Financial Formulas

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To assist you in your financial applications, COMPUSTAT (North America) has developed a number of predefined formulas and calculations. These commonly used formulas are by no means all-inclusive; rather, they offer a starting point upon which you can expand.

Due to the availability of certain data, not all of the calculations can be applied to all companies. However, the calculations are designed to help you obtain a basic understanding of COMPUSTAT (North America) data, their definitions, and their usage.

Within the equations, numbers shown in a different typeface and boldface (for example, 100) are actual values and do **not** refer to data item numbers. When doing calculations based on ratios, take into account annual and quarterly time periods. Be aware of time period references (subscript t, t-1, etc.) in these calculations.

Period information refers to quarterly calculations that include quarterly items that return year-to-date data. This is because the quarterly data items used in the calculation are cash flow data, which is year-to-date information.

Formulas Used in Financial Calculations

Legend

Period information

	Annual Data Item #	Quarterly Data Item #
Statements of Changes in Financial Position	on (Total \$)	

Cash Flow (\$ millions)

Defi	nitic	n 1

Income Before Extraordinary Items *plus* Depreciation and 123 + 125 • 76 + 77 Amortization

Definition 2

Income Before Extraordinary Items *plus* Depreciation and Amortization *plus* Deferred Taxes *plus* Equity in Net Loss (Earnings) *plus* Extraordinary Items and Discontinued Operations *plus* Minority Interest (Income Account)

Definition 3

Income Before Extraordinary Items *plus* Depreciation and Amortization *plus* Deferred Taxes *plus* Equity in Net Loss (Earnings) (Statement of Cash Flows) *plus* Extraordinary Items and Discontinued Operations

$$123 + 125 + 126 + 106 + \bullet 76 + 77 + 79 + 80 + 78$$

Statements of Changes in Financial Position (\$ per Share)

	Annual Data Item #	Quarterly Data Item #
Capital Expenditures Capital Expenditures (Statement of Cash Flows) divided by (Common Shares Used to Calculate Earnings per Share	128/(54 * 27)	90/(15 * 17)
(Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)		
Cash Flow		
Definition 1 (Income Before Extraordinary Items (Statement of Cash Flows) <i>plus</i> Depreciation and Amortization (Statement of Cash Flows)) <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(123 +125)/(54 * 27) •	(76 + 77)/(15 * 17)
Definition 2 (Income Before Extraordinary Items (Statement of Cash Flows) plus Depreciation and Amortization (Statement of Cash Flows) plus Deferred Taxes (Statement of Cash Flows) plus Equity in Net Loss (Earnings) (Statement of Cash Flows) plus Extraordinary Items and Discontinued Operations (Statement of Cash Flows) plus Minority Interest (Income Account)) divided by(Common Shares Used to Calculate Earnings per Share (Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)	(123 + 125 + 126 + 106 + 124 + 49)/(54 * 27)	NA
Definition 3 (Income Before Extraordinary Items (Statement of Cash Flows) plus Depreciation and Amortization (Statement of Cash Flows) plus Deferred Taxes (Statement of Cash Flows) plus Equity in Net Loss (Earnings) (Statement of Cash Flows) plus Extraordinary Items and Discontinued Operations (Statement of Cash Flows)) divided by (Common Shares Used to Calculate Earnings per Share (Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)	(123 + 125 + 126 + 106 + 124)/(54 * 27)	7 (76 + 77 + 79 + 80 + 78)/(15 * 17)
Equity in Earnings per Share		
Equity in Net Loss (Earnings) (Statement of Cash Flows) divided by (Common Shares Used to Calculate Earnings per Share (Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)	106/(54 * 27)	80/(15 * 17)

Income Statement (Total \$)

	Annual Data Item #	Quarterly Data Item #
Cash Flow (\$ millions)		
Income Before Extraordinary Items <i>plus</i> Depreciation and Amortization	18 + 14	8 + 5
Preferred Dividend Coverage		
Income Before Extraordinary Items <i>divided by</i> Dividends – Preferred	18/19	8/24
Pretax Income Available for Interest		
Pretax Income plus Interest Expense	170 + 15	23 + 22
Tax Rate		
Income Taxes - Total divided by Pretax Income	(16/170) * 100	(6/23) * 100

