BUSINESS ENTERPRISE VALUE AND DEPRECIATION IN SHOPPING MALLS:

How Will the Omnibus Budget Reconciliation Act of 1993 Affect Investment Value?

Roy T. Black, J.D., Ph.D.
Assistant Professor, Department of Real Estate, Georgia State University

John A. Harris, CPA, M.S.
Atlanta, Georgia

Overview

The recognition of intangible value in real estate assets began about a decade ago as appraisers attempted to factor in the concept when making appraisals of income-producing property. The need to recognize intangible value was accelerated by the Tax Reform Act of 1986, which reduced many tax-driven cash flows in investment-grade real estate investments. In addition, federal guidelines for appraisals in the wake of the savings and loan collapse called for appraisers to consider intangible value. While first efforts in the research literature focused on hotels and motels, regional shopping malls began to test the concept of "enterprise value" in an attempt to lower city and county *ad valorem* taxes, with mixed success. The enactment of P.L. 103–66 - the Omnibus Budget Reconciliation Act of 1993 (OBRA) - provides a method of amortizing recognized purchased enterprise value in real estate assets. OBRA lengthened the depreciation period for non-residential real estate such as shopping malls to 39 years and provided for a 15-year amortization period for recognized purchased intangibles, including enterprise value. OBRA effectively changes the rules for cash flows since more problems are created than are at first apparent. These problems include lowering *ad valorem* taxation, financing the intangible value, possible higher equity contributions by inves-

tors, and the optimal amount of intangible value to maximize the shopping mall investment. The authors create a discounted cash flow model for a regional shopping mall to test the effects of recognizing enterprise value and use the new depreciation period to compute net present value of the asset. Sensitivity analysis is performed to test different assumptions.

■ Background and Literature Review

For approximately the past decade, the real estate industry has been struggling with the concept of intangible value in investment real estate assets (usually termed "enterprise value" in the literature). While intangible value is commonly recognized as "good will" in the sale of a business, it has been a controversial notion in real estate valuation. Possibly because "good will" did not receive favorable income tax treatment, there seemed to be little interest in pursuing the concept for real estate purposes until the early 1980s when hotels and motels began to contest city and county *ad valorem* taxation. The hospitality industry typically values a hotel or motel operation based upon its cash flow, and the assessments for *ad valorem* taxation were tracking the market value of these properties. Thus, it was the *ad valorem* tax question that led to the question of whether or not entrepreneurial value existed at all, and whether or not it should be recognized in the appraisal process.

The first wave of articles began to appear in the appraisal literature, and focused on the question of whether or not entrepreneurial value, or some form of business enterprise value, should be recognized. Rushmore and Rubin (1984) and Rushmore (1987) contended that the market value of a hotel includes land, improvements, personal property (such as furniture and beverage inventory) and going-business value. While taxing authorities properly excluded personal property from real property *ad valorem* taxation, they were improperly including the going concern value in the real property assessment. Rushmore and Rubin pointed out that a hotel operation is a labor-intensive, retail-type activity that depends upon customer acceptance and highly specialized management skills to maintain occupancy, given that hotel tenancies turn over—on an average—once every two to four days. In addition, studies have shown that chain hotels outperform independents, giving credence to the contention that locational attributes alone do not determine the value of the real estate. Rushmore shows when independent manage-

ment fees, franchise affiliation fees and chain affiliation fees are deducted from cash flow from operations, overall property values will decrease by 20% to 30%, reflecting the business or going-concern component.

Meanwhile, several cases made their way through state courts, mostly appealing adverse rulings on *ad valorem* tax cases. [See, for example, *Lawrence Associates* (1983) and *State of Wisconsin, ex rel., N/S Associates V. Board of Review of the Village of Greendale* (1991)].

For appraisal purposes, Acolia (1984) argued against including entrepreneurial value as an arbitrary percentage factor in the cost estimate of properties. A later article by Derbes (1990) questioned whether entrepreneurial profit should be considered under the cost-approach appraisal, but contended that it should be a component of the market approach. Derbes, however, felt that the theory was applicable only in speculative/builder markets. Mann (1990) argued that entrepreneurial profit should be considered in all markets, not just the speculative ones. Kapplin (1992) takes issue with the treatment of entrepreneurial profit as an item to be considered in the cost-approach appraisal. According to Kapplin, entrepreneurial profit is a residual of the production process and is implicit in price.

Vernor and Rabianski (1993) state that many market followers attempt to prove existence of a business value component beyond conventional real estate value by pointing to the low capitalization rates exhibited in many super-regional and regional mall sales and to sale prices that exceed replacement costs. Along with hotels, resorts, nursing homes, and private hospitals, shopping malls are characterized by a high degree of business managerial ability and entrepreneurial effort, which contribute to the viability of the business and the value of the real estate. Elements of entrepreneurship exist in the creation of a shopping mall, throughout its construction, and subsequently in its operation. First, labor is allocated a market return through the payment of salary and wages; then the invested capital receives its mortgage interest or equity cash flows; third, the land is afforded a fair market return (at market value for generic retail land); and, finally, any remaining income from the shopping mall enterprise is considered a return for the entrepreneurship of the owner-operator. Entrepreneurship is especially significant in a seasoned center that has been successfully promoted and leased over several years. The capitalized present value of the residual income stream creates an intangible business enterprise value.

Some authors have turned their attention away from the proper accounting treatment of entrepreneurial profit and instead assumed its existence so that methods can be developed to measure it. Fisher and Lentz (1990) tested the existence of enterprise value in a shopping mall by examining rent paid by existing tenants on a lease renewal vs. that

paid by new tenants for otherwise identical space. The higher rents paid for renewals suggested that with each lease renewal there is a marginal increase in the business enterprise value component of the rents. Karvel and Patchin (1992) propose guidelines for appraisers to consider in valuing the enterprise value of regional shopping centers and malls. Kenney (1995) reviews recent research and concludes that creating agglomeration economics and maintaining merchandise-type attractions account for higher rents in shopping malls relative to rents in other shopping centers. However, Kenney questions the legal aspects of transferring business activities.

