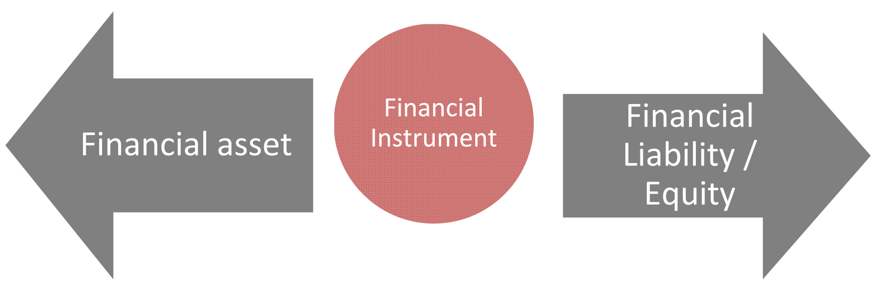
Training on Fair Valuation of Financial Assets & Liabilities

What is a Financial Instrument?



A financial instrument is <u>any contract</u> that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

What is a Financial Asset?

Any asset that is:

- cash
- an equity instrument of another entity
- a contractual right:
  - to receive cash or another financial asset from another entity
  - to exchange financial instruments with another entity under conditions that are potentially favorable

What is a Financial Liability?

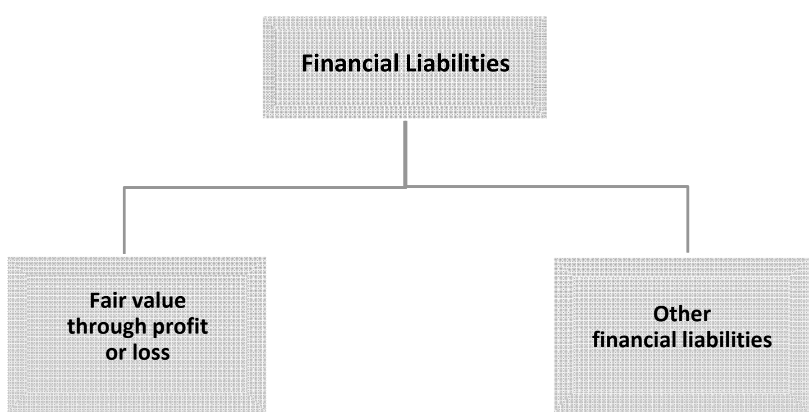
Any **contractual** obligation:

- to deliver cash or another financial asset to another entity; or
- to exchange financial instruments with another entity under conditions that are potentially unfavorable.

Categories of Financial Assets

Asset	Financial Assets			
Classification	FVPL	HTM	L&R	AFS
Initial Measurement	FV	FV	FV	FV
A/C for Transaction Costs	Expensed	Capitalised	Capitalised	Capitalised
Subsequent Measurement	FV	Amortised Cost	Amortised Cost	FV
Treatment of FV	Adjust to P&L			Adjust to Equity/ adjust to P&L based on EIR

Categories of Financial Liabilities



Fair Value Measurement Criteria/ Hierarchy

Fair Value

The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

- *Exit price concept*
- *Consider characteristics of asset/liability (i.e condition, location, restrictions on sale/use)*

Fair Value- Hierarchy

Level 1

Quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date

Level 2

observable for the asset or liability, either directly or indirectly.

Level 3

Unobservable inputs are used to measure fair value to the extent that relevant observable inputs are not available

Initial Measurement of Financial Assets/Liabilities

Accounting for Day 1 Difference

► Rent Deposit

► Staff Loans

► Inter Company Loans (Parent/Subsidiary)

► Non-Related Party Lending

Definition of Day 1 Difference

- This is the difference between the transaction price & the FV value of the transaction.

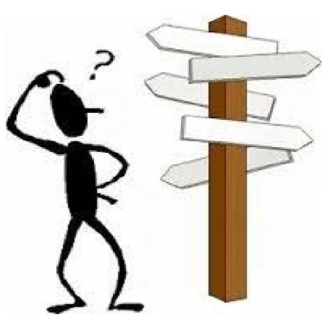
- If the transaction is a market transaction at arms length

    - **Fair Value = Transaction Price**

Rent deposits

Accounting for Rent Deposit Vs Rent Advance

Rent deposits are security deposits usually refundable by the lessor at the end of the period



Rent Advances are rent paid in advance which will be off-set with the rent payable by the lessee during the period of the lease.

