HOLD vs. SELL OFFICE BUILDING CND EXAMPLE

INTRODUCTION

This example illustrates Hold versus Sell Analysis.

The Investit Pro Template used is "Hold vs. Sell Office Monthly"

This practice example consists of three sections;

- 1. The input information for the project
- 2. Instructions for entering the data
- 3. Sample reports and conclusions

EXAMPLE

An investor has owned Plaza 500 for 7 years and needs your help in deciding whether to hold the property for another 10 years or sell. The investor's Desired Return (IRR) is 13.00% before tax.

The best approach for Hold vs. Sell decisions is to carryout after tax analysis. If the investor sells today they will have to pay Capital Gains Tax and Recaptured Depreciation Tax which can influence the decision as to whether to sell or keep the property.

PROJECT INFO. Folder

Property Name: Plaza 500

Description: 15,000 Sq. Ft Office Building

Starting Date: Year 1 Jan Building Area: 16,500 Sq Ft Total Rentable Area: 15,000 Sq. Ft

Usable Area: 12,750 Sq. Ft Analysis Period: 10 Years

INVESTOR Folder

Marginal Tax Rate: 37.00%

Capital Gain Rate: 50.00% of the gain added to income

Discount Rate Before Tax: 13.00%

Short Term Rates before Tax for calculating the Modified Internal Rate of Return (MIRR)

Financing Rate: 7.000% Reinvestment Rate: 2.00%

INVESTMENT Folder

Investments made prior to the Analysis Start Date

In order to calculate the annual depreciation during the Analysis Period we need to enter previous investments in the building or improvements (excluding the land which is not depreciated), the depreciation method and when the investment was made.

In this example, the property was acquired 7 years ago and the value assigned to the building.

The current Undepreciated Balance of the improvements is \$2,350,000. In order to continue the depreciation claims and reduce taxable income during the analysis period the following information is entered in the Investment Folder

Description: Undepreciated Balance: \$2,350,000

CCA Class: Building CCA Rate: 4.00%

Investments made after the Analysis Start Date

Investment made on or after the Analysis Start Date are entered in the Investment Folder. In this example, the roof is being replaced in year 3 Jan for \$200,000

Description: Roof Replacement

Amount: \$200,000 Year 3 Jan

CCA Class: Building CCA Rate: 4.00% Investment: Exists

Sell Now Inputs

The following information is used to calculate the sales proceeds before and after tax if the property was sold today.

Sale Price: \$4,200,000

Important Note: The sale price would include the current balance in the Replacement Reserve Account of

\$270,000 which is included in the Sale Price of \$4,200,000

Repayment of existing Mortgages: \$2,623,720 (This is the outstanding balance of the mortgage)

Selling Expenses

Real Estate Commissions: 4.50% of Sale Price Selling & Legal Expenses: 1.50% of Sale Price

Income Taxes paid on Sale: \$500,000 which includes Capital Gain and Recaptured Depreciation tax. This

information would come from the owner's accountant.

REPLACEMENT RESERVES Folder

Sometimes there is a requirement by the lender or mortgage insurer to maintain a Replacement Reserve fund. If this is the case you need to complete the Replacement Reserve folder.

Opening Balance: \$270,000.

(This is the amount in the Replacement Reserve Account on the Analysis Start Date)

Interest Rate: 2.50%

Amounts added to the Replacement Reserve Account

Year 2 Jan: \$75,000

Amount withdrawn from the Replacement Reserve Account

Roof Replacement: Year 3 Jan: <\$200,000>

EXPENSES Folder

Operating expenses paid for by the investor such as taxes, insurance, maintenance, property management etc

TIM's

\$8.00 per Sq. Ft per Yr for the first 12 months then increasing at compounding at 3.00% per Yr compounding

REVENUE Folder

Base Rent

\$20.00 per Sq. Ft per Yr for the first 12 months then increasing at 3.00% compounding per year

Recoverable Expenses

\$7.25 per Sq. Ft per Yr paid monthly for the first 12 months then increasing at 3.00% compounding per year

VACANCY Folder

No vacancy

FINANCING Folder

Existing First Mortgage

Status: Pre-existing mortgage or financing

Type: Standard Mortgage

Original Mortgage: \$3,000,000, 7.50%, 25 year amortization taken out 7 years ago

Current Outstanding Balance: Year 1 January: \$2,623,720 (This is the outstanding balance of the existing first

mortgage on the Analysis Start Date)

Time Period: 18 years

Amortization: 18 years (The remaining Amortization Period)

Interest Rate: 7.50%

SALE Folder

Real Estate Commissions

5.00% of Sale Price

Selling Expenses

Selling Expenses: 2.00% of Sale Price Legal Fees: 1.00% of Sale Price

Sale Price

Base on a Cap Rate of 7.50% using the Income for the year following the Sale i.e., based on the Income & Expenses for Year 11.

