my contribution to this Symposium attempts to deepen our normative understanding of the Act.

I accept, for the most part, the premise that the ADEA cannot be justified on traditional distributive or rights-based grounds. The project is then to meet the challenge posed by the concluding passage of a recent empirical analysis of the ADEA: “[The ADEA] cannot be justified in terms of opening opportunities to a historically disfavored group. . . . It is therefore necessary to turn to other justifications for the ADEA. These have yet to be supplied . . . .” I examine the possibility of an efficiency-based argument in favor of the ADEA, one that links the Act to a market failure potentially remedied by it. Drawing on this analysis, I suggest that common efficiency-based criticisms of the ADEA are misguided. I do not purport to offer anything like a full-fledged efficiency defense of the ADEA; the ultimate desirability of the Act from an efficiency perspective turns on difficult empirical questions to which we do not yet have good answers. Likewise, I do not suggest (nor do I believe) that the ADEA was enacted to serve the efficiency function I argue may be ascribed to it. My goal is the more limited one of identifying and defending a particular efficiency-based argument in favor of the ADEA—an argument that, I suggest, makes sense of the ADEA cases, enjoys substantial empirical support, and corrects the prevailing view among economically oriented commentators that the ADEA has no redeeming virtues from an efficiency perspective.

The efficiency argument developed below arises out of the difficulty of achieving desirable “hands-tying” in the employer-employee relation-

5. George Rutherglen, From Race to Age: The Expanding Scope of Employment Discrimination Law, 24 J. LEGAL STUD. 491, 505, 507-08 (1995) (Tables: Charges Filed with the EEOC & Outcome in Cases Filed by the EEOC). The EEOC itself brings only a modest fraction of all age discrimination cases, but it brings them in rough proportion to initial claims filed with the agency, see id. at 509, and initial claims in turn reflect the overall body of employment discrimination cases (due to the requirement that the plaintiff exhaust administrative remedies), see id. at 501.
7. Rutherglen, supra note 5, at 521.
ship. Hands-tying refers to a commitment not to engage in behavior that is attractive in the short term but ultimately destructive of long-term goals. Such a commitment may be desirable in the employment setting for several reasons, some familiar and others less so, and, as explained below, may be facilitated by legal limits on age discrimination in employment. An important theme in the analysis to follow is the role of labor market mobility in an efficiency-based analysis of the ADEA. I suggest that whatever one believes about the need for legal intervention to remedy shortcomings of private contracting between employers and employees known to be in long-term relationships—the focus of much of the contemporary literature in employment law—job mobility creates an independent and possibly more broadly compelling basis for legal involvement.

The hands-tying perspective on the ADEA is grounded in a striking empirical regularity in the ADEA cases: older workers are often terminated or otherwise disfavored because they command higher wages than younger workers capable of performing the same job. As Part I explains, this empirical regularity is difficult to explain on the basis of the human capital considerations on which previous economically oriented analyses of the ADEA have focused. The empirical regularity in the cases seems to put the efficiency costs of the Act (interpreted to prohibit the employer's behavior) in stark relief: society is forced to pay more for goods and services than in the absence of the prohibition. As Part I argues, however, this perspective on cost-based decisions about older workers fails to ask the obvious question raised by the pattern observed in the cases and corroborated by empirical evidence in the economics literature: why do older workers tend to be paid more than younger workers capable of performing the same jobs? Wages, after all, are determined in the market, not handed down from above. Yet higher pay based on age—wholly apart from either productivity or seniority at a particular firm—seems to be a fairly robust empirical fact about our economy. Why does the market produce such a situation, and what, if anything, does the answer suggest about the ADEA?

Part II sketches an answer to the first of these questions, concerning why the market might produce wages that rise with workers' age. The first and most familiar explanation for age-based wages (which I treat fairly


10. See POSNER, supra note 8, at 321, 328-30, 333-35, 337; Rutherglen, supra note 5, at 500-01; Peter H. Harris, Note, Age Discrimination, Wages, and Economics: What Judicial Standard?, 13 HARRY, J. & PUB. POL'Y 715, 718 (1990); see also Metz v. Transit Mix, Inc., 828 F.2d 1202, 1217 (10th Cir. 1987) (Easterbrook, J., dissenting) (linking higher wages for older workers to higher productivity); EPSTEIN, supra note 8, at 451-52 (discussing human capital considerations).
briefly on that account) links such wages to incentive problems in the employment relationship. On this view, rewarding employees with higher wages later in life is desirable because it encourages them to work hard even when their efforts cannot be directly monitored. A second explanation for rising wages focuses on individuals' psychological preference for improvement in their earnings over time. Here rising wages are better than flat ones even if total earnings across the life-cycle are the same in present value terms; people like to feel that they are doing better over time. These two theories together seem to explain at least part of the rise in wages with workers' age.

The fact that age-based wages may be desired by labor market participants leads naturally to the question whether these parties face limits on their ability to put such wages into practice. If they do not, then legal intervention, including the ADEA, would be difficult to justify on efficiency grounds. As Part III explains, however, private solutions may be limited by employers' inability to commit to plans of rising wages, where the incentive to renege in the high-wage phase is great. Explicit or implicit contracts may help to mitigate the commitment problem, but in a world in which individuals often change jobs over the course of their working lives, contractual solutions are likely to be imperfect. As explained below, job mobility, though valuable in many respects, creates a species of inter-employer externality that cannot readily be solved by conventional private contracts. Legal limits on cost-based decisions about older workers represent a possible solution to this externality problem; such limits tie employers' hands and prevent them from reneging on the payment of age-based wages. Evidence on wages negotiated by unions—entities that may help to address the contracting barriers created by job mobility—seems to provide some support for the view that legal limits on cost-based decision-making may help to replicate the arrangements parties would choose in the absence of contracting barriers.

Part IV examines the implications of the hands-tying analysis for the ADEA. It explains that hands-tying considerations argue in favor of ADEA liability for cost-based decisions about older workers—and thus in favor of "disparate impact" liability under the Act. I also discuss reasons that the ADEA may be a better means of facilitating desirable hands-tying than other legal doctrines potentially suited to that purpose. I emphasize, however, that while disparate impact liability under the ADEA may be desirable in principle, it raises serious implementation issues and may entail considerable administrative cost. Part IV concludes with a discussion of whether and to what extent employees should be permitted to waive ADEA provisions as to events that may occur in the future. Hands-tying considerations imply that such waivers, now prohibited, should be permitted if knowing and voluntary—conditions that may, however, be unlikely to be satisfied in practice.
I. The Age-Wage Relationship

A. ADEA Cases

The paradigmatic ADEA claim arises from an employer’s decision to replace an older worker with a younger, cheaper employee capable of performing the same job. The court held that an employer violated the ADEA when, in Metz v. Transit Mix, Inc., the court held that an employer violated the ADEA when, in seeking to cut its costs, it replaced the fifty-four-year-old plaintiff with a forty-three-year-old employee earning little more than half the plaintiff’s salary. Judge Easterbrook, in dissent, strenuously disputed the majority’s conclusion: “It is hard to imagine how the use of wages could not be a valid business measure; wages correspond precisely to the costs of doing business, and hence to profitability.” Similarly, the Second Circuit’s holding in Geller v. Markham that a school board violated the ADEA when it passed over a fifty-five-year-old applicant on cost grounds elicited a spirited rebuke from then-Justice Rehnquist, who dissented from denial of certiorari on the ground that the school board’s cost-cutting policy, which made no specific reference to age, did not constitute age discrimination in violation of the Act.

The myriad cases involving cost-based decisionmaking under the ADEA arise when older workers are disfavored as a result of the high pay (in the form of wages or other benefits) they command. Of course, an expensive worker need not always be less attractive than a cheaper one; the critical issue is whether the higher cost of the more expensive worker is

---


12. 828 F.2d 1202 (7th Cir. 1987).

13. Id. at 1204-05, 1211.

14. Id. at 1219 (Easterbrook, J., dissenting) (emphasis in original).


matched by higher productivity. Judge Easterbrook's Metz dissent puts the point nicely: "There is no 'qualified [worker]' in the abstract . . . . To say that someone is 'qualified' to manage the [defendant's] plant is to say that he can handle the manufacture and sale of concrete well enough that he adds to the value of the enterprise at least the cost of his salary."17 When an older, more expensive employee is terminated or otherwise disfavored on cost grounds relative to a younger worker, the older worker's wage-productivity combination must have proven less attractive to the employer than that of the younger individual; otherwise the older worker would not have been disfavored. The wage pattern tentatively suggested by the cases is therefore one of increasing wages with age even after controlling for productivity.

