

Economic Science and Hedonic Damage Analysis in Light of *Daubert v. Merrell Dow*

Thomas R. Ireland
Department of Economics
University of Missouri-St. Louis
St. Louis, MO 63121
314/516-5558
stirel@umslvma.umsl.edu

Walter D. Johnson
Department of Economics
University of Missouri-Rolla
Rolla, MO 65401
573/341-4809
wjohnson@umr.edu

Paul C. Taylor
Consulting Economist
2245 Penrose Lane
Fairbanks, AK 99709
907/455-6037
ptaylor@polarnet.com

Abstract

The 1993 landmark United States Supreme Court decision in *Daubert v. Merrell Dow* set out specific criteria for admission of expert testimony. A crucial question for economists raised by the decision is how damage analysis by economists might be impacted by these new rules. To the extent that the courts have applied *Daubert* to decisions on the admissibility of economic testimony in the three years since *Daubert*, it has been almost exclusively in the area of “hedonic damages.” In a number of cases, courts have ruled that “hedonic damage” testimony does not meet the requirements of the *Daubert* decision. Only one has contained even an inference of probable acceptance of “hedonic damages.” This paper reviews the cases individually and examines the rationales by which the courts have denied admissibility to “hedonic damage” testimony in an attempt to garner insight into the potential impact of *Daubert* on testimony by economic experts.

Introduction

Since the decision in *William Daubert et al. v. Merrell Dow Pharmaceuticals, Inc.*, 509 US ___, 113 S. Ct. 2786, 125 L. Ed. 2d 469, was announced on June 28, 1993, economists have been concerned with how the expanded criteria set forth by the Supreme Court might affect the admissibility of expert opinion. To date, the major aspect of economic testimony subjected to *Daubert* based judicial review has been the area of “hedonic damage” testimony, where economists provide testimony about the value of “loss of the enjoyment of life.” This paper examines the rationale of court decisions in cases involving “hedonic damages” in light of the *Daubert* criteria and attempts to provide initial insight into the impact of *Daubert* on the admissibility of this testimony by economic experts.

The paper begins with a very brief review of the *Daubert* decision and then considers one case decided immediately prior to *Daubert* and twelve cases the authors have been able to identify that explicitly address the admissibility of economic testimony on hedonic damages and that were decided between June 28, 1993 (the date of the *Daubert* decision) and April 5, 1996 (the date of the *Kurncz* decision, discussed below).¹ In the included cases, judges are speaking directly to their understandings of economic science and either explicitly or implicitly on how the *Daubert*

* The authors thank Robert Male for detailed suggestions for improving this paper.

¹ The paper is a presentation of all post *Daubert* cases identified by Westlaw and Lexis searches keyed on “hedonics” and “expert.” As such, it contains several cases with little or no precental value. A reader interested in the current state of the law should focus on *Hein*, *Anderson*, and most particularly on *Ayers*, all of which are discussed in the body of the paper.

decision or closely related Federal Rules of Evidence² (FRE) have influenced their employments of those understandings. The names of experts proffered to offer “hedonic damage” testimony, most of whom are well known among forensic economists, are identified, adding to the interest. Moreover, for the first time in the authors’ experience, judicial references are seen to articles that have been published in the various forensic economic journals, offering some insight into the potential effect of this literature on judicial decision making processes.

The Meaning of the *Daubert* Case

The decision of the United States Supreme Court in *Daubert* has been hailed as a landmark decision concerning the admissibility of expert testimony in federal cases involving scientific testimony. It ruled specifically that the so-called *Frye test* (from *Frye v. United States*, 293 F. 1013 (D.C.Cir. 1923) had been superseded by the 1975 adoption of the Federal Rules of Evidence. The essence of the *Frye test* was that the admissibility of expert scientific testimony

² From the Federal Rules of Evidence:

Rule 403: Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence. (Pub.L. 93-595, Section 1, Jan. 2, 1975, 88 Stat. 1932)

Rule 702: If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education, may testify thereto in the form of an opinion or otherwise. (Pub.L. 93-595, Section 1, Jan. 2, 1975, 88 Stat. 1937)

Rule 703: The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence. (Pub.L. 93-595, Section 1, Jan. 2, 1975, 88 Stat. 1937; Mar. 2, 1987, eff. Oct. 1, 1987)

was dependent on its general acceptance within the professional community from which the “science” was drawn.

Many state and federal courts³ had already deemed the *Frye* test superseded by the Federal Rules of Evidence (and their state equivalences) by 1993, so this part of the *Daubert* ruling was much less dramatic than it seemed at the time. To set the stage for the examination of *Daubert*'s effects, the authors included one immediately pre-*Daubert* case, *Livingston*⁴ as an example of this transition. The real significance of *Daubert* is found in the Supreme Court's exhortation to federal trial court judges to act as more decisive “gatekeepers” in determining whether or not proffered testimony meets the scientific standards required by Federal Rules of Evidence 403, 702, and 703.

