

ACTUARIAL RESEARCH CLEARING HOUSE  
1990 VOL. 1  
DISTRIBUTION OF PENSION BENEFITS ON DIVORCE:  
SOME UNRESOLVED ACTUARIAL ISSUES

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**ABSTRACT**

The authors have been involved with the development of an economically unbiased model for the distribution of pension benefits in divorce. While the research is not completed, it was felt that some of their findings and insights might be of interest to the actuarial community. In view of this, the purpose of this article is to: (1) present the findings of the authors with respect to their review of major court cases and (2) to identify major actuarial issues which are as yet unresolved.

# DISTRIBUTION OF PENSION BENEFITS ON DIVORCE: SOME UNRESOLVED ACTUARIAL ISSUES

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## INTRODUCTION

Virtually all states treat pension benefits earned during marriage as marital property<sup>1</sup> subject to division by the court on divorce.<sup>2</sup> It is not surprising, therefore, that significant increases in the number of divorces and in the value of pension benefits should result in increased litigation and commentary in the area.<sup>3</sup> The courts generally recognize that pension benefits are the "most significant marital assets owned by the couple,"<sup>4</sup> and at least one commentator has suggested that this activity in part has resulted in or from more sophisticated family law practitioners.<sup>5</sup> In any event, one of the most important issues

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<sup>1</sup>The term "marital property" as used in this article refers to property distributed on divorce in community property, common law and equitable distribution states. Most states have adopted either by case or statutory law the doctrine of equitable distribution which gives courts in divorce actions the right to distribute marital property in a "just," "fair," or "equitable" manner. For a analysis of property distribution by state see Freed and Foster, "Family Law in the Fifty States: An Overview," 16 FAM. L.Q. 289 (1983).

<sup>2</sup>See generally Blumberg, "Marital Property Treatment Of Pensions, Disability Pay, Workers' Compensation, And Other Wage Substitutes: An Insurance, Or Replacement, Analysis," 33 UCLA L. REV. 1250, 1253 (1986) and Annot., 94 A.L.R. 3d 176,180 (1979).

<sup>3</sup>See Wright, "Valuing Pensions Within Marriage Dissolution Actions: A Call For A standard Presumption Of Retirement Age," 9 HAMILNE L. REV. 431 (1986) and Comment, "An Interdisciplinary Analysis Of The Division Of Pension Benefits In Divorce And Post-Judgment Partition Actions: Cures For The Inequities In Berry v. Berry," 37 BAYLOR L. REV. 107 n. 3,4 (1985).

<sup>4</sup>See, for example, Bloomer v. Bloomer, 267 N.W. 2d 235, 238 (Wis. 1978), Koelsch v. Koelsch, 713 p. 2d 1234,1239 (Ariz. 1986), Cearley v. Cearley, 544 S.W. 2d 661 (Tex. 1976) and id. Comment.

<sup>5</sup>Wright, supra note 3. It is obvious that as the stakes rise higher in the marital property pension game, client representation will become more sophisticated.

that has not been consistently resolved is that of valuing pension benefits for purposes of distribution on divorce.

The complexity of the pension valuation issue is well documented in numerous court opinions. It has been invariably described as being "complex,"<sup>6</sup> "difficult, ...imprecise,"<sup>7</sup> and "speculative."<sup>8</sup> As a result, courts generally agree that the opinion of experts, typically actuaries, is preferable, if not required, for them to reach an equitable result.<sup>9</sup>

Although the courts generally "decline to impose rigid rules and leave the doing of equity to the trial courts"<sup>10</sup> in the divorce area of pension valuation, it is clear that there should be some degree of equity, consistency and uniformity, preferably among all jurisdictions.<sup>11</sup> Ideally, there should be an economically unbiased model that can be used by the courts as a basis for setting guidelines.

From an actuarial perspective, the first step in developing an economically unbiased model is to review the positions that the courts have taken, and to organize them within an actuarial framework. This step is imperative, since an actuarial solution derived without regard for the opinions of the courts is likely to contain serious legal flaws. Having done this, the next step is to identify the actuarial issues of pension plan valuation that remain unresolved. The final step is to formulate actuarial models and techniques to help resolve these issues.

The authors have been involved with a study of this nature as a part of their ongoing research. While the research is not completed, it was felt that some of their findings and insights might be of interest to the actuarial community, and, hence, this article. In view of this, the purpose of this article is to: (1) present the findings of the authors with respect to their review

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<sup>6</sup> Rosenberg v. Rosenberg, 497 A. 2d 485, 496-97 (Md. App. 1985).

<sup>7</sup> Holbrook v. Holbrook, 309 N.W. 2d 343, 347 (Wis. App. 1981). See also Ohm v. Ohm, 431 A. 2d 1371, 1371 (Md. App. 1981).

<sup>8</sup> Corliss v. Corliss, 320 N.W. 2d 219, 221 (Wis. App. 1982).

<sup>9</sup> For example, in Wisniewski v. Wisniewski, 437 N.E. 2d 1300, 1306 (Ill. App. 3d 1982) the court stated that "(w)hile the possibility that expert testimony may not be necessary to properly value a pension ..., we believe it the better view that such valuation should be supported by expert testimony." Some jurisdictions are more emphatic. Arizona, for example, implies that expert testimony is mandatory. See Miller v. Miller, 683 P. 2d 319, 322 (Ariz. App. 1984).

