

Financial Analysis Examples - Page 1

YEAR 20__ Pro-Forma

Loan assumptions for analysis:	PV	I	N	PMT	SALE PRICE
	220,500	7%	180	1,981.92	245,000
10% down payment					

PGI	(Potential Gross Income)	141,372
- V+C (3%)	(Vacancy & Collection loss)	< 4,241 >
<u>- Other Expenses</u>		<u>0</u>
Effective Gross Income		137,131
<u>- Operating Expense</u>		<u>< 46,121 ></u>
NOI	(Net Operating Income)	91,010
<u>- Debt Service</u>		<u>< 23,783 ></u>
BTCF	(Before Tax Cash Flow)	67,227

<u>± Tax</u>	Tax = (NOI - Depreciation - Interest + Reserve for Replacements) x Tax Rate
ATCF	(After Tax Cash Flow)

$$\text{NOI} - \text{Depr} - \text{Int} + \text{RR} = \text{Taxable Income}$$

$$\frac{\text{X Tax Rate}}{\text{Tax Liability}}$$

How to Use Calculation Formulas to Compute the below Ratios

<u>A</u>	<u>50</u>
B C	135 .37
A / B = C	-----> 50 / 135 = .37
A / C = B	-----> 50 / .37 = 135
B X C = A	-----> 135 X .37 = 50

Financial Analysis Examples - Page 2

Overall Capitalization Rate (ROI)

$$\frac{\text{NOI}}{\text{R}^\circ \mid \text{PV}} = 37\% \text{ ROI}$$

(Cap Rate) (Present Value)

$$\frac{91,010}{245,000} = 37\% \text{ ROI}$$

R° = Return on Investment NOI = Net Operating Income

Operating Expense Ratio

$$\frac{\text{OE}}{\text{OER} \mid \text{EGI}} = 33.6 \text{ OER}$$

(Effective Gross Income)

$$\frac{46,121}{37,131} = 33.6 \text{ OER}$$

Debt Service Coverage Ratio

$$\frac{\text{NOI}}{\text{DSCR} \mid \text{DS}} = 3.83 \text{ DSCR}$$

(DCR)

$$\frac{91,010}{23,783} = 3.83 \text{ DSCR}$$

NOI is 3.83 times the annual debt amount

* Banks want 1.3 or higher

Cash on Cash Return
Equity Dividend Rate

$$\frac{\text{BTCF}}{\text{CCR} \mid \text{Equity}} = 2.74 \text{ EDR}$$

(EDR)

$$\frac{67,227}{220,500} = 2.74 \text{ EDR}$$

Cash Breakeven Ratio

(Operating expense + debt service - reserve for replacement)

$$\frac{\text{OE} + \text{DS} - \text{RR}}{\text{CBR} \mid \text{PGI}} = .49 \text{ CBR}$$

$$\frac{(46,121) + (23,783) - (0)}{141,372} = .49 \text{ CBR}$$

CBR = Occupancy rate producing BTCF of 0

Financial Analysis Examples - Page 3

Rate of Return on Investment (%)

$$\frac{\text{Stockholders' Equity}}{\text{BTCF}} = \frac{24,500}{67,227} = 36.4\% \text{ ROI (Before Income Tax)}$$

(before tax cash flow)

Debt to Equity Ratio

$$\frac{\text{TOTAL LIABILITIES}}{\text{Stockholders' Equity}} = \frac{220,500}{24,500} = 9\% \text{ DER}$$

This is the amount of debt to equity. Debt is \$9.00 for each \$1.00 of equity.

Margin of Safety

$$1.00 - \text{Cash Breakeven Ratio} = \underline{\quad}\% \quad 1.00 - .49 = 51\% \text{ Margin of Safety}$$

Gross Rent Multiplier

This is an unreliable way to value property as it does not consider operating expenses. Can be calculated using monthly or annual figures.

$$\frac{\text{PRICE}}{\text{GRM} \mid \text{Gross Rent}} = \frac{150,000}{15,000} = 10 \text{ GRM}$$

Loan to Value Ratio

$$\frac{\text{LOAN AMT}}{\text{LTV} \mid \text{VALUE}} = \frac{220,500}{245,000} = .90 \text{ LTV}$$

Financial Analysis Examples - Page 4

Debt to Income Ratio

Home buyer unrelated example

$$\frac{\text{PITI} + \text{EXPENSES}}{\text{Income}} \quad | \quad \% \text{ Debt Ratio}$$

$$\frac{925}{2,500} = 37\% \text{ Debt Ratio}$$

Vacancy & Collection Ratio

$$\frac{\text{V\&C}}{\text{VCR} \quad | \quad \text{PGI}}$$

$$\frac{4,241}{141,372} = 3\% \text{ VCR}$$

EBITDA Earnings before interest, taxes, depreciation, amortization