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INVESTMENT IN COMMERCIAL REAL ESTATE INCLUDING REHABILITATION: IMPACT OF THE TAX RECOVERY ACT OF 1981

BY
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ABSTRACT

Investment in Commercial Real Estate Including Rehabilitation: Impact of the Tax Recovery Act of 1981

by

Alan R. Cerf

The Economic Recovery Tax Act of 1981 contains numerous provisions to stimulate investment. The accelerated cost recovery system (A.C.R.S.) provides for rapid write-offs for depreciable business and investment realty. A new schedule of investment credits for rehabilitation of older business structures is allowed.

The concern of this study is the change in stimulus to investment in commercial real estate and particularly to investment in the rehabilitation of older commercial buildings as a result of the 1981 Act. A case study of a commercial property is employed to observe the impact of tax provisions on cash flows and internal rates of return in an actual investment situation. The incentives under the 1981 Act are compared to prior law.

Using the criteria of expected internal rates of return, the 1981 Act has maintained the incentives for rehabilitation of commercial real estate over 40 years old. Additional incentive from the new law decreases as holding periods increase. The selection of accelerated depreciation for the nonrehabilitation portion makes little difference under the 1981 Act.

There is less incentive in the new law for a 30-year-old building where the I.T.C. is 15 percent. The incentive is removed entirely for buildings less than 30 years old.

The accelerated cost recovery system, by allowing shorter depreciation lives, results in returns which are slightly higher than under prior law for this case study for property not qualifying for the investment tax credit.

Additional incentive is provided for a building qualifying under the rehabilitation rules over a building which does not qualify. Thus, there is still a comparative advantage of investing in rehabilitation.

This study has set forth quantitative differences in cash flows and rates of returns for a corporate investor in a specific case study. Whether these tax incentives will in fact impact a decision by a corporate investor depends on where the hurdle rate of return is set and the importance of the rate of return relative to other factors in the decision process.

INVESTMENT IN COMMERCIAL REAL ESTATE INCLUDING REHABILITATION: IMPACT OF THE TAX RECOVERY ACT OF 1981

by

Alan R. Cerf

The Economic Recovery Tax Act of 1981 (1981 Act) contains numerous provisions designed to stimulate investment. The accelerated cost recovery system (A.C.R.S.) provides for rapid write offs for business equipment and depreciable business and investment realty. Business and investment realty can be depreciated in 15 years for tax purposes compared to 40 years and longer under prior law.

Investment credits to stimulate rehabilitation of older business structures are contained in the statute. To maintain this stimulus and to avoid an adverse effect on investment in older business structures from A.C.R.S., a new schedule of investment credits is allowed in the 1981 Act.

The provisions of the 1981 Act are complex and impact investors' decisions via cash flows in a number of ways. The concern of this study is with the change in stimulus to investment in commercial real estate and particularly to investment in the rehabilitation of older commercial buildings.

The impact of A.C.R.S. and the rehabilitation tax credit are potentially important to the preservation of older buildings. Since these buildings are often in the inner cities, there is significance to urban economic problems. Tax incentives impact federal revenues and perhaps have redistribution of income effects.

Research Objectives

Decisions to invest in real estate are influenced by projected cash flows which are impacted by tax laws. To hypothesize on the impact of tax factors, a realistic situation is used to determine how the tax factors work together with the basic economics of a real estate investment.

A case study of a commercial property is employed to observe the impact of tax provisions on cash flows and internal rates of return in an actual investment situation. A major objective is to observe the incentive impact on the corporate investor in the rehabilitation of older commercial property. The incentives under the 1981 Act are compared to prior law.

The impact of A.C.R.S. through rapid depreciation write-offs is to provide the corporate investor with a significant alternative to the rehabilitation of commerial property. To assume there is significant stimulus for rehabilitation, there must be superior incentives for rehabilitation over investment in newer properties. Incentives with and without the rehabilitation investment tax credit are examined.

Specifically, projected internal rates of return, cash flows from operations, and cash flows from sales are determined and examined. Allowable depreciation methods, depreciation lives, and investment tax credits (I.T.C.) impact cash flows and through cash flows, internal rates of return. Depreciation and investment tax credit recapture rules also impact tax liabilites, cash flows, and internal rates of return.

Methodology

Certain assumptions are selected for the purposes of this study which relate to the decision making process of the investor.[1] This study is concerned with the corporate investor. It is assumed the investor examines projected internal rates of return in making a decision to invest. The projected internal rate of return would then have to exceed a predetermined hurdle rate before the corporation would undertake a project. Expected cash flows from operations and from projected sale of the property are considered separately and together.

Tax factors operate at the decision making level by changing cash flows. The investor faces a certain set of opportunities and has certain expectations as to the future. The investor has limited wealth and has that wealth invested in a portfolio of assets. Tax factors would be controlling in a decision by impacting an investment at the margin so that it would be selected over other alternatives.

Previous Literature

In the economic literature there have been studies of the impact of the investment tax credit on investment. There are also articles which examine the impact of the I.T.C. on hypothetical investments. At the time of this writing the 1981 Tax Recovery Act has just been passed by Congress and

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1. See P.F. Wendt and A.R. Cerf, Real Estate Investment Analysis and Taxation, McGraw Hill Inc., 1979, p. 44-62 for a discussion of real estate investment analysis.

there is as yet no published material other than synopses of the law and some tax planning suggestions.

Investment in Office Buildings

A high degree of risk is characteristic of investment in office buildings. Risk results from high financial leverage, risk associated with the specific investment, factors influencing investment in office buildings as a whole, and risk of increases in property tax. Because of these risks, a high potential return is required to attract investors.[2]

Divergence in local office building market conditions necessitates careful examination of each specific opportunity. An investor might make an analysis similar to the following. First, it is desirable to examine the office building environment within the scope of the current economic environment. To compute hypothetical investment returns, an economic forecast must be made for the specific investment. Gross revenues and operating expenses are projected and cash flows derived. Revenues are based on estimation of rents and occupancy rates in the local market. Expenses reflect managerial quality as well as local tax policies and wage levels. Using estimates of the offering price, financing terms, future selling price, and available tax shelter, calculations of potential rates of return can be made.

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2. See Office Building Investment in Ibid, p. 238-284.

The uncertainty inherent in the estimates of the above suggests the desirability of sensitivity analysis where a range of expected outcomes can be evaluated. The existing supply as well as new construction in relationship to the market absorption rate impact potential rental rates and therefore rates of return.

Case Study

Information on projected building cost, rehabilitation cost, projected rentals and expenses were provided for a building which was in the process of rehabilitation in the San Francisco Bay Area. This information is presented in Table III. The author then chose likely financing terms based on a survey of the financial market, resulting in the choice of a 16 percent annual interest rate, 15-year amortization, and a 15-year due date. It is assumed $800,000 is borrowed out of a total cost of $1,600,000.