The existence and applicability of the theory of entrepreneurial value in real estate have been given credibility by the Appraisal Institute that states in *The Appraisal of Real Estate*:

> Going-concern value is the value created by a proven property operation. *It includes the incremental value associated with the business concern, which is distinct from the value of the real estate only. Going-concern value includes an intangible enhancement of the value of an operating business enterprise which is produced by the assemblage of the land, building, labor, equipment, and marketing operation. This process creates an economically viable business that is expected to continue. Going-concern value refers to the total value of a property, including both real property and intangible personal property attributed to business value.*

Standards Rule 1–2 of the Uniform Standards of Professional Appraisal Practice states that an appraiser must identify and consider the effect on value of any intangible items that are not real property but are included in the appraisal. The Uniform Standards have been adopted by six key federal agencies and implemented in Title XI of the Financial institutions Reform, Recovery Enforcement Act of 1989 (FIRREA) for appraisals used in connection with certain real estate related financial transactions entered into or regulated by these agencies.

In addition, the Board of Governors of the Federal Reserve System includes the following statement in its recently proposed regulations for appraisals of federally related transactions:

> *An appraisal is to include a separate assessment of personal property, fixtures, or intangible items that are attached to or located on real property if the personal property, fixture, or intangible item affects the market value of the real property . . . Favorable loan financing or any* business interest or other intangible item *should be valued separately within the appraisal. (Emphasis added).*

Alex. Brown & Sons (1993) incorporates components of value in real estate attributable to management when valuing REIT (Real Estate

Investment Trust) stocks. Alex. Brown & Sons (ABS) states that a REIT can be worth more than the total market value of its current portfolio of properties. ABS views the REIT as a platform from which to manage real estate operations as a business that can manufacture Funds From Operations (FFO) from the ownership and financing of real estate. ABS believes that management can enhance a REIT's FFO in three ways: (1) portfolio management, i.e., leasing and asset management; (2) new property acquisition or expansions; and (3) financial structure and management. In considering shopping malls, it can be inferred - using the logic of ABS - that the value of real estate owned directly (i.e., not securitized) can be increased by superior management, thus producing enterprise value.

Several problems are inherent in the debate thus far. First, the main focus of the debate has been lowering *ad valorem* taxes, primarily for hotels and shopping malls. Owners have attempted to create enterprise value to lower their assessments after the fact, when no enterprise value was recognized in the purchase contract, on the books of the owner, or under the Internal Revenue Code. Second, the debate about enterprise value has been largely academic until lately, since the lack of market usage and a slow real estate market have inhibited development and implementation of the concept. Before OBRA, amortization of good will and going concern value for federal income tax purposes was proscribed by Treasury Regulation §1.163(a)-3. However, the passage of OBRA could effectively end the controversy by providing guidelines for the amortization of intangible value in real estate assets. OBRA lengthened the depreciation period for non-residential real estate such as shopping malls to 39 years. OBRA also created Internal Revenue Code Section 197 [IRC § 197] that provides for 15-year amortization for recognized purchased intangibles, including enterprise value, acquired in an "applicable asset acquisition." This legislation will thus change the tax consequences of income-producing real estate in three ways: first, by allowing some percentage of the asset value (enterprise value) to be amortized over 15 years, thus creating accelerated depreciation for this component of the investment value; second, by providing a concrete argument for lowering *ad valorem* tax assessments at the local level; and third, by lengthening the depreciation period applicable to non-enterprise value ("sticks and bricks") of nonresidential eal property to 39 years [IRC §168(c)(1)].

■ Statement of Purpose

This study examines the implications of amortizing enterprise value on a typical regional shopping mall. A discounted cash flow model,

incorporating the various implications of enterprise value and varying key parameters, is developed and contrasted with a discounted cash flow model that does not incorporate enterprise values, holding all other assumptions the same.

■ Methodology

This study will attempt to simulate the effects of adding enterprise value into an after-tax discounted cash flow model for a regional shopping mall. The general cash flow model that incorporates enterprise value is as follows:

Discounted Cash Flow Model for NPV

$$NPV = [[\sum_{i=1}^{n} \frac{NOI_t - I_t - T_t(NOI_t - I_t - DR_t - DE_t)}{(1 + r_A)^t}] + \frac{[SP_n - LB_n - T_n(SP_n - AB_n)](1 - T_n)}{(1 + r_A)^n}] - E_o$$

where:

NOI = potential gross income minus vacancy & collection losses minus operating expenses
E_o = initial equity investment
I_t = interest on purchase money mortgage in period t
T_t = income tax rate applicable in period t
T_n = income tax rate applicable in period of sale
DR_t = amount of depreciation applicable to real estate in period t
DE_t = depreciation applicable to Enterprise Value in period t
r_A = after-tax required return to equity
SP_n = selling price in the period of sale
LB_n = mortgage loan balance in the period of sale
AB_n = adjusted basis of the real estate in the period of sale, defined as:

$$V_o - (\sum_{i=1}^{n} DR_t + \sum_{i=1}^{n} DE_t)$$

Note: for the non-enterprise value model, operating expenses include *ad valorem* tax defined as AV*R*M

where:

AV = *ad valorem* tax appraisal value
R = assessment ratio
M = millage rate

For the Enterprise Value model, *ad valorem* tax is defined the same if *ad valorem* taxes are not lowered. If *ad valorem* taxes are lowered, *ad valorem* tax is defined as (AV - EV)*R*M, where EV is the value assigned to Enterprise Value.

