

# Understanding Financial Statements

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Engineering Staff College of India



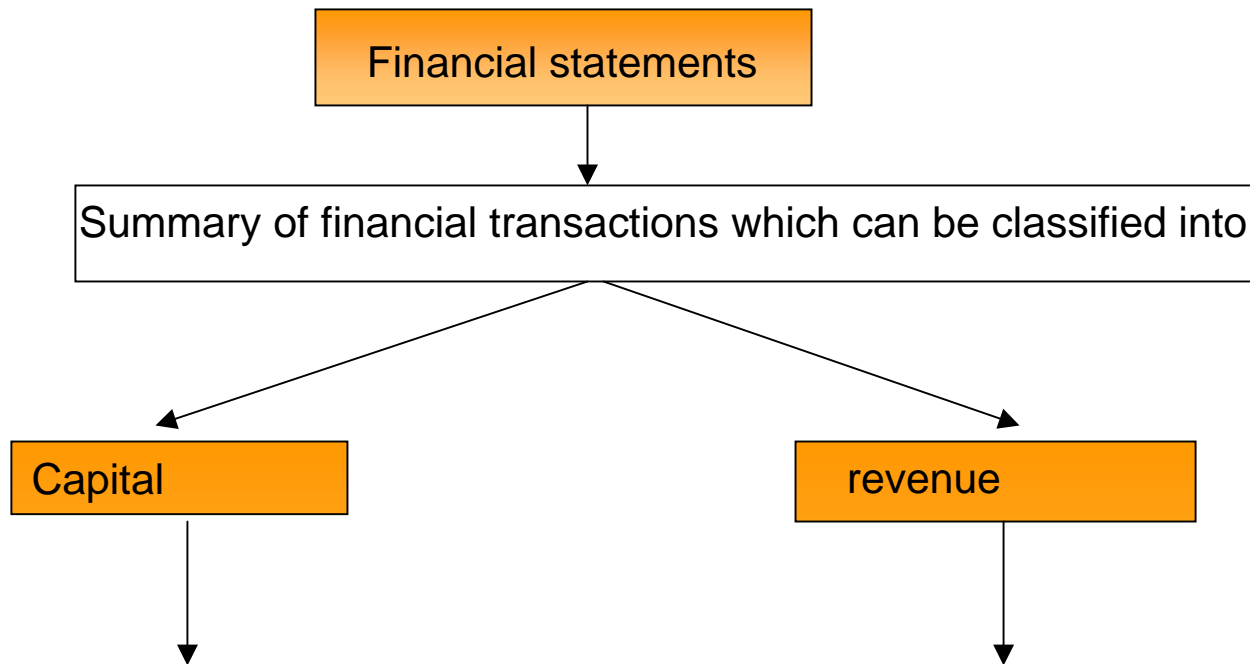
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# Composition of financial statements

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Items of capital nature are reflected in the

Items of revenue nature are reflected in the

Balance Sheet

Profit & Loss account

The impact on Cash Balances due to the operations and financing activities during the period

Cash Flow Statement

# FINANCIAL STATEMENTS

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- Balance Sheet
  - Value of assets and Liabilities in a MOMENT of time
- Profit and Loss Account
  - Value of transactions impacting the value of the assets and liabilities during A PERIOD of time
- Cash Flow Statement
  - Summarises the impact on CASH balances , independent of valuation
- Notes to the Accounts & Schedules

# Users of financial statements

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- Lenders
- Employees (potential employees)
- Suppliers
- Managers
- Bankers
- Financial planners
- Investors
- Regulators

# Elements of financial statements

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- Financial statements portray the effects of financial transactions by grouping these into broad classes according to their economic characteristics.
  - Assets
  - Liabilities
  
  - Income
  - Expenditure , all impacting
  - **Equity**

# Assets

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- Asset is the resource controlled by the enterprise as a result of past events and from which benefits are expected to flow to the enterprise.
- Example
  - ▣ Plant and machinery, Buildings, office equipments etc.,

# Liability

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- Liability is a present obligation of the enterprise arising from past events, settlement of which is expected to result in out flow from the enterprise of resources embodying economic benefits
- Example
  - ▣ Long term loans, working capital loans, overdrafts, public deposits etc.