Income Statement (\$ per Share)

	Annual Data Item #	Quarterly Data Item #
Cash Flow		
(Income Before Extraordinary Items <i>plus</i> Depreciation and Amortization) <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(18 + 14)/(54 * 27)	(8 + 5)/(15 * 17)
Depreciation and Amortization		
Depreciation and Amortization divided by (Common Shares Used to Calculate Earnings per Share (Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)	14/(54 * 27)	5/(15 * 17)
Discontinued Operations		
Discontinued Operations <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	66/(54 * 27)	33/(15 * 17)

Income Statement (\$ per Share) (cont.)

	Annual Data Item #	Quarterly Data Item #
Earnings per Share (Diluted)		
Excluding Extraordinary Items Earnings per Share (Diluted) – Excluding Extraordinary Items <i>divided by</i> Adjustment Factor (Cumulative) by ExDate	57/27	9/17
Including Extraordinary Items Earnings per Share (Diluted) – Including Extraordinary Items <i>divided by</i> Adjustment Factor (Cumulative) by Ex- Date	169/27	7/17
Earnings per Share (Basic)		
Excluding Extraordinary Items Earnings per Share (Basic) – Excluding Extraordinary Items <i>divided by</i> Adjustment Factor (Cumulative) by Ex- Date	58/27	19/17
Excluding Extraordinary Items – 12-Months Moving		
Earnings per Share (Basic) – Excluding Extraordinary Items – 12-Months Moving <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	27/17
Including Extraordinary Items Earnings per Share (Basic) – Including Extraordinary Items divided by Adjustment Factor (Cumulative) by Ex-Date	53/27	11/17
Equity in Earnings		
Equity in Earnings <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	55/(54 * 27)	NA
Extraordinary Items		
Extraordinary Items <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	192/(54 * 27)	119/(15 * 17)
Extraordinary Items and Discontinued Operations		
Extraordinary Items and Discontinued Operations <i>divided</i> by (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	48/(54 * 27)	26/(15 * 17)

Income Statement (\$ per Share) (cont.)

	Annual Data Item #	Quarterly Data Item #
Interest Expense		
Interest Expense <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	15/(54 * 27)	22/(15 * 17)
Labor and Related Costs		
Labor and Related Expenses <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	42/(54 * 27)	NA
Nonoperating Income (Expense)		
Nonoperating Income (Expense) divided by (Common Shares Used to Calculate Earnings per Share (Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)	61/(54 * 27)	31/(15 * 17)
Operating Income After Depreciation		
Operating Income After Depreciation divided by (Common Shares Used to Calculate Earnings per Share (Basic) multiplied by Adjustment Factor (Cumulative) by Ex-Date)	178/(54 * 27)	(21 – 5)/(15 * 17)
Operating Income Before Depreciation		
Operating Income Before Depreciation <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	13/(54 * 27)	21/(15 * 17)
Operating Income Before Depreciation (Restated)		
Sales (Restated) <i>minus</i> Cost of Goods Sold (Restated) <i>minus</i> Selling, General, and Administrative Expense (Restated)	117-131-132	NA
Pension Expense		
Pension and Retirement Expense <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	43/(54 * 27)	NA

Income Statement (\$ per Share) (cont.)

	Annual Data Item #	Quarterly Data Item #
Pretax Income		
Pretax Income <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	170/(54 * 27)	23/(15 * 17)
Research and Development Expense		
Research and Development Expense <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	46/(54 * 27)	4/(15 * 17)
Sales (Net)		
Sales (Net) <i>divided by</i> (Common Shares Used to Calculate Earnings per Share (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	12/(54 * 27)	2/(15 * 17)

Operating Margins

NA ((23 + 22)/2) * 100
((23 + 22)/2) * 100
((23 + 22)/2) * 100
(30/2) * 100
(5/2) * 100
(22/2) * 100
NA
(31/2) * 100

Operating Margins (cont.)