The suggestion about the wage pattern is tentative because ADEA cases reflect an obviously circumscribed set of circumstances: only employees over forty are protected by the ADEA, and age discrimination will be difficult to prove unless the successful candidate is younger than the plaintiff.18 However, the wage evidence described in the following section suggests that the cost-based decisionmaking observed in the ADEA cases may indeed reflect higher wage-productivity ratios for older workers than for younger ones.

B. Wage Evidence and the Limits of Human Capital Theory

Empirical evidence shows that wages tend to rise with age, sometimes dramatically. Regular wage payments often increase automatically with each additional year in the labor force; annual merit raises, for example, are typically above the rate of inflation even for the worst-performing individuals.19 Likewise, employee compensation often includes a pension component, leading to spikes in the employee's total wage when benefits vest. Pension benefits may be a significant component of a worker's lifetime earnings; for example, in 1992 the average level of benefits (in present value terms) was $180,000, or fourteen percent of the total discounted value of earnings from the hire date to normal retirement age.20

17. Metz, 828 F.2d at 1213 (Easterbrook, J., dissenting).
18. See, e.g., Roper v. Peabody Coal Co., 47 F.3d 925, 926 (7th Cir. 1995) (holding that to make out a prima facie case under the ADEA, the plaintiff must show that younger employees were treated more favorably than the plaintiff); Rinehart v. City of Independence, 35 F.3d 1263, 1265 (8th Cir. 1994) ("[T]he plaintiff [must] be replaced by a younger person" to make out a prima facie case under the ADEA), cert. denied, 115 S. Ct. 1822 (1995). The Supreme Court approved this approach in O'Connor v. Consolidated Coin Caterers Corp., 116 S. Ct. 1307, 1310 (1996).
Moreover, wage growth and pensions are empirically correlated, in the sense that the same individuals tend to have both, which suggests that the two phenomena arise from the same underlying influence. The increase in workers' earnings with time in the labor force does not depend on their having long tenure with a particular employer; the increase is primarily a function of the total time spent in the labor force.

It does not necessarily follow from this pattern of rising pay that wages rise with age even after controlling for productivity—the pattern tentatively suggested by the ADEA cases. The increase in wages with age might simply reflect increases in workers' productivity as they gain experience, accumulate human capital, and take on additional supervisory and training roles. Empirical evidence suggests that over eighty percent of companies provide on-the-job training, which is likely to result in greater productivity for workers with more experience. Likewise, workers' wages appear to increase most rapidly in periods in which they are receiving training from their employers, suggesting that rising wages are at least a partial function of enhancements in human capital. The human capital explanation for rising wages predicts that wages and productivity will rise in tandem, not diverge as workers grow older.

The picture is a bit more complex, but not qualitatively different, once the relationship-specific nature of human capital is accounted for. Employees' productivity often will be higher at their current employer than at a different firm because the training provided by the company, though typically not useless at a different firm, also would not be as valuable as at the original firm. Both employer and employee thus gain by staying together; the employer gets a worker who is more productive than an outsider lacking specialized training would be, and the employee commands a higher wage than what he or she could get at an outside firm. The precise division of the surplus from staying together will depend on the relative bargaining power of the parties, but unless the employer has no bargaining power at all (a highly unlikely scenario), employees' wages will

21. See Edward P. Lazear, Why Is There Mandatory Retirement?, 87 J. POL. ECON. 1261, 1280 (1979) (Table: Logit and OLS Results).

22. See Katharine G. Abraham & Henry S. Farber, Job Duration, Seniority, and Earnings, 77 AM. ECON. REV. 278, 288-90 (1987); Joseph G. Altonji & Robert A. Shakotko, Do Wages Rise with Job Seniority?, 54 REV. ECON. STUD. 437, 442-46 (1987). These studies show that previous findings of a wage-tenure relationship were artifacts of the correlation between tenure and other explanatory variables (such as the quality of the job match) that in turn are correlated with wages but were omitted from the analysis.

23. HARRIET GORLIN, PERSONNEL PRACTICES I: RECRUITMENT, PLACEMENT, TRAINING, COMMUNICATION 41 (Conference Board Information Bulletin No. 89, 1981) (Table: On-Site Training or Education).


be below their "marginal revenue product" at the firm—the amount they add to the firm's revenue.26 (Their wages at the present firm will be above their marginal revenue product at an outside firm, so the employees are still better off (wage-wise) with the current employer.)

With wages below marginal revenue product at the firm, the employer has no incentive to get rid of older workers in Metz-style terminations; these workers are adding more to the employer's revenue than they are costing in terms of wages.27 Focusing on human capital considerations therefore leads to the conclusion (advanced by Richard Posner and others) that cost-based termination of older workers is an unlikely event—a conclusion that seems difficult to reconcile with the frequency in practice of Metz-style claims.28 Rather, as explained above, the paradigmatic cost-based decisionmaking case makes sense only if the wage of the older worker is higher than the worker's marginal revenue product at the firm; only in this situation will the employer have an incentive to discharge or refuse to hire the older individual. The human capital explanation for rising wages may also be difficult to square with empirical evidence suggesting (tentatively) that relatively little of the increase in earnings with age is attributable to tenure at a particular firm as opposed to overall labor market experience.29

Consistent with the tentative suggestion in the ADEA cases (and contrary to the prediction of human capital theory), wage evidence supports

26. See id. at 41-44; FLANAGAN ET AL., supra note 6, at 55. In the version of the human capital model developed in Lorne Carmichael, Firm-Specific Human Capital and Promotion Ladders, 14 BELL J. ECON. 251 (1983), the wages of older workers are above, not below, their marginal revenue product at the firm. See id. at 252. However, as noted just below, even in this model employers have limited incentive to discharge older workers.

27. FLANAGAN ET AL., supra note 6, at 274; POSNER, supra note 8, at 333-35; Stewart J. Schwab, Life-Cycle Justice: Accommodating Just Cause and Employment at Will, 92 MICH. L. REV. 8, 15-16 (1993). In the Carmichael version of the human capital model noted in the preceding footnote, wages are above marginal revenue product for older workers, but the employer's incentive to fire these individuals is limited nonetheless, as firing a worker simply causes a high-wage job to "revert to the worker one rung down on the seniority ladder." Carmichael, supra note 26, at 252.

28. See POSNER, supra note 8, at 334. Posner supports his claim by reference to evidence that ADEA plaintiffs in reported cases are typically unsuccessful. Id. at 335. However, without any indication of how plaintiffs fare in cases brought under Title VII or other employment disputes, it is difficult to tell whether ADEA plaintiffs are an especially unfortunate group or, rather, plaintiffs do relatively poorly in all types of employment and civil rights litigation. In fact, the evidence suggests that age discrimination plaintiffs do substantially better than plaintiffs in race and gender discrimination cases. See Rutherfelen, supra note 5, at 512 (Table: Outcome of Cases).

29. See Abraham & Farber, supra note 22, at 289-90, 295; Altonji & Shakotko, supra note 22, at 442-46. See generally Victor P. Goldberg, A Relational Exchange Perspective on the Employment Relationship, in FIRMS, ORGANIZATION, AND LABOUR 127 (Frank H. Stephen ed., 1984) (arguing that the importance of relationship-specific human capital in the employment setting has been over-emphasized). But see Robert Toppel, Specific Capital, Mobility, and Wages: Wages Rise with Job Seniority, 99 J. POL. ECON. 145, 147-48 (1991) (finding that increases in earnings over time are in fact attributable in significant part to tenure at a particular firm).
the view that at least some of the increase in pay levels with age cannot be explained by increased productivity. First, time in the labor force (whether or not with a single employer) appears to be a much greater factor in wage levels than rated performance, which is correlated at least to some degree with the employee’s productivity. Moreover, employers tend to go to great lengths to force or encourage older workers to retire, something they would have no incentive to do if older workers’ productivity matched their wages. Mandatory retirement—the most extreme form of induced exit—was common prior to its abolition by Congress in 1986. In the post-mandatory retirement era, employers have relied on carrots rather than sticks by, for example, structuring pension plans in such a way that workers can take early retirement while still obtaining full pension benefits. “Open-window” offers of early retirement, which reward workers for leaving the firm “voluntarily,” represent another means of inducing the departure of older employees, who, after all, are most likely to be interested in retirement. Standing alone, mandatory retirement and exit-incentive programs could be consistent with wages equal to productivity until the age of retirement or early retirement, followed by a sharp drop-off in productivity at that age (hence the need for induced retirement, or else a sharp cut in wages). However, neither the prevalence of cost-based discharge of middle-aged employees in the ADEA cases, nor the empirical evidence on wages and productivity over the life-cycle, is consistent with this alternative explanation.