To assist the district courts in following this mandate, the Supreme Court provided extensive explication of its understanding of the requirements of those rules, identifying three basic areas that should be considered by trial court judges in admitting expert testimony: (1) The qualifications of the expert to render the information; (2) the admissibility of the evidence or testimony the expert would offer; and (3) the sufficiency of the information in assisting the jury to reach its decision. The meanings of each of these *Daubert* criteria has been discussed at length

³ Pre-*Daubert* cases involving hedonic damages cited frequently and/or prominently: *Gregory v. Carey*, 791 P.2d 1329 (Kan. 1990)
Sterner v. Wesley College, Inc., 747 F. Supp. 263 (D.Del. 1990)
Mercado v. Ahmed, 756 F. Supp. 1097 (N.D.Ill. 1991), affirmed 974 F.2d. 863 (7th Cir. 1992)
Fetzer v. Wood, 569 N.E.2d 1237 (Ill.App. 2 Dist. 1991)
Southlake Limousine and Coach, Inc. v. Brock, 578 N.E.2d 677 (Ind.App. 3 Dist. 1991)
Foster v. Trafalgar House Oil & Gas, et al., 603 So.2d 284 (La.App. 2 Cir. 1992)
Patch v. Glover, 618 N.E.2d (Ill.App. 1 Dist. 1993)

⁴ *Livingston v. U.S.*, 817 F.Supp. 601 (E.D.N.C. 1993). We also include this case because it is one of only two cases we discuss in which economists are referenced on both sides.

elsewhere⁵ and are not repeated here. Rather, the focus in this paper is on case law specific to *Daubert* or *Daubert*-like criteria applied to economic testimony on hedonic damages. Each case identified for inclusion in this study either directly references *Daubert* or contains judicial cites of the FRE or state rules containing the same or very similar language.

Each case description begins with a summary which includes the citation; whether the case was a personal injury or wrongful death case; the names of participating economists by the retaining side; whether *Daubert* was mentioned; and the result.⁶ A more general narrative follows, containing a discussion of the specific basis for the court's ruling, citations to earlier cases that might have been important, other special factors that might be interesting, and general conclusions that might be drawn from the decision.

(1). *Livingston v. U.S.* 817 F.Supp. 601 (E.D.N.C. 1993), decided on March 18, 1993 by the United States District Court, Eastern Division of North Carolina. It was a wrongful death allegation brought under the Federal Torts Claim Act⁷ Gary Albrecht, a member of the National Association of Forensic Economics (NAFE), was the economist for the plaintiff. The late Thomas Havrilesky, another NAFE member, was a cited economist for the defense. W. Kip

⁵ "Qualifications and Admissibility: Applying the Daubert Mandate to Economic Testimony," Walter D. Johnson and Thomas R. Ireland, paper presented at the Allied Social Sciences Meeting, January 5-7, 1996.

⁶ Cases are presented in chronological order except when several state cases have a close relationship to each other, as with the two New Mexico cases and the three Louisiana cases, where the second (and third) case is presented immediately following the first, rather than chronologically.

⁷ The Federal Torts Claim Act (FTCA) is a limited waiver of sovereign immunity allowing recovery of compensatory damages against the United States for ordinary torts recognized under state law.

Viscusi, also a NAFE member, issued an affidavit in opposition to use of hedonic damage testimony in this case.

In addition to concluding (at 606) that hedonic damages were not recoverable under North Carolina Law, the *Livingston* court (again at 606) provided the following discussion of hedonic damage testimony obiter dicta.

Dr. Albrecht's testimony fails to pass muster under the Federal Rules of Evidence. Rule 702 allows testimony by experts if the specialized knowledge claimed will assist the trier of fact in understanding the evidence or determining a fact at issue. In a wrongful death action, recovery under a hedonic theory depends upon the extent of the diminishment of the survivors' pleasure of life...Dr. Albrecht's testimony is devoid of any indication of the extent to which the Livingstons' pleasure of life has deteriorated as a result of their son's death.

Furthermore also the plaintiffs expert bases his opinion on figures provided in the Violette and Chestnut study in arriving at his values of life and the pleasure of life. However, the study is better characterized as measuring the value of avoiding risk. As Dr. Havrilesky observed, the inducements necessary to persuade a person to perform a dangerous activity increase as the certainty of death increases until an infinite inducement is necessary for a person to engage in an activity involving certain death. As a result, the court finds that Dr. Albrecht's opinion neither rests on a reliable foundation nor does it assist the court in determining a fact at issue.

In many respects, the *Livingston* court is anticipating the *Daubert* decision with its emphasis on meeting the requirements of Federal Rules of Evidence 702 and 703. With its ruling, the court specifically rejected the plaintiffs' contention that "the value of life methodology is widely accepted as being applicable to wrongful death actions" and implicitly accepted the defense argument that "calculations on the pleasure of living are simply beyond the scope of economic science and are inadmissible under Fed.R.Evid. 702 and 703" (recital at 606).

In other words, the court carefully defined "losses by survivors" as the standard that needed to be met and rejected claims based on "lost pleasures of life" of the decedent. It's obiter

dicta discussion made clear that even if this were not the legal standard, Dr. Albrecht's testimony did not meet the scientific standards of Rules 702 and 703. This was clearly a *Daubert* type of decision, grounded in the court's belief that the testimony was not reliable and therefore not admissible.

(2) *Wilt v. Burracker*. 443 S.E.2d 196, 205 (W.VA. 1993), cert. denied May 31, 1994, 114 S. Ct. 2137. This case, decided December 13, 1993 was an appeal from a 1992 personal injury trial at which the jury awarded \$225,000 for lost enjoyment of life. In the trial, NAFE member and former president Michael Brookshire presented "hedonic damage" testimony. The West Virginia Supreme Court of Appeals made it clear that its prior decision in *Flannery v. United States*, 297 S.E.2d 433 (1982) had established damages for the loss of enjoyment of life as a valid element of recovery. However, it accepted the appeal in *Wilt* (at 200): "[Primarily]...to determine whether the testimony of an economist calculating a monetary amount of damages for the loss of enjoyment of life, often called hedonic damages, is admissible evidence."

The court noted that West Virginia's Rules of Evidence 702 was identical to the FRE 702 and discussed *Daubert* at length before concluding at 203: "Because we are not convinced that the testimony offered by the plaintiffs' expert [Brookshire] has any relevance whatsoever to a calculation of damages for the loss of enjoyment of life, we conclude that the trial court abused its discretion by allowing the testimony at trial." The form in which this decision was made implies that hedonic damage testimony would also not be admissible in West Virginia wrongful death or survival actions.

