

Lesson 16-2 -Capital Cost Allowance

Depreciation for Tax Purposes

— Capital Cost Allowance (CCA)

- CCA is the Canadian legally mandated method for depreciating assets for income tax purposes
- Assets are grouped into classes, and the total value of a class is depreciated using the declining balance method with prescribed rates
- There are specific rules about how asset values get added to a class when purchased, and deduced when disposed
- There are different rates for different types of assets (asset classes) Find more info at the CRA

Depreciation and Asset Disposal

- Asset class accounting:
 - Assets of a single class are grouped in a single account.
 - Assets may be added to or subtracted from the account each year.
- For year n , $CCA_n = UCC_n \times d$
 - d = CCA rate
 - UCC_n is the **Undepreciated Capital Cost** of the asset class, ie. the book value (BV) or the entire amount that is eligible for depreciation
 - CCA_n is the **Capital Cost Allowance** for year n , or the depreciation expense that is allowed for income tax purposes

Asset Class Example

- You run a small startup, and have a number of computers (Asset Class 10) for your employees. After two years, the total value of that asset class is \$4,500.
- Some are getting old, so you purchase two new computers, for a total cost of \$2200. You also sell off two old computers for a total of \$500.
- Your computer asset class would now be \$6,200. ($\$4500 + 2200 - 500$)
- The depreciation rate for Asset Class 10 is 30% per year, so this year you would have $\$6200 * 30\% = \1860 in depreciation expenses
- it's actually a little trickier than this due to certain rules, but this gives the idea

General Process for Determining CCA

1. Find or determine the UCC for the beginning of the period.
2. Add the cost basis of any assets acquired to the UCC
 1. $\frac{1}{2}$ year rule: only $\frac{1}{2}$ the cost basis of an asset can be added to the UCC in the year of purchase.
 2. Remainder is added the next year.
3. Reduce the UCC by the proceeds of any dispositions
4. Calculate the CCA for the period based on the UCC balance and the CCA rate for that class. Reduce the UCC by this amount.
5. If no assets remain in the class, reconcile the remaining UCC

Adding an Asset to a class

- When a capital asset is acquired, the cost basis is added to the UCC balance for the appropriate class
- Cost basis includes more than just purchase price – all costs associated with getting the asset running, e.g.
 - Purchase price
 - Installation costs
 - Training
 - Related works necessary to implement the asset
- Only one-half of the cost bases may be added to the UCC balance in the year of purchase (Canada Revenue Agency Rules). Second half added the next year
 - Some exemptions, but not significant for our purposes (e.g. small hand tools)

