3 Customer is in real trouble → keep aside a lot (again cover full loan & adjust interest too)

Step 3 Calculate how much you might lose (ECL)

Ask yourself

How likely is that the customer won't pay?

How much will I lose if they don't?

When might that happen?

Now multiply: ECL = probability of default × Amt lost × Time value (discounting)

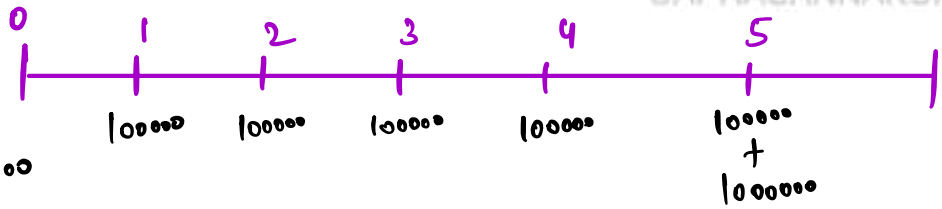
Step 4 Use your brain + data

Don't just guess – use

- past payment history
- Current financial situation
- Future forecasts (like recession risk, Job market, Inflation)

This is called forward looking Info.

Case ①



① loan = 1000 000
EIR = 10%.

② Identify CF not expected to be Collected

③ Discount the above CF @ Original E.I.R. (PV of loss)

④ ECL = ③ x probability of default.

- 12m probability → 12m ECL
- life time probability → life time ECL

① lease receivables → lessor has choice → 12 M ECL / life time ECL

② F.A which are credit impaired on acquisition date → life time ECL.

③ F.A whose Credit risk has increased Since Initial recognition → life time ECL

Eg below

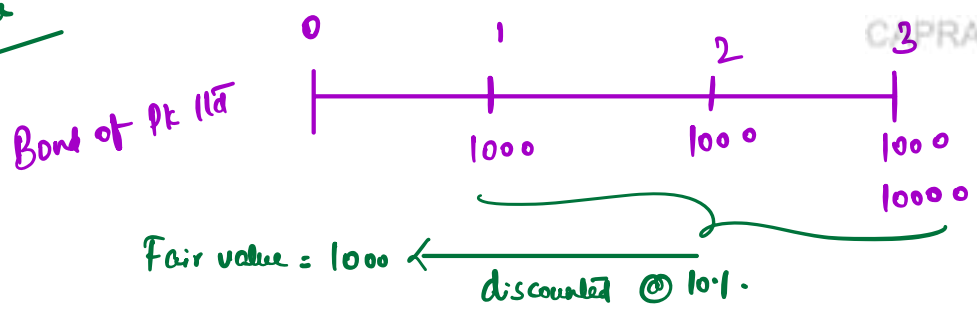
④ Amt is overdue for period exceeding 30 days → life time ECL

Rebuttable assumption

⑤ Any other Case → 12m ECL

* All loan related transactions ⇒ Fair value = PV of future CFs (W.K.This)

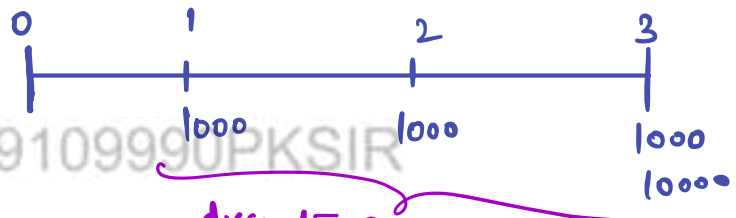
Case 3 example



Required Return depends on two factors → Risk of Company, Market Int rate

Raju → Invest → Reqd 10% for Pk Ltd → Issue price of Pk Ltd = 10000, So Raju purchased it.

After 1 yr, Pk Ltd risk increases, so RR of Raju ↑ by 4% to 14%.



* Price of bond = 9070

Accounting for Imp loss

F.A @ ACM

P/L A/c Dr xxx
To loss allowance xxx
(L.A)

Nothing but Provision for Bad debts

BS

F.A	xxx	
(-) L.A	xxx	
		xxx

EIR = 10%.

F.A @ FVTOCI

P/L Dr xxx
To OCI - Reserve xxx

Bcoz of fair valuation loss is already there in OCI - Reserve, from there bring it to P/L

For Interest Income Calculation

If Bad debt (default) is certain, then apply EIR on Net amt value.

But otherwise apply EIR on Gross value of asset.

Also Note that we are not touching BIs Asset A/c

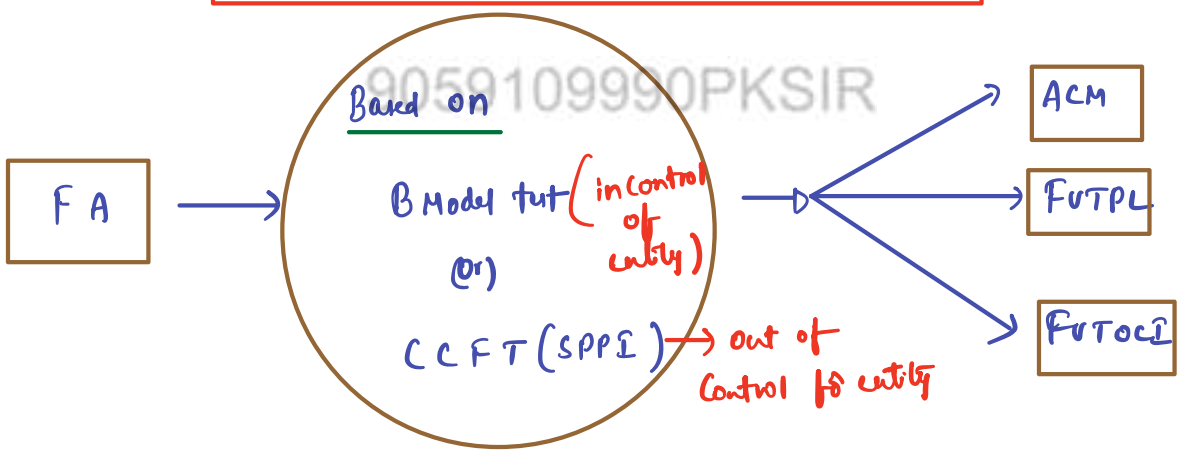
BIs

Investment	xxx
@ Fair value	

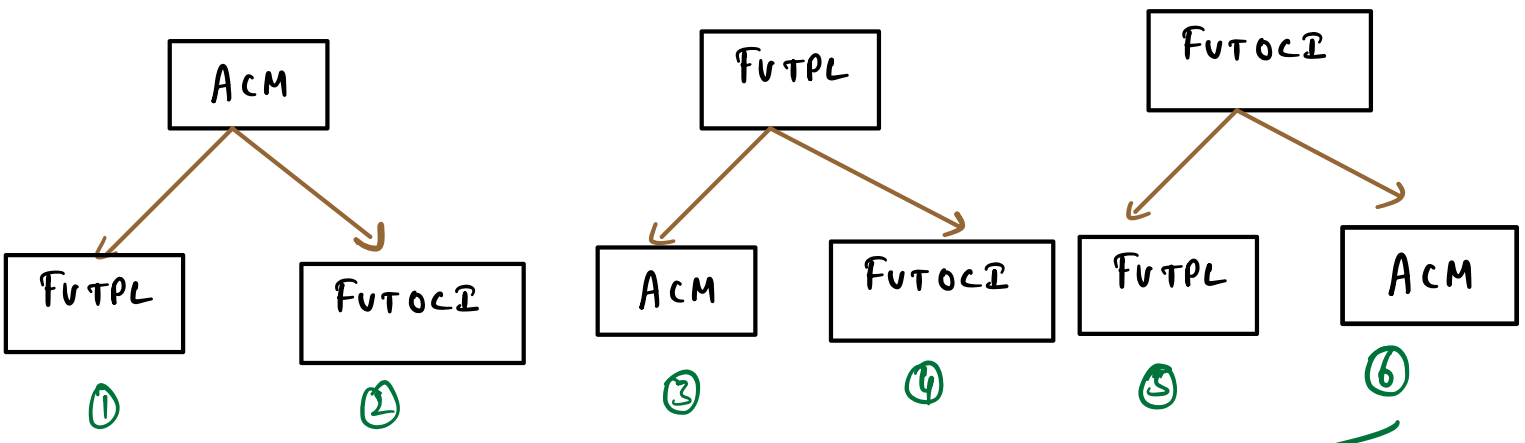
* **OTHER APPROACHES FOR ESTIMATING IMPAIRMENT LOSS:** Apart from the above ECL method the following methods are also followed

1) **PROBABILITY DEFAULT APPROACH:** In this method based on past experience we assign probabilities to various outcomes of losses and calculate the expected credit loss.
2) **PROVISION MATRIX:** This approach is usually followed for debtors where provision rate is assigned based on the outstanding periods.

RE - CLASSIFICATION OF F.A



Possibilities for reclassification



Total = 6 possibilities.

* New method cannot be applied in current year, it can be applied from next year & also accounting will be prospective.

Basic rule You can reclassify a F.A only if your business model changes (i.e the reason for holding the asset) It's not about market going up (or) down. It's about your purpose changing.

Type	Logic	Real-life example
	Lets quickly revise business models (BM)	
ACM	Hold to Collect Cash flows	Fixed deposit ; hold till maturity
FVTOCI	Hold to Collect + Sell	Bonds ; Earn Interest but may sell.
FVTPL	Trade for profit	Shares ; Buy/sell frequently

6 possibilities

① **ACM - FVTOCI**

Logic You used to keep the asset just to collect cash. Now you want the flexibility to sell it too

Think From locked deposit to bond that you may sell

Action Revalue at market price

Put any gain / loss in OCI

② ACM → FVTPL

logic You were holding it long term. Now you want to trade it for profit

Think From fixed deposit – Trading Stock

Action Revalue at market price (Fair value)

Put gain / loss in P/L

③ FVOCI → ACM

logic You were keeping it to sell (or) Collect interest

Now no more selling – Just hold till maturity.

Think From flexible bond to locked deposit

Action keep fair value at new cost

Move any OCI to reserves (not P&L)

④ FVOCI – FVTPL

logic You were open to sell (or) hold

Now you just want to trade actively

Think From Semi-trading bond → Stock trading desk

Action Revalue asset

Move any OCI to P&L

⑤ FVTPL → AC

Logic You were trading it. Now you want to keep it till maturity and get interest

Think From Stock trader → Safe Investor

Action Use current fair value as new cost
No more fair value changes

⑥ FVTPL → FVOCI

Logic You were trading actively
Now you want to hold but may sell later

Think From daily trading → Portfolio manager

Action Use fair value as base
Future changes go to OCI

SUMMARY

	AC	FVOCI	FVTPL
AC	–	Revalue → OCI	Revalue → P&L
FVOCI	Set FV as Cost	–	Revalue + move OCI → P&L
FVTPL	Set FV as Cost	Set FV as Cost FV Changes → OCI	–

Eg A Ltd. Has purchased 10% debentures of face value Rs 10,000 which are issued at 20% discount and or redeemable after 4 years at par value original EIR in the FA is 17.3%. During year 2, there is a change in the business model of the entity.

