# Transfer or Redemption for a Withdrawing Partner: An Indifference Econometric Decision Model Built on the Position Improvement Equilibrium ("PIE") Concept 

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# TRANSFER OR REDEMPTION FOR A WITHDRAWING PARTNER: AN INDIFFERENCE ECONOMETRIC DECISION MODEL BUILT ON THE POSITION IMPROVEMENT EQUILIBRIUM ('‘PIE’) CONCEPT 

by

Jayprakash G. Patankar*<br>Charles K. Moore**<br>James W. Childs***


#### Abstract

The preferred way for a withdrawing partner to leave a partnership is normally thought to be by way of redemption under Internal Revenue Code Section $736^{1}$ rather than as a transfer under Section 741. ${ }^{2}$ The advantage to the continuing partnership lies in the deductability of the payment to the withdrawing partner for goodwill. The withdrawing partner benefits from a higher exchange price, increased by the tax benefits of redemption treatment. However, the following three factors tilt the preference back toward a 741 transfer for both parties: individual obligation of portions of the exchange price, with additional basis, goodwill negotiations and safeguarding of the optional basis adjustment. To allow for proper consideration of these factors, indifference equations are proposed which produce an exchange price that makes 741 as advantageous to the dominant party as 736 . These equations constitute a dynamic interactive econometric model for finding a position improvement equilibrium ('PIE') indifference model that provides an incisive decision tool. This model takes graduated tax brackets into consideration, heightening its value as a decision tool.


## Introduction

A useful area for a decision model is the partnership from which a partner (" A '") wishes to withdraw. Two means are provided in the law by which such a withdrawal may be accomplished: The transfer under Internal Revenue Code Section 741 (hence ' 741 '"), in which A sells his partnership interest to another

[^0]partner, and the redemption under 736, in which A turns in his interest to the partnership. A will receive his proceeds from other partners, such as continuing partners B and C, if the withdrawal is structured as a 741 transfer; and from the partnership, if structured as a 736 redemption.

In either case it is necessary for the practitioner in advising the client to, at the outset, make the Internal Revenue Code Section 751 calculations (hence " 751 '"); ;' that is, to precisely calculate (1) the unrealized receivables of the partnership and (2) substantially appreciated inventory items which are not capital assets within the tests of 751(c) and 751(d).

## Legislative Background, Court Fights

The United States Congress in 1954 recognized a need to add a comprehensive scheme to the Internal Revenue Code for the taxation of partnerships, now known as Subchapter K of the Internal Revenue Code. ${ }^{4}$ Congress decided that two separate sections would apply to the disposition of partnership interests: 741 and 736. These sections have been retained in the Internal Revenue Code of 1986 in the same form in which they appeared in the Internal Revenue Code of 1954, as amended. While it might appear that one of these sections should be eliminated for sake of simplicity and of partnership treatment, no such move has been mounted in Congress in the past thirty-two years. Much confusion among tax practitioners, judges and partners has arisen as to which section ought to apply.

If the disposition of a partner's interest is treated as a sale under 741, capital gain treatment applies and the partner would only pay a tax based upon his gain (sales price in excess of his basis). ${ }^{5}$ Under current law it makes no immediate difference upon disposition whether the partner has ordinary income or capital gain, for the tax rates are the same. But it has not always been so, and there may be a tax rate differential in the future between long-term capital gains and ordinary income. Under 741 the disposing partner receives capital gain treatment, except as provided in 751. Section 751 assets are unrealized receivables and substantially appreciated inventory items which are treated as ordinary income items, sometimes these are termed 'hot assets." Section 741 treats the sale of a partner's interest from an equity approach much like the sale of a shareholder's interest in a corporation, except for the limitations of 751 , hence the necessity of making the 751 calculation at the outset. Section 751 was placed in the law to close a loophole which would enable a withdrawing partner to convert ordinary income into capital gain through a 741 disposition of a partnership interest.

On the other hand, 736 applies if the partnership interest of a retiring or

[^1]deceased partner is turned back to the partnership. ${ }^{6}$ Section 736(a) treats a disposing partner as if he received payments of distributive shares of income or guaranteed payments, whereas 736 (b) deals with payments received for the property interest. Section 736 (b) requires some adjustments to the value of the disposing partner's interest in partnership assets: 1) The value of the disposing partner's interest in the partnership goodwill cannot be included in the 736 (b) property interest unless there is a partnership agreement that provides for a payment with respect to goodwill. ${ }^{7}$ If the agreement does not so provide, distributions received in respect to goodwill are treated under 736(a) as ordinary income distributions like a distributive share. 2) Payments received for the disposing partner's interest in unrealized receivables and inventory items likewise cannot be included in the property interest. Rather, the payments are classified as ordinary income under 736(a). Under 731, capital gain treatment is given to the partner for any excess of the payments made over the basis of the partnership assets after the 736(b) and 736(a) classification adjustments have occurred.

The tax treatment of the continuing partners (' B ," ' ' C ') is radically different between 741 and 736 . Although neither provision allows a deduction for the amount paid for non-751 assets, under 736 the partners get a deduction via the partnership for the amount paid for 'goodwill'' if the partnership agreement does not contain a goodwill provision. Not so under 741. This goodwill deduction produces the advantage for B and C of 736 over 741 .

Whether 741 or 736 controls in any particular case has been the subject of much litigation. The reason for this is many partners and their advisers do not foresee the results of how a partnership interest will be retired because of lack of foresight as to the disposition of the partnership interest. Many partnership agreements do not even address whether the disposition of an interest will be treated as a sale under 741 or a liquidation under 736.