The wage-productivity relationship suggested by the cases and the empirical evidence is depicted graphically in Figure 1. The figure shows both wages and productivity (the latter measured by the employee’s marginal revenue product at the firm) rising with age, but at different rates; wages rise faster than productivity. When wages are below marginal revenue product, the employer profits from having the employee on the payroll. When wages rise above marginal revenue product, however, employing the individual is no longer profitable, though from the employee’s standpoint the high wages are simply restitution for low wages earned early on. It is precisely the divergence between wages and productivity in later years that gives rise to the cost-based decisionmaking observed in the ADEA cases.

32. Gustman et al., supra note 20, at 432.
A few clarifying comments may be helpful at this point. First, throughout the analysis below productivity is measured within the firm at which the employee works; as discussed above, productivity at an outside firm may be lower. Second, while the figure focuses on the rise in wages and productivity with age, at some point both may begin to fall as a consequence of aging. This would produce an inverted U-shaped curve for wages and productivity. Alternatively, it is sometimes suggested that productivity (but not wages) follows an inverted U-shaped pattern, beginning below wages, then rising above wages after the employee has been with the firm for a few years, and ultimately falling below wages again—perhaps because productivity levels off when an employee reaches middle age.\textsuperscript{34} Regardless of these nuances, however, the central fact of a rising wage-productivity relationship over a significant portion of a worker's lifetime is supported by both the ADEA cases and the empirical evidence.

\textbf{C. Implications}

If, as the cases and the empirical evidence suggest, older workers have higher wage-productivity ratios than younger employees, how could it ever be efficient to force an employer to stick with its older employees? At first

glance, such an outcome would appear to be at odds with any plausible notion of efficiency. Employers would be holding onto older workers to perform jobs that younger, cheaper candidates could do as well or better relative to their cost. Society would pay more for goods and services, and younger workers would sacrifice more in their early years than they would gain later on. Plants would be shut down,\textsuperscript{35} the need for cost-cutting policies would be frustrated,\textsuperscript{36} and the options of governmental bodies seeking to deal with shrinking budgets would be severely limited.\textsuperscript{37}

This gloomy view, however, fails to consider why it might be that older workers are paid so generously. Wages are determined in the market, not handed down from above. Thus, if employers and employees are opting for age-based wages, presumably there is some reason for their doing so. The sensibility of prohibiting cost-based decisions about older workers cannot be assessed without consideration of the parties' reasons for getting themselves into the high-wage situation in the first place. Reasons that age-based wages may be efficient and therefore desired by market actors are the focus of Part II.

II. Explanations for Age-Based Wages

The view that forcing firms to retain older, more expensive workers is necessarily inefficient reflects a purely static conception of efficiency. From a static perspective, paying an input more than its marginal revenue product is clearly inefficient; neoclassical theory predicts that firms will hire workers up to the point at which marginal revenue product just equals the wage.\textsuperscript{38} But the world is more complicated than this. The analysis below explains that once we move beyond the static perspective, age-based wages may be desired by market actors either as a response to incentive problems in the employment relationship or due to employees' psychological preference for increased earnings over time. Other factors may also contribute to age-based wages, but the two explanations discussed below have been tested and shown to have empirical support. The evidence suggests that at least part of the phenomenon of age-based wages is due to incentive considerations and the preference for increased earnings over time.

\textsuperscript{35} Metz v. Transit Mix, Inc., 828 F.2d 1202, 1212 (7th Cir. 1987) (Easterbrook, J., dissenting).


\textsuperscript{37} Markham v. Geller, 451 U.S. 945, 948 (1981) (Rehnquist, J., dissenting from denial of certiorari); see also Note, The Age Discrimination in Employment Act of 1967, 90 HARV. L. REV. 380, 399 (1976) (contending that there is no reason to construe the ADEA to prohibit firing older workers on cost grounds).

\textsuperscript{38} FLANAGAN ET AL., supra note 6, at 100.
A. Incentive Problems in the Employment Relationship

A classic problem in the employment setting is that workers may tend not to work hard when they are paid on the basis of time worked rather than performance. This moral hazard problem is potentially serious because almost ninety percent of employees in the United States are paid on time-worked basis.\(^{39}\) Direct oversight of workers can alleviate the problem, but such oversight often imposes substantial costs of its own. While some individuals may work hard even apart from any personal financial reward (because they enjoy their work or believe that putting in an honest effort is the right thing to do), for other individuals the absence of a financial reward for hard work may affect behavior. This is true not only for workers in low-level jobs but also for top executives, as suggested by the push to tie these individuals' pay to corporate performance.\(^{40}\)

A widely-noted solution to the moral hazard problem involves offering workers delayed rewards for good behavior.\(^{41}\) Even if detailed monitoring of employees' effort or output levels is prohibitively costly (so that performance-based wages are not realistic), detecting the simple fact of "shirking" of some sort, with some probability, may be feasible.\(^{42}\) Alternatively, assuming the infeasibility of cost-effective monitoring on a day-by-day or month-by-month basis, it may nevertheless be possible to infer something about employees' devotion and loyalty from their behavior over a longer period.\(^{43}\) In either case, back-loading employees' wages reduces their incentive to shirk by increasing the potential punishment associated with such behavior. With back-loaded wages, much of the reward from not shirking comes later in the employee's working life. Thus, shirking may be punished—severely—by firing the wayward employee and depriving him or her of the back-loaded reward. The potential cost of shirking at any point is therefore higher than it would be if wages did not rise over time.\(^{44}\)

---

39. Id. at 251.
42. Lazear, supra note 21, at 1267; Lazear, supra note 41, at 614-15.
44. Lazear, supra note 21, at 1267; Lazear, supra note 41, at 607. The specifics of Lazear's model structure may be open to criticism in certain respects, see Peter Kuhn, Wages, Effort, and
The incentive explanation for age-based wages suggests that both employers and employees are made better off (financially) by the use of such wages. By mitigating the moral hazard problem, age-based wages raise workers’ productivity over their years in the labor force and thus increase the surplus created by the employment relationship. The precise division of the extra surplus will depend on the nature of the market in question (employees will capture all of the surplus in a perfectly competitive market, in which lifetime wages and productivity are equalized\(^{45}\)), but employers and employees are necessarily better off as a unit, and there is no reason to think that employees as a group would be made worse off. Incentive considerations therefore represent one reason why age-based wages may be desired by market participants.

Empirical confirmation of the incentive theory of age-based wages is complicated by the fact that jobs in which monitoring of employees is difficult (and, thus, back-loaded wages are desirable on incentive grounds) may also tend to be jobs in which wages increase over time due to accumulation of human capital. If this is true, then wage increases with age may reflect human capital rather than incentive considerations. The conflation poses a problem because the underlying phenomenon of interest—wages that are upward-sloping even after controlling for productivity—is difficult to observe directly.

Notwithstanding these complications, several pieces of evidence are suggestive. First, wages of older workers are higher—even after controlling for education, union status, race, region, and other characteristics—in jobs not involving repetitive tasks (defined as “repetitive or short cycle operations carried out according to set procedures or sequences”), where monitoring difficulties are likely to give rise to moral hazard issues, than in jobs involving repetitive tasks, where moral hazard should be less severe.\(^{46}\) The comparison is possible because some jobs in the “repetitive task” category are skilled occupations that attract the same sorts of workers as are found in jobs not involving repetitive tasks.\(^{47}\) A second piece of

---

Incentive Compatibility in Life-Cycle Employment Contracts, 4 J. LAB. ECON. 28, 35-38 (1986), but these criticisms do not go to the basic intuition behind Lazear’s conclusion.

45. FLANAGAN ET AL., supra note 6, at 55.


47. Id. at S161. Nevertheless, an important limit on the reliability of the finding is that employees may differ along dimensions that affect wages and are not captured by the education, union status, race, region, and other controls. What the evidence says is that an older worker with a given education level, union status, and so forth earns more in old age in a job not involving repetitive tasks than in a job involving such tasks. However, employees in jobs not involving repetitive tasks may be paid more in old age, or throughout their lives, even after controlling for education, union status, and other worker qualities, simply because of factors (including human capital) that cannot adequately be controlled for in the analysis.
evidence for the incentive explanation of age-based wages is that pension plans are more common in jobs not involving repetitive tasks, where monitoring may be difficult, than in jobs involving repetitive tasks, again controlling for differences in observable characteristics of employees.\textsuperscript{48} Pensions are also more common among workers with demographic characteristics linked to job level (and, hence, at least arguably to monitoring difficulties).\textsuperscript{49} Finally, mandatory retirement, which signals a divergence between wages and productivity, was most common (before its abolition) in jobs not involving repetitive tasks, and among workers with demographic characteristics linked to job level.\textsuperscript{50}

B. \textit{Psychological Preference for Increased Earnings over Time}

A second possible explanation for age-based wages is a psychological preference for improvement in earnings over time. Human beings appear to prefer increasing quantities of good things over time, as compared to constant streams or decreasing quantities.\textsuperscript{51} This may reflect in large part a tendency to evaluate options based on whether they represent upward movement from an initial status quo.\textsuperscript{52} Thus, for example, earning $20,000 one year, $22,000 the next, and $24,000 the year after that would typically be preferred to earning $22,000 each year. The former path entails repeated upward movement relative to the previous year’s benchmark and is more attractive on that account.

