

2 ISSUES PRELIMINARY TO A WRITTEN ANALYSIS OF ECONOMIC LOSS

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2.1 Is An Expert on Economic Damages Necessary?

A logical first question is whether a search for an economic expert should even be begun. Normally, it is the plaintiff attorney who, representing the party with the burden of producing evidence and burden of proof, first addresses this multi-dimensional question.

One major factor in the decision on whether to seek an economic expert is the anticipated size of a settlement or verdict. Is the anticipated "return" from use of the expert worth the costs of fees and expenses? Many attorneys have told us that they use \$100,000 in anticipated settlement or verdict as a rule of thumb. Below that amount, an economic expert normally will not be retained, and above that amount such an expert will be utilized. Perhaps a better and more general rule is that of the "No Cost Expert." This rule is that an expert is "no cost" when his work is expected to result in an additional amount of damages greater than the costs expended upon him—and that additional amount could not have been obtained without him. Thus, use of such an expert may be very important in obtaining a settlement or verdict in the \$0-\$100,000 range. This, of course, is a matter of

judgment for the attorney. It should be noted that experienced economic experts will give their opinion over the telephone as to whether their benefits are likely to be greater than their costs in a particular case. Moreover, most experts after only minor computation can give the attorney a ballpark estimate of damages for use in settlement discussions. The economists will not generally lend their names to such an estimate or testify to it, since they will place their reputations on the line only after careful economic analysis. The decision to use an economic expert has also been approached by plaintiff economists in a very different sense. Can a credible damage figure be laid before the jury as effectively or more effectively without an economic expert? Some plaintiffs' attorneys, including several very successful attorneys, still prefer not to use an expert on damages, regardless of the anticipated size of a settlement or jury award. They may present the proposed amount of lost earning capacity to the jury themselves, simply multiplying \$20,000 in wages and fringe benefits in the last work year by 20 years of lost working life, for example, to obtain a \$400,000 estimate of loss. However, as noted below, the clear trend appears to be toward the use of experts on damages, especially if potential awards are large.

A significant reason for this trend is the increasing complexity of dealing with the major variables affecting lost earning capacity—wage trends, productivity rates, fringe benefits, interest rates, inflation, personal consumption, income taxes, and work-life expectancy factors. Plaintiffs' attorneys and their clients are less sure that simplistic estimates made by those trained in the law will be reasonably accurate. They also may not have access to, or feel comfortable with, the range of data sources which should be involved in an accurate estimate.

Even the use of a total offset technique in some jurisdictions, under which wage growth rates and interest (discount) rates are assumed to offset, has not eliminated the need for an economist to make decisions regarding many important variables. The movement toward increased use of offset rules, for purposes of "judicial simplicity," appears to have stalled by the late 1980's. Little chance seems to exist that estimates of economic damages and economic testimony will become less complicated. The emergence of hedonic damages and increased research and specialization in the field of forensic economics imply that the opposite will be true.

Another reason for the increasing use of economic experts is that their written reports are commonly used as a major part of the settlement package sent to the defense for consideration. It may also be felt that the testimony of an expert witness will have more credibility than an estimate offered by the attorney for the plaintiff. Finally, an appellate court may be less likely to reduce the amount of a jury award if the award is related to an estimate of economic damages by a qualified expert. This reason for using an expert probably becomes more important as the possible jury award becomes greater.

Defense attorneys must also decide if their own expert on damages should be retained, especially when a plaintiff's expert produces a loss estimate and is preparing to testify. Historically, defense counsel are much less likely to present economic expert testimony than are plaintiffs' counsel. However, the defense frequently retains an economist to analyze the economic side of the case and to prepare cross-examination questions for the expert used by the plaintiff.

This seems true at least partially because of the increasing complexity of economic loss analyses, mentioned above, and the need to know what is reasonable. Lines of attack can be mounted against virtually all assumptions and economic techniques. Also, we continue to see problems with economic loss reports even in such basic areas as the wage base and wage growth trend. Secondly, rapid price inflation since 1970 (by historical standards) has resulted in higher dollar values in loss estimates and has increased the benefits of consultation with an expert on damages. Third, as testimony on hedonic damages becomes common in more jurisdictions, with loss estimates sometimes double or triple traditional estimates, defense counsel may have an urgent need for help. A fourth variable is the confidence of defense counsel in their contentions regarding the liability portion of the case. Where they are less confident on liability, they are more likely to worry about the plaintiff's expert on damages and to hire their own economic expert to help them attack the plaintiff's estimate of damages.