The fair value of the financial asset is as follows

@ end of year 1 - Rs 8500

@ end of year 2 - Rs 9500 [@ beginning of y3]

Show the accounting for reclassification in all the 6 possible cases.

W.N:1 ACM Table

	1	2
Opg bal of F.A	8000	8384
(+) Int Income @ 17.3.1.	1384	1450
(-) CF's received	(1000)	(1000)
Clg bal of F.A	8384	8834
Fair value	8500	9500

Fair value gain till date = 9500 - 8834 = 666

Case ① ACM TO FVTPL

Inv in Bond A/c Dr 666 (9500 - 8834)

To P/L 666

(Or)

Inv in Bond (FVTPL) 9500

To Inv in bond (ACM) 8834

To P/L 666

* We need to fair value F.A & remaining gain / loss goes to P/L. Stop EIR. On every B/S date F.A to be fair valued & gain / loss to be trsfd to P&L.

Case ② ACM TO FVTOCI

Inv in Bond A/c Dr 666 (9500 - 8834)

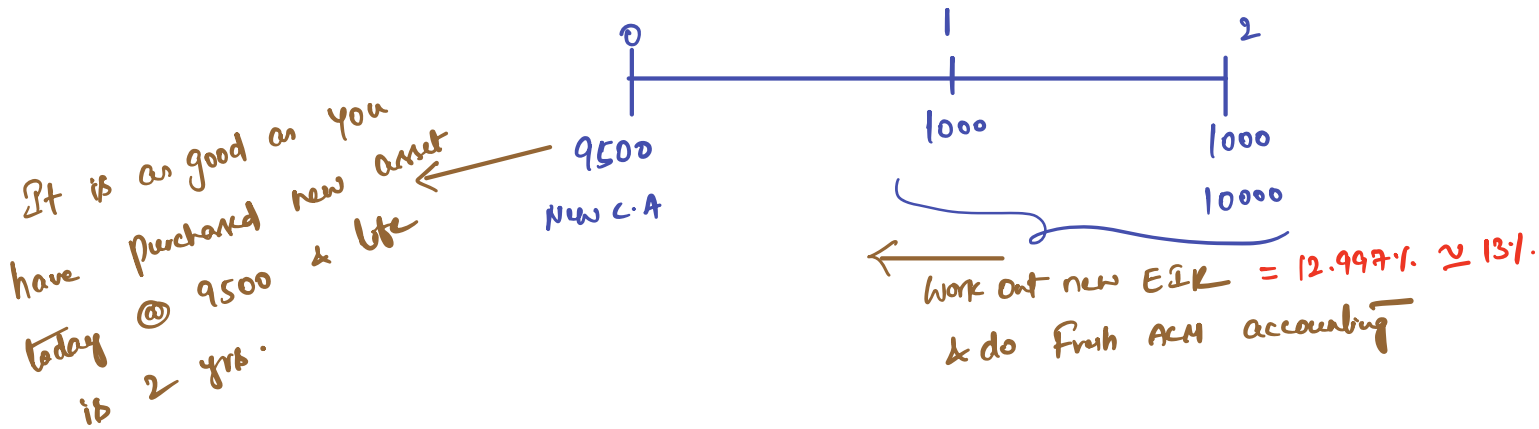
To OCI-R 666

E.I.R Calculation will Continue as it was in ACM

* Int Income will Continue to be measured @ 17.30% as in ACM
* We need to fair value F.A & remaining gain / loss goes to OCI
* on every B/s date F.A to be fair valued & gain / loss to be trfd to OCI.

Case 3 FVTPL to ACM

F A is appearing at its fair value of 9500. Do not Change this. 9500 is taken as Suitable Starting point & ACM is applied here after.



Case 4 FVTPL to FVTOCI

Similar to Case ③, but in addition to that every Year you need to do fair valuation.

* F A is appearing at its fair value of 9500. Do not change this.

* Int Income hereafter to be measured using EIR (as if ACM is applied) Same as in Case 3 @ 13% pa

* Hereafter on every Bls date F.A to be fair valued & gain / loss to be routed to OCI.

Case 5 FVTOCI to FVTPL

* F A is appearing at its fair value of 9500. Do not change this.

* First discontinue EIR which you have used so far
* Hereafter Gain / loss will be routed to P/L.
* Existing balance in OCI - Reserve will be recycled through P/L. (above example is bond) → OCI - R 666 TO P/L 666
* What if it is E Shares ?

a) FVTOCI → FVTPL is not possible, as once u opt for FVTOCI, it is irrevocable

Case 6 FVTOCI to ACM

Hold (or) Sell — Hold till maturity

Similar to Case ③, but in addition to that every year you need to do fair valuation.

* What about existing OCI - Reserve ? ↓ set it off against Inv in bonds

a) Bls

OCI-R 666 — Inv in bonds 9500 (F.v) — 8834

Inv in bonds ↓

OCI- R 666

To Inv in bonds 666

* Now Inv in bonds would be appearing @ 8834 as if ACM is applied from very beginning.

* Continue to recognise Int Income @ E.I.R @ 17.3%.

Student doubt ?

Why this is not Considered retrospective :

a) Bcoz you are not Changing prio period P&L (or) B/s

b) You are simply reversing the unrealised Fv gain that was never booked in P&L & aligning the carrying amount with AMC model going forward.

* So TECHNICALLY IT IS NOT RETROSPECTIVE, IT IS PROSPECTIVE CLEAN UP *

DE RECOGNITION OF F.A

* De-recognition simply means removing a F.A (loan, bond, receivable) from your B/s, bcoz its no longer yours.

logical Conditions fo de-recognition :-

Step ① Has the amt been trfd ?

Did you trfr Contractual rights to CF's

Eg Sell a bond, assign receivables (or) Did some one else Collect money on your behalf.

If NO → Do not de-recognise

If Yes → Go to Step ②

Eg of NO transfer → Pledging receivables as Collateral but still Collecting CF's

Step ② Assess if Risks & Rewards (R&R) are trsfd

Did you trsfr all Substantial R&R ?

	Scenario	Result
(A)	All R&R trsfd	De-recognise
(B)	None trsfd	Do not De-recognise
(C)	Partial trsfn	Go to Step 3

(A) Sold trade receivables with out recourse

(B) Sale with recourse where you bear Credit risk

(C) Step ③ Control test

Step ③ Assess Control

If partial risk / rewards trsfd. Now Ask !

Do you retain control of the asset ?

	Scenario	Result
(A)	Control lost	De-recognise
(B)	Control retained	Continue to show the asset (to the extent of Continuing involvement)

(A) Bcoz you no longer directly Who Collects (or) Sells the asset

(B) You still have Significant say (or) benefit from the asset.

Extra Angle – Continuing involvement

Even if de-recognition occurs, if you still have Some exposure (like guarantee, repurchase option (or) Servicing) you may need to

* Recognise New Asset | Liability
* Measure it as maximum exposure to loss.

Eg Sale of Receivables with a Guarantee

ABC Ltd Sells 1000 000 receivables to factor. The Sale is without recourse for most Customers (risk trfd)

But ABC guarantees that if any one large Customer defaults, ABC will Compensate the factor up to 200000

↓

ABC de-recognises the receivables, but has Continuing involvement for 200000 (due to Guarantee)

Q A Ltd has trade receivables worth Rs 10,00,000. It has sold the right to receive cash flows to a factor X Ltd., for a lumpsum consideration of Rs 9,00, 000.Show the accounting in the books of A Ltd. in the following cases.

Case (i) The transfer to X ltd is on non-recourse basis i.e., risk of bad debts is transferred.

Case (ii) The transfer to X Ltd., is on recourse basis i.e., risk of bad debts is not transferred to X ltd., (Retained by A Ltd).

Case (iii) A Ltd has transferred the right to collect all the trade receivables and also has given guarantee to the factor to the extent of Rs 2,00,000. The fair value of guarantee given is Rs 30,000.

Case (i)

Bank	Dr	900000
P&L	Dr	100000
To Drs		1000 000

Case (ii)

Bank	Dr	900000
To ~~Drs~~		
F.L		900000

* C.A of 1000 000 Debtors Should not be de-recognised

However 900 000 is the maximum that Company receives from Factor. We Should recognise Impairment loss of 100000

Impairment loss 100 000

To Debtors 100 000

Case (iii)

① Bank 900 000

P/L 100 000

To Debtors 10 00 000

Dummy entry Just to show off (or) Presentation

② Continuing involvement (FA) Dr 200 000

To Associated liability 200 000

③ P&L A/c Dr 30 000

To Guarantee 30000 @ FVTPL

(Or)

Compound entry

Bank Dr 900 000

P/L Dr 130 000

Continuing involvement Dr 200 000

To Drs 1000 000

To Associated liability 200 000

To Guarantee 30 000

ICAI Entry

Bank Dr 900 000

P/L Dr 130 000

Continuing involvement Dr 200 000

To Drs 1000 000

To Associated liability 230 000

Now lets see what happens next year !

Two possibilities

Actual Amt Collected = 950000

∴ Bad debts = 1000 000 − 950000

= 50 000

Amt payable = 50 000

* P/L Dr 20000
  To FL - guarantee 20000
* FL- guarantee 50000
  To Bank 50000
* Associated liability 200000
  To Continuing involvement (F.A) 200000

Actual Amt Collected = 1000 000

Bad debts = 0

∴ Amt payable = 0

F.L guarantee 30000

To P/L 30000

Same Copy paste here also entry

Reverse the Contra entry & liability.

* Lets Expand our learning further *

B) When will you de-recognise ?

If F.A is Sold → Full derecognise

CF's are expired (Collected) → " "

Right to collect CF's lapsed

(Or)

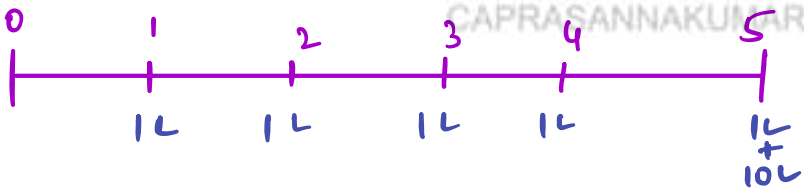
Right to Collect CF's is retained, but what ever you Collect you have to pay i.e an obligation is Created to Collect & repay the CF's as it is.

↓

But in this case we need to decide whether we should do full derecognition (Or) partial derecognition?

Eg ① Pk Ltd has FA of 1000000

E.I.R = 10%.



Pk Ltd Sold right to all CF's from asset till its maturity to Ak Ltd for 950 000

↓

Then full derecognition of F.A

↓

Bank A/c Dr 950 000

P/L Dr 50000

TO F.A 1000000

Eg ② Pk Ltd Sold Specific CF from F.A not all CF (or) A proportion of Specific CF from F.A

like say Pk Ltd Sold right to Collect all Interest related CF's to Ak Ltd for ₹ 400 000 but retained the right of principal Amount.

(or)

Pk Ltd Sold right to Collect 50% of Int CF's & 30% of principal amount for ₹ 600 000 & retained the right towards remaining CF's.

↓

Now You need to do Partial de-recognition

↓

How ?

