



A plaintiff's lawyer cautions

Wrongful death: Don't let your economist damage your damages argument

Even if present cash value calculations make your eyes glaze over, you need to understand the logic behind what you will present to a jury

BY NATHANIEL LEEDS

Over the last couple months our firm has been working on a significant number of wrongful death cases involving decedents who had complicated wage histories. In the process, we have been focusing on the issues surrounding properly valuing our clients' economic losses – and asking our economists to do more than just average a stack of W-2s. To our surprise, we found some errors in our economists' initial reports, and the more we dug into their reports, the more errors we started to find.

Some of these errors were in methodology, and some were simply typos. When we raised some of the more glaring methodology errors with one of our experts, we were told they had been “doing it that way for over 20 years.”

I became curious: how widespread was this poor workmanship? So, I asked colleagues to send over wrongful death reports they had commissioned. We found that many were sloppy and did not address significant economic components of the families' losses. As a consequence, the cases were undervalued.

This article addresses what you, the attorney, must know about present value calculations and consumption rates. A future article will address the loss of household services and business losses.

Present value of future loss

Under CACI 3904A juries are instructed to reduce all future losses to “present cash value” because “money



Earnings growth is not linear, particularly in the high-tech Bay Area. And a paycheck is not the only form of compensation.

received now will, through investment, grow to a larger amount in the future.” The concept is deceptively simple: if I require \$10 in 20 years to compensate me for a harm caused today, you can pay me \$5.54 today, and if I invest it at 3 percent, I will have my \$10 in 20 years. In this example, the \$5.54 is the “present cash value,” the 3 percent is called the “discount rate.”

In order to do any present cash value analysis, your economist needs to address two different topics, 1) the “discount rate” and 2) which parts of your client's loss will keep pace with inflation, and which will lag, or outpace inflation.

Most economists will factor inflation into the discount rate. Other economists use what they call a “pure offset” method where they pull inflation out of both the cost-growth and discount side of their calculations. If you read the “pure offset”

reports carefully, you will recognize that they still have discount rates for some future expenses.

Although the inflation rate typically drops out of the calculations and does not influence the “present cash value,” it is a concept which jurors are familiar enough with that it is risky to have your economist testify that he views it as insignificant – even if it is.

Discount Rate

Many plaintiffs' attorneys shop for the economist with the lowest discount rate, thinking a low discount rate will increase the present cash value of their case. Sometimes they are right. Other times they end up with an indefensible report that undervalues their client's loss. For example, I recently looked at two reports: one with a 3 percent discount, the other with a 5 percent discount. I built a spreadsheet to see how the two reports stacked up with the same loss of income. I found that the report that used a 5 percent discount rate offered a *higher* present cash value.

For those economists who factor in inflation, the discount rate is two parts:

- 1) the anticipated long-term inflation rate
- +
- 2) the risk-free return on capital

Inflation

Inflation is a simple concept: today \$1 will buy one peach; next year a peach will cost \$2. If there has not been a huge change in the demand or production of peaches, then there has been 100 percent



inflation. Inflation is this price growth across all costs of goods and services (although it can diverge from wages). The most common way of measuring economy-wide inflation is to look at the Consumer Price Index (“CPI”) of non-volatile commodities. For reasons too subtle to discuss here, the CPI is really best as a tool over a shorter period (i.e., 3 months to 5 years), and is imperfect when you average it over longer time periods. If your economist and the opposing economist are averaging CPI over wildly different periods to support their inflation numbers, you should discuss these subtleties with your economist.

Sometimes I have heard people use terms like “medical-inflation” to describe price-growth in one sector of the economy – that nomenclature is misleading because true inflation is an economy-wide phenomenon dealing with the money supply, and not a single-sector cost growth. Single-sector growth is discussed in the section below about inflation-adjusted growth.

Return on capital

The *risk-free rate of return on capital* is a more complicated concept. If you loan someone money, they should pay

you interest on the loan which is greater than the rate of inflation. Part of that additional interest is to compensate the lender for the risk associated with any loan. But, another part of that additional interest is what the borrower is paying the lender because while the borrower has the money, the lender cannot use the money themselves.

