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## The Probability of Life

An economic loss calculation must reflect the expected mortality of the injured person. Many plaintiffs' damages experts use "cliff" life expectancy assumptions in their calculations of economic damages. This approach is illogical (thus, unreasonable) because it does not reflect the pattern of real human life. Humans are generally assumed to have a maximum life expectancy of 102 years at birth. Statistical life expectancy increases as a person ages, increasing the probability of actually achieving 102 years. The proper approach to estimating life expectancy when calculating economic damages is, therefore, to determine the annual risk of mortality over the expected remaining life of the plaintiff. These calculations are done using mortality data from the *National Vital Statistics Reports* published by the U.S. government, but require adjustment to reflect the fact that the injured person was alive at the time of injury.

## Pre-Tax Versus After-Tax Lost Earnings

On the basis of *Dempsey v. Thompson,* 251 S.W. 2d 42 (1952), many Missouri damages experts who regularly testify on behalf of personal injury plaintiffs claim that it is "settled law" that plaintiffs' damages should be calculated on the basis of pre-tax income, not after-tax income. But *Dempse*y did not settle the issue. In that appeal, the Missouri Supreme Court found that the trial court "did not err" in refusing to permit the defendant to cross examine a witness and to argue to the jury regarding the effects of income taxes on the plaintiff's damages. Finding an absence of error is not the same, however, as stating that it would have been error to have allowed such cross examination and argument had the trial court done so. So the issue is unsettled.

Plaintiffs' experts rely on Internal Revenue Code Sec. 104 (IRC § 104) in arguing that personal injury damages should be based on pre-tax income. IRC § 104(a)(2) states:

> Compensation for injuries or sickness. (a) In General…gross income does not include… (2) the amount of any damages (other than punitive damages) received (whether by suit or agreement and whether as lump sums or as periodic payments) on account of personal physical injuries or physical sickness."

Thus, the tax consequences of a damages award depend on both the origin and character of the claims and the nature of the award itself. Punitive damages are not exempt from taxation. So the question is, How does IRC § 104(a)(2) affect the *computation* (as opposed to the *taxation*) of non-punitive damages, if at all?

Plaintiffs' experts often try to extend IRC § 104(a)(2) to the *method* by which an award is calculated. But the Code is silent regarding that subject. Instead, it explicitly refers to "the



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amount of any damages…received." (Emphasis added.) Therefore, however a plaintiff's economic and other non-punitive damages may have been determined, the money actually paid to the plaintiff on account of such damages is exempt from Federal income taxation.

There is ample authority for the proposition that future damages attributable to lost earnings should be computed net of avoided income taxes. *First*, the amount received by the plaintiff on account of personal physical injury is not taxable. That social policy is unaffected by calculating economic damages using after-tax earnings. *Second*, the obligation to pay income taxes on earned income is unavoidable in real life. Therefore, plaintiff experts who calculate compensation-based personal injury damages on gross income are defying economic realities. *Third*, in 1980 the U.S. Supreme Court held that juries should reduce damage awards determined under the Federal Employers' Liability Act ("FELA") for income taxes the decedent would have paid. [1] *Fourth*, when confronted with the same issue in determining how to compensate the victims of the World Trade Center attack on September 11, 2001, the U.S. government awarded compensation-based damages on the basis of after-tax income. *Fifth*, although some economists argue that deducting future taxes is too conjectural, it is no more conjectural than any other component of future damages. Moreover, the actual burden of individual income taxes has been remarkably stable.[2] *Sixth*, the U.S. Supreme Court rejected the argument that income taxes impose too great a complexity to be included in damages calculations.[3] Indeed, accountants make these sorts of calculations every day. *Seventh*, using pre-tax income assigns to the injured party the gains attributable to the government's decision not to tax damage awards, which condones multiple recoveries. This violates a principal objective of tort law which is to place the victim in as favorable a position as she would have been absent the injury, but no more favorable.[4] *Eighth*, with respect to the wrongdoer, pre-tax income recovery transforms the tort system's compensatory nature creating, in effect, a punitive regime.[5] *Ninth*, awarding damages in excess of compensatory amounts is economically inefficient because it encourages over-

[1] *Norfolk & Western Railway Co. v. Liepelt*, 444 U.S. 490, rehearing denied, 445 U.S. 972 (1980).

