Calculating a plaintiff’s economic damages in an employment case is seemingly quite straightforward. The basic method is to take the total compensation that the plaintiff would have earned absent the employer’s allegedly unlawful action and subtract the income that the plaintiff can expect to earn in mitigation. In fact, calculating economic damages involves a lot more than adding up columns of numbers. The same raw data (e.g., the employee’s salary at the time of discharge, the anticipated growth rate of the salary, the length of the ensuing unemployment) can yield drastically different damages figures depending which assumptions are made. This article discusses the mechanics of an economic loss assessment in an employment cases and seeks to bring to light the assumptions lurking within such estimates.

Typically, a plaintiff’s economic losses have two components: back pay and front pay, or future losses. Back pay refers to lost compensation for the period from the
alleged illegal act to the time of trial, and front pay represents plaintiff’s anticipated losses after trial.

**Calculating Back Pay and Benefit Losses**

Past economic losses consists of all economic remuneration (e.g. base salary, salary increases, bonuses) and fringe benefits that an employee could have expected to receive through the time of trial but for the allegedly illegal act, as well as the profit from employer stock options that an employee could have exercised during this period. Back pay awards are mitigated by amounts earned since termination, and prejudgment interest is ordinarily awarded. ¹**Lost Base Salary**

The starting point in determining the lost salary of a discharged employee is to take his or her base annual compensation at the time of the termination or the illegal act, as reflected in a W-2 statement, and multiply that amount by the length of time from discharge to trial (reduced to a multiple of a year or month). Thus, where Plaintiff X was earning $50,000 per year at the time of discharge, and the trial took place three years after the discharge, her lost base annual salary is $50,000 x 3, or $150,000.

Similarly, the lost salary of an employee challenging the unlawful denial of a promotion is the difference between his or her annual salary with and without the promotion multiplied by the length of time between the date of non-promotion and trial. Where Plaintiff Y, earning $50,000 a year in his job, applied for and was denied a promotion to a job paying $60,000 a year, and then must wait two years to challenge the denial at trial, his lost salary is $20,000 (($60,000 - $50,000) x 2).
A discharged employee’s base compensation is not necessarily his or her earnings immediately prior to the termination. When a discriminatory environment has deflated a plaintiff’s pre-discharge earnings through discriminatory practices, a court may apply the earnings he or she was receiving before the discrimination. In Durham Life Insur. Co. v. Evans, the Third Circuit held that the district court, in calculating economic damages, properly used as a base salary plaintiff’s higher earnings from the year before her discharge rather than the reduced earnings of her discharge year. The court noted that in 1993 the plaintiff was subjected to severe harassment that adversely affected her earnings. The court wrote that if the plaintiff’s salary on the last day of employment was used to calculate back pay, would be to a discriminator’s advantage to increase its mistreatment from a hostile environment to a decrease in pay, so that any ultimate penalty would be minimized. [The plaintiff’s] attempts to deal with the discrimination without quitting, despite the negative effects on her salary, should not be held against her.

Durham, 166 F.3d at 156.

Where a plaintiff brings suit challenging the denial of a promotion to a position for which a salary had not yet been established, his or her attorney ordinarily will look to the salary of the successful candidate as a benchmark for calculating the plaintiff’s damages. The salary awarded the successful candidate, the plaintiff will argue, reflects the employer’s own measure of what the job is worth, and therefore is a fair basis to evaluate damages. Alternatively, an estimate of plaintiff’s lost salary can be based on the salaries of other employees holding positions similar to the one that was denied the
By contrast, defendants often contend that the successful candidate’s or replacement’s salary is not a fair measure of a plaintiff’s economic damages. Defense counsel will try to show that the successful candidate had superior credentials or a more favorable salary history than the plaintiff, and therefore commanded a higher salary. When the successful candidate’s earnings depend on individual efforts, such as with a sales executive paid on commissions, arguably there is even less reason to use his or her compensation as a measure of damages.

When calculating back losses, the plaintiff’s counsel should make sure to include all forms of compensation, in addition to base salary, that the plaintiff had been receiving, including commissions, overtime and tips.\(^5\)

**Loss of Potential Promotions and Salary Increases**

In addition to lost base salary, a plaintiff’s back pay losses include the salary increases that the plaintiff would have received but for the wrongful discharge or non-promotion. There are several approaches for estimating damages arising from forfeited salary increases. First, anticipated salary increases can be projected from the employee’s own history of salary increases with that employer.\(^6\) A second method is to look to the actual salary increases given to similarly situated employees subsequent to the plaintiff’s discharge.\(^7\) The plaintiff has the burden of showing, however, that the comparators selected are truly similarly situated.\(^8\)

A third method for projecting a plaintiff’s would-be salary increases is by referring to the wage index growth rate of the private non-farm sector data, also known as the
Employment Cost Index (“ECI”)\(^9\). The ECI, published by the U.S. Department of Labor’s (DOL’s) Bureau of Labor Statistics on a quarterly basis, measures the changes in employers’ compensation costs, including wages and bonuses. The ECI provides industry- and region-specific data – ordinarily a better indicator of a plaintiff’s anticipated salary increases than more generalized economic data. As a general rule, the more closely the salary growth information is tied to the plaintiff’s job or industry, the more persuasive the economic loss estimate.\(^{10}\)

**Lost Bonuses**

A prevailing plaintiff may be compensated for lost bonuses as long as there was a substantial probability that he or she would have received the bonus absent the employer’s illegal conduct.\(^{11}\) A plaintiff does not necessarily have to specify the size of the bonus he or she would have earned if still employed by the defendant in order to claim lost bonuses as an item of damages.\(^{12}\) Where the amount of the potential bonus was not fixed prior to the discharge, the trier of fact may use the parties’ prior course of dealings and bonus history to set damages.\(^{13}\)

**The Length of the Back Pay Period**

Ordinarily, the period for which a plaintiff will be awarded back pay is from the date of the discriminatory event to the time of trial or entry of judgment. An employer can limit the back pay award, however, by establishing that after the unlawful discharge, but prior to trial, the plaintiff would have lost his or her job for reasons unrelated to its allegedly unlawful motive. Thus, a defendant can stop back pay damages from running by demonstrating that the plaintiff’s employment would have been terminated in a non-
discriminatory reduction-in-force (RIF) taking place after the allegedly unlawful discharge. The mere fact that the employer implemented a reduction-in-force subsequent to the plaintiff’s discharge, however, will not necessarily limit damages. As long as the plaintiff can show that he or she would have been retained following the RIF but for the employer’s earlier unlawful conduct, back pay damages are permissible.

Under the “after-acquired evidence” defense, if the employer can prove that during the course of discovery it learned that the plaintiff had committed an offense warranting discharge, but unrelated to the employer’s purported reasons for firing the plaintiff, the back pay period will be limited to the period from the date of the unlawful discharge until the time the misconduct was discovered. A plaintiff’s entitlement to back pay may also expire as of the time when the court determines he or she should reasonably have secured alternate employment. Finally, the accrual of back pay liability ceases if the employer makes an unconditional offer of reinstatement which the plaintiff refuses.

