



Agenda

Part 1

- a) Definitions
- b) What is deferred taxliabilities (DTL) anddeferred tax assets (DTA)?
- c) Summary of deferred tax
- d) Principles of HKAS 12
- e) Sources of Deferred Tax Liabilities
- f) Sources of Deferred Tax Assets
- g) Reconciliation and disclosure

Part 2

- a) Initial Recognition Exemption
- b) Amendments to HKAS 12 on 'Deferred Tax related to Assets and Liabilities arising from a Single Transaction'
- c) HK-IFRIC Interpretation 23
 Uncertainty over Income
 Tax
- d) Deferred tax impact of HK tax rules on lease contracts
- e) Deferred tax at group level



Two types of taxation

Tax charge consists of two components

- 1. Current tax amount actually payable to tax authority
- 2. Deferred tax accounting adjustments that match
 - a. accounting base vs tax base of assets or liabilities; OR
 - b. tax charge vs profit before tax



What is deferred tax liabilities (DTL)?

- A computer at \$30,000 and depreciates it over 3 years.
- Tax authority allows full deduction in the year of acquisition.

	Year 1	Year 2	Year 3	Total
Accounting profit	60,000	60,000	60,000	180,000
Depreciation	10,000	10,000	10,000	30,000
Less: Computer addition	(30,000)			(30,000)
Taxable profit	40,000	70,000	70,000	180,000
Tax rate	10%	10%	10%	10%
Current tax payable	4,000	7,000	7,000	18,000

	Year 1	Year 2	Year 3	Total
Profit before tax	60,000	60,000	60,000	180,000
Tax	(4,000)	(7,000)	(7,000)	(18,000)
Profit after tax	56,000	53,000	53,000	162,000
Effective tax rate	-7%	-12%	-12%	-10%



What is deferred tax liabilities (DTL)?

Profit or loss account approach

	Accounting expense	Taxable expenses	Difference	Tax effect (change)	Remark
Year 1	10,000	30,000	(20,000)	(2,000)	DTL created
Year 2	10,000	-	10,000	1,000	DTL reduced
Year 3	10,000	-	10,000	1,000	DTL reduced
Total	30,000	30,000	-	-	or reversed

Balance Sheet approach

	Accounting base asset	Tax base asset	Difference	DTL	Remark
Year 1	20,000	-	20,000	2,000	DTL balance
Year 2	10,000	-	10,000	1,000	DTL balance
Year 3	-	-	-	-	



What is deferred tax liabilities (DTL)?

		Year 1	Year 2	Year 3	Year 4
Profit befor	re tax	60,000	60,000	60,000	180,000
Tax		(4,000)	(7,000)	(7,000)	(18,000)
Deferred ta	X	(2,000)	1,000	1,000	-
Profit after	tax	54,000	54,000	54,000	162,000
Effective ta	x rate (normalized)	-10%	-10%	-10%	-10%
Year 1	Dr. P/L – Taxation	\$	2,000		
	Cr. Deferred tax liabilities	(\$2	2,000)		
Year 2	Dr. Deferred tax liabilities	\$	1,000		
	Cr. P/L – Taxation	(\$1	1,000)		
Year 3	Dr. Deferred tax liabilities		\$1,000		
	Cr. P/L – Taxation	(\$	1,000)		



Deferred tax summary



Account Base	Tax Base	Tax
Asset	> 0	DTL

Taxable timing difference → deferred tax liabilities





- A company accrued a pension cost of \$30,000 per year.
- It only paid out the accrued amount in Year 3 when it found a reliable pension house
- Tax authority allows deduction when payment is made.

	Year 1	Year 2	Year 3	Total
Accounting profit	100,000	100,000	100,000	300,000
Accrued pension cost	30,000	30,000	30,000	90,000
Less: actual incurred pension cost	_	-	(90,000)	(90,000)
Taxable profit	130,000	130,000	40,000	300,000
Tax rate	10%	10%	10%	10%
Current tax payable	13,000	13,000	4,000	30,000

	Year 1	Year 2	Year 3	Total
Profit before tax	100,000	100,000	100,000	300,000
Tax	(13,000)	(13,000)	(4,000)	(30,000)
Profit after tax	87,000	87,000	96,000	270,000
Effective tax rate	-13%	-13%	-4%	-10%



What is deferred tax assets (DTA)?