Disposition of assets

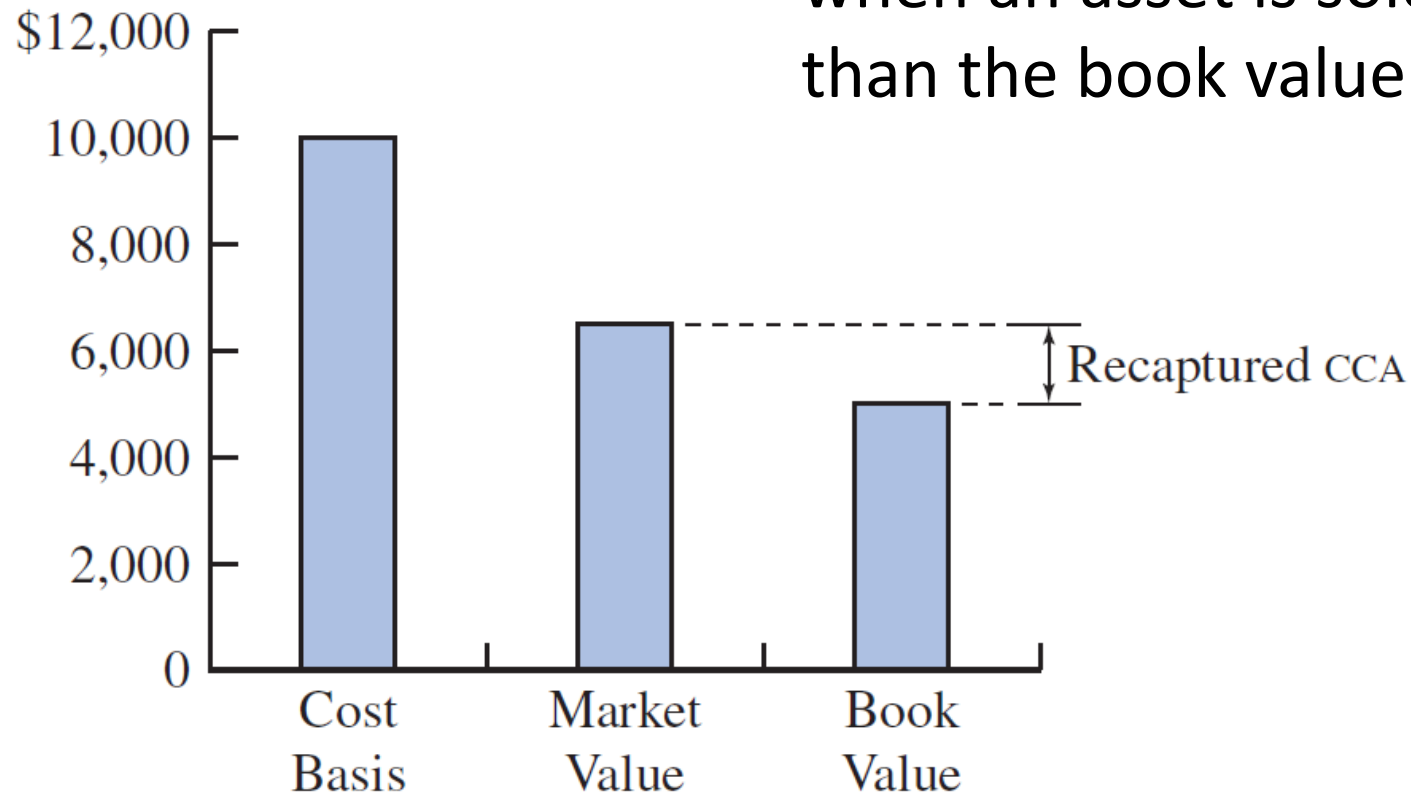
- When disposing of assets, reduce the UCC for that class by the proceeds of disposition (i.e. how much you sold it for)
- If you sold the asset for more than you paid for it, you must also claim a capital gain on the surplus
- For tax purposes, that's it!
- For our analysis purposes, we want to know the difference between the proceeds of disposition and the Book Value at disposition, as this generates a tax shield or liability (eventually)

Depreciation and Asset Disposal Continued...

Taxes-owed changes based on different factors with respect to disposal
(described in situations 1-3)