This litigation can be grouped into three categories:

## The "Responsibility" Category

The United States Tax Court in Champlin v. Commissioner recognized that partners may dictate the consequences of a disposition of a partnership interest in the partnership agreement. ${ }^{8}$ In Champlin the partners failed to provide for the disposition of a partnership interest and the court looked to the responsible party for the payments. Consequently, the taxpayer contended that the payments resulted from the sale of his interest and thus entitled him to capital gain treatment, whereas the IRS

[^2]argued that the payments were the result of a liquidation and were hence ordinary income. The taxpayer asserted 741, the government 736. The court applied a "responsibility" or "obligation" test, determining that 741 involves an agreement between the partners as individuals whereas 736 reflects dealings with the partner and the entity. ${ }^{9}$ Treasury Reg. 1.736-1(a) states that liquidations are executed between the partnership entity and the withdrawing partner. In examining the withdrawal agreement the court found that the partners had signed in their representative capacities and that the remaining partners did not personally obligate themselves to make the payments. The result was a liquidation under 736. This rigid mechanical test for characterization can cause many problems for a partnership adviser. In Champlin, even though the partnership agreement did not provide for the method of the disposition of the partner's interest, the agreement upon withdrawal became important.

## The "Totality of Circumstances" Category

A test which is less rigid than the Champlin analysis is the "totality of the circumstances' ' test.

Foxman v. Commissioner ${ }^{10}$ is often cited for the proposition that substance prevails over form; the "transaction must be viewed as a whole and each stop from the commencement of negotiations to consummation is relevant." This same approach was followed by the United States Tax Court in another case, Paul J. Kelly. ${ }^{11}$ Factors in both cases are set in order of priorities.

The first factor is the withdrawal agreement. If there is no wording effectively indicating a "sale" then such is evidence of a liquidation. Secondly, the sophistication of the partners in tax matters is scrutinized. In Kelly, one of the remaining partners was once manager of the tax department of Price Waterhouse, a national accounting firm, and therefore was held to the explicit language of the withdrawal agreement. Thirdly, the source of the payments is considered: individual partner(s) or partnership. Fourthly, whether the partnership entity is named in the withdrawal agreement. The failure to name the partnership in the withdrawal agreement is considered evidence of a sale. Fifthly, whether the withdrawal agreement explicitly stated that the disposition is to be executed as a liquidation pursuant to 736 or as a sale pursuant to 741 . Kelly results in a marked departure from Champlin because the sole factor in Champlin is only one of several factors in Kelly.

[^3]
## The 'Intention of the Parties'' Category

Often the tax treatment in the statements of the parties will not be consistent. Sloan deals strictly with the intention of the parties. In Sloan ${ }^{12}$ all of the parties reported the payments under 736 even though the partnership did not make the payments. The individuals made the payments. The court found that the intention of the parties was to treat the transaction as a 736 withdrawal; consequently, that intention was given effect even though the regulations under 736 require the entity to make the payment. ${ }^{13}$ Intent could ignore the provisions of the regulations.

General Pie Model

The position improvement equilibrium (PIE) model formulates exchange prices under each code section, 741 and 736 , that equalize and optimize the position of each party in view of the tax intricacies. ${ }^{14}$ The position improvement of withdrawing partner A is measured by his gain less taxes attributable to capital gain and ordinary income. The position improvement of continuing partners $B$ and $C$ is measured by the sum of 1) the extent to which they are able to acquire A's interest below A's original asking price, plus 2) the value of deductions available for the payments for goodwill and unrealized receivables. The model finds the exchange price for each code section that produces an equilibrium in each section of the opposing position improvements. Hence the term "position improvement equilibrium,'' or PIE.

Following are the equations on which the PIE model is built:

For Section 741:

$$
\begin{align*}
& -2 \mathrm{P}_{1}-2 \mathrm{P}_{2}+\mathrm{C} \\
& +\mathrm{R}_{\mathrm{a}} G P_{1}-\mathrm{R}_{\mathrm{a}} \mathrm{GC}+\mathrm{R}_{\mathrm{a}} \mathrm{P}_{2}+\mathrm{R}_{\mathrm{a}} \mathrm{H}_{\mathrm{a}}-\mathrm{R}_{\mathrm{a}} \mathrm{~A}_{\mathrm{a}}+\mathrm{N}_{\mathrm{a}} \\
& -\mathrm{K}_{\mathrm{a}} \mathrm{H}_{\mathrm{a}}+\mathrm{K}_{\mathrm{a}}-\mathrm{L}_{\mathrm{a}} \\
& +\mathrm{E}_{\mathrm{b}} \mathrm{H}_{\mathrm{b}}-\mathrm{D}_{\mathrm{b}} \mathrm{D}_{\mathrm{b}}+\mathrm{F}_{\mathrm{b}} \\
& -\mathrm{R}_{\mathrm{b}} \mathrm{H}_{\mathrm{b}}+\mathrm{R}_{\mathrm{b}} \mathrm{P}_{2} \mathrm{~S}_{\mathrm{b}}+\mathrm{R}_{\mathrm{b}} \mathrm{~A}_{\mathrm{b}}-\mathrm{N}_{\mathrm{b}} \\
& +\mathrm{D}_{\mathrm{c}} \mathrm{H}_{\mathrm{c}}-\mathrm{D}_{\mathrm{c}} \mathrm{D}_{\mathrm{c}}+\mathrm{F}_{\mathrm{c}} \\
& -\mathrm{R}_{\mathrm{c}} \mathrm{H}_{\mathrm{c}}+\mathrm{R}_{\mathrm{c}} \mathrm{P}_{2} \mathrm{~S}_{\mathrm{c}}+\mathrm{R}_{\mathrm{c}} A_{\mathrm{c}}-\mathrm{N}_{\mathrm{c}}+\mathrm{V} \\
\mathrm{P}_{3}= & \left(2-\mathrm{R}_{\mathrm{a}} \mathrm{G}\right) \tag{1}
\end{align*}
$$