[2] Gonzaga Law Review, 1995-96, *Calculating Tort Damages for Lost Future Earnings: the Puzzles of Tax, Inflation and Risk* at section IV.A.

[3] *Norfolk & Western Railway Co. v. Liepelt*, 444 U.S. 490, rehearing denied, 445 U.S. 972 (1980).

[4] Gonzaga Law Review, 1995-96, *Calculating Tort Damages for Lost Future Earnings: the Puzzles of Tax, Inflation and Risk* at section IV.A.

[5] Id.



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deterrence.[6] *Tenth*, beyond FELA cases, there are many jurisdictions that are awarding compensation-based personal injury damages on the basis of after-tax earnings.[7]

Social Security taxes and benefits require a somewhat different consideration than income and Medicare taxes. Many plaintiffs' experts ignore the lost benefits as a justification for ignoring the avoided Social Security taxes. This approach is improper. Instead, avoided Social Security taxes should be deducted from lost earnings and the present value of the difference (if any) in expected future Social Security benefits post retirement should be calculated. This passage from *Adams v. Burlington Northern Railroad Company* supports VFC's methodology:

> To determine the plaintiffs lost retirement benefits, one should simply apply the formula in order to arrive at two numbers: (1) the amount plaintiff would have been entitled to if he had continued to work until age 66, and (2) the amount plaintiff will actually be entitled to. <u>The difference between the two amounts, discounted to present value, represents plaintiffs lost benefits</u>.[8]

Methods that do not deduct the avoided the Social Security taxes from expected future earnings, and that do not calculate the present value of lost future benefits, are inconsistent with *Adams*.

Damages calculations that do not deduct avoided Medicare taxes from her future earnings are also inconsistent with *Adams*. Under Medicare law, 100% of a taxpayer's earned income is subject to the Medicare tax and is unavoidable in the real world. But Medicare taxes are avoided when receiving awards of economic damages. The calculation of economic damages should reflect that fact.

<u>Work Force Participation</u>

The Missouri Supreme Court case *Wolfe v. Kansas City,* 334 Mo. 796, Mo. (1934), drew a distinction between two components of lost "capacity to labor" consisting of economic damages on one hand (i.e., the inability to work) and non-economic damages on the other hand (i.e., the ability to enjoy life). The *Wolfe* court recognized that the inability to earn money is included in the inability to work. *Wolfe* did not address the topic of damages attributable to the subsets of labor-based economic damages represented by compensation-based and non-compensation-based activities.

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[6] Id.

[7] For example, see *Feldman v. Allegheny Airlines, Inc*. (524 F.2d 384), a Connecticut case; Fanetti v. Hellenic Lines Ltd. (678 F.2d 424), a New York case; *Euken v. Secretary of Health and Human Services*, 34 F.3d 1045 (Fed. Cir. 1994), a Virginia case; and *Watkins v. Secretary of Health and Human Services*, 1999 U.S. Claims 62 (Ct. Claims 1999), a Utah case.

[8] *Adams v. Burlington Northern Railroad Company,* 865 S.W. 2d 748 (Mo. App. W.D. 1993). Emphasis added.



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Some plaintiffs' experts proffer a differentiation between "voluntary" and "involuntary" reasons for historically not participating in the labor force. This is an improper distinction. There is no economic difference in "but for" earnings between voluntary and involuntary absence from the labor force; there is merely absence. Otherwise, there would be no reason to limit a plaintiff's "but for" work capacity to anything less than his or her physical ability to work. Theories that seem to place no limit on "but for" gross earnings are fundamentally unreliable.

The unreasonableness of differentiating between voluntary and involuntary historical non-participation in the labor force is demonstrated by the assumption of a retirement age. Retirement is a purely voluntary act that no law requires. Under a "voluntary" verses "involuntary" theory, it should be hypothesized that a plaintiff will voluntarily work until being physically unable to work or until death. Such a hypothesis is, of course, unreasonable on its face.