<sup>10</sup> Diffenderfer v. Diffenderfer, 491 So. 2d 265, 270 (Fla. 1986).

<sup>11</sup> In Bednar v. Bednar, 474 A. 2d 17, 19 (N.J. Super. A.D. 1984) the court urged the use of a common evaluation date for all marital assets and noted that "[t]here is no absolutely iron-clad rule for determining the date of evaluation but use of a consistent date is preferable...."

of major court cases and (2) to identify major actuarial issues which are as yet unresolved.

### GENERAL STATEMENT OF THE PROBLEM

In general, the problem of equitable distribution is one of proportioning the property of the marriage, at some assignment date, in an economically unbiased fashion. The essence of the problem may be formalized in the following manner. Given some assignment date,<sup>12</sup> let:

$V_i$  = economic value of marital property  $i$

$V = \sum V_i$

$a_{ij}$  = proportion of property  $i$  assigned to spouse  $j$ .

Then, disregarding the expenses associated with divorce<sup>13</sup> and assuming the assignment date is given, the problem becomes one of assigning:

$$\sum_i a_{ij} V_i, \quad j = 1, 2$$

such that

$$\sum_i a_{i1} V_i = k \cdot \sum_i a_{i2} V_i, \quad k \geq 0$$

and

$$V = \sum_i a_{i1} V_i + \sum_i a_{i2} V_i.$$

The proportion of the total property assigned to a given spouse need not be fixed, but often it is. Thus, for example, in community property states, such as California, an additional absolute constraint would be that each spouse is assigned one-half ( $k=1$ ) of the total economic value of the marital property.

The foregoing represents a general statement of the problem. In practice, the primary marital property usually consists of pension benefits and a house. Moreover, it is not uncommon for the employee spouse to retain the pension benefits and for the

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<sup>12</sup>In this formulation, the date of assignment is taken as given. In practice, since the date of assignment is a principal determinant of property values, it is a critical factor, and, as such, is often a major point in the litigation.

<sup>13</sup>The expenses associated with a divorce include such things as attorney's fees, expert witness fees, and so on. The formulation is easily extended to incorporate this type of slippage.

nonemployee spouse to retain the house, with the balance of the assets distributed in such a way as to provide an equitable distribution.

### THE MODEL BEFORE THE COURTS

One of the first observation, from an actuarial perspective, has to do with the model usually relied upon by the courts. Since  $V_i$  is a random variable, an economically unbiased model generally would require that

$$\Pr\left[\left|\sum_i a_{i1} V_i - k \cdot \sum_i a_{i2} V_i\right| \geq \delta\right] \leq \epsilon$$

This fact, notwithstanding, the courts have invariably relied on expected value models which merely require that

$$\sum_i a_{i1} E(V_i) = k \cdot \sum_i a_{i2} E(V_i)$$

The impetus for expected value models is their simplicity. However, it is interesting to note that a number of "actuarial experts" are biased towards them.<sup>14</sup>

Moreover, in some instances, since attorneys tend to think in terms of future lifetime, some court decisions have relied on models based on a period certain equal to expected future lifetime. These models have well documented shortcomings.<sup>15</sup>

### METHODS OF DIVIDING PENSION BENEFITS AS MARITAL PROPERTY

Two standard methods of dividing pension benefits on divorce are the present value method and the reserved jurisdiction method.<sup>16</sup> A third method, called a "qualified" domestic relations order (QDRO),<sup>17</sup> became available in 1985 under the Retirement Equity Act of 1984.

#### Present Value Method

The present value method has been variously referred to by the

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<sup>14</sup> See, for example, Projector's discussion, pp. 345-6, of McCrory, "Mortality Risk in Life Annuities," *ISA XXXVI*, pp. 309-338.

<sup>15</sup> See, for example, Lowrie, Luckner, and Projector, "The Expectancy Discrepancy", *PCAPP*, Vol. 33, 1983-84, pp. 577-603.

<sup>16</sup> See Troyan, "Pension Evaluation and Equitable Distribution," 10 *FAM. L. REP. (BNA)* 3001, 3006 (1983), Skoloff, "How to Evaluate and Distribute Employee Benefits in Divorce," *NAT'L L.J.* 25, 26 (Feb. 13, 1984) and Wright, *supra* note 3 at 431 for a general explanation of each method.

<sup>17</sup> I.R.C. Sec. 414 (p) (1984).

courts as the "present cash value method," the "cash out method,"<sup>18</sup> the "immediate offset distribution method"<sup>19</sup> and the "lump sum method."<sup>20</sup> But no matter how it is labeled, the effect is the same. The present value of the employee spouse's pension benefits is determined. The employee spouse receives these benefits which are offset by the distribution of other marital property to the nonemployee spouse.<sup>21</sup>

The present value method is preferred by most courts.<sup>22</sup> Its greatest virtue being that it effects an immediate and final settlement of pension benefits.<sup>23</sup> The problem with the method is its inherent computational difficulties. Moreover, the method tends to be impracticable where the parties do not possess enough assets to offset the pension benefit award.