The financial markets for commercial real estate loans at this time provide for historically high interest rates so that the use of substantial financial leverage carries a great deal of risk. To project future rentals, an 8 percent growth per annum was based on what appeared to be a relatively conservative projection of the impact of inflation on office building rentals. Expenses were also assumed to increase at 8 percent per year. Results of holding periods of 5, 10, and 15 years are examined. To project sales price, a gross income multiplier of 12.5 times was consistent with the market at the time of the study.

Specifications of the Internal Revenue Code

The following rules in the law impact tax liabilities or provide shelter and therefore help determine cash flows: (a) allowable depreciation life, (b) allowable depreciation methods, (c) depreciation recapture, (d) repeal of component depreciation, (e) allowance of investment tax credit, (f) recapture of investment tax credit, (g) ordinary tax rates, (h) capital gain tax rates.

The rules relating to used commercial real estate not subject to the rehabilitation investment tax credit are summarized in Table I. Particularly important in the 1981 Act is the significant reduction in depreciation lives. The allowance of 175 percent declining balance depreciation under the 1981 Act loses a good deal of attractiveness, in most situations because there is a full recapture of gain on sale as ordinary income to the extent of total depreciation taken. Note under prior law only straight line depreciation could be selected for used commercial property. Component depreciation is no longer allowable under the 1981 Act. Prior law allowed for selection of lives for components of a property which resulted in a larger depreciation allowance overall than the allowance determined by using one rate on the entire building. Another significant change is the extension of operating loss carryovers from 7 to 15 years.

The rules under the 1981 Act are compared to prior law in Table II for commercial real estate which qualifies for the rehabilitation tax credit. Under the prior law 150 percent

declining balance depreciation could be used on the portion qualifying for the investment tax credit as it was considered new property. Straight line depreciation is required under the 1981 Act for the portion qualifying under the Rehabilitation I.T.C.

Significant changes in the allowance of the I.T.C. have been made. A building must be at least 30 years old to obtain an I.T.C. of 15 percent. Prior law allowed a 10 percent I.T.C. if the building was 20 years old. The 10 percent credit is not allowed after December 31, 1981. If the building is 40 years or older a 20 percent I.T.C. is allowed. Note, however, there is a negative impact under the 1981 Act because the adjusted basis for depreciation and for determination of gain or loss on disposition is reduced by the amount of the I.T.C. However, the I.T.C. carryover is increased from 7 to 15 years.

Comparative Cash Flows

Using the data described in Table III, cash flows for prior law were projected using the Real 80 computer program at the University of California.[3] Adjustment to the tax provisions and cash flows were made to comply with the provisions of the 1981 Act. Rates of return were determined using an internal rate of return computer program of the School of Business.

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3. See P.F. Wendt and A.R. Cerf, op. cit., Appendix 3A, p. 63-86. The Real 80 program was subsequently adapted to incorporate the provisions of the 1978 Revenue Act.

The investor is a corporation in the 46 percent marginal tax bracket for ordinary income and the 28 percent tax bracket for long term capital gains. It is assumed the investor has sufficient income to use any tax savings at the 46 percent tax rate and any ordinary income from the project is taxed at the 46 percent tax bracket. Cash flows are after the tax impact of the project. The expected marginal result of adding the project to the corporation's portfolio of investments is what is calculated.

The first section following here discusses cash flows and the second section internal rates of return for property qualifying for the I.T.C. The process is repeated for property not qualifying. To hypothesize on the impact of the differences in cash flows under the prior law and the 1981 Act, the following questions were posed: (1) How do cash flows change as holding periods change? (2) What is the difference in the proportion of cash flows from operations relative to cash flow from expected sales proceeds? The relevance is that nearer term cash flows from operations can be projected with more accuracy than distant sales proceeds. Table IV presents the after tax cash flows <u>with</u> the I.T.C. under prior law compared with two depreciation assumptions under the 1981 Act. Annual flows under the new law benefit from the increased I.T.C. which is $180,000 compared to $90,000 under prior law. Also there is a positive impact because depreciation is taken over a 15 year period compared

to 40 years under the prior law.[4] Expected sales proceeds under the 1981 Act are less than prior law because more tax is paid as a result of the larger gain. Recall the basis for the rehabilitation property is reduced by the amount of the I.T.C. (see Table II). Under the 1981 Act there is considerably less contribution from the sales proceeds relative to the annual operating cash flows. For a 5 year holding period under prior law, 88.1 percent of the cash flow comes from sales compared to 80.5 percent for the 1981 Act using straight line depreciation and 78.7 percent using 175 percent declining balance depreciation on the non-rehabilitation portion of the building. This should be considered positive since investors tend to place more emphasis on near term cash flows. It also impacts the internal rate of return as will be discussed shortly.

Using 175 percent declining balance depreciation on the non-rehabilitation portion improves the timing of the annual cash flows but results in less cash from sale as all depreciation is recaptured if an accelerated method is used under the 1981 Act.

Internal Rates of Return

The cash flows with the rehabilitation I.T.C. presented in Table IV were used to determine internal rates of return for holding periods of 5, 10, and 15 years which are shown in Table VII. Under the 1981 Act as well as prior law, rates of return decrease as holding periods increase under an

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4. A 40 year old building is used in this example. A 30 year old building would get only a 15% I.T.C.

assumption of an 8 percent annual growth rate in rentals. This would be expected because of the impact of the I.T.C. in year one. Decreases in rates of return as holding periods increase has potential implications for how long investors will hold property and the amount of turnover of commercial real estate.

Does the 1981 Act provide significant additional incentive for rehabilitation of commercial buildings relative to the prior law? Rates of return are superior. Using straight line depreciation for the non-rehabilitation portion under the 1981 Act there is a 3.10 percent difference in the rate of return under the new law for a 5 year holding period, 2.18 percent for a 10 year holding period, and 1.92 percent for a 15 year holding period (Table VII). Thus, in so far as this example is representative it appears the incentive has been slightly improved over the prior law. The difficult question is whether this amount of difference would cause a difference in decision considering the many uncertainties in this type of investment.

The alternative of 175 percent declining balance depreciation on the non-rehabilitation part makes little difference in rates of return from the use of straight line. This is because the time value of early depreciation is offset by more depreciation recapture on sale as the new law recaptures all depreciation as ordinary income on sale if accelerated depreciation has been used.

Cash Flows and Rates of Return Without the Rehabilitation I.T.C.

Cash flows are presented in Table V and internal rates of return are presented in Table VIII. These tables show the impact of the accelerated cost recovery system (A.C.R.S.). Here the case example is used and it is assumed the property does not qualify for the rehabilitation I.T.C.

Under the 1981 Act using straight line depreciation, cash flows are less dependent on sales proceeds then under the prior law because of the shorter depreciation life. A 15 year life is used under A.C.R.S. compared to 40 years chosen under the prior law. The timing of annual cash flows is improved further by the use of 175 percent declining balance under the 1981 Act. It is significant that full recapture of depreciation allowances as ordinary income is required under the new law if accelerated depreciation is chosen. This results in less total cash flow under accelerated depreciation than total cash flow using straight line.