The risk-free rate of return on capital is what a theoretic borrower would need to pay to borrow if there was no risk in the loan. Think of it as the interest that Bill Gates would need to pay to borrow \$100,000 from you – no risk Mr. Gates will default, but you are still entitled to the money that you could have made on the \$100,000. If you can make \$1,000 on that same money without any risk, you won’t lend it to Mr. Gates unless he offers at least as good a deal.

The important concept with the risk-free rate of return on capital is “risk.” Defense economists will often talk about stock-market historical average returns, or average short-term bond rates in calculating their discount rate. What they are suggesting

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is that your client will get a nice healthy return on their investment by accepting some risk. The fallacy here is that increased returns from taking on risk are, well, risky.

If your client wants to take risks and buy lottery tickets, that's their business, but a defendant cannot force your client to take the risk that the market will not behave the way the defense expert says it will.

Here is the difficulty with discount rates: reported interest rates on investments do not differentiate which part of the interest is to keep up with inflation, which part reflects the risk-free rate of return on capital, and which part is a risk premium.

The best your economist can do for you is look at extremely low-risk investments and use those rates to benchmark their discount rate. The rate I look at most often are U.S. Government Treasury notes. Although the black-helicopter crowd is concerned that our government will default, or radically debase our currency, most people think that the chance of a Zimbabwean-style dollar crisis is pretty low.

Also, because the Treasury sells notes ranging from 30 days to 30 years, you can match the discount rate to when your client needs the money.

Here are Treasury note annualized returns as of the writing of this article:

30-day: .01%
90-day: .01%
5-year: 1.08%
10-year: 2.43%
30-year: 3.20%

Remember, these rates reflect both (1) the risk-free rate of return on capital, and (2) an estimate of inflation.

There are three last observations when working with discount rates:

Do not worry about the discount rate until you have removed inflation from the calculation. Whatever discount rate your economist uses, you need to figure out what part of the discount rate is compensating for anticipated inflation. Inflation factors typically cancel each

other out and are not reflected in present cash value. If the inflation component of the discount rate is high, then more of the discount rate will drop out of the calculations, so you will have a higher present value.

Match Treasury rates. If an economist is using numbers which are significantly higher than what the market is valuing Treasury notes at, they have some explaining to do. What they are saying is that they know better what the capital is worth and what inflation will do than the very smart people on Wall Street who are valuing the Treasury notes. If they are so confident they can beat Wall Street's wisdom, then they are in the wrong profession.

Do not substitute past performance for market indicators. Because interest rates are at a historic low, some economists will tell you that it is better to look at a bundle of Treasuries historically because of the chance that your client will get "stuck" in a low-yield Treasury if interest rates went up. The argument is a fallacy because (1) past is not necessarily predictive of the future and (2) if you are going to face risk that your client's long-term investment will be devalued, that is an argument for a lower discount rate (and higher present value), not the other way around.

Medical expenses and wage growth should not track inflation

There are some parts of any economic analysis that track inflation, like the value of household services. There are other parts that do not. There are two big line-items in most economic workups that should not track inflation: medical expenses, and wage growth.

Medical expenses: With respect to medical expenses, if your economist is looking at the cost of a particular medical service today, and then simply assuming that the cost of that same service in the future, they are undervaluing your client's claim. There are two reasons for this undervaluation.

First, the costs of specific medical goods have risen significantly faster than

inflation. For example, in 2014 the CPI increase for goods apart from food and energy (which tend to be volatile) was 1.7 percent but medical care was 2.4 percent (historically, the spread has been much higher). If your client needs a \$250,000 procedure, in 25 years the difference between tracking inflation, and tracking medical expense growth is \$70,000.

Second, looking at CPI is an unnecessarily conservative approach to future medical costs. This is because the CPI is based on a fixed-basket of selected medical goods. Comparing CPI to CPI you will see how much the cost of a particular item (gauze, for example) has gone up historically, but a large part of what has been driving medical costs has been a change in the services being offered – new tests and treatments increase the cost (and efficacy) of medical care.

