XII. DEPRECIATION

This presentation contains information, in addition to the material prepared and provided by the professor, from:

- 1. Elizabeth A. Gordon, Temple University, Jana S. Raedy, University of North Carolina, Alexander J. Sannella, Rutgers Business School, ©2016, Pearson | ISBN13: 9780132162302
- 2. Donald E. Kieso, Jerry J. Weygandt, Terry D. Warfield, Intermediate Accounting, 16th Edition
- 3. March 2016, ©2016
- 4. Doupnik T. and Perera H. INTERNATIONAL ACCOUNTING- CONT4029 (Custom Edition by Prof. Aida Lozada and Prof. Carmen Ríos. McGraw-Hill, 2014. ISBN 9781308235059.
- 5. Thimothy, D., Finn M., Gotti, G. and Perera, H. 5ed. INTERNATIONAL ACCOUNTING. Mc Graw Hill 2020, New York.
- 6. J. David Spiceland, James Sepe, Mark Nelson, Intermeiate Accounting, 6th edition, McGraw-Hill, 2014. ISBN-13: 978-0077614065 ISBN-10: 0077614062
- 7. Other: Official Websites

DEPRECIATION

PROPERTY PLANT AND EQUIPMENT (PPE)

DEPRECIATION BY COMPONENTS

US GAAP FASB ASC 410,420,845

- Allow but not Require:
- Consequently, most firms do not separate their depreciable assets into components

IFRS IAS 16

Allow but not Require:

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated separately.

http://archive.ifrs.org/Usearoundtheworld/Education/Documents/Frameworkbased%20teach ing%20materials/2014%20Stage2%20FBT_PPE_final.pdf

DEPRECIATION METHODS

US GAAP FASB ASC 410,420,845

IFRS IAS 16

- > Various depreciation methods are used in practice.
- > Specifically mentions three depreciation methods:
- > straight-line
- ➤ units-of-production
- declining balance method

COMPONENTS EXAMPLE

BUILDING

- 1. Fundation: useful life
- 2. Frame: useful life
- 3. Heating and air condition systems: machine hours

AIRPLANE

- 1. Airframe: flying hours
- 2. Engines: machine hours
- 3. Interior: useful life

DEPRECIATION: EXAMPLE

ABC uses the straight line method and useful life for all components.

\$5,000,000 to the airframe, useful life of 20 years and \$500,000 residual value.
\$4,000,000 to engines, useful life 16 years and \$200,000 residual value.
\$1,000,000 to the interior, useful life 5 years and no residual value.

What is the depreciation expense for the firts year?

IFRS:

Airframe: \$5,000,000-500,000/20=	\$225,000
Engine: \$4,000,000-200,000/16=	\$237,500
Interior: \$1,000,000/5=	<u>\$200,000</u>

\$662,500

US GAAP:

\$10,000,000-500,000-200,000/*20=

\$465,000

* example: use the highest year

\$10,000,000-500,000-200,000/**13.67 = **estimates: use an average (20+16+5= 41 years/3)

\$680,322

EXAMPLE

Components	<u>Cost</u>	<u>Useful Life</u>
1. Motor	\$100,000	5
2. *Inspection (Engine)	\$25,000	2
3. Machine	\$ <u>200,000</u> \$120,000	10

Motor- replace every 5 years Engine replace every 2 years

EXAMPLE

Components	Cost	<u>Useful Life</u>	Depreciation Expense
1. Motor	\$100,000	5	\$20,000
2. *Inspection (En	gine)\$25,000	2	\$12,500
3. Machine	\$ <u>200,000</u> \$325,000	10	<u>\$20,000</u> \$ 52,500

Motor- replace every 5 years Engine replace every 2 years *Component could be tangible or intangible



7. DEPRECIATION BY COMPONENTS