



# Development Appraisal

- Financial Feasibility
- Development Pro-Forma



# What is a good return?

- Commercial Projects
  - 20% Profit on Cost (Dev. Margin)
- Smaller Residential Projects
  - 12%-15% DM
- Acceptable Return
  - Project Specific & corresponds to
  - Risk



# Financial Feasibility

- Basic Profit
- Development Margin on Cost
- Development Margin on Revenue
- Residual Value of Land
- Cap Rate (Capitalization Rate)
- Return on Equity / Cash on Cash Return
- Template



# Basic Profit

$$\textit{Profit} = \textit{Revenue} - (\textit{Land} + \textit{All Other Costs})$$



# Development Margin on Cost (Mark Up)

$$\text{Net Profit} = \text{Total Sales (GRV)} - \text{Total Development Costs (TDC)}$$

$$\text{Development Margin} = \frac{\text{Net Profit} * 100\%}{\text{TDC}}$$

\*GRV = Gross Realization Value aka Total Sales or GDV (Gross Development Value)



# Development Margin on Revenue

$$\text{Dev. Margin on Revenue} = \left( \frac{\text{Profit}}{\text{Revenue}} \right) * 100$$

It is the % of the Revenue that you take home.



# Residual Value of Land

- Project Related Site Value (PRSV) / Residual Value of Land
  - Used to appraise the land for a specific development.
- $\text{Land} = \text{Revenue} - \text{All other costs} - \text{Profit}$ 
  - The sum of money available for the purchase of land can be calculated from the value of the completed development minus the costs of development (including profit).
  - Calculated on Target Development Margin / Entrepreneurial Risk Margin
  - Max price for the land that the developer would pay to make the calculated development margin.



# Residual Value of Land

- Based on Target Development Margin of x%
- $Residual\ Land\ Value = \frac{GRV\ (Total\ Sales)}{1+x\%} - \text{Sum of all costs excluding Land Value}$





# Residual Value of Land

Only reflects what the land opportunity may be worth to you, based on what you think you can do with it. (Not necessarily the market).

## **Project Related Site Value**

Value changes based on what you propose to do with it.

If you don't follow through with what you propose to do with it - the value is more closely aligned with the general market and is referred to "AS IS WHERE IS".



# Cap Rate (Capitalization Rate)

- The capitalization rate, often referred to as the "cap rate", is a fundamental concept used in the world of commercial real estate. It is the rate of return on a real estate investment property based on the income that the property is expected to generate. This metric is used to estimate the investor's potential return on their investment.
  - [Investopedia.com](https://www.investopedia.com)



# Cap Rate (Capitalization Rate)

- The capitalization rate, often just called the cap rate, is the ratio of Net Operating Income (NOI) to property asset value. So, for example, if a property was listed for \$1,000,000 and generated an NOI of \$100,000, then the cap rate would be  $\$100,000 / \$1,000,000$ , or 10%
- If a Property Gives a Rent of \$100,000. It's Valuation based on Cap Rate of 5% =  $\$100,000 / 5\% = \$2\text{m}$



# Cap Rate (Capitalization Rate)

- $$\text{Cap Rate} = \frac{\text{NOI (Net Operating Income)}}{\text{Current Market Value}}$$
  - NOI = Net Rental Income
- $$\text{Market Value} = \frac{\text{NOI (Net Operating Income)}}{\text{Cap Rate}}$$



# Development Appraisal

- Financial Feasibility
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## Return on Equity / Cash on Cash Return