General Assumptions of the Models

1. Same Loan-to-Value ratios for both models;
2. Passive activity rules are not binding (i.e., enough passive income to offset losses);
3. All cash flows from each project are reinvested at the same rates;
4. All properties are held for a finite holding period of n years;
5. r_A is the same for all cash flow components, either scenario.

For the non-Enterprise Value model, the DE term drops out. While at first this seems like a small difference between the two models, it will have profoundly different results on the cash flows. The equity investment (E_o) will be lower for the non-EV model, assuming the same loan-to-value ratio for each model. Lenders under current underwriting guidelines might lend on real estate value only, so the enterprise value component would be subtracted from the sales price to determine the maximum loan amount. Increased equity investment often lowers the risk of a real estate investment, but it also lowers the return, if financial leverage is positive. Depreciation benefits will decrease, thus shrinking after tax cash flow due to the lack of shorter term amortization of the enterprise value. The adjusted basis of the asset will be affected by lower depreciation recapture due to the absence of enterprise value. Interest payments will increase due to the loan being larger.

To measure these effects on the investor's value of the property, the two cash flow models were tested using data from ULI's *Dollars and Cents of Shopping Centers™: 1993*. Data on leases, sales, overage rents, and expenses were used to create a typical regional shopping mall. An appraised sales price for the mall was estimated by capitalizing net operating income. *Ad valorem* tax levels were estimated using a reasonable composite assessment method and millage rate. The Enterprise Value (EV) model was run under different parameter assumptions,

SUPER REGIONAL SHOPPING CENTER ASSUMPTIONS

CENTER SIZE (Square Feet) (1)				
Department Stores (owned)		740,836		
GLA of Mall Shops	666,872			
Total Owned Area	1,407,708			
Unowned Occupancy Area	392,292			
Total Occupancy Area		1,800,000		
COST OF CENTER				
Cost of Improvements			$145,821,987	
Enterprise Value (2)			$72,910,994	25.00%
Land Cost			72,910,994	25.00%
Total Cost of Center (3)			$291,643,975	
INVESTMENT				
Equity Investment			$ 72,910,994	25.00%
Loan Amount			218,732,981	75.00%
Total Investment			$291,643,975	
OPERATING RESULTS				
Total Operating Receipts (per square foot)			$25.73	
Less: Operating Expenses				
Real Estate Taxes	$1.62			
Other Operating Expenses	$6.50			
Total Operating Expenses			$ 8.12	
Net Operating Income (4)			$17.61	
OTHER ASSUMPTIONS				
Operating Receipts Inflation				5.00%
Operating Expense Inflation				5.00%
Date of Purchase				January 1
Capitalization Rate - Purchase				8.50%
Capitalization Rate - Reversion				8.50%
Discount Rate				8.50%
Interest Rate - Loan				9.00%
Federal and State Income Tax Rate				42.00%
Transaction Costs at Reversion				5.00%
Depreciation Period - Improvements				39.0 yrs.
Amortization Period - Enterprise Value				15 yrs.

Note: The numbers used in the assumptions for center size data and operating data were taken from the average amounts in Table 3-1, *Dollars & Cents of Shopping Centers®: 1993.*

(1) The data for Center Size as presented in Table 3-1 of *Dollars & Cents* were adjusted to reflect the owned and unowned areas. These numbers were then "grossed up" to reflect a total of 1,800,000 sq. ft. in the shopping mall, maintaining the same ratios to the total of the various categories.

(2) Enterprise Value was varied from 0% to 75%, depending upon the scenario.

(3) The total cost of the center was derived by dividing the initial NOI by the capitalization rate of 8.5%.

(4) Because the operating data averages were computed by category in *Dollars & Cents*, subtracting the reported average Operating Expenses from Total Operating Receipts did not yield an arithmetically correct Net Operating Balance (NOI). To ensure arithmetic accuracy, the NOI was adjusted so that it was arithmetically correct.

primarily varying the purchase value assigned to enterprise value and the holding period. The results were compared to determine how net present value (NPV) generated from after-tax cash flows changes when enterprise value is included and when it is not. The non-EV model was run for each holding period used in the EV model.

Simulations Under Varying Assumptions

The NPV model and ATIRR (after-tax internal rate of return) were tested using four scenarios:

Scenario I

The NPV model and ATIRR were first tested under the following conditions:

(a) Enterprise Value varied from 0% to 25% of the purchase price,
(b) Enterprise Value financed and not financed, and
(c) *Ad valorem* taxes reduced and not reduced. If *ad valorem* taxes were reduced, they were reduced in an amount equal to the per-

CASH FLOW MODEL

The following format was used in computing the After Tax Cash Flows (ATCF) in years one through 25:

TAXABLE INCOME
- TOTAL OPERATING RECEIPTS
- LESS: OPERATING EXPENSES:
  - Property Taxes
  - Other Operating Expenses
- TOTAL OPERATING EXPENSES
  - NET OPERATING INCOME
- LESS: OTHER EXPENSES:
  - Interest on Mortgage
  - Depreciation
  - Amortization of Enterprise Value
- TOTAL OTHER EXPENSES
  - TAXABLE INCOME OR LOSS

CASH FLOW
- NET OPERATING INCOME
- LESS: Debt Service
  - BEFORE TAX CASH FLOW (BTCF)
- LESS: Tax Expense (+Tax Savings)
  - ATCF from Operations
- EQUITY INVESTMENT
- AFTER TAX SALES PROCEEDS
  - AFTER TAX CASH FLOW (ATCF)

cent of recognized Enterprise Value. This reduction assumes that the investor can convince the local tax assessor that only the "sticks and bricks" component of the purchase price is taxable for *ad valorem* purposes.

