

Residential Development BUSINESS MODEL: BUILD AND SELL

Analysing Strategies through Financial Modeling

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"Simplicity is the ultimate sophistication".

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The Case Study



This Covid-19 pandemic has forced people to think in ways they never bothered about earlier. Remote working is the new normal for most of the working population, especially in the IT sector. Village life is the new theme that seems to be driving the demand for quality housing. For good health as well as peace of mind.

A Tier – 2 city self contained in itself, Mysore is one such ideal location due to its green riches and also the vicinity to India's Silicon Valley of Bangalore, thereby offering abundant hustling opportunities as well.

Pinkstone Group, quite known for their quality residential developments across South India, has duly taken note of this shift of needs and the Opportunity.

They have a new project in their mind: Serene Homes, a residential apartments development deal in the idyllic locality of Vijayanagar, Mysore. 2 high-rise towers of 90 flats each built over 1.5 acres of land.

In order to leverage their own development experience as well as raise and manage other people's money more smartly, Pinkstone guys are contemplating over various funding and operational strategies. They are looking for some serious number crunching help. A financial model that is logical, easy to understand, edit and audit. Not just by them but also their investor audience.

Pinkstones wish to analyse all their strategies and input assumptions by means of a robust financial

model.

> How lucrative is a joint development with Land owners?

- > Given their operational strategies and plans, how long will this Project take to complete and get sold out?
 - > What are the returns from this venture for Pinkstone as well as their LP Investors?
- > What is the sensitivity of the returns to various input variables such as Construction Cost, Construction Time and the Pricing Points?

The foreign investors in this project would like to read the model in their language (read: currency). A financial model that is readable in atleast 5 foreign currencies such as the USD, SGD, Euro, AED and AUD in addition to INR.

1. <u>Land</u>

Pinkstone has zeroed in on a land parcel of **1.5 acres** in the target location. Asking price for the land is ₹ 1500 pSF (per square foot).

There are 2 options here.

1. Outright Purchase

Terms –

- Pay 50% upfront &
- balance money in 2 equal instalments over the next 2 months.

2. Joint Development with the Landowners

This is very much akin to a Revenue Participation Finance from the Landowners. Pinkstone has to pay little upfront and has the comfort of paying back the land guys as the project picks up speed and starts selling well. Terms –

- Pay 5% of the land price as upfront sponsorship fees &
- Pay 20% share of the proceeds from the sale of developed flats as a consideration for the land sale until 2.2x of the current market price of the land has been paid out.

In either case, presume an additional 5% of Land Cost as Stamp duty and registration costs & 1.5% as Brokerage costs. Brokerage cost is payable over the first 3 months since registration.

2. Development Plan

As per the zoning rules -

Floor Area Ratio, FSI is 3 and the Ground Coverage Ratio is 40%. The developers peg the Load factor @ 35% on the Net Square Footage (NSF). This means an efficiency rate of 74.07% [1/(1+0.35)] on the Gross Square Footage (GSF).

Product Mix :

Product Name	Product Type	# Flats	pUnit GSF	pUnit NSF
Lily	Studio	60 no(s).	807 SF	598 SF
Lavender	1 bed/ 1 bath	60 no(s).	1023 SF	758 SF
Lotus	2 bed/ 2 bath	60 no(s).	1345 SF	996 SF
Total		180 no(s).	190,500 SF	141,120 SF

3. Construction Phasing

Pre-launch sales shall be an essential driver.

Construction of Phase 1 shall begin only once atleast 40% of the all the flats has been pre-sold.

The Developers shall commence the Project with an aggressive promotional drive to ensure that the project achieves desired bankability.

Key Assumptions

The project consists of 2 Towers of 90 flats each. Each tower will have an equal number of each of the above products.

# Phases	# Tower	# Flats	GSF	Const. Time	Time lag
Phase 1	Tower 1	90 no(s).	95,250 SF	9 months	-
Phase 2	Tower 2	90 no(s).	95,250 SF	9 months	4 months
Total		180 no(s).	190,500 SF	13 months	

Maximum time length to complete the project and achieve final exit is expected to be 5 years.

4. <u>Sales Estimates</u>

As per RERA^{*} regulations, sale price is to be quoted in terms of Carpet area (NSF).

Product Name	# Flats	pUnit NSF	Sale Price pNSF	Sales Offtake Rate
Lily	60 no(s).	598 SF	4800 pSF	10%/ month
Lavender	60 no(s).	758 SF	5200 pSF	10%/ month
Lotus	60 no(s).	996 SF	5400 pSF	10%/ month
Total	180 no(s).	141,120 SF		

Sale Price for each product shall be increased by 5% every 6 months.

*RERA ~ The Indian Real Estate (Regulation & Development) Act, 2016

5. Cost Estimates

Hard Cost estimates:

Hard Cost Type	Budget	Begins from	Duration	Spending Strategy
Construction Cost (All-in)	₹1600 pGSF	Once Pre-sales target achieved	9 months	Mild Bell Curve

Soft Cost estimates:

Soft Cost Type	Budget	Begins from	Duration	Spending Strategy
Building Approvals Cost	₹2 Million	Project Start	3 months	Uniform over time
Set-up & Legal Costs	₹1 Million	Project Start	1 month	One time
Design & Engineering	3% of Hard Cost	After Building Approvals	6 months	High initially, decreasing gradually
Construction Management	4% of Hard Cost	When Const. Starts	Over Const. Period	Mild Bell Curve
Development Fee	3% of Hard Cost	After Building Approvals	Until Const. is over	Mild Bell Curve
Contingencies	5% of Hard Cost	When Const. starts	Over Const. Period	Low initially, increasing gradually
Marketing Expenses	15% of Hard Costs	After Building Approvals	12 months	High initially, decreasing gradually
Admin Expenses	₹20 Million	Project Start	Until all flats sold	Uniform over time

Key Assumptions

6. Sales Collection Mechanism

Collection plan is as under:

Collection Milestone	Collection%	Starting from
Initial Booking	5%	For Phase 1: 2 months after Marketing begins For Phase 2: 2 months after Phase 1 Booking begins
Construction Phase	70%	Collected over the Construction Phase, once atleast 30% construction is over
Final Payment	25%	Once all construction is over

7. <u>Debt</u>

Bankers have agreed to fund the Project's operating deficit on following terms -

- 1. Land Cost: will not be funded by the lenders.
- 2. Interest rate: 9% p. a. Interest shall be accrued and added to repayable loan balance until it can be paid off.
- 3. Tenure: 5 years.
- 4. **Repayment:** to begin as soon as the construction of the Phase 1 of the is over.
- 5. Restriction on Sales Collection Monies: All proceeds received towards sale of flats shall be held in a separate Escrow Account. And shall be available only to meet project related costs. It shall not be available for Equity Distribution until all loan balance (including any accrued interest) is paid back.
- 6. First ranking Charge over all project assets.

8. Equity

All The Equity contribution shall come right at the start of the project, so as to fund the land costs and building approval costs. And also the legal fees and set up costs.

In case of a Joint Development with Landowners, Pinkstone stipulates that Equity distribution to partners shall begin only once the landowners have also been paid their entire dues.

Pinkstone as the Sponsor/ GP (managing partners) and the Limited Partners (investing partners) shall contribute equity in the ratio of 20:80.

LPs shall be required to pay a one-time acquisition fee to the GPs, equal to 1% of the equity contribution. This fee shall not be considered as part of their capital.

Pinkstone proposes the following promote structure that will reward them appropriately for delivering superior returns and managing capital deployment efficiently.

Waterfall distribution terms:

Stages of Distribution	Milestone	Expected Ro (Hurdl	Expected Return Range (Hurdle rate)	
Tier 1	Return of Capital & Preferred Return		Up to 9%	0%
Tier 2	Excess Profits	Above 9%	Up to 12%	10%
Tier 3	Excess Profits	Above 12%	Up to 15%	20%
Tier 4	Any Balance	Above 15%	N.A.	25%





Thought Process Visu

Visualising the Story



^GP ~ General Partner/ Sponsor/ Promoter/ Deal Originator/ Investment Manager

*LP ~ Limited Partners/ The various investors that subscribe to the deal and contribute a major chunk of equity capital, say - 70-100%

*SPE ~ Special Purpose Legal Entity/ Corporation specifically formed to house only this real estate deal.

Key Elements

Threefold Leverage

Joint Development with Landowner

Developer can get 2 more sources of financial leverage in addition to the traditional Debt. Thanks to the nature of the product - Residential Real Estate for outright sale.

Advance Money from homebuyers

Another cool source of funding

Reduces the need for external funding

Increases Bankability of the

Project

If held up in a separate Escrow Account & used

strictly for Project related purposes, ensures

better monitoring over funds' use leading to

timely completion of project.

Increases Credibility of the

Developer

Timely delivery of the property to the

homebuyers enhances the Developer's goodwill

and personal brand, making fund raising much

easier for their next ventures.

In a joint development, the landowner contributes their land and the developer brings in their development expertise. A potential win-win.

Landowner:

gets to unlock a higher value by staying put through the development process. As compared to an outright sale at current market values.

Developer:

Big source of Funding! Saves them heavy investment in land in the initial phase. Asset-light business model.