Profit or loss account approach

	Accounting expense	Taxable expenses	Difference	Tax effect (change)	Remark
Year 1	30,000	-	30,000	3,000	DTA created
Year 2	30,000	-	30,000	3,000	DTA increased
Year 3	30,000	90,000	(60,000)	(6,000)	DTA reduced
Total	90,000	90,000	-	-	

Balance Sheet approach

	Accounting base liability	Tax base asset	Difference	DTA	Remark
Year 1	30,000	-	30,000	3,000	DTA balance
Year 2	60,000	-	60,000	6,000	DTA balance
Year 3	90,000	90,000	-	_	



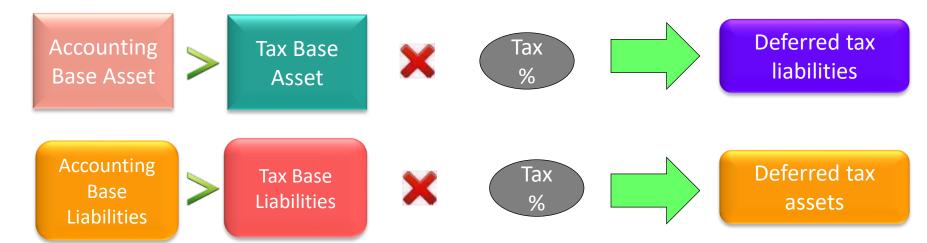
What is deferred tax assets (DTA)?

	Year 1	Year 2	Year 3	Total
Profit before tax	100,000	100,000	100,000	300,000
Tax	(13,000)	(13,000)	(4,000)	(30,000)
Deferred tax	3,000	3,000	(6,000)	-
Profit after tax	90,000	90,000	90,000	270,000
Effective tax rate (normalized)	-10%	-10%	-10%	-10%

Year 1	Dr. Deferred tax assets	\$3,000
	Cr. P/L – Taxation	(\$3,000)
Year 2	Dr. Deferred tax assets	\$3,000
	Cr. P/L – Taxation	(\$3,000)
Year 3	Dr. P/L – Taxation	\$6,000
	Cr. Deferred tax assets	(\$6,000)



Deferred tax summary



Account Base	Tax Base	Тах
Asset	> 0	DTL
Liabilities	> 0	DTA

Taxable timing difference → deferred tax liabilities

Deductible timing difference → deferred tax assets

Definitions

Tax base of an asset or liability = amount attributed to that asset or liability for tax purposes.

e.g. computer is zero because tax authority allows full deduction





Temporary differences (TD):

differences between the carrying amount of an asset or liability vs its tax base.



Deferred tax liabilities (DTL): amounts of income taxes payable in future periods in respect of taxable temporary differences.

(e.g. add back depreciation charges in year 2 & 3)





Deferred tax assets (DTA) are the amounts of income taxes recoverable in future periods in respect of:

- (a) deductible temporary differences; (e.g. deduct pension when pay out)
- (b) the carryforward of unused tax losses; and
- (c) the carryforward of unused tax credits.





a) taxable temporary differences

temporary
differences that will
become taxable
profit (tax loss) of
future periods when
the carrying amount
of the asset or
liability is recovered
or settled;

E.g. add back depreciation of computer in year 2 &3



differences, temporary differences that will become deductible in determining taxable profit (tax loss) of future periods when the carrying amount of the asset or liability is recovered or settled.

E.g. general bad debt provision



What is the definition of tax base?

<u>Tax base</u> of an asset or liability is the amount attributed to that asset \ liability for tax purpose.

Tax base of asset = Carrying amount – taxable amount + deductible amount

	Carrying amount	Taxable amount	Deductible amount	Tax base
Year 1	Computer at end of Year 1	Future dep add back	Future depreciation allowance	
	\$20,000	\$20,000	0 =	0
Year 1	Accrued pension at end of Year 1	Taxable amount (add back)	Deductible amount (Cash payment)	
	\$30,000	\$30,000	} 0	0

Accounting base = tax base when

- 1. When expenses will never be deducible for tax purposes
- When income will never be taxable for tax purpose



Exercise on calculation of tax base – Polling questions 1 to 5

- 1. Interest \ dividend receivable has a carrying amount of \$2,000. The related interest revenue is not taxable.
- a. \$0
- b. \$2,000
- 2. Machine cost \$10,000. Depreciation \$3,000 has been deducted in the current and prior periods tax computation. Remaining cost will be deductible in future periods, either as depreciation or through a deduction on disposal.