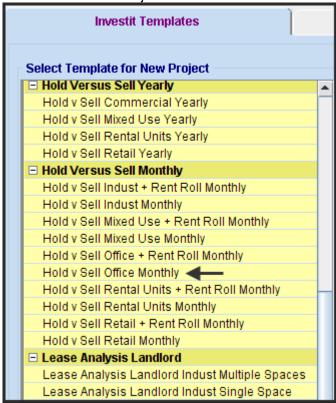
INSTRUCTIONS FOR ENTERING THE HOLD vs. SELL ANALYSIS

Selecting the Template

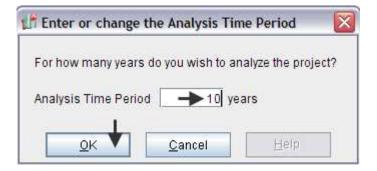
The first step is to open Investor Pro and select the "Hold v Sell Office" template as follows:

1. Open Investor Pro.

2. Select the New Project Folder then select the Investit Template folder



- 3. Select and open the Investit template "Hold v Sell Office Monthly" The analysis period dialog will open at this point.
- 4. Enter 10 years and click OK



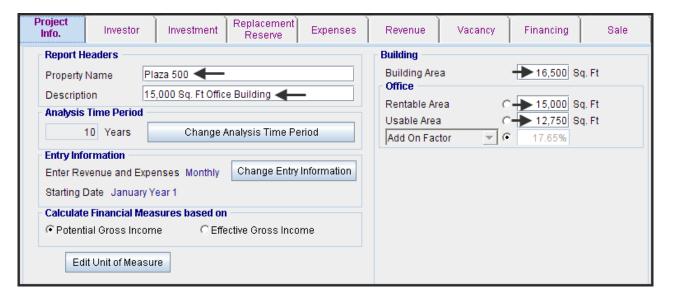
PROJECT INFO Folder

1. Enter the Property Name: Plaza 500

2. Enter Description: 15,000 Sq. Ft Office Building

Enter Building Area: 16,500 Sq. Ft
 Enter Rentable Area: 15,000 Sq. Ft
 Enter Usable Area: 12,750 Sq. Ft

The completed Project Info. Folder



INVESTOR Folder

1. Enter the Discount Rate Before Tax: 13.00%

Notes:

The Discount Rate is used to calculate the Net Present Value
The program automatically calculates the Discount Rate after Tax

2. Enter Short Term Rates Before Tax (For calculating the Modified Internal Rate of Return)

Financing Rate: 7.00% Reinvestment Rate: 2.00%

The completed Investor Folder

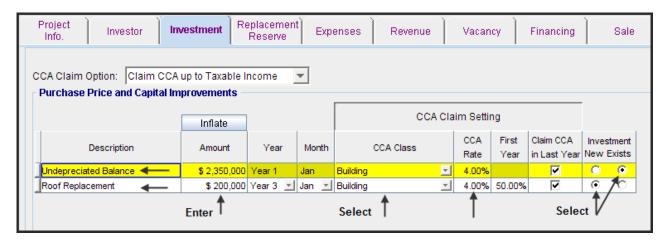


INVESTMENT Folder

There are two entries to be made in the Investment Folder

- 1. The current Undepreciated Balance of \$2,350,000. This is needed to continue the Depreciation claims during the Analysis Period
- 2. Replacement of the roof in Year 3 Jan for \$200,000

Complete the Investment Folder as shown below.