Consideration to Landowner:

Either in Kind

By sharing of pre-agreed portion of the Developed area (# flats) Or in Cash By sharing of a fixed % of Sales Cashflows

until a mutually agreed multiple on current market value of land is achieved. Similar to a Revenue Participation Finance

Why do we call it a Quasi-equity Loan from Landowner?

Higher risks than a traditional Debt

- Landowner gives development rights and power of attorney to the developer right at the start while their timely exit realisations will depend upon the successful planning and execution of the project.
 - The land goes as a mortgage collateral for any further funding by means of debt.

Yet cannot be classified as Equity

- Landowner doesn't participate in the management of the project's ongoings.
- Also has a first preference share out of the Developed product/ Sale Proceeds before anyone else.

Lesser need for Debt

As compared to a commercial development. Because the advances from the property buyers becomes an undeniable source of funding, if harnessed well.

Debt

But, Riskier and Costlier Debt Why?

- Ensuring smooth Debt service can be a challenge in cases where the sales offtake does not happen as planned.
- Unlike Commercial RE, there is no fixed income stream against which the debt service can be secured.

Stipulating Escrow on Sales cashflow monies to

minimise risks

In India, thanks to RERA*, atleast 70% of the Sales collections is to be held up in Escrows. That means it cannot be diverted for distributions to Equity or investment in another project until this project is delivered and all debts are paid off.

Increased leverage = Increased Sensitivity of the Equity Returns to changes in Cost inputs.

Why?

Because with increased leverage, the Fixed Financing Cost increases. (viz, Returns to the Landowner/ Interest on Debt). And very little bandwidth remains to absorb the shock of increase in any other operating cost such as the Construction Cost. Sometimes there is very little recovery possible by jacking up the sale prices either. Because sale prices are mostly determined by market driven factors.

Key Elements

Timing

Timing of various events

How long will getting the building approvals take?

How are the various budget monies going to be spent ? Straight-line, Bell-curve, gradually decreasing or increasing ? In order to organise the sources of funding, we need to know how much money is needed when.

What is the go-to market plan ? How much pre-sales is targeted before starting the construction ?

Pre-Sales: A Critical factor for the project's success

- Adds to the bankability of the Project, thereby providing easier access to Bank credit.
- Aggressive marketing in the initial phase helps generate good pre-sales booking.
 - Developer can leverage on customer advances as a source of funding.

Post Const. Phase



Key Elements

Return Metrics

1. Profit Margins :

This is simply the difference between the Sale Price and the underlying cost to build the RE property.

Is it in line with the industry standards? If not, what unfair advantages make the developers peg their product at a different price point? And how strong is the demand?

Equity Return: A function of 3 things -

2. Leverage:

How much of Other People's Money are the Promoters able to use efficiently ?

3 Simple Tools to measure Equity Returns

Internal Rate of Return

A metric that annualises the rate of return for a range of cashflows. • Cash outflow at the start and • a series of Cash inflows (and maybe some Outflows) over

 a series of Cash inflows (and maybe some Outflows) over the investment period.

But more often than not, IRR will throw an exuberant result.

Formula -

IRR = The Discount rate at which Initial Cash Outflows = PV of All Future Cashflows

In MS-excel, we have the straightforward IRR/ XIRR formula.

Outside of excel we extrapolate a few probable rates and figure out the exact IRR rate by trial and error method.

Equity Multiple

Most important measure for any business as such. It tells us how much the investment gives back in gross terms.

For example, if I invested \$ 100 and got back \$ 400, that means I made 4 x (400/100) on my investment.

However, Equity Multiple ignores the Time, the most costly input in any investment.

Hence EM is always accompanied with an annualised rate of return , so as to know if the Investment is worth the money as well as the time.

Formula -

Multiple = Sum of all Cash Inflows/ Sum of all Cash Outflows

3. Timing:

Are the developers able to deliver quality RE on time ? Are they able to ensure the sales on time ?

Timely Completion & Timely Sales = Timely encashment of all investments.

Speaks about their good planning skills and efficient building processes & effective marketing strategies.

Geometric Mean

A metric that annualises/ averages out the returns received from an investment over the invested number of years. But it very much considers the compounding effect.

Geometric Mean projects the rate at which the initial investment will grow over time until the end of the invested period.

Offers a subdued result as compared to IRR that makes more sense in "Build and Sell" models.

Formula -

Geometric Mean = Equity Multiple ^ (1/n) - 1 Where n = number of invested years

Yes, Geometric Mean is the same as CAGR !

In a Build & Sell Model, the Cashflow Pattern is always going to be uneven.

Cash outflows for initial Investment, then some cash inflows for advance sales, followed by heavy outflows as construction picks up speed as well as inflows

depending upon the volume of sales bookings.

This is why, for an annualised return, Geometric Mean (or CAGR) is always a better measure than IRR.

Key Elements

Return Metrics

How Geometric Mean is a better measure for an annualised return than IRR?

2.

Scenario 1: Returns received at the end. No interim cashflows						
Cashflow Profile	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Initial Investment	100	-	-	-	-	-
Returns (Including capital payback)	-	-	-	-	-	350
Net Cashflows	-100	-	-	-	-	350
IRR = 28.47%		Multiple	e = 3.5 x	C	i. Mean = 2	8.47%

[Using Excel's IRR function]

[350/100] $= 3.5^{(1/5)} - 1$

the second se

Scenario 2: Returns received over the period

Cashflow Profile	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	Year 3	Year 4	<u>Year 5</u>
Initial Investment	100	-	-	-	-	-
Returns (Including capital payback)	-	30	40	60	70	150
Net Cashflows	-100	30	40	60	70	150
IRR = 44.34%		Multiple	e = 3.5 x	C	G. Mean = 2	8.47%
[Using Excel's IRR function	onl	[350,	/100]		= 3.5^(1/5)	- 1

Scenario 3: Higher Returns received in the earlier years

IRR = 56 95%		Multiple	= 35 v	C	Mean = 2	8 / 7%
Net Cashflows	-100	70	60	40	30	150
Returns (Including capital payback)	-	70	60	40	30	150
Initial Investment	100	-	-	-	-	-
Cashflow Profile	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	Year 4	<u>Year 5</u>

IRR = 56.95%

Multiple = 3.5 x[350/100]

 $= 3.5^{(1/5)} - 1$

Our observations from the 3 adjacent scenarios :

- 1. IRR = Geometric Mean, when no interim cashflows. IRR increases if more cashflows received earlier in the timeline than later. Although total returns remain
 - the same.
 - 3. No change in Geometric mean in all the 3 scenarios.

How differently do IRR and GM grow the money?

IRR

presumes that all the cashflows received will be reinvested at the same IRR rate. If money is received earlier, it will earn compounding returns at the same IRR until the end of the investing period.

For example in Scenario 2 - Cash inflows are expected to get reinvested and grow at the same IRR for the remaining period as follows:

1 st Year-end receipt \rightarrow	grows to 130.23	← 30*(1+44.34%)^4
2^{nd} Year-end receipt →	grows to 120.29	← 40*(1+44.34%)^3
3^{rd} Year-end receipt \rightarrow	grows to 125.01	← 60*(1+44.34%)^2
4 th Year-end receipt →	grows to 101.04	← 70*(1+44.34%)^1
5 th Year-end receipt \rightarrow	remains 150, received on the last date	← 150*(1+44.34%)^0

Thus giving a Total Cash inflows of 626.57. This includes actual money from the investment of only 350 whereas balance 276.57 is the notional income we might have earned elsewhere by reinvesting at the same return rate as the IRR!

Geometric Mean

meanwhile doesn't care about the timing of the returns. GM grows the initial investment at the GM rate. Of course to calculate the GM, we need to know the total returns and the total time taken to earn them.

In the example, 100 grows by 28.47% every year to finally become 350. i.e., 100*(1+GM rate)^5

Irrespective of how much of this total amount of 350 is received when within the timeline. There is no fluff of any notional income received from reinvestment elsewhere at the same rate!

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[Using Excel's IRR function]

Key Elements

Return Metrics

Geometric Mean is the same as CAGR*. In fact CAGR is a use case for GM.

We can coolly use the quick and easy CAGR formula in our financial models in place of the long textbook formula prescribed for Geometric Mean.

Continuing with Scenario 2 example to find GM using 2 different formulas

Cashflow Profile	<u>Year 0</u>	Year 1	Year 2	Year 3	Year 4	<u>Year 5</u>
Initial Investment	100	-	-	-	-	-
Returns (Including capital payback)	-	30	40	60	70	150
Net Cashflows	-100	30	40	60	70	150

CAGR Formula:

(Total Cash Inflows/ Total Cash Outflows)^(1/n) – 1

Where n = the total period for which we are invested

In the above example, CAGR is 28.47%

Geometric Mean Formula:

 $[(1+r_1)+(1+r_2)+....+(1+r_n)]^{(1/n)} - 1$

In the above example, **GM is also 28.47%**

Ingredients for CAGR Formula in the above example:

Total Cash Outflows = 100 Total Cash Inflows = 350 n = 5 years

Ingredients for Geom. Mean Formula in the above example:

		r (1+ r) as	n = 5 years calculated belo	ow.		
	<u>Year 0</u>	Year 1	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Total Cash Inflows		30	40	60	70	150
Less: Principal received back		30	40	30		
Net Returns portion (balance)	-	-	-	30	70	150
What is r ? Notice the denominator ? [#]				30% 30/100	54% 70/(100+30)	75% 150/(100+30+70)
Add 1 to every 'r'		1	1	1.3	1.54	1.75

*CAGR - Compounded Annual Growth Rate

[#] Denominator consists of the Principal Invested + all returns (pure income) received previously

Key Elements

Equity Waterfall



European Waterfall in Build & Sell Models

In 'Build & Sell' Models, building and selling the units of the Property both are part of the main operations. But distributable profits for the Equity guys appears much later in the timeline once all the external stakeholders are paid off.