↓

Divide F.A of 10 00 000 in to two pieces

Retained F.A Transferred F.A

But How will you do the Split of C.A of F.A i.e 1000000

↓

Based on the ratio of Fair value

	C.A (Book value)	FV (using Market Int rate)
CF retained Strip →	550000 x	xxx x
CF trsfd Strip →	450000 y	xxx y
F.A	10 00 000	xxx

↓

Bank A/c Dr 600000 → Sale value of trsfd strip

To F.A 450000 (C.A of tramfd Strip)

To P/L 150000

(or)

ICAI entry

Bank A/c Dr 600000

F.A (retained Strip) Dr 550000 (C.A of retained Strip)

To FA (full C.A value) 10 00 000

To P&L 150000

Eg② Pk Ltd has trsfd right to Collect 80% of the CF's for last 3 yrs with out any identification as to Int & Principal trsfd

↓

Here there is no Specification, in that Case how can you Split CF's, It is difficult to Split.

↓

So log says Since it is not Specific, Partial derecognition not permitted

What if the Solution then? → Do full derecognition

↓

How?

↓

Bank A/c Dr xxx

F.A (retained) Dr xxx → This is at fair value

TO F.A (full CA) xxx

TO P&L xxx

↓

The above entry looks similar to previous entry but they are not same Why bcoz earlier F.A retained is debited at C.A & now F.A retained is debited at F.V.

* Trsfring the F.A (or) Transferring the right to Collect CF's

Risk & Reward Should be trsfd

↓

If R&R are not trsfd → Do not derecognise F.A.

Eg Selling my F.A (Debtors) to Factor.

Bad debt risk is borne by Factor

↓

Non-recourse

↓

Risk & Reward trsfd

↓

De-recognise F.A

Bad debt risk is borne by Company

↓

Recourse

↓

Risk & Reward not trsfd.

↓

Do not De-recognise FA

↓
Bank A/c Dr
To F.A

↓
Bank A/c Dr
To F. liability (F.L)

↓
Bls

F.L	xxx	F.A	xxx

Eg X Ltd has a loan receivable of 1000000 at Int rate of 10% p.a for another 5 yrs. It has today txfd the Complete rights to interest & 30% of principal CF to Bltd for 500000. The market Int rate today is 12% p.a. Should we do a partial de-recognition (or) Full de-recognition? Show the accounting?

a) The CF's txfd are representing

(i) Int CF (Specifically identified) (ii) 30% of principal (Prop Share Specifically Identified)

So now we need to do partial de-recognition.

Bls

loan receivable	= 1000000

Fv of txfd Strip = 100000 (PVAF 12% 5yrs) + (1000000 x 30%) (PVF 12% 5th yr)

= (100000 x 3.6048) + (300000 x 0.5674)

= 530700

Fv of retained Strip = (1000000 x 70%) x (PVF 12%, 5th year)

= 700000 x 0.5674

= 397180

C.A of loan receivable = 10 00 000

↓ Ratio of 530700 : 397180 (F.V)

Trfd Strip	Retained Strip
C.A = 571949	CA = 428051

Dummy entry ⇒

Trfd Strip Dr 571949

Retained Strip Dr 428051

To loan receivable 10 00 000

For de-recognising Trfd Strip :-

Bank A/c Dr 500 000

P/L Dr 71949

To Trfd Strip 571949

Eg Pk Ltd has advanced various housing loans & whose installments are receivable over next 10 yrs. Pk Ltd today has sold to BLtd right to collect all CFs from loan receivables in next 4 yrs.

a) CFs are not specifically Identified. Partial de-recognition is not allowed. Full de-recognition of F.A has to be done. The portion of CFs belonging to Pk Ltd is to be recognised Separately @ Fair value

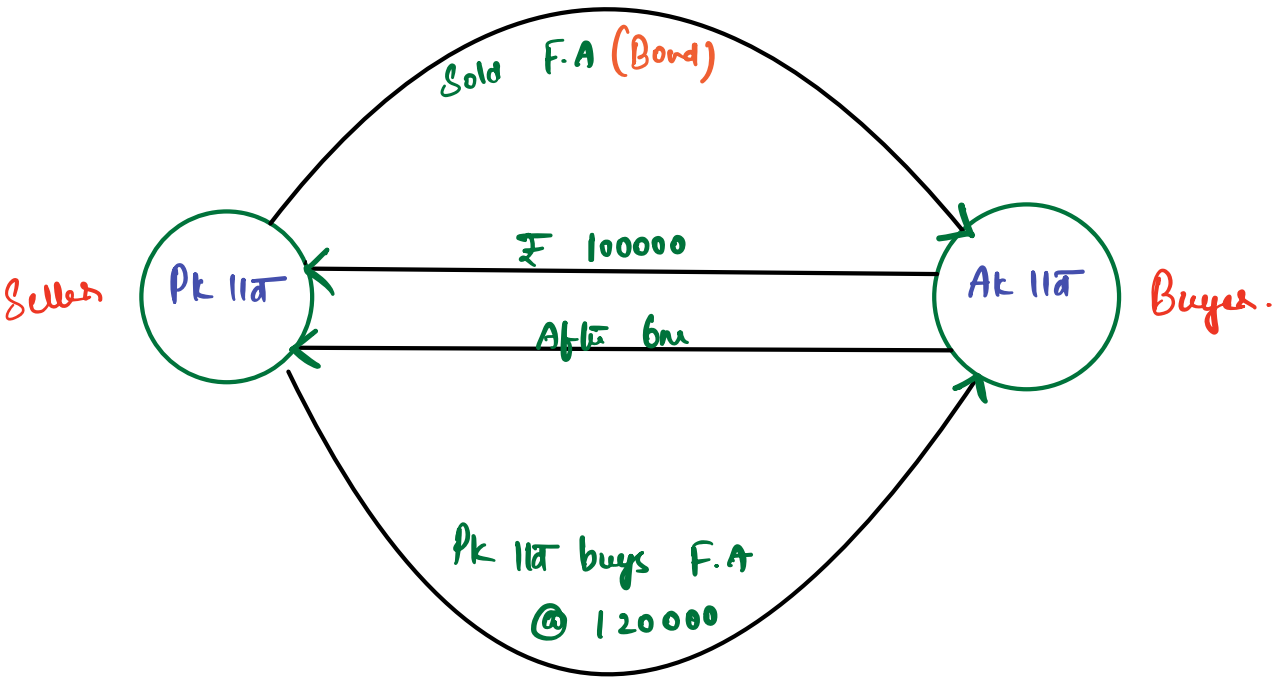
Bank A/c Dr xxx

Retained Strip Dr xxx (Fair value)

To F.A xxx (Total C.A)

To P&L xxx

(Repo) Repurchase Agreement (Sale & Buy Back)



Q) What is Repo?

* A Repo is where Entity Pk Ltd Sells a F.A to Ak Ltd but promises to buy it back later at a fixed price.
* It looks like a Sale, but in Substance its a loan with F.A as Collateral.

Q) Why Substance over form?

A) Ind AS 109 follows principle of Substance over form i.e Dont just look at legal documents Focus on economic reality (Substance)

Logic Even if its called Sale, if Pk Ltd Still Controls the F.A & bears risk & reward (like price ↓, default) its not a Sale. Therefore Continue recognising the asset & record a borrowing (F.L)

Eg A sells govt bonds to B for ₹ 1000 & agrees to repurchase them in 30 days for 1010

Int = 10 for 30 days

RLR stays with 'A' (price movements of bonds)

Substance = 'A' borrowed 1000 using bonds as Security.

So 'A' Continue to recognise bonds

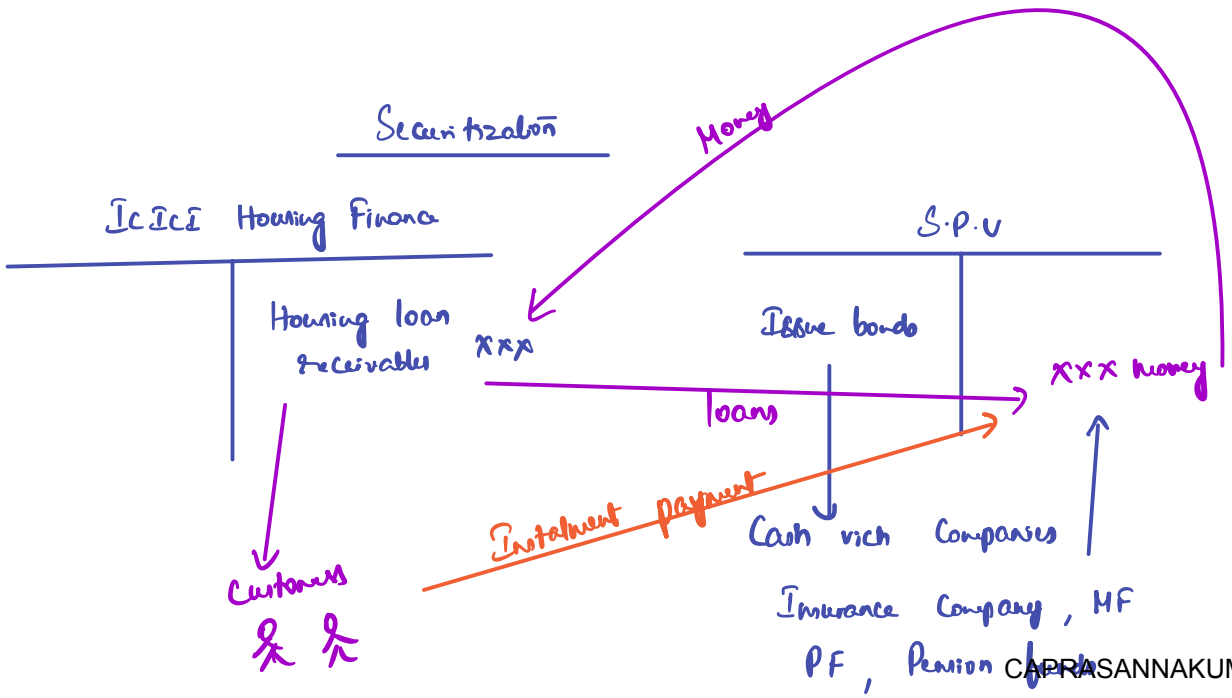
'A' recognises F.L of 1000

'10' is recognised as Int exp for 30 days.

Economic reality = loan / legal form = Sale

NOTE If repurchase price is not fixed, but happens at fair value, then FA should be de-recognised as RLR are trfd to buyer.

Transfer of FA to Trust / SPV

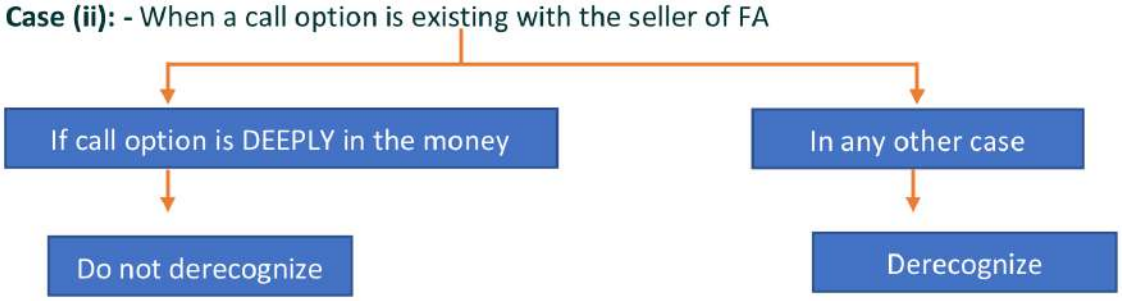


* Bank can de-recognise F.A if RLR are trfd to S.P.V.