# Equity

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- Equity is the residual interest in the assets of the enterprise after deducting all its liabilities.

# Recognition of the elements of financial statements

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- Recognition is the process of incorporating an item in the balance sheet or income statement.
  - For example, if an item meets the definition of expense, it cannot be shown as an asset.
  - Customer Deposits are obligations of the enterprise which have to be returned, unless it is certain that the unclaimed deposits do not have to be returned

# Recognition of the elements of financial statements

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- Financial statement element should be recognised if
  - It is probable that future economic benefit associated with the item will flow to or from the enterprise, and
  - The item has a cost or value that can be measured with reliability.

# Measurement of the financial statement elements

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## □ Historical cost

- The assets and liabilities are recorded at the values at which they are acquired or incurred.

## □ Current cost

- The assets and liabilities are recorded at the values as if they are acquired or incurred currently.

## □ Realisable value

- The assets and liabilities are recorded at the value which can be obtained if they are sold or settled.

## □ Present value

- The present discounted value of the future net cash inflows or outflows.

# Basis for measurement

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- The basis for measuring the items in the financial statement should be
  - Reliability
  - Relevance
  - Consistency
  - Comparability
  - Understandability and
  - Standardisation.

# Accounting Environment

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- GAAP
- Companies Act
- Income Tax Act
- ESSAR
- Accounting Standards
- Guidelines & Opinions Of Expert Committees
- Regulators
- Accounting Policies of the Company

# Accounting standards

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- Accounting standards are developed to present a
  - Fair
  - Clear and
  - Complete financial statement.

# Accounting Standards

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- Why do we need Accounting Standards?
- Who develops Accounting Standards?
- How are they Introduced?
- Are they mandatory?
- Do they cover all transactions?
- Are Indian Accounting Standards contemporary?

# Fundamental Accounting Assumptions

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## □ Accrual basis

- Effects of transactions are recognised when they occur and not when their cash or cash equivalent is received or paid.