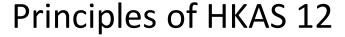
Revenue generated by using the machine is taxable, any gain / loss on disposal will be taxable / deductible for tax purposes.

- a. \$3,000
- b. \$7,000 (\$10,000 \$3,000)



Exercise on calculation of tax base

- 3. Account \ loan receivable has a carrying amount of \$1 million. There are no tax consequences for repayment of the loan.
- a. \$1 million
- b. \$0
- 4. Current liabilities include revenue received in advance at \$4,500. Related revenue was taxed on an accrual basis.
- a. \$0
- b. \$4,500
- 5. Current liabilities include accrued fines \ penalties with a carrying amount of \$7500. They are not tax deductible.
- a. \$0
- b. \$7,500





Full Provision Base: all temporary timing differences between tax base and accounting base will be fully provided.

Liability method: to provide the potential tax liabilities that ultimately will become payable.

A company has \$1,000 income receivable booked in 20x7 when the tax rate is 25%. Tax will be payable when actual cash is received in 20x8 when tax rate is 30%.

	20x7	20x8
Tax rate	25%	30%
Income \ Profit	\$1,000	\$0
Tax	\$0	(\$300)
Profit after tax	\$1,000	(\$300)

Conclusion: use future year tax rate to calculate deferred tax





Source of deferred tax

Deferred tax liabilities

- 1. Depreciation of assets
- Revaluation of PPE
- 3. Investment properties
- 4. Development cost (IA)
- 5. Transaction costs of loans
- 6. Convertible bonds

Deferred tax assets

- 1. Tax losses
- 2. Unrealized loss on fair value measurement of debt instruments (updates in Jan 2016)



Depreciation of assets - DTL

- A company buy a car \$10,000 and depreciate over 5 years, with annual depreciation of \$2,000
- 2. For tax purpose, initial allowance of 60% is granted in first year, and annual allowance of 30% at reducing balancing basis

30% pool
10,000
(6,000)
4,000
(1,200)
2,800

Tax Computation	Year 1
Accounting profit	60,000
Depreciation	2,000
Less: dep allowance (IA+AA)	(7,200)
Taxable profit	54,800
Tax rate	10%
Current tax payable	5,480
Current tax payable	5,480

Polling question #6

What is the DTL amount?

- a. DTL of \$520
- b. DTL of \$280
- c. DTL of \$548



Depreciation of assets - DTL

Deferred	tax calculation				
	Accounting Base	Tax Base	Diff	Tax rate	DTL
Vehicle	8,000	2,800	5,200	10%	520

Dr. P/L – Taxation	\$520
Cr. Deferred tax liabilities	(\$520)

	Year 1	Year 1
Profit before tax	60,000	60,000
Tax	(5,480)	(5,480)
Deferred tax		(520)
Profit after tax	54,520	54,000
Effective tax rate	-9%	-10%

Revaluation of PPE – DTL to revaluation reserve



- 1. A building purchased at \$1,000m and depreciation 50 years (no residual value).
- 2. Tax depreciation is 4% per year.
- 3. After first year, the building revalued to \$1,200m
- 4. Revaluation gain is recognized in revaluation reserve

	Accounting base	Tax base	Difference	Tax rate	Deferred tax	
Cost	1,000	1,000				
Depreciation	(20)	(40)				
Net book value	_ 980	960	20	10%	2	DTL
Revaluate to \$1,200	220		220	10%	22	DTL
Revalued amount	1,200	960	240			

Dr. P/L – Taxation	\$2
Dr. Revaluation reserve	\$22
Cr. Deferred tax liabilities	(\$24)

Para 12.61A: Deferred tax shall be recognized outside P/L if the tax relates to items that are recognized outside profit or loss.

