

Economic Controversy in Personal Injury Cases – An Example of a Bad Example

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Note: This paper was written in response to Scott Gilbert’s article “Economic Controversy in Personal Injury Cases” which appeared in the January-February 2012 *Journal of the Missouri Bar*. In order to avoid publication delays, a shortened version of this response was published as a letter to the editor in “The Bar Speaks” section of the March-April 2012 edition of the *Journal*. This letter has been appended to the end of this file. The major difference between this paper and the letter is that the letter omitted the discussion of Figures 1 and 2. Additionally, all but one of the endnotes was eliminated, with endnote 4 being incorporated into the main body of the published response.

Synopsis

Dr. Gilbert’s short article in the most recent edition of this journal relies on a flawed example to quantify the differences arising from use of current versus historical discount rates. This reply identifies the flaw and addresses a more substantive controversy created by use of current interest rates in today’s economic environment.

Economic Controversy in Personal Injury Cases – An Example of a Bad Example

Reply by David G. Tucek¹

In the most recent issue of the *Journal of the Missouri Bar*, Scott Gilbert addressed a major difference among forensic economists – the use of current interest rates versus historical average rates to calculate the present value of future damages. Dr. Gilbert’s main conclusion is that economists who rely on historical rates do so because their training in financial economics is somehow lacking and, consequently, their present value calculations fall short of his proffered objective of “*valuing* an expected earnings stream.” I read his article with perhaps more interest than most, given that I am among those economists who use a historical average as the basis of the discount rate I use to reduce future damages to the present.

To underscore his point, Dr. Gilbert presents the results of a series of present value calculations based on current (2010) rates of various Treasury securities and their 50-year historical average values. His example is based on an annual earnings loss of \$40,000 that is presumed to continue for 30 years. The published calculations quantify the controversy in terms that will catch any plaintiff or defense attorney's eye: the differences in the two sets of present value calculations range from 42 to 85 percent, with the present values based on current interest rates always being higher.

As striking as these differences are, the example on which they are based suffers from a fatal flaw. The example overlooks the fact that the decision to use current or historical interest rates does not occur in isolation: it goes hand-in-glove with the choice of the growth rate used to project the earnings loss. For example, the historical interest rates shown in Dr. Gilbert's example cover a time period in which average weekly salaries increased at an average rate of 4.1 percent per year. If this historical growth rate is used to increase the \$40,000 of lost earnings in conjunction with use of a historical average interest rate, the differences in the two sets of present value calculations are less remarkable, ranging from a negative 9.8 percent for 10-year notes, to a positive 21.6 percent for 6-month bills. Because Dr. Gilbert's example overlooks the connection between interest rates and the expected growth in wages and economic output, it does not really establish that use of historical average discount rates will result in lower present value calculations than would use of today's current low rates.²

A More Substantive Controversy

Nevertheless, Dr. Gilbert's example highlights a real controversy between the use of historical and current interest rates in today's economic environment. The example implicitly assumes that future real earnings growth will be negative, with the rate of decline equal to future inflation.³ The validity of this assumption depends on the reasons for today's low interest rates. At the short end of the yield curve, the most obvious and immediate reasons are that today's low rates are the result of current monetary policy and are also due to a flight to safety as foreign investors seek to protect themselves from the uncertainties surrounding the European financial crisis. Farther along the yield curve, these reasons become less important, while expectations concerning prospects for long-term economic growth become moreso.⁴

The controversy created by use of current interest rates in today's environment hinges on the issue of what growth rate is used to project future earnings. Clearly, use of current rates in conjunction with a historical nominal or real earnings growth rate would not be consistent with expectations for sub-par growth embodied in current interest rates, and would result in significantly increased present values. In Dr. Gilbert's example, projecting earnings with the historical 50-year average earnings growth rate of 4.1 percent, and using current interest rates to discount to the present, increases the calculated present values by 66 to 91 percent.

