WHAT IS THE INCOME STATEMENT?

- ➔ The income statement is a financial report that depicts the operating performance of a company (i.e. revenues less expenses generated – i.e. profitability) over a specific period of time (typically a quarter or year).

WHY IS IT IMPORTANT?

- ➔ It facilitates the analysis of a company's growth prospects, cost structure, and profitability.
- ➔ Analysts can use the income statement to identify the components and sources ("drivers") of net earnings.

Also referred to as:

- ➲ The Consolidated Statement of Earnings
- ➲ The Profit and Loss (P&L) Statement
- ➲ Statement of Revenues and Expenses

MAJOR TYPICAL COMPONENTS & THEIR DEFINITIONS

Net Revenues	Total dollar payment for goods and services that are credited to an income statement over a particular time period.
Cost of Goods Sold	Cost of Goods sold represents a company's direct cost of manufacture (for manufacturers) or procurement (for merchandisers) of a good or service that the company sells to generate revenue.
Gross Profit	Revenues - Cost of Goods Sold
Selling, General & Administrative (SG&A)	Operating costs not directly associated with the production or procurement of the product or service that the company sells to generate revenue. Payroll, wages, commissions, meal and travel expenses, stationary, advertising, and marketing expenses fall under this line item.
Research & Development (R&D)	A company's activities that are directed at developing new products or procedures.
Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)	Gross Profit - SG&A - R&D. EBITDA is a popular measure of a company's financial performance.
Depreciation & Amortization (D&A)	The allocation of cost over a fixed asset's useful life in order to match the timing of the cost of the asset with when it is expected to generate revenue benefits.
Other Operating Expenses / Income	Any operating expenses not allocated to COGS, SG&A, R&D, D&A
Earnings Before Interest & Taxes (EBIT)	EBITDA - D&A
Interest Expense	Interest expense is the amount the company has to pay on debt owed. This could be to bondholders or to banks. Interest expense subtracted from EBIT equals earnings before taxes (EBT).
Interest Income	A company's income from its cash holdings and investments (stocks, bonds, and savings accounts).
Unusual or Infrequent Income / Expenses	Gain (loss) on sale of assets, disposal of a business segment, impairment charge, write-offs, restructuring costs.
Income Tax Expense	The tax liability a company reports on the income statement.
Net Income	EBIT - Net Interest Expense - Other Nonoperating Income - Taxes
Basic Earnings per Share (EPS)	Net income / Basic Weighted Average Shares Outstanding
Diluted EPS	Net income / Diluted Weighted Average Shares Outstanding

REVENUES

Definition

- ➔ Revenues represent proceeds from the sale of goods and services produced or offered by a company.

- ➲ You will see revenues represented on the income statement as Revenues, Sales, Net Sales or Net Revenues. We'll explain what is being "netted" out of net revenues shortly.
- ➲ Revenues are referred to colloquially as a company's top-line.

Not all income is revenue

A company may have other income streams, which are not related to its main operations:

- ⇨ Interest income earned from investments
- ⇨ Income received from a legal settlement
- ⇨ These are not recorded as revenues, but rather as *Other Income*, and accounted for on the income statement in a line item below Revenues.

Examples of revenues include:

- ➲ Sale of crude oil by ExxonMobil
- ➲ Sale of books by Amazon.com
- ➲ Sale of hamburgers by McDonald's

REVENUES

Exercise: CVS

In February 2005, CVS, a drugstore chain, recorded the following transactions:

- Sold $500m in merchandise
- Sold $100m in prescriptions
- Won a legal settlement of $400m
- Collected $20m in interest income from a bank account

Record total revenues for CVS in February 2005

REVENUES

Solution: CVS

☑ Sold $500m in merchandise

☑ Sold $100m in prescriptions

❑ Won a legal settlement of $400m

❑ Collected $20m in interest income from a bank account

Total revenue = $600m (merchandise and prescriptions)

⇨ Legal settlement and interest income are NOT part of revenues (Non-operating income)

REVENUES

Bad Debt Expense

- ➔ Recall that we mentioned that revenues are presented as Net Sales or Net Revenues on the income statement.
- ➔ This is because bad debt expense is being netted against gross revenues, and the income statement simply represents the consolidated line item as revenues, net of bad debt expense.