Investment properties (HKAS12.51C) – DTL



- A investment property purchased at \$100m and measure at fair value (no depreciation)
 according to HKAS 40.
- 2. Tax depreciation is 4% per year.
- 3. After first year, the investment property is revalued to \$150m
- 4. There is NO capital gain tax
- Since the investment property is stated at fair value, there is a rebuttable presumption that the investment property would be recovered through sales
- i.e. the revalued gain would be realized through sales and so would not be taxable. No deferred tax would be provided.
- Deferred tax is limited to the CLAW BACK of depreciation allowance claimed.

	Accounting base	Tax base	Difference	Tax rate	Deferred tax	
Cost Depreciation	100	100 (4)	-			
Net book value	100	96	4	10%	0.4	DTL
Revaluate to \$150	50	-	50	0%	-	DTL
Revalued amount	150	96	_			

Dr. P/L – Taxation	\$0.4
Cr. Deferred tax liabilities	(\$0.4)

Investment properties (HKAS12.51C) – DTL



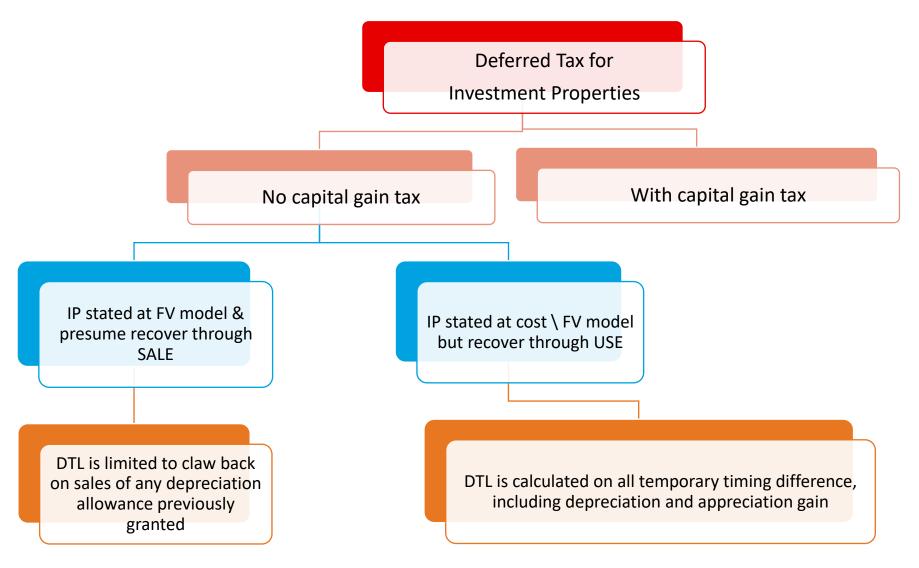
- If the presumption that the investment property would be recovered through sales is rebutted, then the value of the *investment property is recovered through USE*.
- The investment property will generate higher rental income when its value appreciated.
- Since its value is recovered through use, that translate into higher rental income which would taxable.
- So deferred tax is provided on the revaluation surplus (which is equivalent to future rental income)

	Accounting base	Tax base	Difference	Tax rate	Deferred tax	
Cost	100	100	-			
Depreciation		(4)				
Net book value	100	96	4	10%	0.4	DTL
Revaluate to \$150	50		50	10%	5	DTL
Revalued amount	150	96			5.4	DTL

Dr. P/L – Taxation	\$5.4
Cr. Deferred tax liabilities	(\$5.4)

Investment properties (HKAS12.51C) – DTL





Development cost – DTL



- A company spent and capitalized \$60m development cost on developing software apps and amortize it over 4 years
- 2. For tax purpose, the amount was fully deductible when it was incurred

Tax computation	Year 1
Accounting profit	100,000
Amortization \$60m / 4 years	15,000
Less: software development cost	(60,000)
Taxable profit	55,000
Tax rate	10%
Current tax payable	5,500

Deferred tax calculation – Software development cost				
Accounting Base	Tax Base	Diff	Tax Rate	DTL
45,000	0	45,000	10%	4,500

	Year 1	Year 1
Profit before tax	100,000	100,000
Tax	(5,500)	(5,500)
Deferred tax	-	(4,500)
Profit after tax	94,500	90,000
Effective tax rate	-5.5%	-10%





- A company paid \$60m to acquire a patent on certain technology, which was capitalized and amortize it over 4 years
- 2. For tax purpose, the amortization was not deductible as it is capital in nature

Tax computation	Year 1
Accounting profit	100,000
Amortization \$60m / 4 years	15,000
Less: Patent acq cost	
Taxable profit	115,000
Tax rate	10%
Current tax payable	11,500

	Year 1
Profit before tax	100,000
Tax	(11,500)
Deferred tax	-
Profit after tax	88,500
Effective tax rate	-11.5%

Polling question #7

Should we provide deferred tax?