In American Waterfall style, distribution of returns to LPs and the GP happens out of operational income and the Capital is paid back at the time of the grand event of sale of the CRE Asset. GP claims promotes during operations as well as the exit.

But in European Waterfall, no return or promote is paid to GP until the LPs have been paid off their capital and preferred returns.

Since money is available only at the end of the lifecycle for either the LP or the GP, by default, European style of distribution is what applies here.

Role of IRR in Equity Distributions

We bashed up IRR in the earlier slide as a lousy metric that inflates up the returns in some cases.

But there is no denial that IRR is an awesome measure to ensure a fair distribution of profits to the Equity Partners in accordance with their pre-agreed waterfall terms.

In the Tiered distribution structure, what happens is at each Tier, Return is calculated on the outstanding capital using the APY. Once the pay-outs are made corresponding to the outstanding capital and the accrued returns, the remaining undistributed Cashflows go to the Next Tier, to be distributed in the same manner but now with a higher expected return rate.

At the end of every Tier (except the last one), if we calculate the IRR, it is equal to the applied APY rate and offers us a great sanity check thus ensuring a controlled distribution at every stage.

IRR serves here as a good cross-check tool.

Valuable EPC Partnerships ?

Lending Relationships? Risk Management skills?

Skin in the Game?

Operational expertise?

Outreach Strategies?

Past Track records?



Basics Touch-up



Basics Touch-up CRE Deals ~ Project Finance

Real Estate Deals essentially follow Project Financing Principles. This is the premise upon which our Financial Model is built.

In the next 2 slides, we see why.

Basics Touch-up CRE Deals ~ Project Finance



* Debt Service ~ Periodic Interest plus principal repayment

SPE ~ Special Purpose Entity

The main feature of Project Finance

Each CRE investment is housed in a separate legal entity exclusive to itself.

Why?

1. Isolated Risks and Rewards

The risks and rewards associated with this investment belong to the SPE alone. They do not get jumbled up with the other businesses the Owners of the SPE maybe having.

As a result, the SPE has its own books of account that documents the entire lifecycle of the CRE investment from formation and financial closure to development to operations to the final sale.

2. Increased Bankability

Standalone credibility of the Project becomes the main focus. Since risks and returns from the investment are clearly distinguished and independent from the other businesses of the Owners, obtaining Finance becomes easier. Financing costs get optimised as structuring the deal becomes straightforward.

3. Easy Exit

SPE with the underlying investment can stay on forever. The Ownership can change hands by simply transferring their shares in the SPE to the next buyers.

4. Sound Exit Planning

A good detailed documentation of the SPE's financial performance all through enables fetching right valuations at the time of exit. Adds to the credibility of its standalone financial health.

Basics Touch-up CRE Deals ~ Project Finance

Corporate Finance Structure



Corporate Finance is unsuitable for CRE Deals

A traditional practice in several developing property markets though a distorted one.

Why?

.. Unclear Funding goals

Developer may be developing several projects at one time. He usually seeks credit for new acquisitions as well as completion of the ongoing projects. His goals are not specific but several and general corporate purposes.

. Unclear Cashflow Profile

Because of the fungible Cash pool, Cashflow profile for each of the projects is not clearly identified. Determining the borrowers' project specific periodic debt servicing capacity is a challenge.

3. Difficulties in Financing

The Ownership goes on to seek credit against cashflow profiles of their entire business, personal guarantees.

Resulting in inefficient leveraging and relatively higher financing costs.

4. High Credit Risks

Credit given is highly exposed to diversion of funds, project mismanagement and market risks.

5. Difficult Exit

Exit for Investors from one specific Asset is not possible.

* Debt Service ~ Periodic Interest plus principal repayment

Basics Touch-up

Area Concepts

Ground Coverage Ratio/ Building Coverage Ratio

Ratio of the built-up space covering the ground of a building to the land plot area.

The land use zoning authorities/ local municipal authorities stipulate a certain percentage as the Ground coverage ratio for various types of residential and commercial real estate properties.

Floor Area Ratio/ Floor Space Index

Ratio of all the built-up area across all the floors/ levels of a building to the land plot area.

That means, Total Built up Area = Land Plot area x FSI

FSR is stipulated by the Land use zoning authorities to regulate the landscape planning and development.

Higher permissible FSI denotes stronger density of population and need for stronger infrastructure.

Summarising Example

Land Plot area = 20000 sqm. | FSI = 2x | Ground Coverage Ratio = 40% | Common Area Factor = 25%

Total Construction Area (GSF) = 40000 sqm. (2 * 20000)

Saleable Area (NSF) = 32000 sqm. (40000 / [1+25%])

Ground Coverage = 8000 sqm. (20000 * 40%)

Number of Floors (average) = 5 (40000 / 8000)



Gross Square Footage / Total Construction Area/ Super Built up Area

Total Constructed Area Including occupiable as well as common areas

Common areas includes covered areas such as lobbies, clubhouses, gyms etc., built inside the residential complex but excludes open areas such as parks and gardens.

Costing of the saleable property units is done as per this area.

Net Square Footage / Total Saleable Area/ Net Usable Area/ Carpet Area

Area of the housing unit that is actually used by the buyer/ tenant. Sale price is determined/ lease rent is charged as per this area.

Efficiency ratio

Ratio of the NSF to the GSF.

A portion of GSF will be taken up in building common utilities such as the HVAC Systems, lobby, restrooms, etc.

Loading Factor/ Add-on Factor/ Common Area Factor

Portion of the Common Areas expressed as a % of the NSF.

GSF = NSF * (1 + Load Factor)

Example: GSF = 5000 SF, Load Factor = 25%. What is NSF?

Answer: NSF = 5000/ (1+25%) = 4000 SF.

Basics Touch-up Compounding – "The Eighth Wonder"

We all know what Compounding is. Interest earned on Cumulative Basis

Compound Interest = (Principal + previously Accumulated Interest) * Interest Rate.

This happens when the interest/ cost of the money is not paid out immediately but rather reinvested towards the intended use. i.e. added to the principal balance.

		Year 1	Year 2	Year 3	Year 4	Year 5
	Starting Principal [P] = 1000	0 Interest ra	te [r] = 10% p.a. r	number of periods [n] = 5 years	
Opening Balance [A]		10000	11000	12100	13310	14641
Compound Interest [B =	A * r]	1000	1100	1210	1331	1464
Closing Balance [C = A + [Compounded Return = I	B] P*(1+ r)^n] [1000	11000 00*(1+10%)^1]	12100 [10000*(1+10%)^2]	13310 [10000*(1+10%)^3]	14641 [10000*(1+10%)^4]	16105 [10000*(1+10%)^5]

Basics Touch-up

For

Enter APR & APY

APR & APY mean the same as long as the frequency of compounding is annual

They differ in formula and meaning only in 'less than year' compounding periods

APR ~ Annual Percentage Rate Simple nominal interest rate

APY is the base rate that allows linear compounding period after period

Periodic Rate = APR / n n = Frequency of compounding within a year

APR is used in the context of Costs Examples: Inflation rate, Interest rate on Debt APY ~ Annual Percentage Yield Annual Effective Rate $| APY = (1 + APR/n)^n - 1$

APY already factors in the Compounding Effect.

Periodic Rate = $(1 + APY)^{(1/n)} - 1$ n = Frequency of compounding within a year

APY is used in the context of net Returns expected by Investors. Example: Equity Return rate

an <u>APR of 12% p.a. compounded monthly –</u>						
Periodic rate	= APR/n					
	= 12%/12					
	= 1.00 %					
APY	= $(1 + APR / n)^n - 1$ [MS Excel Function ~ EFFECT]					
	= (1 + 12 % / 12) ^ 12 - 1					
	= 12.68 %					

For an APY of 12% p.a. compounded monthly – Periodic rate = $(1 + APY)^{(1/n) - 1}$ = $(1 + 12\%)^{(1/12) - 1}$ = 0.95% APR = Periodic rate * n = 0.95% * 12 = 11.39%

For any given APR, the corresponding APY will always be a little higher depending on how many times it is compounded within the year.