Six cases were tested under Scenario I to find the case and level of Enterprise Value that produced the highest NPV and ATIRR. All other assumptions remained constant in each of the six cases. The six cases are:

CASE 1 No Enterprise Value.
CASE 2 Enterprise Value varied from 0% to 25%; Enterprise Value not financed and no *ad valorem* tax reduction for the Enterprise Value.
CASE 3 Enterprise Value varied from 0% to 25%; Enterprise Value financed, but no *ad valorem* tax reduction.
CASE 4 Enterprise Value varied from 0% to 25%; Enterprise Value not financed but *ad valorem* taxes reduced.
CASE 5 Enterprise Value varied from 0% to 25%; Enterprise Value financed and *ad valorem* taxes reduced.
CASE 6 Pre-OBRA. No enterprise value, 31.5 year depreciation.

For all cases, the after-tax internal rates of return and the net present values were computed using holding periods from one to 25 years.

SUMMARY OF THE SIX CASES

CASE	ENTERPRISE VALUE RECOGNIZED?	ENTERPRISE VALUE FINANCED?	AD VALOREM TAX REDUCED?
CASE 1	NO	N/A	N/A
CASE 2	YES	NO	NO
CASE 3	YES	YES	NO
CASE 4	YES	NO	YES
CASE 5	YES	YES	YES
CASE 6	NO	N/A	N/A

Scenario II

In Scenario II, the NPV model and ATIRR were *optimized* under the following conditions. All other assumptions in Scenario I remained the same.

(a) Enterprise Value varied from 0% to 75% of the purchase price,
(b) Loan-to-value ratios (LTV) varied from 50% to 80%,
(c) Loan interest rates varied from 7.5% to 10%.

Scenario III

Under Scenario III, the NPV model and ATIRR were *optimized* under the following conditions. All other assumptions used in Scenario II remained the same.

(a) Loan interest rate fixed at 10%.

Scenario IV

Under Scenario IV, NPV and ATIRR for Case 5 and pre-OBRA (Case 6) were compared.

■ Results

Scenario I

In the cases (Cases 2 and 4), where enterprise value was recognized, but not financed, the enterprise value - expressed as a percentage of total cost of the shopping mall - that produced the greatest ATIRR and NPV was 0% (the lower limit of the enterprise value range). This was true whether or not *ad valorem* taxes were reduced.

In the cases (Cases 3 & 5), where enterprise value was recognized and financed, the enterprise value that produced the greatest ATIRR and NPV was 25% (the upper limit of the enterprise value range). This result held true whether or not *ad valorem* taxes were reduced.

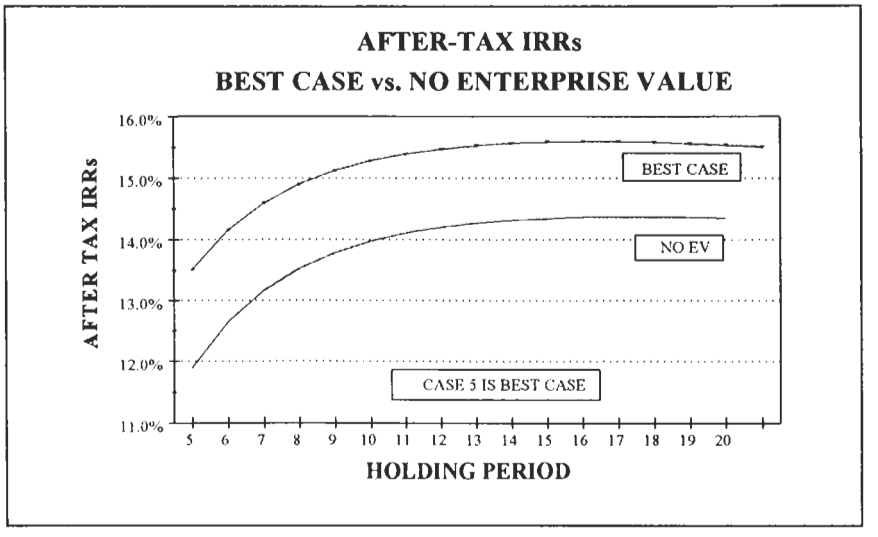
The highest ATIRR and NPV throughout the range of holding periods, from one to 25 years, occurred under the following criteria:

(1) 25% of purchase price allocated to enterprise value,
(2) enterprise value financed, and
(3) *ad valorem* taxes reduced because of the recognition of enterprise value.

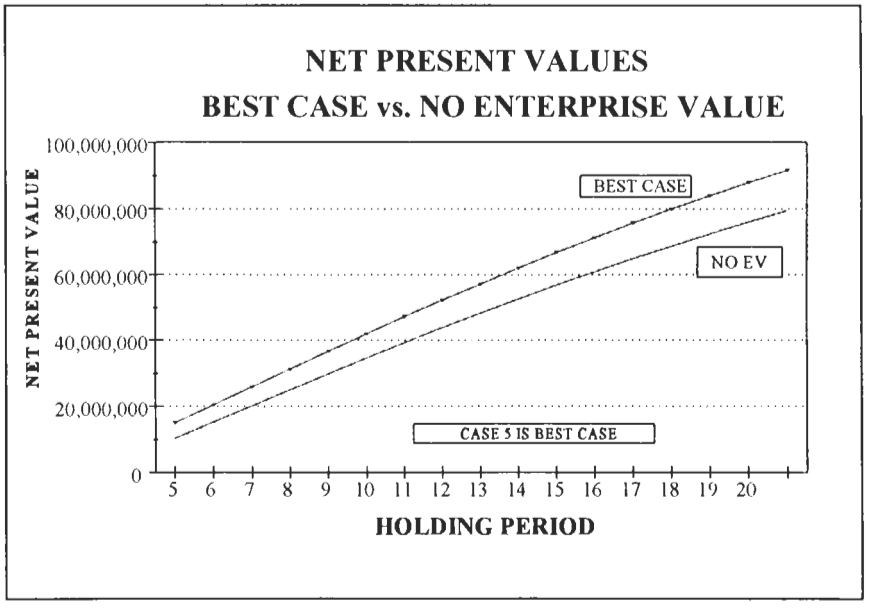
Only Case 5 met all these criteria. Therefore, it was the Best Case under Scenario I.