Evidence from experimental economics studies suggests the existence of just this type of preference for improvement over time. In the context of job earnings specifically, one study found that individuals asked to choose between wage profiles that declined over time and wage profiles that increased over time overwhelmingly preferred the latter, even though the discounted present value of wage payments was higher with the former.\textsuperscript{53} This preference existed despite discounting of future events (which would imply a preference for declining profiles) in other contexts. Subjects asked why they preferred increasing wage profiles gave, as the most common explanation, “pleasure from increase,” followed by

\begin{flushleft}
\textsuperscript{48} \textit{Id.} at S163.
\textsuperscript{49} Lazear, supra note 21, at 1280 (Table: Logit and OLS Results).
\textsuperscript{50} Hutchens, supra note 46, at S163; Lazear, supra note 21, at 1280 (Table: Logit and OLS Results).
\textsuperscript{53} Loewenstein & Sicherman, supra note 51, at 71-75.
\end{flushleft}
“aversion to decrease.” The preference for increasing profiles was less pronounced, although still present, in the case of rental income earned from ownership of an apartment building, a context in which improvements to the status quo are less likely to be attributed to actions taken by the individual. These results may reflect what psychologists have called “mastery”—the idea that people derive satisfaction from the perception that they have mastered their environment, and for this reason prefer steady improvements to a flat path over time.

Studies outside the wage context have produced similar findings. For example, subjects asked to choose between a free dinner at a French restaurant and a free dinner at a Greek restaurant typically preferred the former, and those who preferred the French dinner also preferred to receive it in one month’s time rather than two. This latter ordering indicates a general inclination towards having good things sooner rather than later; future events are discounted in value. However, when those who preferred the French dinner were told that they would receive both a French dinner and a Greek dinner, the majority preferred to have the Greek rather than the French dinner first—the opposite of what conventional present-value discounting analysis would predict.

The experimental findings thus suggest that people prefer increasing quantities of good things over time. Age-based wages may be a real-world counterpart to the psychological evidence, either because productivity is flat while rising wages are preferred or because the rise in productivity is slower than the preferred rate of increase in wages. Either way, if the suggestion about age-based wages here is correct, then their use increases the surplus to be divided between employers and employees and makes these parties better off as a unit. (Also, as above, there is no reason to think that employees as a group would be made worse off.)

Wages satisfy what seems to be an important element in the preference for increasing sequences: they exhibit “integrity,” which refers to the extent to which the events that comprise a sequence are of a similar type,

54. Id. at 78.
55. Id. at 74-75.
56. Id. at 69; Robert W. White, Motivation Reconsidered: The Concept of Competence, 66 PSYCHOL. REV. 297, 302 (1959). To check whether subjects were simply confused about the choice between declining and increasing profiles, Loewenstein and Sicherman explained that accepting a declining wage or rental income profile would yield higher monetary returns by allowing the individual to invest the front-loaded payments and earn positive returns in the form of interest. They also presented the subjects with the psychological explanation for preferring increasing profiles. Subjects’ choices among profiles were qualitatively unchanged. See Loewenstein & Sicherman, supra note 51, at 75-76.
57. Loewenstein & Prelec, supra note 51, at 348.
58. Id.
are regularly spaced, and are not stretched too far apart.\textsuperscript{59} If a sequence lacks integrity in this sense, then the preference for improvement over time may disappear. This occurs, for example, in sequences consisting of two dissimilar events, one a week off and the other twenty-six weeks off.\textsuperscript{60} Wage sequences, in contrast, are comprised of similar, regularly spaced, and relatively frequent events.

I am not aware of any direct economic tests of the posited link between age-based wages and the psychological preference for improvement over time. Age-based wages do seem to be observed in jobs in which incentive considerations may be relatively unimportant; an example is airline pilots, whose wages increase sharply with age without any apparent increase in productivity, and whose "shirk[ing] on (say) safety [is] amply punished by nature."\textsuperscript{61} On the other hand, it is possible that use of age-based wages where incentive considerations seem unimportant may reflect something other than a psychological preference for increased earnings over time.\textsuperscript{62}

\textsuperscript{59} \textit{Id.}

\textsuperscript{60} \textit{Id.} at 349.


\textsuperscript{62} An independent explanation for age-based wages, not considered in the text, is workers' desire to commit themselves to saving for retirement or higher anticipated expenses (including college tuition for children) in middle age. If willpower to save were not an issue, workers could simply take any "extra" pay earned in their early years and put it in the bank; age-based wages would not be necessary. If, however, workers are concerned about having the willpower to engage in an adequate level of saving, they may want to "bind themselves to the mast" through age-based wages, just as Ulysses, fearing the temptation of the Sirens' song, did in Homer's \textit{Odyssey}. \textit{See HOME, THE ODYSSEY} 214 (Robert Fitzgerald trans., Anchor Books 1963). In effect, age-based wages facilitate saving for retirement or middle age by delaying the payment of the necessary funds until the appropriate point in the life-cycle. On this view, age-based wages may be efficient, in the sense of making the individual better off at each point in time. \textit{See E.S. Phelps & R.A. Pollack, \textit{On Second-Best National Saving and Game-Equilibrium Growth}, 35 REV. ECON. STUD. 185, 188-89 (1968).} Alternatively, they may make some "temporal selves" better off and others—those who want to engage in momentary splurges rather than futuristic saving for retirement or middle age—worse off, a distributive consequence that is probably salutary.

The retirement-saving theory, like the theories linking age-based wages to incentive issues and a psychological preference for increased earnings over time, explains why such wages may be desired by market actors. However, unlike the two theories examined in the text, the retirement-saving theory does not explain why age-based wages must be linked to the employment relationship in an ongoing way. Suppose that a worker leaves one employer and begins a new relationship with another. If the back-loaded wage entitlements the worker has accumulated at the first firm are packaged as a portable pension that follows the worker to the new firm, then the purpose of age-based wages has been fulfilled, without any need for a continuing link to the employment relationship. This feature of the retirement-saving explanation means that the rationale, developed more fully in Part III, for affording legal protection to employees' age-based wage entitlements on hands-tying grounds does not apply when age-based wages reflect retirement-saving considerations. While such considerations may provide a partial explanation for age-based wages, the empirical evidence described in the text suggests that the two theories I emphasize also play a significant role.
III. The Role of the Law: Hands-Tying

The preceding Part described two theories of age-based wages that, individually or together, seem to provide at least a partial account of the wage pattern suggested by the ADEA cases and the empirical evidence. One question raised by these theories is whether legal limits on cost-based decisions about older workers might contribute to private parties' ability to make use of age-based wages. If parties are readily able to reach their preferred solution on their own, then legal involvement is probably unnecessary. As this Part explains, however, private parties may be limited in their ability to rely on age-based wages in a world in which individuals often change jobs at least once over the course of their working lives. Labor market mobility, though certainly valuable on balance, creates a species of inter-employer externality that interferes with parties' ability to use contracts or other market mechanisms to commit to age-based wages. Commitment is essential because employers will be tempted to renge on their side of the bargain when wages rise above marginal revenue product, as illustrated by the claims of cost-based decisionmaking under the ADEA.

Legal limits on cost-based decisions about older workers represent a possible solution to the inter-employer externality problem arising from labor market mobility. They facilitate commitment by tying employers' hands and preventing them from reneging on age-based wages when the back-loaded portion of those wages comes due. The law may thus play a desirable hands-tying role in a setting in which the unregulated market is unable to ensure the satisfaction of employers' and employees' preferences for age-based wages.