[^4]For Section 736:

$$
\begin{align*}
&-2 \mathrm{P}_{1}-2 P_{2}+C \\
&+E_{b} H_{b}-E_{b} D_{b}+F_{b}-R_{b} H_{b}+R_{b} S_{b} P_{2} \\
&+R_{b} A_{b}-N_{b}+E_{c} H_{c}-E_{c} D_{c}+F_{c} \\
&-R_{c} H_{c}+R_{c} S_{c} P_{2}+R_{c} A_{c} \\
&-N_{c}+V \\
&+R_{a} G P_{1}-R_{a} G C+R_{a} H_{a} \\
&+R_{a} P_{2}-R_{a} A_{a}+N_{a} \\
& P_{3}=-H_{a} H_{a}+K_{a} J_{a}-L_{a} \\
& 2-R_{a}-R_{b} S_{b}-R_{c} S_{c} \tag{2}
\end{align*}
$$

Legend for the PIE equations:
$P_{1}=$ Value of Sec. 736(b) assets underlying withdrawing partner's partnership interest
$P_{2}=$ Value of unrealized receivables under 751(a)(1) plus substantial attributable inventory under 751(a)(2)
$P_{3}=$ Goodwill attributable to withdrawing partner, treated as the unknown
$\mathrm{C}=$ Cost or basis of withdrawing partner for his partnership interest
$S_{b}=$ Partner B sharing ratio after A's withdrawal
$S_{c}=$ Partner $C$ sharing ratio after A's withdrawal
$\mathrm{V}=$ Value of withdrawing partner's interest, including underlying assets and goodwill, in terms of initial asking price
$A_{i}=$ Income amount at lower end of bracket of income tax rate schedule, primary loop calculation
$D_{i}=$ Income amount at lower end of bracket of income tax rate schedule, secondary loop calculation
$J_{i}=$ Income amount at lower end of bracket of income tax rate, tertiary loop calculation
$\mathrm{R}_{\mathrm{i}}=$ Income tax rate of marginal bracket, primary
$\mathrm{E}_{\mathrm{i}}=$ Income tax rate of marginal bracket, secondary
$\mathrm{K}_{\mathrm{i}}=$ Income tax rate of marginal bracket, tertiary
$\mathrm{N}_{\mathrm{i}}=$ Income tax amount at lower end of bracket, primary
$F_{i}=$ Income tax amount at lower end of bracket, secondary
$L_{i}=$ Income tax amount at lower end of bracket, tertiary
$\mathrm{G}=$ Capital gain inclusion rate
$\mathrm{H}_{\mathrm{i}}=$ Nonpartnership taxable income
The PIE model serves the purpose of a decision framework for negotiating the withdrawal of a partner from the partnership. Withdrawing partner A's negotiator obviously wants to arrange the best deal for his client. This is expressed in the model as the best possible position improvement for A. Likewise, the negotiator for continuing partners B and C wishes the best deal for his clients. In like manner as for A, this "best deal" is read by the model as the optimum position improvement for them. Since these position improvements are inverse to each other, equilibria are found by applying the equations.

Under the assumption that both negotiators have access to the model and a computer spreadsheet, a negotiating offer or ploy by one can be immediately evaluated by the other. A Lotus 1-2-3 ${ }^{15}$ program is used for the PIE exercises of this article, incorporating all the equations. Hence the model serves as a vigorous decision tool, dealing with the complexities referred to in the previous discussion of 741 and 736 and related court cases. Realistic data and the actual 'married joint'" Federal tax rate schedule for tax years beginning 1987 are used in Exhibit 1:
$\mathrm{P}_{1} \quad$ Value of Sec. 736(b) assets attributable to withdrawing partner
\$60,000
$P_{2} \quad$ Value of Sec. 751(a)(1) unrealized receivables attributable to withdrawing partner

6,000
$\begin{array}{ll}\text { Cost or basis of withdrawing partner for his } \\ \text { partnership interest }\end{array} 40,000$
$\begin{array}{ll}\text { Initial asking price of A for his partnership } \\ \text { interest }\end{array} 90,000$
H Nonpartnership taxable income of each partner: A 63,200
B $\quad 33,600$
C 49,400

[^5]Exhibit $l$ showś the results of applying the equations above. The $\$ 20,984.476$ PIE of 736 is much more than 741 's PIE of $\$ 20,324.78$. The goodwill is $\$ 6,595.895^{16}$ under 736 but only $\$ 5,523.22^{17}$ under 741 . The deductability of it under 736 to $B$ and

```
\({ }^{16}\) Equation (3) yields the \(\$ 6,595.895\) goodwill as follows:
6595.895 (1-.385)
\(-[((1 \times 60000)-(1 \times 40000)+6000)(.385-.385)]\)
\(-[(63200 \times .385)-(63200 \times .385)]\)
\(+[(.385 \times 90000)-(.385 \times 90000)]\)
\(-(24590-24590)+[(.35 \times 63200)-(.35 \times 63200)]\)
\(-[(.35 \times 45000)-(.35 \times 45000)]\)
\(+(8840-8840)\)
\(P_{3}=\)
[1-(.385 x 1)]
    \(\mathrm{P}_{3}=\$ 6595.895\)
\({ }^{17}\) Goodwill payments in Exhibit 1:
```

Exchange price $\quad \$ 71,523.220 \quad \$ 72,595.895$

Payments for:

| Sec. 736(b) assets | $-60,000.000$ | $-60,000.000$ |
| :--- | :---: | :---: |
| Sec. 741(a) assets | $-6,000.000$ | $-6,000.000$ |
|  |  |  |
| Goodwill | $\$ 5,523.22$ | $\$ 6,595.895$ |
|  |  |  |