As will be discussed later, leading defense bar groups suggest that a defense expert normally be used to help prepare the cross examination of the plaintiff's economic expert rather than to testify. Given this advice, which is sound, the defense should be more likely to employ its own expert for testimony when it is felt that the plaintiff's economist has made mistakes, ignored important facts, made tenuous assumptions, or is otherwise "stretching" the estimate. Experienced defense attorneys often become sufficiently familiar with economic techniques to know when a plaintiff expert seems vulnerable and a defense expert should appear as a witness.

2.2 Choosing the Expert on Damages

Let us now assume that an expert on damages is to be utilized by either plaintiff or defense counsel in a personal injury or wrongful death case. What guidelines should be considered in deciding upon the type of person to be utilized? Historically, economists seem to have been most commonly utilized, although actuaries and finance professors, and sometimes accountants, have been used for this purpose. Persons in each of these professions could do an adequate job if they have spent enough time beyond their "normal" academic work learning the techniques and issues of the specialized field now called forensic economics.

The academic area most likely to produce an expert with solid background is economics. An economist is generally more likely to have knowledge of the data and issues relevant to analyses of lost earning capacity and other aspects of economic loss. Thus, he will have studied interest rates, inflation rates, wage rates, productivity rates, fringe benefits, work-life expectancy factors, and consumption patterns. An economist specializing in the economics of labor and human resources has probably spent more time on specific labor market variables, but any economist may have covered, in his or her career, the important variables.

The next criterion, whatever the academic field of the expert on damages, is that the expert have an advanced degree in the field. Thus, one generally should employ an expert on damages who has attained a Ph.D. or at least completed Ph.D. course work. A lesser academic background invites an attack on qualifications, unless publications and relevant work experience can compensate. It also seems

that a college or university faculty member appears to be more “neutral” than a forensic economist engaged in damage calculations full-time.

Assume for now that one is seeking an expert with academic credentials in economics. The next important criterion is his or her experience in this very specialized area of economics. Economists are not trained in Ph.D. programs for appearance as expert witnesses in direct and cross examination; neither are they trained in explaining economic calculations to jury members, who have not had previous training in economics. The effective background for the economic expert here is, simply, experience. It has been said that “good judgment comes from experience and experience comes from poor judgment.” The quote has direct relevance to the value of experience in expert testimony. Experts primarily learn from their experience how to explain their calculations in a manner that can be understood by a jury. In relatively new areas of testimony, such as hedonic damages, testimony experience is especially important.

Much of what experience may bring involves poise, confidence, personality, and communication skills, and these may never be developed by an expert, even after 100 trials. Assuming these skills, an economic expert with more than 100 depositions or trials will rarely be faced with a new or surprising question by opposing counsel. In fact, such an expert can usually render good advice on his own direct examination and on what should be anticipated in cross examination.

Perhaps the most important criterion of selection is the intellectual honesty of the economic expert to be used. On either side, it is sometimes thought desirable for the expert to testify exactly as the attorney desires. Yet, if the forensic economist has testified scores of times, he (or she) will tend to contradict himself in technique and results unless he is consistent in methodology.

At most, an intellectually honest economic expert for the plaintiff may base a loss estimate on assumptions supplied by the plaintiff’s attorney, and with which he is not entirely comfortable. If this is true, the expert must honestly admit this on the witness stand. A standard question for the defense in cross examination should therefore be “Do you have any reservations, at all, about the assumptions which you used in arriving at your estimates?” The answer, if honest, could be very damaging to the plaintiff’s case. Interestingly, the defense in our experience has rarely asked this question. Of course, the same principle may apply to experts retained by the defense.

The hiring attorney should also determine whether the expert has ever been barred from testimony in any jurisdiction. This can occur because of a lack of relevant qualifications or inconsistent use of methods dictated by the desires of plaintiff versus defense attorneys. Vocational experts, for example, have sometimes attempted to perform economic analyses and may be disqualified for extending their work into areas about which they are unqualified to speak.

The above are the basic criteria in selecting an expert on damages. Some others, listed below, may add extra credibility to the work and testimony of the chosen expert.

1. Does he or she have general publications in fields such as economics, actuarial science, and finance? What is the total number and what is the quality of such publications?
2. Has he published books or journal articles specifically addressing the

- calculation of damages, either in academic journals in his field or in legal journals and magazines? Has he presented professional papers in these areas?
3. Has he spoken or conducted seminars regarding economic damages before professional associations of attorneys? Before both plaintiff and defense attorneys?
 4. Does he have a reasonable balance of work for plaintiff attorneys and defense attorneys?

Affirmative answers to the above further enhance the credibility of the chosen expert.

Given the above criteria for choosing an economic expert, how is one located? First, the attorney must realize that two general categories of economic experts exist. Toward one extreme are a few economists or economic consulting firms which provide economic analyses in 100 or more cases per year. These individuals tend to be highly specialized in the area of forensic economics, keep sound data bases, publish and lecture in the field, testify frequently, and usually maintain a faculty position at a college or university as a matter of both personal preference and to keep them in the mainstream of their field.