Lost Fringe Benefits

A prevailing plaintiff may recover the value of lost fringe benefits, including health insurance, pension and retirement benefits, unused vacation days, life insurance, sick pay, reduced cost of meals and the loss of the personal use of an automobile supplied by the employer. Lost health insurance benefits ordinarily are recoverable only if the plaintiff has offered evidence of out-of-pocket expenses incurred for alternate insurance coverage or actual medical expenses.

In limited situations, it may be appropriate to value a plaintiff’s fringe benefits as a
whole and to express them as a percentage of the individual’s salary. At least one court has upheld an award of lost benefits expressed as a percentage of salary when the percentage was based upon data found in an annual survey of employee benefits published by the United States Chamber of Commerce.28

**Stock Options**

Stock options are a common form of compensation for executives, and increasingly, for non-executives. A stock option gives the option holder the right to buy a share of stock at a fixed “exercise” or “strike” price, usually the market price on the date the options are granted. Typically, before the stock options become effective, they must vest over time. After the options vest, the holder may continue to hold them or pay the strike price and purchase the stock in exchange for the options. The district court in *Regier v. Rhone-Poulenc Rorer, Inc.*, described how stock options work:

> If the market price of stock is $10 and the strike price of a call [or stock] option on that stock is $8, the holder of the option could elect to exercise the option, tender the $8 in exchange for a share of the stock, and sell the share of stock on the open market for $10. The certain profit in this situation would be $2 – the $10 received from the open market sale of the stock less the $8 paid to exercise the option.30

Courts tolerate a certain amount of imprecision in the valuation of stock options. Economists use several methods to determine the precise value of a stock option, most prominently, the Black-Scholes option-pricing model. The Black-Scholes method prices stock options by weighing the stock price at the grant date, the expected life of the option, the volatility of the stock, expected dividend payments and the risk-free interest
rate over the expected life of the stock. Courts, however, have determined the value of stock options, without recourse to sophisticated economic models, by using common law principles of damages. There are two competing common law theories of damages in valuing the loss of stock options: 1) breach of contract, and 2) conversion.

Under the breach of contract theory, a plaintiff’s damages consist of the difference between a stock option’s exercise price and the market price of the stock at the time of breach. Breach occurs when the employer first fails to deliver the stock under the option agreement. Under the conversion theory, a plaintiff’s damages are calculated by taking the difference between the option’s exercise price and the stock’s highest price for a reasonable amount of time after the company refused to honor the option.

The conversion theory of damages benefits the plaintiff more than does the breach of contract theory. Under the breach of contract theory, the plaintiff must base his or her damages on the price of the stock at the time of breach, whatever the price. Under the conversion theory, the plaintiff, in computing damages, is presumed to have exercised the option when the stock reached its highest price. Accordingly, the conversion theory permits the plaintiff to realize a stock option’s potential profits. As the Second Circuit explained,

in the case of goods whose market value is volatile – stock, for example – to allow the injured party merely the value of the stock at the time of conversion would provide an inadequate and unjust remedy, because the real injury sustained by the principal consists . . . . in the sale of [the stock] at an unfavorable time, and for an unfavorable price.33
Scully v. US WATS, Inc.,\textsuperscript{34} shows how the two competing theories of valuing damages for a breach of a stock option agreement can lead to vastly different results. In May 1995, Scully entered into a two-year employment agreement to serve as president and chief executive officer of US WATS. With the execution of the employment agreement, the company granted Scully an option to purchase 850,000 shares of restricted company stock that would vest over a two-year period at 75 cents per share. The restriction provided that on exercising the option, Scully would not be able to transfer the stock for one year from the date of its purchase. Eighteen months later, in December 1996, US WATS fired Scully. In January 1997, Scully attempted to exercise his option to purchase 600,000 shares of stock that had vested by that date. US WATS refused to honor the option agreement, claiming that it automatically expired when Scully was fired. Scully brought suit, and the district court found that he was wrongfully fired, in violation of the employment agreement. The district court calculated Scully’s damages from the voided stock option as $531,250. The district court arrived at that figure by multiplying the number of shares of Scully’s options by the difference between the exercise price of 75 cents per share and the stock’s market price of $1.375 as of January 1997, the date the company refused to honor the option agreement. On appeal, both sides challenged the size of the damages award.

The Court of Appeals considered Scully’s damages under both the breach of contract and conversion theory. Using the conversion model, Scully argued that the district court erred in fixing his damages as of the January 1997 breach of the option agreement. Scully contended that his damages should have been calculated as of the
end of the restricted period – one year after the breach – because only then could he have sold all his shares. The one-year restricted period for the 600,000 shares expired in January 1998, at which time the US WATS stock was selling for $2 a share. Had Scully sold the stock on that date, he would have made a profit of $1.25 per share ($2.00 - $0.75), or $750,000. As to the remaining 250,000 shares that had not vested as of January 1997, their sales restriction expired in May 1998, at which time the stock closed at $2.0625 per share. With respect to the 250,000 shares, under Scully’s analysis he would have realized a profit of $1.3125 per share, or $328,125. Thus, under the conversion theory, Scully’s total damages for the breach of the option agreement would have amounted to $1,078,125 ($750,000 + $328,125).

Unfortunately for Scully, the Third Circuit opted for the breach of contract valuation of stock options and held that the district court properly assessed his damages as of the January 1997 breach. The court reasoned that the breach of contract rule is consistent with the principle that a failure to deliver securities or stock options, pursuant to a legally binding agreement, constitutes a breach of contract. In addition, according to the court, the breach of contract theory had the benefit of “avoid[ing] the speculativeness and hindsight problems attendant to the conversion theory” which presumes that the plaintiff would have had the foresight to sell the stock at its highest price.

Mitigation

The earnings that a plaintiff receives after the termination of his or her employment are deducted from back pay awards. Courts have made clear that “the
preferred method” for determining a plaintiff’s mitigating earnings is periodic mitigation.\textsuperscript{38} Under the periodic mitigation method, the court takes the amount the plaintiff would have earned for each pay period and deducts the wage, if any, earned in other employment that period. Earnings in any period that exceed the amount the plaintiff earned for each period do not operate to reduce the back pay award from any other period.\textsuperscript{39}

Periodic mitigation becomes significant in cases when a plaintiff – after a period of unemployment and/or reduced wages – find a job better paying than the one from which he or she was unlawfully discharged. Take for example, a plaintiff fired from a job with an annual salary of $60,000, who then was unemployed for one year, at which point he or she found a position with an annual salary of $90,000. The trial was held three years after the illegal discharge. In the aggregate, the plaintiff’s interim earnings for the three-year post-discharge period were $180,000 ($180,000 x 2), the same amount of compensation that the plaintiff would have earned had he remained with the defendant employer. Thus, under the aggregate method, defendant would have no back pay liability, even though the plaintiff lost $60,000 while unemployed for the year following the discharge. Using the periodic mitigation method, however, the plaintiff’s acceptance of a more favorable job stops the accrual of further back pay damages and does not act to eliminate those already suffered while he or she was unemployed. As the Tenth Circuit in Godinet wrote, quoting the trial court, “While the aggregate endorsed by defendant seeks equity in the long run, such an approach fails to adequately satisfy the very real and concrete period [of] injuries sustained by plaintiff.”\textsuperscript{40}
iminish the back pay award for the year of unemployment that the plaintiff suffered.