	Annual Data Item #	Quarterly Data Item #
(Item) as a % of sales (cont.) Pension and Retirement Expense		
Pension and Retirement Expense divided by Sales (Net)	(43/12) * 100	NA
Rental Expense Rental Expense divided by Sales (Net)	(47/12) * 100	NA
Research and Development Expense Research and Development Expense <i>divided by</i> Sales (Net)	(46/12) * 100	(4/2) * 100
Selling, General, and Administrative Expenses Selling, General, and Administrative Expenses <i>divided by</i> Sales (Net)	(189/12) * 100	(1/2) * 100
Cash Flow Margin		
Definition 1 (Income Before Extraordinary Items (Statement of Cash Flows) <i>plus</i> Depreciation and Amortization (Statement of Cash Flows)) <i>divided by</i> Sales (Net)	((123 + 125)/12) * 100 •	((76 + 77)/2) * 100
Definition 2 (Income Before Extraordinary Items (Statement of Cash Flows) plus Depreciation and Amortization (Statement of Cash Flows) plus Deferred Taxes (Statement of Cash Flows) plus Equity in Net Loss (Earnings) (Statement of Cash Flows) plus Extraordinary Items and Discontinued Operations (Statement of Cash Flows) plus Minority Interest (Income Account)) divided by Sales (Net)	((123 + 125 + 126 + 106 + 124 + 49)/12) * 100	((76 + 77 + 79 + 80 + 78 + 3)/2 * 100
Definition 3 (Income Before Extraordinary Items (Statement of Cash Flows) plus Depreciation and Amortization (Statement of Cash Flows) plus Deferred Taxes (Statement of Cash Flows) plus Equity in Net Loss (Earnings) (Statement of Cash Flows) plus Extraordinary Items and Discontinued Operations (Statement of Cash Flows divided by Sales (Net)))	((123 + 125 + 126 + 106 + 124)/12) * 100 ■	((76 + 77 + 79 + 80 + 78)/2) * 100
Definition 4 (Income Before Extraordinary Items <i>plus</i> Depreciation and Amortization) <i>divided by</i> Sales (Net)	((18 + 14)/12) * 100	((8 + 5)/2) * 100
Net Profit Margin (After-tax Profit Margin)		
Income Before Extraordinary Items divided by Sales (Net)	(18/12) * 100	(8/2) * 100

Operating Margins (cont.)

	Annual Data Item #	Quarterly Data Item #
Operating Profit Margin After Depreciation (Operating Income Before Depreciation minus Depreciation and Amortization) divided by Sales (Net)	((13 – 14)/12) * 100 or (178/12) * 100	((21 – 5)/2) * 100
Operating Profit Margin Before Depreciation Operating Income Before Depreciation divided by Sales (Net)	(13/12) * 100	(21/2) * 100
Pretax Profit Margin Pretax Income divided by Sales (Net)	(170/12) * 100	(23/2) * 100

Balance Sheet (Total \$ Millions)

	Annual Data Item #	Quarterly Data Item #
Gross Assets		
Assets – Total/Liabilities and Stockholders/Equity – Total plus Depreciation, Depletion, and Amortization (Accumulated)	6 + 196	44 + 41
Invested Capital (Total)		
Definition 1		
Invested Capital – Total	37	62
Definition 2		
Invested Capital – Total <i>minus</i> Minority Interest (Balance Sheet)	37 – 38	62 – 53
Definition 3		
Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet) <i>minus</i> Minority Interest (Balance Sheet)	37 + 35 – 38	62 + 52 - 53
Definition 4 Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet)	37 + 35	62 + 52

Balance Sheet (Total \$ Millions) (cont.)

	Annual Data Item #	Quarterly Data Item #
Net Operating Assets		
Property, Plant, and Equipment – Total (Net) <i>plus</i> Current Assets – Total <i>minus</i> Current Liabilities – Total	8 + 4 - 5	42 + 40 - 49
Stockholders' Equity (Net Worth)		
Alternative Definition Preferred Stock – Liquidating Value <i>plus</i> Common Equity – Tangible	10 + 11	NA
Total Debt		
Long- Term Debt – Total <i>plus</i> Debt in Current Liabilities	9 + 34	51 + 45
Total Earning Assets		
Property, Plant, and Equipment – Total (Net) <i>plus</i> Current Assets – Total	8 + 4	42 + 40
Working Capital		
Current Assets – Total <i>minus</i> Current Liabilities – Total	4 – 5	40 – 49