Defendants will argue that your client is only entitled to the growth in the cost of today's medical care. But, what they are saying is that your client is only entitled to 2016 medical care, even if they need the care in 2041, and 2041 medical care will offer better treatment. Although no economist will know the cost of the medical technologies of the future, they can look to the past and look at the growth of medical care, generally – not just the cost of specific services.

Instead of looking at the cost of specific items (gauze, particular pills, particular tests . . .), your economist should look at the overall cost of health care as a benchmark for what total care will cost in the future. These broad-based measures are things like the cost of insurance, or per person Medicare expenses. People's illnesses do not change, so looking at broad measures of health-care costs can often give you a more realistic measure of what treatment will cost in the future – whatever that treatment might be.

Wage loss: Unlike medical expenses, which are universal, wage loss analysis is very specific to your own client's earnings history and future. There are three different factors at play in any wage analysis: (1) overall wage growth, (2) anticipated



career advancement, and (3) sector growth.

Looking first at overall wage growth, the story has been very mixed over the last 30 years with high wage earners outpacing low wage earners. Between 1979 and 2013 persons in the top 5 percent of earners (above \$150k/year) have seen their wages grow by an inflation-adjusted 41 percent, the bottom 10 percent (below \$22k/year) have lost 5 percent over the same period. Your economist's analysis of future lost wages should factor in these different trends: for a laborer from the Central Valley, it is unrealistic for your economist to project wage growth (sad as that is), whereas a well-paid professional in San Francisco can expect that their wages will beat inflation by more than 1 percent a year – that is before factoring in any job advancement.

Technology and Finance workers: If your client is in a boutique or “hot” industry, it is important to hire a wage consultant in addition to your economist. We are working a case right now where the young decedent worked at a well-established technology company. We hired an industry-specific wage consultant who will testify that employees at this company expect four percent wage increases – even without any job advancement.

Another challenge with “hot” industries is that wages in these industries tell a very small part of the story of a person's compensation. In start-ups, employees often defer wages in the hope that the company will be sold and they will receive a windfall – accordingly, an individual's historical wages may lag significantly behind what they could get on the open market. Because their family is entitled to the loss of earning-potential, you need to find out if their recent wages were at, or below, industry standards.

Finally, it is not uncommon for workers at technology companies with high market valuations to get restricted stock units (RSUs) that can be as high as 40 percent on top of their wages.

In valuing RSUs, it is important to do some research into how the employee came to work at their employer. Many employees come into name-brand technology companies through acquisition; often after an acquisition there is a huge, one-time retention grant of stock. One manager told me that his employees got “screwed” because their retention grants were *only* 500 percent of their wages.

Additionally, some of those grants would likely have been offered after the initial retention bonus vested. You need a compensation expert to explain all of this or you will not recover for the customary grants.

Job advancement: The next factor to consider is job advancement. Generally, people see significant wage growth in their 30's which flattens in their 40's, and starts to decline in their 50's. If your decedent or catastrophically injured plaintiff is in the early part of his or her career, that wage growth needs to be factored in – most economists will match wage growth to age-independent growth.

There are a number of exceptions to the general trend that you should explore: **Union/Government employees:** Many collective bargaining agreements have set wage advancement for people as they age – even if they are doing the same job. This advancement can be reflected in either take-home pay, or in increased pension benefits. What this practice tends to do is push a person's peak-earning years into later life with less of a drop-off, even if they are less physically able to do the job.

Experience Industries (Law/Accounting): There are some professions, like law, which put a significant premium on age. In those professions wages can continue to grow through retirement as workers steadily amass more client relationships and oversee more people doing work for them.

Physically demanding professions (Construction/Medicine): There are some professions where earnings are tied to how much a person can do, physically.

These are not only traditional blue-collar industries (such as construction) but also include jobs in the medical field, like nurse and hospital physician, where people are paid by shift, and are unlikely to continue to work 60 hours of 12-hour shifts per week into later life.

