

Session 42 Wrongful Death: Personal Consumption and Maintenance/Household Services by Thomas R. Ireland, University of Missouri at St. Louis, St. Louis Missouri.

Biography of Thomas R. Ireland

Basics: Date of Birth: April 26, 1942. Age 60.6. Married to Kathleen M. Ireland.

Education: B.A. in Economics, Miami University in Ohio, 1964; Ph.D. in Economics, University of Virginia, 1968.

Interesting Life Experience: Ran for U.S. Congress in 1968. Won Republican Primary. Was decisively beaten in the general election by Abner Mikva, later to be a federal judge and President Clinton's first White House counsel. My campaign manager was Danny J. Boggs, now a Federal District Court judge in Louisville, Kentucky.

Academic Employments: Loyola University in Chicago, Purdue University-Hammond Campus, Illinois State University, the University of Wisconsin-Milwaukee, Southern Illinois University at Edwardsville and the University of Missouri at St. Louis; Professor of Economics at UM-St. Louis from 1972 to the present.

Consulting Involvements: First consulting assignment in forensic economics was in the fall of 1974; Dr. Ireland currently handles about 45 new cases a year.

Books and Book Length CD-ROMs: Dr. Ireland has written, co-written or co-edited eleven books, with another book length CD-ROM project in press. Six of the books or CD-ROMs and the CD-ROM in press are in the area of forensic economics

Papers in Professional Journals: Dr. Ireland has published or co-published 95 articles, 7 chapters or sections in books written or edited by other persons, and 18 book reviews. Most of those publications are in the area of forensic economics.

Addresses to Professional Association Meetings: Dr. Ireland has presented more than 100 papers to professional meetings and has been very active as a program chair, discussant and round table participant at professional meetings. Most of those presentations and participations have been in the area of forensic economics.

Editorial Involvements: Dr. Ireland was on the editorial board of the *Journal of Socio-Economics*, is on the editorial board of the *Journal of Legal Economics*, Associated Editor of the *Journal of Forensic Economics*, and is editor of *The Earnings Analyst*.

Professional Offices: Dr. Ireland was the Midwest Vice President of the National Association of Forensic Economics from 1991-1995, President of the American Academy of Economic Experts from April 2000 to April 2002 and President of the American Rehabilitation Economics Association from July 2001 to July 2002.

Forensic Advice from a Long-Time Forensic Economic Expert

- *The KISS Principle.* - Anything too complicated for a jury of high school graduates to understand is not going to be helpful if you testify. Even lawyers are not economic or financial experts.
- *Don't be Slick!* Some experts think that expensive suits, Rolex watches, and very mechanized Power Point presentations add to the power of their testimony. What matters is being understood and being thought of as a normal person who is down to earth, and being respectful of the process. Slickness creates suspicion. Polish suggests rehearsal. Very expensive clothing or jewelry creates distance.
- *Don't Take Sides!* You will take an oath to tell the truth, the whole truth and nothing but the truth. That should mean something. Once you utter those words, your job is to assist the jury in making the hard decisions it needs to make. You assist best when you remember that it is your job to answer questions, not to advocate for the side that has retained you. Don't let your retaining attorney put words in your mouth any more than you would let the opposing attorney do that. Demonstrate your credibility by doing your very best to listen to questions and answer them completely and fairly.
- *Treat the opposing attorney with respect.* You are being paid well to tolerate the slings and arrows of litigation and it is part of the opposing attorney's job to make you get angry or defensive if possible. Don't let it be possible by maintaining an attitude of calm confidence in yourself while being respectful even if you are not being respected.
- *Admit Mistakes Immediately!* If you testify long enough, you will make mistakes in some aspect of your calculations. Following Murphy's Law, you may find these at the worst possible time. Generally, making mistakes that will not badly hurt your career, but attempting to cover your mistakes will hurt you. It may be awkward to admit mistakes, but you are much better off to admit your mistakes when you find them and immediately volunteer the consequences for your calculations. Juries may forgive your mistakes. They won't forgive your efforts to be evasive in covering them.
- *Don't volunteer information.* Telling the truth, the whole truth, and nothing but the truth does not mean telling the jury everything that you know. It means answering the questions you were asked fully and completely. Going beyond that will seldom provide any benefit for anyone, particularly you.
- *Make sure you know what the questions are.* Forensic economics has a substantial literature. Make sure you know what is available in that literature. If others use methods different than yours, be sure you know about those other methods and why you prefer the method you use. Sources will be discussed at the end of this presentation.
- *Don't express opinions beyond your expertise.* You may "know" that smoking shortens life expectancy, but an accountant (or an economist) is not an expert on how smoking shortens life expectancy. Once you express an opinion in an area like this, you