The *Wilt* case is a classic application of the *Daubert* approach. The *Wilt* court even begins (at 200) by pointing out that West Virginia's adoption of its own Rule 702 superseded the

Frye test in West Virginia. The Court notes that while *Daubert* removes the rigidity of the *Frye* test, it replaces it with the requirement that “..the trial judge must ensure that any and all scientific evidence admitted is not only relevant, but reliable” (509 US at ___, 113 S. Ct. at 2795, 125 L. Ed. 2d at 480). Furthermore, the *Wilt* court (203 n.11) makes it clear that it interprets the *Daubert* mandate as applying to all experts (not just scientific). It specifically states at 203:

we believe that *Daubert* is directed at situations where the scientific or technical basis for the expert testimony cannot be judicially noticed and a hearing must be held to determine its reliability...The trial court’s initial inquiry must consider whether the testimony is based on an assertion or inference derived from scientific methodology...This includes an assessment of (a) whether the scientific theory and its conclusion can be and have been tested; (b) whether the scientific theory has been subjected to peer review and publication; (c) whether the scientific theory’s actual or potential rate of error is known; and (d) whether the scientific theory is generally accepted within the scientific community.

The *Wilt* decision then goes on to spell out precisely the “hedonic damage” methodology employed by Michael Brookshire; it points out that the studies used by Brookshire were not injury studies; it also points out that the underlying value of life studies were not presented into evidence and are not part of the record. The court wrote at 204:

...without a detailed explanation of the underlying studies’ methodology, the expert testimony would not meet the reliability standard and the testimony should be excluded.

Even if we were to assume that Dr. Brookshire’s explanation of the the reliability of the willingness-to-pay studies was sufficient, the question would then be whether the studies were sufficiently relevant to support his calculations on loss of the enjoyment of life.

Based on this, the court continued at 205:

Even if we were to assume that this methodology has some valid economic basis, we reject it from a legal standpoint because it has nothing to do with defining the particular value of the loss of the *enjoyment of life* in this case.

Moreover, the calculations are based on assumptions that appear to controvert logic and good sense. Anyone who is familiar with the wages of coal miners, policemen, and firefighters would scoff at the assertion that these high risk jobs have any meaningful extra

wage component for the risks undertaken by workers in those professions.

The Wilt court then cites several pre-*Daubert* decisions and in particular, *Mercado v. Ahmed*, 974 F.2d 863, 871 (7th Cir. 1992) in support of a general assertion made at 205: “the majority of jurisdictions that have addressed whether expert testimony based upon willingness-to-pay studies is relevant to one’s loss of enjoyment of life have concluded that such testimony is inadmissible.”

Finally, the Wilt court cites two of its own cases, *Crum v. Ward*, 122 S.E.2d 18 (1961) and *Flannery v. U. S.*, *supra*, to summarize at 206-207:

the question of loss of enjoyment of life [should be discussed] in terms of a subjective jury evaluation issue rather than as an objective calculable item..

..Consequently, the we conclude that “the loss of enjoyment of life resulting from a permanent injury is part of the general measure of damages flowing from the permanent injury and is not subject to an economic calculation.”

The case was remanded with the instructions that the plaintiffs could remit the hedonic damage award or seek a new trial on damages.

(3) *Laing v. American Honda Motor Co., Inc.* 628 So.2d 196 (La.App.2 Cir. 1993). The Court of Appeal of Louisiana, Second Circuit, December 1, 1993 decision, was a severe personal injury case, with “hedonic damage” testimony presented by Stan V. Smith, NAFE member, with opposing testimony by Dr. Jerome Staller, also a NAFE member. *Daubert* is not mentioned in the *Laing* decision, but the appeal was based on the court’s prior ruling in *Foster v. Trafalgar House of Oil & Gas*, 603 So.2d 284 (La.App. 2d Cir.1992) which was quoted in *Laing* at 203: “any evidence, including expert testimony, that attempts to quantify or assign a specific monetary value for alleged loss of the pleasure of life (hedonic damages), is inadmissible.”

In *Laing* (at 203), the appellate court noted that the original trial in this case was held

before *Foster* was decided and that the jury had been instructed that damages were “within their sole discretion.” Further, the court separately considered the amount of damage awarded for loss of enjoyment of life and found the jury’s decision reasonable and not unduly influenced by Smith’s testimony. Consequently, at 204 the court determined:

Regardless of whether Dr. Smith’s testimony should have been allowed, there is ample evidence in the record to support the jury’s award of \$1,350,000 to Laing for loss of enjoyment of life and mental anguish. Laing suffered a severe traumatic brain injury and was in a coma for over two months..more than seven years after his accident, requires assistance to perform basic tasks. He is unable to feed himself and cannot enjoy such activities as writing and cooking....Thus, even if it were in error to allow Dr. Smith’s testimony on the issue of the money value of hedonic damages, we find that the record, independent of this testimony, supports the jury’s award for loss of enjoyment of life and mental anguish.

Similar to its reasoning in *Foster*, the *Laing* Court recognizes the conceptual basis of “hedonic damages,” but does not see these damages as calculable by an economist.

(4) *Longman v. Allstate Ins. Co.* 635 So.2d 343 (La.App. 4 Cir. 1994). This Court of Appeal of Louisiana, Fourth Circuit March 29, 1994 affirmed the trial judge’s decision to exclude Stan V. Smith’s testimony on hedonic damages at the personal injury trial.

