RE 618 / Fin 618 – Real Estate Investment Analysis
Disposition and Renovation Analysis Lecture Notes

1) As you hold a property, its relative attractiveness as an investment will change over time.
   a) An increasing amount of equity will be tied up in the property.

   b) As a result, the benefits from positive financial leverage will lessen over time.

   c) The *opportunity cost* of holding the property is the cash you would receive from selling it today.

2) Periodically, you will need to evaluate and compare the various alternatives that are available for properties that you currently own.

   b) Hold

   c) Sell

   d) Refinance

   e) Renovate

3) Basic steps for analyzing these alternatives:

a) Define the specific alternatives to be considered.

b) Estimate the cash flows from each alternative.

	Hold	Sell	Refinance	Renovate
Initial cash flows				
Operating cash flows				
Terminal cash flows				

c) Calculate the differential cash flows between the two alternatives.

d) Calculate the NPV of each alternative and the NPV/IRR of the differential cash flows.

e) Interpret and make a decision using the NPV/IRR decision rules.

4) Disposition Analysis Example (available on class website)

a) If Ronald chooses to sell the property today, what will his return on this property have been over his holding period? (See the *Sale Today* tab on the Disposition Analysis spreadsheet.)

NOTE: This is an *ex post*, or after the fact, measure of the investment return. This is NOT the right way to determine whether the sale is a good decision, but it is sometimes interesting and useful to verify what the ex post return on the investment was.

- Based on the historical information provided in the problem, Ronald's ex post cash flows from this property if sold today would be:

Year	Cash Flow
0	(470,250)
1	47,027
2	47,044
3	59,483
4	58,881
5	57,695 + 747,970 = 805,665

b) If Ronald chooses to hold the property for five more years, what will be the *ex post* return from this investment over the entire ten-year holding period? (See the *Historical Analysis* tab on the Disposition Analysis spreadsheet.)

NOTE: This, too, is a bad way to analyze whether Ronald should sell the property today.

c) The right way to analyze the sell/hold decision is to conduct a *prospective* analysis comparing the decision to sell with the alternative of holding the property for five more years. (See the *Prospective Analysis* tab on the Disposition Analysis spreadsheet).

The final cash flows from each of the alternatives are as follows:

Year	Keep	Sell	Difference
5	0	747,970	(747,970)
6	60,112	0	60,112
7	63,341	0	63,341
8	66,634	0	66,634
9	69,998	0	69,998
10	72,867 + 1,140,495	0	1,213,362

- The NPV of the differential cash flows is _____.

- The IRR of the differential cash flows is _____.
  - These cash flows "look like" a(n) _____.

d) One final way to look at this problem is to ask whether it is worth continuing to hold the property another year. (See the *Marginal Analysis* tab on the disposition analysis spreadsheet.)