### Reserved Jurisdiction

The reserved jurisdiction method, similar to the present cash value method, has been given a number of different names or designations including "deferred distribution,"<sup>24</sup> "pay as it comes in system,"<sup>25</sup> and "wait and see approach."<sup>26</sup> But similar to the present cash value method, all the different names and designations essentially mean the same thing, that pension benefits are not divided until they enter pay status. This method, therefore, does not require computation of the present value of the pension benefits<sup>27</sup> with its inherent difficulties. It has the added advantage of spreading the risk between the divorcing spouses if the pension benefits have not yet vested.<sup>28</sup>

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<sup>18</sup> Bergman v. Bergman, 214 Cal. Rptr. 661, 664 (1985).

<sup>19</sup> Flynn v. Flynn, 491 A. 2d 156, 161 (Pa. Super. 1985).

<sup>20</sup> Koelsch, 713 P. 2d at 1234.

<sup>21</sup> See Braderman v. Braderman, 488 A. 2d 613, 619 (Pa. Super. 1985). The terminology used by the Pennsylvania Superior Court to describe the present cash value method in the Braderman case was "immediate offset."

<sup>22</sup> Troyan, supra note 16, at 3006.

<sup>23</sup> See id. at 3006 and Braderman, 488 A. 2d 613, 620 (Pa. Super. 1985).

<sup>24</sup> Flynn, 491 A. 2d at 161.

<sup>25</sup> Ohm v. Ohm, 431 A. 2d 1371, 1380 (Md. App. 1981).

<sup>26</sup> Haun v. Haun, 677 S.W. 2d 927, 930 (Mo. App. 1984).

<sup>27</sup> See Braderman, 488 A. 2d 613, 619 (Pa. Super. 1985).

<sup>28</sup> Shill v. Shill, 599 P. 2d 1004, 1008 (Idaho 1979).

The primary disadvantage of the reserved jurisdiction method is that contact must be established and maintained between the nonemployee spouse and the pension plan administrator. This "forces parties who desire to dissolve their relationship by divorce to deal with each other, and deferred distribution continues to burden the court."<sup>29</sup> In addition, if the nonemployee spouse predeceases the employee spouse, the latter will receive a windfall if he/she resumes "full right to the benefit entitlements."<sup>30</sup>

#### **Qualified Domestic Relations Order (QDRO)**

The Retirement Equity Act of 1984 helped to reconcile the nonassignment of vested benefits and state law preemption by requiring pension plans to follow qualified domestic relations orders.<sup>31</sup>

The Internal Revenue Code defines a "qualified domestic relations order" as a judgment or decree of a state court "which creates or recognizes the existence of an alternative payee's right to, or assigns to an alternate payee the right to, receive all or a portion of the benefits payable with respect to a participant under the plan."<sup>32</sup> In a divorce situation, an "alternative payee" is a nonemployee spouse.

In general, the earliest a nonemployee spouse can receive payment under a domestic relations order is the time when the employee reaches the earliest retirement age which is defined as the earlier of (i) the date on which the employee is entitled to a distribution under the plan, or (ii) the later of (I) the date the employee reaches age 50, or (II) the earliest date on which the employee could begin receiving benefits under the plan if separated from service.<sup>33</sup>

The QDRO combines advantages of both the present value and reserved jurisdiction methods in that it does not require further court administration (this task is assumed by the employee spouse's pension plan administrator) and a present value calculation is not required. Other advantages exist for both parties. For the employee spouse, payments made from the plan are taxed for income

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<sup>29</sup> F.Lynn, 491 A. 2d at 165.

<sup>30</sup> F.Lynn, 491 A. 2d at 165.

<sup>31</sup> Spencer's research reports on employee benefits, p. 112.04.-1 (12-87).

<sup>32</sup> I.R.C. Sec. 414 (p)(1)(A).

<sup>33</sup> I.R.C. Sec. 414 (p)(4)(B).

tax purposes to the nonemployee spouse.<sup>34</sup> For the nonemployee spouse, as noted above, payment can begin before the actual retirement of the employee spouse.

#### THE PENSION BENEFITS PAYABLE TO THE NONEMPLOYEE SPOUSE

The pension benefits payable to the nonemployee spouse is given by the general formula:<sup>35</sup>

$$\left[ \begin{array}{c} \text{Non-EE} \\ \text{Spouse's} \\ \text{Portion} \end{array} \right] \times \left[ \frac{\text{Time Married Under Plan}}{\text{Time Employed Under Plan}} \right] \times \left[ \begin{array}{c} \text{Value of} \\ \text{Pension} \\ \text{Benefits} \end{array} \right]$$

The first term (the nonemployee spouse's portion) is often taken to be one-half. In community property states,<sup>36</sup> property is divided equally without regard to any equitable factors such as length of marriage or size of individual estates. Hence, one-half is an absolute amount in community property states. But the majority of jurisdictions take equitable factors into account; therefore, one-half may not be an absolute amount. However, with respect to pensions, equitable jurisdiction courts appear to apply one-half to pensions as a specific asset.