Another aspect of this controversy relates to what I have called the "*Pretty Woman* trap." In the movie, Edward (Richard Gere) asks Vivian (Julia Roberts) "What's your name?", to which she replies "What do you want it to be?" While it is possible for an economist to use current rates along with a current

forecast of wage growth, doing so raises the question of how such a forecast is obtained and whether it is consistent with current market rates. While the economist may not explicitly ask the retaining attorney “What do you want it to be?”, use of current interest rates in conjunction with a purportedly consistent forecast of future earnings growth runs the risk that the economist will skew the forecast to meet the perceived expectations of the attorney.

Conclusion

So, where does that leave economists and attorneys? For one thing, both defense and plaintiff attorneys should be wary of an economist who discounts using today’s current interest rates and also relies on historical nominal or real earnings growth rates. And they should perhaps be even more wary of an economist using current rates in conjunction with a current forecast of earnings growth.

More important, however, is that the foregoing argument leaves both attorneys and economists with use of historical averages to discount future earnings to the present. Whether this takes the form of a historical net discount rate based on the difference between past interest rates and wage growth, or whether it takes the form of explicit averages of (nominal or real) interest rates and earnings growth is not a major concern. What is important is that, unlike the use of today’s current rates and historical earnings growth, the explicit or implicit average interest and growth rates should be consistent with each other.

The 50-year time period chosen by Dr. Gilbert provides an example in which use of historical interest rates and earnings growth rates is not consistent. This period encompasses Paul Volcker’s term as Federal Reserve chairman. The period was a time of monetary austerity in which the Federal Open Market Committee (FOMC) changed monetary policy from targeting short-term interest rates to targeting the quantity of reserves at member banks without regard to the impact on interest rates. During this period, the Federal funds rate ranged as high as 22 percent, and rates on 10- and 30-year Treasuries exceeded 14 percent. By the time Mr. Volcker’s term as chairman ended in August, 1987, the FOMC had shifted back to implementing monetary policy by targeting interest rates. Figure 1 shows the level of 10-year bond rates before, during and after Chairman Volcker’s term; Figure 2 shows the growth in average weekly earnings for the same sub-periods. During the Volcker years, interest rates shifted up compared to the prior period, while earnings growth declined. The economic experience during these years is not likely to be repeated, and including the period in the calculation of average historical interest and growth rates is inappropriate.⁵

Endnotes

¹ Mr. Tucek provides economic consulting services in personal injury and wrongful death cases and is the general partner of Value Economics, LLC. Mr. Tucek may be contacted at David.Tucek@valueeconomics.com.

² These results are not representative of all differences between current and historical present calculations. The actual differences will depend on the time period over which the historical average interest is calculated, as well as the explicit or implicit rate used to project future earnings.

- ³ Not all present value calculations that rely on a fixed level of earnings loss make this assumption. For example, calculations that rely on a net discount rate based on the historical difference between interest rates and wage growth implicitly assume that wages will increase in the future in both nominal and real terms.
- ⁴ With respect to the short end of the yield curve, current monetary policy clearly is driven both by current economic conditions and by concern regarding future growth. Additionally, the Federal Reserve's "Operation Twist" that began in the fall of 2011 has likely had some effect on current long-term rates, though the jury is still out on the extent of the impact.
- ⁵ Whether the Federal Reserve's recent efforts at quantitative easing through the purchase of bonds and other securities constitute another regime shift in monetary policy is a question that will likely only be answered with the benefit of hindsight.