While no mention was made of *Daubert*, the trial judge used La.Code Evid. art. 403 and 702 (identical to FRE 403 and 702) as his basis for exclusion and his assessment was quoted by the appellate court at 354:

Plaintiff sought to have an expert witness quantify the value of his loss of enjoyment of life as a result of his injuries. In other words, this expert would attach a dollar value to Longman’s pain and suffering and other damages. *This court had previously heard Smith’s testimony in a death case, where he attached a dollar value to the decedent’s life based on life expectancy and various studies of how much money is spent on safety measures in order to save lives* (emphasis added by the appellate court).

This court did not believe that this analysis would assist the jury in determining how to compensate Longman for his general damages. Longman, himself, was capable of

explaining how his injuries have affected his lifestyle. Smith's quantitative efforts would not assist the jury in that respect. Additionally, *the court feels that this expert does not rely upon a well-founded methodology in reaching his assumption* (emphasis added by the appellate court).

Identical to the *Laing* court, the *Longman* court affirmatively cites *Foster, supra* and, after quoting *Foster* extensively, concludes succinctly at 354: "...economic theories which attempt to extrapolate the 'value' of human life from various studies of wages, costs, etc., have no place in the calculation of general damages...Such testimony...would improperly invade the province of the jury."

(5) *Trabucco v. Hilton Hotels Corporation*, 1994 WL 419846 (E.D.LA.). This unpublished case from the U.S. District Court, Eastern District of Louisiana, granted a motion in limine, August 5, 1994, to preclude hedonic damage testimony. The economist was Melville Z. Wolfson, who is not listed as a NAFE member, but has participated in NAFE and AAEFE programs in the past.

In granting the motion, the court cited both (the pre-*Daubert*) *Mercado, supra* and FRE 702. The court gave its reasoning as follows (at *1):

Hedonic damages form a part of the award for general damages and it is the province of the jury to determine if plaintiff is entitled to recover general damages and, if so, in what amount...Dr. Wolfson's report is speculative in this regard and fails to provide any scientific basis for its conclusion. The average person is fully capable of understanding this issue without the aid of expert testimony...As such the testimony will be excluded.

(6) *Romero v. Byers*, 872 P.2d 840 (N.M. 1994). This March 16, 1994 decision responded to a consolidated appeal which included two questions certified to the New Mexico Supreme Court from the U.S. District Court, District of New Mexico concerning a death claim in *Sears v. Nissan* (unpublished). The relevant question was whether New Mexico law allowed

recovery for the value of life itself and whether an economist could testify as to that value.

Daubert was not cited in the decision and no economist was named.

The court's answer to this two part question was given at 847: "...we hold that the value of life itself is compensable under our Act. Whether or not expert testimony is admitted for the purpose of proving this value is a matter best left to the rules of evidence of the applicable court." Thus, because the issue of the admissibility of expert testimony on the enjoyment of life was left to the trial court's discretion, the door remained open for the possible admissibility of hedonic damage testimony in the New Mexico Courts, as was shown in the *Sena* case, which follows.

(7) *Sena v. New Mexico State Police*. 892 P.2d 604 (N.M.App 1995). This is an appeal from a personal injury trial decided by the New Mexico Court of Appeals on January 11, 1995. At the trial, the jury awarded damages of \$456,400, but no breakdown into damage categories was given in the recital. One of the appeal points was the hedonic damage testimony given by David Hamilton, who is not listed as a member of NAFE.

This case is the only example that was found of hedonics testimony being allowed in the post *Daubert* era. In reaching a decision, the *Sena* court: (a) recognized that the loss of enjoyment of life is one of the elements of nonpecuniary (general) damages (at 610-611); and (b) extended the New Mexico Supreme Court's *Romero* ruling on recovery for the lost value of life from wrongful death to personal injury (at 610).

The court then concluded (at 611):

Consistent with the rule in *Romero* we think it is clear that New Mexico permits *proof* of nonpecuniary damages...Similarly, we conclude that where an expert witness has been properly qualified, it is not improper for the trial court to permit an economist to testify regarding his or her opinion concerning the economic value of a plaintiff's lost of enjoyment of life (emphasis added).

In reaching its decision, the *Sena* court cited cases from several jurisdictions.

Interestingly, all of those cases except *Romero* were pre-*Daubert* and *Romero* itself made no mention of *Daubert*. What appears to set the New Mexico State Court System apart (at least in this instance) from other jurisdictions noted in this paper, is the appellate deferral on questions of admissibility to the individual trial judge.

(8) *Sullivan v. United States Gypsum Company*. 862 F.Supp. 317 (D.Kan. 1994).

This wrongful death case was decided by the United States District Court, District of Kansas, August 17, 1994. Stan V. Smith was the proffered expert and had prepared testimony for hedonic damage claims for both the decedent and the surviving spouse. *Daubert* was important in the court's ruling to preclude Smith's testimony.

The decision (at 320) provides a description of Smith's methodology and calculations and expressly notes:

These calculations do not take into account any specific facts about Mrs. Sullivan or her life. Thus, the value attributed by Mr. Smith to Mrs. Sullivan's loss of enjoyment of life would not differ from the value for any other 59 year old woman. In calculating Mr. Sullivan's alleged loss of enjoyment of life by virtue of the death of Norma Sullivan, Mr. Smith relies on the identical figures used to calculate the value of Mrs. Sullivan's life, the only exception being that Mr. Sullivan's losses end at the year 2004 rather than 2011 because of Mr. Sullivan's shorter life expectancy.

The court finds that Mr. Smith's proffered testimony should be precluded on two separate grounds. The first ground is this court's belief that the type of loss...sought...simply are not allowed under Kansas Law. Kansas law does not provide a separate and distinct category...[the loss] is inextricably included within the more traditional areas of damages for disability and pain and suffering...