* **Options related to transfer of FA**

Case (i): - When put option is given to the buyer of FA.

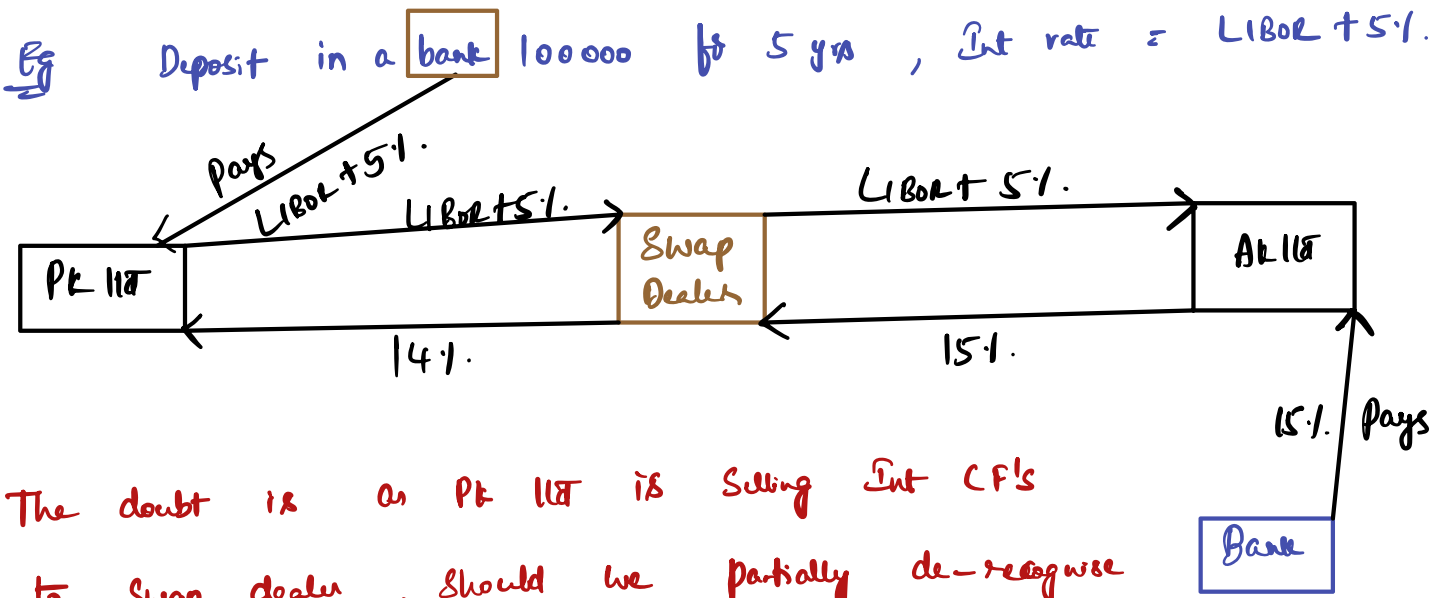
Case (ii): - When a call option is existing with the seller of FA



IN THE MONEY: Option likely to be exercised. OUT OF THE MONEY: Option likely to be lapsed.

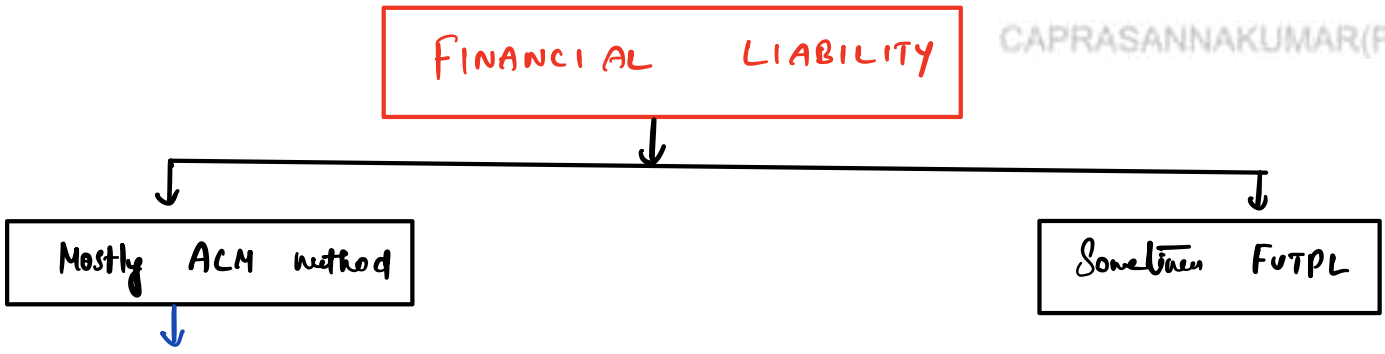
INTEREST RATE SWAP

Eg Deposit in a bank 100000 for 5 yrs, Int rate = LIBOR + 5%.



Q) The doubt is as Pk Ltd is selling Int CF's to Swap dealer, should we partially de-recognise F.A?

a) No, Do not de-recognise. It looks like selling but its not. Its mere exchange of Floating Int with Fixed Int.



Initial recognition @ FV Net Trans cost

* FL payable on demand | insignificant Time value of money → Recorded @ Transaction Value

Steps to Solve the Practical Questions: -

Step1: Calculate Fair Value of F.A. or F.L.

Step 2: Adjust Transaction Cost from Fair Value (if any) to find the Amount to be recognized Initially

Step 3: Prepare Amortization Table

Step 4: Pass Journal Entries if required in question.

Eg ①

Transaction at Market Terms.

A ltd issued 10% Debentures [Face Value ₹1,00,000] at ₹ 94,000. Interest is paid Annually & It will be redeemed at End of 3rd year at face Value. Pass Journal Entries for 1st Year.

Given PV Factors

	Year I	Year 2	Year 3
@12%	0.893	0.797	0.712
@13%	0.885	0.783	0.693

Solution: -

Calculation of EIR (By Using Trial & Error Method):

Year	Cash flow	PVF @ 12%	P.V.	PVF @ 13%	P.V.
1	10,000	0.893	8,930	0.885	8,850
2	10,000	0.797	7,970	0.783	7,830
3	10,000	0.712	7,120	0.693	6,930
4	1,00,000	0.712	71,200	0.693	69,300
			95,220		92,910

∴ Now, Do Interpolation to find the EIR at which PV of future Cash flow is ₹ 94,000

$$EIR = 12\% + \frac{95,220 - 94,000}{95,220 - 92,910} \times (13 - 12) = 12 + 0.53 = 12.53\ \%$$

Calculation of Interest Expense (Finance cost) on Financial Liability [F. L. A/c]: -

Year	Opening Balance of Debenture A/c	Interest @ 12.53%	Actual Payment of Coupon / Principal	Closing Balance of Debenture A/c
1	94,000	11,778	10,000	95,778
2	95,778	12,001	10,000	97,779

3	97,779	12,221	1,10,000	–
		36,000		

Journal Entries: - 1st Year

At Beginning: Bank	94,000	
To 10% Debentures [F.L.]		94,000
At Year End: Interest Expense [P&L]	11,778	
To 10% Debentures [F.L.]		11,778
10% Debentures [F.L.]	10,000	
To Bank		10,000
OR		
Interest Expense [P&L]	11,778	
To Bank		10,000
To 10% Debentures [F.L.]		1,778

Eg ② B Ltd has issued 10% debentures of FV Rs 1,00,000 redeemable after 3 years. The initial issue expenses is Rs 5000. Show the accounting in the books of B Ltd if the effective interest rate is 12.1%.

Bank Dr 95000

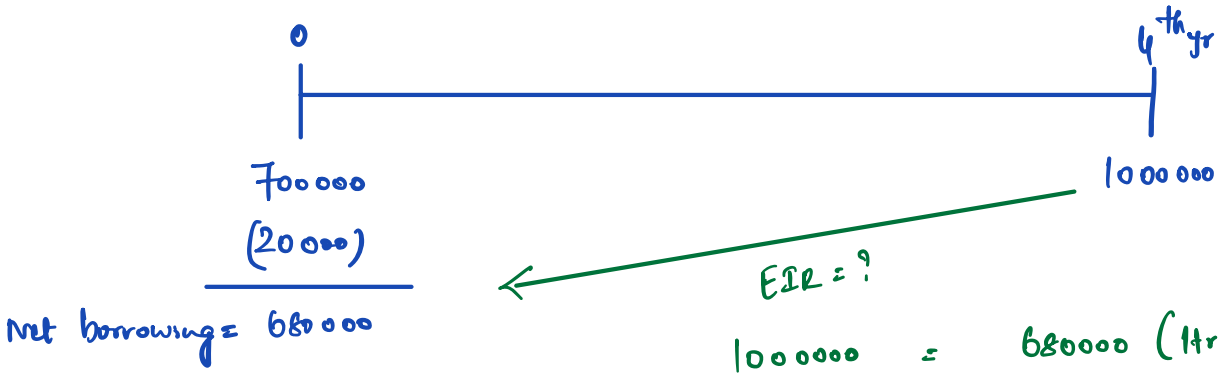
To Debentures 95000 (100000 − 5000)

FV − T Costs

At the end of each year

	1	2	3
ⓐ Fs Int exp each yr			
Int exp Dr	11495	11676	11629
To Deb (FL)	11495 (95000 × 12.10%)	11676 (96495 × 12.10%)	11629 (B.F)
ⓑ Fs Contractual CFs paid			
Deb (FL)	10000	10000	110000
To Bank	10000 (100000 × 10%)	10000	110000
ⓒ Clg bal of Deb - (FL)	96495	98171	Nil

Eg ③ A Ltd has issued zero coupon bonds for Rs 7,00,000 which will be redeemed after years at their nominal of Rs 10,00,000.
The initial expenses incurred for issuing the bonds is Rs 20,000. Show the accounting in the books of A Ltd.



$$1000000 = 680000\,(1+r)^4$$

$$r = \left(\frac{1000000}{680000}\right)^{\frac{1}{4}} - 1$$

$$r = 1.1012 - 1$$

$$r = 0.1012 \simeq 10.12\%$$

ACM table

	1	2	3	4
Opg bal	680000	748816	824596	908045
(+) Int exp @ 10.12%	68816	75780	83449	91995
(−) CF's paid	—	—	—	(1000000)
Clg bal	748816	824596	908045	NIL

COMPOUND FINANCIAL INSTRUMENTS

Every 2 attempts 1 Q in exam

It is one single F.I (Issuer's view) that is made up of 2 parts

- **Liability part** → Something that Company must pay back
- **Equity part** → Something that gives the holder ownership right like shares

logic :- Even though you see one Contract, Inside it are actually two things a loan + right to become owner.