Rates of return are only slightly higher under the 1981 Act without the rehabilitation I.T.C. (Table VIII). There seems hardly enough additional incentive under the 1981 Act to make a difference in an investment decision. Given the high degree of risk in such ventures such a small difference in rates of return would probably not be significant.

Table VI provides cash flow results under several sets of assumptions for the 1981 Act. These assumptions are shown in Figure I.

Figure I

1981 Act

Alternative Depreciation Assumptions

	Structure	Rehabilitation
With I.T.C.		
(1)	straight line	straight line
(2)	175% D.B.	straight line
Without I.T.C.		
(3)	straight line	straight line
(4)	175% D.B.	175% D.B.

If a property qualifies for the rehabilitation I.T.C. and the project is held 5 years there is a 4.33 percent higher rate of return then if the project does not qualify. Examination of Table IX shows how differences in returns decrease as holding periods lengthen.

Conclusions

Using the criteria of expected internal rates of return the 1981 Act has maintained the incentives for rehabilitation of commercial real estate over 40 years old. The 1981 Act provides superior returns over prior law (Table VII).

Additional incentive from the new law decreases as holding periods increase. The selection of accelerated depreciation for the non-rehabilitation portion makes little difference under the 1981 Act.

There is less incentive in the new law for a 30 year old building where the I.T.C. is 15 percent. The incentive is removed entirely for buildings less than 30 years old.

The A.C.R.S., by allowing shorter depreciation lives, results in returns which are slightly higher then under prior law for this case study (Table VIII).

Additional incentive is provided for a building qualifying under the rehabilitation rules over a building which does not qualify (Table IX). Thus, there is still a comparative advantage of investing in rehabilitation.

This study has set forth quantitative differences in cash flows and rates of returns in a specific case study. Whether these tax incentives will in fact impact a decision by a corporate investor depends on where the hurdle rate of return is set and the importance of the rate of return relative to other factors in the decision process.

LIST OF TABLES

TABLE I

CAPITAL COST RECOVERY
USED COMMERCIAL REAL ESTATE
NOT SUBJECT TO REHABILITATION INVESTMENT TAX CREDIT

	Old Law Prior to 1/1/81	New Law After 12/30/80
Depreciation life	40 years[1]	15 years Or election 35-45 yrs.
Depreciation method	Straight line	175% Dec. balance with automatic change to straight line Or election straight line
Basis for depreciation	Adjusted basis	Adjusted basis
Depreciation recapture -- if straight line used	No recapture	No recapture
-- if accelerated method	Not eligible	Full recapture
Component depreciation	Yes—but subject to audit	No component depreciation
Investment tax credit	None	None
Investment tax credit recapture	None	None

[1]Varies as function of age, condition

TABLE II

CAPITAL COST RECOVERY
COMMERCIAL REAL ESTATE IMPROVEMENTS
SUBJECT TO REHABILITATION INVESTMENT TAX CREDIT

Depreciation Rules Investment Tax Credit	Old Law Before 1/1/81 Before 1/1/82	New Law After 12/30/80 After 12/31/81
Depreciation life	40 years[1]	15 years Or election 35-45 yrs.
Depreciation method	150% Dec. bal.	Straight line
Basis for depreciation	Adjusted basis	Adjusted basis less Investment tax credit
Depreciation recapture -- If straight line used	None	None
-- If accelerated method	Excess accelerated over straight line	None
Component depreciation	Yes—subject to audit	No component depreciation
Investment tax credit	10% (20 years)	15% - (30-39 yrs.) 20% - (40 yrs.)
Investment tax credit recapture	Credit taken less credit allowed for actual use	1 yr. 100%, year 2, 80% yr. 3, 60%, yr. 4, 40% yr. 5, 20%
Investment tax credit carryover	7 years	15 years
Operating loss carryover	7 years	15 years

[1]Varies with age, condition

TABLE III

SPECIFICATIONS OF
BASE MODEL

			Notes
Land	$ 160,000		
Structure	540,000		
Rehabilitation	900,000		
Total Cost	$1,600,000		
Gross Rental		$194,160	6,472 @ $30 sq./ft.
Expenses			
Real Estate Taxes	16,000		1 % of purchase price
Janitorial	6,240		
Utilities	6,000		
Maintenance & Repair	1,500		
Insurance	2,500		
Management	3,918		
Points	1,600	37,758	
Operating income before vacancy		$156,402	
Operating income after vacancy		150,577	
Note: Vacancy Rate		3 % of gross	$5,825.00
Loan			
Amount	$ 800,000		
Rate	16 %		
Maturity	15 years		
Points	$ 24,000		
Growth Rates			
Rentals	8 %		
Expenses	8 %		
Determination of Sales Price Multiplier			
Times Gross Income	12.5		

Depreciation Schedules			
$540,000	straight line	40 years	salvage = 0
$900,000	150 % DB	40 years	salvage = 0

Rehabilitation Investment Tax Credit

Simulation provides for computations with and without 20 % rehabilitation tax credit under alternative specifications of variables. I.T.C. applies only to $900,000 improvements.

TABLE IV

COMPARATIVE CASH FLOWS:
THE 1981 TAX RECOVERY ACT AND PRIOR LAW
WITH REHABILITATION INVESTMENT TAX CREDIT

Annual After Tax Cash Flow

Year	Old Law	New Law Both St. Line	New Law Rehab - SL BLDG - 175 DB
1	$ 110,473	$ 217,377	$ 229,797
2	25,287	42,774	51,813
3	30,452	48,499	54,522
4	35,976	54,563	57,977
5	41,865	60,791	62,056
6	48,122	67,705	66,702
7	54,744	74,666	72,029
8	61,726	82,276	78,786
9	69,056	90,052	86,511
10	76,713	98,137	94,596
11	84,668	106,519	102,965
12	92,880	115,115	111,575
13	101,295	123,912	120,371
14	109,840	132,824	129,284
15	118,656	141,761	138,217
	1,061,754	1,456,971	1,456,971
	After Tax Sales Proceeds		
5	$ 1,813,607	$ 1,746,274	$ 1,681,864
10	3,021,076	2,864,282	2,781,831
15	4,951,048	4,724,660	4,627,482
	Total Cash Flows		
5	$ 2,057,660	$ 2,170,278	$ 2,138,029
10	3,575,491	3,701,122	3,636,570
15	6,012,802	6,181,631	6,084,453

TABLE V

COMPARATIVE CASH FLOWS:
THE 1981 TAX RECOVERY ACT AND PRIOR LAW
WITHOUT REHABILITATION INVESTMENT TAX CREDIT

Annual After Tax Cash Flow

Year	Old Law	New Law Both St. Line	New Law Both 175 % D.B.
1	$ 20,473	$ 42,815	$ 76,020
2	25,287	48,294	72,400
3	30,452	54,005	70,160
4	35,976	60,083	69,189
5	41,865	66,490	69,377
6	48,122	73,248	70,650
7	54,744	80,352	72,904
8	61,726	87,796	78,371
9	69,056	95,572	86,146
10	76,713	103,657	94,231
11	84,688	112,026	102,600
12	92,880	120,635	111,210
13	101,295	129,432	120,006
14	109,840	138,344	128,919
15	118,656	147,281	137,857
	971,754	1,360,030	1,360,030
	After Tax Sales Proceeds		
5	$ 1,843,607	$ 1,779,874	$ 1,608,109
10	3,021,076	2,881,166	2,661,208
15	4,951,048	4,724,679	4,465,483
	Total Cash Flows		
5	$ 1,997,661	$ 2,051,561	$ 1,965,255
10	3,485,491	3,593,478	3,420,656
15	5,922,802	6,084,709	5,825,513