The second, and equally more important, reason why the court finds that the testimony of Mr. Smith regarding hedonic damages should be precluded is that the court does not believe that the testimony is scientifically valid, nor that it would assist the trier of fact to

understand the evidence or determine a fact at issue. Under Fed.R.Evid. 702, expert testimony may be proffered if it will “assist the trier of fact to understand the evidence or to determine a fact at issue.” A court must assess “whether the reasoning or methodology underlying the testimony is scientifically valid,” and whether “that reasoning or methodology properly can be applied to the facts at issue” [citing the *Daubert* decision.]

This court’s concern is that the willingness-to-pay studies upon which Mr. Smith’s calculations are based have no apparent relevance to the particular loss of enjoyment of life suffered by a plaintiff due to an injury or death. The studies relied upon by Mr. Smith do not use methodology designed to calculate the loss of enjoyment of life, yet are nonetheless extrapolated by Mr. Smith into what he claims to be valid data for calculating damages for both Mr. and Mrs. Sullivan’s loss of enjoyment of life. Mr. and Mrs. Sullivan suffered totally distinct and different damages (Mrs. Sullivan died, Mr. Sullivan faces living without the support and companionship of his wife), yet, under Mr. Smith’s analysis their damages are identical, save only an adjustment for differing the expectancy. The court finds that the proffered testimony of Mr. Smith simply fails in any real terms to provide a measure of the loss and affection to Mr. Sullivan due to his wife’s death. The court does not believe that the distinct and personal relationship that Mr. Sullivan enjoyed with his wife has commercial value which can be determined by a comparison to the alleged value that society places on the contributions of a statistically average person.

Plaintiff seeks to present expert testimony on precise damage calculations for loss of enjoyment of life. The court finds that such damages are, by their very nature, not amenable to such analytic precision. The court does not believe that such testimony would be helpful to the jury. The court believes that a jury is capable of determining these losses from its own experiences and knowledge, and through testimony by Mr. Sullivan, and further concludes that the proffered testimony of Mr. Smith would improperly invade the province of the jury.

(9) *Montalvo v. Lapez*. 884 P.2d 345 (Hawai’i 1994). This personal injury case was decided by Supreme Court of Hawai’i, October 12, 1994. Although *Daubert* was not cited, the court based its decision on Hawai’i Rules of Evidence 702 and 703 which are substantially identical to the FRE upon which *Daubert* is predicated. Louis Rose, NAFE member, was the economist proffered by the plaintiff to present hedonic damage testimony.

At 364, the court wrote: “We note first that, indisputably, hedonic damages are recoverable...Thus, the important issue-of-first-impression we face is strictly whether the trial

court abused its discretion in excluding damages.”

The court acknowledges the ongoing controversy and debate over admissibility and then examines its own [Hawai’i] Rules 702 and 703 which consider the following factors of admissibility (*Montalvo* at 365):

- 1) the evidence will assist the trier of fact to understand the evidence or to determine a fact in issue;
- 2) the evidence will add to the common understanding of the jury;
- 3) the underlying theory is generally accepted as valid;
- 4) the procedures used are generally accepted as reliable if performed properly;
- 5) the procedure were applied and conducted properly in the present instance.

The court then provides a description of Rose’s methodology before concluding (365-366):

Recent decisions, however, have specifically rejected expert testimony on hedonic damages based upon willingness-to-pay studies...

The measurement of the joy of life is intangible. A jury may draw upon its own life experiences in attempting to put a monetary figure on the pleasure of living...Testimony of an economist would not aid the jury in making such measurements because an economist is no more expert at valuing the pleasure of life than the average juror.

(10) *Hein v. Merck & Co, Inc.* 868 F.Supp 230 (M.D.Tenn. 1994). United States District Court, M.D. of Tennessee personal injury case decided November 22, 1994. The economist being proffered on “hedonic damage” testimony is Richard Palfin, who is not listed as a NAFE member, but (along with Brent B. Danninger) is author of *Hedonic Damages: Proving Damages for Lost Enjoyment of Living*, Michie 1990, which was mentioned by the *Sena, supra* court. The *Hein* court ruled that expert witness testimony on “hedonic damages” was excludable as unreliable, invalid and unhelpful to a jury. *Daubert* is cited prominently at 231:

In *Daubert*, this court is instructed to be a gatekeeper and to make an initial determination whether proffered ‘expert’ testimony is helpful to the trier of fact, whether it is reliable, and whether it is valid. If not, it must be excluded. The majority of the court went on to offer some ‘observations’ of some of the ‘many factors [which] will bear on the inquiry.’

The Court suggested: (1) has it been or can it be tested? (2) has it been subjected to peer review? (3) what is the potential rate of error? (4) how much acceptance does it have within the relevant scientific community?

To these this court would add: (5) Are the underlying data untrustworthy for hearsay or other reasons? (6) Does the underlying data exclude other causes to a reasonable confidence level? (7) What do the leading professional societies say about this specialty or this type of testimony? (8) How much of the technique is based on the subjective analysis or interpretation of the alleged “expert?” (9) The judge’s experience and common sense.

The *Hein* court then utilizes these ten factors to conclude that the proffered testimony of Palfin is not admissible. In its evaluation, the court (at 232) contrasts hedonic damage calculations to traditional economic parameters as follows:

...predicted rates of inflation, predicted salary escalations, average life expectancies, average worklif expectanacies, average interest rates can all be looked at years down the line to determine whether we were correct in allowing expert estimates of economic loss. Such an evaluation after time has passed is a comforting response to the criticism that courts’ decisions to accept or exclude novel scientific evidence may be “behind the curve,” or may have a dampening effect on scientific development. No such retrospective validation is possible in Dr. Palfin’s theory of the valuation of hedonic damages. *Speculative assumptions remain speculation* (emphasis added).