What if a terminated plaintiff obtains a lower paying job, and supplements his or her income by working extensive overtime or holding a second job – should these supplemental earnings be subtracted from the back pay award? The leading case is out of the Seventh Circuit, Chesser v. State of Illinois. The court held that interim earnings from a “moonlighting” job may be deducted from the back pay award only if the plaintiff would have been unable to hold the second job while working for the defendant employer. In that case, the Seventh Circuit determined that the plaintiff-police officer would have been unable to hold her moonlighting jobs simultaneously with the state trooper position (the job which she had been illegally denied), and therefore, the earnings from the supplemental jobs are deductible. The same analysis applies to overtime: overtime compensation may be subtracted from back pay as long as the plaintiff would not have earned such compensation while employed by the defendant employer.

There remains some controversy as to whether benefits that a plaintiff receives sources other than and collateral to the employer may be deducted from a damages award. Under the collateral source rule, funds unrelated to the conduct at issue and received from third parties are not counted as mitigating earnings. Under the collateral source rule, “an employer is entitled to no credit for moneys paid to the injured employee by third parties.” Some Circuits strictly apply the collateral source rule to require, as a matter of law, that third party payments, not be subtracted from a back pay award, while others Circuits have left the matter to the discretion of the trial court.
A majority of courts hold that unemployment benefits, disability benefits, workers compensation benefits and pension benefits are collateral and should not be applied to offset the back pay award. Severance payments generally are not considered collateral source benefits and, therefore, are deducted from a back or front pay award.

**Pre-judgment Interest**

Pre-judgment interest may be awarded “as a normal incident” of actions brought under Title VII. As the Third Circuit stated, “the purpose of an award of pre-judgment interest is to reimburse the claimant for the loss of the use of its investment or its funds from the time of the loss until judgment is entered.”

Pre-judgment interest should be awarded in the absence of unusual circumstances favoring its denial. The rate at which pre-judgment interest is to be awarded on federal actions is left to the sound discretion of the trial court. In federal actions where the plaintiff has recovered under both federal and state civil rights statutes, courts will normally apply uniformly a lower federal rate rather than a higher rate available under state law.

In awarding pre-judgment interest federal courts commonly use the average 52-week Treasury bill rate over the period for which interest is due, the same rate utilized by the federal post-judgment interest rate. Alternatively, federal courts apply the Internal Revenue Service (IRS) adjusted prime rate, codified at Section 6621 of the Internal Revenue Code (Code). Interest is compounded annually.

Back pay awards are taxable under the Code. In furtherance of the equal
employment opportunity laws’ “make whole” objective, a district court has discretion to include as part of the back pay award an additional sum to compensate for the increased tax liability that a plaintiff may incur from receiving the damages award as a lump sum rather than over time as annual wages.

Calculating Front Pay

Whereas the calculation of back pay involves ascertaining economic losses already suffered, calculating front pay requires anticipating economic losses to be experienced in the future. The method for calculating front pay can be summarized as follows: project the plaintiff’s likely earnings from the defendant but for the illegal act for the period he or she could reasonably be expected to have worked for the defendant. From that amount subtract the plaintiff’s projected earnings from alternative employment. Finally, reduce the resulting estimated future earnings to a present, lump-sum value.

Projected Future Earnings but for the Discrimination

Projecting a plaintiff’s future earnings at his former job involves many of the same considerations as does calculating back pay, that is, fixing the base salary, placing a value on fringe benefits, and determining the earnings’ annual growth rate. Unlike computing back pay, where the length of time from the illegal conduct to the trial is certain, estimating front pay requires predicting the length of time a plaintiff would have worked for the defendant and will work at alternative employment.

Courts frequently limit the length of time for which front pay may be awarded to three to five years. To predict a plaintiff’s economic fortunes beyond that point is
considered overly speculative. There are, however, no absolute rules, and when warranted, courts stretch out the front-pay period, particularly in cases involving an older worker facing limited job prospects, courts will extend the front pay period.\(^{66}\) In projecting a, courts generally will not base a plaintiff’s age of retirement solely on the plaintiff’s own stated intentions.\(^{67}\) Other factors that courts consider in determining front pay are the length of time employees in similar positions stay at the defendant employer,\(^{68}\) Because predictions as to how long a plaintiff would have remained working for the defendant absent the illegal conduct are unsure, the plaintiff may want to present to the trier of fact several front pay calculations with alternative dates of retirement. The trier of fact can then select the front pay award with the most credible retirement date.

One way to take the guesswork out of estimates of how long a plaintiff will remain in the labor force is by referring to work-life expectancy tables the United States Department of Labor’s Bureau of Labor Statistics.\(^{69}\) The tables give the average work-life expectancy of men and women according to their current age and labor force status, and take into account the likelihood of an individual dying, becoming disabled or voluntarily withdrawing from the labor force. For instance, according to the work-life tables, a 50-year old male with 15 years or more of education is expected to work another 15 years, while a 50-year old woman with less than a high school education is only expected to work another six years.

**Projected Earnings at Alternate Employment**

If the plaintiff has obtained another job by the time of trial, and there is a
reasonable expectation that he or she will continue working there in the foreseeable future, calculating the plaintiff’s projected earnings from the alternate employment is straightforward. The plaintiff’s estimated future earnings from the alternate employment are computed by multiplying the annual earnings, including the value of fringe benefits and salary increases, by the number of years the plaintiff is expected to continue working there.

If by the time of trial the plaintiff has not obtained alternative employment, both parties will need to make plausible predictions about the likelihood of the plaintiff’s future re-employment. The plaintiff’s counsel can be expected to argue, with persuasive force when the plaintiff is an older worker, that the plaintiff’s heretofore unsuccessful job search demonstrates that the chances of future re-employment are negligible. The defendant’s counsel will likely counter that with reasonable efforts, the plaintiff should have found a job already or can be expected to do so shortly.

One resource available to both plaintiffs and defendants to take predictions about future re-employment out of the realm of guesswork is the Displaced Workers Survey, published biennially by the DOL’s Bureau of Labor Statistics. The Survey analyzes — by age group, education, class of worker, occupation, length of tenure on the job, and earnings level — the re-employment status of workers who have lost their jobs of three or more years for reasons such as plant closings, corporate restructuring, and other major economic events. The Survey indicates the percentage of displaced workers who become re-employed within three years and their earnings relative to those of their former jobs.
Among the relevant findings in the 2000 Survey is that nearly 75% of long-tenured workers who became displaced during the past three years were re-employed by February 2000. Re-employment rates, however, were much lower for older workers, ages 55 to 64 (56%) and 65 and older (26%). Table 7 of the survey reveals that almost 80% of displaced professionals became re-employed within three years, and of those who returned to full-time work, 22% were earning 20% or more below the earnings of their lost jobs.

Either party may challenge the applicability of the Survey to the case at hand by arguing: 1) the plaintiff does not fit the definition of “displaced worker” and therefore the Survey is inapplicable; 2) even if the plaintiff can be considered a “displaced worker,” the Survey provides statistical data that fail to take into account the circumstances relating to the plaintiff and the termination; and 3) the plaintiff’s experience in finding work up to the time of trial is a better indicator of his or her future success in obtaining re-employment than are the generalized data of the Survey.