open up a Pandora's box that can be used to make you look foolish. You make a much better impression by pointing out that while you may have personal opinions that smoking shortens life expectancy, you are not an expert on that subject and have not made assumptions of your own about such effects.

- *Learn to write well.* It is very important to be able to explain how and why you made your damages calculations. Good writing is not beyond your grasp. It requires making sure that you have explained every step along the way thoroughly enough that someone with a high school education can understand what you did. You don't need to be able to write a great novel, just a clear and concise explanation that tells what you did to come up with your numbers. The secret to good writing of that type is practice, practice and more practice. Ask others to read your reports to see if they are clear, if they contain extraneous material and if there are ways you could change your wording to make your explanations easier to understand. Then try to implement those suggestions.
- *Read relevant legal decisions.* Do not assume that the attorney who has hired you is an expert in the law of the venue for interpreting what are the rules for calculating economic damages. Ultimately, the attorney is a legal expert and you are not. You should never try to act as a legal expert. However, by reading the cases and legal instructions, you will become a much more helpful expert – especially when the attorney who has hired you is inexperienced.

What Is Unique About Wrongful Death Litigation

- *It isn't part of the common law.* The common law evolved specific ways for dealing with torts involving personal injuries. It is an exaggeration, but it was commonly said "a man's action dies with him." Thus, much of the law governing personal injuries in which the injured person has survived is not statutory, but governed, at least in part, by traditions in law that go back to the middle ages. Legal actions involving wrongful death throughout the United States and other common law countries have a statutory basis.
- *There are significant differences among the fifty states* in the recoverable damages that result from a wrongful death. Circumstances that might result in very large damages in one state might result in no damages in another. The range of differences is much smaller in personal injuries of persons who have survived.

A Little Law Governing Family Loss

- *States have two ways of dealing with wrongful deaths* – Survival Acts and Wrongful Death Acts. Some states have one or the other. Some have both. Some have Acts that are mixtures of both.
- *A Survival Act (sometimes Survivor Act) is concerned with death, but not necessarily a wrongful death.* If someone brings a legal action against someone else and then dies for purely natural reasons, the legal action may survive the death. In a survival

action, the estate is authorized to proceed with the legal action and to recover whatever damages the decedent could have recovered if the death had not occurred. It could be a business damages suit or a libel suit or any other kind of legal action, including, but not limited to, an action following a wrongful death.