Replacement Reserve Account

Interest Rate: 2.50%

Existing Replacement Reserve: \$270,000. (The balance in the account on the Analysis Start Date)

Amounts added to the Replacement Reserve Account

Year 2 Jan: \$75,000 Enter as a positive number because it's adding \$75,000 to the account

Amount withdrawn from the Replacement Reserve Account

Roof Replacement: Year 3 Jan: <\$200,000> Enter as a negative number because it's withdrawing \$200,000 from the Replacement Reserve account

- 1. Enter the Interest Rate: 2.50%
- 2. Enter the Existing Replacement reserve on Analysis Start Date: \$270,000
- 3. Enter the addition to the account Year 2 Jan: \$75,000



Enter Roof Replacement \$200,000. This is withdrawal. Enter as a negative value



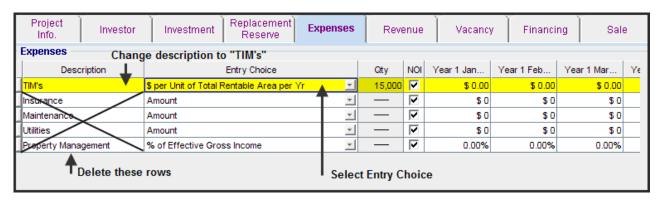
EXPENSES Folder

Operating expenses paid for by the investor such as taxes, insurance, maintenance, property management etc

TIM's

\$8.00 per Sq. Ft per Yr for the first 12 months then increasing at compounding at 3.00% per Yr compounding

- 1. Enter "TIM's" as the description in the first row
- 2. Select the Entry Choice "\$ per Unit of Total Rentable Area per Yr
- 3. Delete the remaining rows

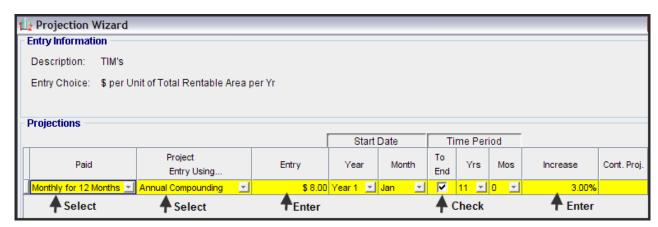


The completed screen



Enter and project the expenses using Projection Wizard

- Click on the "Projection Wizard" button
 Projection Wizard
- 2. Complete the Projection Wizard as follows by entering "\$8.00 per Sq. Ft per Yr for the first 12 months then increasing at 3.00% per Yr compounding as follows;



3. Click "OK" to save the projection and return to the Expenses Folder

REVENUE Folder

The revenues are:

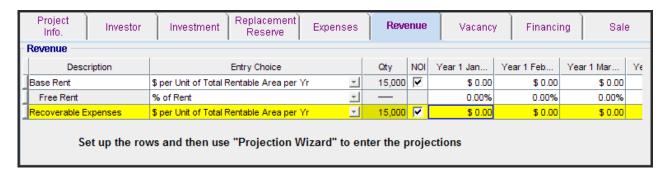
Base Rent

\$20.00 per Sq. Ft per Yr Sq for the first 12 months then increasing at 3.00% compounding per year

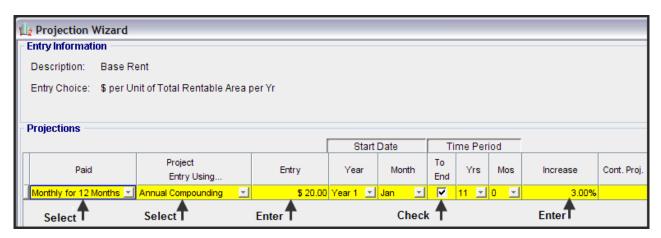
Recoverable Expenses

\$7.25 per Sq. Ft per Yr paid monthly for the first 12 months then increasing at 3.00% compounding

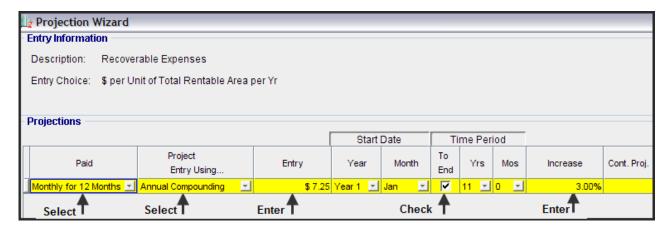
1. Set up the Revenue Template as shown below.