Reduction to Present Value

A plaintiff’s future economic damages are calculated by subtracting the income stream that the plaintiff is expected to earn from alternate employment from the income stream that the plaintiff would have earned while employed by the defendant but for the illegal conduct. Because the plaintiff is being compensated today for damages that will occur in the future, it is necessary to determine how much those future losses are worth today, that is, the “present value” of those future losses.

The term time value of money refers to the fact that a dollar received today is
worth more than the right to receive a dollar in the future. Because one can earn interest on one’s money, a dollar invested today will be worth more in the future. How much that dollar grows depends upon the rate you can earn by investing. For instance, if someone invested $1,000 in a savings account that pays annual interest of 10%, after one year the investment would total $1,100. If the entire $1,100 is left in the bank, by the second year the individual will have earned $110 ($1,100 x .10) in interest, for a total of $1,210 ($1,100 + 110). After five years that $1,000, left untouched in the bank and earning 10% interest, would have grown to $1,610.50.

“Discounting,” or “reducing,” for present value is the reverse of calculating future value. Instead of calculating how much $1,000 will be worth in five years, one computes how much $1,000 five years from now is worth today. The formula for determining the present value of $1 to be received \( t \) years into the future at a discount rate of \( r \) is: \( PV = \frac{1}{(1 + r)^t} \). Under the formula, the amount one must invest at 10% interest to yield $1,000 in five years is $620.90 ($1,000 x1/(1 + .10)^5. Thus, $620.90 is the present, or discounted, value of $1,000 to be received in five years at a discount rate of 10%. When reducing to present value a stream of income over a period years, the formula must be applied to each year separately.

**The Discount Rate** The higher the discount rate, the lower the present value. Thus, with a discount rate of 15% (i.e., one invests the money in an instrument with a 15% interest rate), the present value of that same $1,000 to be received in five years is only $497.20. By the same token, a lower discount rate yields a higher present value. For example, with a 5% discount rate, the present value of the $1,000 to be received in five
years is $783.50. The further into the future the money is to be received, the lower the present value. For $1,000 to be received in ten years, with a discount rate of 10%, the present value is $385.50. Clearly, the present value of future earnings varies substantially depending on the discount rate used and the length of the payout.

There is general agreement among the courts that in discounting, or reducing, lost future wages to present value, the discount rate that is used should be based on the rate of interest that would be earned on “the best and safest investments.” Commonly, the average yield of Treasury bills or other government bonds will be used as the discount rate.

**Inflation Effect on Present Value**

One complication in calculating the present value of future economic losses is the impact of inflation on the calculation. Inflation has an impact on both the discount rate used to calculate present value and the growth rate of the plaintiff’s future earnings. Interest rates, and in turn, discount rates, are calibrated to take into account the anticipated rate of inflation. Because of inflation, money received in five years is worth less than the same amount of money received today. Discounting reflects the devaluation of today’s money in the future because of inflation. As for an employee’s future earnings, they will increase because of his or her increasing experience and skills and because of general wage inflation.

Is the impact of inflation in devaluing future earnings offset by the fact wage inflation will increase the total amount of the future earnings? Courts have grappled with that question and have taken one of three approaches when considering the impact
of inflation on future damages.\textsuperscript{78} The first technique, the “total offset” method, assumes that the market rate return on investment is totally offset by future wage inflation, making unnecessary any reduction to present value of future losses.\textsuperscript{79}

The second approach, the “reduced-market discount rate” method, presumes that market interest rates include two components: an estimate of future inflation and a “real” rate of return on investment. Historically, the inflation-cleansed “real” rate of return on investment is between 1-3%; the remainder of the interest rate is due to inflation. When future inflation is eliminated as a factor in both the market interest rate and the lost wages estimate, what remains is the “real” interest rate.\textsuperscript{80} For example, if for the next five years inflation is anticipated to average 5% a year, and the market rate of interest is 7%, the “real” or “reduced market rate” of interest is 2%. Under the “reduced market rate” approach, the discount rate should be set at between one and three percent.\textsuperscript{81} A widely accepted method of calculating the reduced market rate is to subtract the average annual change in the Consumer Price Index over a period of years from the interest rate on government bonds held during the same period.\textsuperscript{82}

The third approach is to discount future losses by the full market interest rate. This approach is appropriate when a plaintiff’s lost future earnings have been augmented to take wage inflation into account: the discount rate must reflect the full market rate and not be reduced below market value.\textsuperscript{83} With respect to computing the present value of future pension benefits, since the amount of the yearly pension benefits is fixed, and does not increase because of inflation, the discount rate should reflect the full market rate of return and not the lower “real” rate of return.\textsuperscript{84}
In an attempt at making more concrete the above discussion on calculating economic damages, consider the following hypothetical case. The plaintiff is a male civil engineer of South Asian race and Indian national origin. For 29 years, until 1999, he worked for a municipality as an engineer. Throughout his employment with the municipality, the plaintiff was repeatedly passed over for promotions to managerial positions. By 1997, plaintiff was earning $55,000 a year, with 3% annual pay raises. That year, he again was denied a promotion to manager, a position having an annual salary range of $65,000 to $85,000. The person eventually hired for the job was paid $75,000 per year. Plaintiff filed a charge of discrimination with the Equal Employment Opportunity Commission (EEOC) challenging the denial of the 1997 promotion.

The plaintiff alleged that management harassed him after he filed his complaint, so much so that in 1999 he quit, claiming that he was constructively discharged. At the time of the termination of his employment in 1999, the plaintiff had an annual salary of $58,350 ($55,000 per year as of 1997 plus 3% increases for two years) and was entitled to health insurance coverage. After his termination, the plaintiff did not incur out-of-pocket costs for health insurance since he received medical coverage through his wife’s employer.

At the time of the termination of his employment the plaintiff, was 59 years old. He received a pension from the municipality. The formula for determining the yearly pension benefit is $2% \times \text{Final Average Salary} \times \text{Years of Service}$. The plaintiff did not work after the termination of his employment despite making efforts to find a job. The
trial was held in 2001.

**Plaintiff’s Expert’s Assessment of Economic Loss**

**Lost Earnings from Failure to Promote**

The plaintiff’s expert measured the plaintiff’s salary losses arising from the denial of the promotion by comparing the plaintiff’s actual salary, $55,000, with the salary awarded the successful candidate for the manager job, $75,000. Accordingly, the expert concluded that the plaintiff suffered a loss of $20,000 a year. When the 3% yearly increases are factored in, the plaintiff’s salary losses for the two-year period prior to his termination totaled $40,600 ($20,000 from 1997 to 1998; $20,600 from 1998 to 1999).

**Lost Earnings from Constructive Discharge**

Rather than dividing the plaintiff’s economic loss into past or pre-trial damages, and future or post-trial damages, the plaintiff’s expert made a single calculation for lost earnings arising from non-promotion and constructive discharge. In making this calculation, the expert needed to determine how long into the future to project the plaintiff’s losses. To do so, the expert had to predict the number of years the plaintiff would have continued working at the municipality but for his constructive discharge. The expert assumed that, if not for the employment discrimination, the plaintiff would have remained fully and continuously employed at the municipality until the end of his work-life expectancy.