The coverture fraction, the second term of this formulation, controls the fractional division or apportionment of pension plan benefits. The numerator of the fraction is the number of months married under the plan; the denominator of the fraction is the number of months employed under the plan. It is here where problems often arise.

The last term of the formula relates to valuation of the pension plan benefits and is the topic of the next section.

The courts recognize the importance of the interaction of the last two terms of the general formula. For example, the Texas Court of Appeals in May v. May<sup>37</sup> concluded that the dates at which these two variables should be calculated is the central question.<sup>38</sup> Both the courts and commentators have noted that the use of date of divorce or retirement in the denominator of the coverture

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<sup>34</sup> Wright, *supra* note 3, at 442.

<sup>35</sup> See Comment, "An Interdisciplinary Analysis of the Division of Pension Benefits In Divorce and Post-Judgment Partition Actions: Cures for the Inequities in Berry v. Berry," 37 Baylor L. Rev. 106, 136 (1985).

<sup>36</sup> The community property states are Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas and Washington.

<sup>37</sup> 716 S.W. 2d 705 (Tex. App. - Corpus Christi (1986)).

<sup>38</sup> *Id.* at 707.



fraction can produce substantially different results.<sup>39</sup> Of course, this is common knowledge among actuaries.

The function of the apportionment fraction, the court have reasoned, is to shield the employee spouse's premarriage and postdivorce earnings from the nonemployee spouse. This lead the May court to conclude, for example, that "where the parties are divorced after employee spouse has retired or terminated employment under the plan ... [and] apportionment is the only issue,"<sup>40</sup> the date of retirement is more appropriate for the denominator of the coverture fraction.

It can be argued that postmarriage pension benefits should not be **totally** shielded from the nonemployee spouse. A commentator who analyzed Berry v. Berry,<sup>41</sup> the case relied upon by May, expressed concern that the choice of divorce date could lead to an injustice to both the employee and nonemployee spouse. It may be unfair to the employee spouse to permit the nonemployee spouse to "partition pension interests which **were not** subject to division at divorce (for example nonvested pension benefits in certain jurisdictions), yet **were** influential in a trial court's "just and right" division of the community."<sup>42</sup> It may be unfair to the nonemployee spouse because it may unfairly jeopardize that spouse's "true interest in the future benefit at the date of divorce. The fact that both spouses own interests in a **future** benefit should be emphasized."<sup>43</sup> The latter observation is particularly appropriate because, for a least a decade, courts have recognized that pension benefits represent a form of deferred compensation for services rendered which are derived from an employment contract. They are not mere expectancies. Rather, they are a choice in action, a contractual property right subject to division as marital property.<sup>44</sup>

The fractional division or apportionment issue remains a source of confusion. Most courts that have considered the pension benefits distribution problem do not describe how they arrive at valuation let alone differentiate between fractional division and valuation. The assumption, therefore, is that if a specific date is selected for valuation, the same date also applies for

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<sup>39</sup> See for example Comment, supra note 35, at 145 n. 198 where the commentator hypothetically calculated monthly benefits using date of retirement and divorce as \$195.65 and \$562.50 respectively.

<sup>40</sup> id. at 710.

<sup>41</sup> 647 S.W. 2d 945 (Tex. 1983).

<sup>42</sup> Comment, supra note 35, at 146.

<sup>43</sup> Comment, supra note 35, at 153.

<sup>44</sup> See In re Marriage of Brown, 126 Cal. Rptr. 633, 544 P. 2d 561 (1976).

apportionment. However, in Koelsch v. Koelsch,<sup>45</sup> the Arizona Supreme Court, in a case of first impression relating to a matured pension plan,<sup>46</sup> used mixed dates in the general formula. The pension's maturation date was used for valuation. The "date of dissolution" was used in the denominator of the apportionment fraction. The court reasoned that by taking this approach, "we avoid the problem of dividing the fruits of separate labor."<sup>47</sup> To complicate the issue, a number of courts that have dealt with the valuation issue have suggested other possible dates including the dates of separation and trial which will be discussed in the following section.

### THE PARAMETERS OF THE VALUATION

The determination of the appropriate present value<sup>48</sup> presents a major obstacle to the realization of an equitable division. The standard method consists of two steps: first, determine its future value expressed as a lump-sum at the retirement age; and second, apply discount factors to calculate the present cash value of this sum at the valuation age.<sup>49</sup> The equations are straightforward and follow from the observations that the present value (PV) is:

$$\tilde{P}V_r = B_r \cdot \tilde{a}_{u|}$$

and

$$\tilde{P}V_t = v_t B_r \tilde{a}_{u|}$$

respectively, where  $U$  is the random variable future lifetime at the retirement age  $r$ , given the current attained age  $x$ ,  $B_r$  is the annual retirement benefit at age  $r$ ,  $T$  is the random variable future active lifetime, and a tilde over a factor denotes a random variable.

In addition to date selection issues inherent in both steps of the present value calculation (date of retirement applicable to the first step and date of valuation applicable to the second

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<sup>45</sup>713 P. 2d 1234 (Ariz. 1986).