- *A Wrongful Death Act* is necessarily concerned with a wrongful death, but *does not involve recovery by the dead person*. In a wrongful death action, living persons who have been harmed by the wrongful death bring an action on their own behalfs for their own losses that have resulted from the wrongful death. Ordinarily, this includes loss of financial support from the decedent, loss of household services from the decedent, loss of access to job-related fringe benefits (such as medical insurance) that were available when the decedent was alive, and sometimes loss of accumulations to an estate, grief and bereavement, loss of love and affection, companionship, consortium, guidance, counsel and instruction that would have been provided by the decedent if the death had not occurred. Each state with a wrongful death act has its own standards for what may be recovered.
- *Some states have only have Wrongful Death Acts*, with no special provisions for how a Survival Act might apply in cases of wrongful death. Missouri is an example.
- *Many states have “paired” Survival Acts and Wrongful Death Acts*. The most common type of pairing allows the estate to recover for all losses of the decedent from the moment of an injury to the moment of death and allows survivors to recover for their losses after the death. *The period from the injury to death is treated like a personal injury under the Survival Act*. This means that the decedent’s estate can recover damages from that period as if the decedent were personally injured and still alive. *For the period after death occurs, the Wrongful Death Act applies and the only damages that can be recovered are damages suffered by the survivors*. Thus damages are calculated as if it was a personal injury during the period while the injured person was alive after the injury, but as a wrongful death for the period after death occurs. Illinois is an example.
- *Some states have paired Survival Acts and Wrongful Death Acts that both apply to the entirety of a decedent’s pre injury life expectancy*, but which have a rule against double counting any damage element. In these states, an action is jointly filed under both acts. For each element of damages, survivors can compute damages under either act, but cannot double count. Thus, if a portion of lost earnings is claimed under the Wrongful Death Act as a source of lost financial support, it cannot also be claimed under the Survival Act as lost earnings to the estate. However, lost earnings can be divided into a portion for which claims are made under the Wrongful Death Act and a portion for which claims are made under the Survival Act. To see why this is important, consider the following family situation: A divorced mother is killed and the two plaintiff children go to live with their father. They bring an action for recovery of their damages. For the period when the children were minors, the loss would be claimed under the Wrongful Death Act. Once the children were grown, they would no longer have been receiving financial support, so they would claim losses for that part of lost earnings under the Survival Act. If children live with parents, housing and utilities can be claimed as types

of financial support even though the decedent needed them to live. After the children begin supporting themselves and leave home, they no longer receive any financial support. Therefore, the estate's claim for lost earnings is larger than the survivors' claims for lost financial support. That is true even though expenses of housing and utilities must now be subtracted from lost earnings.

- *Some states only rely on their Survival Acts* because all of a decedent's lost earnings, without reduction for personal consumption or personal maintenance, can be claimed for the entirety of the decedent's pre injury life expectancy. Georgia is an example.
- *In most Wrongful Death Acts, there is no mention of "personal consumption,"* but forensic economic experts often calculate a "personal consumption reduction." Clearly, if a decedent had remained alive, the decedent would have spent some portion of future earnings for personal uses. Such uses would include personal hobbies, some part of food, clothing, costs of transportation to and from work, medical expenses and so forth. That part of the decedent's future earnings would not have resulted in any benefit to survivors, so it needs to be subtracted from the decedent's earnings to determine the amount available for providing financial support. (Note that savings for the future might or might not result in any future financial support for survivors.) This would include both states with no Survival Act applications in wrongful death circumstances and states whose Survival Acts apply only from the moment of injury to the moment of death.
- *In states with paired Wrongful Death and Survival Acts that apply to the entirety of the decedent's normal life expectancy, there is a "personal maintenance" reduction that is conceptually different from a "personal consumption" reduction.* A reduction for personal maintenance is based on the necessary costs of maintaining the decedent in the work force to earn the earnings that were lost. A reduction for personal consumption subtracts expenditures that would not have benefited survivors. Personal maintenance is a narrower concept than personal consumption because a worker's expenditures on hobbies are not necessary to maintain the worker in the labor force, but does reduce the amount of income available to provide financial support. Under a personal maintenance standard, there would be no reduction for personal hobbies and entertainments even though these monies would not have been used to provide financial support for survivors.

Earl Cheit, Equivalence, Family Economies of Scale and All That

- *Who is Earl Cheit and why does it matter?* The last anyone heard, Earl Cheit, now in his 90's, was alive and well in Berkeley, California, having long since retired from the economics department at UC-Berkeley. What makes Earl Cheit matter is that he published a book in 1961 entitled *Injury and Recovery in the Course of Employment*, John Wiley & Sons, Inc., New York. On page 78 of that book, he published Table 3.5 for "Consumption Expenditures of a Family Head, by Size of Family." That table provides percentages for the personal consumption of family heads based on the size of their families. For a two adult family, it shows 30 percent. For two adults and one minor dependant child, it shows 26 percent, with 22 percent for two adults and two minor

dependent children, 20 percent for two adults and three minor children, and 18 percent for two adults and four minor children. If you work in wrongful death states, you will see use of this table by some forensic economic experts even today.