A second category consists of hundreds of academicians across the country, usually economists, who handle a few cases per year. Persons in this category may be less "state of the art" in terms of data bases or techniques and will have less experience in testimony. On the other hand, some attorneys prefer "local" experts, and these persons may be more readily available on short notice and/or less costly.

The best means of locating either type of expert is to simply contact an experienced attorney, either plaintiff or defense, who will probably have several names of economic experts. The attorney experienced in personal injury and wrongful death litigation has probably seen several experts in testimony and can provide insight as to which expert seems to be the most effective.

Alternatively, the American Trial Lawyers Association, the Defense Research Institute, and several bar organizations maintain lists of economic experts. Some economists and economic consulting firms advertise in legal magazines and journals, and a West-Coast-based Society of Loss Appraisers will provide names of "member" experts near a given location. Membership in some organizations is based on payment to the organization for referrals. Moreover, the handful of very experienced experts don't tend to advertise or associate themselves with various types of marketing organizations. They simply don't have to do so, as word-of-mouth among attorneys remains the primary route to their selection as experienced forensic economists.

2.3 Relationships Between Experts on Damages

In many wrongful death cases, an economist is the only expert on damages who is utilized. Yet, for other categories of cases, another type of expert should normally be used in conjunction with an economist. Perhaps the most common example is that of a personal injury case in which there is continuing earning capacity after the injury, although post-injury earning capacity is below pre-injury earning capacity.

Often, a medical doctor has been used to testify that the plaintiff has some percentage of disability of the body as a whole. Assuming this percentage to be 50 percent, as an example, some economists have said that economic loss is 50 percent of earning capacity had the injury not occurred. Such a method is totally

unacceptable. The percentage figure provided by the medical doctor has little, if any, relationship to the difference between pre-injury and post-injury earning capacity.

Another expert is needed: a vocational expert who may have a doctorate in vocational rehabilitation, for example. This type of expert may well rely upon the opinion of a medical doctor but may also perform several types of tests on the injured party. Ideally, he or she will then provide a written report to the economist which shows a pre-injury earning capacity range and a post-injury earning capacity range. This is exactly what the economist needs to estimate the present value of earning capacity both in the absence of the injury and because of the injury. The difference between these two amounts is the present value of *lost* earning capacity. Neither the vocational expert nor the economist alone can properly do the job in most partial disability cases. Rather, they should be used together and should closely coordinate their work.

Furthermore, only a handful of vocational experts give the economic expert a report with conclusions stated in a form that can be easily used by the economist. Therefore, a good strategy in locating a vocational expert is to first locate an experienced forensic economist. He or she can probably render good advice on whether a vocational expert is needed and on names of the most effective such experts.

With the emergence of hedonic damages, involving the lost pleasure of life apart from any losses of earning capacity, some plaintiff's attorneys have employed two forensic economists. One analyzes lost earning capacity and other "traditional" elements of damages, such as household services and medical costs. The other economist separately testifies about the application(s) of economics to the lost pleasure of life and, possibly, to pain and suffering.

As one moves beyond wrongful death and personal injury cases into other types of cases involving damages, one is more likely to find other experts to be used in conjunction with, or in lieu of, an economist. As will be discussed in Chapter 13, it is likely that the forensic economist and/or other experts will offer opinions important to the liability portion of these other cases, in addition to the damages portion.

In certain commercial damage cases, for example, a Certified Public Accountant, or an expert on purchasing practices, or an expert on industrial management techniques may be utilized. In commercial, antitrust, and complex discrimination cases, a Ph.D. statistician may work with an economist. In certain types of very large class actions, an expert on survey design and data management may be needed. Again, a very good source of help in deciding whether these other experts are needed and how to locate them is the experienced economic expert himself.

2.4 Timing

Given the decision on "WHO TO LOCATE," the attorney must also address the "WHEN TO LOCATE" issue. Even if the expert is available to testify, in the time available he may be unable to collect the data necessary for an acceptable estimate of economic damages. For example, the affected family may not have kept copies of income tax statements or of W-2's, and it may take as long as two months to obtain such information from the Internal Revenue Service.

If it is worth using an economic expert in the first place, the expert should be contacted early in the case. Necessary data can be collected and the exact method(s) for a loss projection can be decided upon, even if the actual production of a loss estimate is delayed for several months. The trend seems to be toward earlier consultation with an expert, probably because the written report on damages is increasingly used as an important basis of settlement discussions. In fact, the economic expert typically testifies in only 10-20 percent of the cases in which a written report has been produced.

Another point about timing is that one can have the written report prepared too early in the case. A report begins to lose its "freshness" after 6 months, because interest rates, inflation rates, and other variables change. After one year, most experienced economic experts will insist that an estimate be completely recalculated before testimony. This will cost additional money, so the major risk of an unnecessarily early report is some extra cost.