<sup>46</sup>A matured pension is one in which the employee has an unconditional right to immediate payment prior to divorce. See Ohm, 431 A. 2d 1371, 1372 (1981).

<sup>47</sup>Koelsch, 713 P. 2d. at 1242.

<sup>48</sup>There is general agreement among the courts that present value is the proper test. See Kis v. Kis, 639 P. 2d 1151 (1982).

<sup>49</sup>In re Marriage of Pilant, 709 P. 2d 1241, 1245 (1985).

step),<sup>50</sup> there is the overriding question of dealing appropriately with the numerous variables that affect the discount rate in calculating the present value of pension benefits. They generally include mortality, interest, inflation, disability, probability of continued employment, taxes and probability of vesting.<sup>51</sup> There is no consistent manner in which the courts deal with these variables other than to recognize their existence. They may deal with them individually, in combinations, or stipulate to the rate,<sup>52</sup> all of which provides little guidance for subsequent cases. It is clear that without relevant evidence pertaining to present values, a trial court may not be in a position of making an equitable distribution of pension benefits.<sup>53</sup>

### The Retirement Age

On dissolution of a marriage, it is usually impossible for a courts to determine the exact date at which the employee spouse will retire.<sup>54</sup> It seems clear that the employee may retire at an economically optimal date. That is, a rational employee may choose to retire at age,  $r_0+n$ , where  $r_0$  is the earliest retirement age, and  $n$  is chosen so as to maximize the present value of the future earnings and pension benefits. Before taxes, this will be equal to:

$$\int_0^n (ES)_t v^t {}_t p_{r_0} dt + \int_n^{\infty} B_t v^t {}_t p_{r_0} dt$$

Selection of the wrong retirement date by the court can produce gross inequities. If the court assumes a retirement date that substantially precedes the actual retirement date, the value of the pension benefits will be "artificially high" resulting in a windfall to the nonemployee spouse.<sup>55</sup> Conversely, if the court assumes a retirement date that substantially succeeds the actual retirement date, the value of the pension benefits will be

<sup>50</sup> See supra text accompanying note 37.

<sup>51</sup> When reaching the valuation issue, courts typically recognize the "[v]arious actuarial calculations are used to discount the present value of the retirement plan to reflect contingencies affecting the eventual payout, including discounts for mortality, interest, probability of vesting, and probability of continued employment." *Johnson v. Johnson*, 638 P. 2d 705, 709 (Ariz. 1981).

<sup>52</sup> For example, in *Rimmele v. Rimmele*, 429 N.E. 2d 879 (Ill. App. 1981), the only variable considered was interest. The parties stipulated to present values at discount rates ranging from 5 percent to 12 percent. The court settled on 8 percent.

<sup>53</sup> See, for example, *Disher v. Disher*, 397 N.E. 2d 488 (Ill. App. 1979).

<sup>54</sup> Troyan, "What's Wrong With the 'Accrued Benefit' Method of Valuing Pensions Upon Divorce," *FAIRSHARE* (Vol. 4, No. 4, April 1984) p. 11.

<sup>55</sup> Wright, supra note 3, at 432.

"artificially low" resulting a windfall to the employee spouse.<sup>56</sup>

To resolve this problem, one commentator suggests using the date on which the employee has an "unqualified right to retire."<sup>57</sup> Although recognizing that the "Normal Retirement point or some point between the initial maturity point and Normal Retirement Age" as possibilities, he urged "use of the initial maturity point on the basis of equity, uniformity and a desire to prevent advocates from putting a wide variety of numbers before the court."<sup>58</sup> This approach, however, can clearly be biased against the employee spouse. This would be the case, for example, in public plans, where participants have the option of retiring once they become vested, particularly where early retirement benefits are subsidized.

#### **Date Of Valuation<sup>59</sup>**

It is obvious that the date of valuation is a primary determinant of the value of the benefits. Despite this fact, the date of valuation required by the courts has not be uniform. The date of divorce, or some variation thereof, and the date of separation represent the two relative extremes in this regard.

**Date Of Divorce.** Some variation of the date of divorce appears to be used by the majority of courts in valuing pension benefits on divorce. However, even within the same jurisdiction there is not agreement among the decisions. For example, in DiPietro v. DiPietro,<sup>60</sup> the New Jersey Superior Court purported to follow the general rule that the valuation date is the date the complaint for divorce was filed.<sup>61</sup> But in Bednar v. Bednar,<sup>62</sup> the same court stated "[t]here is no absolutely iron-clad rule for determining the date of evaluation but use of a consistent date is preferable, such as filing of complaint, (citations omitted) or perhaps the time of the hearing, depending on nature of asset and any compelling equitable considerations."<sup>63</sup>

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<sup>56</sup>Wright, supra note 3, at 432.

<sup>57</sup>Troyan, supra note 54 at 11.

<sup>58</sup>Troyan, supra note 54, at 11.

<sup>59</sup>See Annot., 34 A.L.R. 4th 63 (1984) for a summary of the various views taken by courts with respect to valuation date of marital assets on divorce.

<sup>60</sup>475 A. 2d 82 (N.J. Super. 1984).

<sup>61</sup>Id. at 85.