## □ Going concern

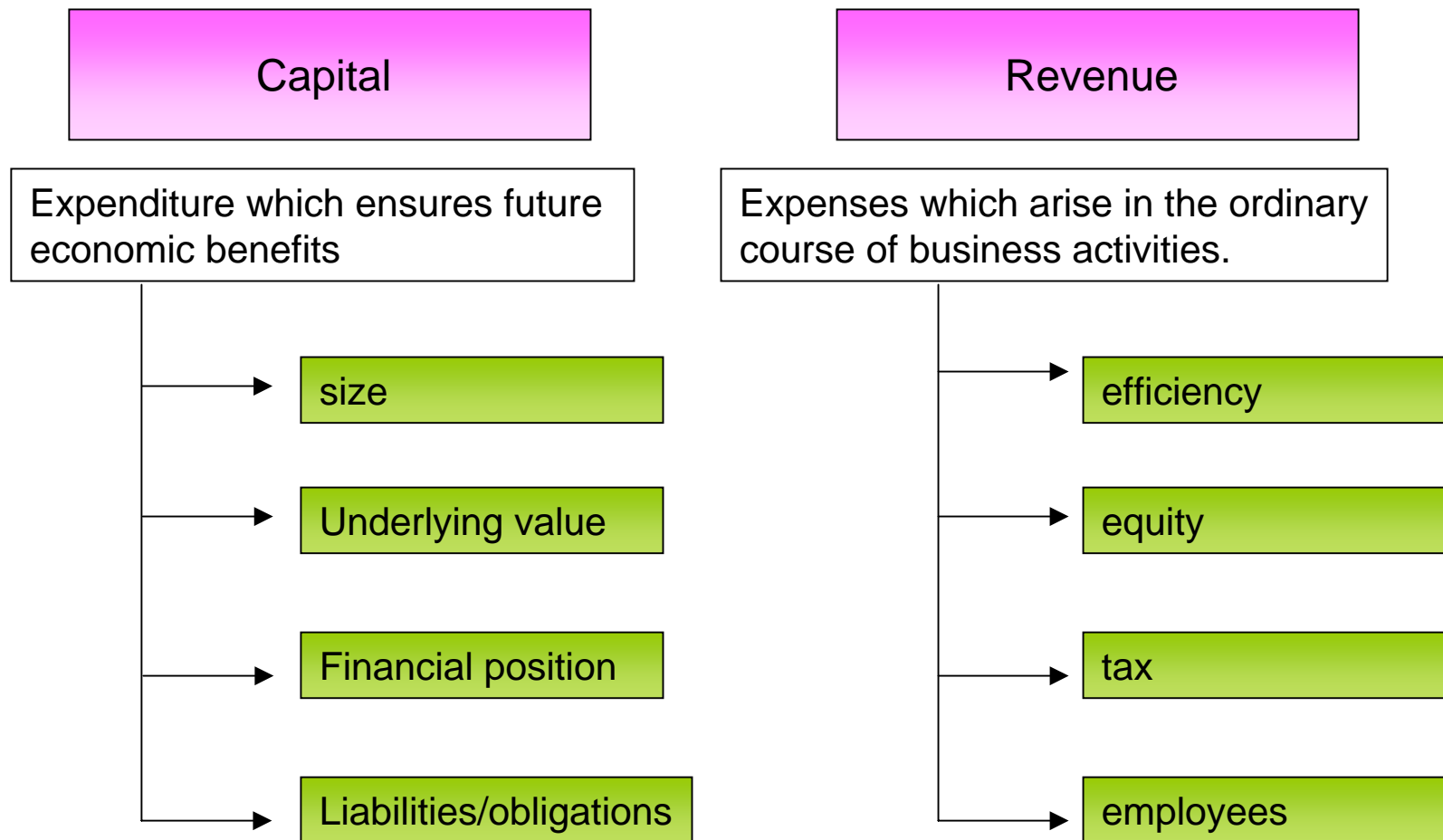
- Enterprise will continue for the foreseeable future and has no intention to curtail its operations.

## □ Consistency

- To achieve comparability of financial statements, accounting standards are consistently followed.

# Distinction of capital and revenue

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# R & D expense – an example

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## □ As Expense

Income	1000
Expense	500
R&D	<u>200</u>
Profit	300

Assets	800
Liabilities	400
Equity (Net Worth)	400

## □ As Asset

Income	1000
Expense	500
Profit	500

Assets	800
R & D exp	200
Liabilities	400
Equity (Net Worth)	600

# Items of capital and revenue

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- Capital
  - Land, building, Plant & Machinery
- Revenue
  - Salaries, Purchases of Inventory, Rent
- Some Issues
  - Pre Incorporation
  - Advertisement
  - Research & Development
  - Asset Repairs
  - Foreign Exchange Differences

