BACKGROUND NOTES FOR A LABOR ECONOMIST'S PROSPECTIVE ON AGE DISCRIMINATION

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In the three principal areas of discrimination litigation - sex, race, and age - the labor economists' perspective has to date had the least impact in age cases. Labor economists, in their dual roles as theorists and statisticians, have dictated the language and in large part the substance of the debate in the class action aspects of race and sex litigations. This is far less true when age is the demographic attribute at issue. However, with the rapid rise in the volume of age discrimination allegations, labor economists have been increasingly asked to lend their expertise to issues focusing primary on business justification. Although race, sex, and age disputes all reduce eventually to the existence or non-existence of discrimination, the labor economists' perspective on age discrimination has little in common with his more similar perspectives on race and sex. Lawyers who have adjusted to the mind set of labor economists when the subject involves race and sex will find themselves required to absorb and evaluate a completely new set of points and counterpoints in age litigation.

The purpose of these notes is to sketch out briefly some of the main economic concepts labor economists may advance as expert witnesses in age discrimination cases. This list is not meant to be exhaustive but many of the concepts that arise will be genetically related to those outlined here.

Viable labor market theories that deal with the differentiations of workers by their ages must ultimately be able to confront adequately the

essentual empirical facts that distinguish workers by their ages. These facts are:

1. Salary increases significantly as a worker ages and accumulates experience in the labor market (or seniority or tenure on the job). However, the rate of increase in salary tends to diminish as the worker ages. Finally, at any age, salary growth rates are more rapid among more highly skilled workers.

2. After some initial period with the firm, promotion probabiliti will decline as a worker ages.

3. Job mobility declines significantly with a worker's age. The labor market is basically characterized by considerable churni among younger workers who frequently change jobs. However, mos workers eventually assume what are virtually life-time jobs. This reduction in job mobility reflects both firm and worker preferences in that both quit and layoff rates fall with job tenure and age.

4. After age forty, most male workers expect to remain in their current firms until they retire. Moreover, their employers expect them to do likewise. To illustrate among workers aged thirty and above, 40 percent are currently working in jobs whi eventually will last 20 years or more.

5. Those older workers who are terminated often earn much less in new jobs than they did in the jobs they were dismissed from. This is particularly true the higher one is in the firm's hierarchy.

To explain these facts and to provide a business justification defense, perhaps the most important concept the labor economist has to offer involves investments in human capital. Labor economists see jobs not simply as producing current output but also as activities containing large training components. Especially early in the career, a considerable amount of time and resources of both the firm and worker are spent in learning new skills and polishing old ones. By its very nature, on-the-job training is forward looking. At the expense of foregoing current output (for firms) or wages (for workers), future output, productivity and wages are increased. In the training process costs are incurred now while benefits are received later.

To non-economists, growth in wages with age or tenure is often attributed to seniority based rules or conventions. To the labor economist, age related wages growth reflects primarily this investment process. Wage growth with age is a signal of real productivity growth. Thus many labor economists, including this one, would treat with considerable suspicion business justification arguments that rely primarily and without amplification on the idea that one reason that older workers are terminated is that wages grow with age.

This investment perspective also explains why the rate of growth in wages with age tends to become smaller the older the worker is. Essentially, the longer a worker expects to be in the labor force, the more years he will benefit from investments than enhance his future skills. Since older workers have fewer years left in the labor force, they have less incentive to invest. Human capital investments are concentrated early in the career and diminish as a worker gets older. Alongside this lower increment in skills will be smaller salary increases for older workers compared to younger ones.

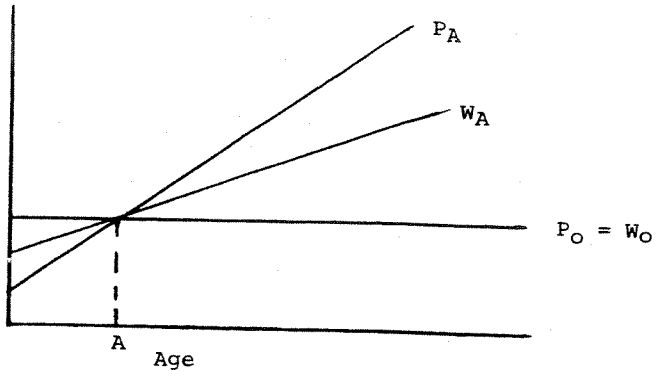
A distinction labor economists frequently make that has important implications about why firms care about the age of their workers is that between general and specific training. In the extreme, general training not only increases a worker's productivity in the firm in which he is currently employed but to many alternative employers as well. In contrast, specific training enhances a worker's productivity only at the firm in which he is currently employed. To illustrate, training in law schools is of the general variety since it enhances the skill of the prospective lawyer to many potential firms. However, the training involved in a 10 year commitment to an IBM antitrust case is specific since the knowledge obtained is useful primarily to the firm handling the case.

While both types of training enhances workers' skills, they have different implications in the labor market. Since general training increases a work skill outside the firm as much as inside it, the firm must increase the

salary of a worker to the precise extent that his productivity increased. Clearly if the firm did not, the worker would simply leave. Therefore, with general training the worker must capture all the benefits from training and pay all the costs. No special tie arises between the worker and the firm.