Basics Touch-up

Illustrating APR & APY

APR -

When the Lender accrues an interest (APR) of 12% p.a. every month on a Loan advanced of \$ 100,000

Periodic Rate = 1.00% [12%/ 12]

	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	<u>Month 10</u>	Month 11	Month 12
Opening Balance		100000	101000	102010	103030	104060	105101	106152	107214	108286	109369	110462	111567
Debt drawn	100000												
Accrued Interest		1000	1010	1020	1030	1041	1051	1062	1072	1083	1094	1105	1116
Repaid													
Closing Balance	100000	101000	102010	103030	104060	105101	106152	107214	108286	109369	110462	111567	112683
											Net Ann	ual Return	12.683%
											[Closing E	Balance/ Pr	incipal - 1]
												[112683/1	00000 - 1]

APY -

When Equity Investors are expecting an IRR (APY) of 12% p.a. on a capital contribution of \$100,000

Periodic Rate = 0.95% [(1+12%)^(1/12) - 1)]

	Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	<u>Month 10</u>	Month 11	Month 12
Opening Balance		100000	100949	101907	102874	103850	104835	105830	106834	107848	108871	109904	110947
Equity	100000												
Accrued Returns		949	958	967	976	985	995	1004	1014	1023	1033	1043	1053
Distribution													
Closing Balance	100000	100949	101907	102874	103850	104835	105830	106834	107848	108871	109904	110947	112000
											Net Ann	ual Return	12.000%
										[C	losing Balaı	nce/ Contri	bution - 1]

[112000/100000 - 1]





Accounting Side 2 Approaches to Financial Modeling

Pure Cashflow Approach

Investment is purely analysed in terms of CASH.

Meaning: The Financial Model documents the entire lifecycle of the Investment Proposition.

Best suited for:

Project Finance. For e.g. most CRE deals, Cash cow investment opportunities.

Goal:

Does the Investment make sense and deliver the investor's expected returns?

Investor would want to know only 2 things -

- What Cash is required to be invested ?
- What Cash will they reap out of the investment?
- > And of course, the timing of the various Cashflows.

Process:

Cash is analysed through a simple and logic driven layout -

- 1. Investment Cashflows (Outflows)
- 2. Operating Cashflows (Net Inflows)

3. Exit Cashflows - (Net Inflows)

In case of a 'Build & Sell' model – Investment & Exit Cashflows, both form part of the operations.

Left-out:

The non-cash item of depreciation, income tax expenses, credit given for sales/ incomes and received for purchases/ expenses don't get calculated.

However, discounts for any bad debts and necessary expense provisions is duly considered in calculating the net cashflows.

Balance Sheet Approach

Data from Past years' Balance Sheets is extrapolated with estimates for the future to understand the impact of new investments.

Meaning:

The Financial Model strives to show how the new Investment Proposition adds value to the existing business situation.

Best suited for:

Corporate Finance. For e.g., M&A deals, Expansion plans of a growing Corporation.

Goal:

What synergies (e.g.: (2+2) > 4) will the merger offer ? How will the increased investment add to the bottom-line of the Firm ?

Process:

Fresh inputs as well as past insights are channelled through the Balance Sheet and P/L Statement so as to see how the future periods in the investment analysis period will look like.

Left-out:

In order to calculate return and valuations metrics such as NPV/ IRR/ Enterprise Value/ Equity Value, we have to pull back into pure Cashflow Analysis formats.

Accounting Side Need for the Balance Sheet*

We follow the clean and sharp 'Pure Cashflow' Approach to analyse RE deals. That means, if needed, "Projected" Balance Sheet will have to be drawn out from the Financial Model.

A few good reasons:

1. Legal & Regulatory requirements

We may have to annex a projected balance sheet as part of the legal documents such as the Private Placement Memorandum. Our bankers may want us to submit a projected financial statements. Perhaps, a Cashflow model may not suffice.

2. After Tax Analysis

Having a projected set of financial statements enables us to know the tax impact. Tax is payable out of income. To know the income we must have the P/L account that is part of the Balance Sheet.

3. Investor's Expectation

Investors may want to see how the modelled numbers look like in the Balance sheet.

*Please note that by Balance Sheet I mean all the 3 financial statements – Balance Sheet as well as P/L account and Cashflow Statement. The word 'Balance Sheet' has a better and quicker recall value than the long boring – "Financial Statements". 😳

Accounting Side Financial Statements: Primer

Financial Statements consist of -

1. The Statement of Financial Position a.k.a. The Balance Sheet Financial health of a business at any point of time

2. Statement of Income a.k.a. The Profit/Loss Account Net profit/loss earned during a period, this balance rolls into the Equity, that further rolls into the Balance Sheet.

3. Statement of Other Comprehensive Income

(The Unrealised Incomes/ Losses that cannot be included in the P/L account yet) An advanced reporting concept, we are not delving into right now

> 4. Statement of Changes in Equity (the Equity Schedule) Rolls into the Balance Sheet

> > 5. Cashflow Statement

(the Schedule of Cash balance with breakup into 3 main activities)

Closing Cash balance from the Cashflow Statement rolls into the Balance Sheet (only for our modeling purposes!). In practice, Cashflow Statement is drawn from the Balance Sheet and the P/L by segregating cashflows into the 3 broad types of transactions (see next page).

6. Notes

(accounting policies and presumptions and other details of the items reported in Balance Sheet)

Accounting Side Financial Statements*: Primer



Some Accounting 101

Nature of the Balance Sheet items

All Assets ~ Debit Balances

All Liabilities & Equity ~ Credit Balances

Nature of Profit/ Loss Account items

All Incomes ~ Credits

Less: All Expenses ~ Debits

Net Profit/ (Loss) ~ Credit/ (Debit)

Accounting Sanctity

My business is an entity separate from me. If I invest my own (equity) money in my business, the business still has an obligation to return back my money at the end of its lifecycle.

For Every Debit, there is a corresponding Credit.

Essence of Double Entry Accounting System. Lends accuracy & completeness to the accounting process. The Zero-sum equation.

Matching Concept

All the Revenues and the related Expenses be recognised in the same reporting period.

Some Accounting 101

Nature of the Balance Sheet items

All Assets ~ Debit Balances

All Liabilities & Equity ~ Credit Balances

Nature of Profit/ Loss Account items

All Incomes ~ Credits

Less: All Expenses ~ Debits

Net Profit/ (Loss) ~ Credit/ (Debit)

The 3 Golden Accounting Rules

Debit the Receiver, Credit the Giver.
 Debit What Comes in, Credit what Goes out.
 Debit all Expenses and Losses, Credit all Incomes and Gains.

Example: When an Investment Property is purchased									
Account :	Golden Rule?	Where?	Effect?	Zero Sum :	Account :				
Investment Property	Debit what comes in	Balance Sheet	Debit	1,000,000	Cash				
Cash	Credit what goes out	Balance Sheet	Credit	1,000,000	Equity				
Net				0	Net				
	Example: when a Financing Fee	e is paid to the Lender	r						
Account :	Golden Rule?	Where?	Effect?	Zero Sum :	Account :				
Financing Fee	Debit all expenses and losses	Profit/Loss	Debit	10,000	Cash				
		Account			Rental Inco				
Cash	Credit what goes out	Balance Sheet	Credit	10,000					
Net				0	Net				

Notice that every time cash goes out, it is either made towards buying an asset (B/S) or incurring an expense (P/L).

Account :	Golden Rule?	Where?	Effect?	Zero Sum :					
Cash	Debit what comes in	Balance Sheet	Debit	500,000					
Equity	Credit the Giver	Balance Sheet	Credit	500,000					
Net				0					
Example: When a rental income is received									

Example: When Partners contribute Equity Capital in the business

Account :	Golden Rule?	Where?	Effect?	Zero Sum :
Cash	Debit what comes in	Balance Sheet	Debit	50,000
Rental Income	Credit all incomes and gains	Profit/Loss Account	Credit	50,000
Net				0

Notice that every time cash is received, it is either towards a liability/ equity (B/S) or an income (P/L).

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To Capitalise or not to Capitalise?

One important question that bugs the accountants all the time is whether to capitalise an item of cost or write it off in P/L account. Calls for prudence, also reference to the accounting standards prescribed by the regulatory authorities. Capitalisation will lead to a higher Net-Worth (Equity balance) versus a write-off.

Example: In the Books of one SPE, Break-up of a CRE Investment Property Cost :

Total Costs	\$3,300,000
Fees for "XYZ" Services	\$200,000
Closing Costs	\$100,000
Property Acquisition Costs	\$3,000,000

If this XYZ Fees is Capitalised

The Initial Balance Sheet							
Liabilities & Equity			<u>Assets</u>				
Debt (60%)		\$1,980,000	Investment Property	\$3,300,000			
<u>Equity (40%)</u>							
Capital	\$1,320,000						
Net Profit/Loss	-	\$1,320,000					
Total		\$3,300,000	Total	\$3,300,000			

If this XYZ Fees is not Capitalised

The Initial Balance Sheet							
Liabilities & Equity			<u>Assets</u>				
Debt (60%)		\$1,980,000	Investment Property	\$3,100,000			
<u>Equity (40%)</u>							
Capital	\$1,320,000						
Net Profit/Loss	(-) \$200,000	\$1,120,000					
Total		\$3,100,000	Total	\$3,100,000			

Accounting Side Steps to the Balance Sheet



Let's look at the first 5 steps closely. We can handle the 6th one in the excel.