<sup>62</sup>474, A. 2d. 82 (N.J. Super. 1984).

<sup>63</sup>Id. at 19.

To compound the question relating to trial date, courts have been faced with the question, on remand, of whether the original trial date should apply or the subsequent trial date after remand. A California Court of Appeal concluded that while normally the trial date prevails, it may also be the remand date after appeal.<sup>64</sup> In any event, the court should consider equitable factors in determining which date to apply.<sup>65</sup>

**Date of Separation.**<sup>66</sup> Although it appears that date of separation is not widely used by the courts for valuation purposes on divorce,<sup>67</sup> a California Court of Appeal in re Marriage of Behrens<sup>68</sup> concluded that date of separation was appropriate. The court reasoned that post-separation increases in pension benefits were a form of compensation and should be regarded as the employee spouse's separate property.<sup>69</sup> In Sergi v. Sergi,<sup>70</sup> the Pennsylvania Superior Court used date of trial. But with respect to date of separation, the court suggested that its use is appropriate in situations where there is "unbridled consumption" of marital property between separation and trial dates.<sup>71</sup> Furthermore, the court stated, "to require a trial court to value property as of the date of separation may ... result in the use of stale financial data and subsequent inequitable distribution of marital property."<sup>72</sup> The court also considered the possibility of using the date of the equitable distribution hearing because it could provide the court with "the most recent information available."<sup>73</sup> But in concluding that the date of trial was the most appropriate valuation date, the

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<sup>64</sup> In re Marriage of Hayden, 177 Cal. Rptr. 183 (1981).

<sup>65</sup> Id. at 183 n. 17.

<sup>66</sup> The specific time when separation occurs has not been uniformly agreed upon by the courts. Some courts, for example, may require a well-defined physical separation of the parties, i.e. a leaving of the personal residence. Other courts may base it upon intent. For purposes of this article, the period when separation begins is when all cohabitation ceases to exist.

<sup>67</sup> This is based upon the approximately one-hundred cases read in preparing this article.

<sup>68</sup> 187 Cal. Rptr. 200 (1982). See contra In re Marriage of Marsden, 181 Cal. Rptr. 910 (1982). For an excellent discussion and analysis of In re Marriage of Behrens, see Note, "Distribution Of Pension Benefits In Marital Dissolutions: Determining The Time Of Valuation Of The Community Interest," 24 SANTA CLARA L. REV. 999 (1984).

<sup>69</sup> Id. at 209.

<sup>70</sup> 506 A. 2d 928 (1986). In accord, see also DeMasi v. DeMasi, 530 A. 2d 871 (Pa. Super. 1987).

<sup>71</sup> Id. at 931.

<sup>72</sup> Id. at 931.

<sup>73</sup> Id. at 932. In two previous cases, King v. King, 481 A. 2d 913 (1984) and Braderman v. Braderman, 488 A. 2d 613 (1985) the Pennsylvania Superior Court used the date of hearing.

court adopted a neutral posture similar to Bednar. "[W]e do not attempt at this time to establish a valuation to be used in every situation. To recognize a specific valuation date as a matter of law would deprive the trial court of the necessary discretion required to effectuate economic justice."<sup>74</sup>

One commentator agreed that flexibility should be maintained in the selection of a date to value pension benefits on divorce, but at the same time guidelines must be established to provide a basis for selecting.<sup>75</sup> As a guideline, he suggested that when post-separation increases in pension benefits are due to personal factors such as merit raises (to the extent they can be distinguished from inflation increases), the date of separation should apply in which case the employee spouse benefits. Conversely, when post-separation increases are due to non-personal factors such as longevity and cost-of-living raises, the date of trial should apply so that the nonemployee spouse may share in the gain.<sup>76</sup>

### **Mortality and Interest**

Mortality and interest are the most common discount variables when determining the present cash value of pension benefits on divorce. The courts generally seem to accept a wide range of discount rates. For example, in one case,<sup>77</sup> the parties stipulated discount rates ranging from 5 percent to 12 percent. The court elected to use 8 percent which was not overturned on appeal. In another case,<sup>78</sup> the court concluded that the trial court's use of a 5 percent discount rate did not abuse its discretion.

The Arizona Supreme Court also described the conditions under which mortality should be taken into account and the table that should be used in determining value. "If the right to be paid under the plan is contingent upon the employee's surviving to a certain age, the calculation of present value must take into account the probability that the employee will attain that age, based on standard mortality tables and on the employee's physical condition."<sup>79</sup> The Supreme Court in Washington urges the its lower courts to use "actuarial tables of "average expectancy of life" ...

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<sup>74</sup> Id.

<sup>75</sup> Note, supra note 68, at 1017-18.

<sup>76</sup> Id. at 1015.

<sup>77</sup> Rimmele v. Rimmele, 429 N.E. 2d 879 (Ill. App. 1981).

<sup>78</sup> Bouchard v. Bouchard, 321 N.W. 2d 330 (Wis. App. 1982).