HOLDING PERIOD	ATIRR NO EV	ATIRR BEST CASE	NPV NO EV	NPV BEST CASE
5	11.89%	13.51%	10,294,534	15,085,034
10	13.97%	15.28%	34,736,876	41,998,898
15	14.34%	15.59%	56,857,046	66,749,271
20	14.35%	15.54%	75,991,527	87,972,119
25	14.25%	15.37%	92,005,287	105,230,476

Scenario I



Scenario I



Scenario II

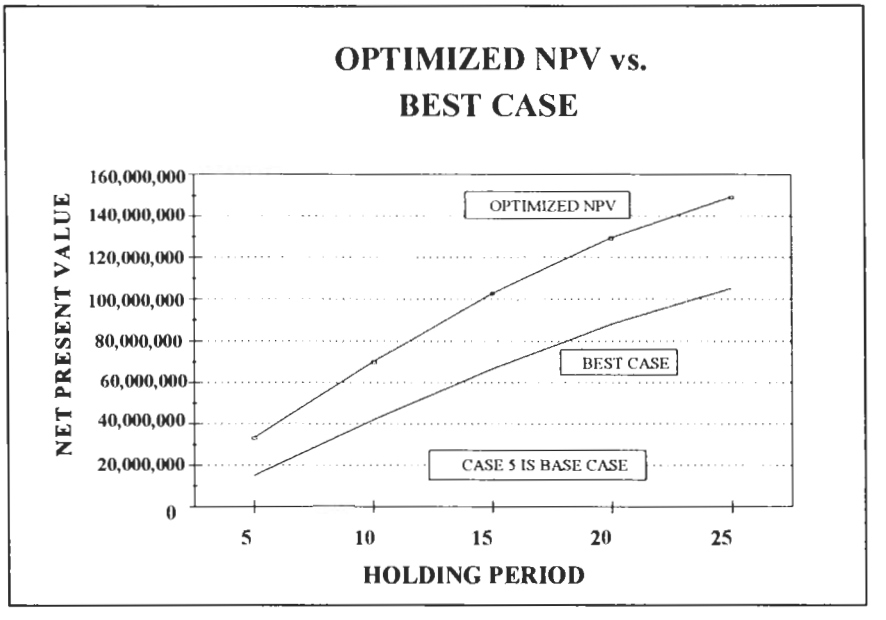
Using the variables and constraints above, the *optimized* ATIRR and NPV throughout the range of holding periods, from five to 25 years, occurred when the following conditions were met:

(1) Purchase price allocated as follows
- 75% to enterprise value,
- 0% to "sticks and bricks,"
- 25% to land,

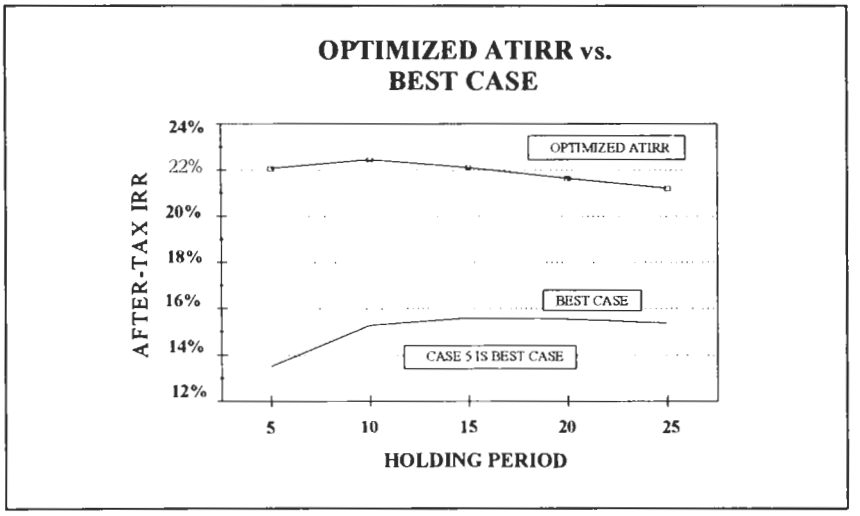
(2) enterprise value financed, and
(3) *ad valorem* taxes reduced because of the recognition of enterprise value,
(4) LTV was 80%,
(5) Interest rate of 7.5%.

HOLDING PERIOD	ATIRR BEST CASE	ATIRR OPTIMIZED	NPV BEST CASE	NPV OPTIMIZED
5	13.51%	22.06%	15,085,034	33,398,551
10	15.28%	22.45%	41,998,898	70,206,810
15	15.59%	22.11%	66,749,271	102,779,565
20	15.54%	21.65%	87,972,119	129,277,138
25	15.37%	21.21%	105,230,476	149,274,086