TABLE VI

COMPARATIVE CASH FLOWS:
THE 1981 TAX RECOVERY ACT WITH AND WITHOUT
THE REHABILITATION INVESTMENT TAX CREDIT

Annual After Tax Cash Flow

Year	With Credit		Without Credit	
	Both Straight Line	Rehab. Straight Line Bldg. 175 %	Both Straight Line	Both 175 % DB
1	$ 217,377	$ 229,797	$ 42,815	$ 76,020
2	42,774	51,813	48,294	72,400
3	48,499	54,522	54,005	70,160
4	54,563	57,977	60,083	69,189
5	60,791	62,056	66,490	69,377
6	67,705	66,702	73,248	70,650
7	74,666	72,029	80,352	72,904
8	82,276	78,736	87,796	78,371
9	90,052	86,511	95,572	86,146
10	98,137	94,596	103,657	94,231
11	106,519	102,965	112,026	102,600
12	115,115	111,575	120,635	111,210
13	123,912	120,371	129,432	120,006
14	132,824	129,284	138,344	128,919
15	141,761	138,217	147,281	137,857
	1,456,971	1,456,971	1,360,030	1,360,030
	After Tax Sales Proceeds			
5	$ 1,746,274	$ 1,681,864	$ 1,779,874	$ 1,608,109
10	2,864,282	2,781,831	2,881,166	2,661,208
15	4,724,660	4,627,482	4,724,679	4,465,483
	Total Cash Flows			
5	$ 2,170,278	$ 2,138,059	$ 2,051,561	$ 1,965,255
10	3,701,122	3,636,650	3,593,478	3,420,686
15	6,181,631	6,084,767	6,084,709	5,825,592

Table VII

COMPARATIVE INTERNAL RATES OF RETURN:
COMPARISON OF 1981 TAX RECOVERY ACT AND PRIOR LAW
WITH THE REHABILITATION INVESTMENT TAX CREDIT

Holding Period Years	Prior Law	New Law St. Line Both	New Law 175% DB on Bldg.
		PERCENT	
5	23.47	26.56	26.58
10	18.84	21.01	21.17
15	17.23	19.15	19.32

Differences in Rates of Return

	col. (2)-(1)	Col. (3)-(1)
	PERCENT	
5	3.10	3.11
10	2.18	2.33
15	1.92	2.10

Table VIII

COMPARATIVE INTERNAL RATES OF RETURN
COMPARISON OF 1981 TAX RECOVERY ACT AND PRIOR LAW
WITHOUT REHABILITATION INVESTMENT TAX CREDIT

Holding Period Years	Prior Law	New Law Both St. Line	New Law Both 175% DB
	PERCENT		
5	21.09	22.25	22.05
10	17.37	18.55	18.76
15	16.19	17.33	17.64
	Differences in Returns		
	(2)-(1)	(3)-(1)	
	PERCENT		
5	1.16	.96	
10	1.18	1.40	
15	1.14	1.45	

Table IX

COMPARATIVE INTERNAL RATES OF RETURN:
COMPARISON OF 1981 TAX RECOVERY ACT WITH AND WITHOUT
THE REHABILITATION INVESTMENT TAX CREDIT

Holding Period Years	With Credit		Without Credit	
	Percent			
	Both S.L.	Rehab. S.L. Bldg. 175%	Both St. Line	Both 175% Dec. Bal
5	26.57	26.58	22.25	22.05
10	21.02	21.17	18.55	18.77
15	19.15	19.24	17.33	17.64

Differences in Rates of Return

PERCENT

	(2)-(1)	(2)-(3)	(2)-(4)	(1)-(3)
5	.013	4.33	4.53	4.32
10	.152	2.62	2.40	2.47
15	.083	1.90	1.60	1.82

APPENDIX

A series of graphs follow which are based on the tables in the article. For graphs I to III, dollars are on the vertical axis and years are on the horizontal axis. Graph I illustrates the cumulative annual cash flows assuming the improvements qualify for the investment tax credit, and is based on table IV. Sales proceeds are not included. Note the superiority of the two alternatives under the 1981 Act compared with prior law. The small difference in the two alternatives under the 1981 Act is apparent.

Graph II shows the cumulative annual cash flows resulting from the investment assuming there is no investment tax credit. It is based on table V and sales proceeds are not included.

Graph III shows the cumulative annual cash flows under the 1981 Act assuming alternative depreciation choices combined with the investment tax credit and without the investment tax credit. This is based on table VI.

The following graphs show internal rates of return on the vertical axis and years on the horizontal axis. Returns were computed for five, ten, and fifteen year holding periods. These are connected by the computer.

Graph IV, based on table VIII, illustrates internal rates of return under prior law and under the 1981 Act with the use of the investment tax credit.