The structure of the analysis in this Part reflects the conventional structure of analyses of legal rules from an efficiency perspective. I describe a potential market failure and then discuss whether legal intervention could conceivably help. The second step in the analysis proceeds at a highly general level at this stage. Thus, I ask whether and how an ideal legal regime governing cost-based decisions about older workers

A further explanation for age-based wages links them to employers' desire to attract the type of employee who is likely to stay with the firm for an extended period. See Joanne Salop & Steven Salop, Self-Selection and Turnover in the Labor Market, 90 Q.J. ECON. 619, 620 (1976). Here again, though, the proposed explanation for age-based wages is inconsistent with the rationale set forth in Part III for protecting employees' age-based wage entitlements. Central to the employee-selection theory (as developed by Salop and Salop) is the idea that job mobility is harmful to employers and must be discouraged by the choice of an appropriate wage structure. In contrast, the desirability and practical importance of mobility are central to the role of legal rules envisioned in Part III. If the employee-selection theory were modified to focus on attracting employees with desirable attributes other than long expected tenure at the firm (for example, ability to do the job well), then the theory would fit well with the argument in Part III. However, because the employee-selection theory (in any of its variants) has not, to my knowledge, been subjected to the same degree of empirical scrutiny as the two theories considered in the text, I do not pursue its implications here.
might remedy the market failure I describe. This generalized and idealized inquiry falls far short of an endorsement of the specific contours of any real-world regime, including that established by the ADEA. The inquiry is meant to show conceptually how legal limits on cost-based decision-making might address the externality problem I identify. Part IV returns to the specific context of the ADEA and grapples with the match between the ideal legal regime of this section and the recalcitrant reality of employment discrimination litigation.

A. Market Solutions to the Commitment Problem

The central constraint on age-based wages in an unregulated market—by which I mean a market governed solely by contract, property, and other common-law rules—is the difficulty of achieving commitment to such wages on the part of employers. Once employees' wages exceed their marginal revenue product, it is in the short-term interest of the firm not to employ them. They are no longer producing as much as they cost in wages, though from their perspective the high wages are merely restitution for low wages earned early on. Termination or failure to hire in these circumstances is precisely the sort of employer behavior underlying the paradigmatic cost-based decisionmaking claim under the ADEA.

The incentive to deviate from age-based wages implies the need for some form of commitment mechanism if such wages are to be feasible in an unregulated market. A useful typology of commitment mechanisms distinguishes between legally enforceable contracts, which commit parties by subjecting them to legal penalties for breach, and nonlegal sanctions, which commit parties by penalizing deviations through informal or extra-legal means.63 Each of these forms of commitment represents a possible means of fostering the use of age-based wages in an unregulated market, but, as described below, each is subject to significant limits, in major part due to labor market mobility.

1. Legally enforceable contracts.—Legally enforceable contracts are perhaps the most obvious means of commitment. Entry into a contract can deter the parties from engaging in various forms of opportunistic behavior—such as terminating older employees whose wages exceed their marginal revenue product.64 For this reason contracts make parties better off—paradoxically by allowing them, when it serves their interests, to limit their own future choices. Employment contracts illustrate the phenomenon well: by enabling employers to commit to high pay at the end of the life-

cycle, they make it possible for employers and employees to rely on age-based wages. Without a contract, discharging an employee earning more than marginal revenue product may be desirable for the employer; with a contract, the employer will keep the employee on because of a contractual obligation to do so. The prospects for contracting should be especially bright in the long-term relationships on which the contemporary employment law literature has focused, as employees in such relationships can contract while young for job protection when they are old.\textsuperscript{65}

Economically oriented commentators who discount or dismiss contractual solutions to commitment problems in employment relationships often do so on the ground that transaction costs (broadly defined) preclude parties from writing even reasonably complete agreements.\textsuperscript{66} However, the transaction costs of writing complete contracts in long-term relationships typically justify only default rules—rules that attach only if a contract is made, and only if the contracting parties do not explicitly contract around them. Legal regulation of employment discrimination clearly does not fall into this category. Thus, for example, a protection against age discrimination that did not attach until an employment relationship had been established and only then if the parties to the relationship had not contracted around the protection would bear little resemblance to antidiscrimination law as we know it. An individual would have no entitlement at all not to be discriminated against at the hiring stage because at that stage no employment relationship, and thus no protection against discrimination, would exist. Where transaction costs are the barrier to optimal contracting by private parties, it is the exception rather than the rule that creating an entitlement, rather than merely specifying a default term for an established relationship, makes rational contractors better off.\textsuperscript{67}

A distinct and important source of contracting failure in employment relationships is imperfect information on the part of employees.\textsuperscript{68} If imperfect information gives rise to a contracting failure, then a rule creating an entitlement may well yield efficiency gains, even relative to the alternative of providing employees with more information. Thus, for

\textsuperscript{65} For discussions of long-term employment relationships, see Epstein, supra note 8, at 448-49; Paul C. Weiler, Governing the Workplace: The Future of Labor and Employment Law 63-64 (1990); Samuel Issacharoff, Contractual Liberties in Discriminatory Markets, 70 Tex. L. Rev. 1219, 1247-48 (1992) (reviewing Epstein, supra note 8); Samuel Issacharoff, Reconstructing Employment, 104 Harv. L. Rev. 607, 621-24 (1990) (reviewing Weiler, supra); Rutherf. supra note 5, at 500-01; and Schwab, supra note 27, at 13.

\textsuperscript{66} E.g., Schwab, supra note 27, at 19-20.


example, if employees' failure to appreciate the threat of cost-based discharge in their later years leads them not to insist on contractual protection against such behavior, then some form of legal intervention may be desirable on efficiency grounds. Information failures have not, however, been the focus of economically oriented commentators' analyses of employment relationships—perhaps in part because of the divergence in these commentators' views of the importance of the problem.

Transaction costs and information failures are not the only barriers to successful contracting in an unregulated market. Job mobility represents an additional—and possibly more broadly compelling—ground for questioning the efficacy of contractual means of commitment. Employees in long-term relationships with particular firms may be able to contract in advance for protection against cost-based discharge, but the contractual entitlements will protect them only as long as they stay in their original jobs. The entitlements are not portable to new employers. Thus, if an employee wants or needs to change jobs—because his or her productivity is higher at a different firm, or because he or she needs to move away from the job or the region for some reason—the employee will no longer be protected by the original contractual entitlement.

Mobile employees would be able to rely on contracts to achieve commitment to age-based wages if contracting in advance with every potential future employer were feasible. In that case, the employee would enjoy the same contractual protection as he or she would have in a long-term contractual relationship with a single employer. Such extensive ex ante contracting, however, is unlikely to be realistic. The more interesting question is whether the parties can somehow replicate what would occur if complete ex ante contracting were feasible. Contracting with the initial employer should be feasible, so the question then becomes whether the employee can leverage the original contractual entitlement not to be discharged when wages exceed marginal revenue product into an entitlement not to be disadvantaged on cost grounds at a new firm.

Numerous barriers to this sort of leveraging exist. As an initial matter, it is the first employer, not the second, who has captured the benefits of paying low wages early on in the relationship. The second employer will have no reason to agree to pay wages above marginal revenue product to an employee from whom the employer has not been able to recoup the back-loaded wages early on. One response to this problem is severance pay; the original employer should be willing to compensate the employee for giving up the right to a wage above marginal revenue product by moving to another company, as the employer saves money by removing the obligation to pay the employee the high wage.69 However, the

69. Lazear, supra note 21, at 1272-73.
severance-pay strategy, without more, would undo for the future whatever benefit was sought to be achieved by age-based wages. Under the severance-pay strategy, the employee receives a lump-sum payment and then a wage equal to his or her marginal revenue product at the new employer. The back-loaded payment has already been made. Thus, whatever the reason for age-based wages in the first instance—whether incentive issues or a psychological preference for increased earnings over time—the intended function of such wages is no longer being served.

The intended function of age-based wages would continue to be served if the first employer somehow arranged for the second to cover the excess wages of the employee in the later years of the life-cycle, or continued to cover these excess wages itself. However, each of these solutions would require new contractual relationships, distinct from the traditional employer-employee one, and would thus impose additional transaction costs and informational difficulties. Furthermore, it is doubtful whether payment of a wage supplement by an individual’s former employer (whether done indirectly through the new employer, or directly in the form of an annuity from the former employer) would respond to the psychological preference for increased earnings over time in the same way that payment of increasing wages over time by the current employer does.

An alternative means of leveraging the original contractual arrangement would involve coupling the severance-pay strategy with some form of up-front payment by the employee to the new employer, who would then pay out wages above marginal revenue product just as the original employer would have done. This type of employee bonding is not the sort of contractual arrangement we typically observe in practice. Indeed, if such an arrangement were feasible, then it is unclear why parties would ever need to rely on age-based wages for incentive purposes in the first place, as desirable incentives could be created (at least up to the point at which liquidity constraints kick in) by forcing employees to post bonds that would be forfeited in the event of employee misbehavior. Furthermore, it is doubtful whether the employee-bonding strategy would satisfy the psychological preference for improvement in earnings over the life-cycle, as increases in pay over time would simply reflect reimbursement of the bond posted by the employee.