Scenario II



Scenario II



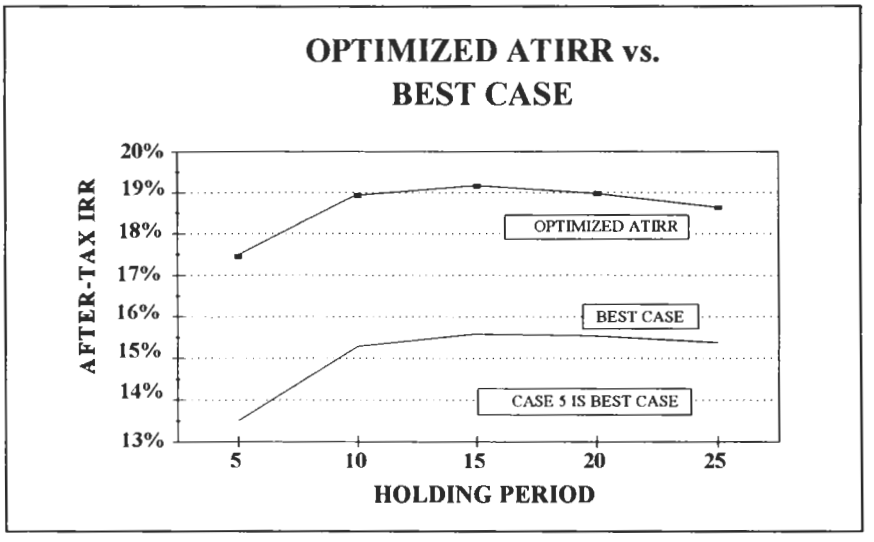
Scenario III

Using the variables and constraints under Scenario III, the optimized ATIRR and NPV throughout the range of holding periods - when the loan interest rate was a constant 10.0% - occurred when the following conditions were met:

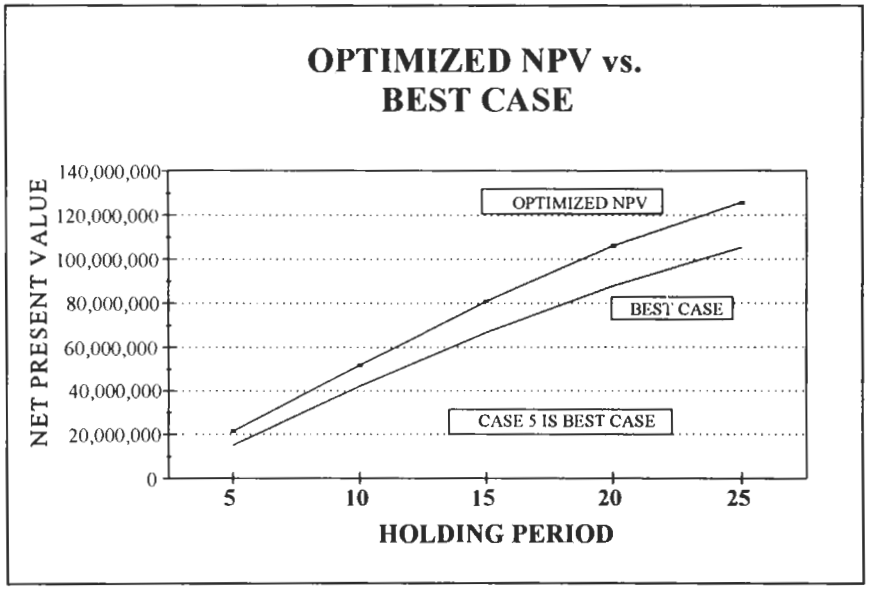
(1) 75% of purchase price was allocated to enterprise value,
(2) enterprise value was financed, and
(3) *ad valorem* taxes were reduced because of the recognition of enterprise value,
(4) LTV was 80%, and
(5) zero amount of purchase price allocated to "sticks and bricks."

HOLDING PERIOD	ATIRR CASE 5	ATIRR OPTIMIZED	NPV CASE 5	NPV OPTIMIZED
5	13.51%	17.46%	15,085,034	21,638,681
10	15.28%	18.94%	41,998,898	51,806,762
15	15.59%	19.17%	66,749,271	80,981,026
20	15.54%	18.98%	87,972,119	106,066,655
25	15.37%	18.64%	105,230,476	125,796,413