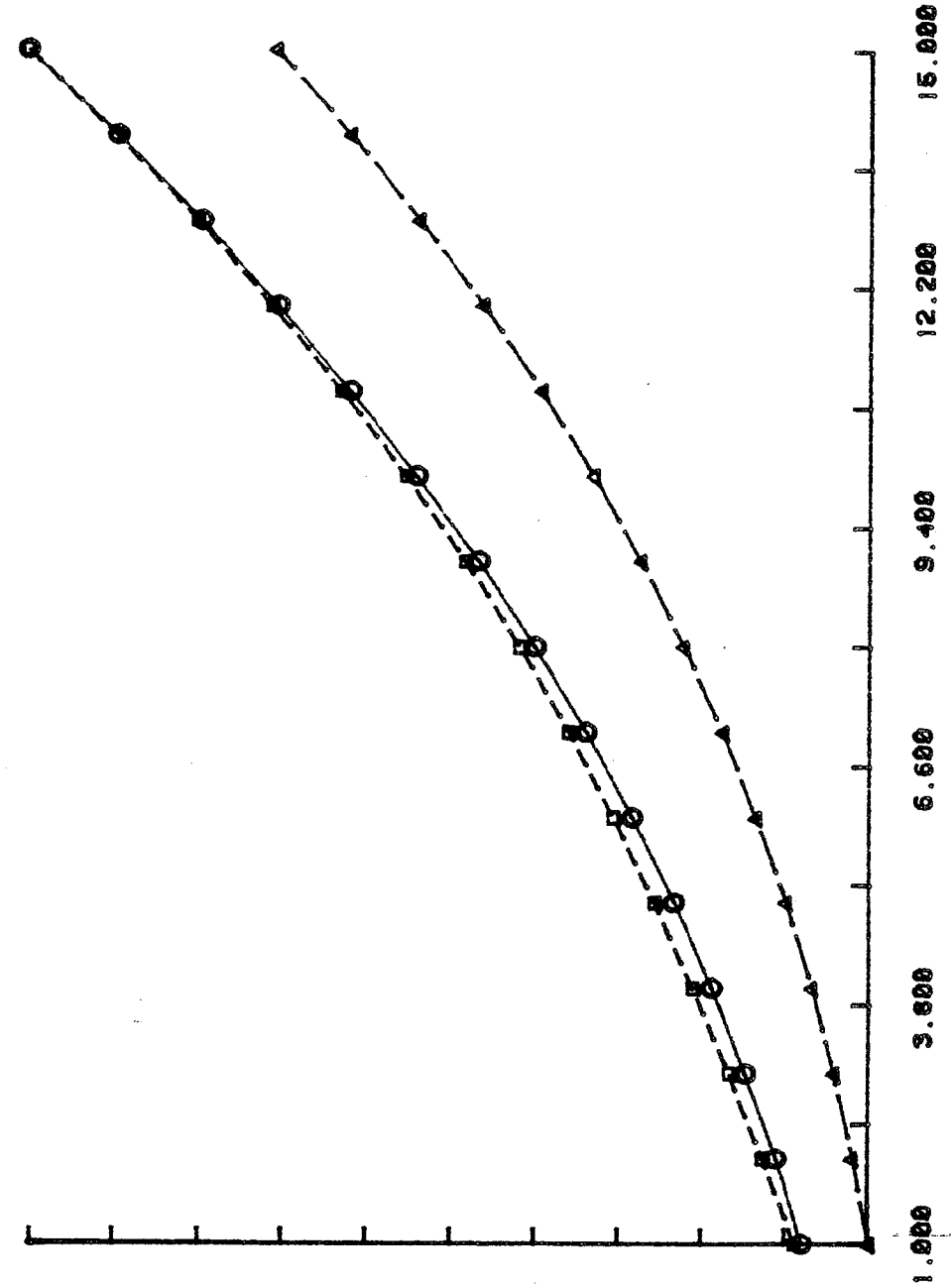
Graph V, based on Table VIII, illustrates rates of return assuming the property did not qualify for the investment tax credit.

Graph VI is based on Table IX and illustrates comparative rates of return under the Tax Recovery Act of 1981.

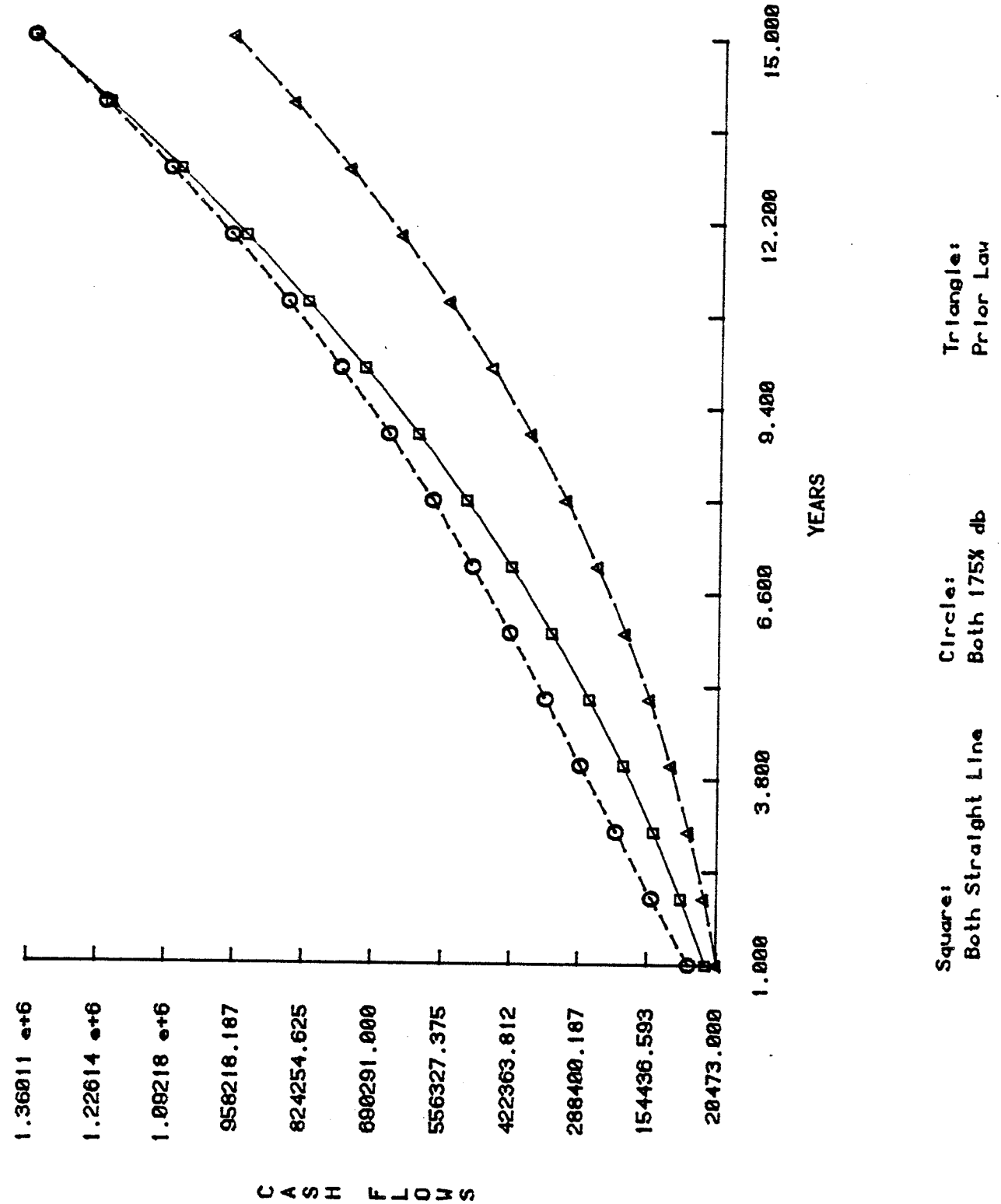
Graph VII plots rates of return with and without the investment tax credit and compares prior law with alternatives under the 1981 Act.