- *Why will you see this table used?* Because the data we have for determining how much of a decedent's income would be used for personal consumption is very weak. Cheit's table seems to come up with figures that are reasonable and it is a source that can be cited as justification for the percentages used in an expert's report. There are also other sources, but each of them has weaknesses. Personal consumption percentages also vary significantly from one source to the next. In my book with Tom Depperschmidt that induced Salty Schuman to invite me here, *Assessing Family Loss in Wrongful Death Litigation: The Special Roles of Lost Services and Personal Consumption*, Lawyers & Judges Publishing Co., 1999, we cover many of the studies that have been done. Reviews are also available in Jerry Martin's, *Determining Economic Damages*, Chapter 5, James Publishing 2002, and Stephen Horner provides a very good summary in Table 5, page 61 of *Expert Economic Testimony*, Ireland et al., Lawyers & Judges, 1998. The Cheit table falls into the range of reasonable results when compared with all of the other efforts to provide data for measurement.

- *The rest of the story!* On page 78 of Earl Cheit's book, the source for the percentages is listed as "estimates from interview data (Appendix II), and on Heller Committee budget data (Appendix I)." If you look up those appendices in this long out-of-print book, you will find that they offer no insight into how this table was prepared. Jerry Martin, the author of *Determining Economic Damages*, asked Earl Cheit how the table was prepared. Cheit indicated that it had been prepared by a graduate student whose name he had long since forgotten and that he did not know how the table was prepared. He did know that he was long since tired of being subpoenaed to explain how the table was prepared and that he had never used it in his own consulting work.

- *The Bureau of Labor Statistics has produced so-called "Equivalence Scales"* that show the amount of money needed to allow a family to live at an equivalent standard of living compared with other family sizes. Poverty thresholds are one example of equivalence scales in that they define a particular quality of life level as "the poverty level" and then determine the amount of money needed to stay above that threshold. The amount varies by size and adult-child composition of the family. These scales have been used to project personal consumption percentages by comparing the income level needed with and without the decedent to maintain a given standard of living. Whether this is any better than relying on Earl Cheit's table is another matter.

- *Forensic economists have done the other studies* in an effort to develop reliable ways to measure personal consumption. There are several fundamental problems. First, no basic research has even been done to specifically try to answer the personal consumption question forensic economic experts need to answer in wrongful death damages calculations. That question is how much of an average decedent's income is spent in ways that do not benefit survivors. The amount would obviously vary by family size, by culture and in other ways, but a reliable average figure would still be very

helpful. It does not exist. Second, the theory of family goods has not been adequately developed. Family goods are similar to public goods in public and private sectors of the economy in that they are non-rival in consumption. Housing and utilities are available to more than one member of a family at the same time. Thus providing them to a decedent is also providing them to other family members. However, they are not perfectly non-rival in consumption because a smaller family can get by with less housing. There is, however, no good theory of the economies of scale in family living, making it very difficult to answer the question of how much of these expenditures should be treated as lost support and how much as personal consumption. Third, there is no good data about the variation that exists among families with the same composition. Family consumption patterns are as varied as individual consumption patterns. Therefore, even if we had reliable information about the consumption behavior of average families, it might tell us very little about the family of the decedent.

- None of the studies, except perhaps the earliest study to mention the problem, have even tried to measure personal maintenance for states that maintain paired Survival and Wrongful Death Acts that apply to the entirety of a decedent's pre-death normal life expectancy. This includes Pennsylvania, Tennessee, Alaska, Washington and probably Hawaii, and possibly other states as well. That earliest study was *The Money Value of Man* by Louis I. Dublin and Alfred J. Lotka, originally published by Ronald Press in 1930, with a revised edition in 1946. Arno Press reprinted the 1930 edition in 1977 and remains in print at least as of three years ago. The book's perspective was to think in terms of the money value of a man in terms of a person's earnings stream minus the costs of maintaining stream. This book may even have influenced the way legislation has been developed in states that use personal maintenance standards. However, there are no studies that are specifically directed at measuring personal maintenance in a way that is different from personal consumption.