Steps to the Balance Sheet

Cashflow Model Summary	Major Events	Relevant Acc	counting Heads
A. Investment Cashflows:	[]	Balan	ce Sheet
Land Costs	Creation of RE Asset. Inventory	Liability Heads	Asset Heads
Hard Costs			Asset Heads
Soft CostsRE Development related	Operational Up-keep	Debt	Under Development Inventory Property
General Admin & Marketing Costs		Loan from Landowner	Finished Inventory
Financing Cost		(Revenue Participation	Property
Total Project Costs		i mance)	
As Funded By -		Advances from	
Equity	Canital Raised	Customers	Cash
Landowner's Finance	CupitarNaisea		
Project's Escrow Funds		Equity	(Sales Receipts held in Escrow)
Debt	Sales Collections		Accounts Receivable
B. Sales Cashflows:	Capital & Returns Payback to L-O		
Sales Collections received	Funding back the Droject		
Less: Landowner's Share	Funding back the Project		
Less: Capital Draw	Interest service on Debt		
Less: Interest paid on Debt	Debt repaid		
Less: Debt repaid	·		
Less: Equity Distribution	Equity Distribution		
Summary of Cashflows Identify the	Events Relevant Headings		nats 35

Steps to the Balance Sheet

Flow of Entries

Movement of the RE Inventory Property – from Creation to Subsequent Sales



Steps to the Balance Sheet

Flow of Entries

*PL Account – Profit and Loss Account

Steps to the Balance Sheet

*PL Account – Profit and Loss Account

Steps to the Balance Sheet

Flow of Entries

*PL Account – Profit and Loss Account

 Summary of Cashflows
 Identify the Events
 Relevant Headings
 Flow of Entries
 Create Formats

Accounting Side Steps to the Balance Sheet

Flow of Entries

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Steps to the Balance Sheet

Balance Sheet

	Year 0	Year 1	Year 2	<u>Year 3</u>
<u>Assets</u>				
Non-Current Assets				
Restricted Cash (Escrow balance)				
Current Assets				
Inventory Property				
Under Development				
Finished				
Accounts Receivable				
Assets Total				
Liabilities & Equity				
Non-current Liabilities				
Debt				
Landowner's Quasi Equity Loan (RPF)				
Current Liabilities				
Advance from Customers				
Equity:				
LP Equity				
GP Equity				
Liabilities & EquityTotal				

Equity Schedule

	<u>Year O</u>	Year 1	Year 2
A Limited Partners' Equity			
LP Capital: Starting Balance			
Add: Net Income/(Loss) from PL			
Add: Contribution			
Less: Distributions			
LP Capital: Ending Balance			
B General Partners' Equity			
Add: Net Income/(Loss) from PL			
Add: Contribution			

- Less: Distributions
- GP Capital: Ending Balance

		A
Jrotit/		\ccount
	LU33 F	ACCOUNT

	<u>Year 0</u>	Year 1	Year 2	Year 3
Income				
Sale of Inventory Property				
Under-development				
Finished				
Other Income				
Total Income				
Expenses				
Cost of Sales				
Marketing Expenses				
Admin Expenses				
GP Fees				
Total Expenses				
Income/ (Loss) before Taxes	S			
Income tax Expenses				
Net Income/ (Loss)				
Net Income/ (Loss) attributa	able to -			
LP Equity				
GP Equity				
Total				

Cashflow Statement

Year 0 Year 1 Year 2 Year 3 A Operating Activities Income/ (Loss) before Taxes Adjust: (Increase)/ Decrease in Working Capital Under-development Inventory Finished Inventory Accounts Receivable Advances from Customers Cashflow from Operating Activities B Investing Activities (Increase)/ Decrease in Restricted Cash Balance Cashflow from Investing Activities C Financing Activities Add: Landowner's Loan raised Less: Landowner's Loan paid back Add: Debt raised Less: Debt paid back Add: Equity Contribution Less: Equity Distributions Cashflow from Financing Activities

А

В

Year 3

Accounting Side **Recording Sales in the Books**

Unique Case of Residential Development

As we observe in the Case Study, we are anticipating pre-sales. That means we are booking sales and collecting advance monies from the customers even before the property is ready for buyer's occupation.

> In such a scenario, can we treat those advances collected as our 'Sales' in the P/L account also? No. Then should we wait until all the construction is over and the building is ready? Again No.

IFRS 15 says that Sales in such cases can be recognised over the period of development time subject to the condition of certainties. (My paraphrasing!)

When and How much Sales can be booked?

The Institute of Chartered Accountants of India has further offered some great guidance in this respect.

From When?

Sales in the books can be recorded if all the following 4 conditions are fulfilled -

1. All necessary building approvals are in place.

Atleast 25% of the Construction costs has been incurred (excluding Land Cost) 2.

- Atleast 25% of the total built-up area has been sold out. 3.
- Atleast 10% of the sale price has been collected from each home-buyer. 4.

How much?

Proportionate to the extent of Work completed.

i.e. in the ratio of - Project Costs incurred till date (including Land) / Total Estimated Project Costs (including Land)

Accounting for Cost of Sales

All the property development costs is first accounted as part of 'Under Development Inventory' in the Balance Sheet. As and when we account for Sales, we pull out a proportionate amount (corresponding to the % NSF sold) from the 'Inventory' balance and charge them off to the P/L account as the 'Cost of Sales'.

For a detailed reading, check out the below documents from ICAI, EY, PwC, Grant Thornton available in public domain.

Financial Reporting Format as per IFRS from EY -

Revenue recognition guidance from ICAI -

- https://www.ey.com/en_gl/ifrs-technical-resources/good-real-estate-illustrative-financial-statements-2019
- https://kb.icai.org/pdfs/PDFFile5b28b00f579eb6.35674209.pdf
- Revenue recognition as per IFRS 15 from PwC https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-15/ifrs-15-industry-supplement-real-estate.pdf
- https://www.grantthornton.global/en/insights/articles/get-ready-for-ifrs-15-rec/ Revenue recognition as per IFRS 15 from GT -

Accounting Side Calculating tax expenses

My 2 cents on Tax workings

All this while our discussion has centred on analysis of the investment and the strategies around it and also little bit of accounting.

Tax is a vast subject and very much local in nature. Every jurisdiction has its own dos and don'ts prescribed for the businesses. At a financials forecasting stage, determining a ballpark amount of tax costs should be more than sufficient for our purposes. I don't think we must be too much worried about going in detail into specifics of the tax laws especially in a for-profit business like Real Estate. (I mean, your govt will not treat you any differently and hand you any unusual tax credits for doing a regular business. Unless of course, you are doing something to stop climate change, green building perhaps or building affordable houses).

This is why I have kept tax related workings in the Financial Model very simple and generic. But I am sure you can chisel it further as per the specific needs of your deal using the various modeling techniques deployed in this model.

2 things to understand with respect to tax calculation:

Calculation of Tax payable

Below Format explains the process:

Net Profits as per P/L Account Add : Expenses not allowed as per Tax Laws, but accounted in Books Less : Expenses allowed as per Tax Laws, but not accounted in Books

Taxable Income Less: Utilising any Tax loss previously suffered

Net Taxable Income

Apply the applicable tax rate to this 'Net Taxable Income'

Tax Loss Balance

Tax is payable only on Net Profits.

What about the years when the business incurs losses?

These losses can be carried forward and set off against profits earned in the future periods.

In some jurisdictions, tax losses expire after a stipulated period of time.

To your Success !!

CA Padmaa Iyer

padmaa@thoughtfulstrategies.com

i roject - 5	crene nome											T Inkstone	cupitar ratariers
Leverage	e 16.66%	Eq. IRR	176%	Eq.Return (GM)	164%	Eq. Multiple	6.98 x	Equity Invested	1.51 M	n Eq. Net Profits	9.00 Mn	Duration	2.00 years
		Ba	ase Currency	INR	Qu	oted in Currency	HKD	Exchange Rate	9.480	0 Amoun	ts Expressed in	Millions	10,00,000
PROJECT	FSCRIPTION												
Proper	ty Type	Pr	emium 15 Stor	rev Apartments	Address		6th	Main.1st Stage.					
Busine	ss Model			Build - Sell	Town/ City		Vijay	anagar, Mysore,					
					State/ Country		k	Karnataka, India.					
Land A	cquisition M	ode	Join	t Development	Code			570-017					
Land A	rea	6,070 SM	65,340 SF	1.50 acre(s)									
Floor A	rea Ratio			3.00 x	Analysis Start		Month 1	01-Feb-22			Rendered Im	age	
					Project Duration	(Devp. Period)		24 Month(s)		(minin	num file size!) of th	e Building to be	
Gross S	quare Foota	ge (GSF)		1,90,500 SF	Development Sta	irt	Month 4	01-May-22			liiseiteu		
Net Sq	uare Footage	e (NSF)		1,41,120 SF	Development En	d	Month 27	30-Apr-24					
Land A	cquisition da	ite		01-Feb-22	Holding Period (F	rom Analysis Start)		2.00 years					
Buildin	g Approvals		3 month(s)	30-Apr-22	Exit Date		Month 24	31-Jan-24					
DEVELOP	/IENT PLAN												
										Loading %	Efficiency %		
Sr. No.	Phase #	Product		Specification		Mix Ratio	# Flats	pUnit GSF	Total GSF	(on NSF)	(on GSF)	pUnit NSF	Total NSF
1.1	Phase 1	Lily		Studio		33.3%	30 no(s).	807 SF	24,210 SF	35%	74.07%	598 SF	17,940 SF
1.2	Phase 1	Lavende	r	1 Bed/ 1 Bath		33.3%	30 no(s).	1,023 SF	30,690 SF	35%	74.07%	758 SF	22,740 SF
1.3	Phase 1	Lotus		2 Bed/ 2 Bath		33.3%	30 no(s).	1,345 SF	40,350 SF	35%	74.07%	996 SF	29,880 SF
2.4	0			Phase 1 Sub-tot	al	100.0%	90 no(s).	007.05	95,250 SF	25%	74.07%	500.65	70,560 SF
2.1	Phase 2	Lily	_	Studio		33.3%	30 no(s).	807 SF	24,210 SF	35%	74.07%	598 SF	17,940 SF
2.2	Phase 2	Lavende	:r	1 Beu/ 1 Bath		33.3%	30 no(s).	1,023 SF	30,090 SF	35%	74.07%	758 SF	22,740 SF
	Pilase Z	LOLUS		2 Deu/ 2 Balli Phase 2 Sub-tot		100.0%	90 no(s)	1,345 5F	40,350 SF	35%	74.07%	990 SF	29,680 SF
	_			Totals		100.070	180 no(s).		1.90.500 SF				1.41.120 SF
							(3).		_,,				_,,0 01