# Balance sheet of a Power Utility company



## BALANCE SHEET AS AT 31st MARCH 2005

	SCHEDULE NO.	31.03.2005	Rs. million 31.03.2004
<b>SOURCES OF FUNDS</b>			
<b>SHAREHOLDERS' FUNDS</b>			
Capital	1	82,455	78,195
Reserves and surplus	2	335,308	277,376
		<u>417,763</u>	<u>355,501</u>
Deferred Revenue - on account of Advance Against Depreciation	3	3,374	1,591
Development Surcharge Fund		-	3,784
<b>LOAN FUNDS</b>			
Secured loans	4	44,407	45,844
Unsecured loans	5	126,471	108,684
		<u>170,878</u>	<u>154,528</u>
Deferred Tax Liability (Net)		50,570	52,280
Less: Recoverable		50,569	52,279
		<u>1</u>	<u>1</u>
<b>TOTAL</b>		<u><b>592,016</b></u>	<u><b>515,405</b></u>
<b>APPLICATION OF FUNDS</b>			
<b>FIXED ASSETS</b>			
Gross Block	6	431,062	400,281
Less: Depreciation		207,914	187,736
Net Block		<u>223,148</u>	<u>212,545</u>
Capital Work-in-Progress	7	67,063	56,413
Construction stores and advances	8	32,222	18,540
		<u>322,433</u>	<u>287,498</u>
<b>INVESTMENTS</b>	9	<u>207,977</u>	<u>173,380</u>
<b>CURRENT ASSETS, LOANS AND ADVANCES</b>			
Inventories	10	17,777	17,380
Sundry debtors	11	13,747	4,699
Cash and bank balances	12	60,783	6,091
Other current assets	13	9,714	80,019
Loans and advances	14	27,052	27,279
		<u>129,073</u>	<u>135,468</u>
<b>LESS: CURRENT LIABILITIES AND PROVISIONS</b>			
Liabilities	15	52,306	65,244
Provisions	16	15,161	15,697
		<u>67,467</u>	<u>80,941</u>
Net current assets		<u>61,606</u>	<u>54,527</u>
<b>MISCELLANEOUS EXPENDITURE</b> (to the extent not written off or adjusted)			
	17	-	-
<b>TOTAL</b>		<u><b>592,016</b></u>	<u><b>515,405</b></u>
Contingent liabilities	18		
Notes on accounts	28		
Schedules 1 to 28 and accounting policies form integral part of accounts.			

# Profit and loss account

## PROFIT & LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH 2005

	SCHEDULE NO.	Current Year	Rs. million Previous Year
<b>INCOME</b>			
Sales	19	225,402	188,491
Energy internally consumed		248	193
Provisions written back	20	6,235	9,648
Other income	21	23,575	61,310
<b>Total</b>		<b>255,460</b>	<b>259,642</b>
<b>EXPENDITURE</b>			
Fuel		137,235	122,150
Employees' remuneration and benefits	22	8,835	8,835
Generation, administration & other expenses	23	12,096	9,813
Depreciation		19,584	20,232
Provisions	24	75	5,835
Interest and finance charges	25	16,955	33,697
<b>Total</b>		<b>194,780</b>	<b>200,562</b>
<b>Profit before Tax and Prior Period Adjustments</b>		<b>60,680</b>	<b>59,080</b>
Prior period income/ expenditure (net)	26	(102)	183
<b>Profit before tax</b>		<b>60,782</b>	<b>58,897</b>
Provision for current tax		10,058	8,682
Less: Income tax recoverable		7,346	2,393
		<b>2,712</b>	<b>6,289</b>
<b>Profit after current tax</b>		<b>58,070</b>	<b>52,608</b>
Provision for Deferred tax		(1,710)	7,901
Less: Deferred tax recoverable		(1,710)	7,901
		-	-
<b>Profit after tax</b>		<b>58,070</b>	<b>52,608</b>
Balance brought forward		566	681
Write back from Bond Redemption Reserve		17	584
Write back from Foreign Project Reserve		2	-
Balance available for appropriation		58,655	53,873
Transfer to Bonds Redemption Reserve		2,351	2,067
Transfer to Capital Reserve		22	30
Transfer to General Reserve		33,000	39,000
Dividend			
- Interim		9,895	-
- Proposed		9,895	10,823
Tax on Dividend			
- Interim		1,292	-
- Proposed		1,388	1,387
<b>Balance carried to Balance Sheet</b>		<b>812</b>	<b>566</b>
<b>Incidental expenditure during construction</b>	27		
Earning Per Share (Equity shares, face value Rs.10/- each) - Basic and Diluted		7.26	6.73