Think of it like this

Imagine you are selling Pizza Combo (Pizza + Coke)

The Combo price is 500 but if bought

Separately Pizza = 400, Coke = 100

Ind AS says Split & record Pizza & Coke Separately

Q) Why do we need to split a Compound instrument?

a) TO Show true financial position of the Company.

Debt & Equity are very different.

Debt → Needs repayment + Int = legal obligation

Equity → Ownership = No repayment obligation

If we dont split it, the Company's FS will not reflect reality.

So Ind AS says Split the bond in to debt part & Equity part at the beginning.

B) How do we split it? (3 steps)

Step	What do you do	Why you do it
1	Calculate how much the debt alone would be worth (without any conversion option)	Bcoz this is borrowing.
2	Subtract this debt value from total amt received	The remaining value must belong to equity part
3	Record both parts separately	Liability for loan Equity for ownership right.

Eg JIO Ltd has issued 10% debenture of Rs 25000, redeemable or convertible after 4 years at par. The market int rate on similar debentures without conversion feature is 14% debentures will be converted into equity shares having a face value of Rs 10,000.

Show the accounting in following cases.

Case (i) The option to convert / redeem is with the holder

Case (ii) The Option to convert / redeem is with the entity

* Face value given ⇒ So no: of E Shares is fixed → FTF test passed ↓ So Equity.

(i) Option to Convert / redeem with the holder :-

① Calculation of fair value of FL & Equity

Year	Contractual CFs	PVF @ 14% (Market rate)	DCF
1	2500	0.8772	2193
2	2500	0.7695	1924
3	2500	0.6750	1687
4	2500	0.5921	1480

4 | 25000 (F.L) | 0.5921 | 14802

Fv of F.L ⇒ 22087

Total amount rcd ⇒ 25000

Equity Component ⇒ 2913

Initial recognition of CFI :-

Bank A/c Dr 25000

To CFI - F.L 22087 → Apply ACM

To CFI - Equity 2913 → Stay put

Accounting of CFI - F.L (ACM table)

	1	2	3	4
Opg bal of F.L	22087	22679	23354	24124
(+) Int exp @ 14%	3092	3175	3270	3376
(-) CFIs paid	(2500)	(2500)	(2500)	(2500)
Clg bal of FL	22679	23354	24124	25000

You should not make it '0' bcoz you dont know whether it is redeemable (or) Convertible depends on holders decision.

B/S of Jio Ltd (Yr 4)

Other Equity

CFI - Equity 2913

F.L

CFI - FL 25000

Possibility ① Holder Chooses redemption in Cash

① CFI - FL Dr 25000

To Bank 25000

② CFI - Equity Dr 2913

To R. Earnings 2913

(is adjusted against other Equity)

Possibility ② Holder Chooses Conversion option.

① CFI - FI Dr 25000

To CFI Equity 25000

② CFI - Equity Dr 27913 (25000 + 2913)

To ESC 10000

To Sec prem 17913 (B.F)

(ii) Option to Convert / redeem with the issuer :-

① Fair value of F.L & Equity :-

Year	Contractual CFs	PVF @ 14%	DCF
1	2500	0.8772	2193
2	2500	0.7695	1924
3	2500	0.6750	1687
4	2500	0.5921	1480
4	~~25000~~		

No obligation to pay Cash of 25000

FV of F.L = 7285

Total amt recd = 25000

Equity value 17715

Initial recognition of CFI :-

Bank A/c Dr 25000

To CFI - F.L 7285 → Apply ACM

To CFI - Equity 17715 → Stay put / in Bls ?

Accounting of CFI - F.L (ACM table)

	1	2	3	4
Opg bal of F.L	7285	5805	4118	2195
(+) Int exp @ 14%	1020	813	577	305
(-) CFIs paid	(2500)	(2500)	(2500)	(2500)
Clg bal of FL	5805	4118	2195	0

Bls of Jio Ltd (4th)

Other Equity

CFI - Equity 17715

F.L

CFI - FL NIL

Possibility ① Entity issues E.Shares.

CFI - Equity Dr 17715

To Esc 10000

To Sec prem 7715 (BP)

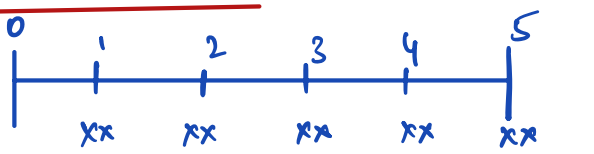
Possibility ① Entity pays cash

CFI - Equity Dr 17715

Retained Earnings Dr 7285 (This is like a Buy back)

To Bank 25000

Transaction Costs relating to CFI



discounted @ 10%.

Fair value of F.L = 80000

Fv of Equity = Total recd − Fv of FL

= 100000 − 80000

= 20000

Transaction Costs = 5000

in ratio of 80000 : 20000

Say 4000 | 1000

↓

Split in the ratio of F.v of FL & Equity.

FL → Will be adjusted against Initial recognition of F.L

Equity → Adjusted in to CFI - Equity

↓

Now put adjustment entry

CFI	FL	4000	
CFI	Equity	1000	
	To Bank		5000

* But after above Entry CFI - F.L bal is 76000 not 80000.

76000 does not represent Pv of Future CFs discounted @ 10%.

So we need to reverse EIR.

* Pref Shares are now Converted in to E Shares

* CFI - BUY BACK *

* Any excess payment (or) less payment towards Equity owners should be adjusted to R.E.
* Any excess payment (or) discount on any liability will go to P/L W.K.T

* When a CFI is bought back (redeemed before maturity) two parts are affected. The liability part must be extinguished & Equity part is treated as transaction with owners.

CFI - Buy Back

BIs

CFI - Equity	400
CFI - FL	600

B B price = 1200
& cancelled CFI
| Split

- CFI - FL 700
- CFI - Equity 500

Q) Why this split ?

Bcoz liability affects profit / loss but Equity does not affect P/L. This is fundamental accounting rule.

Q) Why Buy Back a CFI ?

- lower debt
- Falling Int rate (or) Market fears → Buy Back Cheaply (100 @ 90)
- Market Signaling (Boost Investor Confidence)
- Prevent dilution of Ownership.

Real life eg In 2019 TESLA offered to repurchase a set of Convertible bonds. Why ?

- Conversion date is approaching
- avoid dilution
- Tesla had raised enough Cash via other means, so preferred to retire debt early

Q) RTP Q)

On 01.01.2000 Entity has issued a 7% convertible debenture with a face value of Rs 1000. Maturity on 31.12.2008. The debenture are convertible into ordinary shares of the entity at a conversion price of Rs 50 per share. Interest is payable yearly in cash. At the date of issue the entity could have issued a non-convertible debt at an interest rate of 10%.

On 01.01.2005 the convertible debenture has a fair value of Rs 1450. The Entity made on offer to the holder of debenture to repurchase the debenture for Rs 1450 to which the holder accepts. On the date of Repurchase the company could have issued a non-convertible debenture with 4 years life at a coupon rate of 6%.

Show the accounting for Initial recognition and also on the date of early redemption.

Assumption in Q : Holder has the option to redeem @ par (or) Convert in to E Shares.

a) 1.1.2000

① Fv of F.L $= 70 \times PVAF(10\%, 9\text{yrs}) + 1000 \times PVF(10\%, 9^{th}\text{ yr})$

$= (70 \times 5.7590) + (1000 \times 0.4241)$

$= 827$

Fv of Equity $= 1000 - 827 = 173$

Bank A/c	Dr	1000	
To CFI	F.L		827
To CFI	Equity		173

② Calculation of C.A of CFI – Equity & CFI – F.L on date of Early redemption :- (1:1:2005)

C.A of CFI - Equity = Same i.e 173

* How to find C.A of CFI - FL → Simply draw ACM table

	1	2	3	4	5
Opg bal	827	839.70	853.67	869.04	885.94
(+) Int exp @ 10%	82.70	83.97	85.37	86.90	88.59
(-) Contractual CF paid	(70)	(70)	(70)	(70)	(70)
Clg bal	839.70	853.67	869.04	885.94	904.53

Clg balance of F.L

(or)

Bal on 1.1.05 ⇒ PV of remaining Cash flows discounted @ original E.I.R

$$\Rightarrow \left[70 \times PVAF(10\%, 4\text{ yrs})\right] + \left[1000 \times PVF(10\%, 4^{th}\text{ yr})\right]$$

$$\Rightarrow (70 \times 3.1698) + (1000 \times 0.6830)$$

$$\Rightarrow 904.89 \simeq 905$$

③ Splitting the Redemption / Buy Back price

Fair value of F.L on 1.1.05 = $70 \times PVAF(6\%, 4\text{ yrs}) + 1000 \times (PVF\ 6\%, 4^{th}\text{ yr})$

$= (70 \times 3.4651) + (1000 \times 0.7921)$

$= 1035$

$\therefore$ Fair value of Equity = 1450 − 1035

= 415

Gain / loss & Accounting for Early Redemption

P	BB price	C. Amt	Gain / loss
CFI - FL	1035	905	130 (P/L)
CFI - Eq	415	173	242 (R.E)

CFI - FL Dr 905

P/L Dr 130 (B.F)

To Bank 1035

CFI - Equity Dr 173

R. E Dr 242 (B.F)

To Bank 415

★ DE-RECOGNITION OF F.L ★

* De-recognition of F.L means removing a previously recognised F.L from B/s.

Ind AS 109 Says " An entity should de-recognise a F.L when it is Extinguished i.e when an obligation is discharged (or) Cancelled (or) Expires. "

Only live obligations should stay on the B/s.

Discharged → You pay the lender / creditor either in cash (or) transfer of other assets (or) by issuing new Equity shares.

Cancelled → Mutual agreement to cancel the liability without payment.

Expired → The F.L automatically lapses by passage of time (or) by operation of law.

Special Situation

If terms of liability are Substantially modified. Ind AS 109 treats it as extinguishment of the old liability & recognition of new liability.

What is Substantial modification ⇒ Usually NPV of CF's Δ by 10% (or) more

V.UU V U* Imp

DEBT RESTRUCTURING (DRE)	LOAN MODIFICATION

*

* It means Changing the original terms of loan (or) other F.L

* What Changes ?

Changing Int rate

Extending repayment period (tenure)

Reducing principal amount

Changing Security | Collateral

Converting Debt to Equity.

Modification

- **Substantial** → Extinguishment accounting
- **Not Substantial** → Either
  - Revise EIR for new CFs
  - (or)
  - Revise C.A of F.L by starting with existing EIR

Step ① PV of revised CFs discounted @ Original EIR — XXX

(+) legal / modification exp — XXX

Ⓐ — XXX

Ⓑ — XXX

Step ② C.A of F.L

Step ③ Is diff b/n Ⓐ & Ⓑ ≥ 10% of Ⓑ

- **Yes** → Substantial modification → Extinguishment A/cing
  1. Recognise exp in P/L
  2. Cancel the Existing F.L @ C.A
  3. Recognise New F.L @ PV of revised CFs discounted @ market Int rate
- **No** → Not Substantial modification

F.L (Existing) Dr xxx

To F.L (New) xxx

(Any diff txfd to P/L) → liability means always P/L

Simple modification

Alt ①

① legal / modification exp in P/L

② Revise C.A of F.L to reflect P.V of revised future CFIs discounted @ Original EIR & Corresponding adj should be done in P/L.

