

discounting of expected earnings in distant years. For older people, the mitigating effect of discounting is not present. Thus, for a man age 45 with the same earnings stream used above, Nelson's and Boudreaux's methods of estimating the present value of potential earnings yield \$256,044 and \$242,217, respectively. Our mathematical expectations are \$236,626 for an active man, \$155,310 for an inactive man, and \$231,325 for the weighted average of active and inactive persons.

OUR METHOD OF CALCULATION requires two modifications of the increment-decrement worklife tables published by BLS.⁵ First, the probabilities of transition into and out of the work force at each age must be converted to probabilities that are conditional on survival. Second, conditional probabilities of transition between active and inactive work force status must be added at age 76 to close the table. The relevant probabilities of transition are provided in table 1. A computer program for calculating the present value of expected earnings based on these transitional probabilities is available from the authors. □

—FOOTNOTES—

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¹ See Shirley J. Smith, "New worklife estimates reflect changing profile of labor force," *Monthly Labor Review*, March 1982, pp. 15-20; Shirley J. Smith, "Using the appropriate worklife estimate in court proceedings," *Monthly Labor Review*, October 1983, pp. 31-32; David M. Nelson, "The use of worklife tables in estimates of lost earning capacity," *Monthly Labor Review*, April 1982, pp. 30-31; Kenneth J. Boudreaux, "A further adjustment needed to estimate lost earning capacity," *Monthly Labor Review*, October 1983, pp. 30-31; Gerald P. Martin, "New Worklife Expectancy Study Favors the Defense," *For the Defense*, March 1983, pp. 3-4; and Melvin Borland and Robert Palsinelli, "Equalizing Wage Differences, Worklife Expectancy Tables and Wrongful Death Litigation," *Trial Lawyer's Guide*, Summer 1983, pp. 213-19.

² See Nelson, "The use of worklife tables"; and Boudreaux, "A further adjustment needed."

³ See Michael T. Brady, "Inflation, Productivity, and the Total Offset Method of Calculating Damages for Lost Future Earnings," *The University of Chicago Law Review*, Fall 1982, pp. 93-122.

⁴ Edwin B. Wainscott, "Computation of Lost Future Earnings in Personal Injury and Wrongful Death Action," *Indiana Law Review*, Summer 1978, pp. 648-91.

⁵ Shirley J. Smith, *Tables of Working Life: The Increment-Decrement Model*, Bulletin 2135 (Bureau of Labor Statistics, November 1982), pp. 1-65.

Estimating lost future earnings using the new worklife tables: a comment

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George C. Alter and William E. Becker provide yet another valuable contribution to the ongoing dialog on estimates of

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lost earnings due to wrongful injury or death. The authors have written a computer program replicating the BLS worklife model, expanding it to manipulate earnings projections by age, and allowing selection of a discount rate to estimate the present value of those lost future earnings.

I have no reservations about the worklife component of their model, which is nearly identical to our own. They do use a different closure procedure (for persons age 75 and over) than was employed in the BLS 1977 estimates. Our closure procedure has now been modified for better internal consistency. Alter and Becker also redefine transition rates, making them conditional on survival. Mortality is factored into their model somewhat differently than it is in the BLS procedure. However this is a difference of form rather than substance, the results of the two techniques being virtually identical.

The authors' primary purpose in replicating the BLS model is to draw out some of its unpublished findings having to do with the age-by-age timing of forgone labor force involvement for persons of a known labor force status at the time of injury. Readers involved in liability claims have expressed considerable interest in this type of data. As I noted in an earlier issue of the *Review*,¹ it is possible to derive population-based estimates of worklife during each age from the published tables. Alter and Becker reassert the need for estimates specific to the labor force status of the claimant.

The BLS model produces such estimates, but we have not found it feasible to publish them as part of the Bureau's worklife bulletin. (Status-specific estimates by sex, for 60 initial ages, would add at least 120 pages of tables to an already lengthy publication.) Nevertheless, we have taken note of the demand for such estimates.

Our next worklife publication is slated to include tables not only by sex, but also by race and education. This expansion of the output from 2 to 12 reference groups will require a cutback in the number of data items published for each group. We hope to be able to retain the estimates most useful for analysis of lost earnings. In addition, we hope to be able to provide on request some of the unpublished findings of the model, such as initial-status-specific worklife expectancies within each age, in some form certifiable for use in court.

The Alter and Becker model estimates lost earnings under the assumption of biannual payments over the claimant's natural lifetime. Doing so entails the use of very detailed worklife data (specifically, estimates of labor force entries and exits at each subsequent age, for a cohort of a given initial age and labor force status). We may also attempt to provide counts of these flows in the unpublished tables, to facilitate this type of computation. □

—FOOTNOTE—

¹ Shirley J. Smith, "Using the appropriate worklife estimate in court proceedings," *Monthly Labor Review*, October 1983, pp. 31-32.