- a. Yes
- b. No

Deferred tax calculation – Patent cost				
Accounting Base	Tax Base	Diff	Tax rate	DTL
45,000	45,000	0	10%	0



Shown as reconciling items in the notes to accounts.





- 1. A company issued \$30m 3-year debenture at 5% p.a.
- 2. Annual interest payment is 5% x \$30m = \$1.5m
- 3. Transaction cost is \$2m is deducted from the net proceed and amortized to P/L.
- 4. Transaction cost is deductible for calculating taxable profit when it is paid
- 5. Effective interest rate is 7.57%
- 6. Only actual interest expenses and transaction cost paid are tax deductible

Accountin	g Base			
	Beginning	Effective interest rate	Payment	Closing amortized cost
		7.57%	\$30m x 5%	
Year 1	28,000	2,120	(1,500)	28,620
Year 2	28,620	2,167	(1,500)	29,286
Year 3	29,286	2,217	(1,500)	30,003

Tax Computation	Year 1
Accounting profit	60,000
Interest expense	2,120
Less: interest paid	(1,500)
Less: transaction cost paid	(2,000)
Taxable profit	58,620
Tax rate	10%
Current tax payable	5,862



Transaction costs of loans - DTL

Deferred tax calculation					
	Accounting Base	Tax Base	Diff	Tax rate 10%	DTL
Loan	28,620	30,000	1,380	10%	138

	Year 1	Year 1
Profit before tax	60,000	60,000
Tax	(5,862)	(5,862)
Deferred tax	-	(138)
Profit after tax	54,138	54,000
Effective tax rate	-9.8%	-10%

Dr. P/L – Taxation	\$138
Cr. Deferred tax liabilities	(\$138)

Convertible Bonds - DTL



- 1. A company issued \$100m 3-year convertible bonds at 5% p.a.
- 2. Annual interest payment is 5% x \$100m = \$5m
- 3. Bonds without conversion right is 7%.
- 4. Transaction cost is deductible for calculating taxable profit when it is paid
- 5. Tax rate 10%

Voor	Cash	Effectiv		Discounted
Year	outflow	e rate		cash flow
1	5,000	/1.07		4,673
2	5,000	/1.07	2	4,367
3	105,000	/1.07	3	85,711
				94,751

Deferred tax – convertible bonds			
Accounting Base	Tax Base	Diff	DTL
94,751	100,000	5,249	525

Dr. Bank	\$100,000
Cr. Liability – convertible bonds	(\$94,751)
Cr. Equity	(\$5,249)

Dr. Equity	\$525
Cr. Deferred tax liability	(\$525)

Polling question #8

Should we provide deferred tax?

- a. Yes
- b. No





Accounting I	Base			
	Beginning	Effective interest rate	Payment	Closing amortized cost
		7.00%	\$100m x 5%	
Year 1	94,751	6,633	(5,000)	96,384
Year 2	96,384	6,747	(5,000)	98,130
Year 3	98,130	6,869	(105,000)	(0)

Tax Computation	Year 1
Accounting profit	60,000
Interest expense	6,633
Less: interest paid	(5,000)
Taxable profit	61,633
Tax rate	10%
Current tax payable	6,163