Balance Sheet (\$ per Share)

	Annual Data Item #	Quarterly Data Item #
Capital Expenditures Property, Plant, and Equipment – Capital Expenditures (Schedule V) divided by (Common Shares Outstanding multiplied by Adjustment Factor (Cumulative) by Ex-Date)	30/(25 * 27)	NA
Common Equity – Tangible Common Equity – Tangible divided by (Common Shares Outstanding multiplied by Adjustment Factor (Cumulative) by Ex-Date)	11/(25 * 27)	NA
Common Equity – Liquidating Value Common Equity – Liquidation Value divided by (Common Shares Outstanding multiplied by Adjustment Factor (Cumulative) by Ex-Date)	235/(25 * 27)	NA

Balance Sheet (\$ per Share) (cont.)

	Annual Data Item #	Quarterly Data Item #
Common Equity – Total		
Common Equity – Total <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	60/(25 * 27)	59/(61 * 17)
Gross Assets		
(Assets – Total/Liabilities and Stockholders' Equity – Total <i>plus</i> Depreciation, Depletion, and Amortization (Accumulated)) <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(6 + 196)/(25 * 27)	(44 + 41)/(61 * 17)
Invested Capital		
Definition 1 Invested Capital – Total <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	37/(25 * 27)	62/(61 * 17)
Definition 2 (Invested Capital – Total <i>minus</i> Minority Interest (Balance Sheet)) <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(37 – 38)/(25 * 27)	(62 – 53)/(61 * 17)
Definition 3 (Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet) <i>minus</i> Minority Interest (Balance Sheet)) <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(37 + 35 – 38)/(25 * 27)	(62 + 52 - 53)/(61 * 17)
Definition 4 (Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet)) <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(37 + 35)/(25 * 27)	(62 + 52)/(61 * 17)
Net Operating Assets		
(Property, Plant, and Equipment – Total (Net) <i>plus</i> Current Assets – Total <i>minus</i> Current Liabilities – Total) <i>divided by</i> (Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date)	(8 + 4 - 5)/(25 * 27)	(42 + 40 - 49)/(61 * 17)

Balance Sheet (\$ per Share) (cont.)

	Annual Data Item #	Quarterly Data Item #	
Net Operating Assets (cont.)			
Fiscal Year Price – Fiscal Year – High <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	199/27	NA	
1st Month of Quarter Price – Close– 1st Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	12/17	
2nd Month of Quarter Price – Close – 2nd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	13/17	
3rd Month of Quarter Price – Close – 3rd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	14/17	
Property, Plant, and Equipment – Total (Net)			
Property, Plant, and Equipment – Total (Net) divided by (Common Shares Outstanding multiplied by Adjustment – Factor (Cumulative) Ex-Date)	8/(25 * 27)	42/(61 * 17)	
Total Net Assets			
Assets – Total/Liabilities and Stockholders' Equity – Total divided by (Common Shares Outstanding multiplied by Adjustment Factor (Cumulative) by Ex-Date)	6/(25 * 27)	44/(61 * 17)	
Working Capital			
(Current Assets – Total <i>minus</i> Current Liabilities – Total) divided by (Common Shares Outstanding multiplied by Adjustment Factor (Cumulative) by Ex-Date)	(4 – 5)/(25 * 27)	(40 – 49)/(61 * 17)	

Retained Earnings Statement (Total \$)

	Annual Data Item #	Quarterly Data Item #
Retained Earnings		
Beginning of Year		
Retained Earnings t minus 1	36(t-1)	58(t-1)
End of Year		
Retained Earnings t	36 t	58 t
Other Changes		
Retained Earnings t minus Retained Earnings t minus 1 minus	36t - 36(t - 1) - 99 -	NA
6	123 - 124 + 127	
Extraordinary Items (Statement of Cash Flows) minus		
Extraordinary Items and Discontinued Operations (Statement		
of Cash Flows) <i>plus</i> Cash Dividends (Statement of Cash		
Flows)		