Graph 1

Comparative Cash Flows with ITC

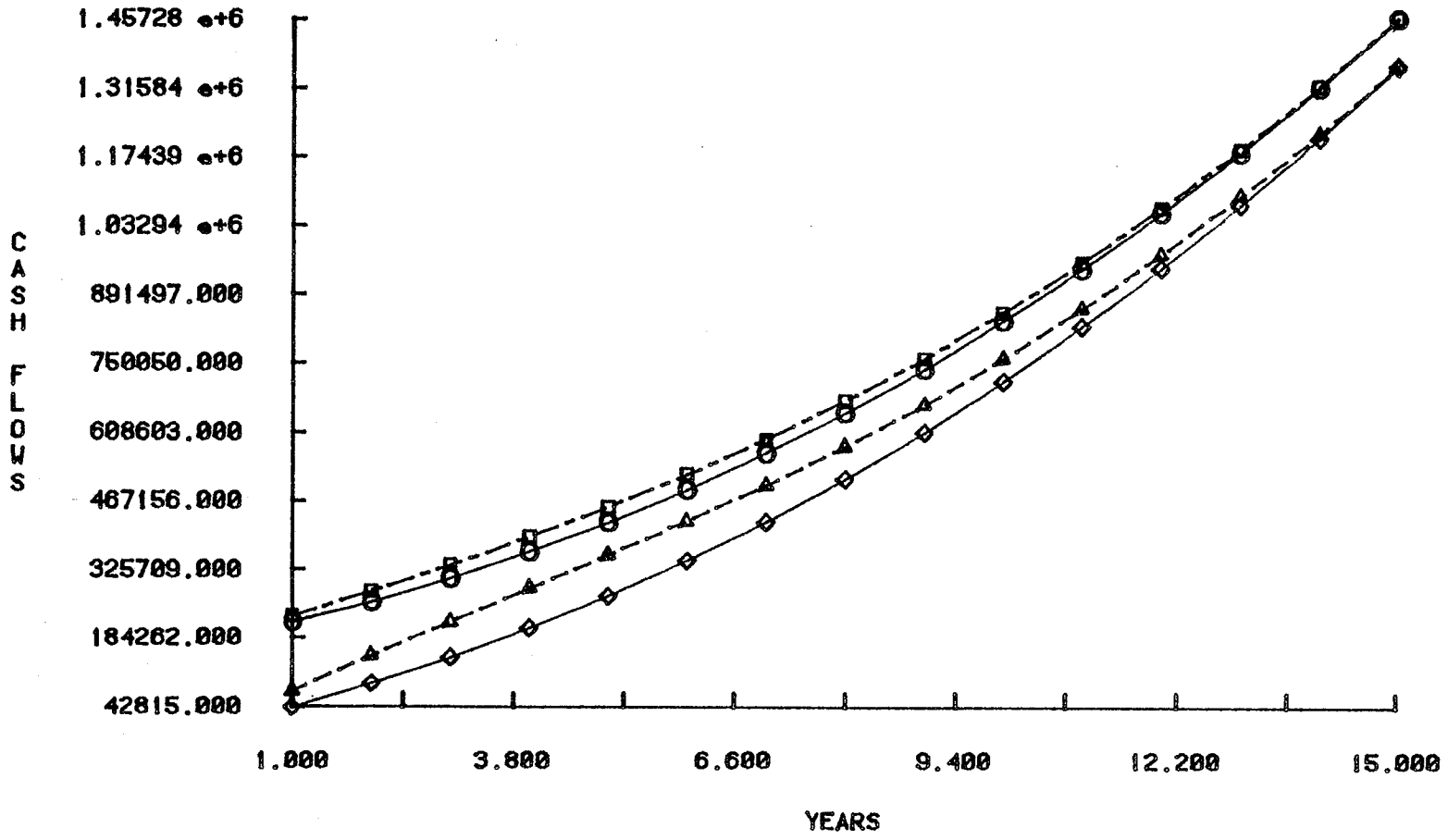


Graph 2


Comparative Cash Flows without ITC
CASH FLOWS
1.36011 e+6
1.22614 e+6
1.09218 e+6
958218.187
824254.625
690291.000
556327.375
422363.812
288400.187
154436.593
20473.000
1.000
3.800
6.600
9.400
12.200
15.000
YEARS
Square:
Both Straight Line
Circle:
Both 175% db
Triangle:
Prior Law