The same plaintiffs' experts also typically fail to differentiate the lost earnings separately attributable to voluntary and involuntary reasons for not working. This failure is logically inconsistent with the underlying theory. Some lost capacity to labor has a monetary cost while the remainder does not. Moreover, the different inputs do not necessarily correspond with notions of "voluntary" and "involuntary" lost work capacity. The generally accepted approach is to separately value lost capacity to work based on the nature of the work, not based on whether absence from the labor force is "voluntary" or "involuntary."

There are many reasons why a person may elect to not work. All of them amount to a decision by the individual that the alternative is worth more to them than the money or savings that come from working. Some people forego working in order to go to school. Some people forego working to care for children. Some people forego working to go fishing, or to exercise, or to sleep, or to mow the lawn, etc. These activities may have a value, but they do not have the same value as the individual's income producing activities, and they often do not have a quantifiable economic value. Additionally, non-income producing activities are not subject to income taxation, which further demonstrates why earnings-based economic damages attributable to physical personal injury should be computed using disposable income.

## The Risk of Unemployment

The risk of being unemployed has two components: (1) the probability of participating in the labor force, and (2) the probability of being employed within the labor force. Both factors are necessary to determine the probability of employment because there is a statistical probability that the injured person would not have worked due to unrelated factors such as personal choice or some other "but for" event. But the calculation of economic damages does not stop with determining the probability of participating in the labor force because there remains a statistical probability of unemployment within the labor force. Employment data from the U.S. Bureau of Labor Statistics is typically used to make these calculations, but may require adjustment to reflect the fact that the person was gainfully employed at the time of injury.



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Education Expectations

It is not necessarily appropriate to default to a family's educational history, or to automatically assume higher education, when building expectations of lost earnings and potentially avoided educational costs for an injured or decedent child. Determining the probability of achieving increasing levels of education in the decedent's community can be highly instructive. The range of outcomes should be evaluated.

Personal Consumption Expenditures

In death cases, it is necessary to reduce the expected future earnings of the decedent for the avoided costs of personal consumption. One source of cost of living data is the Bureau of Labor Statistics, which publishes a variety of reports estimating personal consumption.

Claims involving deaths of minors require special consideration. While a minor, it is reasonable to assume that the decedent would not personally have incurred any costs of living. The costs of supporting minors are typically borne by the parents or guardians. Upon reaching majority, the expected costs of living typically would revert to the decedent. These facts impact the damages claims brought by parents and guardians. When a dependant dies, parents and guardians typically experience cost savings represented by the avoided cost of food, clothing, transportation, college, etc. These savings reduce the damages otherwise suffered by parents and guardians.

Inflation

Future lost earnings should be calculated using nominal monetary values that reflect objective market expectations for inflation. Occupation data available from the Bureau of Labor Statistics and the U.S. Census that provides means of estimating the extent to which earnings in particular occupations keep pace or fail to keep pace with inflation. Such data should be adjusted to reflect expected inflation at the time damages are calculated. Cost expectations, whether expected to be incurred or avoided, should also be calculated using nominal monetary values that reflect the same objective market expectations for inflation.

Many damages experts use a "look back" method to estimate future inflation. This approach is unreliable: (1) There is no reasonable basis to believe that any period of historical inflation is predictive of future inflation; and (2) Look back periods tend to be arbitrary, including being arbitrarily pegged to the injured person's life expectancy. Market data exists from which to objectively estimate inflation expectations. Market expectations of future inflation directly affect the interest rates used to discount future losses to present value.

Discounting to Present Value



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Many plaintiff damages experts discount future damages to present value using the real risk free rate, which represents the cost of borrowing by the U.S. government with inflation stripped out. This approach is unreliable because it does not allow for calculating damages based on the growth of earnings and avoided costs caused by inflation, and prevents the calculation of tax effects across tax brackets. Because objective estimates of future inflation exist, damages should be calculated in nominal terms and discounted to present value using the nominal risk free rate after reduction for future income taxes that will be paid on the earnings that accrete in the future. Using an after-tax rate results in a higher present value than an equivalent pre-tax discount rate, and is mathematically consistent with the need to make the plaintiff economically whole.



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