Turnover Ratios

	Annual Data Item #	Quarterly Data Item #
Accounts Receivable Turnover		
Sales (Net) <i>divided by</i> ((Receivables – Total <i>t plus</i> Receivables – Total <i>t minus 1</i>) <i>divided by</i> 2)	$12/((2\mathbf{t} + 2(\mathbf{t} - 1))/2)$	2/((37t + 37(t - 1))/2)
(Item) as a % of Sales		
Accounts Receivables		
Receivables – Total divided by Sales (Net)	(2/12) * 100	(37/2) * 100
Cash and Short-Term Investments		
Cash and Short-Term Investments divided by Sales (Net)	(1/12) * 100	(36/2) * 100
Inventories		
Inventories – Total divided by Sales (Net)	(3/12) * 100	(38/2) * 100
Inventory Turnover		
Definition 1		
Cost of Goods Sold <i>divided by</i> ((Inventories – Total <i>t plus</i>	$41/((3\mathbf{t} + 3(\mathbf{t} - 1))/2)$	$30/((38\mathbf{t} + 38(\mathbf{t} - 1))/2)$
Inventories – Total t minus 1) divided by 2)		
Definition 2		
Sales (Net) divided by ((Inventories – Total t plus	$12/((3\mathbf{t} + 3(\mathbf{t} - 1))/2)$	$2/((38\mathbf{t} + 38(\mathbf{t} - 1))/2)$
Inventories – Total t minus 1) divided by 2)		

Turnover Ratios (cont.)

	Annual Data Item #	Quarterly Data Item #			
Number of Days' Sales					
in Inventories – Definition 1					
((Inventories – Total t plus Inventories – Total t minus 1) divided by 2) divided by (Cost of Goods Sold divided by 365)	((3t + 3(t-1)) /2)/(41/365)	((38t + 38(t - 1))/2)/(30/90)			
in Inventories – Definition 2					
((Inventories – Total t plus Inventories – Total t minus 1) divided by 2) divided by (Sales (Net) divided by 365)	$(3\mathbf{t} + 3(\mathbf{t} - 1)/2)$ /(12/365)	(38t + 38(t - 1)/2) /(2/90)			
in Receivables					
((Receivables – Total t plus Receivables – Total t minus 1) divided by 2) divided by (Sales (Net) divided by 365)	$((2\mathbf{t} + 2(\mathbf{t} - 1))/2)$ /(12/365)	((37t + 37(t - 1))/2) /(2/90)			
Sales per \$ Cash and Short-Term Investments	Sales per \$ Cash and Short-Term Investments				
Sales (Net) divided by Cash and Short-Term Investments	12/1	2/36			
Sales per \$ Common Equity					
Sales (Net) divided by Common Equity – Total	12/60	2/59			
Sales (1907) arraca by Common Equity – Total	12/00	2137			
Tangible Sales (Net) <i>divided by</i> Common Equity – Tangible	12/11	NA			
Liquidating Value Sales (Net) <i>divided by</i> Common Equity – Liquidation Value	12/235	NA			
Sales per \$ Gross Assets					
Sales (Net) divided by (Assets – Total/Liabilities and Stockholders' Equity – Total plus Depreciation, Depletion, and Amortization (Accumulated))	12/(6 + 196)	2/(44 + 41)			
Sales per \$ Inventory					
Sales (Net) divided by Inventories – Total	12/3	2/38			

Turnover Ratios (cont.)

	Annual Data Item #	Quarterly Data Item #		
Sales per \$ Invested Capital				
Definition 1				
Sales (Net) divided by Invested Capital – Total	12/37	2/62		
Definition 2 Sales (Net) <i>divided by</i> (Invested Capital – Total <i>minus</i> Minority Interest (Balance Sheet))	12/(37 – 38)	2/(62 – 53)		
Definition 3 Sales (Net) <i>divided by</i> (Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit(Balance Sheet) <i>minus</i> Minority Interest (Balance Sheet))	12/(37 + 35 – 38)	2/(62 + 52 - 53)		
Definition 4 Sales (Net) <i>divided by</i> (Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet))	12/(37 + 35)	2/(62 + 52)		
Sales per \$ Net Assets				
Sales (Net) <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	12/6	2/44		
Sales per \$ Property, Plant, and Equipment				
Gross Sales (Net) <i>divided by</i> Property, Plant, and Equipment – Total (Gross)	12/7	2/(41 + 42)		
Net Sales (Net) <i>divided by</i> Property, Plant, and Equipment – Total (Net)	12/8	2/42		
Sales per \$ Receivable – Current				
Sales (Net) divided by Receivables – Total	12/2	2/37		
Sales per \$ Stockholders' Equity				
Tangible Sales (Net) <i>divided by</i> (Preferred Stock – Liquidating Value <i>plus</i> Common Equity – Tangible)	12/(10 + 11)	NA		
Total Sales (Net) <i>divided by</i> Stockholders' Equity – Total	12/216	2/60		