To ascertain the plaintiff’s work-life expectancy, the expert relied upon U.S. Department of Labor’s (DOL’s) work-life expectancy tables. According to the DOL
tables, the plaintiff’s work-life expectancy as of the termination of his employment in 1999 was eight years, or, until 2007, at which time he would be 67 years old.

The expert then computed the earnings that the plaintiff would have received from 1999, the date of his constructive discharge, until 2007, his projected retirement date. The expert measured the plaintiff’s projected earnings loss on the basis of the salary of the individual who was hired for the manager’s position, $75,000, rather than the plaintiff’s $55,000 actual salary. The expert assumed that absent unlawful discrimination, the plaintiff would have been promoted to manager and received the same salary as that of the successful candidate.

Assuming a 1997 base salary of $75,000, and compounding 3% annual increases, the expert determined that the plaintiff would have earned $79,567 in 1999, when he was constructively discharged; $84,413 in 2001 when the trial took place; and $100,792 in 2007, at the end of his work-life expectancy. Informed by the plaintiff’s two-year unsuccessful job search, the expert assumed that he would remain unemployed through retirement. Therefore, the expert did not deduct from the plaintiff’s projected wages any compensation from alternate employment or mitigation.

With this data in hand – base salary, work-life expectancy and mitigation – the expert was capable of projecting a future earnings stream for the plaintiff. The only further task was to reduce the future earnings to present value, which required the expert to determine an appropriate discount rate. The plaintiff’s expert used a full market rate discount rate of 6% to reduce the future wage loss to present value. The expert determined that the full market discount rate was appropriate because future
annual salary increases of 3% were already included in the projection of the plaintiff’s future earnings loss. Where, as here, future wage inflation was factored into the future earnings loss estimate, the higher full market rate was warranted. Had the calculation of the plaintiff’s future earnings loss eliminated wage inflation as a factor, then the below-market discount rate would have been correct.

The plaintiff’s expert’s estimate of the plaintiff’s lost earnings for the period 1997 to 2007, for which the years 2002-2007 are reduced to present value, is set forward in column 3 of Plaintiff’s Table I below (Present Value of Economic Loss from Promotion Denial and Constructive Discharge).

**Loss of Health Benefits**

The expert valued the plaintiff’s lost health insurance on the basis of its replacement costs. According to the plaintiff’s 1999 COBRA notice, the premium for individual health insurance coverage cost $300 a month or $3,600 a year. In calculating the loss of future medical coverage, the plaintiff’s expert assumed that health insurance premiums would increase at an annual rate of 6% – a figure derived from changes in the Consumer Price Index for medical care services during the past decade. The expert used the average yield on U.S. Treasury bonds with a 10-year maturity in 2001 to derive a full-market discount rate of 6%. Because the annual increases in premium costs and the discount rate offset one another, the expert fixed an annual cost of $3,600 through 1997.

The present value of the plaintiff’s lost health insurance benefits is shown in column 4 of Plaintiff’s Table I.
Loss of Pension Benefits

To calculate the plaintiff’s pension loss, the expert applied the formula of 2% x Final Average Salary x Years of Service. Relying on the proposition that the plaintiff would have continued working at the municipality through the end of his work-life expectancy in 2007, the expert set the plaintiff’s years of service at 37 and his final average salary, after computing the 3% annual salary increases, at $100,792.

Thus the expert made the following calculation to derive plaintiff’s yearly pension benefit: .02 x $100,792 x 37 yrs. = $74,586. Assuming a 2007 retirement date, the plaintiff would begin receiving this sum in 2008. The actuarial table revealed that the plaintiff’s life expectancy was 79 years old. Accordingly, the plaintiff would receive, annually, $74,586 until 2019. The expert reduced this future income stream to present value, using a full market discount rate of 6%, since the yearly pension benefit was fixed and could not increase with inflation. The present value of the plaintiff’s lost pension benefits is shown at column 5 of Plaintiff’s Table I.

Net Present Value of Overall Losses

Table 1 summarizes the plaintiff’s expert’s conclusions. The expert calculated each year’s net losses by adding the present value of the plaintiff’s yearly salary loss, health benefits loss, and pension loss, and then subtracting the present value of the yearly pension benefit that the plaintiff actually received upon his retirement in 1999. The plaintiff’s expert concluded that the present value of the plaintiff’s economic losses is $751,134.

To better understand the data appearing in Plaintiff’s Table I, consider the
economic loss calculations made for the years 2004 and 2012. In 2004, the plaintiff would have been 64 years old, and, according to the plaintiff’s expert’s governing assumption, still working for the municipality and earning a salary of $92,239 a year. Since 2004 is three years into the future from when the expert prepared the economic loss estimate, the expert computed the present value of $92,239 to be received three years in the future, with a 6% discount rate.

Plugging 2004’s numbers into the formula for determining the present value derives the following value:

$$\frac{92,239}{(1.06)^3} = 77,445$$ (column 3).

To that sum, the expert added the present value of the health benefits the plaintiff had forfeited, $3600 (column 4).

The plaintiff’s premature retirement also meant, however, that he would receive his pension benefits earlier than he otherwise would have. Thus, the plaintiff’s 2004 salary and health insurance losses are partially offset by the pension benefit that the plaintiff actually would receive that year thanks to his 1999 retirement (column 6). Using the pension benefit formula set forth above, the plaintiff’s actual yearly pension benefit was: .02 x $58,350 (final average salary in 1999) x 29 (years of service) = $33,843. The present value of $33,843 in pension benefits received in three years with a 6% discount rate was $28,415. When $28,415 was subtracted from $81,045, the present value of the plaintiff’s 2004 losses came to $52,630 (column 7).

In 2012 the plaintiff would be 72 years old, and according to his expert, five years into receiving his pension. His projected yearly pension benefits, based upon a final
average salary of $100,792 and 37 years of service, was $74,586. Since 2012 was 11 years into the future from the trial, the expert calculated the present value of $74,586 to be received in 11 years as $39,291. The present value of the pension benefit that the plaintiff actually would receive pension in 2012 was only $17,828. (The actual pension was so much smaller than the projected pension benefit because the final average salary and years of service are much smaller than their equivalents in the calculation of the projected pension benefit.) The present value of the plaintiff’s net earnings loss in 2012 was, therefore, the difference between the present values of his projected pension benefit and actual pension benefit, or $21,463.

PLAINTIFF’S TABLE I

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Defendant’s Expert’s Assessment of Economic Loss

Lost Earnings from Failure to Promote

The defendant’s expert relied on a personnel policy, *verbally* articulated by the municipality’s director of administration, that upon receiving a promotion an employee was not necessarily entitled to a salary increase; and in any event, the maximum salary increase would have been the largest of either 10% of the previous job’s salary (which in this case would be $60,500) or the minimum of the title’s salary range ($65,000). Therefore, according to defendant’s expert, the plaintiff’s lost salary for the two years (1997-98 and 1998-99), arising from the failure to promote is $0 (assuming no salary increase) or, at most (assuming an increase to $65,000 per year), $20,300 ([$65,000 - $55,000] with 3% annual increases for two years).
The defendant’s expert conceded that the non-promotion also reduced the amount of pension benefit the plaintiff could have expected to receive. According to the defendant’s expert’s own calculations, had the plaintiff received the promotion, his final average salary would have been $68,960, compared to his actual final average salary of $58,350. The differential in final average salary, in turn, would have altered the plaintiff’s pension benefits. Whereas the plaintiff’s actual pension benefit was $33,843, his projected benefit according to defendant’s expert’s analysis, would have risen to $39,997.