What is bad debt expense?

- ➔ When companies sell their products, some customers may ultimately not pay. Companies are therefore required to estimate this uncollectible amount (referred to as Bad Debt Expense) at the time of sale.
- ➔ Net revenues include the financial impact of returned goods and uncollectible payment (Bad Debt) from customers.
- ➔ Net Revenues = Gross Revenues – Bad Debt Expense

In the real world

Microsoft recorded net revenues of $36,800 million in 2004. Per the company's footnotes, we discover:

Gross sales = $36,844m

Bad debt expense = $36,844m - $36,800m = $44m

REVENUES

Revenue Recognition: To Recognize and When?

➔ Recall that accrual basis of accounting dictates that revenues must be recorded only when they are earned and measurable.

➔ Recall the Amazon.com exercise: Amazon.com received a $20 book order on 12/29/04, but it could only record it as revenue once it was shipped on 1/4/05.

➔ According to the revenue recognition principle, a company cannot record revenue until it is earned – that is, until that order is shipped to a customer and collection from that customer, who used a credit card, is reasonably assured.

➔ Deciding when to recognize revenues can be less straight-forward for some companies than for Amazon.com. For instance, how should companies engaged in long-term projects recognize revenue?

Revenue Recognition: Long-term projects

➔ For long-term projects, companies have some flexibility with respect to revenue recognition:

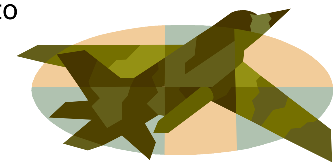
1. **Percentage of Completion method**
   ⇨ Revenues are recognized on the basis of the percentage of total work completed during the accounting period.

2. **Completed Contract method**
   ⇨ Rarely used in the U.S., this method allows revenue recognition only once the entire project has been completed.

REVENUES

Exercise: Boeing

On January 12, 2005, Boeing agreed to deliver 6 Boeing airplanes to Bavaria Aircraft Leasing for $330 million. Delivery of the airplanes begins in 2005 and extends through 2007. Boeing is paid upon delivery of each plane.



Assuming Boeing uses the percentage of completion method, when should Boeing recognize $330 million of revenues?

- ❑ On January 12, 2005 – announcement date of this contract
- ❑ Sometime during the 2005-2007 period – as it delivers each of these planes to the customer
- ❑ At the end of 2007 – when all of the planes have been delivered
- ❑ In 2008 – when all six airplanes are in service

REVENUES

Solution: Boeing

- ❑ On January 12, 2005 – announcement date of this contract
- ☑ Sometime during the 2005-2007 period – as it delivers each of these planes to the customer
- ❑ At the end of 2007 – when all of the planes have been delivered
- ❑ In 2008 – when all six airplanes are in service

REVENUES

Expense Recognition & Accrual Basis of Accounting

➔ When should Boeing record costs associated with producing those six airplanes?

The Matching Principle

➔ The Matching Principle states that expenses should be “matched” to revenues. In other words, the costs of manufacturing a product are matched to the revenue generated from that product during the same period.

Matching principle in action

- Costs associated with the production of the book by Amazon.com must be recorded in the same period as the revenue from its sale.
- Costs associated with the production of airplanes by Boeing must be recorded in the same period as the revenue from their sale.

REVENUES

Putting It All Together – The Accrual Basis of Accounting

➔ Revenues and expenses are recognized and recorded when *an economic exchange occurs,* not necessarily when cash is exchanged.

➔ This is the core principle of the accrual basis of accounting, which measures a company's performance by recognizing economic events regardless of when cash transactions happen.