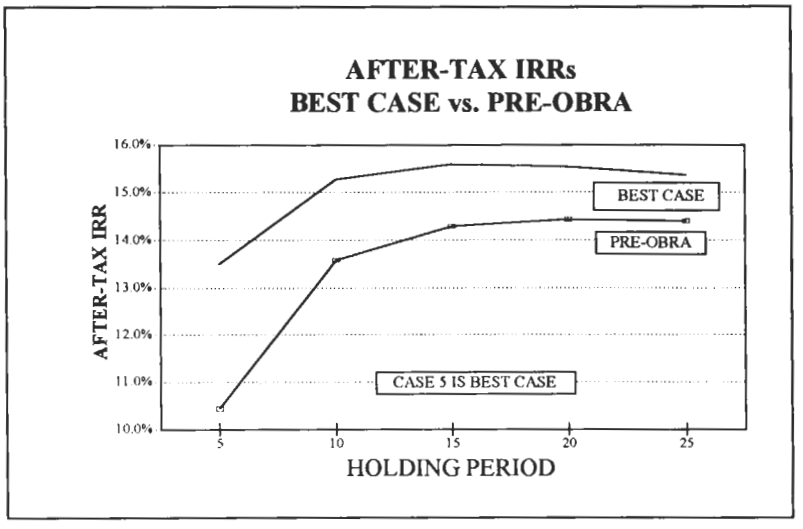
Scenario III



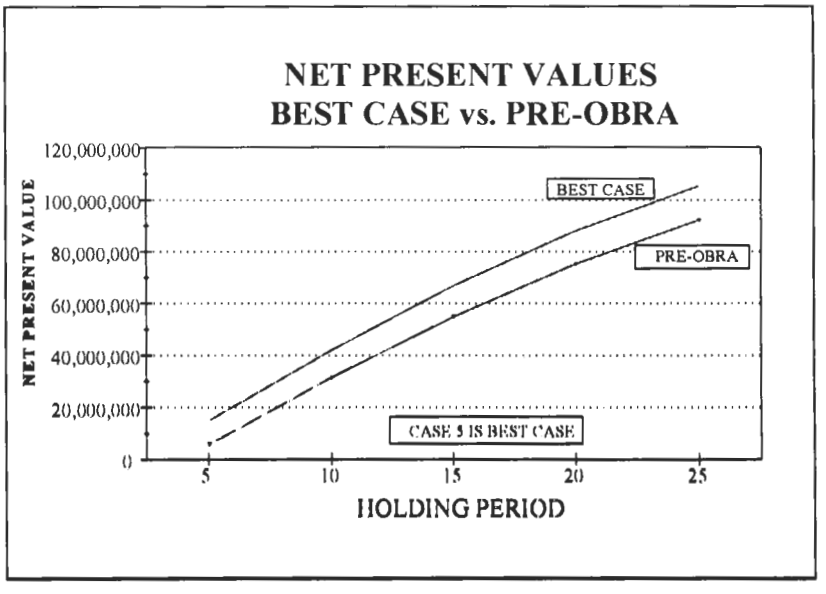
Scenario III



Scenario IV



Scenario IV



Scenario IV

Scenario IV compares the Best Case (Case 5) to the pre-OBRA Case (Case 6). This scenario compares the effects of amortization of enterprise value under OBRA and depreciation of "sticks and bricks" over 39 years to the pre-OBRA non-amortization of enterprise value and depreciation of "sticks and bricks" over 31.5 years.

HOLDING PERIOD	ATIRR CASE 5	ATIRR CASE 6	NPV CASE 5	NPV CASE 6
5	13.51%	10.44%	15,085,034	5,728,025
10	15.28%	13.59%	41,998,898	31,368,809
15	15.59%	14.29%	66,749,271	54,795,705
20	15.54%	14.43%	87,972,119	75,161,433
25	15.37%	14.40%	105,230,476	92,254,680

■ Federal Income Tax Considerations

The enactment of P.L. 103–66 - the Omnibus Budget Reconciliation Act of 1993 ("OBRA") - provides a method of amortizing recognized purchased enterprise value in real estate assets. OBRA lengthened the depreciation period for non-residential real estate such as shopping malls to 39 years [IRC 168(c)(1)]. OBRA also created Internal Revenue Code Section 197 [IRC 197] that provides for 15-year amortization for recognized purchased intangibles, including enterprise value acquired in an "applicable asset acquisition."

For an "applicable asset acquisition," the residual method must be used to allocate the purchase price [IRC §338(b)(5)]. The allocation is made in the following order: cash, readily marketable stock and securities, land, buildings, equipment, etc., customer lists, patents & copyrights, and finally to goodwill & going concern value. [IRC § 1060(a); Reg. §1.1060–1T(d)]. An "applicable asset acquisition" is any direct or indirect transfer of a group of assets that constitutes a trade or business in the hands of either the seller or purchaser and the purchaser's basis in the transferred assets is determined wholly by reference to the purchaser's consideration. [IRC §1060(c); Reg. § 1.1060-1T(b)(1)].

The transferor and transferee in an "applicable asset acquisition" must provide to the Secretary of the Treasury the amount of consideration received for the assets which is allocated to goodwill or going concern value [IRC §1060(b)(1)]. Such allocation should be established by contract as the result of valuation by independent experts, such as appraisers.

(Note: Please see Appendix A for applicable provisions of Internal Revenue Code Section 197.)

▪ Summary and Conclusions

The enactment of the Omnibus Budget Reconciliation Act of 1993 (OBRA) provides a method of amortizing recognized purchased enterprise value in real estate assets. While OBRA lengthened the depreciation period for non-residential real estate such as shopping centers to 39 years, it provided for a 15-year amortization period for recognized purchased enterprise value and goodwill. This tax treatment of purchased intangibles brings the Internal Revenue Code (IRC) into closer alignment with Generally Accepted Accounting Principles (GAAP).

This treatment will reduce federal income taxes when enterprise value is recognized. If the amortization period elected under GAAP is also 15 years, financial statements prepared under the IRC and GAAP will be more nearly comparable because income tax expense will be the same and the effect on deferred income taxes will be eliminated. This last result is especially important to those who interpret and analyze financial statements because of the controversy surrounding the recognition and presentation of deferred income taxes on the balance sheet.

In testing the NPV model and ATIRR, the most important factor in determining the highest NPV and ATIRR at any level of enterprise value was whether or not the enterprise value was financed. This result held true whether or not *ad valorem* taxes were reduced because of the recognition of enterprise value. If enterprise value was financed, higher enterprise value - expressed as a percentage of the total purchase price of the shopping center - resulted in higher NPV and ATIRR for each holding period.

Under the model, optimized NPV and ATIRR were attained when the following were true, all other factors being equal:

(1) enterprise value was greatest,
(2) enterprise value was financed, and
(3) *ad valorem* taxes were reduced.

Purchasers of shopping centers who attempt to maximize NPV and ATIRR, using the recognition and amortization of enterprise value under IRC §197, should first determine if the enterprise value will be financed. If enterprise value can be financed, then the maximum amount of the purchase price of the shopping center allocated to enterprise value will yield the highest NPV and ATIRR.

APPENDIX A

INTERNAL REVENUE CODE SECTION 197 GOVERNING AMORTIZATION OF GOODWILL AND GOING CONCERN VALUE

SEC. 197. AMORTIZATION OF GOODWILL AND CERTAIN OTHER INTANGIBLES.

(a) GENERAL RULE.—A taxpayer shall be entitled to an amortization deduction with respect to any amortizable section 197 intangible. The amount of such deduction shall be determined by amortizing the adjusted basis (for purposes of determining gain) of such intangible ratably over the 15-year period beginning with the month in which such intangible was acquired.