The PIE equations for 741 and 736 , (1) and (2), exhibited in the article are proven as follows for each of the above goodwill amounts:

Equation (2), for 736:
$-(2 \times 60000)-(2 \times 6000)+40000+(.28 \times 33600)-(.28 \times 28000)+4080-(.15 \times 33600)+(.15$ $\mathrm{x} .6 \times 6000)+(.15 \times 3000)-330+(.35 \times 49400)-(.35 \times 45000)+8840-(.28 \times 49400)+(.28 \times .4 \times 6000)$ $+(.28 \times 28000)-4080+90000+(.385 \times 1 \times 60000)-(.385 \times 1 \times 40000)+(.385 \times 63200)+(.385 \times 6000)$ $-(.385 \times 90000)+24590-(.35 \times 63200)+(.35 \times 45000)-8840$

$$
\begin{aligned}
& P_{3}=\underline{2-.385-(.15 \times .6)-(.28 \times .4)} \\
& P_{3}=\$ 6595.895
\end{aligned}
$$

C gives them tax benefits that make possible a bigger exchange price, $\$ 72,595.895$, under 736 than the $\$ 71,523.22$ under 741 .

## Complexities Of Graduated Tax Rates

This model's vigor is enhanced by the fact that it computes tax effects by the actual graduated rates rather than assumed marginal rates. Scholarly papers typically limit the tax aspect to marginal rates, in effect using a flat rate. The study of Curatola et al, ${ }^{18}$ for instance, used this simplification.

The PIE model employs a multiple bracket search routine that permits proper computation of the tax for each one of the three partners, $\mathrm{A}, \mathrm{B}$, and C , regardless of their respective brackets. Following is a rearranged but accurate tax rate schedule for married couples filing joint returns for 1987 which is used by the model to determine the taxes of Exhibit 1 :

```
Equation (1), for 741 :
\(-(2 \times 60000)-(2 \times 6000)+40000\)
\(+(.385 \times 1 \times 60000)-(.385 \times 1 \times 40000)\)
\(+(.385 \times 6000)-(.385 \times 1 \times 63200)\)
\(-(.385 \times 90000)+24590\)
\(-(.35 \times 63200)+(.35 \times 45000)-8840\)
\(+(.28 \times 33600)-(.28 \times 28000)+4080\)
\(-(.28 \times 33600)+(.28 \times 6000 \times .60)\)
\(+(.28 \times 28000)-4080\)
\(+(.35 \times 49400)-(.35 \times 45000)+8840\)
\(-(.35 \times 49400)+(.35 \times 6000 \times .40)\)
\(+(.35 \times 45000)-8840+90000\)
\(\mathbf{P}_{3}=\)
        \([\) [2-(.385 \(\times 1)]\)
\(P_{3}=\$ 5523.22\)
```

${ }^{18}$ See supra note 13.

Table 1: Federal tax rate schedule for married couples filing joint returns for 1987.

| Total Income |  | Marginal Tax | Cumulative |
| :---: | :---: | :---: | :---: |
| from | to | Rate | Tax |
| 0 | \$ 3,000 | . 11 | 0 |
| \$3,000 | 28,000 | . 15 | \$ 330 |
| 28,000 | 45,000 | . 28 | 4,080 |
| 45,000 | 90,000 | . 35 | 8,840 |
| 90,000 | on up | . 385 | 24,590 |

The legend mentioned, supra, for the PIE equation contains nine symbols that could be considered in the following pattern:

Table 2: Symbols in the PIE equations relating to the tax rate schedules.
Order of computation use in model
Primary Secondary Tertiary
Income amount at lower end of bracket of income tax
rate schedule
A
D
J

Income tax rate of marginal bracket
R E K

Income tax amount at lower end of bracket N F

L

The PIE model deals with the graduated tax rate schedule by picking up the " A D J" and "N F L"' items from the rate schedule and then applying the marginal brackets of "R E K."

The primary and secondary uses of the rate schedule are designed to find the tax effect of the capital gain to partner A. The primary use finds A's total tax and the secondary finds A's tax figured without the capital gain. The model takes the difference as the tax attributable to the capital gain and prints it (Exhibit 1): $\$ 9,098.44$ under 741, \$7,202.856 under 736.

Then the secondary and tertiary uses find the tax effect of the partnership ordinary income to each of the three partners. The above secondary use of the brackets finds the tax figured without the capital gain. The tertiary use finds the tax per partner without capital gain and without the 751 and goodwill ordinary incomes. The difference between the secondary and tertiary uses is the tax effect of these ordinary incomes and is printed in Exhibit 1; these items are analyzed in Table 3.

Table 3: Tax items of Exhibit 1 analyzed.

These are tax costs to A on disposition of A's interest, so are indicated as negatives in Exhibit 1.

| Value of <br> deduction for <br> unrealized |  |  |
| :--- | ---: | ---: |
| receivables and |  |  |
| goodwill to: |  |  |
| Partner B | $\$ 1,008.00$ |  |
| Partner C | 840.00 | $\$ 1,861.631$ |

These are tax benefits to B and C on deduction of their proper amounts against their partnership interest and other income, indicated as positives.

The steps of the flowchart of Exhibit 2 correspond to the following description:

## Step 1: Initial Data Input

The model searches for the right bracket for each partner based on entry of the values for the following symbols:
$P_{1} \quad$ Value of 736(b) assets ..... $\$ 60,000$
$P_{2} \quad$ Value of 751(a)(1) unrealized receivables ..... 6,000
C Cost or basis of A for A's partnership interest ..... 40,000
$S_{B} \quad$ B's sharing ratio after A's withdrawal ..... 0.60
$S_{c} \quad$ C's sharing ratio after A's withdrawal ..... 0.40
G Capital gain inclusion rate ..... 1.00
(This would have been only 0.40 before the Tax Reform Act of 1986, when the capital gain deduction of 60 percent was allowed.)

