

STUDENT MANUAL

Comparable Transactions (Precedent Transactions Method – PTM)

Five-Case Teaching Workbook

1. PURPOSE OF THIS WORKBOOK

This Excel workbook demonstrates how to value a company using the **Comparable / Precedent Transactions Method (PTM)**.

Students will learn:

1. How transaction characteristics affect valuation
2. How to **include or exclude deals logically** using a binary control
3. How to compute **Enterprise Value (EV)** correctly
4. How **Average vs Median multiples** change valuation
5. Why PTM is **judgment-driven**, not mechanical

Each case is implemented as **one complete model in one sheet**, using the **same structure**, so learning transfers across cases.

2. WORKBOOK STRUCTURE (OVERVIEW)

Sheets in the Workbook






Sheet Name	Purpose
INDEX	Navigation + overview
CASE_1_ControlPremium_100pct	Control premium from 100% acquisitions
CASE_2_DealSelection_Include01	Deal selection using Include (0/1)
CASE_3_AvgVsMedian_Outliers	Average vs Median multiples
CASE_4_PartialStake_Normalization	Scaling partial stakes
CASE_5_Judgment_Integrated	Integrated PTM with judgment
CHECKS_Summary	Validation dashboard

 **Rule:**

One case = one sheet = one complete model

3. COLOR CODING CONVENTION (VERY IMPORTANT)

Students must **follow this color logic**:

Color	Meaning
 Light Blue	Inputs (student editable)
 Light Grey	Calculations (formulas)
 Light Green	Final outputs / valuation
 Dark Blue	Section headers
 Text “FAIL”	Indicates model issue

This makes the model **readable, auditable, and exam friendly**.

4. INDEX SHEET (Sheet: INDEX)

Purpose

- Acts as a **table of contents**
- Enables **one-click navigation** to any case

Key Cells

Cell	Description
A1	Workbook title
A3:D3	Column headers (Case, Sheet, Learning Point, Open)
D4:D8	Hyperlinks to each case
A12:C12	Color legend
A14	Student instruction

How the hyperlink works

Example formula (in D4):

=HYPERLINK("#'CASE_1_ControlPremium_100pct!A1","Open")

Students should **not edit formulas** in the Index.

5. CASE SHEET STRUCTURE (COMMON TO ALL 5 CASES)

Each case sheet follows the **same vertical layout**.

SECTION A — COMPARABLE TRANSACTIONS (INPUTS)

Location

- Header: **Row 5**
- Data: **Rows 7–14**

Column Structure (Row 6)

Column	Variable	Cell Example
A	Deal Ref	A7
B	Acquirer Name	B7
C	Target Name	C7
D	Deal Type	D7
E	Stake %	E7
F	Deal Value (₹ cr)	F7
G	Revenue (₹ cr)	G7
H	EBITDA (₹ cr)	H7
I	Net Debt (₹ cr)	I7
J	Include? (0/1)	J7

Formatting rules

- All input cells (A7:J14) → **Blue**
 - Stake % → percentage format (E7:E14)
 - Currency → ₹ with Indian commas
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6. CORE CALCULATIONS (AUTOMATED)

Equity Value @ 100% (Column K)

Cell K7

=IF(J7=1, F7 / E7, "")

✦ Interpretation

- Scales partial stake deals to **100% equity**
 - If Include = 0 → deal is ignored
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Enterprise Value (EV) (Column L)

Cell L7

=IF(J7=1, K7 + I7, "")

✦ Concept

EV = Equity Value + Net Debt

EV / Revenue (Column M)

Cell M7

=IF(J7=1, L7 / G7, "")

EV / EBITDA (Column N)

Cell N7

=IF(J7=1, L7 / H7, "")

✦ **Most important multiple** used in valuation.

7. DEAL SELECTION LOGIC (CORE PEDAGOGY)

Include column (J7:J14)

Value Meaning

- 1 Deal is included
- 0 Deal is excluded

Students **control the valuation outcome** by changing this column.

💡 Teaching insight:

PTM is not “plug-and-play”.
It requires judgment.

8. SECTION B — DESCRIPTIVE STATISTICS

Location

- Rows immediately after deal table

Average EV/EBITDA

Cell B(Stats Row +1)

=AVERAGEIF(J7:J14,1,N7:N14)

Median EV/EBITDA

Cell B(Stats Row +2)

=MEDIAN(FILTER(N7:N14, J7:J14=1))

📌 Note (important):

- FILTER() requires **Excel 365 / Excel 2021**
 - If unavailable, instructor will show workaround
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Included Deal Count

Cell E(Stats Row +1)

=COUNTIF(J7:J14,1)

9. SECTION C — TARGET COMPANY VALUATION

Target Inputs (Blue cells)

Cell	Variable
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B(Target+2)	Target EBITDA
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B(Target+3)	Target Net Debt
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B(Target+4)	Shares Outstanding (cr)
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✦ These **three inputs are sufficient** for EV/EBITDA-based PTM.

Valuation Using Average Multiple

Implied EV

=Average_Multiple × Target_EBITDA

Implied Equity Value

=Implied_EV – Target_Net_Debt

Price per Share

=Equity_Value / Shares_Outstanding

Units cancel naturally:

₹ crore ÷ crore shares = ₹ per share

Valuation Using Median Multiple

Same formulas repeated using **Median EV/EBITDA**.

● Final prices are highlighted in **green**.

10. SECTION D — CHECKS (MODEL VALIDATION)

Check 1 — Minimum Deals

=IF(Count>=3,"PASS","FAIL")

Check 2 — No Division Errors

=IF(COUNTIF(N7:N14,"#DIV/0!")=0,"PASS","FAIL")

Check 3 — Stake Sanity

Ensures included deals have valid stake %.

Case Status

=IF(AND(Check1="PASS",Check2="PASS",Check3="PASS"),"PASS","FAIL")

📌 Students must **never submit a model with FAIL status**.

11. CHECKS SUMMARY SHEET

Purpose



- One-page audit of **all five cases**

What it pulls

- Included deal count
- Average multiple
- Median multiple
- Case status

All values are **linked**, not duplicated.

12. NAVIGATION & USABILITY

- Every case sheet has:
 -  **Back to INDEX** at top-right
 -  **Back to INDEX** at bottom
- Freeze panes applied below headers
- Column widths optimized for readability
- Comments (sticky notes) explain:
 - Equity scaling
 - EV logic

- Include (0/1)
- Median calculation

13. WHAT STUDENTS SHOULD NEVER DO

- ✗ Hard-code numbers in calculation cells
- ✗ Delete formulas
- ✗ Change color conventions
- ✗ Mix inputs and outputs
- ✗ Ignore FAIL checks

14. WHAT STUDENTS SHOULD BE ABLE TO EXPLAIN

1. Why some deals are excluded
2. Why median \neq average
3. Why EV is used instead of equity
4. Why PTM includes control premium
5. How judgment affects valuation