Revenue recognition (p. 68-70)

- IAS 18 revenue recognition: the seller obtains benefits of the transaction, transfers risks, control and rewards of the goods, reliable measurement.
- IAS 11 (firm construction contracts): percentage of completion method, reliable measurement.
- IFRS 15: performance obligation concept (physical goods and services separately, installation), control.

R&D

- Definitions
- R&D capitalization vs expensing
  - Research IAS 38 and SFAS 2
  - Development
- Development costs
  - IAS 38, five criteria
  - SFAS 86, 1985
- Life cycle approach
- Development costs include ...
- Consequences of expensing ...
- Types of development costs that are not capitalized.

R & D: Capitalization vs. expensing

- Research costs have to be expensed when incurred both according to IAS 38 and SFAS 2.
- According to IAS 38, development costs shall be expensed except if, and only if, an enterprise can demonstrate all of the following: (see the next slide)

Development costs under IAS 38

- technical feasibility of completing the intangible asset so that it will be available for use or sale
- its intention to complete the intangible asset and use it or sell it
- its ability to use or sell the intangible asset
- how the intangible asset will generate probable future economic benefit, e.g., that there exists a market for the output of the intangible asset or the intangible asset itself
- availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- its ability to measure reliably the expenditure attributable to the intangible asset during its development.
Return on R&D investments

<table>
<thead>
<tr>
<th>Industry</th>
<th>Return (in $) on 1 $</th>
<th>Duration of benefits (in years)</th>
<th>IRR %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals and Pharmaceuticals</td>
<td>2.6</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>Machinery and Computer HW</td>
<td>1.7</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Electrical and Electronics</td>
<td>2.0</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Transportation Vehicles</td>
<td>2.0</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Scientific Instruments</td>
<td>1.7</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Other R&amp;D Industries</td>
<td>1.8</td>
<td>6</td>
<td>20</td>
</tr>
</tbody>
</table>


R & D disclosure

- Trade-off between the costs of revealing proprietary information (loosing competitive advantage) and the resulting benefits
- Benefits:
  - more accurate share prices (expectations consistent with those of the firm)
  - showing how the R&D fits within the firms overall activities, and
  - revealing the firm’s strategic vision
  - communicating the firm’s “technology leadership”

Marketing costs (IAS 38)

- IAS 38 is very restrictive
- similarities to R&D costs
- the duration of possible benefits is shorter
- Expenditures on advertising and promotional activities are recognized as an expense (§69c)
- IAS 38 explicitly prohibits the recognition of
  - internally generated brands,
  - mastheads, publishing titles,
  - customer lists and items similar in substance

R&D and marketing costs

- Product lifecycle
- Marketing costs should always be expensed (IAS 38.63), Saunalahti
Intangible Assets

- Future benefits and reliable measurement
- Internally generated?
- Cost or revaluation model?

Property plant and equipment


- Troberg, p. 34-35
- Valuation subsequent to acquisition
- Revaluation model of PPE
- Depreciation over useful (economic) life (PPE)
- Impairment of PPE
- Impairment test (and reversal) according to US standard

Total comprehensive income and PPE

Income statement
Other comprehensive income
- Foreign currency translation on foreign subs
- Actuarial gains
- The revaluations of PPE
- \( \Delta \) in FV of financial instruments in CF hedge

Total comprehensive income

PPE (p.34): Primary model: cost, Alternative: revaluation (other comprehensive income, every 3-5 years), or both!
US GAAP does not allow revaluation model

Income Taxes – IAS 12

IAS 12 (revised in 2000) is based on the so-called balance sheet liability method.
- Obligation based on current year taxable income
- Permanent and temporary (i.e. timing) differences
Deferred tax liabilities and assets (temporary differences)

- Initially, in tax filing there is larger tax deduction than tax expense in financial reporting → liability
- Initially, in tax filing there is smaller tax deduction than tax expense in financial reporting → asset
- Temporary differences reverse over time
- Permanent differences (no tax deductability; e.g. in Finland: fines, restaurant bills with customers) never reverse
- An example: machine purchased at 60, useful life 3 years (straight line), tax depreciation 30, 20, 10

Deferred tax liability (1. year)

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>Tax reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>EBITD A</td>
<td>120</td>
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<tr>
<td>DEPR</td>
<td>20</td>
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<td>EBIT</td>
<td>100</td>
</tr>
<tr>
<td>Tax (30%)</td>
<td>30</td>
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<tr>
<td>NI</td>
<td>70</td>
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Deferred tax liability (2. year)

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<th>Tax reporting</th>
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<td>NI</td>
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Deferred tax liability (3. year)

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<tr>
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<th>Tax reporting</th>
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</tbody>
</table>
Deferred tax / Airbus group (EADS) 2013

€ 502 million represents the income tax calculated from "true and fair view" income before taxes. Split to current tax expense (paid to the tax authority because of this years taxable income) and deferred tax expense (timing difference, e.g. tax payment postponed because of more favourable tax depreciation used in the firm’s tax return).

Deferred taxes


Measurement

Deferred tax assets and liabilities shall be measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The measurement of deferred tax liabilities and deferred tax assets shall reflect the tax consequences that would follow from the manner in which the entity expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities shall not be discounted.

The carrying amount of a deferred tax asset shall be reviewed at the end of each reporting period. An entity shall reduce the carrying amount of a deferred tax asset to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilised. Any such reduction shall be reversed to the extent that it becomes probable that sufficient taxable profit will be available.