Nonpartnership taxable income:
$\mathrm{H}_{\mathrm{A}} \quad$ Partner A \$63,200
$\mathrm{H}_{\mathrm{B}} \quad$ Partner B $\quad 33,600$
$\mathrm{H}_{\mathrm{C}} \quad$ Partner C $\quad 49,400$

Step 2: Computation of Initial Goodwill
The data of step 1 are cycled through the 741 and 736 equations on parallel passes, employing the above 'married joint" tax rate schedule. No goodwill amounts are present yet. The 741 equation initially yields $\$ 5,423.030$ of goodwill, and the 736 equation yields a goodwill of $\$ 6,667.660$.

Step 3: Bracket Search and Final Goodwill Computations
The 741 goodwill of $\$ 5,423.030$ is joined with the data of Step 1. Since the exchange price will be increased by that much, the program for the PIE model recycles this expanded data through the 741 equation on a new bracket search. Even if the bracket does not change, the taxes of partner A are increased. Accordingly the 741 goodwill changes, becoming $\$ 5,523.220$.

The 736 goodwill of $\$ 6,667.660$ is joined with the data of Step 1 for another pass through the 736 equation. The exchange price is increased by a like amount. Unlike the 741 , however, partners $B$ and $C$ receive a tax deduction for their 60 and 40 percent shares of the goodwill payment. So the tax benefits to them for their goodwill deductions will possibly be affected by a bracket change. The 736 equation yields a goodwill of $\$ 6,595.895$ on this second pass.

## Step 4: Computation of the PIEs

The altered goodwills of Step 4 are entered into the final version of the exchange price:

|  | Exchange Price |  |
| :--- | :---: | :---: |
| Payments for: | $\underline{741}$ | $\underline{736}$ |
| Value of $736(\mathrm{~b})$ assets | $\$ 60,000.00$ | $\$ 60,000.000$ |
| Value of unrealized <br> receivables | $6,000.00$ | $6,000.000$ |

Total exchange price, as in Exhibit 1

5,523.22
6,595.895

| $5,523.22$ | $6,595.895$ |
| :--- | :--- |

\$71,523.22

## Step 5: Test for Equilibrium

If the 741 PIE of A is not equal to the 741 PIE of B and C, Steps 3 and 4 would be repeated. Likewise for 736. The PIEs of Exhibit 1 do correspond within each code section, so the process is complete. The 741 PIE is $\$ 20,324.780$, and the 736 PIE is $\$ 20,984.476$. The PIE model has formulated the exchange price under each code section, 741 and 736, which equalizes and optimizes the positions of each party.

## Problems Of A Practical Nature

Despite the fact that 736's larger PIE appears to make it preferable to 741 , three problems of a practical nature must be considered.

## Individual Obligation

The continuing partners may wish to assume only given portions of the exchange price, notwithstanding that the partnership will actually make payment to the withdrawing partner as under 736. Each will be considered as having bought a specific portion of the withdrawing partner's interest under 741. In David B. Sloan, $J r .,{ }^{19}$ each of the continuing partners did exactly this as the withdrawing partner was bought out by the partnership. Consequently, the court held that a 741 purchase-of-partnership-interest had occurred by each continuing partner. Sloan was held as a 736 redemption on other grounds.

In short, the problem can be stated in terms of the inability of each of the continuing partners to limit their liability to only a given portion of the withdrawing partner's exchange price under the preferable 736. It cannot be done. Section 741 is the alternative.

## Goodwill

Goodwill is deductible to the continuing partnership under 736 only if it is not "provided for"' in the partnership agreement. Section 736(b)(2)(B) specifies that goodwill will be treated as a nondeductible payment if provided for in the partnership agreement. This latter treatment is identical to the result under 741.

[^6]The problem arises as to how the withdrawing partner's goodwill rights will be protected unless they are provided for in the partnership agreement or at least in a withdrawal memo. The withdrawing partner cannot afford to leave goodwill up to the good will of his fellow partners, especially in view of the fact that their interests become adverse at the start of withdrawal negotiations.

Jackson Investment Co., ${ }^{20}$ illustrates the quandary. No provision was made for goodwill in the partnership agreement. But a subsequent "Amendment of Limited Partnership Agreement'' did provide for goodwill. This was deemed to be part of the partnership agreement under 761(c). The goodwill payment was hence not deductible.

In short, goodwill should be '"provided for,'’ and specifically spelled out, to guide partners whose interests become adverse at withdrawal. Section 741 is thus in effect mandated.

## Optional Basis Adjustment (OBA)

The OBA of Internal Revenue Code Section 754, ${ }^{21}$ serves the purpose of protecting the interests of incoming or continuing partners after the departure of the withdrawing partner. Their payment for the latter's interest includes an amount for the value increase. The OBA makes possible increasing the basis of appropriate partnership assets so that the incoming or continuing partners get more depreciation etc. deductions relative to their payments for the value increase.

The problem lies in the precarious nature of the OBA under a 736 redemption. An untimely death of the withdrawing partner before his redemption would destroy the OBA, for it is set under 734 by the gain to the withdrawing partner. Obviously, none of the value increase is recognized as gain to the deceased partner. In short, no gain, no OBA for a 736 redemption.

The answer lies in the OBA computed under 743 for the 741 transfer of interest. This OBA is computed by comparing the transferee partners' bases for their new interests with their share of the partnership's basis of the related assets. Death of a partner has no effect on the OBA derived thusly.

So a pre-planned 741 transfer at the death of a withdrawing partner will preserve the OBA, whereas the 736 redemption could lose it.