Lost Earnings from Constructive Discharge

The defendant’s expert disagreed with most of the assumptions made by the plaintiff’s expert. Specifically, the defendant’s expert contested the assumptions that 1) the plaintiff’s projected base annual salary should have been the same as that paid to the successful candidate for the manager’s job; 2) the plaintiff’s mitigation was $0; and 3) the plaintiff would not retire until he turned 67. The defendant’s expert did agree with the use of a 6% full market discount rate.

As to the plaintiff’s projected base annual salary in 1999, the defendant’s expert fixed it at his actual salary, $58,350, rather than the $75,000 salary the plaintiff claimed that he would have received with a promotion. The expert’s rationale was that the plaintiff would not have resigned, or been constructively discharged, had he been promoted to manager, and that the only reason he did resign was the denial of the promotion.

With respect to mitigation, defendant’s expert relied on the DOL’s Bureau of
Labor Statistics’ Displaced Workers Survey ([Cpsinfo@bls.gov](mailto:Cpsinfo@bls.gov)) to estimate how long it should have taken the plaintiff to find work and the level of compensation for the replacement work. According to the 1998 edition of the Survey, professionals in their 50’s who were displaced from their jobs found re-employment after approximately six months, at which time they earn approximately 80% of their pre-termination salary. (The expert ignored the Survey’s less favorable findings, in particular, the great difficulty older workers encountered in finding re-employment at comparable wages.) Therefore, the expert concluded that after six months of unemployment, resulting in an earnings loss of $29,175 ($58,350 ÷ 2), the plaintiff thereafter would have lost annually 20% of his 1999 salary of $58,350, or $11,670.

As to the duration of front pay, defendant’s expert set the plaintiff’s probable retirement age at 62, based upon the fact that at 62 he would have been eligible for early retirement Social Security benefits. In addition, the expert pointed to data reported in a retirement history longitudinal survey showing that the career job for two-thirds of those surveyed ended at age 62.

**Loss of Health Benefits**

Because the plaintiff suffered no out-of-pocket damages arising from the loss of health benefits (after his discharge, he was covered by his wife’s health insurance policy), the expert concluded that he had $0 damages in this category.

**Loss of Pension Benefits**

The defendant’s expert, using the same pension benefit formula, determined the loss in pension benefits by comparing the plaintiff’s actual and projected pension
benefits. The plaintiff’s actual pension benefit as of his 1999 retirement, based on 29 years of service and a final annual salary of $58,350, was $33,843. The defendant’s expert reduced the yearly benefit for the period 1999 through 2019 (the end of his life expectancy), to present value, as shown in Defendant’s Table 2, column 5.

The plaintiff’s pension benefit as of his projected 2002 retirement date, the year he turned 62, was computed as $40,806. The calculation was based upon a projected 32 years of service and final average salary of $63,760 ($58,350 plus 3% annual increases for 3 years). The defendant’s expert then computed the present value of the receipt of $40,806 annually for the period 2002 through 2019. (Defendant’s Table 2, column 4). Like the plaintiff’s expert, the defendant’s expert used a 6% discount rate.

**Net Present Value of Overall Losses**

The defendant’s expert concluded that the present value of the plaintiff’s economic losses arising from the failure to promote was $105,390 and the present value of his economic loss due to the constructive discharge was $70,008.

To help elucidate how the defendant’s expert reached her results, consider the calculations she made in Defendant’s Table 2 (Present Value of Economic Loss from Alleged Constructive Discharge) for the years 1999, 2001 and 2012. In 1999, the first year of the plaintiff’s termination, he was unemployed for half the year, creating an economic loss of $29,175 (column 3). However, that same year, the plaintiff began receiving his pension, which totaled $33,843 (column 5). Therefore, according to the defendant’s expert, the plaintiff’s discharge unexpectedly caused him to come out ahead for the year, by $4,669.
The defendant’s expert’s calculation showed the plaintiff doing even better in 2001. As noted, the expert predicted that in 2001 the plaintiff would make 80% of his pre-termination salary in mitigation. That accounted for the $11,670 (20% of the plaintiff’s 1999 salary) loss found in column 3. The present value of the plaintiff’s 2001 pension benefit was $28,415 (column 5). Therefore, in 2001, the plaintiff had a net gain, reduced to present value, of $15,586.

In 2012, the plaintiff loss of earnings consisted of the difference between the present value of his projected pension benefit – assuming he had retired at age 62, with 32 years of service, earning $63,760 – and the present value of his actual pension benefit that he received after having retired in 1999. The plaintiff’s yearly pension benefits with 32 years of service and a final salary of $63,760 would have been $40,806 a year compared to his actual benefit of $33,843. The present value of the plaintiff’s projected $40,806 a year pension benefit, received in 2012, 13 years in the future, would have been $20,287 (column 4), whereas the present value of his actual pension benefit that year would have been $14,969 (column 5).

**DEFENDANT’S TABLE I**

**Present Value of Economic Loss from Alleged Failure to Promote**

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<tr>
<th>Year</th>
<th>Age</th>
<th>Earnings Loss</th>
<th>Projected Pension</th>
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**DEFENDANT'S TABLE II**

*Present Value of Economic Loss from Alleged Constructive Discharge*

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**Conclusion**

Clearly, the two experts reached wildly disparate results in assessing the economic damages of the hypothetical civil engineer. Underlying their disagreement are the assumptions they made, some of which are vulnerable to attack as unrealistic.

First of all, the plaintiff’s expert’s assumption that had the plaintiff been promoted
to manager he would have received a salary increase of $20,000 – that is, to $75,000, the same amount earned by the successful candidate – is questionable. In setting the plaintiff’s hypothetical base salary at $75,000, the expert ignored the plaintiff’s salary history, and accepted the dubious proposition that a municipality would give the civil servant a 28% raise.

Even more questionable is the plaintiff’s expert’s assumption that the plaintiff would have been earning a salary commensurate with the managerial position at the time of his constructive discharge. Such an assumption is inconsistent with the plaintiff’s claim that his employment with the municipality became intolerable, in large part, because he was barred from entering the managerial ranks. It would not be credible to propose that, if in 1999 the plaintiff had achieved his goal and been promoted with a 28% raise, he nonetheless would have resigned under duress. The plaintiff’s expert’s decision to use a $75,000 base salary had important implications for the results of the economic loss assessment. Not only did the $75,000 base salary inflate the plaintiff’s salary loss, it significantly raised his final average salary, which in turn increased his yearly pension benefit.

As for the defendant’s expert’s suppositions, perhaps most doubtful are the conclusions about mitigation. The defendant’s expert opined that the plaintiff should have returned to work within six months of the termination of his employment, and thereafter earned 80% of the salary he was made with the municipality. Of course, facts at the time of trial flatly contradicted this opinion. As of 2001, the plaintiff had been unemployed for two years. At a minimum, the municipality would have had to
demonstrate that the plaintiff’s mitigation efforts were unreasonable in order for its expert’s testimony to be credible.