Graph 3

Comparative Impact of ITC on Cumulative Cash Flows under the New Law

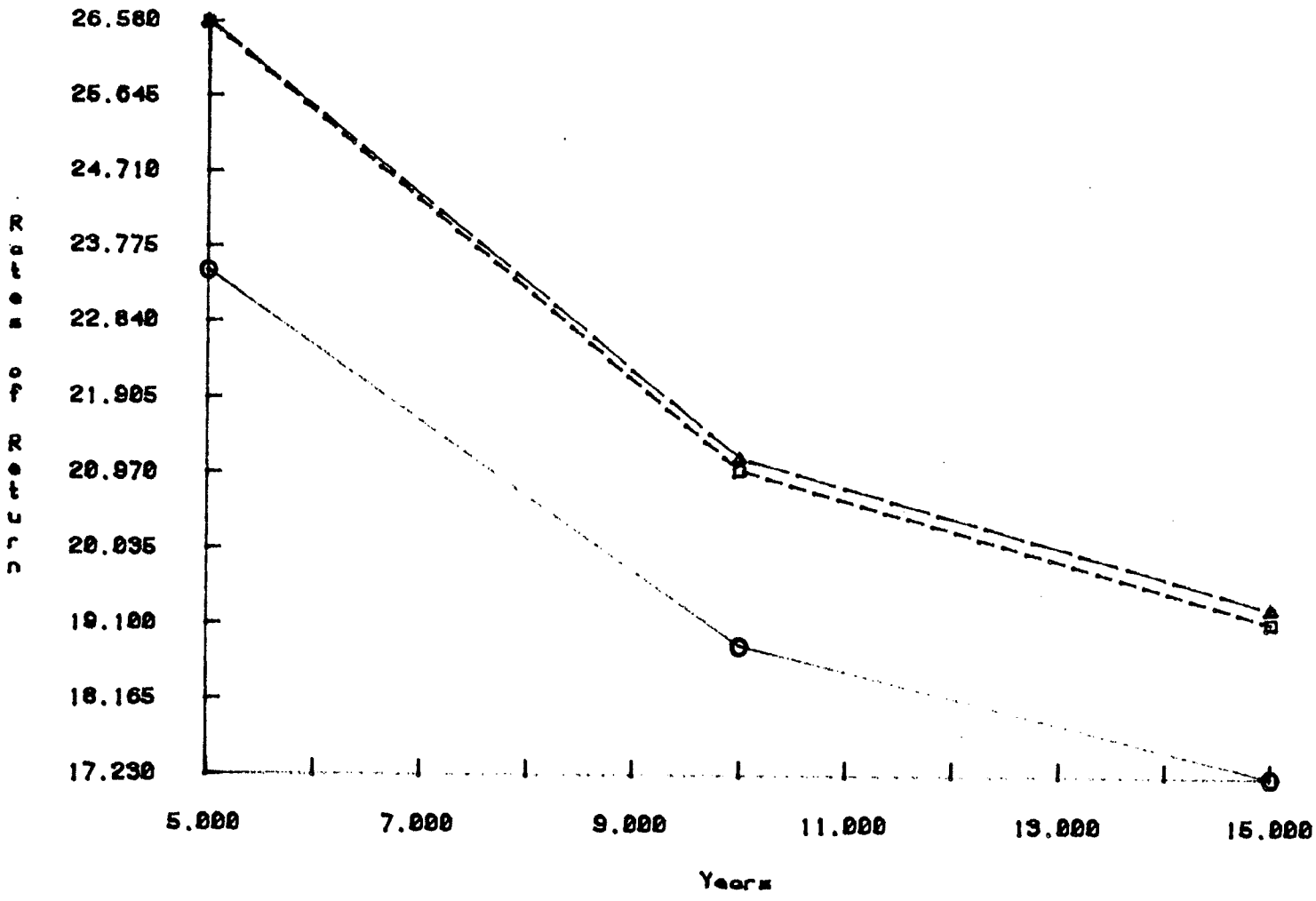


Circle:
Both Straight Line-ITC
Square:
175% DB on Building-ITC

Triangle:
Both 175%-NO ITC
Diamond:
Both Straight Line-No ITC

Graph 4

Rates of Return with ITC



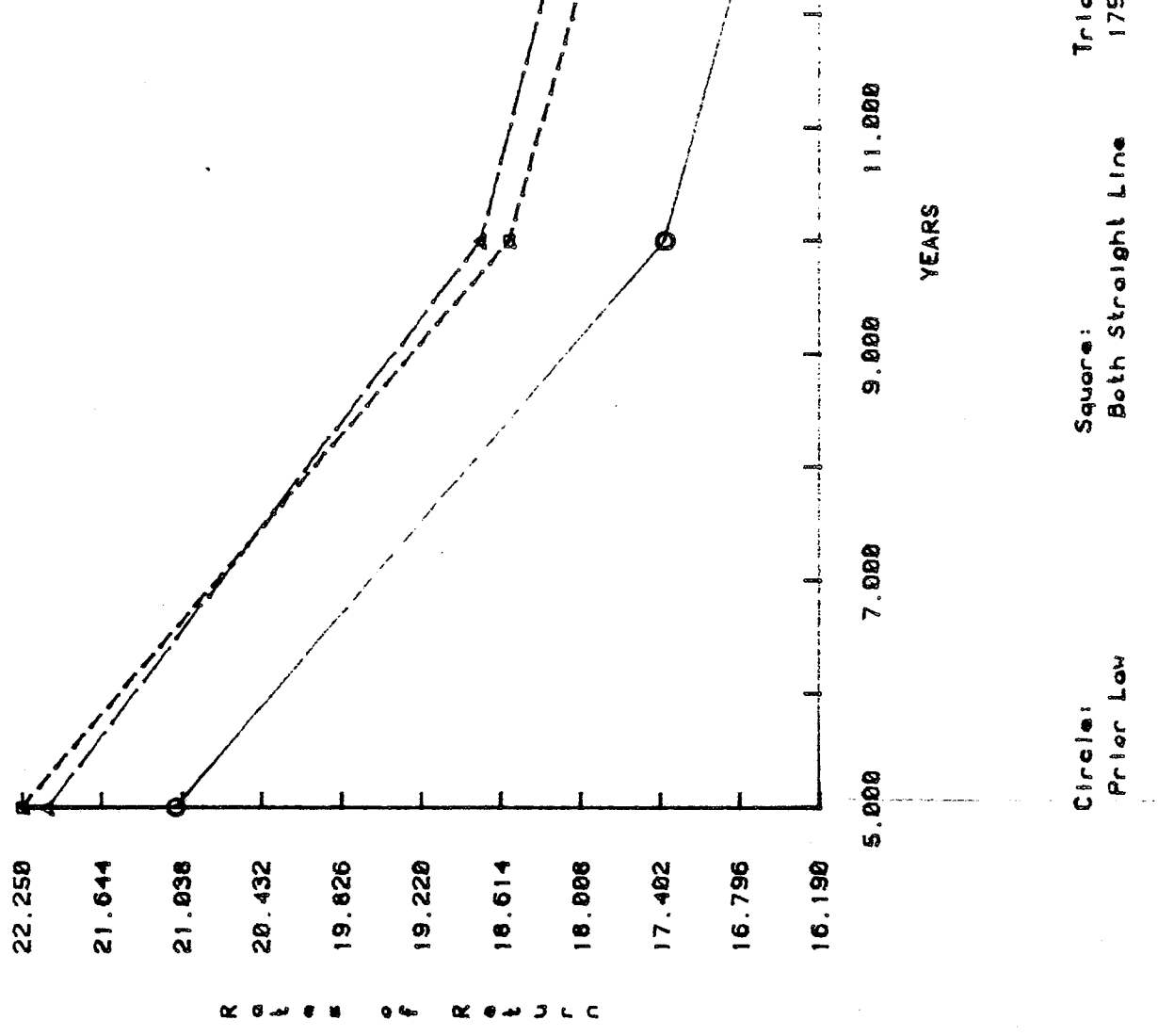
Circle:
Prior Law

Square:
Both straight line

Triangle:
175% Declining Balance On the Building

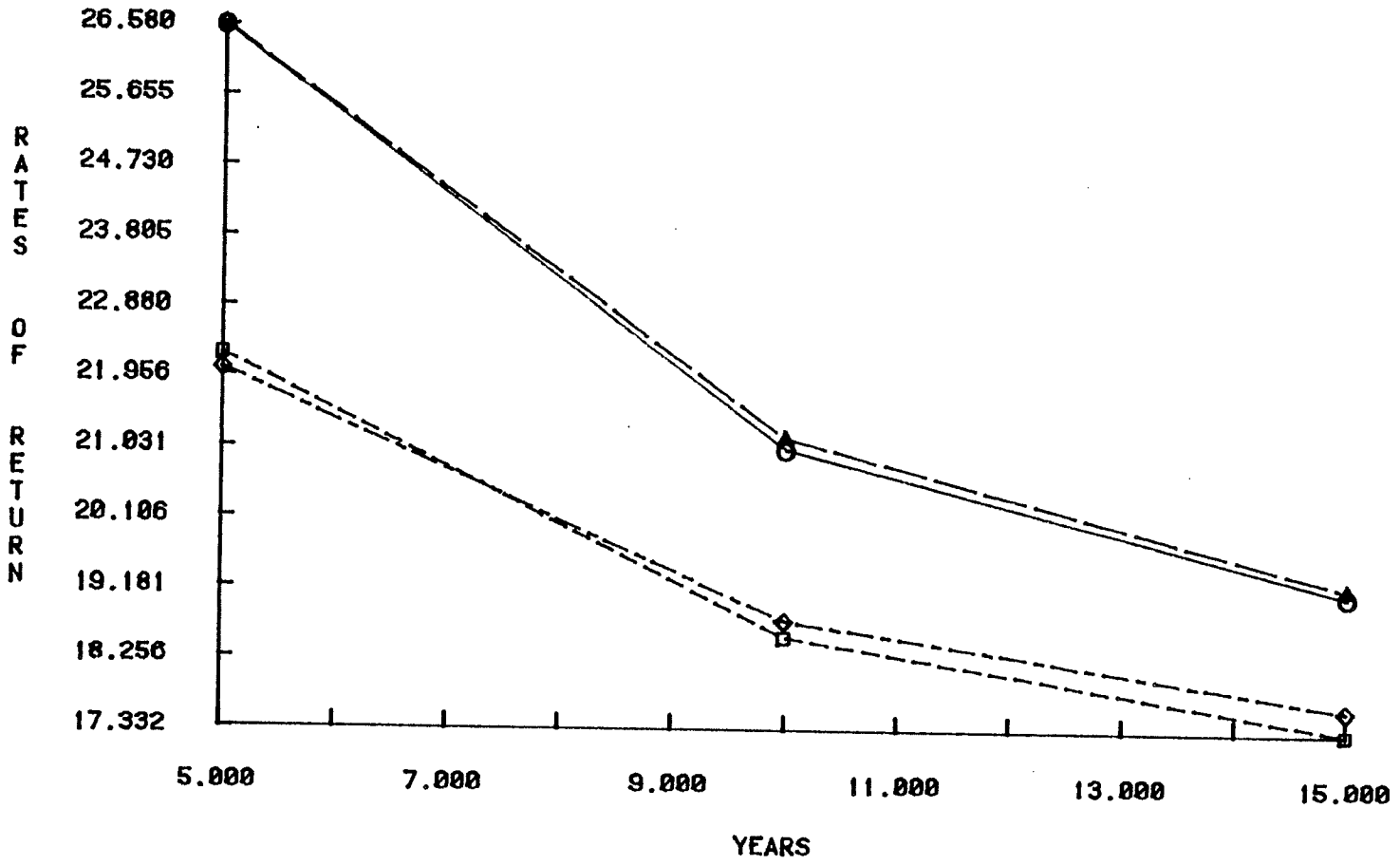
Graph 5

RATES OF RETURN WITHOUT ITC