Specific training is quite different. To illustrate, consider Figure A.

Figure A



where P_O represents a workers productivity and W his wage. If no training occurs, workers productivity and wage at this firm (and others) would be P_O and W_O. If specific training were engaged in, a worker's productivity would be P_A. It would be below P_O during the training period because some current output is foregone in order to train. However, because of the specific skills that are developed and acquired productivity of this worker inside this firm (P_A) will eventually exceed his productivity in other firms.

Given that specific training changes a worker's productivity schedule from P_O to P_A, what compensation scheme will emerge? Labor economists argue that the compensation scheme must be one in which both workers and firms share in the costs and benefits of training. The reason is simple. If either the worker or firm received all the benefits, they would run the risk of a loss of these future benefits - the firm by the worker quitting and the worker by termination from the firm. Specific training creates an incentive for the worker and firm to try to remain together. Thus, the only compensation schemes that make sense must look like line W_A. During the training period, the worker pays part of the cost of training (the difference between $P_O - W_A$ and receives part of the benefits $W_A - P_O$ (after a*). Similarily, the firm pays $W_A - P_A$ (before a*) and receive $P_A - W_A$ (after a*). Specific training has made the firm and worker more valuable to each other than they are to others.

The end result implies that a worker's productivity inside his firm is higher than his salary which is itself larger than the wage the worker would command elsewhere. On implication of the theory is terminations should be less common among workers with more specific training. Since older workers will have more cummulative training behind them, the theory implies that older workers should be laid off less than younger ones. In addition we can see from Figure 1, that if an older worker with a good deal of specific training is laid off, the worker will find himself in a position in which he can earn much less in a new firm than in his previous firm.

This specific training-perspective sees older workers as legitimately anticipating higher salaries than younger ones and legitimately expecting the firm to honor its implicit commitment to keep the worker on the job often until retirement. At this level, this perspective appears to create problems mainly for the defense. And as long as there are no surprises and the firm continues on a path that does not depart much from previous expectations, it is difficult to rationalize terminations of older workers (unless one can show cause). However, if there are major permutations that significantly alter the character of the firm, the relative value of younger and older workers gets turned on its head. If a firm has to adapt to a new environment, older workers are no better in this new world than younger ones and they are less valuable to train. These perpmutations can take many forms - a new technology that makes the skills of older workers obsolete, new product lines that open up or new management teams that take over. Whatever the cause, it is these types of events that create the principal business rationale for a non-age neutral policy that favors the young.

The existence of hiring costs or training investments is one reason why firms will care about a worker's age. To see this, let a firm hire from a pool of workers who are identical in all other respects, except that they differ in their ages. Assume further that if hired, a worker will remain with the firm until age 65 and then retire. The investment in a worker yields a monetary return to the firm of $1 per year for every year employed. Table I illustrates the difference that the age of a worker makes in the value of this investment to the firm.

Table 1

Percent Gain to Hire a Worker

Evaluated at age	One year younger	10 years younger
20	0.6	-
30	1.0	8.28
40	2.0	15.8
50	4.3	35.2
60	17.2	138.5

This example illustrates some simple but important points. The first is the age makes little difference until age 40. The gain to the firm from hiring a 19 year old instead of a 20 year old is six tenths of 1 percent. And even this table exaggerates the size of this gain to hiring a 19 year old since obviously these young workers are unlikely to remain with the fi until retirement. The difference in their expected duration of tenure wit the firm is certainly less than a year. However, the importance of even a year difference in age does begin to matter when we consider middle aged workers. The value of this investment is 4.3 percent larger if the firm hires a 49 year old instead of a 50 year old and 17.2 percent greater for 59 year old compared to a 60 year old. Age does begin to matter and it matters more the older a worker is. As Table 1 shows age differences beco more dramatic when we consider workers 10 years apart in age. Table 1 alw applies if the issue is hiring. But it applies with as much force if the firm has to retool and redirect its efforts. If the firm has to change

enough then older workers inside the firm are much the same as older workers outside the firm.

There are circumstances when age is relevant in hiring, training, promotion, or termination decisions. But to rely on this argument, defense must be willing to establish that investment costs are significant and that the character of the investment is sufficiently lengthy to make the shorter horizon of older workers relevant.

This cryptic description of a labor economist's perspective also hints at some other avenues to pursue in business justification defense. Firms should not be viewed as single dimensional entities. Modern firms, particularily those of any size, have multiple objectives, functions, and products. Growth in demand for individual products or fundtions rapidly grow in importance while others dissipate and decay. New hires (or young workers) will clearly be concentrated in the growing areas while the work force will tend to be older in the declining areas. If a decision is made to scrap completely the no-growth area, older workers will be disproportionately affec However, if this defense is adopted, it may be necessary to show that these affected older workers cannot be absorbed easily in other parts of the corporation.

The specific investment theory implies that quit rates are higher among the young than the old. If there occurs a significant decline in the growth in the demand for output, the firm must scale back its labor force. Because of their higher quit rates, the younger segment of the workforce can be

handled by attrition. However, in order to reduce the number of senior or older workers, explicit terminations may be required.