Rates of Return

		Annual Data Item #	Quarterly Data Item #
4ft	er-tax Return		
	on Average Common Equity – Total Income Before Extraordinary Items – Adjusted for Common Stock Equivalents divided by ((Common Equity – Total t plus Common Equity – Total t minus 1) divided by 2)	(237/((60t + 60(t - 1))/2)) * 100	(25/((59t + 59(t - 1))/2)) * 100
	on Common Equity – Tangible Income Before Extraordinary Items – Adjusted for Common Stock Equivalents divided by Common Equity – Tangible	(237/11) * 100	NA
	on Common Equity – Total Income Before Extraordinary Items – Adjusted for Common Stock Equivalents divided by Common Equity – Total	(237/60) * 100	(25/59) * 100
	on Gross Assets – Definition 1 Income Before Extraordinary Items divided by (Assets – Total/Liabilities and Stockholders' Equity – Total plus Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet))	(18/(6 + 196)) * 100	(8/(44 + 41)) * 100
	on Gross Assets – Definition 2 (Income Before Extraordinary Items <i>plus</i> Interest Expense) divided by (Assets – Total/Liabilities and Stockholders' Equity – Total <i>plus</i> Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet))	((18 + 15)/(6 + 196)) * 100	((8 + 22)/(44 + 41) * 100)
	on Gross Assets – Definition 3 (Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income)))) divided by (Assets – Total/Liabilities and Stockholders' Equity – Total plus Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet))	((18 + (15 * (1 – (16/170))))/(6 + 196)) * 100	((8 + (22 * (1 - (6/23)))) /(44 + 41)) * 100
	on Gross Assets – Definition 4 (Income Before Extraordinary Items <i>plus</i> Interest Expense <i>plus</i> Minority Interest (Income Account)) <i>divided by</i> (Assets – Total/Liabilities and Stockholders' Equity – Total <i>plus</i> Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet))	((18 + 15 + 49)/(6 + 196)) * 100	((8 + 22 + 3)/(44 + 41)) * 100
	on Gross Assets – Definition 5 (Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income))) plus Minority Interest (Income Account)) divided by (Assets – Total/Liabilities and Stockholders' Equity – Total plus Depreciation, Depletion, and Amortization (Accumulated) (Balance Sheet))	((18 + (15 * (1 – (16/170))) + 49)/(6 + 196)) * 100	((8 + (22 * (1 - (6/23))) + 3)/(44 + 41)) * 100

Rates of Return (cont.)