At a minimum, then, each of the potential strategies for leveraging the original contractual arrangement will do so only imperfectly. The surplus created by employment relationships will be lower than it would be if employees could contract in advance with all potential future employers, thereby solving the inter-employer externality problem arising from job mobility. This is not to say that mobility is undesirable on balance; if that were true, mobility would not occur. The point is simply that in a world of mobile employees, contracting will not suffice to permit reliance on the age-based wages that employers and employees appear to prefer.
The empirical evidence suggests the practical significance of job mobility. While many employees remain with their employers for long periods, a substantial fraction of employees moves around, even after many years in the labor force. Thus, for example, interview evidence from the 1980s suggests that 50% of mid-level computer positions and 28% of high-level sales positions are filled by outside hires. Likewise, in the economy as a whole, 18% of workers aged 35 to 44, and 13% of workers aged 45 to 54, have been in their current jobs less than a year. Fewer than one-third of employees aged 35 to 44, and fewer than one-half of employees aged 45 to 54, have been in their jobs more than 10 years. These patterns are not new; an earlier study of the 1967-1973 period found, for example, that 12% of employees aged 35 to 49 changed jobs in a typical two-year period. It is unclear whether mobility has increased over time, as media reports often suggest, or is holding constant, but it is clear that mobility is a significant feature of modern labor markets.

The practical importance of job mobility is also indirectly suggested by the attention it has received in law reform efforts. For example, the passage of the 1986 amendments to the Employee Retirement Income Security Act of 1974 (ERISA), which require vesting of pension benefits after five years with an employer, may have reflected a response to the prevalence of mobility among employees. Likewise, a major focus of the 1993 debate over health care reform was the barrier to job mobility created by preexisting condition clauses in employer-sponsored plans.

The mobility figures and other evidence do not tell us whether mobility among workers is voluntary or involuntary (or somewhere in between).

---

73. Id. (Table A6: Fraction with Job Duration of More Than Ten Years).
For the most part, however, it does not matter for my argument. What matters is that employees change jobs—sometimes frequently—over the life-cycle. Whether this occurs because employees choose to move around or instead because (say) their firm goes bankrupt, employers and employees will not be able to rely on contracts to achieve commitment to age-based wages.

Under certain circumstances, mobility may not pose particularly significant problems. Thus, for example, job changes among workers receiving age-based wages for incentive reasons may be relatively uncommon in practice due to the inability of potential future employers to determine with accuracy whether a job loss was voluntary on the employee’s part or instead represents a discharge for malfeasance (for which loss of the back-loaded portion of wages was the contemplated punishment). But while mobility may not spell the demise of contractual commitment across the board, it certainly suggests important limits on such commitment, particularly where job changes are not likely to reflect malfeasance or age-based wages are desired because of employees’ psychological preference for increased earnings over time.

2. Nonlegal Sanctions.—Nonlegal sanctions represent an alternative to legally enforceable contracts for achieving commitment to age-based wages. Nonlegal sanctions for deviating from an informal understanding include termination of the relationship, loss of profitable future opportunities with other parties, and individual or social condemnation.78 The first type of sanction provides no protection against employer deviation from age-based wages because termination of the relationship is precisely what the employer is seeking. The second type of sanction, in contrast, is of clear practical importance in the employment setting. Employers that fire older employees will gradually gain reputations for doing so and, thus, will not be trusted to follow through on age-based wages. Their inability to make credible offers of age-based wages will prevent them from using such wages to address incentive problems or attract employees seeking to satisfy a preference for increased earnings over time. The third type of sanction, individual or social condemnation, may also constrain employers (or, more likely, their decisionmakers).

While nonlegal sanctions are clearly important, they also have significant limitations, as suggested by employment law reforms such as ERISA and the erosion of the employment at will doctrine (though, of course, these legal developments may also reflect other, less benign influences).79

78. Charny, supra note 63, at 392-94.
79. See Mark A. Rothstein & Lance Liebman, Cases and Materials on Employment Law 1222-23 (3d ed. 1994) (tracing the enactment of ERISA to shortcomings of the private-sector pension
Upon close examination, the economic models in which the threat of losing profitable future opportunities (the type of nonlegal sanction emphasized in the preceding paragraph) is an effective means of commitment depend on strong assumptions. First, the threat of losing future opportunities can constrain an actor’s behavior only if that behavior is observable (at least to some degree) to outside parties.\textsuperscript{80} The greater the “noise” in outsiders’ observation of an actor’s behavior, the harder it is to constrain that behavior by the threat of loss of future opportunities. Employees face obvious barriers to perfect observation of the behavior of firms, and the problem is likely to be exacerbated by employees’ need, in a world of labor market mobility, to make assessments about firms with which they have had little or no prior contact.

The second key assumption behind economic models in which the threat of losing future opportunities constrains an actor’s behavior is that the time horizon for the actor’s market participation is infinite or uncertain, or, alternatively, potential trading partners have incomplete information about the actor’s incentives to misbehave (as distinguished from the actor’s actual behavior).\textsuperscript{81} Without either an infinite or uncertain horizon or incomplete information, all players will know that as the end of the horizon approaches, the threat of losing future opportunities will not be an effective deterrent. Reasoning backwards, this knowledge in turn implies that the deterrent will be ineffective to begin with.\textsuperscript{82} With an infinite or uncertain horizon, in contrast, the players will never be aware that the end of the horizon is approaching. Likewise, with incomplete information, the actor has an incentive to establish a reputation as the “type” of player that adheres to its promises—though if in fact it is only masquerading as that type of player, it will still deviate from these promises as the end of the horizon approaches.\textsuperscript{83} Reputational constraints are therefore effective only so long as parties do not foresee an end to an actor’s market participation and, in the case of a finite and certain horizon, only if the additional requirement of incomplete information about the actor’s incentives to mis-

\textsuperscript{80} See Drew Fudenberg & Jean Tirole, Game Theory 146-48 (1991) (discussing games in which players’ actions are observable by their opponents, who condition their future play on these actions); \textit{id.} at 182-97 (discussing games in which the public outcomes that players act upon provide only imperfect information).

\textsuperscript{81} Hart & Holmström, supra note 43, at 143.


\textsuperscript{83} Hart & Holmström, supra note 43, at 144.
behave is met. Judge Easterbrook's dissent in *Metz v. Transit Mix, Inc.* explicitly recognizes as much: “When the firm encounters economic trouble or for some other reason plans to shrink, it need not worry about scaring away bright new employees; it is out of that market.”

The limitations on nonlegal sanctions suggest that they leave important gaps in the ability to commit to age-based wages in an unregulated market. Thus, as with legally enforceable contracts, it is possible that nonlegal sanctions are usefully complemented by legal means of tying the parties’ hands to age-based wages.

B. Hands-Tying Through Legal Rules

The limits on market mechanisms for committing to age-based wages lead to the question whether legal rules could conceivably help to mitigate the failure of the private market. I begin by addressing this question in a general way, asking whether and how an ideal legal regime governing cost-based decisions about older workers might remedy the inter-employer externality problem that arises with contractual means of commitment. Part IV below adopts a more pragmatic approach to the problem, one that attempts to situate the conceptual analysis offered here within the real world of employment discrimination litigation.

I begin by considering whether legal limits on cost-based *discharge* of older workers might solve the inter-employer externality problem. I then address legal limits on cost-based *failure to hire* older candidates. In each instance, I suggest that legal rules have a potential role to play in achieving commitment to age-based wages.

1. Legal Limits on Cost-Based Discharge of Older Workers.—A threshold question about legal limits on cost-based discharge of older workers concerns the appropriate scope of such limits. Would employers be permitted to substitute lowering the wages of expensive older workers for discharging these individuals on cost grounds? In theory, this is an important question, but in practice it is relatively unimportant for the simple reason that employers are extremely reluctant to cut their workers' pay, fearing adverse consequences for dedication and morale. Thus, the important issue in practice is the degree to which cost-based discharge of older employees is limited by legal rules. I assume in what follows that older workers will not be vulnerable to wage cuts, either because of the

---

84. 828 F.2d 1202, 1221 (7th Cir. 1987) (Easterbrook, J., dissenting).
85. *Cf. id.* at 1209-10 (discussing similarities and differences between the two approaches).
practical considerations militating against such action or because of legal rules against it.

Legal limits on cost-based discharge of older workers address the central problem emphasized above with contractual means of commitment to age-based wages. As described above, labor market mobility impedes parties’ ability to rely on contractual means of commitment because of the infeasibility of contracting in advance for protection against cost-based discharge with every potential future employer. The inability to contract in advance in this way means that an employee who has changed jobs has no contractual entitlement to continued employment once wages have risen above marginal revenue product. Legal limits on cost-based discharge of older workers respond to the limits on contractual solutions by reaching beyond the limits of any single employment relationship. Unlike contracts, they commit employers that have not entered into contracts with particular employees. In effect, legal rules replicate the contractual terms parties would bargain for were they contracting in advance with all potential future employers. Legal limits on cost-based discharge thus mitigate the job-mobility barrier to contractual means of commitment and effectively tie the parties’ hands where contracts cannot.