- A forensic economic expert should attempt to know all that can be known about how the decedent's family spent its income before the death. Someone has defined an expert who says, "I don't know," a lot, but at the right times. A damages calculation must ultimately be based on common sense and the best information you have been able to develop. Sometimes, you will not have all the information you need. Doing your best to be fair, reasonable, and thorough in your efforts to make assessments will stand you in good stead. If you don't know, don't fake it. Explain what you did to develop the most fair and reasonable opinions. You could always have done things differently and the opposing attorney will cheerfully assist you in explaining that to the jury.

Whose Incomes Matter and Why?

- *Many families have two wage earners with two incomes.* Typically, husbands and wives combine their incomes into single-family accounts, which are then used to pay for all family expenses. The personal consumption (or personal maintenance) of each wage earner is paid for from those family accounts. The Cheit table, uses of equivalence scales and studies done by forensic economists have all attempted to calculate the personal consumption of decedents as a percent of family income. Use of such tables might not be

valid in California in state cases, but might be required in California in DOHSA (Death on the High Seas Act) cases in federal courts. This is another case in which a forensic economic expert must understand both what the law is and the reasoning behind it.

- *California has clear case precedents that the income of a decedent's spouse may not be considered when determining the personal consumption of the decedent.* The fact that a decedent might have consumed part of the spouse's income is treated as a collateral source issue. The logic is that what a surviving spouse did with her income is irrelevant to the calculation of loss deriving from the death of the decedent. One may ask whether a surviving spouse is really made better off by not having to spend as much money on the decedent spouse. See *Fein v. Permanente Medical Group*, 38 Cal. 137 (Cal. 1985). Previous cases cited to the same effect are: *Gilmore v. Los Angeles Railway Corp.*, 211 Cal. 192 (Cal. 1930); *Johnson v. Western Air Express Corp.*, 45 Cal.App.2d 52 (Cal.App.1941); *Stathos v. Lemich*, 213 Cal.App.2d 52 (Cal.App.1963); *Webb v. Van Noort*, 239 Cal.App.2d 472 (Cal.App.1966); and *Fox v. Pacific Southwest Airlines*, 133 Cal.App.3d 565 (Cal.App.1982).
- In *Howard v. Crystal Cruises, Inc.*, 41 F.3d 527 (9th Cir. 1994), the 9th Circuit Court of Appeals ruled that *all of family income must be considered in calculating a personal consumption reduction.* From a purely financial standpoint, there is a net savings that derives from less being spent of the surviving spouse's income on the decedent spouse.
- *In most states and in most federal venues, there are no cases that speak to whether the personal consumption reduction should be applied to all of family income or only the decedent's income.* A forensic economic expert should understand the arguments for and against the approaches taken by the state of California and the 9th Circuit in *Howard v. Crystal Cruises*. These arguments are covered in Readings 32, 33 and 34 by John O. Ward, Robert Trout and Thomas Ireland in *Assessing Family Loss in Wrongful Death Litigation*, edited by Ireland and Depperschmidt (1999), cited earlier.

Family/Household Services: Who, What, When, Where and How

- *In most legal venues, damages can be awarded under Wrongful Death Acts for services that a decedent had been providing around the family home.* These services were provided without cash outlay, but they could be replaced by hiring persons from the commercial marketplace to replace them. These services are sometimes referred to as "family services," but more often as "household services," even though they might not be performed within the household. Such services would obviously include cutting the grass, repairing appliances, changing the oil in an automobile, cooking family meals, acting as a purchasing agent for supplies for cooking and cleaning in the household, doing the laundry, paying family bills and keeping financial records, and other routine maintenance activities that are required to maintain a functioning family household. In most venues, childcare, guidance and instruction would also be included within this damages category. However, the "consortium, companionship, comfort, instruction,

guidance, counsel, and training services, even among adult family members not living in the same household may also be includable as damages.” (The terms chosen in this sentence were taken from Chapter 537.090 of the Missouri Revised Statutes.) What services may be included depends on the legal venue, but the range of services allowed is often much more extensive than routine maintenance activities. A forensic economic expert cannot calculate the value of consortium, but calculations can be made for some of the other categories.

