

## DERIVATION OF THE CAPITALIZATION RATE

Debt-Constant/Equity Dividend Band of Investment:

$$\begin{aligned} & \text{Mortgage Portion of Value X Mortgage Constant} \\ & + \text{Equity Portion of Value X Equity Dividend Rate} \\ & = \text{Overall Rate} \end{aligned}$$

The Overall Rate derived by this method of capitalization is a weighted average for the respective portions of value represented by the mortgage (debt) and equity positions. The respective rates are indicated from the market.

This capitalization rate is based upon the following facts and assumptions:

Equity Dividend Rate is estimated	=	12%
Ratio of Mortgage to Total Investment	=	75%
Ratio of Equity to Total Investment	=	25%
Annual Mortgage Constant at 8.25% for 30 years	=	.090200
		(constant Annual % table)

Required Mathematical Procedures:

$$\begin{aligned} .75\% \times .090200 & = .0677 \\ .25\% \times .120000 & = \underline{.030000} \\ & .978 \quad (\text{Say } 9.8\%) \end{aligned}$$

The overall rate provides for recapture of 75% of the investment in 30 years plus an anticipated initial cash flow 12% per annum on the equity investment.

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The Overall Rate derived by this method of capitalization is a weighted average for the respective portions of value represented by the mortgage (debt) and equity positions. The respective rates are indicated from the market.

This capitalization rate is based upon the following facts and assumptions:

Equity Dividend Rate is estimated	=	10%
Ratio of Mortgage to Total Investment	=	75%
Ratio of Equity to Total Investment	=	25%
Annual Mortgage Constant at 8.25% for 30 years	=	.090200
		(constant Annual % table)

Required Mathematical Procedures:

$$\begin{aligned} .75\% \times .0902 & = .0677 \\ .25\% \times .1000 & = \underline{.0250} \\ & .0927 \quad (\text{Say } 9.00\%) \end{aligned}$$

The overall rate provides for recapture of 75% of the investment in 30 years plus an anticipated initial cash flow 10% per annum on the equity investment.

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$$\begin{aligned} & \text{Mortgage Portion of Value X Mortgage Constant} \\ & + \text{Equity Portion of Value X Equity Dividend Rate} \\ & = \text{Overall Rate} \end{aligned}$$

The Overall Rate derived by this method of capitalization is a weighted average for the respective portions of value represented by the mortgage (debt) and equity positions. The respective rates are indicated from the market.

This capitalization rate is based upon the following facts and assumptions:

Equity Dividend Rate is estimated	=	7.5%
Ratio of Mortgage to Total Investment	=	75%
Ratio of Equity to Total Investment	=	25%
Annual Mortgage Constant at 8.25% for 30 years	=	.090200
		(constant Annual % table)

Required Mathematical Procedures:

$$\begin{aligned} .75\% \times .0902 & = .0677 \\ .25\% \times .075 & = \underline{.0188} \\ & .0865 \quad (\text{Say } 8.5\%) \end{aligned}$$

The overall rate provides for recapture of 75% of the investment in 30 years plus an anticipated initial cash flow of 7.5% per annum on the equity investment.

## SUMMATION METHOD

Safe Rate (Govt. Bonds 10 yr.)	4.78	
Risk Rate (measure of the dependability)	2.00	
Non-liquidity (relative to marketability)	1.50	
Management (money management)	<u>.20</u>	
	8.48	(Say 8.5%)

Risk Rate greater than (1) indicates that the opportunity is profitable and has some degree of attraction. Less than (1) indicates that the opportunity is not capable of generating the desired rate of return and is relatively unattractive. Rate of (1) indicates that the opportunity is just satisfactory in terms of the desired rate of return.