Alt ②

① legal / modification exp adjusted in to existing C.A of F.L

② Calculate Revised EIR based on C.A of loan after above adjustment & revised future CF's.

DE-RECOGNITION OF F.L by ISSUE OF EQUITY

* W.K.T F.L is derecognised when it is extinguished i.e when Obligation Specified in the Contract is Discharged / Cancelled / Expires.

* One way this can happen is by issuing Equity Instruments (Eg Shares) to the Creditor instead of repaying the debt in Cash. This is called as **Debt for Equity Swap.**

logic Since Equity doesnot represent a future obligation to deliver Cash (or) another F.A, this transaction results in derecognition of F.L

Accounting treatment

① De-recognise F.L on part there of

② Recognise the Equity (E.I) Instrument at fair value

If fair value of Equity is not reliably measurable, use fair value of liability Extinguished.

③ Recognise the diff b/n C.A of F.L & F.V of E.I in P&L.

Eg

B/s	
loan	1000

For 70% of loan ⇒ PK ltd issued E.Shares of 1000 no:

* loan A/c Dr (F.L) 700

To ESC

To Sec prem

} Fair value of Shares

↓ First time Equity Shares are coming in to existence so fair value.

Gain / loss goes to P/L

F.L MEASURED USING FVTPL (Special Cases)

↓

Special Cases that are exceptions to the general rule of AMC.

Case ① F.L held for Trading :-

① Some liabilities are incurred with the intention to repurchase in short term

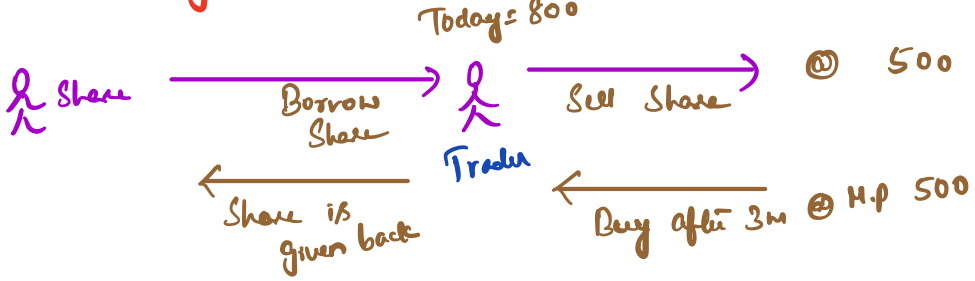
② They are part of Portfolio managed for Short term profit

③ They are derivative liabilities not designated as hedges.

① Since these are short term & driven by market prices fair value reflects their true economic position

② So measuring them at FVTPL is mandatory.

Eg Short selling under Stock lending scheme, Credit Default Swap (CDS)



Q. The market price of SBI share is Rs 300 on 01.03.2019. Mr. A has borrowed 1000 SBI shares from the broker and sold them immediately in the market. The borrowing is for a period of 2 months. On 31.03.2019 the market price of SBI share is Rs 290. On 30.04.2019, Mr. A has bought the shares @ Rs 315 per share. Show the accounting of the short sale – transaction in the books of Mr. A

Solution: 01.03.2019:

Bank A/c	Dr	300000	–	
To Fin liab – short sale			-300000	

[1000 sh x Rs 300 / sh]

On 31.03.2019: Fair valuation of financial liability under FVTPL method: -

To buy 1000 shares outflow would be

= Rs 290 x 1000 sh = Rs 290000

∴ Restate the financial liability from Rs 300000 to Rs 290000.

Fin liab – short sale A/c	-	Dr	10000	-
To P or L			-	10000

On 30.04.2019: Settlement date: -

Mr. A could buy the shares @ Rs 315 per share

Fin. liab – short sale A/c	-	Dr	290000	–
P or L A/c		Dr	25000	–
To Bank			-	315000

Case ② F.L are measured at FVTPL to avoid accounting mismatch

---

* A Company holds assets measured @ FVTPL and funds them with bonds (Choice)

* If bonds were measured at AMC, there is a mismatch asset value changes go through P/L, but liability doesn't

* To fix this, the Company designates the liability at FVTPL

Case ③ liability is a part of a group of F.I managed on fair value basis :-

* A trading desk manages a portfolio of liabilities & assets using fair value
* All are actively revalued
* Therefore the liabilities in this group are designated @ FVTPL

Eg An entity has a portfolio of financial assets yielding fixed rate of interest and it also has FINANCIAL Liabilities (FL) with fixed interest payments. The entity manages the FA & FL on GROUP basis i.e., they are treated as a single portfolio.

Normally, FL is measured using ACM. If FA is also measured under ACM, then there will be no fair valuation for the FA or FL. Hence accounting mis match does not arise.

However, if the FA is measured at fair value (FVTPL / FVTOCL] the gain / Loss on FA will be accounted. However, the corresponding loss / gain relating to FL will not be accounted as it is measured using ACM. This creates an accounting mis-match.

To avoid this mis-match, Ind AS – 109 suggests that both FA & FL should be measured at FVTPL.

Note: -

When the liability value changes due change in required return of the investors, it will result into a gain / loss which is recognized directly in P or L.

However, if there is a gain due to decrease in the value of financial liability which is caused by an increase in entity's own credit risk, then such gain will be recognized in P & L – OCI reserve and not in P or L & it is Non – re-classifiable.

Case ④ Derivative F.L (Not hedging instruments) :-

* All derivatives (like options, swaps & forwards) are measured at FVTPL by default.
* The only exception is when they are part of a Qualifying hedge relationship.
* This is bcoz Derivatives are highly sensitive to market changes → AMC doesn't make sense for such instruments.

Eg Interest rate swap (Pays fixed, receives floating)

Case ⑤ F.L with Embedded Derivatives :-

* Some liabilities (Eg Convertible bonds) may have E.D inside them.
* If the E.D
  - → is not closely related to the host liability &
  - → the overall instrument is not measured @ FVTPL
* Then the entity must either

↓

↓

Separate & measure the E.D @ FVTPL (or) If Separation not possible, measure the entire liability @ FVTPL.

* This ensures users of F.S are aware of volatility (or) risks from embedded features.

Case ⑥ Financial Guarantee Contracts (FGC) if designated @ FVTPL (optional)

Eg A parent Company guarantees a bank loan taken by Subsidiary. The Parent manages its Credit risk exposure using fair value basis. It may designate the FGC at FVTPL for more Consistent & transparent reporting.

Case ⑦ Contingent Consideration (Business Combination)

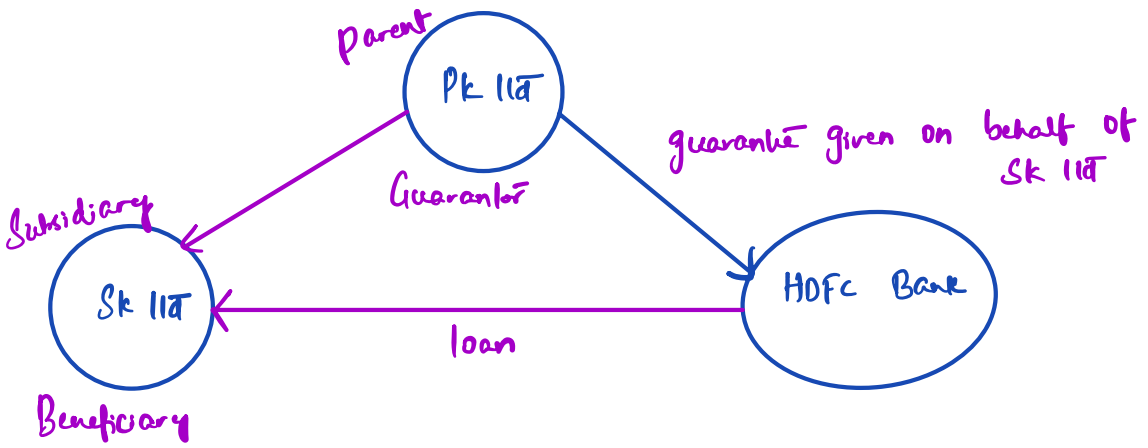
* When a Company acquires another Company. It may agree to make future payments based on performance (future profits)
* If the payment is classified as F.L, it must be measured @ FVTPL regardless of trading intention.

Eg Pk Ltd buys AK Ltd & agrees to pay extra 5 Crore if profits exceed 10 Crores in 2 yrs.

SUMMARY

Case	Condition	FVTPL is	Example
Held for trading	For short term gain / trading	Mandatory	CDS
Designated @ FVTPL	To avoid mismatch (or) Managed fair value Group / Portfolio	Mandatory	Bond funding FVTPL Assets.
Derivatives	Not designated as Hedging	Mandatory	Int rate Swap
E.D	Not Closely related Not Separable	Mandatory	Convertible bond in to another Company Shares
FGC	If designated @ FVTPL initially	Optional	Parent guarantee for Subsidy loan
Contingent Consideration	In Business Combination	Mandatory	Earnout based on Post acquisition profits.

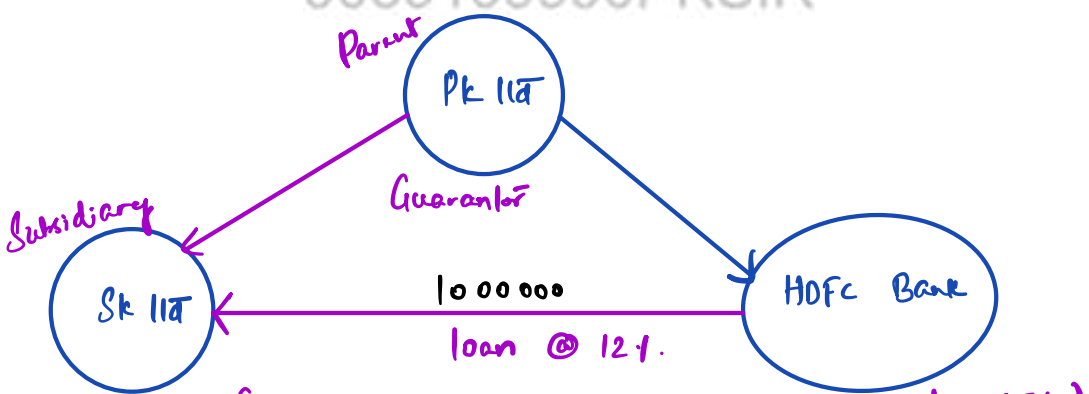
TREATMENT OF FINANCIAL GUARANTEE



Accounting in Sk Ltd books

* Any fee paid to guarantor will be recognised as exp in P/L over the period. If Guarantee fee is paid for any FA/FL it will be adjusted to Initial recognition amount.

Accounting in Pk Ltd books



(with out guarantee Int rate would be 15%.)

* Guarantee to be accounted at FVTPL.

i.e Initial recognition @ fair value.