- In law, “*pecuniary*” means “*in money terms*.” It also may mean, as it applies to whether a forensic economic expert’s testimony is admissible, whether the money value *can be determined by a reproducible standard*. This is not a new issue in forensic economic analysis. The United State Supreme Court spoke to this issue in quite cogent and modern terms in the 1913 case of *Michigan Central Railroad v. Vreeland*, 227 U.S. 59 (1913). The *Vreeland* Court even conjectured that some standard might be found to allow pecuniary assessment of companionship. By “standard” in this context, the court was concerned to have something more than what would today be called the “ipse dixit” of the expert claiming to have assigned a dollar value to a damages category. A specific method must be used to assign that dollar value that another expert could check and that could be used with other individuals in a way that would allow comparisons to be made and error rates to be checked. “Ipse dixit” means literally “said by himself.” It was clear even in 1913 that an expert needed to be able to explain the method used to arrive at the dollar value being provided in testimony. The expert could not just venture an opinion justified by his expertise without an explanation of how the opinion was reached.

Must Loss Be Demonstrated to be Pecuniary?

- With few exceptions, *economic experts must rely on market equivalents to make value assessments*. Economic experts can value things for which there are reasonable market equivalents and cannot value things for which there are not. Consortium, to the extent that it involves a loving relationship (with or without sex) is not something an economic expert can value because there are no market equivalents for loving relationships. Companionship may be different since there is a market for paid companions. How far the courts are willing to go with this varies by venue.

- *There are two types of market equivalents that economic experts use in making damages assessments: Replacement cost analysis and opportunity cost analysis*. Both have been used in developing estimates of the value of household services. A “replacement cost” analysis calculates the cost of purchasing market equivalents for the services that were lost. An opportunity cost analysis calculates the value of alternative uses of the time that a decedent spent producing household services. An accurate replacement cost analysis always overstates the value of losses suffered by a family. An accurate opportunity cost always understates the value of losses suffered by a family.

- *Some courts use a very narrow interpretation of pecuniary loss that requires a replacement cost method*. Surviving family members must demonstrate not only that the services of the decedent had value, but that the lost services have been or will be

replaced. This is a severe restriction on damages that can be introduced because most families do not purchase market replacements for most of the services that were lost in a wrongful death. Typically, other family members begin to provide the services that a decedent had been providing or the family does without. In part, this is because the family has had important economic losses resulting from the death, but that is far from the whole story. The other problem is that provision of household services by market providers is intrusive on family privacy and comes fraught with dangers of possible theft or other forms of opportunism by providers. For both reasons, this interpretation by the courts means that services that had important pecuniary value to family members are not included in allowable damages estimates. (Courts using such interpretations, however, have indicated that such losses can be included as a part of the intangible of lost consortium, but not as pecuniary losses.)

Is Time a Numeraire for Lost Services?

- In economic theory, a “numeraire” is an imaginary standard for purchasing power calculations. “Money” is not a single thing, but a range of assets that are very liquid and can easily be used to make market purchases and to accept in market sales. Typically, the basic money unit is used as a numeraire to express the value of all other goods, services and assets even though all money assets are assets themselves with special characteristics that are slightly different from those assumed by using the money unit as a numeraire.
- Many forensic economists effectively use measures of time spent in providing household services as a numeraire for the value of those services. This, however, assumes that time inputs and service outputs have a simple defined relationship. Assume, for instance, that a decedent mother spent 1.5 hours cooking a Sunday dinner for her family and that the quality of her cooking services in the commercial market was \$13 per hour. Using time as a numeraire, the value of the Sunday dinner would be calculated at \$19.50. This may be inaccurate for several reasons. First, cooking may have been a hobby for the decedent mother, such that the family might have preferred a \$12 meal from MacDonal’d’s. If so, from an output standpoint, the value of the meal would have been less than \$12, the preferred output cost. Second, the decedent mother was probably not continuously cooking during that 1.5 hour period. This may have been a time when important guidance may have been provided to her children and was also time during which she was providing child care in the sense that she was available to respond to emergencies that might arise. Time may or may not provide a reasonable proxy for the value of services provided. Inputs and outputs are not the same thing.

