

Periodic Cash Flows of an Office Building

Purchase Price	→ 1.000.000	(Assume 80% of this value is depreciable)
Market Value Increase per Year	3,00%	(g)
Holding Period	5	Years
Sales Price (S.P.)	1.159.274	3,00% (g)
Selling Expenses as % of S.P.	4%	
Net Sales Price (N.S.P.)	1.112.903	2,16% (g)
Units	6	
Monthly Rent / Unit	2.000	
Months	12	
No Vacancies		
	PGI = EGI (Potential Gross Income = Effective Gross Income)	

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
OE (Operating Expenses) as % of EGI	30,00%	30,00%	30,00%	30,00%	30,00%
PGI Annual Growth	3,00%	3,00%	3,00%	3,00%	3,00%
PGI (for all units)	144.000	148.320	152.770	157.353	162.073
- VC (Vacancies)	0	0	0	0	0
= EGI	144.000	148.320	152.770	157.353	162.073
- OE	43.200	44.496	45.831	47.206	48.622
= Periodic Cash Flows or Net Operating Income (NOI)	100.800	103.824	106.939	110.147	113.451
Cap Rate =	NOI /	Purchase Price	10,08%		
Reversion Cash Flow =	Sales Price -	Sales Expenses (4%)	1.112.903		
Reversion Cash Flow =	Sales Price	(if Sales Expenses equal "0")	1.159.274		

Calculating the Internal Rate of Return (IRR) before Taxes

Cash Flows	CFo	=	-1.000.000			
	CF1	=	100.800			
	CF2	=	103.824			
	CF3	=	106.939			
	CF4	=	110.147			
	CF5	=	1.272.725	=	113.451	+ 1.159.274

Internal Rate of Return → **13,08%**

Alternatively:

Cap Rate (R)	=	r	-	g	
or 10,08%	=	r	-	3,00%	
or r (IRR)	=	10,08%	+	3,00%	= 13,08%