Two Definitional Issues with the Patton-Nelson Personal Consumption Tables: A Comment

By

Kurt V. Krueger
John Ward Economics
8340 Mission Rd Ste 235
Prairie Village, KS 66206
Tel: (913) 381-9420
Fax: (913) 648-5740
Email: Krueger@JohnWardEconomics.com

Abstract

This issue of the *Journal of Forensic Economics* includes the fifth edition of the "Patton-Nelson Personal Consumption Tables" (PNPC). The authors Michael R. Ruble, Robert T. Patton and David M. Nelson (RPN) state in the article that "(s)ince these tables are widely used by forensic economists, attorneys and by Lawyers and Judges Publishing Co., it is appropriate to provide updated consumption percentages based on 2005-06 BLS data." This comment discusses two definitional issues with the PNPC estimates that readers should be aware of before applying them to a wrongful death case.

This issue of the *Journal of Forensic Economics* includes the fifth edition of the "Patton-Nelson Personal Consumption Tables" (PNPC). The authors Michael R. Ruble, Robert T. Patton and David M. Nelson (RPN) state in the article that "(s)ince these tables are widely used by forensic economists, attorneys and by Lawyers and Judges Publishing Co., it is appropriate to provide updated consumption percentages based on 2005-06 BLS data." This comment discusses two definitional issues with the PNPC estimates that readers should be aware of before applying them to a wrongful death case.

The PNPC tables compute personal consumption estimates by relying on summary tabulations of the *Consumer Expenditure Survey* (CEX) as published by the Bureau of Labor Statistics (BLS). The CEX expenditure tables selected by RPN for analysis are delineated by the number of persons living in the consumer unit and their combined before-tax income level.[1] For each expenditure group in the CEX data, RPN decide if the expenditure is subject to adult (ages 18 & older) personal consumption and if so, they allocate a portion of the expenditure to adult personal consumption.

1. Family Data

The fifth PNPC article begins with the following statement:

> "In determining the economic loss to the estate in a wrongful death claim, the forensic economist must adjust past and future wage loss for that portion of earnings that would have been consumed by the decedent; "Therefore, any factor or percentage, which is used in this estimation process must necessarily relate to the earnings stream and family size of the decedent" (Ruble, Patton & Nelson, 2001). This percentage is applied to total family income to arrive at the amount of the consumption adjustment. Finally the consumption adjustment is subtracted from the past and future wage loss to arrive at the net economic loss to the estate."

[1] The 2005-06 combined CEX summary expenditure tables used in PNPC can be downloaded from the Internet at ftp://ftp.bls.gov/pub/special.requests/ce/crosstabs/y0506/sizbyinc/.

Since family members are the survivors of those wrongfully killed, data regarding the expenditures made by families are crucial in determining an appropriate personal consumption amount of the family's income. The term "family data" has a specific meaning to economists as representing information about the subset of all households that consist solely of related persons living and operating as a family unit.

In all of the editions of the PNPC tables, the personal consumption estimates are labeled by "family size" and "family income." However, the data used to calculate the PNPC estimates originate from CEX "consumer units" which may or may not consist solely of family members. According to the CEX, a consumer unit comprises either: (1) all members of a particular household who are related; (2) a person living alone or sharing a household with others, but who is financially independent; or, (3) two or more persons living together who use their income to make joint expenditures. Financial independence is determined by the three major expense categories: housing, food, and other living expenses. To be considered financially independent, at least two of the three major expense categories have to be provided entirely or in part by the CEX respondent.

Wrongful death cases are most common involving the death of a husband or wife in a husband/wife only household or the death of a father or mother in a household consisting of a husband, wife, and children. According to tables 1400 and 1500 of the 2006 CEX,[2] husband and wife consumer units represent 67% of all two-person consumer units while husband, wife, and children consumer units represent 64% of all three-person or more consumer units. So, approximately one-third of the sample data that comprises the PNPC estimates are not directly

[2] Table 1400 of the 2006 CEX can be accessed on the Internet at ftp://ftp.bls.gov/pub/special.requests/ce/stnderror/2006/cusize.txt and Table 1500 at ftp://ftp.bls.gov/pub/special.requests/ce/stnderror/2006/cucomp.txt.

relevant to the personal consumption of a husband or wife in a husband/wife only household or a father or mother in a husband/wife/children household.

2. Wage Earners

The second definitional issue presented in this comment is that the PNPC estimates do not solely flow from the income of wage earners. From the RPN quote listed above, it is clear that RPN intend their personal consumption estimates as offsets to wage losses. According to Table 35 of the 2005-06 CEX,[3] 40% of the one-person consumer unit sample does not contain a wage earner. Therefore, 40% of the sample data that comprises the PNPC estimates are not directly relevant to the personal consumption of single wage earners. According to the 2005-06 CEX microdata files, 50% of all two-person households consist of a husband or wife where the husband and/or wife earn wages. So, half of the sample data that comprises the PNPC two-person estimates is not directly relevant to the personal consumption of husbands or wives that are wage earners.

3. Conclusion

The first PNPC tables were published in 1984 relying upon 1972-73 summary Consumer Expenditure Survey data. To date, the PNPC tables have been updated four times using the same data source and representations of presenting personal consumption estimates by family size and family income. The purpose of this comment has been to point out two definitional issues regarding the PNPC estimates: the PNPC estimates are not based upon (1) family data whose members are (2) wage earners. These facts conflict with RPN's statement that

> "Therefore, any factor or percentage, which is used in this estimation process must necessarily relate to the *earnings stream* and *family size* of the decedent." (emphasis added)

[3] Table 35 of the 2005-2006 CEX can be accessed on the Internet at ftp://ftp.bls.gov/pub/special.requests/ce/CrossTabs/y0506/SIZbyINC/xone.TXT

It is important to know the definitional origins of the empirical estimates of any study before applying them to a case specific situation. It is hoped that this comment provides additional insight to how the PNPC estimates were derived.

References

Patton, Robert T., and David M. Nelson, "Estimating Personal Consumption Costs in Wrongful Death Cases," *Journal of Forensic Economics*, 1991, 4(2), 233-240.

Ruble, Michael R., Patton, Robert T., and David M. Nelson, "Patton-Nelson Personal Consumption Tables 1997-98 Update," *Journal of Forensic Economics*, 2000, 13(3), 303-307.

_____, _____ and _____, "Patton-Nelson Personal Consumption Tables 2000-01: Updated and Revised," *Journal of Forensic Economics*, 2004, 15(3), 295-301.

_____, _____ and _____, "Patton-Nelson Personal Consumption Tables 2005-06," *Journal of Forensic Economics*, 2009, 20(3).

U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey, 2005, 2006, 2005-06*, Washington, D.C.