<sup>79</sup> Id. at note. 7.

computed and maintained by the Insurance Commissioner."<sup>80</sup> If statutory mortality tables are not used, other evidence is generally acceptable by the courts; however, it must be more accurate than the statutory tables, the best evidence being the testimony of an expert.<sup>81</sup>

An early "expert" suggested that by utilizing Pension Benefit Guaranty Corporation (PBGC) interest and mortality tables, much of the confusion surrounding present value computations could be avoided.<sup>82</sup> Furthermore, he noted that their use requires minimal training and permits a speedy and accurate calculation of a pension's present value. There has been general support for this concept. So much so, that now it has become almost standard procedure.

The most notable characteristic of the PBGC rates is that the interest rates vary with duration. The general form for the expected discounted annuity purchase rate is:

$$\prod_{k=1}^K [1+i_k]^{-n_k} \cdot r-x P_x \cdot APR(r)$$

where  $i_k$  is the interest rate earned for  $n_k$  years of the deferral period, and the total deferral period is  $r-x$  years. For PBGC purposes,  $K=3$ , and the maximum values for the  $n$ 's are  $n_1=7$ ,  $n_2=8$ , and  $n_3=r-x-n_1-n_2$ .

### Inflation

In a recent case of first impression,<sup>83</sup> the Pennsylvania Superior Court concluded that use of an inflation factor to determine the present value of pension benefits on divorce is appropriate only when the pension plan itself provides for an inflation adjustment. It allows the nonemployee spouse to share in this aspect of the benefit plan. Conversely, when the pension plan does not provide for an inflation adjustment it is inappropriate to include an inflation factor. The reason is that protection against inflation is not part of the benefit package being valued.<sup>84</sup> The Pennsylvania Superior Court followed an earlier

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<sup>80</sup> *Pilant v. Pilant*, 709 P. 2d 1241, 1246 (Wash. App. 1985).

<sup>81</sup> See *Boyd v. Boyd*, 323 N.W. 2d 553, 556 n.2 (1982).

<sup>82</sup> Skoloff, *supra* note 16, at 26.

<sup>83</sup> See *Lowry v. Lowry*, 544 A. 2d 972 (Pa. Super. 1988).

<sup>84</sup> *Id.* at 983-84.

New Jersey Superior Court decision<sup>85</sup> which applied the "total offset method." According to this method, an estimated inflation rate is subtracted from the discount rate, the net rate being used to compute present value.<sup>86</sup> "Exactitude," the court observed, "is a virtue, the benefit of which may be easily lost by an excessive amount of time and expense utilized in trying to accomplish it."<sup>87</sup>

**Taxes**

The impact of taxes on pension benefit is captured in the equations:

$$a_r^* = \sum_{s=0}^{\infty} v_s^* \cdot p_x B_s^*$$

where:

$$v_s^* = \prod_{k=1}^s [1+i_k \cdot (1-t_k')]^{-1}$$

and

$$B_s^* = B_s (1-t_s)$$

Here,  $t$  denotes the taxes paid on the retirement benefit and  $t'$  denotes the taxes paid on the investment income. As indicated, the present value of the tax adjusted annuity at the retirement age  $r$ ,  $a_r^*$ , is derived from a tax-adjusted discount factor,  $v_s^*$ , and a tax-adjusted periodic retirement payment,  $B_s^*$ .

Taxation has attracted the attention of the courts and generated healthy discussion. For example, in Simpson v. Simpson,<sup>88</sup> the employee spouse argued that the face value of his pension plans should be reduced by his current federal income tax rates since such taxes would be payable when the money was withdraw from the account at some future date. The nonemployee spouse countered by arguing that in fact the employee's tax rate may be lower when the monies are withdrawn and that this is a major reason for contributing to the pension plan in the first place.<sup>89</sup> The court agree with the nonemployee spouse. "These assets have a prima facie value equal to their face value in the absence of proper evidence of a reasonable deduction for the future tax liability."<sup>90</sup>

<sup>85</sup> Di Pietro v. Di Pietro, 443 A. 2d 244 N.J. Super. (1982).

<sup>86</sup> Id. at 247.

<sup>87</sup> Id.

<sup>88</sup> 679 S.W. 2d 39 (Tex. App. 5 Dist 1984).

<sup>89</sup> Id. at 41.

<sup>90</sup> Id. at 42.



In Helland v. Helland,<sup>91</sup> the Minnesota Court of Appeals was in general agreement with Simpson. It is too speculative, the court concluded, to predict the government's tax structure and the employee's financial condition in the future (eleven years in this case).<sup>92</sup> Nevertheless, the court conceded that if the taxable event (distribution from the pension plan) will occur within a short time after dissolution of the marriage, it should consider the tax consequences in computing the present value of pension benefits on divorce.<sup>93</sup>

Conversely, in Corliss v. Corliss,<sup>94</sup> the Wisconsin Court of Appeals reached the opposite conclusion. Admitting that calculation of present value of pension plan is speculative, the court more realistically assumed that future tax rates will "at least equal" present rates. The court reasoned that pension plans are a method of postponing and reducing the impact of income taxes; therefore, calculating the effect of those taxes is important.<sup>95</sup>

Although not dealing directly with tax as a discount variable, an interesting variation of the tax issue occurred in In re Marriage of Rimmele.<sup>96</sup> The employee spouse unilaterally withdrew and spent monies from his pension plan which triggered income tax liability on the amount withdrawn. The court concluded that the pension valuation should not be reduced by the income tax liability because it was the result of an unnecessary unilateral action and the nonemployee spouse did not share in the fruits of the early withdrawal.<sup>97</sup>

#### **Probability of Vesting**

Virtually all courts recognize that vested pension benefits constitute property for purposes of division on dissolution of marriage. However, only during the past two decades have nonvested pensions received the same consideration. Previously, the theory was that nonvested pension rights are not property, but mere expectancies.<sup>98</sup> In 1976, In re Marriage of Brown,<sup>99</sup> the often cited,

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<sup>91</sup> 354 N.W. 2d 591 (Minn. App. 1984).