Finally, defense attorneys have not yet realized the importance of early use of their own economist. The forensic economist may be very useful in the discovery process. He or she knows what data need to be requested and in what form. As one example, a plaintiff's economist may be using data on large statistical groups to establish an earnings base and trend rate of earnings increase. If 5-10 years of earnings history on the deceased or injured person can be developed, it may be seen that his own track record contradicts major assumptions supporting the loss estimates produced by the plaintiff's side. The right kinds of information developed through discovery can also lead to potent attacks on fringe benefits, work life expectancy, personal consumption, cost of care, and other calculations.

2.5 The Costs of Using Experts on Damages

Fees charged by economic experts, for both written analyses of lost earning capacity and for testimony, vary widely by region of the country and, often, by the experience level of the expert. At least one economic firm, which advertises extensively, will provide a written loss estimate for as little as \$100—but will not provide an expert for testimony or deposition. For a comprehensive report by an experienced expert, however, an attorney will rarely find a fee less than \$1,000 for the economic report alone.

The per diem fee for time spent in deposition or testimony normally ranges from \$800 to \$2,000 plus expenses. The hourly fee is normally this daily fee divided by eight hours, and an hourly fee is usually quoted in lieu of a lump sum fee in cases other than wrongful death or personal injury, where the work time of the expert is uncertain.

Many economists will provide what is, in effect, a quantity discount for a guarantee of multiple cases from the same law firm in a given time period. A discount should be expected in mass disaster cases, with many analyses performed for the same law firm or consortium of attorneys. What attorney and forensic economists should never consider is any fee arrangement contingent upon the outcome of a case. Such arrangements eliminate the appearance of neutrality by the expert, at the very least, and also appear to violate the disciplinary rules of the American Bar Association.

A typical agreement will be between the expert and the attorney, as the experienced expert will not wish to have a direct financial relationship with the plaintiff. A retainer will generally be requested before a written analysis is performed, and the balance of the fee for the analysis will be requested within 1-2 months of the receipt of the analysis. A sample agreement between a forensic economist and an attorney appears as Appendix 1.

2.6 Elements of Loss

Either before the expert is contacted or as the attorney initially works with him, the major categories of economic loss which the economist will be asked to address must be identified. These are normally determined either by the characteristics of the particular case or, perhaps, by legal parameters in a particular jurisdiction.

The major possible categories of economic loss in a personal injury or wrongful death case are:

1. Wage or salary losses.
2. The lost value of employer contributions to fringe benefits.
3. The lost value of household services.
4. Medical costs, including nursing services or institutional care.
5. Hedonic damages: the lost pleasure of living.

In labor and discrimination cases, the damage categories addressed by the economic expert are usually limited to wages and fringe benefits. For commercial cases, the major element of loss is lost profits, but a wide array of direct and indirect damages may exist in a particular commercial case. The remaining chapters will address, in detail, how each category of loss may be approached. In any given case, a major decision is likely to be which categories of loss are an appropriate focus for the forensic economist.

2.7 Legal Parameters Affecting the Expert

Before an analysis of economic loss is performed, the attorney should ensure that the economic expert understands the legal parameters affecting his work. It is true that an expert experienced in the relevant jurisdiction will probably be well versed in these parameters, but it is the responsibility of the attorney to be certain.

Legal parameters are thoroughly analyzed in Chapter 12, and complete tables in that chapter detail the status of each major parameter in every state and federal jurisdiction. However, as a preview, the attorney and economist should reach agreement on answers to the following types of questions:

1. Do special rules exist regarding allowable wage growth rates and discount rates, such as an "offset" rule?
2. May or must the effects of federal or state income taxes be considered?
3. In a wrongful death case, must the likely personal consumption of the deceased, had he lived, be considered? Or should minimum maintenance levels of consumption be utilized in determining net economic loss?
4. Is the collateral source rule in effect?
5. Should pre-judgement interest be calculated? At what rate?
6. Is testimony on hedonic damages allowed? Under what circumstances?

2.8 Is A Written Report Desirable?

An economic expert can estimate damages without providing a formal written report. On the plaintiff side, a thorough written report is normally requested. The plaintiff is the party with the invited burdens and desires a written report either for settlement or as the basis of testimony. The plaintiff's attorney may ask for several "iterations," or estimates, based upon differing assumptions, but only one iteration is sent to the defense. A good defense question in cross examination is often, "Did you produce other versions or estimates beyond the one(s) about which you just testified?" The honest expert must face the possibility that all written versions will be reviewed at the trial.