Rent Deposit - Refundable

A lessee makes an interest free security deposit of $1000 on entering a five year lease. It assesses an appropriate rate of interest for the deposit is 4%.

Therefore the fair value of the rent deposit at the inception is $ 822

	$	$
Security Deposit	**822**	
Advance Rentals	**178**	
Cash		**1000**

Rent Deposits (Contd.)

During the five year lease, it will record interest income and additional rental expense as follows;

Year	Interest Income	Rental Expense	Difference
1	33	(35.6)	(2.6)
2	34	(35.6)	(1.6)
3	36	(35.6)	0.4
4	37	(35.6)	1.4
5	38	(35.6)	2.4
TOTAL	178	(178)	-

Accounting for Staff Loans

Measurement of Staff Loans

On 1 January 2008 , Bank grants a 5-year LKR 1 million hosing loan facility (with 4% p.a. interest) to an employee X . Market rate for similar facility is 15%. Mr. X should make LKR 224,627 per annum in arrears to settle the loan.

What is the proper accounting treatment of the “Day 1 difference”?

–

Staff Loans (Contd.)

Housing loan granted	Rs.	1,000,000	
Interest rate		4%	p.a.
Repayment period		5	years
Annual installment	Rs.	224,627	
Market rate for similar loan		15%	p.a.

FV of loan equal = 224,627 X Annuity factor , $_{5 \text{ Years}, 15\% \text{ p.a.}}$

= 752,985

Employee benefits to be expensed over the five yaer period

= 247,015

Staff Loans (Contd.)

	Traditional Method		As per LKAS 39				
	Balance sheet	Income statement	Balance sheet		Income statement		
	Staff Loans Dr	Interest income Cr	Staff Loans Dr	Prepaid compensation Dr	Interest income Cr	Employee cost Dr	Net P&L impact Cr
Initial recognition on 1 Jan 2008	1,000,000		752,985	247,015			
31-Dec-08	815,373	40,000	641,306	174,067	112,948	72,948	40,000
31-Dec-09	623,361	32,615	512,874	110,486	96,196	63,581	32,615
31-Dec-10	423,668	24,934	365,178	58,490	76,931	51,997	24,934
31-Dec-11	215,988	16,947	195,328	20,660	54,777	37,830	16,947
31-Dec-12	(0)	8,640	(0)	0	29,299	20,660	8,640

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Fair Valuation of Unquoted Equities

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Measurement of Unquoted Equity Investments

Can investments in un-quoted equities be measured at cost??

Does the cost indicates the reasonable value for Unquoted Investments

Information to be considered when fair valuing an Equity Investment

- The information that is reasonably available to an investor
- The Market conditions
- Investment horizon or the Investment period
- Nature of the investees Business
- Industry which the Investee Operates

Income Approach

- Discounted Cash flow Method
  - Free cash flow to equity
  - Adjusted for time value of money

- Dividend Discounted Model
  - Price of dividend = present value of all expected future dividends till perpetuity

- Constant growth Dividend Discounted Model
  - Well established dividend pay out policy that the investee intends to continue in the future

Market Approach

Transaction price paid for an identical or similar instrument in an investee :

- Identical Vs Similar

- Comparable Company valuation multiple :
  - Identify the peer
  - Select the performance measure. i.e.- P/E Ratio, P/B Value
  - Apply the valuation
  - Make appropriate adjustments for availability of information

Adjusted Net Assets Method

Combination of Market Approach & Income Approach

- Measuring the fair value of recognized and unrecognized assets & liabilities
- Appropriate for entities who derive value by holding assets