2. Using Projection Wizard enter and project the Base Rent



3. Using Projection Wizard enter and project the Recoverable Expenses



VACANCY Folder

No vacancies to be entered

FINANCING Folder

Existing First Mortgage

Status: Mortgage already exists Type: Standard Mortgage

Year 1 January 1, \$2,623,720 (This is the outstanding balance of the existing first mortgage)

Time Period: 18 years

Amortization: 18 years (The remaining Amortization Period)

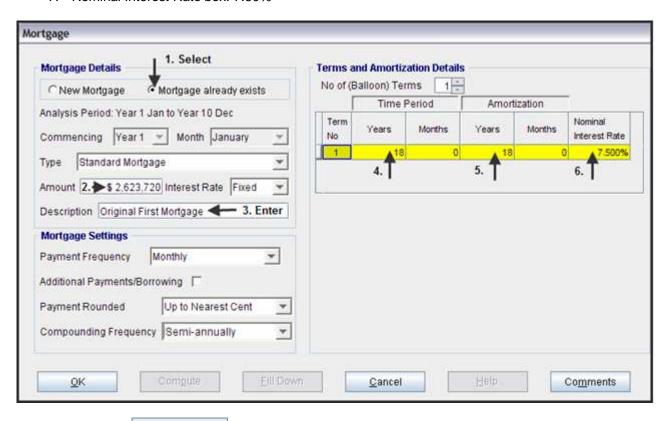
Interest Rate: 7.50%

Setting up a mortgage

1. Click on the Financing folder tab

Click on the Add Mortgage button
 Add Mortgage Edit Mortgage Delete Mortgage Move then;

- 1. Select "Mortgage already exists" button
- 2. Type: Use "Standard Mortgage"
- 3. Amount box: \$2,623,720
- 4. Description box: "Original First Mortgage"
- 5. Time Period box: 18 Years6. Amortization box: 18 Years
- 7. Nominal Interest Rate box: 7.50%



- 8. Press the Compute button
- 9. Press the OK button to return to the Financing folder

The completed Financing Folder



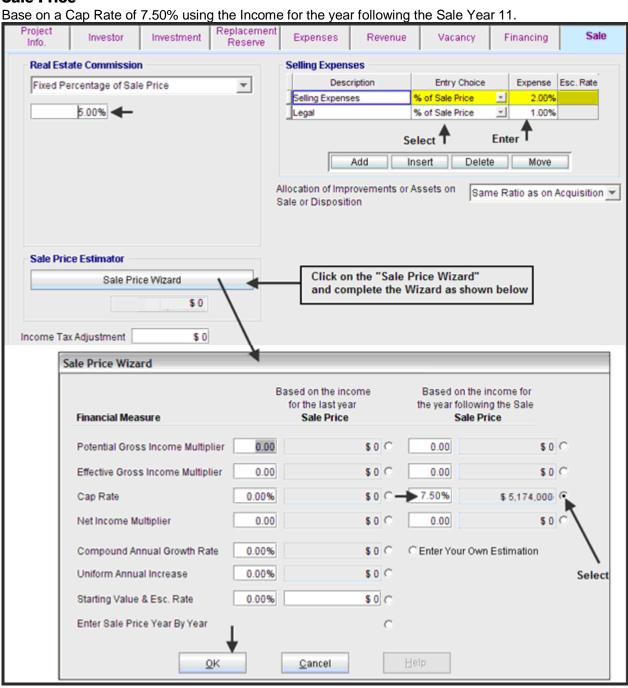
SALE Folder

Real Estate Commissions 5.00% of Sale Price

Selling Expenses

Selling Expenses: 2.00% of Sale Price Legal Fees: 1.00% of Sale Price

Sale Price



Save the project

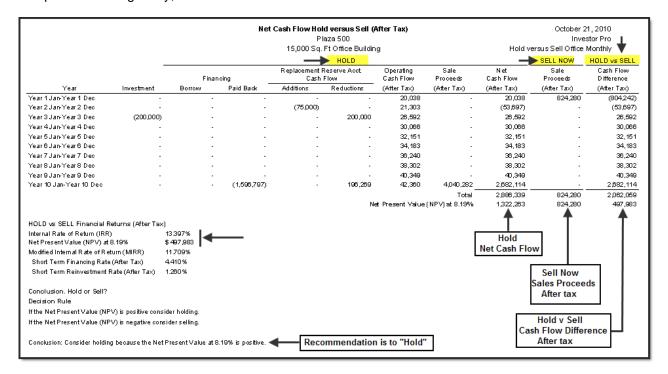
CONCLUSION & RECOMMENDATIONS

The best reports for deciding whether to hold or sell the property today is the "Net Cash Flow Hold versus Sell After Tax" report and the Graph "Hold v Sell NPV After Tax" which are shown below.