Why use accrual accounting?

➔ Accrual accounting presents a more accurate depiction of a company's operations.

➔ In the case of Boeing, its recognition of $330 million of revenues will likely take place in regular intervals, in step with the completion of airplane production and delivery.

➔ Accrual accounting attempts to present a more accurate depiction of a company's operating performance by matching costs with revenues.

➔ For the purposes of financial analysis, the matching principle facilitates making projections of future results.

What if the accrual concept were not used?

➲ In the Boeing example, Boeing presumably had to purchase raw materials (metal, plane parts, etc.) some time ago, before *any* revenues from its contract with Bavaria Leasing were recognized.

➲ If it did not match revenues with expenses, it would have reported the material costs back when they were acquired on their financial statements. The financials would show a company with high costs and no revenues.

➲ This, of course, would not be an accurate depiction of the company's profitability because we know that Boeing bought those raw materials for the purpose of fulfilling an order which will generate future revenues.

➲ By matching costs with revenues, the accrual concept strives to more accurately depict a company's operating results.

REVENUES

Accrual Versus Cash Accounting – What's the Difference?

- Although the benefits of the accrual method should by now be apparent, it does by definition have the limitation that analysts cannot track objectively the movement of cash.

- Cash accounting *objectively* recognizes revenues when cash is received and records costs when cash is paid out; accrual accounting involves *subjectivity* in regards to the allocation of revenues and expenses to different periods.

- Public companies are required to use accrual accounting in accordance with GAAP. Cash accounting may be used by small businesses (a coffee shop) and is used by U.S. federal government in its budget reporting.

- The cash flow statement, one of the three principal financial statements, allows analysts to reconcile these differences.

	Cash Accounting	Accrual Accounting
Purpose	Track movement of cash	Allocate revenues and expenses to create a more accurate depiction of operations
Revenue Recognition	Cash is received	Economic exchange is almost or fully complete
Expense Recognition	Cash is paid out – could be in a different period from revenue recognition	Expenses associated with a product must be recorded during the same period as revenue generated from it (Matching Principle)
Judgment	Movement of cash is *objective*	Allocation of revenues and expenses to different periods is *subjective*
Key Takeaway	Under accrual accounting, some revenues and expenses are reported in periods that are different from those in which cash was actually received or spent!	

REVENUES

Revenue manipulation

- Revenue recognition cannot be performed completely accurately, and under U.S. GAAP, company management must therefore utilize conservative estimates and judgments.
- However, companies' flexibility in revenue recognition creates potential for manipulation in the form of increased revenue through the use of improper techniques.
- Revenue recognition methods are almost always explained in the Notes to Consolidated Statements and must be read carefully!

In the real world – TSAI in 1998

- Software maker TSAI sold 5-year license agreements for its software.
- In accordance with conservative revenue recognition rules, the company only recorded revenues from these agreements when the customers were billed through the course of the 5-year agreement.
- The company began experiencing slowing sales in 1998. To hide the problem, it changed its revenue recognition practices to record nearly 5 years' worth of revenues upfront, thereby artificially boosting sales.
- The gimmick caught up to the company a year later when investors compared 1999 results to 1998 results and saw a 20% decline in revenues.

COST OF GOODS SOLD

Definition

- ➔ Cost of Goods Sold, often referred to as COGS or CGS, represents a company's direct cost of manufacture (for manufacturers) or procurement (for merchandisers) of a good or service that the company sells to generate revenue.

COGS do not include administrative costs

- ➔ Costs such as administrative and marketing expenses which cannot be directly attributed to the manufacture of products are not included in COGS.
- ➔ Those costs are included under Selling, General & Administrative Expenses (discussed in the following section).

Examples of COGS

- ➲ Raw material costs
- ➲ Direct factory labor
- ➲ Delivery costs
- ➲ Any other costs directly associated with the generation of revenue