On the defense side, a fundamental issue is whether a defense economist should be asked to provide a formal written analysis. More commonly, the defense uses its economist to help prepare a cross examination which undermines the written report of the plaintiff's economist. It is felt that testimony by a defense economist may become the "bottom line," below which a jury will not go in an award. The exception, when a defense estimate and testimony may be necessary, is when the plaintiff economist has used especially tenuous assumptions or made significant errors.

2.9 Collection of Data for Economic Loss Estimates

Let us assume in a wrongful death or personal injury case that the attorney has chosen the economic expert and desires a thorough written analysis of lost earning capacity. There are two categories of necessary data for the economic expert—data the attorney gathers for him or with him, and data which the expert independently maintains. Each will be examined in turn.

Generally, the first set of data consists of demographic data from the plaintiff or family, wage and fringe benefit data from the employer or union, and past income tax returns, if necessary, from the Internal Revenue Service. An Information Guide Sheet is provided in Appendix 2; this can be a useful aid in the systematic collection of these types of data. It is always wise for the attorney to have these types of guide sheets on hand, so that the collection of data can start early in the case and new data can be added to the guide sheet as they arrive.

Items A-1 through A-20 on the guide sheet provide basic demographic information. Race and marital status, for example, can affect work life expectancy. The birthdate of the spouse can be important if one projects the wages or household services of a second household head, but the age of the surviving spouse is such that he/she probably would have died first. Birthdates of children can be necessary for both household services and personal consumption calculations. Each listed data element can be important to a written estimate.

Item A-21 asks for details of employer contributions to fringe benefits. It is desirable to have employer contributions to each category of fringes expressed as either a percentage of basic pay or a dollar amount of contribution per time period. Thus, total fringe benefits, as a percentage of basic wages or salary, can be calculated.

Alternatively, the lawyer can simply verify that the employer did or did not

contribute to various categories of fringe benefits—F.I.C.A., unemployment compensation, worker’s compensation, life and health insurance, private pension plan, etc. The expert then has national statistics on the average value of employer contributions to fringes as a percentage of basic wages or salary.

Item A-22 is another important item in data gathering. Here, earned annual wage or salary income, preferably verified via W-2’s or income tax returns, is listed. Ideally, these annual listings will be for at least 10 years preceding the injury or death year. A 10-year history is a very sound basis for projecting lost earnings into the future. Also, for many blue-collar, railroad, construction, and other types of workers, a 10-year history of hourly pay rates and/or hours of work per year can be helpful as either a check on annual earnings or another basis for a projection. Care must be taken not to include spouse earnings, interest or other “unearned” income, or lump sum death benefits showing up in the last year.

Obviously, Part B of the form is for injury cases in which nursing or institutional care will be needed. The economist may already have good data on R.N. and L.P.N. pay rates and on institutional care costs. However, a medical doctor will need to lay the basis for most types of medical treatments and perhaps for their costs. Specialists also exist who can lay out for the forensic economist a complete array of care needs and costs in current dollars.

Part C provides necessary information for estimates of lost household services. Part D provides the forensic economist with guidelines on the legal parameters for the economic analysis, including the treatment of hedonic damages in the relevant jurisdiction. Finally, Part E is only applicable in wrongful death cases, where the actual consumption of the deceased, had he lived, must be deducted from earning capacity to derive net economic loss. It is not applicable in the handful of states that disallow any deduction for personal consumption as a matter of law, or that only prescribe a deduction for personal maintenance expenditures. Some forensic economists delete this form because of possible problems with its accurate completion.

As an aside, the economist should arrange the first few pages of his or her written report to detail major facts, assumptions, and data sources. At trial, these can be systematically placed into the record as a basis for his or her testimony. An organized system of data collection facilitates “organized” testimony.

In labor and discrimination cases, similar data on wages and fringe benefits may be obtained. However, commercial and antitrust cases tend to be very different, case-by-case, in issues, techniques, and necessary data. A standardized approach, or form, is much less useful, and the economic expert will spend much more time in data-gathering and analysis.

2.10 Additional Data Used By Economists

The economic expert will also have his own database, with various series of data which may be relevant to any given case. It is he, for example, who will decide on the interest rates to be used in discounting to present values. While quoted yields on U.S. government securities around the date of trial are important, historical interest rates, and real interest rates (inflation free) may also be important in the process of discounting to present value. Other interest rates, such as rates on corporate

bonds, could be used, but short-term U.S. government securities provide minimum-risk returns. Issues relating to discounting will be discussed in the next chapter.

The economic expert should also have data pertaining to work-life expectancy. As will be discussed later, this means that data must be maintained on three distinct probabilities at each age—the probability of life, the probability of labor force participation, and the probability of employment.