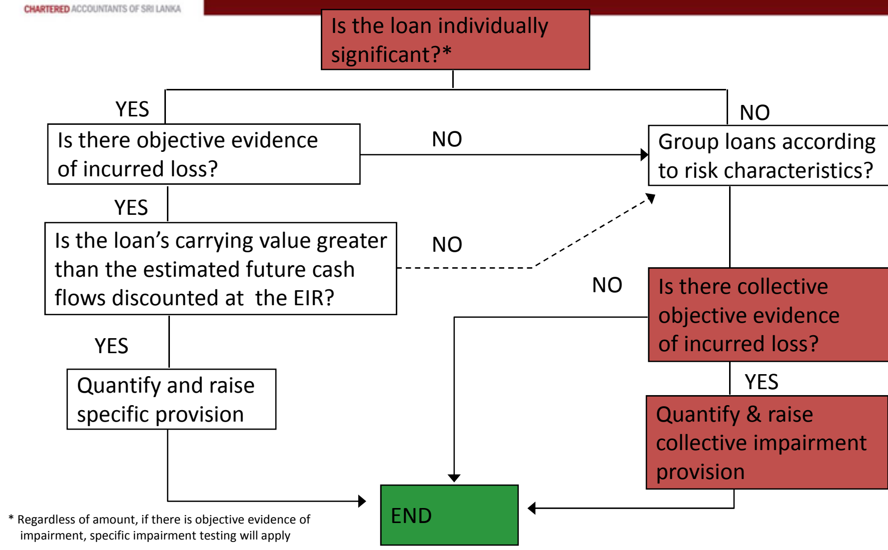
  (i.e.- Property holding companies, Investment entities)

Fair Valuation of Financial Asset/Liabilities

Q&A

Impairment of Financial Assets

What is impairment?



What Constitutes 'Objective Evidence'

Asset-specific loss events include:

- Significant financial difficulty of the issuer/obligor
- A breach of contract, such as default or delinquency in interest or principal payments
- The lender, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider
- High probability of bankruptcy or other financial reorganization
- Disappearance of an active market for the financial asset because of financial difficulties

Case 1: Objective evidence

Customer	NPL	Reschedule	Internal rating	Outlook of the industry	Objective evidence ?
A	No	No	1	Negative	
B	No	Yes	4	Positive	
C	Yes	No	6	Positive	
D	No	No	5	Positive	
E	No	No	2	Positive	
F	No	No	3	Positive	
* Internal ratings 1-5 are for performing loans , However , bank would not grant any loans to customer rated 5 at the initial ratings					

Case Study 1 B

Customer A has obtained many facilities with Bank X, The customer A has the following facilities with the Bank.

1, Leasing facility

2. Housing loan
3. Credit Card
4. Personal life style loan

Case: It is identified in the recent records that customer is making significant delay in making the Credit card and Personal life style loan repayment.

Are these are **all these loans** with objective evidence ?

Individual Impairment

At what rate ?

When ?

How much ?

	Case A	Case B
Discounted Future Cashflow	120,000,000	80,000,000
Less: Carrying Balance	100,000,000	100,000,000
Impairment Loss		

Discount Rate to Use

- Fixed-rate loans
  - original effective interest rate
- Floating-rate loans
  - current effective interest rate determined under the contract
- Restructured loans
  - effective interest rate before restructuring

Case 2 : Individual assessment

- Granted Rs. 120 million to ABC Plc on 1 January 2008
- Original repayment plan
  - Rs. 2 million equal capital + interest per month
  - Payable at the end of the month
  - Five years repayment period
  - Interest rate = 15% p.a.
- Position as at 31 Dec 2009
  - 2 months in default
  - Capital outstanding = (Rs. 120m – Rs. 44m) = Rs. 76 m
  - Interest receivables = Rs. 1.9 million

Case 2 : Individual assessment

- Objective evidence for Impairment
  - 2 months in default
  - Probable bankruptcy
- Recovery plan :
  - No further recovery through installments
  - Initiated the legal actions
  - Expected duration for disposal of the mortgaged property = 2 years from the balance sheet date
  - FSV as at the balance sheet date = Rs. 100 million
  - Expected sale price at the date of disposal = Rs. 110 million
  - Selling and other recovery cost = 20% of the sale price