Youth industries (Technology): There are some industries which put a huge premium on youth, so people have their peak earnings in their 20's and 30's, but start seeing wage stagnation and periods of joblessness increase as they age. In companies like Apple, Google, and Facebook; the average employee is under 32 (and overwhelmingly male). For all practical purposes, even middle-aged technology workers can find themselves aged-out of the best jobs and see their wages decline accordingly.

Finally, there are some sectors of the economy that are doing very well and have seen across-the-board wage growth over the last 20 years – others that are lagging. Generally, wage growth has been most pronounced in technology, stable in occupations that cannot be easily exported (construction/government), and most dismal in industries that have gone overseas. If your economist is evaluating someone in a “hot” industry, they should examine whether an additional wage-growth factor may be warranted.

Consumption rate – keeping it low

Consumption rates typically only come into play in wrongful-death cases, although they can also be a factor in cases where significant injury requires prolonged out-of-home care. As with discount rates, the concept is deceptively simple: the consumption rate is the amount of a person's lost earnings that they, themselves, would have consumed, *but-for* the injury. Since consumption rate is subtracted from any wage-loss claim, this rate has an effect on your plaintiff's overall recovery.

For example, if a wage-earner dies, the family no longer receives his or her



income, but because the family also does not need to feed or clothe that person, the family's cost of living goes down. Emotionally, the concept of consumption rates can be very difficult – does a parent really “benefit” when they no longer need to cook for their child? It can be very uncomfortable to ask an economist the following question: “So, you are saying that because it will be cheaper to cook Christmas dinner, the defendant should not need to pay as much for this family's loss.” Or, “Is it an economic benefit to my clients to have one fewer person at the dinner table?” For an economist, the answer is “yes.” Although technically true that Christmas dinner is now cheaper, your rejoinder is that there is a significant part of the general damages picture that is being overlooked.

Even if the concept of a “consumption” discount is troubling, you are not likely to find an economist who does not factor it in. When we surveyed the consumption rates used by economists for a single wage-earner in a two wage-earner family we found rates ranging from 5.7 percent to 40 percent of wages. Again, the consumption rate is subtracted from any wage-loss claim, so this rate affects your client's overall recovery.

There are two issues that come up in almost any consumption analysis: What was the family actually consuming? As discussed below, if the family was not spending all of their income, then the decedent was consuming less, as a percentage, than they would if the family was living hand-to-mouth.

What portion of the family's expenditures could be “scaled-back” and what cannot be? For example, if a two-person family has one car, and a family member dies, the remaining member of the family cannot switch to driving one-half of a car; similarly if the family only has one bedroom already, they cannot downscale their housing to one-half of a bedroom. Here are some of the factors you should consider in evaluating consumption.

You cannot consume what you do not bring home

The first question is what part of the wage loss to which the consumption rate is being applied. The consumption rate should only be applied to the money that the family was actually spending. For many people large parts of their earnings are diverted into 401K's, health insurance costs, or other benefits which the wage-earner did not consume on an ongoing basis. Since the wage-earner was not “consuming” this part of their earnings, the consumption rate should not be applied to it.

Mortgages, Savings, Tuition and Remittances

After sorting out which parts of a person's earnings that he or she was able to consume, you should spend some time with the family learning about how they were managing their money. The concept here is simple: any part of the family's earnings that was not being consumed should not have the consumption rate applied to it.

If your economist tells you that the consumption rate for the family you are referring to is 16 percent based on their wages, but they lived on only half of their income, the effective consumption rate should be only 8 percent.

Although this is by no means an exhaustive list of significant expenditures that should not be subject to the consumption rate, these are some of the larger items you should discuss with your client:

Savings: What a family saves is, by definition, not consumed. The difficult part here is figuring out how the family “saves.” The traditional savings account at the bank is not the way most people save any longer, so you should look beyond the bank accounts at things like collector's cars, jewelry, stocks, real estate (as investment, or for family) or other non-depreciating assets.

Do not assume that just because your client lived a modest lifestyle that he did not purchase luxury items – I once talked to the wife of a parking lot attendant who

had bought several hundred thousand dollars' worth of jade. Although the family did not think of the jade as “savings,” the money spent on the jade was not available for consumption and could be accessed later, or bequeathed, just like a more traditional savings vehicle.