2. Legal Limits on Cost-Based Failure To Hire.—The hands-tying argument for legal limits on cost-based decisions about older workers applies not only to decisions to discharge older workers but also to decisions not to hire these individuals. Legal limits on cost-based failure to hire provide the mobile employee with an entitlement to age-based wages at a new firm—assuming the employer does not have an independent ground for refusing to hire the individual. Legal rules thus replicate the arrangement the parties would have bargained for were ex ante contracting feasible. The only qualification of the previous argument is that legal protection against wage cuts may be more important in the case of hiring than in the case of discharge, as in the latter case employers’ reluctance to impose wage cuts may be greater. Apart from this distinction, the argument for legal limits on cost-based failure to hire tracks that for limits on cost-based discharge. In both instances, legal rules tie the parties’ hands where contracts cannot. The discharge and hiring contexts differ from one another in other respects—a point to which I return in Part IV—but conceptually the hands-tying argument is the same in the two settings.

Richard Posner has argued that legal limits on failure to hire older workers are unlikely to have much practical force because of the insubstantial economic damages suffered by disappointed job applicants, as distinguished from workers who are discharged after having accumulated
significant relationship-specific human capital. As described above, however, older workers appear to be paid more than younger ones simply because of their age—at least up to some point. It follows that an older worker who is refused a job at a wage greater than marginal revenue product has in fact suffered substantial economic damages as a consequence of the employer’s behavior.

C. Empirical Confirmation

The hands-tying argument for legal limits on cost-based decision-making suggests that imposing such limits will increase the feasibility, and therefore the use, of age-based wages. This prediction is one that is testable in principle. For example, if certain states were to adopt legal limits on cost-based decisionmaking during a particular period while other states did not adopt such limits, then the relative change in the use of age-based wages in the two groups of states might provide some insight into the effect of the legal change. If, however, legal limits on cost-based decisionmaking are imposed at the national level (as with the ADEA), then empirical confirmation of the hands-tying argument is difficult. Changes (or lack thereof) in the use of age-based wages accompanying the change in the legal regime may reflect not the legal innovation but instead some other change in the surrounding environment. For example, if the change in the regime coincided with a decrease in the effectiveness of reputational means of commitment to age-based wages, then any increase in the use of such wages as a consequence of the legal innovation might be cancelled out by the decrease in the use of such wages because of reduced effectiveness of reputational constraints on employer behavior. This observation has particular salience in the context of the ADEA; even if we had good evidence about the relative frequency of age-based wages before and after enactment of the Act (which, as far as I am aware, we do not), it would be difficult to disentangle the effects of the ADEA from those of other changes in the labor market—including changes in the effectiveness of reputational constraints on employer behavior—occurring over the same period.

Indirect means of corroborating the hands-tying argument are somewhat more promising. One means of testing the argument is to look to the wages negotiated by unions—instiutions that may help to address the inter-employer externality problem that arises with job mobility. Whereas an employee who changes jobs at a point at which wages exceed marginal revenue product may be unlikely to earn age-based wages at a nonunion-

87. POSNER, supra note 8, at 329.
88. See supra notes 30-34 and accompanying text.
ized firm, a unionized firm needing experienced workers may find it difficult to employ them except at the wage level specified by the union. The union thus in effect mimics the ex ante contracting that would enable the parties to solve the inter-employer externality problem. In this way, unions may help to mitigate the shortcomings of private contracting—which of course persist to some degree in a market with imperfect restraints on employer behavior, such as those imposed by the ADEA. Whether unions actually perform this function is another question. It is, however, empirically true that unionized employees are more likely to have pensions, and were more likely to be subject to mandatory retirement, than their nonunionized counterparts, consistent with the suggestion of greater feasibility of age-based wages in the unionized sector.\(^89\)

As a final observation, the fact that job mobility plays an important role in the hands-tying analysis developed above does not imply that only highly-mobile employees should avail themselves of legal protection against cost-based discharge or failure to hire. Given the existence of such protection, employees in long-term relationships, who might otherwise rely on contract terms for protection, may find it easier (less costly) to rely on legal rules. The off-the-shelf approach economizes on negotiating, drafting, and other transaction costs, and it permits the employee to capture the benefits, such as predictability, of using terms that have already been extensively litigated and interpreted by courts.\(^90\) The empirical evidence indicates that many ADEA plaintiffs have been with their current employers for substantial periods,\(^91\) suggesting that employees who are not highly mobile do indeed rely on legal means of protection.

IV. ADEA Implications

This Part focuses on the doctrinal implications of the hands-tying analysis developed in Part III. An important threshold issue is the degree to which the efficiency considerations underlying that analysis properly influence the project of interpreting the ADEA. Different theories of statutory interpretation would answer this question differently, and it is not my goal to defend any particular conception of the judicial role in the interpretive project. Rather, I pose the following question: given a possible normative basis for the ADEA (hands-tying), how should courts wishing to reach decisions congruent with that normative basis resolve doctrinal issues arising under the Act? The primary issue I consider is the avail-

89. See POSNER, supra note 8, at 350 n.59; Hutchens, supra note 46, at S164.
91. Rutherglen, supra note 5, at 509.
ability of "disparate impact" analysis under the ADEA. I explain that hands-tying considerations argue in favor of ADEA liability for cost-based decisions about older workers—and thus in favor of disparate impact analysis. I also describe reasons that the ADEA is likely to be a better means of facilitating desirable hands-tying than other legal doctrines potentially suited to that purpose. I emphasize, however, that while disparate impact liability under the ADEA may be desirable in principle, it raises serious implementation issues and may entail considerable administrative cost. Part IV concludes by discussing whether and to what extent workers should be permitted to waive ADEA provisions, either as to past or current events or as to events that may occur in the future.

A. Disparate Impact Liability Under the ADEA

The most basic form of age discrimination occurs when an employer's behavior is directly motivated by the age of the affected employee. Such behavior is prohibited under antidiscrimination law's "disparate treatment" rubric. The employer behavior on which my analysis has focused, however, is not directly motivated by the employee's age; rather, it is motivated by an independent factor—cost—that is correlated with age. While several appeals courts upheld disparate treatment challenges to cost-based decisionmaking prior to the Supreme Court's decision in Hazen Paper Co. v. Biggins,92 the conclusion that discrimination motivated by cost is discrimination motivated by age seems false almost by definition. Hazen Paper set the record straight on this point, holding that "there is no disparate treatment under the ADEA when the factor motivating the employer is some feature other than the employee's age."93 The following section focuses on an alternative basis for legal limits on cost-based decisionmaking.

1. The Case for Imposing Disparate Impact Liability.—The "disparate impact" rubric in antidiscrimination law applies to employment practices that disproportionately burden a protected group but are not directly motivated by the protected characteristic.94 Disparate impact analysis originated under Title VII, and its application in the ADEA context remains uncertain. The Court in Hazen Paper expressly reserved the question of the availability of disparate impact analysis under the ADEA, and appeals

---

93. 507 U.S. at 609.
courts since then have split on the question.\textsuperscript{95} The hands-tying analysis offered above provides a possible policy argument for imposing disparate impact liability: cost-based decisions about older employees—which the disparate treatment rubric cannot reach—may reflect a market failure remediable by legal involvement. Hands-tying thus argues in favor of disparate impact liability for cost-based decisionmaking.

Judge Easterbrook's \textit{Metz} dissent ironically provides support for imposing disparate impact liability on hands-tying grounds. The dissent notes, "The distressed or shrinking firm may try to dispose of higher paid, older employees, cheating them out of the high compensation at the end of their careers. A disparate impact approach under the ADEA might help to curtail this opportunism."\textsuperscript{96} Judge Easterbrook did not pursue this suggestion because he found it inapplicable to the facts of the case. However, the suggestion—though difficult to reconcile with the tenor of his opinion as a whole—is squarely in line with the hands-tying analysis developed above. Judge Posner has similarly recognized the possible desirability of limiting cost-based decisions about older workers, but he goes on to reject the idea out of hand, reasoning that "maybe because [it] would make it difficult for firms to take rational steps to reduce their costs when they find, for whatever reason, that they are paying wages in excess of the market, the Supreme Court has rejected this approach."\textsuperscript{97} \textit{Hazen Paper} is cited in support of the concluding assertion, but, as noted above, the implications of that decision for disparate impact liability under the ADEA are somewhat murkier than Posner suggests. From a policy perspective, hands-tying considerations provide an argument in favor of the approach of circuits that have upheld disparate impact liability under the ADEA.