	Annual Data Item #	Quarterly Data Item #
After-tax Return (cont.)		
on Invested Capital – Definition 1A (Income Before Extraordinary Items <i>plus</i> Interest Expense <i>plus</i> Minority Interest (Income Account)) <i>divided by</i> Invested Capital – Total	((18 + 15 + 49)/37) * 100	((8 + 22 + 3)/62) * 100
on Invested Capital – Definition 1B (Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income))) plus Minority Interest (Income Account)) divided by Invested Capital – Total	((18 + (15 * (1 - (16/170))) + 49)/37) * 100	((8 + (22 * (1 – (6/23)) + 3)/62) * 100)
on Invested Capital – Definition 2A (Income Before Extraordinary Items <i>plus</i> Interest Expense) divided by (Invested Capital – Total minus Minority Interest (Balance Sheet))	((18 + 15)/(37 – 38)) * 100	((8 + 22)/(62 – 53)) * 100
on Invested Capital – Definition 2B (Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income)))) divided by (Invested Capital – Total minus Minority Interest (Balance Sheet))	((18 + (15 * (1 - (16/170))))/(37 - 38)) * 100	((8 + (22 * (1 - (6/23))))/(62 - 53)) * 100
on Invested Capital – Definition 3A (Income Before Extraordinary Items <i>plus</i> Interest Expense) <i>divided by</i> (Invested Capital – Total <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet) <i>minus</i> Minority Interest (Balance Sheet))	((18 + 15)/(37 + 35 – 38)) * 100	((8 + 22)/(62 + 52 – 53)) * 100
on Invested Capital – Definition 3B (Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income)))) divided by(Invested Capital – Total plus Deferred Taxes and Investment Tax Credit (Balance Sheet) minus Minority Interest (Balance Sheet))	((18 + (15 * (1 - (16/170))))/(37 + 35 - 38)) * 100	((8 + (22 * (1 - 6/23))))/(62 + 52 - 53)) * 100
on Invested Capital – Definition 4A (Income Before Extraordinary Items plus Interest Expense plus Minority Interest (Income Account)) divided by (Invested Capital – Total plus Deferred Taxes and Investment Tax Credit (Balance Sheet))	((18 + 15 + 49)/(37 + 35)) * 100	((8 + 22 + 3)/(62 + 52)) * 100
on Invested Capital – Definition 4B (Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income))) plus Minority Interest (Income Account)) divided by (Invested Capital – Total plus Deferred Taxes and Investment Tax Credit (Balance Sheet))	((18 + (15 * (1 - (16/170))) + 49)/(37 + 35)) * 100	((8 + (22 * (1 – (6/23))) + 3)/(62 + 52)) * 100

Rates of Return (cont.)

	Annual Data Item #	Quarterly Data Item #
After-tax Return (cont.)		
on Property, Plant, and Equipment – Total (Net) – Definition 1		
Income Before Extraordinary Items <i>divided by</i> Property, Plant, and Equipment – Total (Net)	(18/8) * 100	(8/42) * 100
on Property, Plant, and Equipment – Total (Net) – Definition 2		
(Income Before Extraordinary Items <i>plus</i> Interest Expense <i>divided by</i> Property, Plant, and Equipment – Total (Net)	((18 + 15)/8) * 100	((8 + 22)/42) * 100
on Property, Plant, and Equipment – Total (Net) – Definition 3		
(Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income)))) divided by Property, Plant, and Equipment – Total (Net)	e ((18 + (15 * (1 – (16/170))))/8) * 100	((8 + (22 * (1 - (6/23))))/42) * 100
on Property, Plant, and Equipment – Total (Net) – Definition 4		
(Income Before Extraordinary Items <i>plus</i> Interest Expense <i>plus</i> Minority Interest (Income Account)) <i>divided by</i> Property, Plant, and Equipment – Total (Net)	((18 + 15 + 49)/8) * 100	((8 + 22 + 3)/42) * 100
on Property, Plant, and Equipment – Total (Net) – Definition 5		
(Income Before Extraordinary Items plus (Interest Expense multiplied by (1 minus (Income Taxes – Total divided by Pretax Income))) plus Minority Interest (Income Account) divided by Property, Plant, and Equipment – Total (Net)	(16/170))) + 49)/8) *	((8 + (22 * (1 – (6/23))) + 3)/42) * 100
on Stockholders' Equity – Definition 1 Income Before Extraordinary Items divided by Stockholders' Equity – Total	(18/216) * 100	(8/60) * 100
on Stockholders' Equity – Definition 2 Income Before Extraordinary Items divided by (Preferred Stock – Liquidating Value plus Common Equity – Tangible)	(18/(10 + 11)) * 100	NA
Pretax Return		
on Net Operating Assets (Operating Income Before Depreciation <i>minus</i> Depreciation and Amortization) <i>divided by</i> (Property, Plant, and Equipment – Total (Net) <i>plus</i> Current Assets – Total <i>minus</i> Current Liabilities – Total) or Operating	((13-14)/(8+4-5)) * 100 or $(178/(8+4-5))$ * 100	((21 – 5)/(42 + 40 – 49)) * 100
Income After Depreciation <i>divided by</i> (Property, Plant, and Equipment – Total (Net) <i>plus</i> Current Assets – Total <i>minus</i> Current Liabilities – Total)		

Rates of Return (cont.)