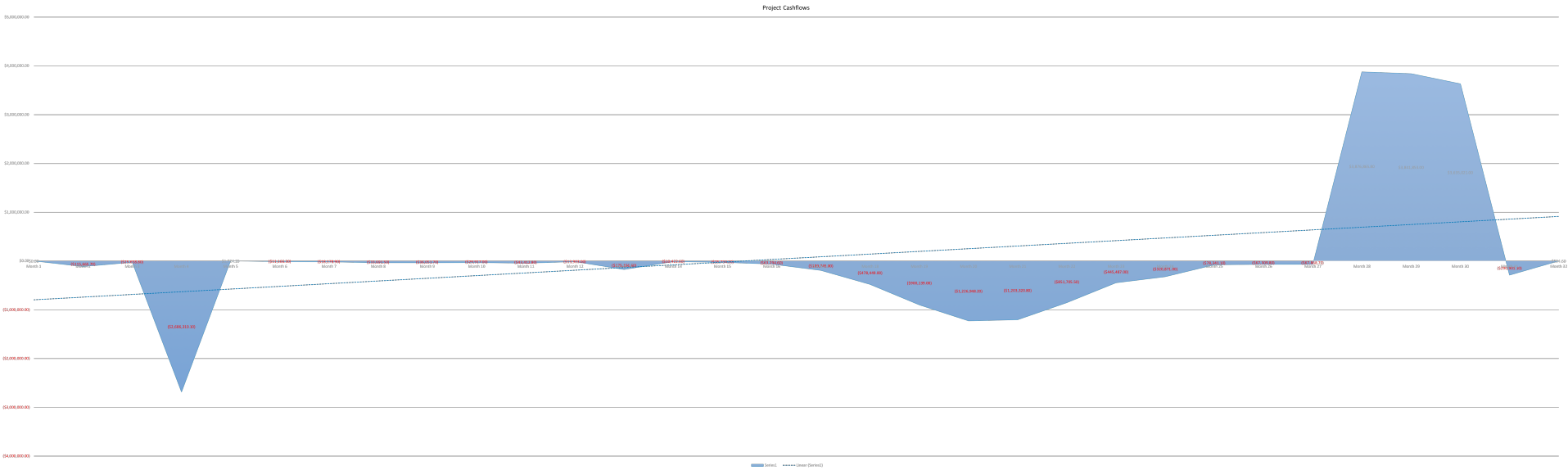
- Profitability Measure
- Return on Investors Cash / Equity
- Profit generated / each \$ of equity
- Amount of Net Income returned as a % of shareholders equity.
- $COC = \text{Cash Income Earned on Cash Invested}$



# Project Feasibility

- Complex Evolutionary Process based on
  - Assess Various Costs
  - Assess GRV (Total Sales)
  - Project Timeline i.e. determining
    - the total time required by the project from Start – Finish.
    - when the costs will be incurred i.e. Project Outflows.
    - Payback period i.e. when would the project return it's profits.

# CashFlows





# Impact of Costs & Sales



Project Name

Country

Description		Amount
Land Value		\$1,400,000.00
GST on Land	No	\$0.00
Stamp Duty	0.00%	\$0.00
Legals Acquisition	0.50%	\$7,000.00
<b>Total Acquisition Costs</b>		<b>\$1,407,000.00</b>
Land Value Units	6	\$234,500.00
Avg Construction Area/Unit		150.00
Estimated Construction		
Const. Costs / m2 iGST		\$1,800.00
<b>Total Const. Costs / Unit</b>		<b>\$270,000.00</b>

Cost Heads	Total Costs / Unit iGST
GRV (Sale Value)	\$710,000.00
Land	\$234,500.00
Construction	\$283,500.00
Consultants	\$8,505.00
Council Contributions	\$11,666.67
GST	\$14,856.82
Marketing / Agents Comm	\$12,070.00
Misc + Legals + Mkt + BP + Val	\$8,000.00
Finance Costs	\$18,460.00
TDC	\$591,558.48
Profit	\$118,441.52
<b>Dev Margin</b>	<b>20.02%</b>
<b>Target DM %</b>	<b>20.00%</b>
Residual Value of Land / Unit	\$234,608.18

	Project TDC iGST
	\$4,260,000.00
	\$1,407,000.00
Contingency	\$1,701,000.00
of Construction	\$51,030.00
Land Value	\$70,000.00
Margin Scheme	\$89,140.91
Commission	\$72,420.00
	\$48,000.00
	\$110,760.00
	\$3,549,350.91
	\$710,649.09
PRSV	\$1,407,649.09
Max. Land Value based on Target DM.	

Finance		Interest	Loan Amount	Interest/annum
Construction (GRV)	LVR / LTV	65%	\$461,500.00	\$27,690.00
Construction (TDC)	LVR / LTV	65%	\$384,513.02	\$23,070.78

Total Periods	Interest / Unit
8	\$18,460.00
8	\$15,380.52

## Developers Equity Contribution

Finance LVR	TDC	GRV
65%	\$1,242,272.82	\$780,350.91

Return on Equity	57.21%
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# Impact of Costs & Sales

Sensitivity Analysis	Sales	5.0%	Costs	3.0%
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Project Dev. Profit					
Costs	Sale Price				
	-10.0%	-5.0%	0.0%	5.0%	10.0%
-6.0%	\$82,935	\$118,435	\$153,935	\$189,435	\$224,935
-3.0%	\$65,188	\$100,688	\$136,188	\$171,688	\$207,188
0.0%	\$47,442	\$82,942	\$118,442	\$153,942	\$189,442
3.0%	\$29,695	\$65,195	\$100,695	\$136,195	\$171,695
6.0%	\$11,948	\$47,448	\$82,948	\$118,448	\$153,948

Profit Drop in %					
Costs	-10.0%	-5.0%	0.0%	5.0%	10.0%
-6.0%	-30%	0%	30%	60%	90%
-3.0%	-45%	-15%	15%	45%	75%
0.0%	-60%	-30%	0%	30%	60%
3.0%	-75%	-45%	-15%	15%	45%
6.0%	-90%	-60%	-30%	0%	30%