The format used by defendant’s expert to present the economic losses is also problematic. Unlike the plaintiff’s expert, the defendant’s expert did not make a single evaluation of the plaintiff’s net economic loss. Instead, the defendant’s expert made two separate evaluations: 1) economic losses resulting from the alleged failure to promote, and 2) economic losses resulting from the alleged constructive discharge. By not aggregating the plaintiff’s economic losses, the expert limited the trier of fact to choosing between two smaller damages estimates.

Moreover, with respect to defendant’s Table I, setting forth the plaintiff’s losses arising from the failure to promote, the expert assumed that the plaintiff would have retired in 1999 notwithstanding his receiving the promotion. It is highly improbable that the plaintiff would have resigned the same year he received a long sought-after promotion – even if the resulting salary increase was $10,000 rather than the $20,000 he thought he deserved.

The experts’ diametrically opposed conclusions are proof enough that calculating a plaintiff’s economic losses in an employment case is far from an exact science. As shown here, it is the experts’ nontechnical assumptions and logical leaps, not sophisticated economic methods and concepts, that largely dictate the results.

1. See EEOC v. Delight Wholesale Co., 765 F. Supp. 583, 587-88 (W.D. Mo. 1991), aff’d, 973 F.2d 664 (8th Cir. 1992). (“A court should calculate the amount of money the claimant could have reasonably earned if the discrimination had not occurred. The
figure should include the base pay, raises, and bonuses or benefits the claimant would have reasonably expected to earn.

2.2 166 F.3d 139 (3rd Cir. 1999).

3. Id. at 156.

4. See, e.g., Stratton v. Dep't for the Aging for the City of New York, 132 F.3d 869, 881 (2d Cir. 1997) (holding that the lower court did not err in basing damages on the salary of the successful candidate).


6. See Rhodes v. Guiberson Oil Tools, 82 F.3d 615, 620 (5th Cir. 1996) (upholding the finding that plaintiff would have received a 5% salary increase had he not been terminated based on plaintiff's testimony that the employer previously had given him annual increases of at least that amount); Bass v. Tanoue, 2001 U.S. Dist. LEXIS 21870 (D.D.C. 2001) (relying on the prevailing plaintiff's past performance ratings to award her back pay as if she had continued to earn "outstanding" performance appraisals)

7. See, e.g., Paolitto v. John Brown E.&C., Inc., 151 F.3d 60, 66-67 (2d Cir. 1998); McMillan v. Massachusetts Soc'y for the Prevention of Cruelty to Animals, 140 F.3d 288, 305 (1st Cir. 1998), cert. denied, 525 U.S. 1104 (1999); Kim v. Nash Finch Co., 123 F.3d 1046, 1064-65 (8th Cir. 1997); Walker v. Dalton, 89 F. Supp.2d 20, 26-28 (D.D.C. 2000) (where the prevailing plaintiff claimed that he would have worked additional overtime had he been promoted to supervisor, the court directed that the selectee's overtime hours be used as a benchmark, unless it is shown that the selectee failed to take reasonable advantage of overtime, in which case, the average number of overtime hours of all the supervisors would be used).

8. See Kirsch v. Fleet Street, Ltd., 148 F.3d 149, 166 (2d Cir. 1998) ("Evidence of the salaries paid to other individuals may be relevant to [a damages award] calculation, but only insofar as the plaintiff lays a specific foundation to permit the reasonable inference that his salary would have matched or been pegged to the salaries of others.

10. See, e.g., Masinter v. Tenneco Oil Co., 867 F.2d 892 (5th Cir. 1989) (finding that evidence about the economic conditions in the oil industry was relevant for determining future losses).


14. See Masinter v. Tenneco Co., 929 F.2d 191, 193 (5th Cir. 1991) (finding expert’s future wage loss calculation speculative where he assumed that plaintiff would work at job uninterruptedly and failed to take into account that the employer underwent a massive layoff).

15. See Banks v. The Travelers Cos., 180 F.3d 358, 363 (2d Cir. 1999); Criado v. IBM Corp., 145 F.3d 437, 445 (1st Cir. 1998); Menchaca v. Am. Med. Response of Ill., Inc., 2002 U.S. Dist. LEXIS 405 (N.D. Ill. 2002); Walker, 89 F. Supp. 2d at 25 (holding that the defendant could not extinguish its back pay liability by eliminating the position which it had discriminatorily denied the plaintiff without having offered the plaintiff one of the still existing substantially similar jobs).


19. See McMillan, 140 F.3d at 305.

20. See Sharkey v. Lasmo (AUL Ltd.), 214 F.3d 371, 375 (2d Cir. 2000); Banks, 180 F.3d at 365.


25. cf. Rhodes, 82 F.3d at 623 (upholding denial of claim for loss of use of an automobile where plaintiff failed to offer evidence of replacement expenses).

26. See Gaworski v. ITT Commercial Fin. Corp., 17 F.3d at 1111 holding that life and disability insurance expenses were properly added to the back-pay award where the plaintiff presented canceled checks showing his insurance premium payments); McMillan, 140 F.3d at 305; Pearce v. Carrier Corp., 966 F.2d 958 (5th Cir. 1992) (holding that ADEA claimant was limited to recovery of actual expenses incurred either to purchase replacement health insurance or to pay for actual medical expenses); Kossman, 800 F.2d at 703-04 (same); Erie County Retirees Ass’n v. County of Erie, 166 F. Supp.2d 310 (W.D. Pa. 2001); but see Blackwell v. Sun Elec. Corp., 696 F.2d 1176, 1185 (6th Cir. 1983) (not requiring proof that plaintiff purchased substitute coverage or incurred out-of-pocket expenses).

27. See, e.g., Stratton, 132 F.3d at 882 (holding that it was permissible for the lower court to accept plaintiff’s "rule of thumb" that the value of fringe benefits is 35% of salary where plaintiff was personally engaged in hiring employees and managing their salaries); Kelly v. Matlack, 903 F.2d 978,985 (3d Cir. 1990) (30%); Watson v. Cotter, 2002 U.S. Dist. LEXIS 16743 *27 n.5 (N.D. Ill. 2002) (20%).


31. See Scully v. US WATS, Inc., 238 F.3d 497, 512 (3d Cir. 2001) (“Given the myriad of factors that might arise in each case, we doubt that any single universal
damage theory could properly value stock options in all situations"); Neiman-Marcus Group, Inc. v. Dworkin, 919 F.2d 368, 370 (5th Cir. 1990) (observing that stock options "elude precise valuation," yet refusing to set aside jury’s award of $790,000 in front pay representing lost stock options and bonuses).


34. 238 F.3d 497 (3rd Cir. 2001).

35. Id. at 512.


37. See 42 U.S.C. § 20003-5(g)(1) (Title VII) ("Interim earnings or amounts earnable with reasonable diligence by the person or persons discriminated against shall operate to reduce the back pay otherwise allowable.").


41. 895 F.2d 330, 338 (7th Cir. 1990).