What Data Sources Exist for Time Use?

- The single most important document for any forensic economic expert to read before using time use data to project lost household services is *Time-Use Measurement and Research: Report of a Workshop* by The Committee on National Statistics, National Academy Press, Washington, D.C. (2000). This short book length document can be ordered by calling (800) 624-6242 or on line at <http://www.nap.edu>. It documents the

problems with time use survey methods. Those problems apply to all time use data, and will apply to the survey data that will begin to be produced by the Bureau of Labor Statistics in 2003 or 2004.

- *All time use data is deeply flawed in comparison with data on outputs and prices* that are available about the commercial sector. Any survey, by its nature, is less accurate than market summaries based on transactions that have actually occurred and been recorded in a systematic way. In surveys, different questioners and respondents have different interpretations of the questions being asked and have psychological agendas that may distort the answers they give or receive. The fact that household contributions of husbands are much larger in a survey of husbands than in a survey of wives is not surprising. The fact that people do not remember precisely what they were doing at various points in time is also not surprising.
- *Each time use survey is based on its own set of definitions* so that comparisons between surveys are difficult and unreliable.
- *Time use surveys do not answer the specific questions that legal standard require* in any one venue. This is not surprising because the legal standards for allowable services in damages calculations vary from venue to venue.
- *Very little peer review testing has been done on most of the time use surveys that have been published.* The surveys performed by the University of Michigan Survey Research Center, headed by F. Thomas Juster in the 1970's and early 1980's were given the most thorough peer review testing, but are now at least 20 years out of date. This still may be the most reliable source to use. See *Time, Goods, and Well-Being*, edited by F. Thomas Juster and Frank P. Stafford, University of Michigan Survey Research Center, Ann Arbor, MI, 1985.
- *Further discussion of time use and a listing of other survey sources* can be found in Ireland and Depperschmidt (1999) and Martin (2002), cited earlier.

Can (Must) We Ask Survivors About Lost Services of a Decedent?

- *The weaknesses of time use surveys are easily demonstrated* and not designed to answer the questions a forensic economic expert must address in damages analysis. Using information provided by survivors of a decedent is also dangerous. Their memories have been shocked by the death of the decedent and may be influenced by how they hope to remember the lost loved one. Survivors might also intentionally distort the amounts of time spent by the decedent in household services upward to increase damages estimates. Nevertheless, *a number of court decisions have held that evidence of lost household services cannot be based on general averages from time use surveys, but must be based on a foundation of evidence from surviving family members* about the specific services that were performed by the decedent.

- If you are asked to make such a calculation, it is probably not useful to ask surviving family members how much time decedents spent providing various categories of household/family services. If someone asked you how much time you spent providing last week, it would be very difficult to recall. A more promising approach is to ask survivors to describe what a typical week was like when the decedent was alive. In doing so, you should make it clear that what you want is the truth, with out any glorification of the decedent. What time did family members get up in the morning on Mondays through Sundays? What time did the decedent get home from work? How long did it take the decedent to get to and from work? What hobbies did the decedent have? How did the family spend vacations? Were things the same in the summer as the winter? How skilled was the decedent at various household tasks the decedent performed. How did other family members react to the services provided by the decedent? Were there services the decedent loved to provide, but which other family members found mostly a nuisance? By asking questions about what happened each day of the week at different times of the year, you are developing the basis for your own time estimates based on the evidence that family members can provide at trial.