(b) NO OTHER DEPRECIATION OF AMORTIZATION DEDUCTION ALLOWABLE.—Except as provided in subsection (a), no depreciation or amortization deduction shall be allowable with respect to any amortizable section 197 intangible.

(c) AMORTIZABLE SECTION 197 INTANGIBLE.—For purposes of this section—

(1) IN GENERAL.—Except as otherwise provided in this section, the term "amortizable section 197 intangible" means any section 197 intangible—

(A) which is acquired by the taxpayer after the date of the enactment of this section, and

(B) which is held in connection with the conduct of a trade or business or an activity described in section 212.

(2) EXCLUSION OF SELF-CREATED INTANGIBLES, ETC.—The term "amortizable section 197 intangible" shall not include any section 197 intangible—

(A) which is not described in subparagraph (D), (E), or (F) of subsection (d)(1), and

(B) which is created by the taxpayer.

This paragraph shall not apply if the intangible is created in connection with a transaction (or series of related transactions) involving the acquisition of assets constituting a trade or business or substantial portion thereof.

(3) ANTI-CHURNING RULES.—

For exclusion of intangibles acquired in certain transactions, see subsection (f)(9).

(d) SECTION 197 INTANGIBLE.—For purposes of this section—

(1) IN GENERAL.—Except as otherwise provided in this section, the term "section 197 intangible" means—

(A) goodwill,

(B) going concern value,

(C) any of the following intangible items:

(i) workforce in place including its composition and terms and conditions (contractual or otherwise) of its employment,

(ii) business books and records, operating systems, or any other information base (including lists or other information with respect to current or prospective customers),

(iii) any patent, copyright, formula, process, design, pattern, knowhow, format, or other similar item,

(iv) any customer-based intangible,

(v) any supplier-based intangible, and

(vi) any other similar item,

(D) any license, permit, or other right granted by a governmental unit or an agency or instrumentality thereof,

(E) any covenant not to compete (or other arrangement to the extent such arrangement has substantially the same effect as a covenant not to compete) entered into in connection with an acquisition (directly or indirectly) of an interest in a trade or business or substantial portion thereof, and

(F) any franchise, trademark, or trade-name.

(2) CUSTOMER-BASED INTANGIBLE.—

(A) IN GENERAL.—The term "customer-based intangible" means—(i) composition of market,

(ii) market share, and

(iii) any other value resulting from future provision of goods or services pursuant to relationships (contractual or otherwise) in the ordinary course of business with customers.

(B) SPECIAL RULE FOR FINANCIAL INSTITUTIONS.—In the case of a financial institution, the term "customer-based intangible" includes deposit base and similar items.

(3) SUPPLIER-BASED INTANGIBLE.—The term "supplier-based intangible" means any value resulting from future acquisitions of goods or services pursuant to relationships (contractual or otherwise) in the ordinary course of business with suppliers of goods and services to be used or sold by the taxpayer.

. . . .(e) EXCEPTIONS.—

. . . .(2) LAND.—Any interest in land.

. . . .(g) REGULATIONS.—The Secretary shall prescribe such regulations as may be appropriate to carry out the purposes of this section, including such regulations as may be appropriate to prevent avoidance of the purposes of this section through related persons or otherwise.

■ References

Acolia, George R. (1984), "The Enigmatic Entrepreneurial Profit Factor," *Property Tax Journal,* (March) 21–25.

Alex. Brown & Sons Incorporated (1993), *Inside the REIT Return, Revisiting "The ABS REIT Valuation Model,"* May 17, 2.

American Institute of Real Estate Appraisers (1987), *The Appraisal of Real Estate,* Chicago, IL: AIREA, ninth edition, 22.

Derbes, Max J. (1990), "Entrepreneurial Profit Is Not Cost," *The Real Estate Appraiser and Analyst,* (Spring) 18–28.

Fisher, Jeffrey D. and George H. Lentz (1990), "Business Enterprise Value in Shopping Malls: an Empirical Test," *The Journal of Real Estate Research,* 5:1 (Spring) 167–175.

Internal Revenue Code §197.

Kapplin, Steven D. (1992), "Entrepreneurial Profit, Redux," *The Appraisal Journal* (January) 14–24.

Karvel, George R. and Peter J. Patchin (1992), "The Business Value of Superregional Shopping Centers and Malls," *The Appraisal Journal* (October) 453–462.

Lawrence Associates v. Lawrence Township (1983), 5 N.J. Tax Court 481.

Mann, George R. (1990), "Entrepreneurial Profit Should Be Considered in All Markets, "*The Real Estate Appraiser and Analyst,* (Winter) 44–48.

Rushmore, Stephen (1987), "Hotel Business Value and Working Capital: a Clarification," *The Appraisal Journal,* (January) 144–147.

Rushmore, Stephen and Karen E. Rubin (1984), "The Valuation of Hotels and Motels for Assessment Purposes," *The Appraisal Journal,* (April) 270–288.

Staff Report to the Board of Governors of the Federal Reserve System (1990), *Real Estate Appraisal Regulation,* June 15.

State of Wisconsin, ex rel. N/S Associates v. Board of Review of the Village of Greendale (1991), 473 N.W. 2d 554.

ULI–the Urban Land Institute (1993), *Dollars & Cents of Shopping Centers™: 1993.* Washington, D.C.: ULI–the Urban Land Institute.

Vernor, James D. and Joseph Rabianski (1993), *Shopping Center Appraisal and Analysis.* Chicago: Appraisal Institute.

Acknowledgment

This research was made possible by a grant from the International Council of Shopping Centers Educational Foundation. The authors wish to express their thanks to the Foundation.