## Indffference Analysis Added To The PIE

The solution lies in finding the exchange price under 741 which will give a PIE

[^7]to the dominant party equal to the PIE that he could have under 736. It is obviously impossible mathematically to compute any exchange price which would yield a 741 PIE for both parties ( A , the withdrawing partner, on the one hand, and B and C , the continuing partners, on the other) equal to the 736 PIE. But it is possible for one party or the other. The indifference equations perform this function. For the dominant party, the choice of code sections becomes a matter of indifference. Hence he can choose the less-favorable 741, receiving the same PIE as available under 736, while at the same time solving the three practical problems discussed above.

Following are the indifference equations:
If withdrawing partner A is dominant:

$$
\begin{aligned}
& \left.P_{3} *\left(1-R_{a 2}\right)-\left[\left(G P_{1}-G C+P_{2}\right)\left(R_{a 2}-R_{a 1}\right)\right]-H_{a 2} R_{a 2}-H_{a 1} R_{a}\right)+\left(R_{a 2} A_{a 2}-R_{a 1} A_{a 1}\right)-\left(N_{a 2}\right. \\
& \left.-N_{a 1}\right)+\left(K_{a 2} H_{a 2}-K_{a 1} H_{a 1}\right)-\left(K_{a 2} J_{a 2}-K_{a 1} J_{a 1}\right)+\left(L_{a 2}-L_{a 1}\right) \\
& \mathrm{p}_{3}=\frac{\left.1-R_{a 1} G\right)}{}
\end{aligned}
$$

If withdrawing partners B and C are dominant:

$$
\begin{align*}
& P_{3}=P_{3}^{*}\left(1-R_{b 2} S_{b 2}-R_{c 2} S_{c 2}\right)+\left(E_{b 1} H_{b 1}-\right. \\
& \left.\mathrm{E}_{\mathrm{b} 2} \mathrm{H}_{\mathrm{b} 2}\right)-\left(\mathrm{E}_{\mathrm{b} 1} \mathrm{D}_{\mathrm{b} 1}-\mathrm{E}_{\mathrm{b} 2} \mathrm{D}_{\mathrm{b} 2}\right)+\left(\mathrm{F}_{\mathrm{b} 1}-\mathrm{F}_{\mathrm{b} 2}\right)- \\
& \left(\mathrm{R}_{\mathrm{b} 1} \mathrm{H}_{\mathrm{b} 1}-\mathrm{R}_{\mathrm{b} 2} \mathrm{H}_{\mathrm{b} 2}\right)+\mathrm{P}_{2}\left(\mathrm{R}_{\mathrm{b} 1} \mathrm{~S}_{\mathrm{b} 1}-\mathrm{R}_{\mathrm{b} 2} \mathrm{~S}_{\mathrm{b} 2}\right)+ \\
& \left(\mathrm{R}_{\mathrm{b} 1} \mathrm{~A}_{\mathrm{b} 1}-\mathrm{R}_{\mathrm{b} 2} \mathrm{~A}_{\mathrm{b} 2}\right)-\left(\mathrm{N}_{\mathrm{b} 1}-\mathrm{N}_{\mathrm{b} 2}\right)+\left(\mathrm{E}_{\mathrm{c} 1} \mathrm{H}_{\mathrm{c} 1}-\right. \\
& \left.\mathrm{E}_{\mathrm{c} 2} \mathrm{H}_{\mathrm{c} 2}\right)-\left(\mathrm{E}_{\mathrm{c} 1} \mathrm{D}_{\mathrm{c} 1}-\mathrm{E}_{\mathrm{c} 2} \mathrm{D}_{\mathrm{c} 2}\right)+\left(\mathrm{F}_{\mathrm{c} 1}-\mathrm{F}_{\mathrm{c} 2}\right)- \\
& \left(\mathrm{R}_{\mathrm{cl}} \mathrm{H}_{\mathrm{cl}}-\mathrm{R}_{\mathrm{c} 2} \mathrm{H}_{\mathrm{c} 2}\right)+\mathrm{P}_{2}\left(\mathrm{R}_{\mathrm{cl}} \mathrm{~S}_{\mathrm{c} 1}-\mathrm{R}_{\mathrm{c} 2} \mathrm{~S}_{\mathrm{c} 2}\right)+ \\
& \left(R_{c 1} A_{c 1}-R_{c 2} A_{c 2}\right)-\left(N_{c 1}-N_{c 2}\right) \tag{4}
\end{align*}
$$

where $\mathrm{P}_{3}$ * represents the PIE goodwill under 736, and the number subscripts to all the algebraic symbols other than Prefer as follows: The numeral ' 2 '" indicates the initial bracket search, and " 1 '" the second bracket search. For example, the ' $\mathrm{R}_{\mathrm{a} 2}$ " value in the equation (3) indicates the primary income tax rate of the marginal bracket for partner A in the initial bracket search. As indicated in the proof at footnote 16 , this value is 0.385 , the top marginal tax bracket.

The $\mathrm{P}_{3}$ solved for by the indifference equations is goodwill modified to find the exchange price at which the dominant party is indifferent between the two code sections, 741 and 736.

Exhibits 3 and 4 show the results of applying the indifference equations.

Equation (3) yields a goodwill of $\$ 6,595.895^{22}$ and hence the exchange price of $\$ 72,595.895$ (that is, $\$ 60,000$ for the 736 (b) plus $\$ 6,000$ for the 736(a) assets plus the goodwill of $\$ 6,595.895$ ). In Exhibit 3, where withdrawing partner $A$ is dominant, the exchange price of $\$ 72,595.895$ yields a PIE of $\$ 20,984.476$ to $A$ under 741 , equal to the PIE available to him under 736. Actually, this is only a 741 'PI,'" not 'PIE," for the 741 position improvements are not in equilibrium between the two parties.