Third, the expert should have data on the personal consumption patterns of individuals, which will be relevant in wrongful death cases. The U.S. Department of Commerce, Bureau of the Census publishes these types of data, and the best single study on the subject was published many years ago by Professor Earl Cheit.¹

Fourth, information relevant to the value of weekly hours of household services provided by family members should be available. The best single source in this area is a periodic study by the New York School of Human Ecology at Cornell University in Ithaca, New York.² The survey differentiates average weekly hours of services, according to whether or not the female is employed, the number of children, and the age of the youngest child.

Fifth, the economic expert should maintain data on the costs of institutional care and the hourly costs of care by R.N.'s, L.P.N.'s, and less-skilled "helpers." Often an economic firm which regularly works for attorneys in a given area will conduct its own surveys of these types of costs. This saves significant time and money for the law firm with a single case involving significant injuries and the possible need for institutionalization and/or other types of care.

Sixth, the economist should have U.S. government, U.S. Chamber of Commerce, and other survey data on average employer contributions to fringe benefits. However, such data generally should supplement, but not replace, information on employer contributions to the fringe benefits of a particular plaintiff.

Seventh, the economic expert should have data on mean earnings of Americans attaining given educational levels. This is especially relevant in minor child cases, where it must be assumed that the child would have been a high school graduate or a college graduate, for example. The U.S. government does publish average earnings by race, sex, and education level in an annual publication entitled *Money Income of Families and Persons in the United States*.³

Finally, several economy-wide variables may, in the least, form the backdrop for expert testimony on damages in any given case. One such variable is the Consumer Price Index (CPI), which is the most generally accepted variable for representing annual price inflation. As will be seen, it is these inflation rates which are the major components of both wage growth rates and interest rates; these inflation rates must be subtracted if wage changes and interest rates used in discounting are to be converted to "real" terms, with the effects of inflation removed.

¹ Earl Cheit. *Injury and Recovery in the Course of Employment*. (New York: John Wiley & Sons, Inc., 1961).

² William H. Gauger and Kathryn E. Walker. *The Dollar Value of Household Work*, New York State College of Human Ecology, Information Bulletin 60. (Ithaca, New York: Cornell University, 1980).

³ U.S. Department of Commerce, *Money Income of Families and Persons in the United States*. (Washington, D.C.: U.S. Government Printing Office, Annual).

Another economy-wide variable is productivity, although many different series of productivity data may be found. The most common is the annual change in output per employee hour in manufacturing. Productivity is the factor which, along with inflation, explains historical rates of wage growth and helps one predict future rates of wage growth.

Employment (and unemployment) rates are major factors which lie behind work-life expectancy. The unemployment rate is also a major index of the health of the economy, moving upward in recession and downward during economic "booms." As such, it may also be important in commercial cases, as economic cycles may affect foregone profits. Changes in the Gross National Product (GNP) may also be important in this regard, and local indices of economic activity, mortgage rates, and other variables may play a role in commercial damage cases.

2.11 Summary

Legal counsel must begin focusing upon economic damages as soon as their involvement in a wrongful death or personal injury case begins. Both plaintiff and defense attorneys must make decisions on whether an economic expert and/or written economic analysis are needed and desirable, on what expert(s) should be employed, on relationships between experts, on the elements of economic loss to address, and on legal parameters which may affect the work of the economist. A major task will be to work with the expert to obtain the data which he or she needs for a written analysis of loss of earning capacity and other economic losses. Once this task is completed, the ball shifts to the court of the economist, as he must employ appropriate techniques to generate an economic analysis which is accurate, fair, and which can be explained to the jury. These techniques, and major issues surrounding estimates of economic loss and economic testimony, are the subject matter of the following chapters.

APPENDIX 1
SAMPLE AGREEMENT BETWEEN
FORENSIC ECONOMIST AND ATTORNEY CLIENT
AGREEMENT

This agreement is made the date shown below by and between **Bill Conway**, attorney, and **Dr. Economist**, a forensic economist.

Whereas, **Bill Conway** desires to retain the professional services of **Dr. Economist** for the purposes of research, preparation and, if necessary, testimony in Court or before an administrative board, in matters involving economics, finance, or economic loss in the case of **Brian Scott**.

IT IS AGREED BY THE PARTIES AS FOLLOWS:

1. Mr. Conway hereby retains Dr. Economist to research, prepare, and, if necessary, testify regarding economic values and/or loss, and the expected fee for research and preparation of an economic analysis will be \$_____, or \$_____ if an analysis of hedonic damages is included. Dr. Economist agrees not to charge more than these amounts without prior approval.

2. Mr. Conway agrees to pay Dr. Economist a fee of \$_____ to retain hime for such services, with the retainer to be applied toward the total fee charged. The parties agree that no refund of the retainer will be made by Dr. Economist under any circumstances.