42. The Eighth Circuit applied the same analysis made in Chesser, upholding the district court’s refusal to deduct moonlighting income from a back pay award because plaintiff could have earned the moonlighting income even if he had remained employed with the defendant employer. Gaworski, 17 F.3d at 1112-13.


45. Salitros v. Chrysler Corp., 306 F.3d 562, 573 (8th Cir. 2002).

46. Lussier v. Runyon, 50.3d 1103, 1107-10 (1st Cir. 1995) (surveying Circuit court rulings on appropriate standard of review to apply regarding the offsetting of collateral benefits).; Craig v. Y & Y Snacks, Inc., 721 F.2d 77, 81-85 (3d Cir. 1983); Brown v. A.J. Gerrard Mfg. Co., 715 F.2d 1549, 1550-51 (11th Cir. 1983) (en banc); EEOC v. Ford Motor Co., 638 F.2d 951, 952 (4th Cir. 1982); but see Naton v. Bank of California, 649 F.2d 691, 700 (9th Cir. 1981) (holding that the district court had discretion to deduct collateral benefits from an ADEA back pay award).

47. Thurman v. Yellow Freight Systems, Inc., 90 F.3d 1160, 1171 (6th Cir. 1996) (no offset); Gaworski v. ITT Commercial Finance Corp., 17 F.3d at 1112 and n. 7 (8th Cir. 1994); Kauffman v. Sidereal Corp., 695 F.2d 343 (9th Cir. 1982); Dailey v. Societe Generale, 108 F.3d 451, 460 (2nd Cir. 1997) (holding that trial court did not abuse discretion in refusing to offset unemployment benefits)

48. Quint v. A.E. Staley Mfg. Co., 172 F.3d 1, 16-18 (1st Cir. ____)
   Hamlin v. Charter Twp. of Flint, 165 F.3d 426, 435-36 (6th Cir. 1999) (no offset); Arenson v. Callahan, 128 F.3d 1243, 1247-48 (8th Cir. 1997) (same)

49. Thurman, 90 F.3d at 1171 (6th Cir. 1996) (no offset); Salitros, 306 F.3d at 573 (same); but see McLean v. Runyon, 222 F.3d 1150, 1156-57 (9th Cir. 2000)


52. See Rhodes, 82 F.3d at 623; but see Local Joint Exec. Bd. of Culinary /Bartender Trust Fund v. Las Vegas Sands, Inc., 244 F.3d 1152 (9th Cir.), cert. denied, 2001 U.S. 9795 (2001) (holding that because severance payments were obligatory under the collective bargaining agreement, severance payments are not deducted from back pay award in WARN Act case); Ciarlante v. Brown & Williamson Tobacco Corp., 143 F.3d 139 (3d Cir. 1998) (refusing to deduct severance from a back pay award because it was deemed an earned benefit that the employer was already obligated to pay).


56. See Conway v. Electro Switch Corp., 825 F.2d 593, 602 (1st Cir. 1987).

57. See, e.g., id., McIntosh v. Irving Trust Co., 873 F. Supp. 872, 882-83 (S.D.N.Y. 1995); but see Gelof v. Papineau, 829 F.2d 452 (3d Cir. 1987) (holding that the district court did not abuse its discretion in selecting the Delaware pre-judgment interest rate which is 5% more than the Federal Reserve discount rate); Proffitt v. Veneman, 2002 U.S. Dist. LEXIS 21906 *6 (W.D. Va. 2002) (applying 9% Virginia statutory rate in Title VII action).


60. See Saulpaugh, 4 F.3d at 145.

61. See Burke, 504 U.S. at 242.


64. Front pay has been defined as “money awarded for lost compensation during the period between judgment and reinstatement or in lieu of reinstatement.” Pollard v. E.I. du Pont de Nemours & Co., 532 U.S. 843, 846 (2001)

65. See, e.g., Gu v. Hughes Stx Corp., 127 F. Supp.2d 751, 761 (Md. 2001) (reducing front pay award from 15-year period requested by 55-year-old plaintiff to four years given the defendant’s tenuous funding and her own exceptional qualifications); Prine v. Sioux City Comm’ty Sch., 95 F. Supp.2d 1005, 1011-14 (N.D. Ia. 2000) (awarding 48-year-old victim of sexual harassment an award of three years’ full-time front pay and an additional three years’ part-time front pay award on grounds that three years allows plaintiff a reasonable amount of time to recover from the harassment-induced post-traumatic stress disorder, at which time she should be able to re-enter the work force on a part-time basis).

66. See, e.g., Tyler v. Bethlehem Steel Corp., 958 F.2d 1176, 1189 (2d Cir. 1992) (upholding 17-year front pay award to age discrimination victim); Newhouse v. McCormick & Co., Inc., 910 F. Supp. 1451, 1457 n. 6 (D. Neb. 1996) (finding that a jury could reasonably believe that a vigorous-appearing 63-year-old man who loved his work and had no plans to retire would have worked to age 70).

67. Cf. Pierce v. Atchison, Topeka and Santa Fe Ry. Co., 65 F.3d 562, 574 (7th Cir. 1995) (upholding a 10-year award of front pay where the lower court relied on more than just the plaintiff’s stated intention to work until age 65, including the fact that he would have received reduced pension benefits with an earlier retirement date).


70. (Cpsinfo@bls.gov).


73. See Oliveri v. Delta S.S. Lines, Inc., 849 F.2d 742, 746 (2d Cir. 1988).
74. Financial calculators and software programs compute present value, and present value tables are also available.


76. Interest rates also take into account non-inflationary productivity increases in the economy.

77. See O'Shea v. Riverway Towing Co., 677 F.2d 1194, 1199 (7th Cir. 1982).

78. See Jones & Laughlin, 462 U.S. at 540-47 (surveying courts’ different methodologies).

79. See, e.g., Kasper v. St. Mary of Nazareth Hosp., 135 F.3d 1170, 1177 (7th Cir. 1998) (approving computation where both inflation and discounting ignored); Stratton, 132 F.3d 869 (discounting to present value is not required where the district court did not factor future salary increases into front pay award); Jackson v. City of Cookeville, 31 F.3d 1354, 1360-61 (6th Cir. 1994); Kaczkowski v. Bolubasz, 491 Pa. 561, 421 A.2d 1027 (1980); Beaulieu v. Elliott, 434 P.2d 665 (Alaska 1967).


81. See, e.g., Ramirez v. New York City Off-Track Betting Corp., 112 F.3d 38 (2d Cir. 1997) (approving 2% discount rate unless litigants prove otherwise); Rhodes v. Guiberson Oil Tools, 82 F.3d 615 (5th Cir. 1996) (holding that a discount rate between 1-3% will not be reversed so long as the trial court explains its choice); O'Shea v. Riverway Towing Co., 677 F.2d 1194, 1200 (7th Cir. 1982).


83. See Ramirez, 112 F.3d at 42.

84. See Rhodes, 82 F.3d at 622.


86. See Ramirez v. New York City Off-Track Betting Corp., 112 F.2d 38, 42 (2d Cir. 1997).

87. Id.

88. See Rhodes v. Guiberson Oil Tools, 82 F.3d 615, 622 (5th Cir. 1996).