General References Useful to a Forensic Economic Expert

Books:

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Brookshire, Michael L., Charles W. deSeve, and Frank L. Slesnick. 1993. "Estimating Damages in Personal Injury and Wrongful Death." Pages 15-38 in *Litigation Economics*, edited by Patrick A. Gaughan and Robert J. Thornton. JAI Press. Greenwich, Connecticut.

Hall, Robert A. and Victoria A. Lazear. 1994. "Reference Guide on Estimation of Economic Losses in Damage Awards." In the *Reference Manual on Scientific Evidence*. Federal Judicial Center. Washington, D.C.

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Ireland, Thomas R., Stephen M. Horner and James D. Rodgers. 1998. "Reference Guide for Valuing Economic Loss in Personal Injury, Wrongful Death and Survival Actions," in Ireland, et al, *Expert Economic Testimony: Reference Guides for Judges and Attorneys*, Lawyers & Judges Publishing Co., Inc.

King, Elizabeth M. and James P. Smith. 1988. *Computing Economic Loss in Cases of Wrongful Death*. The Rand Corporation. Santa Monica, California.

Martin, Gerald D. *Determining Economic Damages*. Annually updated. James Publishing Company. Santa Anna, California.

Speiser, Stuart M. and John Maher. 1995. *Recovery for Wrongful Death and Injury*. Fourth Edition. Clark Boardman Callaghan. New York. 1995. (The accuracy of discussions of economic methods in this book is questionable, but its discussion of law is very good.)

Journals:

Litigation Economic Review. Published by the National Association of Forensic Economics. Two issues per year. The LER began publishing in the fall of 1995 as the Litigation Economics Digest. The most recent issue is Volume 5, Number 2, Winter 2001.

Journal of Forensic Economics. Published by the National Association of Forensic Economics. The JFE began publishing in September, 1987. Three issues per year. The most recent issue is Volume 14, Number 3, Fall 2001.

Journal of Legal Economics. Published by the American Academy of Economic and Financial Experts. The JLE began publishing in March 1991. Three issues per year. The most recent issue is Volume 10, Number 3, Winter 00-01.

The Earnings Analyst. Published by the American Rehabilitation Economics Association. One issue per year. The most recent issue is Volume 4, 2001.

Organizations

Some of these journals can be purchased without memberships in NAFE, AAEFE and AREA, but the savings compared with acquiring memberships is quite small. The web addresses of each association are provided below. NAFE and AAEFE are organizations whose memberships are predominantly economists, while AREA's membership is predominantly composed of vocational experts. Accountants are welcome in all three organizations and in the Council for Ethics and Disclosure in Damages Analysis (CEDDA), which does not publish a journal. Back issues of the journals may be available. Rick Gaskins, a CPA in Maryland, is a board member in both AAEFE and NAFE. Paul Bjorklund, a CPA in Arizona, is the treasurer of CEDDA.

The American Academy of Economic and Financial Experts (AAEFE)
<http://www.aafe.org/>

The American Rehabilitation Economics Association (AREA)
<http://www.A-R-E-A.org/>

The Council for Ethics and Disclosure in Damages Analysis (CEDDA)
<http://www.cedda.net/default.htm>

The National Association of Forensic Economics (NAFE)

<http://www.nafe.net/>

Legal Decisions Relevant to Forensic Economics

Synopses of legal decisions that would be of interest to forensic economic experts are listed, with case full case citations, in a web page maintained by the University of Missouri at St. Louis. The web address is:

<http://www.umsl.edu/divisions/artscience/economics/ForensicEconomics/CasesFE.html>

Final Consideration

Compared with twenty-five years ago, the available literature in areas that relate to making economic damages calculations has become quite extensive. If you lack the necessary background and come up against an expert on the other side who does have a fully developed background in this area, there is some danger that you will lose your future opportunities to work in this area. One case done badly at an early stage could end a budding career. Take the time to become fully prepared, if you have not already done so.