A comparison between Exhibit 3 and 1 is instructive. If partner A receives $\$ 72,595.895$ under 741 (Exhibit 3) in the indifference regime, his PIE is the same as under 736. The reason is obvious. The goodwill he receives, $\$ 6,595.895$, treated as ordinary income under 736, is treated as capital gain under 741. But both are taxed at the same rate under the 1986 Tax Reform Act. Hence the position of A is not affected by a switch to 741 from 736.

The comparison between Exhibit 4 and 1 is even more instructive. Indifference equation (4) above for dominant partners $B$ and $C$ produces a goodwill of $\$ 4,863.524 .{ }^{23}$ This amount, added to the $\$ 60,000736(b)$ payment and the $\$ 6,000$ 736 (a) amount paid for the unrealized receivables, sums to the $\$ 70,863.524$ exchange price. In order for their 741 PIE to be brought up to their 736 PIE of $\$ 20,984.476$, the exchange had to be lowered to compensate for loss of the goodwill deduction under 741. So it was, from $\$ 72,595.895$ (Exhibit l) to $\$ 70,863.524$ (Exhibit 4). The lower the exchange price, the higher the position improvement for B and C , the paying parties.

The vigor of the PIE indifference in Exhibit 4 for decision making is plain in view of reality. Typically the continuing partnership is dominant over a withdrawing partner. This dominance is due to the partnership's control over the checkbook and the future course of events, long after the withdrawing partner has leapt into lassitude.

## Conclusion

The PIE model, extended for the indifference analysis, provides a reference framework for decision makers in the partnership withdrawal area. Since the model can instantly be adapted to any change in data, the negotiators for the parties can