Mortgages: Mortgages are complicated because they are one part savings vehicle; one part housing expenditure. It is tempting to simply look at what part of the mortgage payment is attributed to interest, and what part covers principal and say that the interest payment is a housing expense (akin to rent, which is consumed) and payments to principal are savings (which is not consumed). In practice, early in a mortgage, people pay far more in interest than they ever would in rent because they are using the house as a highly-leveraged, speculative savings vehicle. When you have a very significant portion of the client's income going to a mortgage (which is common in the Bay Area), you should discuss how much of that expense your economist is willing to categorize as savings.

Tuition/Childcare: Many of the consumption studies look at nation-wide data about family spending patterns, but many Californians pay significantly more for childcare and education than in other communities. For example: nationwide, 10 percent of children attend private schools, which average tuition of approximately \$11,000 a year; in San Francisco, private school attendance is about 30 percent, with many tuitions exceeding \$30,000 a year. Money spent on tuition and childcare would not have been available for consumption and should not be factored into the consumption rate calculations.

Remittances: In California many families send significant amounts of money to loved ones both domestically and abroad. Remittances to Mexico alone were estimated to be \$1.6 billion in 2014. Since the domestic family is not consuming this money, it should not be factored into the consumption figures. Defendants will



argue that this money was also not going to be available to the family for their use – but that argument should be rebutted by the fact that familial support is an election that the family had, and should be able to continue to make – it is none of defendant’s business how your client decided to spend their money, only whether they spent it.

Consumption and high wage earners

One of the more common errors we saw in how economists calculated consumption was to fail to adjust for earnings. The fact is, everything else aside, people who earn more, buy more non-depreciating assets (jewelry, art, real estate . . .), use less of their money on necessities such as food and clothing which are consumed, and save more.

When we discussed this with the economists who did not factor in income in their consumption calculations, their explanations were typically that they had built their spreadsheets before there were good studies of income-based consumption, and they had not adjusted them.

Failure to adjust consumption rates for income can cause a serious undervaluing of your case. For example, in one study, the difference in the husband’s consumption for low-income families was 46.1 percent, whereas it was only 10.4 percent for those making over \$115,000 a year. When you get higher up into the income brackets those consumption rates can get even smaller.

Addressing Housing Costs

The whole consumption rate calculation is based on the premise that because

the decedent is no longer in the household, the surviving family saves some money on those parts of their life that they can downsize.

The principal household asset for most families, and source of many household expenses, is the family home. If you are not careful about how consumption rates are calculated, you will find that a defense economist is implicitly telling your clients that they should move out of the family home.

Needless to say, defendants look foolish when they first kill a loved one, and then tell the surviving family to move out of their home. Far from coming out and saying that your clients should move, defendants will hide this assumption in their consumption rate calculations. By refusing to award the part of the housing expenses that their economist attributes to the decedent (i.e., applying the consumption rate to rent/ mortgage without any correction), defense economists are telling your client that they are not entitled to the money necessary to stay in the house.

This defense approach may be appropriate in certain scenarios, such as when the family is going to downsize anyway, but this approach is dead wrong when applied universally. This issue is particularly important in the Bay Area where many people live in rent-controlled apartments, or houses purchased before the current bubble, and cannot move.

Furthermore, excluding housing costs from consumption rates can significantly increase case value. Housing costs make up a huge part of the family budget. The San Francisco Chronicle

recently reported that it would take a full 50 percent of an average salary to rent a median-priced two-bedroom apartment in San Francisco (including Marin and San Mateo). Protecting those expenditures from inclusion in the consumption calculation can provide a much more realistic estimate of what money the decedent would have had available to “consume.”

The second and final article in this series will discuss household services and business losses.

Household services, including child-care expenses, are important when evaluating low-income decedents who, despite low earnings, can be very important to their family economically.

Business losses will focus on understanding the difference between what your decedent told the IRS and what they were actually earning – sometimes the biggest challenge is undoing the damage of an artfully prepared tax return.



Leeds

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