Technical Session #2: Accounting Basics

September 15, 2019
Agenda

I. Recap: macro and market news; deals

II. Introduction to three statements
   I. Income Statement
   II. Balance Sheet
   III. Cash Flow Statement

III. Links between the statements

IV. Practice questions

V. Q&A
Income Statement

Revenue

1. Less: Cost of Goods Sold

Gross Profit

2. Less: Operating Expense

EBITDA

3. Less: D&A

EBIT (Operating Income)

   Less: Interest Expense

EBT (Earnings Before Tax)

   Less: Taxes

Net Income

1. Direct costs that go into the production of goods & services (e.g., raw material, labor, etc.)

2. Costs that a firm incur through normal course of business, but not including production of goods – SG&A = Sales, Marketing, General & Administrative

3. Accounting costs that reflect the reduction in value of tangible & intangible assets over useful life – Non-cash expenses
### Balance Sheet

<table>
<thead>
<tr>
<th>Cash</th>
<th>Assets that can be converted to cash within 1 year (e.g., Accounts Receivable, ST Investments, Inventory)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Property, Plant, &amp; Equipment (PP&amp;E) and Intangibles (goodwill, patent, licenses, etc.)</td>
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<tr>
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<td>Liabilities that must be paid off within 1 year (Accounts Payable, ST Debt)</td>
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<td>Bonds, loans, or mortgages with maturity &gt; 1 years</td>
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<td></td>
<td>Stock of a company traded on the public markets</td>
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<td>Profits that a company generates and does not redistribute to their shareholders in form of a dividend</td>
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1. **Current Assets**
   - Assets that can be converted to cash within 1 year (e.g., Accounts Receivable, ST Investments, Inventory)
   - Property, Plant, & Equipment (PP&E) and Intangibles (goodwill, patent, licenses, etc.)
   - Liabilities that must be paid off within 1 year (Accounts Payable, ST Debt)

2. **Long-Term Assets**
   - Bonds, loans, or mortgages with maturity > 1 years

3. **Total Assets**

4. **Current Liabilities**

5. **Long-Term Liabilities**

6. **Total Liabilities**

7. **Common Stock**

8. **Retained Earnings**

9. **Shareholders’ Equity**

10. **Balance Sheet Equation**

\[
\text{Assets} = \text{Liabilities} + \text{Equity}
\]
Cash Flow Statement

1. Adding back any non-cash expenses, such as D&A to cash flow from operations
2. Keep track of changes in Current Assets & Liabilities
   - Increase in assets = decrease in cash flow
   - Increase in liabilities = increase in cash flow
3. Cash used to invest in Long-Term Assets (PP&E) or generated from sale of existing assets
4. Portion of net profits paid to shareholders at discretion of management
5. Keep track of changes in Long-Term Liabilities
6. Keep track of changes in Common Stock

Net Income
Add: D&A (non-cash expenses)
Change in Working Capital
Cash Flow from Operations (CFO)
Capital Expenditures
Cash Flow from Investing (CFI)
Dividends
Cash Raised/Spent on Debt
Cash Raised/Spent on Equity
Cash Flow from Financing (CFF)
Beginning Cash
Add: Change in Cash
Ending Cash

Change in Current Assets & Liabilities
Increase in assets = decrease in cash flow
Increase in liabilities = increase in cash flow

Cash Flow from Investing (CFI)
Cash Raised/Spent on Debt
Cash Raised/Spent on Equity
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Cash Flow from Operations (CFO)
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# The Links Between Three Statements

## Income Statement
- Revenue
- Less: Cost of Goods Sold
- Gross Profit
- Less: Operating Expense
- EBITDA
- Less: D&A
- EBIT (Operating Income)
- Less: Interest Expense
- EBT (Earnings Before Tax)
- Less: Taxes
- Net Income

## Balance Sheet
- Cash
- Current Assets
- Long-Term Assets
- Total Assets
- Current Liabilities
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- Total Liabilities
- Common Stock
- Retained Earnings
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## Cash Flow Statement
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The Links Between Three Statements (Cont’d)

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**Income Statement**
- Revenue
- Cost of Goods Sold
- Gross Profit
- Operating Expense
- EBITDA
- D&A
- Operating Income
- Interest Expense
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Assets = Liabilities + Equity

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Practice Question 1: What happens when Depreciation goes up by $100?

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**Equation**
\[ \text{Assets} = \text{Liabilities} + \text{Equity} \]
Practice Question 2: What happens when Inventory goes up by $100?

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Assets = Liabilities + Equity
Practice Question 3: What happens when a company raises $100 in Debt?

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Assets = Liabilities + Equity
Practice Question 4: What happens in the beginning of Year 1 when a company buys $100 equipment with cash?
Practice Question 5: What happens in the end of Year 1 after 10% depreciation when a company buys $100 equipment with cash?

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Q&A