SOURCES & USES OF FUNDS (Budget)

USES % F	Project Costs			Start	End	Duration	Allocation		pGSF (INR)	pGSF (HKD)	Amount (HKD)
L Land Costs	19.81%			Month 1	Month 3	3 Month(s)		nSE Land	548 nSF	57.8 nSF	11.01 Mp
Land Rurchase Brice	15.0170	u/ Joint Down		wonthi	Month	<u>5 Wonth(5)</u>		1500 pSE	514 pSE	54.2 pSE	10.24 Mp
Land Fulchase Frice				Month 1	Month 1	1 Month(c)	Founted	1300 p31	514 p5i	54.5 p5i	10.54 Min
Balance payment	Lan	J70		Month 1	Month 1	1 Month(s)	Equated				0.32 Mn
Stamp duty & reg. costs	Lai	idowner s Equity	5%	Month 1	Month 1	1 Month(s)	Founted	75 () nSE	26 nSF	2 7 nSF	0.52 Mn
Brokerage Costs			1 5%	Month 1	Month 3	3 Month(s)	Fouated	22.5 nSF	8 nSF	0.8 pSF	0.32 Min
bioinerage costs			2.570		montario	5(5)		22.0 poi	0 poi	0.0 por	0.10 1011
II. Hard Costs	57.85%										
Construction Cost (all in cost)	GSF	limelag	Month 11	Month 23	<u>13 Month(s)</u>		Std Deviation	<u>1600 pSF</u>	<u>168.8 pSF</u>	<u>32.15 Mn</u>
Phase 1		95,250 SF	0 month(s)	Month 11	Month 19	9 Month(s)	Bell Curve	Std Dev. of 7	1600 pSF	168.8 pSF	16.08 Mn
Phase 2		95,250 SF	4 month(s)	Month 15	Month 23	9 Month(s)	Bell Curve	Std Dev. of 7	1600 pSF	168.8 pSF	16.08 Mn
III. Soft Costs	21.72%	<u>%</u>	of Hard Costs						601 pSF	63.4 pSF	12.07 Mn
Building Approval Cost			0.66%	Month 1	Month 3	3 Month(s)	Equated	Std Dev. of 7	10 pSF	1.1 pSF	0.21 Mn
Set-up & Legal costs			0.33%	Month 1	Month 1	1 Month(s)	Equated	Std Dev. of 7	5 pSF	0.6 pSF	0.11 Mn
Architecture & Engineering									48 pSF	5.1 pSF	0.96 Mn
Phase 1		95,250 SF	3.00%	Month 4	Month 9	6 Month(s) St	eady Decrease	Std Dev. of 7	48 pSF	5.1 pSF	0.48 Mn
Phase 2		95,250 SF	3.00%	Month 4	Month 9	6 Month(s) St	eady Decrease	Std Dev. of 7	48 pSF	5.1 pSF	0.48 Mn
Construction Management									64 pSF	6.8 pSF	1.29 Mn
Phase 1		95,250 SF	4.00%	Month 11	Month 19	9 Month(s)	Bell Curve	Std Dev. of 7	64 pSF	6.8 pSF	0.64 Mn
Phase 2		95,250 SF	4.00%	Month 15	Month 23	9 Month(s)	Bell Curve	Std Dev. of 7	64 pSF	6.8 pSF	0.64 Mn
Development Fee									48 pSF	5.1 pSF	0.96 Mn
Phase 1		95.250 SF	3.00%	Month 4	Month 19	16 Month(s)	Bell Curve	Std Dev. of 7	48 pSF	5.1 pSF	0.48 Mn
Phase 2		95,250 SF	3.00%	Month 4	Month 23	20 Month(s)	Bell Curve	Std Dev. of 7	48 pSF	5.1 pSF	0.48 Mn
Contingencies		1,90,500 SF	5.00%	Month 11	Month 23	13 Month(s)	teady Increase	Std Dev. of 8	80 pSF	8.4 pSF	1.61 Mn
Marketing Expenses		1,90,500 SF	15.00%	Month 4	Month 15	12 Month(s) St	eady Decrease	Std Dev. of 8	240 pSF	25.3 pSF	4.82 Mn
Admin Expenses			6.56%	Month 1	Month 24	24 Month(s)	Equated	Std Dev. of 8	105 pSF	11.1 pSF	2.11 Mn
Project Costs (Before Financing)				Month 1	Month 24	24 Month(s)			2749 pSF	289.9 pSF	55.23 Mn
IV. Financing Costs	0.62%								17 pSF	<u>1.8 pSF</u>	0.35 Mn
Financing Fee				Month 4	Month 4	1 Month(s)	Equated		5 pSF	0.5 pSF	0.09 Mn
Accrued Interest during Cons	t.								13 pSF	1.3 pSF	0.25 Mn
5											

TOTAL USES	100%	IVIONTN 1	Wonth 24	24 Wonth(s)		2766 pSF	291.8 pSF	55.58 IVIN
SOURCES					% Project Costs	pGSF (INR)	pGSF (HKD)	Amount (HKD)
Project Cashflow Escrows					62.96%	1741 pSF	183.7 pSF	34.99 Mn
Landowner's Quasi-Equity Loan					17.67%	489 pSF	51.6 pSF	9.82 Mn
Equity	Capital Contribution Ratio				2.71%	75 pSF	7.9 pSF	<u>1.51 Mn</u>
GP Equity	20%				0.54%	15 pSF	1.6 pSF	0.30 Mn
LP Equity	80%	Interest rate	Funding from:	Payback start:	2.17%	60 pSF	6.3 pSF	1.20 Mn
Construction Debt		9.00% p.a.	Month 4	Month 20	16.66%	461 pSF	48.6 pSF	9.26 Mn
Principal drawn					16.20%	448 pSF	47.3 pSF	9.01 Mn
Accrued Interest					0.46%	13 pSF	1.3 pSF	0.25 Mn
TOTAL SOURCES					100.00%	2277 pSF	240.2 pSF	55.58 Mn
								Ok

SALES PHASING & COLLECTION

							In case of Join	nt Development -		
					Target %	Start Month	Landowner's	Share of Sales Proce	eds until Target multiple returned	20%
Pre	-sales Target	to start Cons	struction		40%	Month 11	Landowner's	target Investment N	Aultiple	2.20 x
SALES OF	FTAKE									
Sr.	N Phase #	Product	# Flats	pUnit NSF	Total NSF	Sales Offtake Mode	Sales Offtake%	Sales Start	Sales End	
1.1	Phase 1	Lily	30 no(s).	598 SF	17,940 SF	Equated	10%/month	Month 6	Month 15	
1.2	Phase 1	Lavender	30 no(s).	758 SF	22,740 SF	Equated	10%/month	Month 6	Month 15	
1.3	Phase 1	Lotus	30 no(s).	996 SF	29,880 SF	Equated	10%/month	Month 6	Month 15	
2.1	Phase 2	Liby	30 no(s)	598 SF	17 940 SE	Founted	5%/month	Month 8	Month 22	
2.2	Phase 2	Lavender	30 no(s).	758 SF	22,740 SF	Equated	5%/month	Month 8	Month 22	
2.3	Phase 2	Lotus	30 no(s).	996 SF	29,880 SF	Equated	5%/month	Month 8	Month 22	
		Total	180 no(s).		1,41,120 SF			Month 6	Month 22	