Determine the Calculated Value and the Impairment Loss

	Rs. M
Discounted future cashflow	66.5
Carrying amount as at 31. 12. 2009	77.9
Calculated value	(11.36)
Impairment	11.36

Discounted future cash flow 15%

Year	CF	PV
0	-	-
1	-	-
2	88	66.5
		66.5

Discuss :

- Primary mortgage
- Secondary mortgage
- Concurrent mortgage

Case 3 - Syndicated Loans

A is a non performing customer Identified as Objective evidences Customer A has obtained the following amount of loans from different banks;

Bank P- 90 Mn

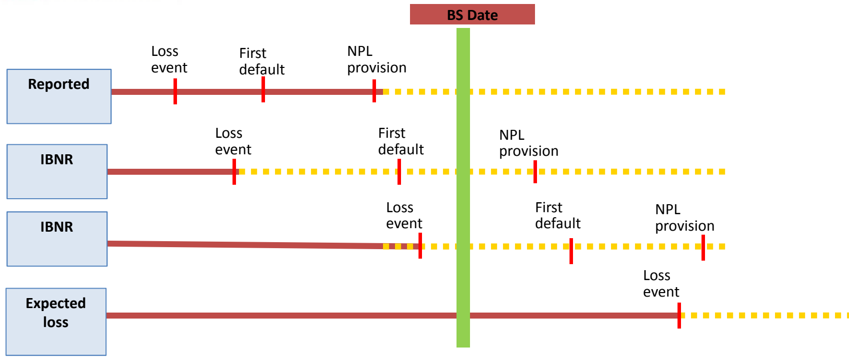
Bank Q- 60 Mn

Bank R- 30 Mn

- The Banks has initiated legal proceeding
- The FSV property value of 150 Mn
- It is assumed that all banks has equal right
- Calculate the individual impaired amount for Bank P ?

Collective Impairment

Comparison of NPL provisioning



Collective impairment

- Risk grouping
- Historical loss experience
- Judgmental adjustment
- Application

Collective Impairment – ‘Risk Groupings

Groupings should be made on the basis of similar credit risk characteristics that are indicative of the debtors' ability to pay all amounts due according to the contractual terms

Assets may be grouped on the basis of one or more of the following risk characteristics:

- Estimated default probabilities or credit risk grades
- Type (for example, mortgage loans or credit card loans)
- Geographical location
- Collateral type
- Counterparty type (for example, consumer, commercial or sovereign)
- Past-due status
- Maturity

Potential linkage/convergence with credit grading process

Collective Impairment – Critical Element

- Historical loss experience – basis for estimating future cash flows
- Use peer group data if there is no loss experience (currently not feasible)
- Adjust historical loss experience based on observable data
- ‘Directionally-consistent’ concept when relating cash flow estimate changes with changes in underlying observable data
- Back-testing and calibration of estimation methods
  - methodology and assumptions used for estimating future cash flows are reviewed regularly to reduce any differences between loss estimates and actual loss experience.

Case : Collective impairment

Age analysis of banks vehicle loan portfolio is as follows ;

Age bracket	Outstanding
Current	100m
1-30 Days	20m
31-60 Days	10m
61-90 Days 111	5m
Over 90 Days	10m

Probability of any loan moving to over 90 days were estimated as follows (based on historical experiences)

Age bracket	PD	Age Bracket	PD
Current	1%	61-90 days	70%
1-30 Days	5%	Over 90 Days	100%
31-60 Days	30%		

Case : Collective impairment cont. ...

- Based on its historical experience , the bank estimated its recovery of vehicle loan once it classified as default (over 90 days) is 60% of the outstanding balance at the date of default.
- The management carefully analysis the economic and portfolio factors and decided that Probability of defaults needs 10% increase . No such adjustment is required for recovery rate / LGD .
- Calculate the impairment provision for vehicle loan portfolio?

Case : Collective impairment – Answer

Age bracket	Outstanding	Adjusted PD	Adjusted LGD / (1-RR)	Loss rate	Impairment provision
Current	100m				
1-30 Days	20m				
31-60 Days	10m				
61-90 Days	5m				
Over 90 Days	10m				

THANK YOU