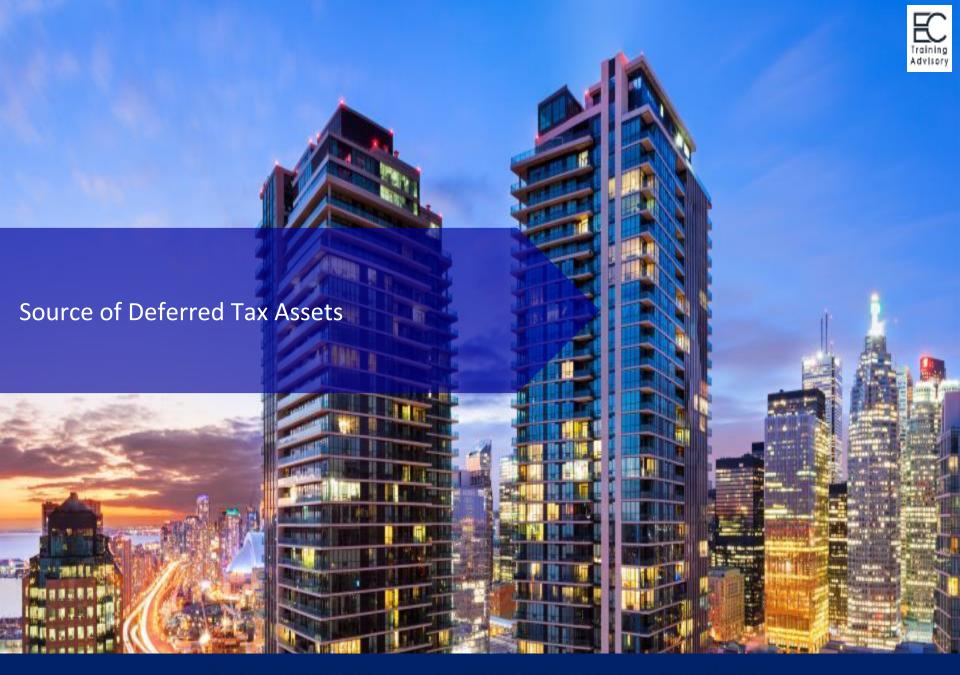


Convertible Bonds – DTL reverse

Deferred t	ax calculation				
	Accounting Base	Tax Base	Diff	Tax rate	DTL
Loan	96,384	100,000	3,616	10%	362
Less : previously DTL on b/s			<u>525</u>		
DTL reduced			<u>163</u>		

	Year 1	Year 1
Profit before tax	60,000	60,000
Tax	(6,163)	(6,163)
Deferred tax	-	163
Profit after tax	53,837	54,000
Effective tax rate	-10.3%	-10.0%

Dr. Deferred tax liability	\$163
Cr. P/L – tax	(\$163)







Recognizes deferred tax assets on tax losses only when it is probable that taxable profits will be available to offset \ utilized such tax losses in the same taxation authority & same taxable entity.

	Y1	Y2	Y3	Y4	Total
	\$	\$	\$	\$	\$
(Loss) \Profit before tax	(100)	80	200	150	330
Tax - 10%	_	_	(18)	(15)	(33)
(Loss) \ Profit after tax	(100)	80	182	135	297
	2				
Effective tax rate	0%	0%	-9%	-10%	-10%
Deferred tax considered					
	Y1	Y2	Y3	Y4	Total
	\$	\$	\$	\$	\$
(Loss) \ Profit before tax	(100)	80	200	150	330
Deferred tax	10	(8)	(2)		0
Current tax - 10%			(18)	(15)	(33)
(Loss) \ Profit after tax	(90)	72	180	135	297
Effective tax rate	-10%	-10%	-10%	-10%	-10%

In determining whether it is probable that taxable profit, one should consider:

- 1. the company will have sufficient estimated taxable profits in future;
- 2. tax planning opportunities in future;
- 3. whether there are sufficient deferred tax liabilities, which are expected to reverse in the same period as the deferred tax asset is expected to reverse.





How much DTA to be provided for \$30,000 tax loss when Company Cici is unsure how much profit it can generate in future and there is no tax planning opportunity?

Cici has \$10,000 car with 5 years useful life and has been used for 1 year.

- NBV is \$8,000 and
- Tax w.d.v. is \$2,800 (\$10,000 \$6,000 initial allowance \$1,200 annual allowance)

Deferred tax calculation						
	Accounting Base	Tax Base	Diff	Tax rate	DTL	
Vehicle	8,000	2,800	5,200	10%	520	



Tax Computaion		
		10% tax
Estimate accounting P/L (for all future years) Add: Depreciation (all future depreciation) Less: All future depreciation allowance Assessable profit (that can utilize the tax losses)	\$0 \$8,000 (\$2,800) \$5,200	\$520 DTL
Tax losses b/f	(\$30,000) (\$24,800)	???

Assume Cici is not able to make any profit, at least we can provide DTA = DTL which represent :

The amount of timing difference expected to reverse in the same period as the deferred tax asset is expected to reverse.