Figure 1

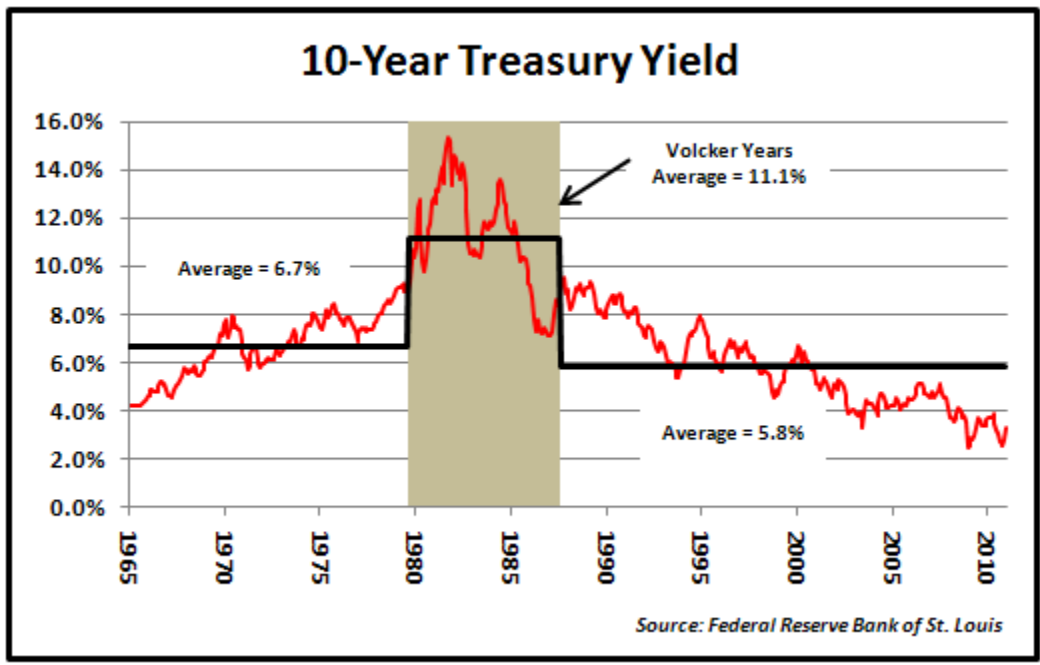
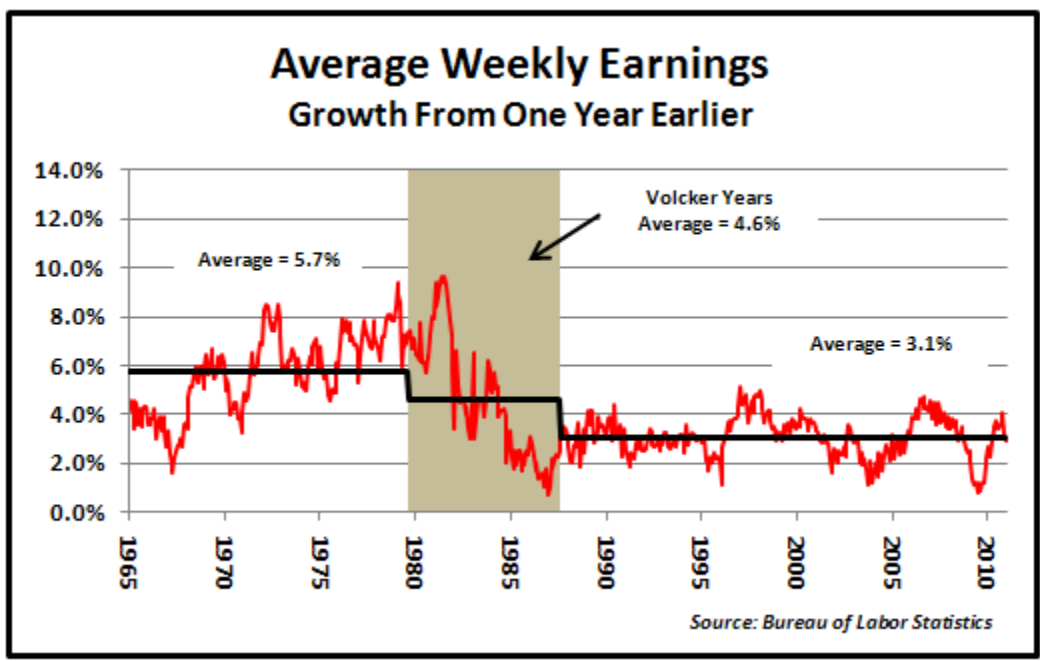


Figure 2



From the March-April 2012 issue of the *Journal of the Missouri Bar*.

<http://www.mobar.org/uploadedFiles/Home/Publications/Journal/2012/03-04/bar-speaks.pdf>

Dear Editor:

Re: “Economic Controversy in Personal Injury Cases” by Scott Gilbert

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Dr. Gilbert's article may be found at:

<http://www.mobar.org/uploadedFiles/Home/Publications/Journal/2012/01-02/economic-pi.pdf>