In its discussion, the court also draws on a paper by Parker Cashdollar and Marsha Cope Huie (“Reliability and Validity of Hedonic Damage Testimony: Judicial Logic about Economic Science in Merrell Dow and Mercado,” *Journal of Legal Economics*, 3(3):57-72, December 1993) to make the point that even the value of life literature itself has a less than universal acceptance.

The judge then adds his final observation at 234:

Even at my somewhat advanced age, I’m not ready or willing to put a price on my continued existence. Honest answers to hypothetical questions of this kind are not possible. This methodology is subject to criticism for being based on unreliable, untrustworthy hearsay. It fails the “common sense” test as well.

To answer *Daubert*’s question about the inherent rate of error in the methodology, the proffered testimony appears to be more probably not true than true.

(11) *Ayers v. Robinson*. 887 F. Supp. 1049 (N.D.Ill. 1995). United States District Court, N.D. Illinois, Eastern Division, decided May 23, 1995. This was a wrongful death case and the economist proffered was Stan V. Smith. The *Daubert* decision was mentioned extensively and the court ruled that “hedonic damage” testimony was inadmissible. What makes this decision significant is the extent of the judicial investigation into the basis for Smith’s opinions, into the meaning of the underlying studies used by Smith to support “hedonic damage” testimony, and even into the scholarship of Ted R. Miller’s article, “The Plausible Range for the Value of Life--Red Herrings Among the Mackerel,” *Journal of Forensic Economics*, 3(3):17-39 (1990). In fact, it is the thoroughness of Judge Shadur’s review of the Miller article which makes this case much more important than its status as a District Court decision would otherwise imply. It is a decision any forensic economist involved with hedonic damages should read.

Judge Shadur begins his analysis by carefully examining (and quoting at some length) Smith’s book with Michael Brookshire, *Economic/Hedonic Damages: The Practice Book for Plaintiff and Defense Attorneys*, Anderson Publishing (1990 with 1992/93 cum. sup.). Six pages (105 1ff) of the decision are devoted to extensive quotations of the Brookshire/Smith book and the 1992/93 supplement, which contains a good deal of sample testimony. Having done that, Judge Shadur then discusses the *Daubert* standards at length, citing a number of elaborating cases, citing *Wilson v. City of Chicago*, 6 F.3d 1233, 1238-39 (7th Cir. 1993). *Ayers* at 1058:

...[the 7th Circuit] has exhorted district courts to apply *Daubert* in these unwavering terms:

The elimination of formal barriers to expert testimony has merely shifted to the trial judge the responsibility for keeping “junk science” out of the courtroom. it is a responsibility to be taken seriously. If the judge is not persuaded that a so-called expert has genuine knowledge that can be genuinely helpful to the jury, he should not let him testify.

Judge Shadur discusses FRE 403 (see this paper's footnote 2) and, having established a frame of reference, subjects Smith's hedonic damage methodology to its tests. He notes at 1059:

“No post-*Daubert* Seventh Circuit decision addresses the admissibility of expert hedonic damages testimony. In the past our Court of Appeals has sent mixed signals on the subject generally and on Smith in particular [contrasting *Sherrod v. Berry*, 827 F.2d 195 (7th Cir. 1987) with *Mercado*, *supra*]....This opinion of course takes those decisions thoroughly into account to the extent that they are consistent with *Daubert*.”

Judge Shadur then itemizes what he regards “as five principle parts of Smith's calculations”--(1) benchmarks, (2) adjustments, (3) pedigree, (4) empirical data, and (5) underlying assumptions--and looks at each in terms of their accordance with *Daubert* factors.

In considering “benchmarks,” Judge Shadur looks at the base value of life estimates from Brookshire/Smith. He finds that the main source relied upon is Miller's “Plausible Range” article, which he then subjects to a thorough analysis. He opines that Miller has engaged in inappropriate manipulation of the studies to arrive at the desired results, and does not find this credible. At 1061 he wrote:

“Any objective reader can recognize the methodology as one that has made whatever adjustments were necessary to bring the raw data within a target range. Adding, subtracting, multiplying and dividing with a predetermined result in mind cannot fairly be labeled science. To put it bluntly, *Plausible Range* strikes this Court as a prime candidate for an Oscar in the most-misleading-title category.”

Judge Shadur suggests that Smith's selection of a \$3.5 million figure is done by a “simple eyeballing technique,” about which he says at 1060-1061:

“Eyeballing may have the advantage of ease, but it surely lacks scientific reliability in the sense of producing consistent results [citing *Daubert*]. Anyone can look at the same range and come up with a different figure. It also contributes to game playing. Note, for example, how quick “Dr. Economist” in the sample testimony (presumably Smith himself) is to exploit the method's malleability by suggesting that he *could* have picked a higher number (like \$5 million) and that by opting for the lower figure he is somehow rendering a

“conservative” opinion. Maybe so, but a conservative opinion in that sense does not equate to a scientific one. Someone who states on the basis of a dull pain in his right knee that he thinks it is going to rain less than .1 inch expresses a conservative, but surely an unscientific, opinion.

...In sum, neither the \$3.5 nor the \$2.5 million benchmark rests upon any scientific method or procedure, so that testimony regarding either one is inadmissible under the scientific knowledge prong of Rule 702.

Judge Shadur then turns to “adjustments,” the second of his five principle parts in Smith’s methodology. He points out at 1061-1062:

By definition the willingness-to-pay model estimates the value of a statistical life--a nameless, faceless member of society...

Hedonic Damages purports to address that problem by adjusting the benchmark to account for certain specific characteristics of the plaintiff...That too is misleading, and in combination with the relatively low probative value of the testimony also calls for its exclusion under Rule 403...

