Objectives and Game Plan

- Understand some key concepts of Financial Accounting

- Appreciate the differences between cash basis and accrual accounting

- Develop a mental model for classifying types of accruals

- Practice the basic bookkeeping model
Important Financial Accounting Concepts

- Conservatism: not the same as pessimism
- Materiality: Benefit/cost trade-off
- Consistency: Contrast with uniformity
- Comparability
- Verifiability
- Revenue Recognition
- Matching Principle: Matching Efforts (costs) with Benefits (revenue)

• Further, we will make assumptions about the Economic Entity, its ability to survive as a Going Concern, and the Fiscal Period (which need not be the calendar year)
Key Conflict: Relevance v. Reliability

- Example: How should we value one-of-a-kind assets, like one of Intel’s wafer fabrication plants?
Key Conflict: Relevance v. Reliability

- Example: How to value one-of-a-kind assets?

  • Financial accounting stresses Objectivity: Verifiable and reliable information.
  
  • Does not mean accounting is “cut and dried.”
  
  • Still ample room for managerial judgment when estimating future effects under “objective rules.”
The Balance Sheet Equation

\[
\text{Assets} = \text{Liabilities} + \text{Shareholders’ Equity}
\]

\[
\text{Assets} - \text{Liabilities} = \text{Shareholders’ Equity}
\]

“own” “owe” “owners’ share of the business” (book value, residual claim)
Accounting in a Single-Period Word is “Easy”

- Cash + Cash
  Invested Returned

  0 1

- Example: Shipping Expeditions in the 15th Century
  • Ship sold at end of voyage: finite project life
  • No information available until ship returns
  • Income is simply difference between cash out and cash in
Accounting in a Multiperiod World is “Difficult”

- No pre-determined end to firm's life - going concern
- Cash invested and generated at multiple points in time
- Subsequent actions affected by prior results - feedback
- Monitoring by external investors: evaluate investment, retain/reward management
- Accrual accounting: focus on measuring performance in a given time period, independent of cash effects.
Principals of Accrual Accounting

- An attempt to measure firm performance regardless of when cash is exchanged

- Revenue Recognition:
  • Earnings process substantially complete
  • Cash collection reasonably assured

- The Matching Principle for Expenses:
  • Match efforts to the benefits generated
  • Capitalize expenditures that will benefit future periods, expense as benefits are realized
  • Recognize liabilities when efforts benefiting the current period require cash payment in the future
## Cash Collection v. Revenue Recognition

<table>
<thead>
<tr>
<th>Prior Period</th>
<th>Current Period</th>
<th>Subsequent Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash received concurrent with earning revenue</td>
<td>+ Cash (A) = + Revenue (SE) → Income Statement</td>
<td></td>
</tr>
<tr>
<td>Cash received before earning revenue</td>
<td>+ Cash (A) = + Deferred Revenue (L) → Revenue (SE) → Income Statement</td>
<td></td>
</tr>
<tr>
<td>Cash received after earning revenue</td>
<td>+ Accounts Receivable (A) = + Revenue (SE) → Income Statement</td>
<td>+ Cash (A) - A/R (A) = 0</td>
</tr>
</tbody>
</table>

Note: Deferred Revenue can also be called Advances from Customers. Both names signify that cash has been received for a service or product that hasn't been delivered.
# Cash Payment v Expense Recognition

<table>
<thead>
<tr>
<th>Prior Period</th>
<th>Current Period</th>
<th>Subsequent Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash paid concurrent with using resource to generate revenue</strong></td>
<td>- Cash (-A) = + Expense (-SE) ➔ Income Statement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Cash (-A) + Productive Asset (A) = 0</td>
<td></td>
</tr>
<tr>
<td><strong>Cash paid before using resource to generate revenue</strong></td>
<td>- Productive Asset (-A) = + Expense (-SE) ➔ Income Statement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 = + Accrued Liability (L) + Expense (-SE) ➔ Income Statement</td>
<td>- Cash (-A) = - Accrued Liability (-L)</td>
</tr>
<tr>
<td><strong>Cash paid after using resource to generate revenue</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The "Productive Asset" could be inventory, Prepaid Insurance, PP&E, etc. In the case of PP&E, we would reduce the value of the asset through the contra-asset Accumulated Depreciation. The "Accrued Liability" could be Accounts Payable, Accrued Wage Expense, Interest Payable, etc.
Temporary v Permanent Accounts

- Permanent Accounts:
  • Appear on the Balance Sheet
  • Start each period with the ending balance from the prior period

- Temporary Accounts:
  • Appear on the Income Statement
  • Start each period with a balance of $0
  • Are closed at the end of the period to the Income Summary to compute Net Income for the period
Handling Temporary Accounts in the Balance Sheet Equation (BSE) Format

Net Income = Revenues - Expenses + Gains - Losses


Therefore...
- Revenues and Gains ultimately Increase Ret. Earn.
- Expenses and Losses ultimately Decrease Ret. Earn.
- We’ll record Income Statement components directly to the Permanent Account, Retained Earnings, with a note about the reason and recognize that this is a short-cut around the use of Temporary Accounts
Exercise E5-18: Peters Company

See Example E4-19: Peters Company on pages 163-4 in the course textbook.
Exercise E5-18: Peters Company, Year 1

Cash + AR + PPRent + INV = AP + WgsPble + CC + RE

BB
1

Total Assets =

Liab + SE =
## Exercise E5-18: Peters Company, Year 2

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>Cash + AR + PPRent + INV</th>
<th>= AP + WgsPble + CC + RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>26 4 6 5 10 4 24 3</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise E5-18: Peters Company (continued)

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Cash Flow from Operations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Points

- Relevance of Accounting Measures depends on the decision context
- Most relevant measures are sometimes the least reliable: a major trade-off in accounting
- Accrual Accounting attempts to measure performance, regardless of when cash is affected
  - Tables on slides 8 and 9 provide a framework for thinking about the accrual process
- Balance Sheet Equation (BSE) as a tool for understanding events' impacts on the Financial Statements