Project - S	erene Home	25										Pinkston	e Capital Partners
Leverage	e 16.66%	6 Eq. IRR	176%	Eq.Return (GM)	164%	Eq. Multiple	6.98 x	Equity Invested	1.51 Mn	Eq. Net Profits	9.00 Mn	Duration	2.00 year
		Bi	ase Currency	INK		Quoted in Currency	HKD	Exchange Rate	9.4800	Amounts	Expressed in	WIIIIONS	10,00,000
RICING													
<u>Sr. N</u>	N Phase #	Product	# Flats	pUnit NSF	Sale Price(INR)	Price Increase	Inc. Frequency	Sale Price(HKD)	ales Value (HKD)				
1.1	Phase 1	Lily	30 no(s).	598 SF	4800 pSF	0%	Every 0.5 years	506 pSF	9.08 Mn				
1.2	Phase 1	Lavender	30 no(s).	758 SF	5200 pSF	0%	Every 0.5 years	549 pSF	12.47 Mn				
1.5	Phase 1	Lotus	30 no(s).	990 SF	5400 pSF	0%	Every 0.5 years	570 pSF	17.02 IVIN				
21	Phase 2	Lilv	30 no(s)	598 SF	4800 nSE	0%	Every 0.5 years	506 nSE	9.08 Mn				
2.2	Phase 2	Lavender	30 no(s).	758 SF	5200 pSF	0%	Every 0.5 years	549 pSF	12.47 Mn				
2.3	Phase 2	Lotus	30 no(s).	996 SF	5400 pSF	0%	Every 0.5 years	570 pSF	17.02 Mn				
		Total	180 no(s).						77.15 Mn				
OLLECTIC	0N												
								Amounts					
<u>Sr. N</u>	N Phase #	Collection I	Milestones	Collection %	Start	End	Duration	Collected	<u>% Collected</u>				
1.1	Phase 1	Initial Book	ting	5%	Month 6	Month 15	10 Month(s)	1.93 Mn	5%			Data	Allesetien
1.2	Phase 1	Constructio	on phase	70%	Month 11	Wonth 19	9 Month(s)	27.00 IVIN	70% struction Progress	s Milestone for C	lection Start	Rate 20%	Allocation
								CON	struction Progres	Collection rate	during Const	7 78%	Fouated
1.3	Phase 1	Final Payme	ent	25%	Month 20	Month 20	1 Month(s)	9.64 Mn	25%	concetion rate	during const.	7.7070	Equated
								38.58 Mn	100%				
2.1	Phase 2	Initial Book	ting	5%	Month 8	Month 22	15 Month(s)	1.93 Mn	5%			_	
2.2	Phase 2	Constructio	on phase	70%	Month 15	Month 23	9 Month(s)	27.00 Mn	70%			Rate	Allocation
								Con	struction Progres	s Milestone for Co	during Coast	30%	Foundard
23	Phase 2	Final Paym	ont	25%	Month 24	Month 24	1 Month(s)	9.64 Mp	25%	collection rate	during const.	7.78%	Equated
2.5	Thuse 2	i illari ayılı	ciic	2570	Wonth 24	Wonth 24	1 Wonth(3)	38.58 Mn	100%				
		Total Collec	ctions		Month 6	Month 24		77.15 Mn					
NNUAL C	ASHFLOW S	UMMARY											
						Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
					Totals V	31-Jan-23	31-Jan-24	31-Jan-25	31-Jan-26	31-Jan-27	31-Jan-28	31-Jan-29	1
		CACUELONIC											
<u>A. Ir</u>	VVESTIVIENT	CASHFLOWS	<u>></u>		11.01 Mp	11.01							
	Lanu	Conto			22.15 Mm	11.01	-	-	-	-	-	-	
	Fiaru C	losts			32.15 IVIN 12.07 Mp	3.30	28.79	-	-	-	-	-	
Tota	J Droject Co	osta (Roforo Ei	inancing)		EE 22 Mp	21.92	22.40						
1016	Finan	ring Cost	inancing)		0.35 Mn	0.35	- 55.40	-	-	-	-	-	
Tota	al Project Co	ets (After Fin	ancing)		55 58 Mn	22.18	33.40						
Fun	ded by -		uneing/		55.50 1411	22.10	55.40						
	Proiec	t's Sales Cash	hflows		34 99 Mn	1 59	33.40	-	-	-	-		
	Lando	wner's Ouasi	i-Fauity		9.82 Mn	9.82	-	-	-	-	-	-	
	Const	ruction Debt	raised		9.26 Mn	9.26	-	-	-	-	-	-	
	Equity	Contributio	n		1.51 Mn	1.51	-	-	-	-	-	-	-
	. ,												
B. E.	XIT CASHFLO	OWS											
	Escrow	w for Sales Co	ashflows - Star	ting Balance		-	-	-	-	-	-	-	
Sale	s Cashflows				77.15 Mn	1.99	75.16	-	-	-	-	-	
Less	: Landowne	r's share (Joir	nt Developme	nt)	21.61 Mn	0.40	21.21	-	-	-	-	-	
Less	: Capital dra	w			34.99 Mn	1.59	33.40	-	-	-	-	-	
Less	: Const. Deb	ot interest pa	id		0.56 Mn		0.56	-	-	-	-	-	
Less	: Income ta:	xes paid			0.23 Mn		0.23	-	-	-	-	-	
Less	Eccro	n repaid	schflows - End	ina Ralance	9.26 Mn	-	9.26		-			-	
Exit	Cashflows -	Equity	isiijiows - Endi	ing buluille	10.51 Mn	-	10.51	-	-	-	-	-	-
RETURNS													
		PROJECT RE	TURNS			EQUITY RE	TURNS			LANDOWNER	S RETURNS		
Proj	ect IRR			78%	Equity	IKK	(a \$400m)	176%	Landow	ner's IRR		66%	
Ann	inalised Ketu	um (Geométr	ic iviean)	43%	Annua	mseu Keturn (Geometr Multiple	ic iviean)	164%	Annuali	seu keturn (Geon	Nultiple	51%	
P10]	CULIVIUILIDIE			2.00 X	EUUIIV	INITIAL DIE		0.70 8	Laudow	uer a linvestillent	waatture	/./UX	

SENS	TIVIT	Y ANAI	YSIS

Project Costs (Before Financing) Sales Cashflows Net Gains 55.23 Mn <u>77.15 Mn</u> 21.92 Mn

#1 Sensitivit	1 Sensitivity to changes in Construction Cost #2 Sensitivity to changes in Construction Time									changes in Pre-	sales Target
	ļ	Eq. Return E	q. Multiple			Eq. Return	Eq. Multiple			Eq. Return	Eq. Multiple
Inc/ Dec	Variable	164%	6.98 x	Inc/ Dec	Variable	164%	<u>6.98 x</u>	Inc/ Dec	Variable	164%	<u>6.98 x</u>
+ 30%	2080 pSF	-100%	0.00 x	+ 30%	12 Month(s)	135%	6.84 x	+ 30%	52%	144%	6.93 x
0%	1600 pSF	164%	6.98 x	0%	9 Month(s)	164%	6.98 x	0%	40%	164%	6.98 x
- 10%	1440 pSF	213%	9.81 x	- 10%	8 Month(s)	176%	7.00 x	- 10%	36%	164%	6.98 x
- 20%	1280 pSF	256%	12.65 x	- 20%	7 Month(s)	189%	6.98 x	- 20%	32%	176%	7.01 x
- 30%	1120 pSF	294%	15.49 x	- 30%	6 Month(s)	192%	7.08 x	- 30%	28%	176%	7.01 x
#4 Sensitivit	y to changes	in Sale Price	of Lily	#5 Sensitivity to a	changes in Sale Price o	of Lavender			#6 Sensitivity to	changes in Sale	Price of Lotus
		Eq. Return E	q. Multiple			Eq. Return	Eq. Multiple			Eq. Return	Eq. Multiple
Inc/ Dec	Variable	164%	<u>6.98 x</u>	Inc/ Dec	Variable	164%	<u>6.98 x</u>	Inc/ Dec	Variable	<u>164%</u>	<u>6.98 x</u>
+ 30%	6240 pSF	226%	10.61 x	+ 30%	6760 pSF	246%	11.96 x	+ 30%	7020 pSF	271%	13.77 x
0%	4800 pSF	164%	6.98 x	0%	5200 pSF	164%	6.98 x	0%	5400 pSF	164%	6.98 x
- 10%	4320 pSF	140%	5.77 x	- 10%	4680 pSF	131%	5.32 x	- 10%	4860 pSF	117%	4.71 x
- 20%	3840 pSF	114%	4.56 x	- 20%	4160 pSF	91%	3.66 x	- 20%	4320 pSF	56%	2.45 x
- 30%	3360 pSF	83%	3.35 x	- 30%	3640 pSF	41%	2.00 x	- 30%	3780 pSF	-57%	0.18 x
- 10% - 20% - 30%	4320 pSF 3840 pSF 3360 pSF	140% 114% 83%	5.77 x 4.56 x 3.35 x	- 10% - 20% - 30%	4680 pSF 4160 pSF 3640 pSF	131% 91% 41%	5.32 x 3.66 x 2.00 x	- 10% - 20% - 30%	4860 pSF 4320 pSF 3780 pSF	117% 56% -57%	4.71 x 2.45 x 0.18 x

1.51 Mn <u>10.51 Mn</u> 9.00 Mn Landowner's Contribution Exit Cashflows for Landowner Net Gains 9.82 Mn <u>21.61 Mn</u> 11.79 Mn