In sum, the low probative value of such testimony (ill-fitting data) is substantially outweighed by the danger of unfair prejudice (a false appearance of tailoring to the individual case).

With respect to “pedigree,” Judge Shadur lambasts Smith for claims in sample testimony in Smith’s book (with Michael Brookshire) that the testimony stems from Adam Smith’s *Wealth of Nations* (1776). Judge Shadur researches the *Wealth of Nations* and concludes at 1062-1063:

Unfortunately for Stan Smith, the surname Smith seems to be about the only thing they have in common.

Very little in the classic *Wealth of Nations* supports the *Hedonic Damages* method of valuing life, and much counsels against it...

Because the sample testimony involving Adam Smith’s classic work thus provides little support for Stan Smith’s theory and much unfair prejudice when used to influence a law jury, it too is inadmissible under Rule 403.

Under “empirical data,” Judge Shadur (discussion at 1063) finds the range in “value of

life” models (between \$.5 and \$9 million) to be so wide that even if the studies were “science” the range precludes their being helpful under the standards of Rule 403.

Reviewing the “underlying assumptions” of the studies relied upon by Smith, Judge Shadur (also at 1063) itemizes the following areas in which the willingness-to-pay module has been criticized for unrealistic assumptions: (1) that people have freedom of choice when confronting risk, (2) that people perceive risk accurately, (3) the nonmonetary factors that drive many consumer purchases (e.g., advertising); and (4) the political aspects of government regulation (e.g. budgets, lobbyists). He offers the explanation (at 1064):

...willingness-to-pay methodology may be an appropriate guide for regulators but not for courts and juries traversing the difficult terrain of valuing life. These two activities have very different foci: Regulators deal in averages, while courts deal with specific cases. Thus a statistical mean may have validity in the former context, while at the same time it simply creates the already-mentioned deceptive appearance of precision in the latter.”

In summary, Judge Shadur looks at every possible scientific implication of the “hedonic damage” methodology employed by Smith and subjects each implication to the tests of sections 702, 703 and 403 of the FRE. Judge Shadur found “hedonic damage” testimony inadmissible on the grounds of every test he applied to every aspect of the methodology underlying the testimony.

(12) *Anderson v. Nebraska Department of Social Services*. 538 N.W.2d 732 (Neb. 1995). The Supreme Court of Nebraska reached its decision on October 20, 1995. The case is a personal injury claim for damages suffered from sexual abuse by a foster child. The Nebraska Supreme Court reversed part of the trial court’s decision and remanded the case for a new trial on the issue of damages, ruling that the trial court had been in error for permitting separate testimony on hedonic damages, which are part of general damages, and for permitting testimony by Stan V. Smith on hedonic damages, on grounds of scientific unreliability.

With respect to the first question, the *Anderson* court cited a prior decision (*Swiler v. Baker's Super Market, Inc.*, 277 N.W.2d 697 (1979)) to affirm that loss of the enjoyment of life can be recoverable in a personal injury claim, but expanded its explanation and wrote (at 739-741):

However, we did not go so far in *Swiler* as to hold that hedonic damages were to be recognized as a separate and distinct category of damages....

We conclude...that loss of the enjoyment of life is not a separate category of damages but is an element or component of pain and suffering and of disability.

Translating human suffering into dollars and cents involves no mathematical formula; it rests, as we have said, on a legal fiction. The figure that emerges is unavoidably distorted by the translation. Application of this murky process to the component parts of nonpecuniary injuries (however analytically distinguishable they may be) cannot make it more accurate. If anything, the distortion will be amplified by repetition.

The second appeal question addressed by the *Anderson* court is whether Stan V. Smith should have been permitted to testify as “an alleged expert on establishing a formula for calculating the value of lost enjoyment of life” (741).

The court cited many of the cases listed in this paper and previous cases not permitting hedonic damage testimony and observed (at 741-742):

As a practical point, it is impossible to place a dollar figure on how each individual values his or her own life. Government regulators may attempt to do so for purposes of adopting regulations, but any amount they arrive at is a fiction, designed to escape the obvious answer anyone would give when asked what one's own life was worth.”

Citing a paper by Andrew J. McClurg, “It's a Wonderful Life: The Case for Hedonic Damages in Wrongful Death Cases, 66 Notre Dame L.Rev. at 58 (1990), the *Anderson* court (at 742) quotes a story in which society deemed priceless the life of a small girl who had become trapped in a water well in Texas in 1987. The point of this reference is the Judge's belief that

when a specific life is at stake, we often act as if life were infinitely precious and therefore cannot be valued in commercial terms like a lost income stream.

In its discussion (742-744), the Anderson court considers and dismisses the studies underlying Smith's testimonies as being inapplicable because they value reduction in risk, not the value of life. While the decision mentions *Daubert*, the *Anderson* court indicates that Nebraska continues to recognize the *Frye* test. However, in context, Nebraska's interpretation of *Frye* appears remarkably like *Daubert*.

(13) *Kurncz v. Honda Motor Company, Ltd. et al*, 1996 U.S. Dist. Lexis 6132 (1996).

This was an unpublished ruling on a motion in limine to preclude Stan V. Smith from testifying on hedonic damages in a personal injury trial. The U.S. District Court for the Western District of Michigan granted the motion on April 5, 1996.

The court first observed that denial of enjoyments is considered an element of recovery for pain and suffering under Michigan law. It then followed the *Daubert* criteria and cited *Ayers, supra* and *Hein, supra* (including the Cashdollar and Huie article) favorably in concluding that Smith's testimony would fail both FRE 403 and 702 standards. Most of the decisions that have been discussed in this paper have concluded, as did this court, that hedonic damages were subsumed in "general" damages. The *Kurncz* court, however, is the first to keenly note the danger of double counting. It wrote at **13:

...under the Michigan jury instructions, enjoyment of life's pleasures is but one form of non-economic losses to be considered along with physical pain and suffering. It would be quite difficult for the jury to assess how much physical pain and suffering have already been taken into consideration in the statistical life value.