<sup>92</sup> *Id.* at 593.

<sup>93</sup> *Id.*

<sup>94</sup> 320 N.W. 2d 219 (Wis. App. 1982).

<sup>95</sup> *Id.* at 221.

<sup>96</sup> 429 N.E. 2d 879 (Ill. App. 1981).

<sup>97</sup> *Id.* at 881.

<sup>98</sup> See French v. French, 112 P. 2d 235 (1941).

leading case in the area, overruled that theory. The California Supreme Court reasoned that: "Since pension benefits represent a form of deferred compensation for services rendered, (citations omitted) the employee's right to such benefits is a contractual right, derived from the terms of the employment contract. Since a contractual right is not an expectancy but a chose in action, a form of property ... an employee acquires a property right to pension benefits when he enters upon the performance of his employment contract."<sup>99</sup> The economic and social climate and the legal logic developed in Brown and other cases of treated nonvested pension benefits as marital property, has become the majority rule.

Although some courts have argued that nonvested pension benefits require no different treatment than vested but unmaturred benefits, since both contain contingencies on actual payment,<sup>101</sup> valuing nonvested pensions clearly further complicates the issue.<sup>102</sup> The added complication arises out of the necessity to take into account the probability of vesting. But, as indicated in a number of opinions, this is not regarded as an "insurmountable barrier."<sup>103</sup>

In these cases, the expected vesting (EV) takes the form:

$$EV(x, j, h) = \int_x^r V(y, j, h) {}_{y-x}p_x^{**} \mu_y^{**} dy + V(r, j, h) {}_{r-x}p_x^{**}$$

where z is the larger of the initial vesting age or the current age, x; V(x, j, h) is the vesting at age x under vesting schedule j, given that the participant was hired at age h;  ${}_{y-x}p_x^{**}$  is the probability that a participant aged x will persist as an active participant to age y; and the force of withdrawal operating during the interval of age y to y+dy is  $\mu_y^{**}$ .

The Pennsylvania Superior Court recently addressed the question of which method of distribution of nonvested pension benefits on divorce is better, deferred distribution or immediate offset. The majority concluded that "given the very nature of a non-vested pension benefit (i.e., that it is speculative), deferred

<sup>99</sup> 126 Cal. Rptr. 633, 544 P. 2d 561 (1976).

<sup>100</sup> *Id.* at 633, 44 P. 2d at 561.

<sup>101</sup> *Janssen v. Janssen*, 331 N.W. 2d 752, 756 (Minn. 1983).

<sup>102</sup> As a note writer observed: "In order to encourage settlement and ensure equal treatment under the law, courts must agree on more refined guidelines for determining how and when to distribute, value and allocate pension rights. Such guidelines will become even more essential if unvested factors are added to the already formidable list of calculations." Note, "Vested But Unmatured Pensions As Marital Property: Inherent Valuation, Allocation And Distribution Problems In Equitable Distributions," 14 RUTGERS L. J. 175, 199 (1982).

<sup>103</sup> See for example *Wisniewski v. Wisniewski*, 437 N.E. 2d 1300, 1303 (Ill. App. 1982).

distribution is the preferred method of effectuating economic justice between the parties and insuring a just settlement of property rights."<sup>104</sup> But in a vigorous concurring and dissenting opinion, one member of the court seemed to say that it is unreasonable to conclude that simply because a pension is nonvested, it is too speculative to calculate a valuation. Rather, given the clear advantages of the immediate offset method, the case should be remanded and the lower court should obtain actuarial testimony as to the present value of the pension benefits.<sup>105</sup> Other than general statements concerning its speculative nature and the added difficulty of discounting for nonvested interests, the courts offer little help providing guidelines to deal with nonvested pension benefits.

### CONCLUSION

There are a number of areas where the actuarial procedures and assumptions for the distribution of pension benefits on divorce can be refined or clarified for the courts. Whether the problem is that actuarial methodology and assumptions are preempted, in preference for techniques that require "minimum training", or the actuary is confronted with irreconcilable requests, like single-point estimates where at least two estimates are required, the actuarial perspective needs to be adequately researched and clearly communicated.

This article has identified some of the unresolved actuarial issues. To the extent it promotes further research on this topic, it will have served its purpose.

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<sup>104</sup> Flynn v. Flynn, 491 A. 2d 156, 160 (Pa. Super. 1985).

<sup>105</sup> *Id.* at 162.