Cost basis	\$10,000
Market value	\$6,500
Book value	\$5,000

1. Recaptured CCA - Occurs when an asset is sold for more than the book value

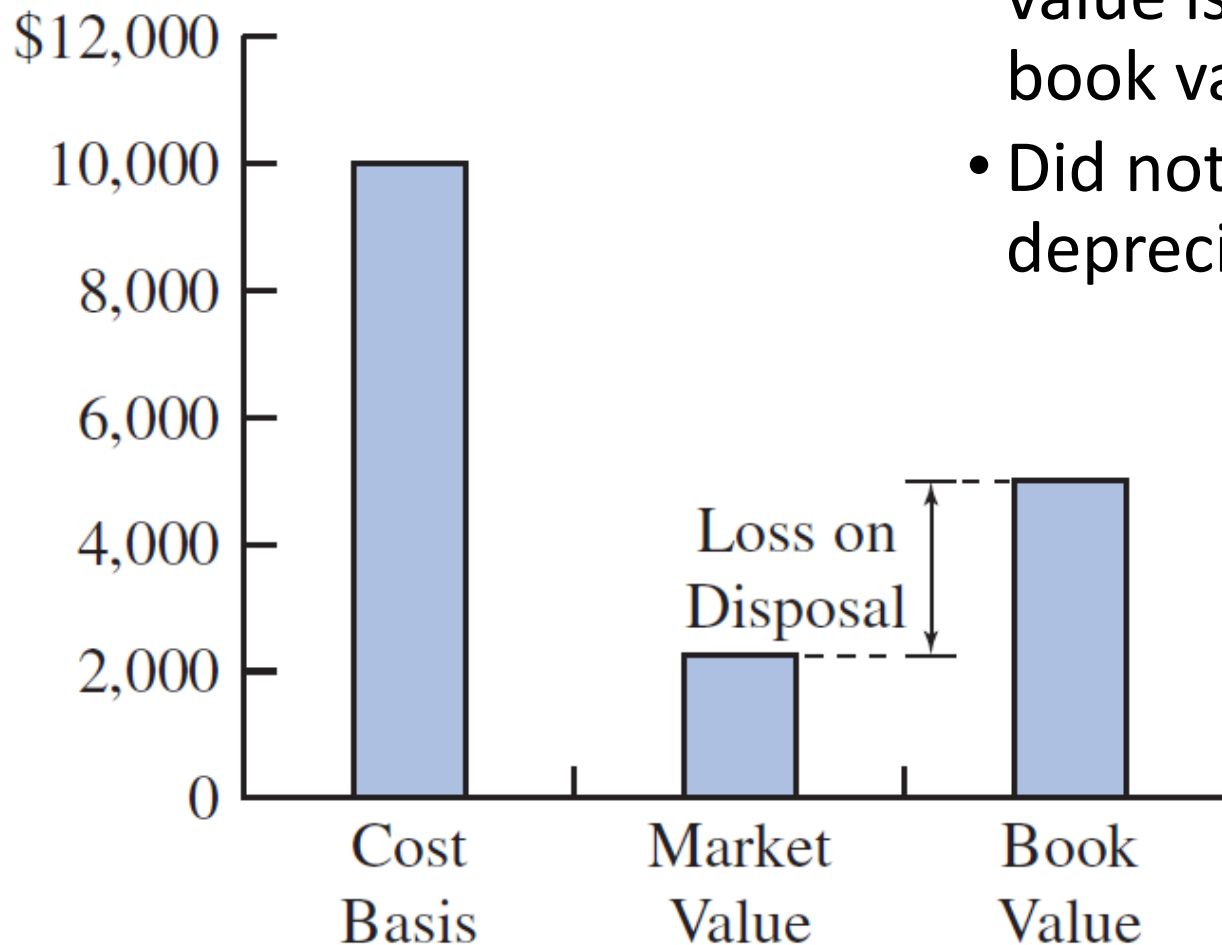


Depreciation and Asset Disposal Continued...