## CASH FLOW STATEMENT FOR THE YEAR ENDED 31ST MARCH 2005

# Cash flow statement

	Current Year	Rs. Million Previous Year
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Net Profit before tax and Prior Period Adjustments	60,680	59,080
Adjustment for:		
Depreciation	20,139	20,232
Provisions	75	5,835
Deferred revenue on account of Advance Against Depreciation	1,783	1,320
Interest charges	9,740	10,107
Guarantee Commission & other Finance charges	1,597	432
Interest/Income on Bonds/Investment	(14,991)	(35,930)
Prior Period Adjustments (Net)	102	(183)
Dividend Income	(117)	(95)
Provisions Written Back	(6,235)	(9,648)
Others (Bonds issue and Servicing Expenses)	18	119
	12,111	(7,811)
<b>Operating Profit before Working Capital Changes</b>	<b>72,791</b>	<b>51,269</b>
Adjustment for:		
Trade and Other Receivables	(2,835)	(12,159)
Inventories	(408)	239
Trade Payables and Other Liabilities	(16,309)	27,489
Loans and Advances	3,264	(6,562)
Other Current Assets	(417)	(111)
	(16,705)	8,896
<b>Cash generated from operations</b>	<b>56,086</b>	<b>60,165</b>
Direct Taxes Paid	(12,959)	(5,115)
Income Tax Recoverable	7,346	2,393
<b>Net Cash from Operating Activities - A</b>	<b>50,473</b>	<b>57,443</b>
<b>B. CASH FLOW FROM INVESTING ACTIVITIES</b>		
Purchase of Fixed Assets	(53,742)	(46,450)
Purchase of Investments	(34,167)	(770)
Investment in Subsidiaries/Joint Ventures	(430)	(216)
Loans & Advances to Subsidiaries	(52)	(36)
Development Surcharge Account	(1,358)	1,022
Interest/Income on Bonds/Investment Received	25,453	22,984
Dividend Received	117	95
<b>Net cash used in Investing Activities - B</b>	<b>(64,179)</b>	<b>(23,371)</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Proceeds from issue of Share Capital (Including Premium)	26,841	37,949
Proceeds from Long Term Borrowings	29,592	(15,578)
Repayment of Long Term Borrowings	(13,242)	(10,023)
Interest Paid	(9,755)	(432)
Guarantee Commission & other Finance charges Paid	(1,597)	(3,080)
Dividend Paid	(20,718)	(395)
Tax on Dividend	(2,679)	(304)
Others (Equity/Bonds issue and Servicing Expenses)	(304)	(119)
<b>Net Cash flow from Financing Activities - C</b>	<b>8,138</b>	<b>8,322</b>
<b>D. OTHERS</b>		
Intangibles - D	-	63
<b>Net Increase/Decrease in Cash and Cash equivalents (A+B+C+D)</b>	<b>(5,568)</b>	<b>42,457</b>
Cash and cash equivalents (Opening balance) *	66,351	23,894
Cash and cash equivalents (Closing balance) *	60,783	66,351

NOTES: Cash and Cash Equivalents consists of Cash in Hand, Balance with Banks, Public Deposit Account and interest accrued thereon.

Previous year's figures have been regrouped/rearranged wherever necessary.

\* Includes Rs. 11 Million deposited as security with Government Authorities as per court orders.

# Standardized Financial Statements

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- Common-Size Balance Sheets
  - Compute all accounts as a percent of total assets
- Common-Size Income Statements
  - Compute all line items as a percent of sales
- Standardized statements make it easier to compare financial information, particularly as the company grows
- They are also useful for comparing companies of different sizes, particularly within the same industry

# Ratio Analysis

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- ❑ Ratios recognise the symbiotic relationships of various items of the Financial Statements
- ❑ Ratios also allow for better comparison through time or between companies
- ❑ As we look at each ratio, ask yourself what the ratio is trying to measure and why is that information important
- ❑ Ratios are used both internally and externally

# Categories of Financial Ratios

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- Short-term solvency or liquidity ratios
- Long-term solvency or financial leverage ratios
- Asset management or turnover ratios
- Profitability ratios
- Market value ratios