How much DTA to provide for the tax loss \$30,000 brought forwards, if Cici in future, instead of making zero profit, is making :

Case A: Loss of \$7,000 Case B: Profit of \$1,000 Case C: Loss of \$4,000

	(\$7,000)	\$1,000	(\$4,000)
\$8,000			
(\$2,800)_	\$5.200	\$5,200	\$5.200
	(\$1,800)	\$6,200	\$1,200
	(\$30,000)	(\$30,000)	(\$30,000)
_	(\$31,800)	(\$23,800)	(\$28,800)
	. ,	\$8,000 (\$2,800) \$5,200 (\$1,800) (\$30,000)	\$8,000 (\$2,800) \$5,200 \$5,200 (\$1,800) \$6,200 (\$30,000) (\$30,000)

DTA – 100% \$0 \$620 \$120

Unrealized loss on debt instruments



- amendment on 19 Jan 2016

Company Cici holds debt instruments that were measured at FVTPL as follows:

Debt	FV \ Accounting base	Cost \ Tax base	Temporary timing difference	Tax 10%	
Α	20,000	30,000	(10,000)	1,000	DTA
В	34,000	30,000	4,000	(400)	DTL

Polling Question #9

Should Company Cici provide DTA or DTL?

- a. Yes
- b. No

Yes!

HKASB amendments on 19 January 2016 clarify that

- the existence of deductible temporary difference (DTA on unrealized loss) depends solely on a comparison of the carrying amount of an asset and its tax base.
- It is NOT affected by possible future changes in the carrying amount or expected manner of recovery of the asset.
- effective on 1 January 2017



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		\$
	Accounting profit	60,000
1	Depreciation of PPE	2,000
	Depreciation allowance of PPE	(7,200)
2	Amortization of software	15,000
	Tax deduction of software cost	(60,000)
3	Amortization of patent (non tax deductible)	15,000
4	Interest expenses on debt instruments	2,120
	Interest paid (cash outflow) on debt instrument	(1,500)
	Transaction cost of issuing debts	(2,000)
5	General provision for bad debts	200,000
	Specific bad debts	(30,000)
	Assessable profits	193,420
	Tax rate	10%
	Tax thereon	19,342

	\$	
Accounting profit	60,000	32%
Tax charge (tax bill)	(19,342)	effective tax
Profit after tax	40,658	



Calculate deferred tax

		\$
	Accounting profit	60,000
1	Depreciation of PPE	2,000 (\$520) DTL
	Depreciation allowance of PPE	(7,200)
2	Amortization of software	15,000 (\$4,500) DTL
	Tax deduction of software cost	(60,000)
3	Amortization of patent (non tax deductible)	15,000
4	Interest expenses on debt instruments	2,120
	Interest paid (cash outflow) on debt instrument	(1,500) (\$138) DTL
	Transaction cost of issuing debts	(2,000)
5	General provision for bad debts	200,000 \$17,000 DTA
	Specific bad debts	(30,000)
	Assessable profits	193,420
	Tax rate	10%
	Tax thereon	19,342 \$11,842 DTA

Dr.	Deferred tax asset	\$11,842
Cr.	Cr. P/L - Tax	(\$11,842)
	Provision for net DTA	

Provide for deferred tax

Dr.	Deferred tax asset	\$11,842
Cr.	Cr. P/L - Tax	(\$11,842)
	Provision for net DTA	

		\$	
Accounting profit		60,000	
Tax charge (tax bill)	(19,342)		12.5%
Deferred tax assets	11,842		effective tax
		(7,500)	
Profit after tax		52,500	



Tax reconciliation – disclose in notes to account

	\$
Accounting profit	60,000
	10%
	V
Tax thereon (\$60,000 x 10%)	6,000
Amortization of patent (non tax deductible)	1,500
Tax charge in profit or loss account	7,500

Conclusion:

Reconciling items are those non taxable income or non deductible expenses.



Tax reconciliation – disclose in notes to account

Summary of key disclosure requirements as per HKAS 12:

- 1. Separate presentation of current and deferred taxes
- 2. Explanation of the relationship between tax expense (income) and accounting profit
- 3. Unrecognised temporary differences
- 4. Significant judgments made with respect to income taxes (for example deferred tax assets on losses carried forward)