3. In addition to the fee for research and preparation of a written analysis, Mr. Conway agrees to pay Dr. Economist \$_____ per hour for travel time, waiting time and for depositions and/or testifying in court or before any administrative board. The minimum fee for such testifying or deposition appearance shall be \$_____.

4. In addition to the above fees, Mr. Conway agrees to pay Dr. Economist a minimum fee of \$_____ for each structured settlement analysis requested by Mr. Conway.

5. It is agreed that if the case is settled, dismissed, or results in a mistrial prior to Dr. Economist's testifying or giving of deposition, Dr. Economist shall be compensated for the per diem charges including travel time and time spent waiting in Court or elsewhere to testify or give a deposition. Mr. Conway agrees to pay Dr. Economist a scheduling fee of \$_____ for any deposition or trial appearance canceled within 72 hours of the scheduled start of such deposition or trial.

6. It is agreed that if more than one year elapses from the date of submission of the written economic analysis to the date of any testimony or deposition, Mr. Conway will pay Dr. Economist an additional fee of one-third of the initial fee for research and preparation for an update of the analysis.

7. Mr. Conway agrees to accept the sole judgment of Dr. Economist as to the necessary and actual time spent in connection with the above.

8. Mr. Conway agrees to render payment to Dr. Economist within 30 days of receipt of the statement requesting such payment.

9. Mr. Conway agrees to pay the fees and per-hour rates specified above for

travel and Court time, including time spent waiting in Court to testify, plus all reasonable costs and attorney fees incurred by Dr. Economist, if such become necessary to collect, in a timely manner, fees and reimbursements owed to Dr. Economist under this agreement.

Dr. Economist

Bill Conway

Date

APPENDIX 2

SAMPLE INFORMATION GUIDE SHEET FOR PERSONAL INJURY OR WRONGFUL DEATH CASE

A. FILL IN PART A FOR ALL CASES (Please print or type)

- A-1. Hiring Attorney: _____
- A-2. Attorney's Legal Assistant: _____
- A-3. Opposing Attorney: _____
- A-4. Court and Location: _____
- A-5. Judge: _____
- A-6. Trial Beginning Date: _____
- A-7. Expected Testimony Date: _____
- A-8. Claimant's Name (Injured/Deceased): _____
- A-9. Claimant's Birthdate: _____
- A-10. Claimant's Race: _____
- A-11. Claimant's Marital Status: _____
- A-12. Date of Injury: _____
- A-13. Date of Death: _____
- A-14. Date of Employment: _____
- A-15. Last Work Date: _____
- A-16. Job Title: _____
- A-17. Employer: _____
- A-18. Union: _____
- A-19. Name/Birthdate of Spouse: _____
- A-20. Names/Birthdates of Children: _____
- A-21. Obtain from the employer the current amount of *employer contributions* to supplemental income such as social security, workers' compensation, health plans, and retirement plans. These *employer contributions* must be expressed as dollars per time period or as a percent of wages. Please itemize these benefit contributions, when possible, on an attached sheet. *Do not* include vacation, sick leave, and holiday pay in the total amount unless it is separately itemized. *Do not* provide the benefits the employee will receive when eligible under different benefit plans (such as the dollar reimbursement for daily hospital room costs). Attach employer-provided Benefits Statements, if available.
- A-22. Complete all of the information on the following page. Note that earned income includes wages, salaries, fees, bonuses, commissions, and tips. List earned income separately for claimant and for spouse. Note that "Hourly Rate" and "Annual Hours Worked" should be determined up to and through any current union contract even if claimant ceased working under a previous

contract. For salaried workers, list only the annual salary up to and through the present date. Document income, hourly rates, and annual hours worked through income tax returns, W-2 statements, and/or written correspondence with employer or labor union if possible.

FROM JANUARY 1, 1970 UP TO ANY CURRENT WAGE OR FUTURE NEGOTIATED WAGE. (Provide as many past and future years as possible.)

Year	Earned Income	Hourly Rate	Annual Hours Worked	Spouse's Earned Income*
1970				
1971				
1972				
1973				
1974				
1975				
1976				
1977				
1978				
1979				
1980				
1981				
1982				
1983				
1984				
1985				
1986				
1987				
1988				
1989				
1990				

*List at least one "typical" year of earned income preceding the claimant's death. (For a wrongful death case only.)

B. FILL IN PART B FOR CASES INVOLVING MEDICAL OR CARE COSTS

- B-1. How many hours per day is a registered nurse (RN) required? _____
- B-2. How many hours per day is a licensed practical nurse (LPN) required? _____
- B-3. How many hours per day of minimally trained supervision is required? _____
- B-4. If institutionalization is required, what are the current annual institutional costs for room and board? On an attached sheet, provide an annual history of those costs for several past years, if possible.
- B-5. On an attached sheet, provide the annual costs of physician fees, medicine, therapy, special equipment, home modifications, etc., in current dollars.