Yr	Dec in Int to Sk Ltd	PVF @ 15%	DCF
1	30000		
2	30000		
3	30000		
	60000		

Day ①

Bank | P/L | Inv in Eq Subsidiary 68000

To F.L (Guarantee) 68000

Yr ① End

FGC is measured @ higher of

(i) ECL (Expected credit loss) [loss x prob of default = 60000]

(ii) Amt initially recognised less Σ amortization

(Or)

Fair value today = 30000 x PVF (15%, 2yrs)

= 48800 (unamortized revenue)

⇒ 60000

* FL - Guarantee A/c Dr 8000 (68000 - 60000)

To P/L 8000

Ind AS 115 says Presume this as revenue

Example On April 1st 20x1, Parent Co provides financial guarantee to a bank for a 3yr loan of 5000 000 granted to its Subsidiary Subco. The guarantee is provided for free (no premium charged). The bank would have charged 2% p.a for a similar risk profile loan if no guarantee was provided. Using appropriate models, the fair value of guarantee at Initial recognition is estimated @ 250000. Parent Co amortizes the income straight line over 3 yrs. At the end of 1st year (31st March 20x2) Parent Co assesses the ECL on guarantee as 160000.

(a) Explain how Parent Co should account for FGC on Initial recognition & Subsequently as on 31st March 20x2 including journal entries & measurement.

a) 1.4.20x1 Initial recognition

FG is recognised at fair value. Even though it is issued for free, it has an economic cost bcoz Parent co is exposed to credit risk.

Inv in Subco 250000
To FG liability 250000

Logic The guarantee is an identifiable liability. Parent Co takes on the obligation to pay if Subco defaults. The 'free' nature is irrelevant from an accounting perspective. You still recognise the economic Substance.

31.3.20x2 Subsequent Measurement

FGC is measured @ higher of

(i) ECL (Expected credit loss) [loss x prob of default = 60000]

(ii) Amt initially recognised less Σ amortization

(Or)

Fair value today = PV of Int savings for remaining period

① Amortized amt Calculation

Guaranteed income Amortized over 3 yrs (Straight line)

$= \frac{250000}{3} = 83333$ / year

Remaining unAmortized amt after 1 yr = 250000 − 83333
= 166667

② Compare with ECL

ECL = 160000
Amortized amt = 166667
} Higher = 166667

So liability at 31.3.20x2 = 166667

FG (liability) Dr 83333 (250000 − 166667)

To P/L 83333

logic This reflects that 1/3rd of the Economic value of the guarantee has been earned as income (i.e 1 yr passed with out default). At the same time, we keep the liability at the most conservative value i.e greater of Expected loss (or) remaining unearned income.

All Students doubt → **Why this makes sense (logic)**

Step	logic
Initial recognition	Even free guarantees have fair value there is risk of risk
Subsequent recognition	Use higher of actual risk (ECL) (or) Residual unearned income → To reflect prudence
ECL approach	Consistent with Ind AS 109 - fforward looking, based on risk assessment
Amortization	Recognised income over the guarantee period as risk is borne over time
No cash flow	Fair value approach means Substance over form → Cash (or) no cash is irrelevant

* ACCOUNTING FOR DERIVATIVES *

Initial recognition

Fair values are exit values (get rid of it)

* All derivative contracts have to be measured using FVTPL.
* Δ in fair value will go to OCI if hedge accounting is applied

long position = agree to buy

Short position = agree to sell

Eg ① Today's spot rate is 1$ = Rs 62 on 01.01.2018. → long
X Ltd has entered into a forward contract to buy 10,000$ @ 1$ = Rs 60 on 30.06.2018 i.e., after 6m. Spot rate on 31.3.2018 1$ = Rs 60. On 31.03.2018, 3m forward rate is 1$ = Rs 63.5. On 30.06 2018, spot rate is 1$ = Rs 65. Show the accounting for forward contract in the books of X Ltd.

SR = 1$ = 62 (1.1.2018) — SR = 1$ = 60, 3mFR ∋ 1$ = 63.50 (31.3.18) — 1$ = 65 (30.6.2018)

Fwd Contract

XYLtd → long 1000$ @ 1$ = 60

Fair value of fwd Contract = '0'

So no entry.

↓

Bcoz if you sell this today (Short) You will sell at same price

So (Sell rate − Buy rate) = '0'

↓

No Investment in case of fwd / futures not in options

If you want to exit out of this today @ what price is fair value.

↓

Assume notional Cancellation

↓

Opposite Contract

X Ltd : To sell 10000$ @ 1$ = 63.50

Gain / loss on Cancellation = (Sell rate − Buy rate) × Qty

= (63.50 − 60) × 10000$

= ₹ 35000 Gain

↓

This notional cancellation is called Marking to market.

Gain in fwd Contract = (65 − 60) × 10000$

= 50000

↓

Gain already recognised: 35000 | B.F: 15000

↓

F.A (Derivative) Dr 15000

To P/L 15000

↓

Net Cash Settlement | Fwd Contract Closed by way of Physical delivery

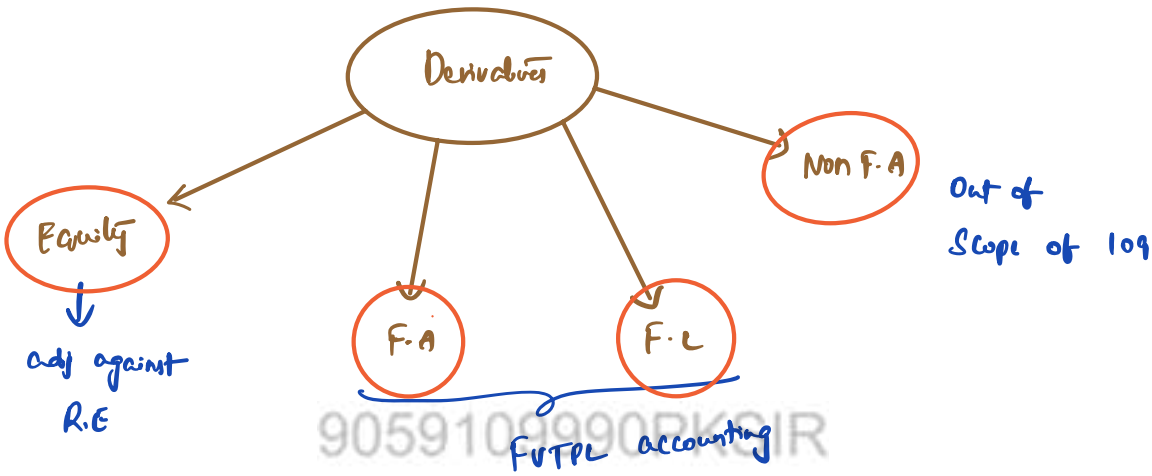
F.A (Derivative) Dr 35000
To P/L 35000

Bank A/c Dr 50000
To F.A (D) 50000

Fc (cash) 650000
(10000 $ x 65)
To Bk 600000
(10000 $ x ₹ 60)
To F.A (D) 50000

Eg X Ltd writes a call option on its own E. Shares 1000 Nos to Y Ltd
X price = 60/share , Time = 3m

a) This is derivative but its Equity Instrument. , No FVTPL accounting
premium will be adjusted against R.E.



Eg ② Z Ltd has taken up a long position in 3m ITC Futures at Rs 265 on 01.02.2018. On 31.03.2018, the spot price of ITC share is Rs 270- and one-month Futures price is Rs 275.On 30.04.2018, the settlement date, Market price of ITC share is

Case (i): - Market Price = Rs 278

Case (ii): - Market price = Rs260.

1.2.2018 Initial recognition (future long position) @ 265

* No entry

31.3.2018 Fair valuation of futures Contract (Subsequent recognition)

(Assume notional Cancellation – Marking to market)

Original position = long @ 265

Opposite position = Short @ 275 (1m futures)

gain = 10

F.A (D) Dr 10
To P/L 10

30.4.2018 — On Settlement date

Case (i) MP = 278

Futures price = 265 (long)

gain = 13

'10' already recognised

'3' recognise now

F.A (D) Dr 3
To P/L 3

Physical delivery

Inv in ITC Share 278
To Bk 265
To F.A (D) 13

Net Cash Settlement

Bank 13
To FA (D) 13

Case (ii) MP = 260

Futures price = 265 (long)

loss = 5

10 already recognised

Cancel this

P/L Dr 10
To F.A 10

Now book loss of 5

P&L Dr 5
To F.L (D) 5

For Physical delivery (Purchasing the Share)

Inv in ITC Share 260
F.L (D) 5
To Bk 265

Options

Eg

1.1.25 — 1.2.25 — 31.3.25

1.1.25

Call option (buy) (holder) (long call)

U/A Pk Ltd

X = 250

Maturity = 3m

Premium = 10

1.2.25

Premium = 18

Become writer of (Short call)

Call option (Seller) (2m)

U/A = Pk Ltd

X = 250

Now you are both Holder & writer
(Buyer) (seller)

& You are out of the market already

Plt ⇒ Bought @ 10 L Sold @ 18
⇒ 8

Lets focus on Accounting part now :-

Eg A Ltd has purchased a call option from B Ltd @ premium of Rs 12. The share having an exercise price of Rs 90. The above transaction took place on 01.02.2018 and the Exercise date is 30.04.2018. On 31.03.2018 Fair value of call option = Rs 19.
On 30.04.2018 the market price of the share is Rs 125. Show the accounting in the books of A Ltd and B Ltd.

Accounting in books of A ltd (Holder x = 90)

1. 2. 2018 — For paying premium

F.A (O)	Dr	12
To Bk		12

31. 3. 2018 — For Fair valuation on B/s date

Imagine Selling call option

Gain = 19 - 12 = 7

F.A (Derivative)	Dr	7
To P/L		7

30. 4. 2018 — Settlement date

Case (i) MP = 125

A ltd will exercise

Benefit due to call ⇒ 125 - 90
⇒ 35

Existing C.A of F.A (Derivative) = 19

F.A (Derivative)	Dr	16 (35-19)
To P/L		16

Case (ii) MP = 60

A ltd will lapse the option

Value / Benefit of call = 0

Existing C.A of F.A (Derivative) = 19
↓
Cancel it (O) kill it

P/L		19
To F.A (O)		19

↓

Settlement by delivery of Share →

Inv in Share	Dr	125
To Bk		90
To F.A (O)		35

Accounting in the books of BIIF :- (Writer X = 90)