# Impact of Costs, Sales & Time



Project Name

Country

Description		Amount
Land Value		\$1,400,000.00
GST on Land	No	\$0.00
Stamp Duty	0.00%	\$0.00
Legals Acquisition	0.50%	\$7,000.00
<b>Total Acquisition Costs</b>		<b>\$1,407,000.00</b>
Land Value Units	6	\$234,500.00
Avg Construction Area/Unit		150.00
Estimated Construction		
Const. Costs / m2 iGST		\$1,800.00
<b>Total Const. Costs / Unit</b>		<b>\$270,000.00</b>

Cost Heads	Total Costs / Unit	iGST
GRV (Sale Value)	\$710,000.00	
Land	\$234,500.00	
Construction	\$283,500.00	G 5.00%
Consultants	\$8,505.00	G 3.00%
Council Contributions	\$11,666.67	5.00%
GST	\$14,856.82	y
Marketing / Agents Comm	\$12,070.00	G 1.70%
Misc + Legals + Mkt + BP + Val	\$8,000.00	G
Finance Costs	\$32,305.00	
<b>TDC</b>	<b>\$605,403.48</b>	
<b>Profit</b>	<b>\$104,596.52</b>	
<b>Dev Margin</b>	<b>17.28%</b>	
<b>Target DM %</b>	<b>20.00%</b>	
<b>Residual Value of Land / Unit</b>	<b>\$220,763.18</b>	

	Project TDC	iGST
	\$4,260,000.00	
	\$1,407,000.00	
Contingency	\$1,701,000.00	
of Construction	\$51,030.00	
Land Value	\$70,000.00	
Margin Scheme	\$89,140.91	
Commission	\$72,420.00	
	\$48,000.00	
	\$193,830.00	
	<b>\$3,632,420.91</b>	
	<b>\$627,579.09</b>	
PRSV	<b>\$1,324,579.09</b>	
Max. Land Value based on Target DM.		

Finance		Interest	Loan Amount	Interest/annum
Construction (GRV)	LVR / LTV	65% 6.00%	\$461,500.00	\$27,690.00
Construction (TDC)	LVR / LTV	65% 6.00%	\$393,512.27	\$23,610.74

Total Periods	Interest / Unit
14	\$32,305.00
14	\$27,545.86

## Developers Equity Contribution

Finance LVR	TDC	GRV
65%	\$1,271,347.32	\$863,420.91

<b>Return on Equity</b>	<b>49.36%</b>
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# Impact of Costs, Sales & Time

Sensitivity Analysis      Sales      5.0%      Costs      3.0%

## Project Dev. Profit

Costs	Sale Price				
	-10.0%	-5.0%	0.0%	5.0%	10.0%
-6.0%	\$69,921	\$105,421	\$140,921	\$176,421	\$211,921
-3.0%	\$51,759	\$87,259	\$122,759	\$158,259	\$193,759
0.0%	\$33,597	\$69,097	\$104,597	\$140,097	\$175,597
3.0%	\$15,434	\$50,934	\$86,434	\$121,934	\$157,434
6.0%	-\$2,728	\$32,772	\$68,272	\$103,772	\$139,272

## Profit Drop in %

Costs	-10.0%	-5.0%	0.0%	5.0%	10.0%
-6.0%	-33%	1%	35%	69%	103%
-3.0%	-51%	-17%	17%	51%	85%
0.0%	-68%	-34%	0%	34%	68%
3.0%	-85%	-51%	-17%	17%	51%
6.0%	-103%	-69%	-35%	-1%	33%



# Impact of Costs, Sales & Time

## Cost & Sales

Sensitivity Analysis	Sales	5.0%	Costs	3.0%	
Project Dev. Profit					
	Sale Price				
Costs	-10.0%	-5.0%	0.0%	5.0%	10.0%
-6.0%	\$82,935	\$118,435	\$153,935	\$189,435	\$224,935
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0.0%	-60%	-30%	0%	30%	60%
3.0%	-75%	-45%	-15%	15%	45%
6.0%	-90%	-60%	-30%	0%	30%

## Cost, Sales & Time

Sensitivity Analysis	Sales	5.0%	Costs	3.0%	
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-3.0%	-51%	-17%	17%	51%	85%
0.0%	-68%	-34%	0%	34%	68%
3.0%	-85%	-51%	-17%	17%	51%
6.0%	-103%	-69%	-35%	-1%	33%



# Takeaways

- Small Market Movements can turn a project unviable.
- Accuracy of your Financial Feasibility
  - Stringent
  - Slight optimism & a slight oversight can render your feasibility useless
- Must **VALIDATE** your numbers & assumptions.