Cost basis	\$10,000
Market value	\$2,250
Book value	\$5,000

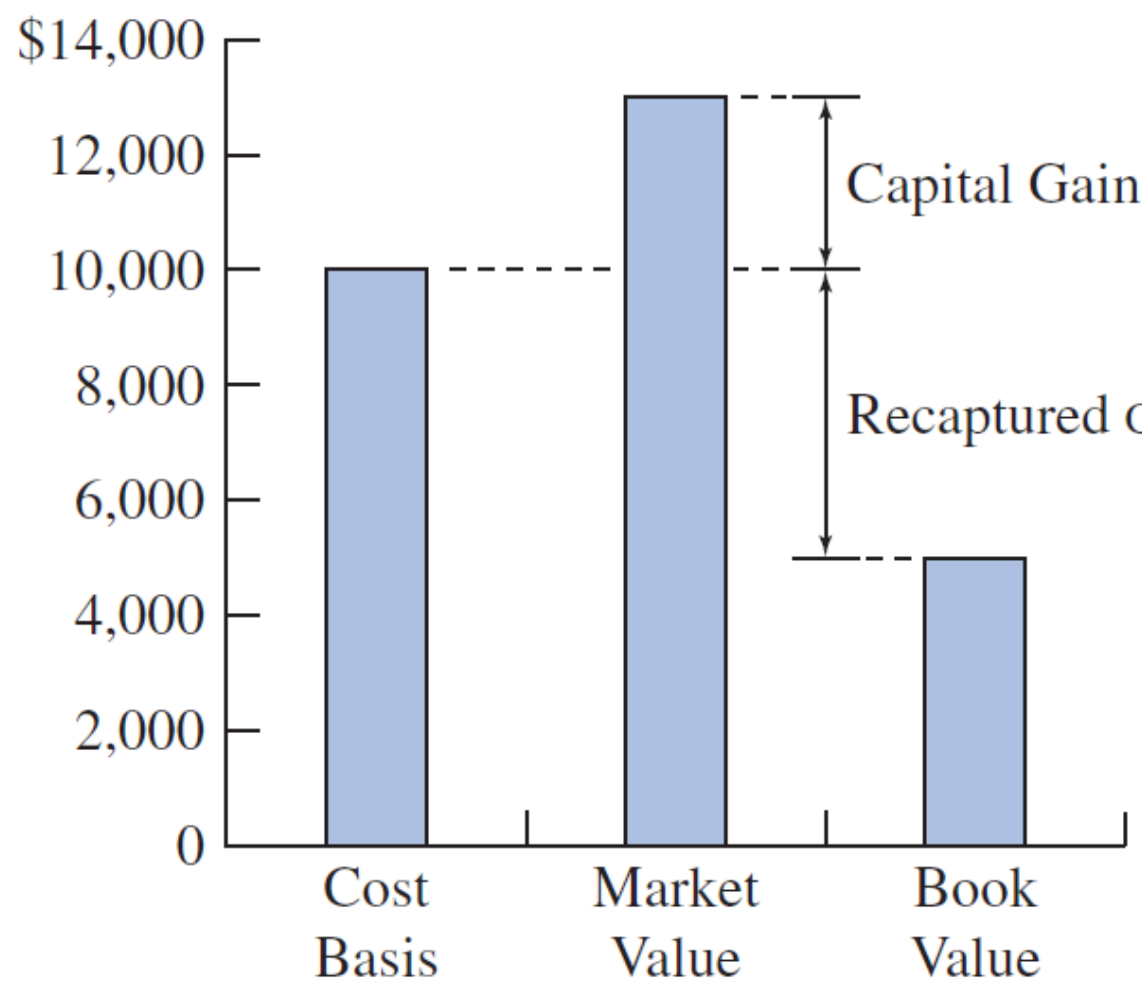
2. Loss on disposal

- Occurs when the market value is less than the book value
- Did not claim enough depreciation expense



Depreciation and Asset Disposal Continued...

Cost basis	\$10,000
Market value	\$13,000
Book value	\$5,000



3. Capital Gains

- Occur when the asset is sold for more than its original cost
- The excess over the original cost is a “capital gain.”

Capital Cost Allowance (allowable depreciation and tax shields)

- Once we've adjusted the UCC balance to reflect asset dispositions, we can calculate the CCA.
- CCA is just the UCC x CCA rate for our class
- The CCA is the allowable depreciation expense we can claim for tax purposes. Our income will be reduced by the CCA amount when determining how much tax to pay.
- Note the CCA itself is a book cost. However, the tax credits realized from the CCA are cash benefits.

CCA Example

- You are starting up a small landscaping company
- In the first year of operation, you purchase a truck for \$15,000, and various landscaping equipment for \$22,000
- In the second year, you add an extra \$5,000 worth of equipment.
- In the third year, you purchase \$4,000 more of equipment, and sell your old truck for \$7,500, purchasing a newer one for \$34,000
- For all classes, determine your CCA allowance and UCC balance for each year.

CCA Example

Class: Equipment, Class 8			Rate:	20%	Tax Rate	26.50%		
Year	Opening UCC Balance	Purchases	UCC Additions	Dispositions	Available UCC	CCA	Ending UCC Balance	Tax Shield
1	\$0	\$22,000	\$11,000	\$0	\$11,000	\$2,200	\$8,800	\$583
2	\$8,800	\$5,000	\$13,500.0	\$0	\$22,300.0	\$4,460	\$17,840.0	\$1,182
3	\$17,840	\$4,000	\$4,500.0	\$0	\$22,340.0	\$4,468	\$17,872.0	\$1,184
Class: Vehicles, Class 10			Rate:	30%	Tax Rate	26.50%		
Year	Opening UCC Balance	Purchases	UCC Additions	Dispositions	Available UCC	CCA	Ending UCC Balance	Tax Shield
1	\$0	\$15,000	\$7,500	\$0	\$7,500	\$2,250	\$5,250	\$596
2	\$5,250	\$0	\$7,500.0	\$0	\$12,750.0	\$3,825	\$8,925.0	\$1,014
3	\$8,925	\$34,000	\$17,000.0	\$7,500	\$18,425.0	\$5,528	\$12,897.5	\$1,465
	= Previous Period Ending UCC Balance	Total of all purchases for this class	1/2 of this years purchases plus unadded 1/2 from previous year	Proceeds of all dispositions	=Opening UCC banalce + UCC Additions - Dispositions	=Available UCC * CCA Rate	=Available UCC - CCA	=CCA * Tax Rate

- CCA rate source: <https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/sole-proprietorships-partnerships/report-business-income-expenses/claiming-capital-cost-allowance/classes-depreciable-property.html>