Graph 6

Comparative Rates of Return under the Tax Recovery Act of 1981

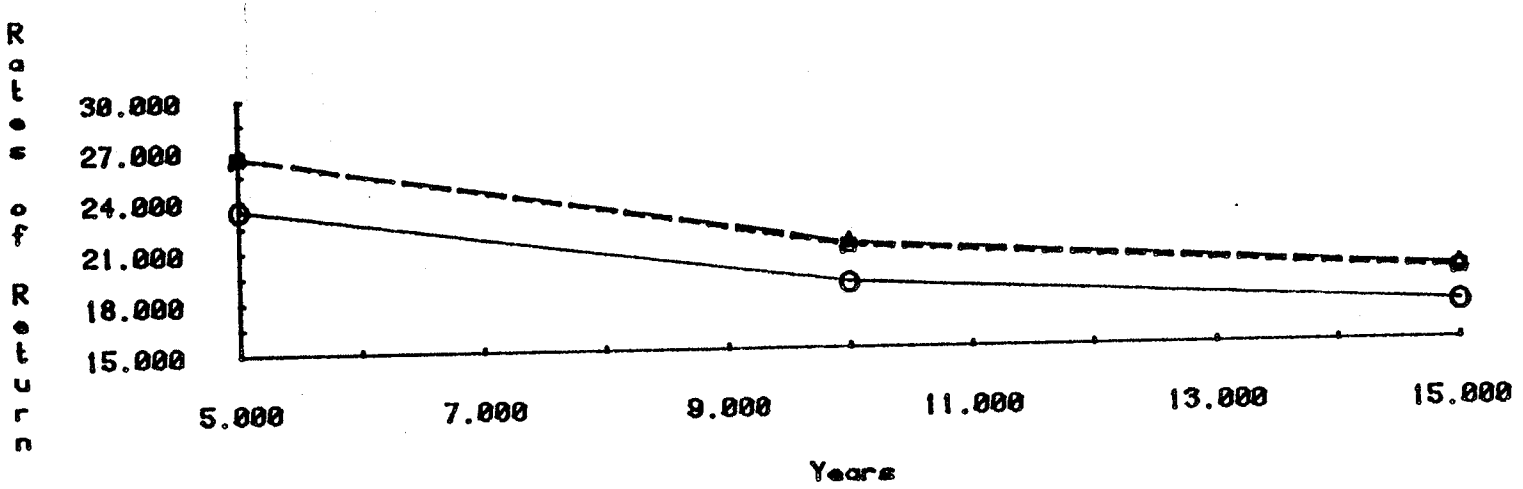


Circle:
BSL-ITC
Square:
BSL-No ITC

Triangle:
175% DB on Building-ITC
Diamond:
175% DB on Both-No ITC

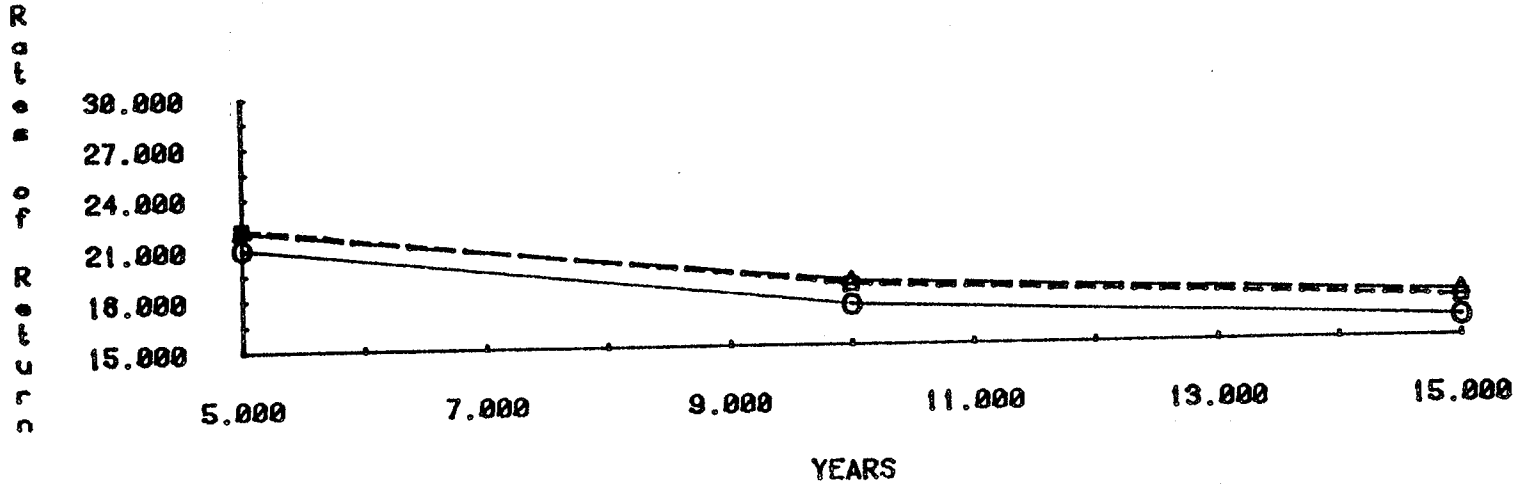
Graph 7

Rates of Return with ITC



Circle:
Prior Law
Square:
Both straight line
Triangle:
175% Declining Balance On the Building

RATES OF RETURN WITHOUT ITC



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