1. 2. 2018 — For receiving premium

Bk A/c	Dr	12
To FL (O)		12

31. 3. 2018 — FO Fair valuation on B/S date

Imagine Buying call option to exit Selling position

loss = 19 - 12 = 7

P/L	Dr	7
To FL (O)		7

30. 4. 2018 — On Settlement date

↓

Case (i) MP = 125

↓

Holder will exercise

Value of Call to holder = 125 - 90 = 35

We have obligation, so 35 is liability for writer

Existing C.A of Derivative (F.L) = 19

①	P/L	16	(35 - 19)
	To F.L (O)		16

Case (ii) MP = 60

Holder will lapse the option

Value of call option = 0

Existing C.A of Derivative (F.L) = 19

F.L (O)	Dr	19
To P/L		19

Settlement of Call option by Delivery of Share

① Inv in Share 125
To Bk 125

② Bank Dr 90
F.L (Or) Dr 35
To Inv in Share 125

SUMMARY OF DERIVATIVES

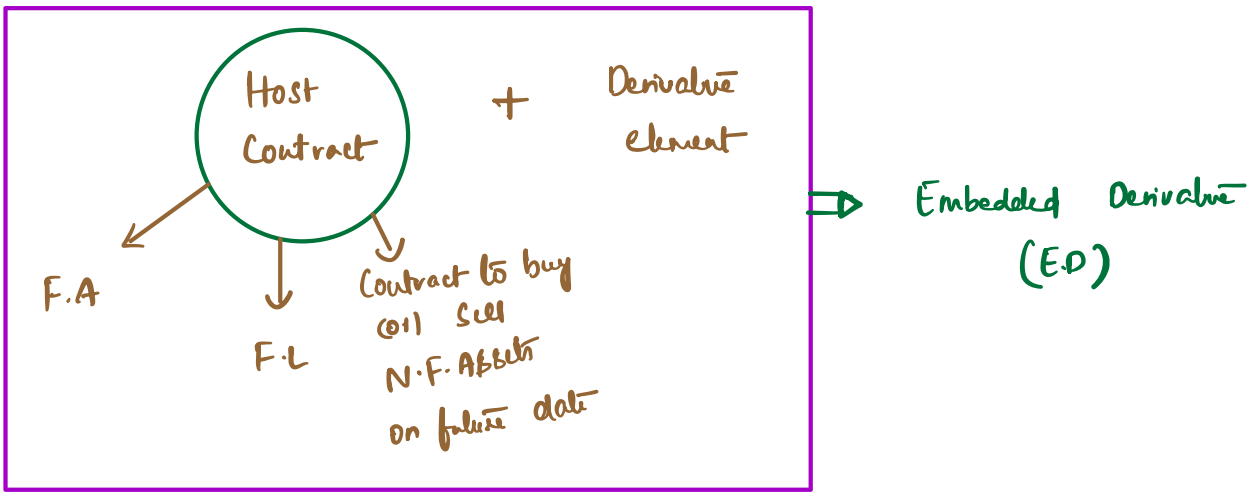
Derivative	Position		Comments
Fwd	Buyer (long)	Spot > Fwd (gain) F.A	Spot < Fwd (loss) F.L
	Seller (Short)	Spot < Fwd (gain) F.A	Spot > Fwd (loss) F.L
Future	Buyer (long)	Futures price ↑ (gain) F.A	Futures price ↓ (loss) F.L
	Seller (Short)	Futures price ↓ (gain) F.A	Futures price ↑ (loss) F.L
Call option	Holder (Buyer)	M.P > X (gain) F.A Exercises	MP < X No liability loss is limited to premium lapses

	Writer (seller)	M.P > X	M.P < X
		(loss) F.L	No obligation
		Obligation to sell	
Put option	Holder (Buyer)	X > M.P	X < M.P
		(gain) F.A	No liability
		Exercises	loss is limited to premium
			lapses
	Writer (seller)	X > M.P	X < M.P
		(loss) F.L	No obligation
		Obligation to buy	

EMBEDDED DERIVATIVES (E.D)

* An E.D is a Component of a F.I (or other Contract) that causes Some (or) all of the Cash flows of that instrument to vary in a way Similar to a Standalone derivative.

To put it Simple → Its a derivative inside a non-derivative Contract



* In CA exam if a 'Q' comes on E.D, it will be about Splitting accounting treatment only. If it is not to be Segregated, simply Ignore E.D and do accounting as pu Normal rules i.e ACM or FVTPL (or) FVTOCI for F.A & ACM / FVTPL for F.L.

E.g. (1): -

Investment in a convertible bond / preference share the fluctuation in market price of the share will also have an impact on the price of the bond. This creates a derivative element in the financial asset.

E.g. (2): -

X Ltd., has raised a loan of Rs 10,00,000. The interest on this loan is payable based on the profits of X ltd. As the profit fluctuates, the interest payable on the loan also fluctuates. This creates a derivative element in the financial liability.

E.g. (3): -

A Ltd., (Indian Company) has made an agreement to sell goods to B ltd. (USA company) after 6M for $ 100,000. The fluctuation in the $ rate creates a derivative element to A Ltd.,

↓ Natural

E.g. (4): -

A Ltd (Indian Company) has made an agreement to sell goods to B Ltd., (Indian company) after 6M for $ 100,000

↓ Not natural

E.g. (5): -

X Ltd., took a loan from ICICI bank @ 13.5% p.a with an option to prepay the loan any time in the next 5 years. The normal market interest rate without the prepayment option is 12% p.a.

Eg ⑥ lease payments inc annually based on CPI

In all the above examples, Cash flows are not Constant & they are changing bcoz of some variables.

↓

Always Segregate Derivative element & account Separately @ FVTPL.

CFI (US) EMBEDDED DERIVATIVES (E·D)

Step ① Is the instrument a Convertible F·I ?

Yes, Go to Step ②

Step ② Does the Conversion option pass FTF test?

Yes

It Qualifies as Equity Component

It is called CFI

Split in to Liability & Equity as per Ind AS 32

NO

The Conversion feature is not Equity, It is derivative

Now Imp → Just bcoz it is derivative doesnot automatically mean you Separate it.

You now move to the embedded derivative analysis under Ind AS 109.

Step 3 Apply the 3 tests to determine if E·D Should be Separated. (only if all 3 Conditions are met)

① Not Closely related to the host Instrument

② Host is not measured @ FVTPL

③ The derivative meets the def of derivative on its own.

STEP BY STEP EXPLANATION : E·D

① Understand the Contract :-

First, Identify whether the Contract is hybrid (Combined) instrument i.e non-derivative host Contract that Contains Derivative Component

Hybrid Contract = Host Contract + E·D

② Identify the host & Embedded Component

- **Host Contract**
  - The basic contract that would exist without the derivative feature
  - Eg Bond, lease, Sale agreement
- **E·D**
  - A clause / Condition that modifies the cash flows based on Δ in variables (like Int rate, Commodity price, Equity value)

③ Check if Embedded Component meets the definition of Derivative

1. Has value Δ with a variable (like Int rate, Fx rate Equity price)
2. Requires little (0) no Investment
3. Is settled at a future date

Step ④ Apply 3 tests for Separation

You must Separate the E·D only if 3 Conditions are met.

Test ① Is the E.D's risk not closely related to host

i.e The inclusion of derivative element is natural & acceptable.

Closely related → Don't Separate

Not Closely related → Continue Evaluation.

logic If the economic risk of the E.D is Similar to the host contract, it doesnot distort the accounting & does not need Separation.

Eg Int on loan indexed to LIBOR / Inflation (Closely related)

Equity Conversion option in a bond (Not Closely related)

Test ② Is the Entire hybrid instrument measured at FVTPL ?

Yes → Do not Separate

NO → i.e measured at AMC (or) FVTOCI then Continue further

logic After Separation anyway you are going to do FVTPL accounting for Derivative. If is already done @ FVTPL, then why to Separate ?

Test ③ Would the Embedded Component be Derivative if Separated ?

Yes → Separation required NO → Not an E.D

logic This ensures we only Separate Components that behave like proper derivatives.

Step ⑤ Accounting treatment

① Separate the E·D from host

② Measure it at FVTPL

③ Host Contract is accounted using normal rules (AMC, FVTOCI)

When E·D Separation is not required

(i) If above 3 tests are not met.

(ii) If host Contract is F.A Bcoz If derivative element is present, then SPPI (CCFT) test is failed. So FVTPL would have been followed.

(iii) Fair value of Derivative cannot be determined

(iv) The gain/loss from Derivative is not Substantial.

(v) Contract with NFA. (Scoped out of Ind AS 109)

3 Popular E·D Questions

- Prepayment option in a loan
- lease Contract with rentals linked to profits/Sales (or) any unrelated index
- Contract to Buy/Sell NFA in Foreign Currency which is not Closely related.

Prepayment of loan option

Pay a small fixed penalty (say 2%) for prepayment

↓

It is closely related

↓

logic Bank just wants to recover lost interest (or) some compensation. It does not depend on market Int rate. It's a common loan feature.

↓

No need to separate

Not an E.D.

Bank says "You can pay early but we will calculate a fee based on the diff b/n your fixed loan rate & Market Int rate.

↓

This behaves like Int rate option

↓

If Market rate goes ↓, You will prepay & refinance cheaper elsewhere

If rate go ↑, You won't prepay.

↓

So prepayment Clause value depends on Market Int rate, not just basic loan terms.

↓

Not closely related

↓

Separate this E.D unless whole loan is already measured through FVTPL.

Optional as per Ind AS 109 ← **HEDGE ACCOUNTING (H.A)** Not so imp

Q) What is Hedge accounting ? (H.A)

A) Action taken to protect a risk (Possibility of suffering loss)

Q) Why H.A is needed ?

A) Imagine your Company is exposed to financial risks like Δ in Int rate, foreign xchange rate, Commodity prices.

To protect yourself from these risks, you use a hedging instrument like a fwd Contract (or) option (or) Int rate Swap

Q) What can be hedged ?

A) Asset, liability, Contract to buy/sell NFA on future date, Highly probable forecasted transaction.

This is called Hedged item

Q) How to hedge ?

Usually a derivative is used to hedge → Hedge Instrument

But here is the issue

* Normal accounting treats the Derivative (Hedge Instrument) Separately from the item you are protecting (Hedged item)
* This means gains/losses from the Hedge appear in P/L immediately, but the related Hedged item (like future purchase) might affect P/L later.

This creates a mismatch in timing & causes volatility in Profit even though you are just managing risk sensibly.

↓

Solution : Hedge Accounting (H.A)

H.A aligns the accounting of both H.Instrument & H.Item so that they affect P/L at the same time. This gives true picture of Company's financial risk mgmt.

Examples

Hedged item	Hedge instrument
① Foreign Currency loan receivable of $100000 @ 2 yrs time. Risk is $ may fall (SR ⇒ 1$ = 80)	Fwd Contract Short position @ 1$ = ₹82

↓ After 2 yrs

	SR 1$ = 65	SR 1$ = 90
With out hedge ⇒	Inflow = 6500000	9000000
With hedge ⇒	8200000	8200000

Hedged item	Hedge instrument
② Inv in bond. Risk is bond price may fall due to ↑ in market Int rate.	① Int rate options ② Int rate futures

Int rate	(Hedged item) Bond price	(Hedged instrument) I. Rate option / futures	
↑	↓ loss	Gain	Compensate
↓	↑ gain	loss	

Hedged item	Hedge instrument
③ Inv in Reliance shares. Risk is Share price may fall	① Short position in Reliance futures @1) ② Buy put option

↓

Possibility	Value of Inv	Futures Contract
M.P of share ↑	↑ gain	↓ loss
M.P of share ↓	↓ loss	↑ gain

* Hedge accounting is optional for entities, If entity chooses to apply then
  (i) Entity should have documented policy for hedging
  (ii) Hedged item & Hedge instrument should be linked.

  Eg You can't hedge investment in Reliance Share by Shorting gold futures bcoz no link.