Equity Contribution Exit Cashflows for Equity Net Gains

EQUITY RETURNS - WATERFALL DISTRIBUTION

WATERFALL DISTRIBUTION TERMS									
Stages of Distribution	ution <u>Milestones</u>		Return Ran	ige	GP's Promote	Partnership	LP's Share	GP's Share	
Tier 1	Preferred Return	+ Capital		9.0%	0.0%	100.0%	80.0%	20.0%	
Tier 2	Excess Profits		Above 9.0%	Upto 12.0%	10.0%	90.0%	72.0%	28.0%	
Tier 3	Excess Profits		Upto 12.0%	Upto 15.0%	20.0%	80.0%	64.0%	36.0%	
Tier 4	Any balance		Upto 15.0%	N.A.	25.0%	75.0%	60.0%	40.0%	
Acquisition Fee payable by LPs 1.00% of LP's Equit		1.00% of LP's Equity Month 1							
RETURNS SUMMARY	shell of payment								

Share of Capital	Contributions	Acquisition Fee	Dist. Ratio	Distributions	Net Profits	Returns (GM)	IRR	Eq. Multiple	
LPs Limited Partners 80%	1.20 Mn	0.01 Mn	63.74%	6.70 Mn	5.48 Mn	135%	144%	5.51 x	
GPs Pinkstone Capital Partners 20%	0.30 Mn	0.01 Mn	36.26%	<u>3.81 Mn</u>	3.52 Mn	256%	285%	12.69 x	
	1.51 Mn			10.51 Mn	9.00 Mn				
PARTNERSHIP CASHFLOW SUMMARY									
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
	Totals V	31-Jan-23	31-Jan-24	31-Jan-25	31-Jan-26	31-Jan-27	31-Jan-28	31-Jan-29	
Cashflows for LP									
LP Contributions	1.20 Mn	1.20	-	-	-	-	-	-	
Acquisition Fee charged to LP	0.01 Mn	0.01	-	-	-	-	-	-	
LP Distributions	6.70 Mn	-	6.70	-	-	-	-	-	
Net Profits	5.48 Mn	-1.22	6.70	-	-	-	-	-	
LP Return - IRR	144%								
LP Return - Geometric Mean	135%								
LP Equity Multiple	5.51 x								
Cashflows for GP									
GP Contributions	0.30 Mn	0.30	-	-	-	-	-	-	
Acquisition Fee paid to GP	0.01 Mn	0.01	-	-	-	-	-	-	
GP Distributions	3.81 Mn	-	3.81	-	-	-	-	-	
Net Profits	3.52 Mn	-0.29	3.81	-	-	-	-	-	
GP Return - IRR	285%								
GP Return - Geometric Mean	256%								

Base Currency INR Quoted in Currency HKD Exchange Rate	9.48	Amounts	s Expressed in	Millions	10,00,000
COMPANY DESCRIPTION Company Number xxx-xxx-xxx Registered Corp.	Address	Vijayana	gar, Mysore	Pincode	570-017
Company Type Limited Liability Partnership Registered unde Date of Incorporation 01-Jan-22 Jurisdiction	r-	[S	pecific Law] Karnataka		
BALANCE SHEET					
Assets	Year 1 31-Mar-22	Year 2 31-Mar-23	Year 3 31-Jan-24		
Non-current Assets		01-Apr-22			
Restricted Cash (Escrow Balance) Total Non-current assets		4.41			
Current Assets		= 10			
Inventory Property Under-development Inventory	11.21	7.48			
Finished Inventory	-	-	-		
Accounts Receivable Cash and cash equivalents	-	- 15.22	-		
Total Current assets	11.21	22.70	-	-	
Total Assets Liabilities & Equity	11.21	27.11	-		
Non-current Liabilities					
Construction Debt Landowner's Quasi-equity loan (Revenue Particination Financing)	0.05 9.82	9.26 9.82	-		
Current Liabilities	5.02	5102			
Advances from Customers		8.23	-		
Equity	5.66	27.51	-		
Limited Partners	1.06	-0.17	1.71		
Total Equity	1.33	-0.04	-1./1		
Total Liabilities & Equity	11.21	27.10	-		
PROFIT & LOSS ACCOUNT	Voor 1	Voor 3	Voor 2		
	31-Mar-22	31-Mar-23	31-Jan-24		
Income		20.42	EC 72		
Under-development		20.43	54.29		
Finished	-	-	2.44		
Other Income Fee received from LPs	0.01		-		
Total Income	0.01	20.43	56.73		
Expenses Cost of Sales	-	16 15	44 84		
Marketing expenses	-	4.76	0.06		
Admin expenses GP Fees	0.18	1.05	0.88		
Total Expenses	0.19	21.96	45.78		
Income/(Loss) before Taxes	-0.18	-1.53	10.95 0.23		
Net Income/ (Loss)	-0.18	-1.53	10.71		
Net Income/ (Loss) attributable to -	-0 14	-1 23	8 57		
General Partner	-0.04	-0.31	2.14		
Total	-0.18	-1.54	10.71		
STATEMENT OF CHANGES IN EQUITY	Year 1	Year 2	Year 3		
	31-Mar-22	31-Mar-23	31-Jan-24		
Limited Partners Equity	01-Feb-22	01-Apr-22 1.06	01-Apr-23 -0 17		
Net Income/ (Loss)	-0.14	-1.23	8.57		
Contribution Distribution	1.20	-	- 6.70		
LP Capital: Ending Balance	1.06	-0.17	1.71		
General Partners Equity		0.27	0.04		
Net Income/ (Loss)	-0.04	-0.31	2.14		
Contribution	0.30	-	-		
GP Capital: Ending Balance	0.27	-0.04	-1.71		
CASHFLOW STATEMENT (Direct Method)					
	Year 1	Year 2	Year 3		
Operating Activities	01-Feb-22	01-Apr-22	01-Apr-23		
Cash receipts	0.01	13.44	63.71		
Fee received from LPs	0.01	- 13.44	63./1		
Cash Payments	11.39	18.24	38.53		
Inventory Development Other Operating Expenses	11.21 0.19	12.42 5.82	37.36 1.17		
Marketing expenses	-	4.76	0.06		
Admin expenses GP Fees	0.18	1.05	0.88		
Income tax paid	-	-	0.23		
Cashflow from Operating Activities	-11.38	-4.80	25.18		

Pinkstone Capital Partners

Project - Serene Homes

Base Currency INR Quoted in Currency HKD	Exchange Rate	9.48	Amounts	Expressed in Mi	llions 10,00,000
CASHFLOW STATEMENT (Cont'd)					
Investing Activities		Year 1	Year 2	Year 3	
Restricted Cash (Escrow Balance)		-	-4.41	4.41	
Cashflow from Investing Activities		-	-4.41	4.41	
Financing Activities					
(+) Quasi-equity Loan from Landowner		9.82	-		
(+) Debt raised		0.05	9.20	-5.82	
(-) Debt repaid		-	-	-9.26	
(+) LP Equity Contribution		1.20	-	-	
(+) GP Equity Contribution		0.30	-	-	
(-) GP Equity Distribution		-	-	-8.70 -3.81	
Cashflow from Financing Activities		11.38	9.20	-29.59	
Cash & Cash Equivalents					
Net Change in Cash during the year				-	
Cash: Starting Balance		-	-	-	
Cash: Ending Balance		-	-	-	
SCHEDULES					
		Year 1 31-Mar-22	Year 2 31-Mar-23	Year 3	
NON-CURRENT ASSETS		01-Feb-22	01-Apr-22	01-Apr-23	
Restricted Cash (Balance held in Escrow)					
Starting Balance		-	-	4.41	
(+) Sales Cashflows		-	13.44	63.71	
(-) Capital Draw		_	6.21	28.79	
(-) Interest paid		-	0.14	0.42	
(-) Income tax paid		-	-	0.23	
(-) Debt Repaid		-	-	9.26	
Ending Balance			4.41	-	
Inventory Property					
Under-development Inventory					
Starting Balance		-	11.21	7.48	
Costs incurred during the period		11.21	12.42	37.36	
Transfer to "Finished Inventory"		-	-	1.93	
Ending Balance		11.21	7.48	-	
Finished Inventory					
Starting Balance		-	-	-	
(+) Transfer from "Under-development Inventory"		-	-	1.93	
(-) Transfer to "Cost of Sales" (P/L) Ending Balance			-	- 1.93	
Accounts Descively					
Starting Balance		-	-	15.22	
(+) Sales for the period		-	20.43	56.73	
(-) Advance from Customers		-	5.21	71.95	
Ending Balance		-	15.22	-	
CURRENT LIABILITIES					
Advances from Customers Starting Balance		_	_	8 23	
(+) Sales Collections (Restricted Cash)		-	13.44	63.71	
(-) Transfer to Accounts Receivable		-	5.21	71.95	
Ending Balance		-	8.23	-	
NON-CURRENT LIABILITIES					
Construction Debt			0.05	0.20	
(+) Debt Draw		0.05	8.95	9.20	
(+) Interest accrued		-	0.25	-	
(-) Repayment		-	-	9.26	
Ending Balance		0.05	9.26	-	
Interest (naid out portion)		_	0.14	0.42	
Principal		-	-	9.26	
Landowner's Quasi-equity loan (Revenue Particination Financing)					
Starting Balance		-	9.82	9.82	
(+) Debt Draw		9.82	-	-	
(-) Repayment		-	-	9.82	
Ending Balance Debt Service (Share of Revenue paid):		9.82	9.82	-	
Return portion		-	2.69	9.10	
Principal repaid		-	-	9.82	