C. FILL IN PART C IF LOSS OF HOUSEHOLD SERVICES IS INVOLVED

- C-1. Estimate the number of hours per week of pre-injury household services provided by claimant: _____
- C-2. Estimate the number of hours per week of post-injury household services provided by claimant: _____
- C-3. On an attached sheet, detail by year any costs incurred in replacing the lost household services.

D. DESCRIBE ON ATTACHED SHEET ANY LEGAL PARAMETERS OR SPECIAL SITUATIONS WHICH YOU FEEL MIGHT AFFECT THE ECONOMIC ANALYSIS. IF AN ANALYSIS OF HEDONIC DAMAGES (THE LOST PLEASURE OF LIFE) IS DESIRED, DESCRIBE APPLICABLE LAW IN THE RELEVANT JURISDICTION.

E. TO BE COMPLETED ONLY FOR WRONGFUL DEATH CASES

Decedent's Expenditure List

THIS LIST IS TO BE COMPLETED FOR DECEDENT'S PERSONAL CONSUMPTION ONLY (EXAMPLE: FOR A FAMILY VACATION, INCLUDE ONLY DECEDENT'S DIRECT COSTS, SUCH AS AIRFARE.)

A DOLLAR AMOUNT IS TO BE USED FOR EACH CATEGORY LISTED BELOW IN A "TYPICAL" TIME PERIOD PRIOR TO DEATH.

CIRCLE WHETHER THE TIME PERIOD IS WEEKLY, MONTHLY, OR YEARLY.

YEAR 19_____ THIS MUST BE THE SAME YEAR FOR ALL ITEMS.

FOOD: (Only decedent's portion)

- Food at home: \$_____ Weekly Monthly Yearly
- Food away from home: \$_____ Weekly Monthly Yearly
- Alcoholic Beverages: \$_____ Weekly Monthly Yearly
- Tobacco: \$_____ Weekly Monthly Yearly

CLOTHING: (Decedent's only)

- New: \$_____ Weekly Monthly Yearly
- Dry cleaning, laundry: \$_____ Weekly Monthly Yearly
- Special/Uniforms: \$_____ Weekly Monthly Yearly

HOUSING: (Single decedent's only)

- Mortgage payment: \$_____ Weekly Monthly Yearly
- Rent: \$_____ Weekly Monthly Yearly
- Utilities: \$_____ Weekly Monthly Yearly
- Furnishings: \$_____ Weekly Monthly Yearly
- Repair: \$_____ Weekly Monthly Yearly
- Other: \$_____ Weekly Monthly Yearly

DUES: (Decedent's portion only)

- Membership: \$_____ Weekly Monthly Yearly
- Social clubs: \$_____ Weekly Monthly Yearly
- Union: \$_____ Weekly Monthly Yearly
- Pool: \$_____ Weekly Monthly Yearly
- Other: \$_____ Weekly Monthly Yearly

TRANSPORTATION: (Decedent's car or own expenses)

- Automobile payment: \$_____ Weekly Monthly Yearly
- Gas & oil: \$_____ Weekly Monthly Yearly
- Repairs: \$_____ Weekly Monthly Yearly
- License/Inspection: \$_____ Weekly Monthly Yearly
- Personal property taxes: \$_____ Weekly Monthly Yearly
- Public transportation: \$_____ Weekly Monthly Yearly
- Liability insurance: \$_____ Weekly Monthly Yearly
- Is decedent's vehicle still owned? _____ Yes _____ No

SUNDRIES: (Decedent's portion only)

- Newspaper/Magazines: \$_____ Weekly Monthly Yearly
- Personal grooming: \$_____ Weekly Monthly Yearly
- Other: \$_____ Weekly Monthly Yearly

MISCELLANEOUS: (Any item not mentioned previously)

- _____ : \$_____ Weekly Monthly Yearly
- _____ : \$_____ Weekly Monthly Yearly

ENTERTAINMENT:

- Vacations: \$_____ Weekly Monthly Yearly
- Recreation: \$_____ Weekly Monthly Yearly
- Hobbies: \$_____ Weekly Monthly Yearly
- Education: \$_____ Weekly Monthly Yearly

HEALTH EXPENSES: (Decedent's portion that is unreimbursed)

Doctor:	\$_____	Weekly	Monthly	Yearly
Dentist:	\$_____	Weekly	Monthly	Yearly
Eye glasses:	\$_____	Weekly	Monthly	Yearly
Hospital:	\$_____	Weekly	Monthly	Yearly
Clinic membership:	\$_____	Weekly	Monthly	Yearly
Medicines, vitamins:	\$_____	Weekly	Monthly	Yearly
Other:	\$_____	Weekly	Monthly	Yearly