Net Cash Flow. Hold versus See (After Tax) Report

This report takes the "Net Cash Flow from Holding" and subtracts the "Sell Now. Sales Proceeds" to get the cash flow difference between Hold vs. Sell and shows the financial return (Internal Rate of Return) of holding compared to selling today, which is 13.397%



Conclusion.

In this example, the financial results suggest that the owner would be financially better of holding rather than selling the property today because the Internal Rate of Return (IRR) after tax of 13.397% generated by holding is much higher than the Investor's minimum desired Internal Rate of Return (IRR) of 8.19% after tax.

Graph. Hold vs. Sell NPV After Tax

A very helpful graph is the "Hold vs. Sell NPV After Tax" graph which enables you to determine whether to "Hold" or "Sell" based on the Investor's Desired Return (IRR) after tax.

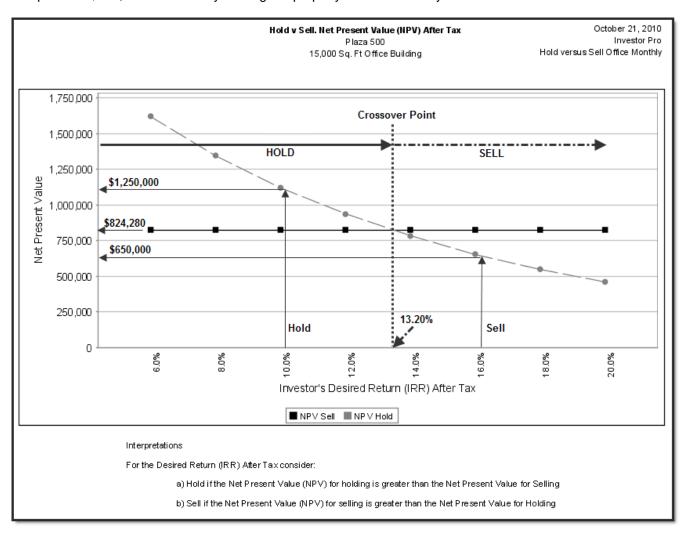
The basic question is "If the building was sold today, and the after tax sales proceeds invested, what return (IRR) after tax would be achieve?".

For the following example, if the after tax return (IRR) is less than 13.20% the property should be kept. On the other hand, if the after tax sales proceeds can be invested for more the 13.20% (IRR) after tax, the property should be sold.

Example

The Investor is considering selling the building today and investing in a second mortgage yielding 10.00% after tax. Should he sell? The answer is 'No" he should keep the building because the Net Present Value (NPV) of holding at 10.00% after tax is approximately \$1,250,000 compared to \$824,280 if the building is sold today.

On the other hand, if he can sell the building today and invest the sales proceeds at 16.00% after tax in another property, he would be better off selling because the Net Present Value (NPV) is approximately \$824,280 compared to \$650,000 achieved by holding the property for another ten years.



Before & After Tax Analysis

Hold versus Sell analysis should always be carried out after tax to take into account the capital gain and recaptured depreciation taxes paid on sale.

Before and after tax analysis can yield different results.

Using the example, the before tax analysis recommends selling the building and the after tax analysis recommends keeping the property.

The before and after tax results for the example are;

Hold versus Sell Analysis	Before Tax Analysis	After Tax Analysis
Minimum Desired Return		
(Internal Rate of Return)	13.00%	8.19%
	Financial Results	
Internal Rate of Return (IRR)	11.916%	13.397%
Net Present Value	<\$118,121> at 13.00%	\$644,649 at 8.19%
Sales Proceeds		
Sale Price	\$4,200,000	\$4,200,000
Less: Real Estate & Legal Fees	252,000	252,000
Repayment of Mortgage	<u>2,623,720</u>	<u>2,623,720</u>
Sales Proceeds (Before Tax)	\$1,324,280	\$1,324,280
Less: Income Taxes paid on sale		<u>500,000</u>
Sales Proceeds (After Tax)		\$ 824, 280
	Consider selling because the	Consider holding because the
Recommendation	Net Present Value at 13.00%	Net Present Value at 8.19% after
	before tax is negative	tax is positive

For this example the Net Sales Proceeds before tax are \$1,324,280 compared to \$824,280 after tax. The before tax analysis suggests selling the building but when the taxes paid on sale of \$500,000 are taken into account, the recommendation is to keep the property.