[^8]```
    P}=66595.895[1-(.15\times.6)-(.28\times.4)]+[(.28\times33600)-(.28\times33600)]-[(.28\times28000) 
-(.28\times28000)]+(4080-4080)-[(.28\times33600)-(.15 x 33600)]+6000[(.28\times.6)-(.15 x.6)]+[(.28\times28000)
-(.15 x 3000)]-4080-330)+[(.35\times49400)-(.35\times49400)]-[(.35 x 45000)-(.35 x 45000)]+(8840-8840)
-[(.35\times49400)-(.28\times49400)]+6000 [(.35 x .4)-(.28 x .4)]+[(.35 x 45000) - (.28 x 28000)] - (8840-
4080)
```

$$
P_{3}=\$ 4863.524
$$

easily assess offers and counter offers of the other parties. If only one side is equipped with the PIE indifference model, that side will have a distinct edge in decision making.

Does the model work? The authors have used this model in classes as negotiation problems for students with widely diverse facts. Not only does the model work, it works in all events and with any events.

## Exhibit 1

## Summary of Position Improvement Equilibriums

|  | Section 741 |  | Section 736 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A, retiring partner | B,C, continuing partners | A, retiring partner | B,C, continuing partners |
| Exchange Price | \$71523.220 | \$-71523.220 | \$72595.895 | \$-72595.895 |
| Basis | -40000.000 |  | -40000.000 |  |
| Gain | \$31523.220 |  | \$32595.895 |  |
| Tax Attributable to Capital Gain | -9098.440 |  | -7202.856 |  |
| Tax Attributable to Unrealized Receivable A's Partnership Ordinary Income | -2100.000 |  | -4408.563 |  |
| Value of Deduction for Unrealized Receivable and Goodwill to: |  |  |  |  |
| Partner B <br> Partner C |  | $\begin{array}{r} 1008.000 \\ 840.000 \end{array}$ |  | $\begin{aligned} & 1861.631 \\ & 1718.740 \end{aligned}$ |
| Value of Purchased Interest |  | 90000.000 |  | 90000.000 |

## Exhibit 1 - (Continued)

| Position Improvements: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Partner A: Gain |  |  |  |  |
| Less Taxes |  |  |  |  |
| Attributable to Capital Gain, UR, Ordinary Income | \$20324.780 |  | \$20984.476 |  |
| Partners B, C: |  |  |  |  |
| Value of Purchased |  |  |  |  |
| Interest and |  |  |  |  |
| Deductions Less |  |  |  |  |
| Exchange Price |  | \$20324.780 |  | \$20984.476 |
| Primary Marginal |  |  |  |  |
| Bracket Rate: |  |  |  |  |
| Partner A | 0.385 |  | 0.385 |  |
| Partner B |  | 0.280 |  | 0.150 |
| Partner C |  | 0.350 |  | 0.280 |
| Secondary Marginal |  |  |  |  |
| Bracket Rate: |  |  |  |  |
| Partner A | 0.350 |  | 0.350 |  |
| Partner B |  | 0.280 |  | 0.280 |
| Partner C |  | 0.350 |  | 0.350 |
| Tertiary Marginal |  |  |  |  |
| Bracket Rate: |  |  |  |  |
| Partner A | 0.350 |  | 0.350 |  |

Ехнівіт 2

## Steps

## BRACKET SEARCH FLOWCHART

1

Initial Data<br>input

## 2 Computation of Initial Goodwill for 741

3741 bracket search

4 Final goodwill is computed for 741

Computation of Initial Goodwill for 736

736 bracket search

Final goodwill is computed for 736

5 Partner A's 741 Partner B,C's 741 Partner A's 736 Partner B,C's 736 PIE is computed PIE is computed PIE is computed PIE is computed

6 Test for equilibrium: do the 741 PIEs equal?

Test for equilibrium:
do the 736 PIEs equal?

## Exнівіт 3

Summary of Position Improvement Equilibriums Withdrawing Partner A Dominant

|  | Section 741 |  | Section 736 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A, retiring partner | $\mathrm{B}, \mathrm{C},$ <br> continuing partners | A, retiring partner | B,C, continuing partners |
| Exchange Price | \$72595.895 | \$-72595.895 | \$72595.895 | \$-72595.895 |
| Basis | -40000.000 |  | -40000.000 |  |
| Gain | \$32595.895 |  | \$32595.895 |  |
| Tax Attributable to Capital Gain | -9511.420 |  | -7202.856 |  |
| Tax Attributable to Unrealized |  |  |  |  |
| Receivable | -2100.000 |  |  |  |
| A's Partnership |  |  |  |  |
| Ordinary Income |  |  | -4408.563 |  |
| Value of Deduction for Unrealized |  |  |  |  |
| Receivable and |  |  |  |  |
| Goodwill to: |  |  |  |  |
| Partner B |  | 1008.000 |  | 1861.631 |
| Partner C |  | 840.000 |  | 1718.740 |
| Value of Purchased |  |  |  |  |
| Interest |  | 90000.000 |  | 90000.000 |

## Exhibit 3 - (Continúed)

## Position

Improvements:

Partner A: Gain
Less Taxes
Attributable to Capital Gain, UR, Ordinary Income \$20984.476 \$20984.476

Partners B, C:
Value of Purchased
Interest and
Deductions Less
Exchange Price
\$19252.105
\$20984.476

Primary Marginal
Bracket Rate:

| Partner A | 0.385 |  | 0.385 |  |
| :--- | :--- | :--- | :--- | :--- |
| Partner B |  | 0.280 |  | 0.150 |
| Partner C |  | 0.350 |  | 0.280 |

Secondary Marginal
Bracket Rate:
Partner A
0.350
0.350

Partner B
0.280
0.280

Partner C
0.350
0.350

Tertiary Marginal
Bracket Rate:
Partner A
0.350
0.350

Ехнівіт 4
Summary of Position Improvement Equilibriums Withdrawing Partners B, C Dominant

|  | Section 741 |  | Section 736 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A, retiring partner | B,C, continuing partners | A, retiring partner | B,C, continuing partners |
| Exchange Price | \$70863.524 | \$-70863.524 | \$72595.895 | \$-72595.895 |
| Basis | -40000.000 |  | -40000.000 |  |
| Gain | \$30863.524 |  | \$32595.895 |  |
| Tax Attributable to Capital Gain | -9098.440 |  | -7202.856 |  |

Tax Attributable
to Unrealized
Receivable -2100.000
A's Partnership
Ordinary Income -4408.563
Value of Deduction
for Unrealized
Receivable and
Goodwill to:
Partner B
1008.000
1861.631

Partner C
840.000
1718.740

Value of Purchased
Interest $90000.000 \quad 90000.000$

## Exhibit 4 - (Continued)

Position
Improvements:

Partner A: Gain
Less Taxes
Attributable to Capital Gain, UR, Ordinary Income $\$ 19665.085$ \$20984.476

Partners B, C:
Value of Purchased Interest and
Deductions Less
Exchange Price \$20984.476 \$20984.476

Primary Marginal
Bracket Rate:
Partner A 0.3850 .385

Partner B
Partner C

Secondary Marginal Bracket Rate:
Partner A
0.350
0.280
0.150
0.350
0.280

Partner B
Partner C

Tertiary Marginal
Bracket Rate:
Partner A
0.350
0.350


[^0]:    *Associate Professor of Management, The University of Akron
    ** Professor of Accounting, The University of Akron
    ** Professor of Law, The University of Akron
    ${ }^{1}$ S. Rep. No. 1622, 83 Cong., 2d Sess. 89 (1954).
    ${ }^{2}$ I.R.C. \& 741.

[^1]:    ${ }^{3}$ I.R.C. § 736.
    ${ }^{4}$ I.R.C. § 736(b)(2)(B).
    ${ }^{5}$ A.O. Champlin, 77 T.C.M. (P-H) 800, 805 (1977).

[^2]:    ${ }^{6}$ Treas. Reg. § 1.736-1(a), § 1.741-1(b) (1987).
    ${ }^{7}$ Foxman v. Commissioner, 352 F.2d 466, 470 (3rd Cir., 1965).
    ${ }^{8}$ Paul J. Kelly, 70 T.C.M. (P-H) 1191, 1206 (1970).

[^3]:    ${ }^{9}$ David B. Sloan, Jr., 81 T.C.M. (P-H) 2500, 2505 (1981).
    ${ }^{10} 352$ F. 2 d 466 (3rd Cir., 1965).
    "A very elemental PIE model was first published by Charles K. Moore, Jr. in The Sloan doctrine - new twist in the partnership interest sale/redemption question?, 14 The Tax Adviser 614 (1983). An extension of the PIE model has been published in the same journal utilizing flat tax rates, "Secs. 736 and 741 for the Withdrawal of a Partner,' 19 The Tax Adviser 307 (1988). The development of the model in this article represents a fully refined and "de bugged" program for any micro-computer using a variety of spreadsheet programs and now encompasses all variables.

[^4]:    ${ }^{12}$ See supra note 9.
    ${ }^{13}$ Curatola, Fields, Ringuest \& Samson, The Tax Litigation Decision: An Analysis of the Small Claims Division of the U.S. Tax Court, 18 Decision Sciences, 116-29 (1987).
    ${ }^{14}$ Supra note 11.

[^5]:    ${ }^{15}$ A copyright program of Lotus Development Corporation.

[^6]:    ${ }^{19}$ See supra note 9.

[^7]:    ${ }^{20} 346$ F.2d 187 (9th Cir. 1965), rev'g. 41 T.C. 675 (1964).
    ${ }^{21}$ See I.R.C. § 754.

[^8]:    ${ }^{22}$ Supra note 16.
    ${ }^{23}$ This goodwill was found by equation (4) above, assuming dominance of $B$ and $C$ :