2. \textit{The "Discrimination" Label and Other Caveats}.—On first glance, labeling a cost-based discharge or refusal to hire "age discrimination" may

\textsuperscript{95} \textit{See Hazen Paper Co.}, 507 U.S. at 610 ("[W]e have never decided whether a disparate impact theory of liability is available under the ADEA, and we need not do so here.") (citation omitted)). Since \textit{Hazen Paper}, the Seventh and Tenth Circuits have rejected disparate impact liability under the ADEA. See EEOC v. Francis W. Parker Sch., 41 F.3d 1073, 1076-77 (7th Cir. 1994), \textit{cert. denied}, 115 S. Ct. 2577 (1995); Ellis v. United Airlines, Inc., 73 F.3d 999, 1006-10 (10th Cir. 1996). In contrast, the Eighth and Ninth Circuits have permitted disparate impact claims. See Houghton v. Sipco, Inc., 38 F.3d 953, 958-59 (8th Cir. 1994); EEOC v. Local 350, 998 F.2d 641, 648 n.2 (9th Cir. 1993). Justice Kennedy apparently did not find the \textit{Hazen Paper} majority's statement about reserving the disparate impact question sufficiently reassuring, as he wrote a separate concurrence, joined by Chief Justice Rehnquist and Justice Thomas, emphasizing that he joined the Court's opinion only on the understanding that nothing in it incorporated disparate impact analysis into the ADEA context. \textit{Hazen Paper Co.}, 507 U.S. at 618 (Kennedy, J., concurring). For a list of cases and commentary on disparate impact liability under the ADEA, see \textit{Francis W. Parker Sch.}, 41 F.3d at 1079 & nn.1-2 (Cudahy, J., dissenting).

\textsuperscript{96} \textit{Metz}, 828 F.2d at 1221 (Easterbrook, J., dissenting).

\textsuperscript{97} \textit{Posner}, \textit{supra} note 8, at 337.
seem incongruous. After all, the employer is acting not on the basis of age but on the basis of cost. The observation has particular salience in the case of discharge of a recently-hired older employee or refusal to hire an older candidate, as here the employer has not benefitted from payment of low wages early on. On the other hand, these are precisely the situations in which private contracts are least effective (as job movement has occurred) and, thus, in which the hands-tying argument for legal involvement has the greatest force.

Several considerations support labeling cost-based discharge or failure to hire "age discrimination." First, the employer's behavior is based on the simple fact of the employee's position on the wage trajectory, which in turn is directly related to the employee's age. Second, in a world in which (because of legal or other constraints) employers typically do not engage in cost-based decisionmaking even as to older employees on whom they have not capitalized during low-wage periods, an employer that does engage in such decisionmaking will in effect reap the benefits of low wage payments without paying the full costs.

Apart from the labeling concern, imposition of disparate impact liability for cost-based decisions about older workers raises serious issues of implementation and may entail considerable administrative and other costs. To begin, courts may often be unable to distinguish between cases of cost-based discharge or refusal to hire an older worker and cases in which the worker is unattractive on independent grounds. Second, the behavior targeted by legal limits on cost-based decisionmaking is a deviation from the age-based wages desired by market participants. Identifying departures from a benchmark that is not itself easily identifiable presents obvious difficulties.

Courts might respond to the latter problem by looking to other firms in an employer's industry or in other industries to formulate rough age-wage benchmarks against which to assess the employer's behavior. Yardstick competition of this sort is used routinely by utility regulators seeking to uncover firms' underlying cost structures, much as courts here must seek to uncover underlying age-wage relationships. Yardstick competition can also be used to guard against the imposition of liability for adverse decisions on an employer to whom, for some reason, older workers tend to flock—a response that is desirable on both fairness and efficiency grounds.

These observations hardly suffice (and in some cases do nothing) to dispel the concern that courts applying disparate impact analysis to cost-based decisions about older workers impose costs greater than any con-

ceivable benefit. My argument is simply that hands-tying considerations provide a possible argument for imposing disparate impact liability. Contrary to the suggestion of several courts and commentators, imposition of liability for cost-based decisionmaking is not inefficient as a matter of basic economics.99 Instead, imposition of such liability may facilitate the use of age-based wages and is potentially desirable on that ground.

B. Why the ADEA?

An important question is whether the ADEA is likely to be a better means of achieving desirable hands-tying than other legal doctrines potentially suited to that function. The most obvious alternative to the ADEA, and the alternative on which I focus here, is the law of wrongful discharge, which, as its name suggests, imposes limits on employers' ability to discharge employees without cause.100 Wrongful discharge law looks much like the ADEA in terms of the demographic characteristics of plaintiffs.101 Moreover, several commentators on wrongful discharge law have focused on the precise features of wages and productivity emphasized above in the analysis of the ADEA.102

I offer two arguments about the suitability of the ADEA on hands-tying grounds, one comparative (involving the ADEA and wrongful discharge law) and the other a purely affirmative argument for the ADEA. As to the comparative issue, I want to suggest that, in two specific respects, the ADEA provides a better fit with the underlying problem than does wrongful discharge law. First, wrongful discharge law applies only to discharge, and not to refusal to hire an older candidate. Thus, wrongful discharge law does nothing to facilitate contract-like protection for employees who find it necessary to search for new jobs during the lifecycle. Second, tenure with a particular firm may be a significant factor in an employee's ability to prevail on a wrongful discharge claim (which will often rest on a notion of implied contract). Thus, again, wrongful discharge law fails to protect many of the individuals—this time, individuals who have recently joined new firms—who would be protected by the ADEA. These gaps in protection under wrongful discharge law are problematic because, as documented above, it is age, not tenure at a particular firm, that produces the wage-productivity disparity that in turn drives cost-based decisions about older workers. Wrongful discharge law is incomplete because it is fundamentally predicated upon the model of the employment relationship as a long-term relationship between employer and

99. For a list of courts and commentators seeming to suggest the opposite, see supra notes 35-37.
100. See, e.g., Schwab, supra note 27, at 8-9.
101. Rutherglen, supra note 5, at 516-17.
102. See Weiler, supra note 65, at 67; Schwab, supra note 27, at 15-19.
employee—a model that, as described above, has animated much of the existing literature but fails to account for the conceptually and practically important phenomenon of job mobility.

The affirmative argument for the ADEA is in some sense just a recasting of the comparative argument. The affirmative version of the argument is that the ADEA makes pivotal the precise feature of an employee that makes contract-like protection desirable. According to the hands-tying analysis developed above, it is age, not time with a particular employer, that gives rise to a need for protection, and it is age that gives rise to protected status under the ADEA.

C. ADEA Waivers

A major issue in ADEA litigation has been whether and to what extent ADEA protections may be waived by their beneficiaries. Waivers of claims arising from past or contemporaneous events are explicitly permitted (subject to certain safeguards) by current law. This section focuses on waivers of claims that have not yet arisen. Title VII precedent suggests that “prospective” waivers of this sort are generally prohibited.

The hands-tying perspective implies that permitting prospective waivers of ADEA claims might be desirable on efficiency grounds. Operationally, employees would waive ADEA provisions prospectively by contracting out of these protections with their current employers. Such waivers would need to bind employees in future employment relationships as well, for otherwise an individual who waived ADEA protections as a young worker—and thereby perhaps obtained wages equal to, rather than less than, marginal revenue product in the early years of the life-cycle—might later be able to claim the right to wages above marginal revenue product at a different firm.

The basic efficiency argument in favor of prospective waivers is that they allow parties for whom age-based wages are not desirable—or at least not sufficiently desirable to warrant the costs of imposing legal liability for cost-based decisions about older workers—to avoid unnecessary and costly regulation of their private affairs. The most serious concern about permitting prospective waivers is that young employees may lack complete information on the costs and benefits of waiver. However strong the argument for permitting prospective waivers if knowing and voluntary, these conditions may be difficult to satisfy in practice.

V. Conclusion

The ADEA factors as significantly in employment discrimination litigation as does Title VII's traditional antidiscrimination command. However, normative analysis of the Act has lagged behind. I have attempted to deepen our normative understanding of the ADEA by tracing the contours and major implications of a hands-tying analysis of the Act. The hands-tying perspective is grounded in an empirical regularity apparent in ADEA cases and confirmed by empirical evidence: older workers are often paid more than younger workers capable of doing the same job. My analysis considers two possible explanations for age-based wages and identifies the impediments to the use of such wages in an unregulated market. I conclude that the ADEA may be understood in part as a hands-tying device enabling employers that wish to commit to age-based wages to do so. Viewing the ADEA in this light marks a departure from the distributional or rights-based focus of normative analysis under Title VII.