Summary

The impact of the *Daubert* decision is clear. In every case in which *Daubert*, the Federal Rules of Evidence or their state statute derivatives, or even *Frye*, have been mentioned as a basis for the admissibility of scientific evidence, “hedonic damage” testimony has been disallowed. Furthermore, in every case in which the scientific accuracy of “hedonic damage” testimony was considered as a basis for the evidentiary decision, this testimony has failed the various tests of scientific accuracy posed by the courts. The rationale has been that the testimony is methodologically flawed, that it is not reliable, and therefore it is not admissible.

In finding against the admissibility of “hedonic damage” testimony, the courts have cited one or more of three basic reasons: first, that the testimony is incorrectly focused, in death cases, on the deceased instead of the survivors; second, that the calculations are predicated on risk avoidance studies rather than studies of pleasures lost; or third, that the underlying studies involve general data that is not specific to the individual plaintiff and/or specific conditions that exist in the case at hand. The courts, for the most part, do not see “hedonic damages” as objectively calculable. Thus, the determination of such damages should be left to the subjective province of the jury. As evidence of these points, the courts have noted that “hedonic” valuations lack general acceptance within the economics community itself, a key criteria under both *Daubert* and its predecessor, the *Frye Rule*.

Indeed, as in *Hein, Longman, Ayers* and *Anderson*, there is some indication that judges are being angered by “hedonic damage” testimony, as if it represented a particularly egregious example of “junk science.” In understanding this anger, it is important to understand that there may be a way in which judges are seeing the fundamental economics of “hedonic damages” more clearly than many forensic economists. To a judge, a “wage-risk” study is a study of the

relationship between risk and wages. A judge can understand this connection, but what the judge cannot fathom is the connection between the risk in employment and purported measures of how much people enjoy their lives. And when they fail to see that relationship, the use of economics to draw this conclusion appears to them to be a manipulation aimed at creating pecuniary value for plaintiffs and an invasion of the jury's prerogatives.

Moreover, the red flag raised by the attempt to correlate wage-risk and consumer safety purchases with lost pleasure of life appears to create a judicial concern that results in a closer examination of the "willingness-to-pay" studies themselves, resulting in the conclusion that the studies are fatally flawed. Judge Shadur's comments in *Ayers* are a prime example. He dismisses the basic economic methodology of "hedonic" valuation offered in the book by Brookshire and Smith. He further concludes that Ted Miller's review of the "value of life" studies is very questionable scholarship, especially in light of the number of authors of "value of life" studies who have issued affidavits and other statements to the effect that their studies are being misused when "hedonic damage" testimony is presented. Economists are, to some extent, conditioned to accept the assertions of other economists that values can be placed on particular variables. Judges are not, and this allows them to proceed in their inquiries from a perspective of natural suspicion essential to the "gate keeping" role espoused in *Daubert*.

It is clear from reviewing these cases that legislatures, courts and economists all agree that life itself and the enjoyment of life have value. The questions arising out of hedonic damage valuation do not result from any conceptual disagreement about the existence of a value of life beyond a discounted earnings stream alone. Rather, they stem from whether economic science and economic practitioners presenting testimony drawn from this science: (a) have reliable

measures for either value based on the “willingness-to-pay” methodology; (b) whether, in death cases, any purpose of justice is served by awarding survivors compensation based on the losses of decedents; and (c) whether the measures used for such losses can be sufficiently disentangled from other aspects of both general and pecuniary losses.

The answer of the judges in the cases discussed in this paper to all of these questions is a resounding no. The courts have also been concerned with the question of whether the persons purporting to report these calculations to juries actually have sufficient “expert” understanding of the underlying “willingness-to-pay” studies from which proffered measures are drawn. It is particularly significant to the courts that persons who have actually done these studies are not testifying that their results measure the value of either a decedent’s “whole life” or “the enjoyment of life.” Indeed, the “value of life” literature pointedly abjures such interpretations.⁸ Instead, “value of life” researchers issue affidavits indicating that their studies should not be used in this way because they were not intended for this purpose.

It has been said that economics is the science of common sense. When claims by economists do not meet the test of common sense, which the *Hein* judge added to the list of *Daubert* requirements, economics becomes vulnerable to judicial challenge. Conversely, there is another undertone in these cases that should be more reassuring to economists. Over and over, the judges who are rejecting “hedonic damages” are doing so in stated contrast to their acceptance of “lost earnings” and “lost household services” methodologies employed by forensic economists in death and injury litigation. Implicitly, the judges are saying that the economic

⁸ See particularly Thomas Schelling’s definition of the “value of life” in *The New Palgrave Dictionary of Economics*, edited by John Eatwell, Murray Milgate and Peter Newman, The Macmillan Press Limited, 1987, Vol. 4: 793-796.

methodologies used by economists for most other types of calculations *do* meet the *Daubert* standards.

The observation in *Hein* that *Daubert's* focus on testability is satisfied in earnings loss calculations because judges can see after the fact whether other types of economic projections proved to be accurate is very important. This is stated to establish the contrast with “hedonic damage” testimony in which accuracy can never be tested, even after the fact. This affirmation of the scientific merit of conventional forensic economic methodology may be the single most important judicial observation in this set of cases. Economics as a whole has fared well after *Daubert*. It is “hedonic damage” alone that is not faring well under *Daubert*. It is “hedonic damage” testimony alone that has fallen short of satisfying the *Daubert* criteria.