# Computing Liquidity Ratios

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- Current Ratio =  $CA / CL$ 
  - $2256 / 1995 = 1.13$  times
  
- Quick Ratio =  $(CA - \text{Inventory}) / CL$ 
  - $(2256 - 1995) / 1995 = .1308$  times
  
- Cash Ratio =  $\text{Cash} / CL$ 
  - $696 / 1995 = .35$  times
  
- NWC to Total Assets =  $NWC / TA$ 
  - $(2256 - 1995) / 5394 = .05$
  
- Interval Measure =  $CA / \text{average daily operating costs}$ 
  - $2256 / ((2006 + 1740)/365) = 219.8$  days

# Computing Long-term Solvency Ratios

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- Total Debt Ratio =  $(TA - TE) / TA$ 
  - $(5394 - 2556) / 5394 = 52.61\%$
  
- Debt/Equity =  $TD / TE$ 
  - $(5394 - 2556) / 2556 = 1.11$  times
  
- Equity Multiplier =  $TA / TE = 1 + D/E$ 
  - $1 + 1.11 = 2.11$
  
- Long-term debt ratio =  $LTD / (LTD + TE)$ 
  - $843 / (843 + 2556) = 24.80\%$

# Computing Coverage Ratios

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- Times Interest Earned =  $\text{EBIT} / \text{Interest}$ 
  - $1138 / 7 = 162.57$  times
  
- Cash Coverage =  $(\text{EBIT} + \text{Depreciation}) / \text{Interest}$ 
  - $(1138 + 116) / 7 = 179.14$  times

# Computing Inventory Ratios

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- Inventory Turnover = Cost of Goods Sold / Inventory
  - $2006 / 301 = 6.66$  times
  
- Days' Sales in Inventory =  $365 / \text{Inventory Turnover}$ 
  - $365 / 6.66 = 55$  days

# Computing Receivables Ratios

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- Receivables Turnover = Sales / Accounts Receivable
  - $5000 / 956 = 5.23$  times
  
- Days' Sales in Receivables =  $365 /$  Receivables Turnover
  - $365 / 5.23 = 70$  days

# Computing Total Asset Turnover

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- Total Asset Turnover = Sales / Total Assets
  - $5000 / 5394 = .93$
  - It is not unusual for  $TAT < 1$ , especially if a firm has a large amount of fixed assets
  
- NWC Turnover = Sales / NWC
  - $5000 / (2256 - 1995) = 19.16$  times
  
- Fixed Asset Turnover = Sales / NFA
  - $5000 / 3138 = 1.59$  times

# Computing Profitability Measures

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- Profit Margin = Net Income / Sales
  - $689 / 5000 = 13.78\%$
  
- Return on Assets (ROA) = Net Income / Total Assets
  - $689 / 5394 = 12.77\%$
  
- Return on Equity (ROE) = Net Income / Total Equity
  - $689 / 2556 = 26.96\%$

# Computing Market Value Measures

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- Market Price = \$87.65 per share
- Shares outstanding = 190.9 million
- PE Ratio = Price per share / Earnings per share
  - $87.65 / 3.61 = 24.28$  times
- Market-to-book ratio = market value per share / book value per share
  - $87.65 / (2556 / 190.9) = 6.56$  times

# Why Evaluate Financial Statements?

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## □ Internal uses

- Performance evaluation – compensation and comparison between divisions
- Planning for the future – guide in estimating future cash flows

## □ External uses

- Creditors
- Suppliers
- Customers
- Stockholders

# Potential Problems

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- ❑ There is no underlying theory, so there is no way to know which ratios are most relevant
- ❑ Benchmarking is difficult for diversified firms
- ❑ Globalization and international competition makes comparison more difficult because of differences in accounting regulations
- ❑ Varying accounting procedures, i.e. FIFO vs. LIFO
- ❑ Different fiscal years
- ❑ Extraordinary events