	Annual Data Item #	Quarterly Data Item #
Pretax Return (cont.) on Total Earning Assets (Operating Income Before Depreciation minus Depreciation and Amortization) divided by (Property, Plant, and Equipment – Total (Net) plus Current Assets – Total) or Operating Income After Depreciation divided by (Property, Plant, and Equipment – Total (Net) plus Current Assets – Total)	((13 – 14)/(8 + 4)) * 100 or (178/(8 + 4)) * 100	((21 – 5)/(42 + 40)) * 100
Sales per \$ Working Capital Sales (Net) divided by (Current Assets – Total minus Current Liabilities – Total)	12/(4 – 5)	2/(40 – 49)
Working Capital as a % of Sales (Current Assets – Total minus Current Liabilities – Total) divided by Sales (Net)	((4-5)/12) * 100	((40 – 49)/2) * 100

Capitalization Ratios

·		
	Annual Data Item #	Quarterly Data Item #
Invested Capital		
Definition 1 Long-Term Debt – Total <i>plus</i> Preferred Stock – Carrying Value <i>plus</i> Common Equity – Total <i>plus</i> Minority Interest (Balance Sheet)	9 + 130 + 60 + 38	51 + 55 + 59 + 53
Common Equity – Tangible as a % of Invested Capital	(11/37) * 100	NA
Common Equity – Total as a % of Invested Capital	(60/37) * 100	(59/62) * 100
Long-Term Debt – Total as a % of Invested Capital	(9/37) * 100	(51/62) * 100
Minority Interest (Balance Sheet) as a % of Invested Capital	(38/37) * 100	(53/62) * 100
Preferred Stock – Carrying Value as a % of Invested Capital	(130/37) * 100	(55/62) * 100
Preferred Stock – Liquidating Value as a % of Invested Capital	(10/37) * 100	NA

Capitalization Ratios (cont.)

Annual Quarterly Data Item # Data Item	#
Capital in Current Liabilities) ((9 + 34)/37) * 100 ((51 + 45)/6	2) * 100
red Stock – Carrying 9 + 130 + 60 51 + 55 + 59)
a % of Invested $(11/(37-38)) * 100$ NA	
of Invested Capital $(60/(37-38)) * 100$ $(59/(62-53)) * 100$	3)) * 100
sted Capital $(9/(37-38)) * 100$ $(51/(62-53))$	3)) * 100
ue as a % of $(130/(37-38)) * 100$ $(55/(62-53))$	3)) * 100
/alue as a % of (10/(37 – 38)) * 100 NA	
Capital in Current Liabilities) ((9 + 34)/(37 – 38)) * ((51 + 45)/(60)) minus Minority 100 100	62 – 53)) *
red Stock – Carrying 9 + 130 + 60 + 35 51 + 55 + 59 plus Deferred Taxes Sheet)	9 + 52
a % of Invested $(11/(37 + 35 - 38)) * NA$	
of Invested Capital $(60/(37+35-38))$ * $(59/(62+52)$ 100	2 – 53)) *
t Tax Credit as a% (35/(37 + 35 – 38)) * (52/(62 + 52)	2 – 53)) *
sted Capital $(9/(37+35-38)) * 100$ $(51/(62+52)$ 100	2 – 53)) *
ue as a % of $(130/(37+35-38))$ * $(55/(62+52)$ 100	2 – 53)) *
/alue as a % of (10/(37 + 35 – 38)) * NA 100	
Let as a % of $(130/(37-38)) * 100$ $(55/(62-53)) * 100$ NA Capital in Current Liabilities) $((9+34)/(37-38)) * ((51+45)/(61)) * (51/(62+52)) * (100)$ Tred Stock – Carrying $(9+34)/(37-38)) * ((51+45)/(61)) * (51/(62+52)) * (100)$ Tred Stock – Carrying $(9+34)/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(60/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(60/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(60/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(9/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(9/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(9/(37+35-38)) * (59/(62+52)) * (100)$ Tred Stock – Carrying $(9/(37+35-38)) * (59/(62+52)) * (100)$	3)) * 10 62 - 53 9 + 52 2 - 53)) 2 - 53))

Capitalization Ratios (cont.)

	Annual Data Item #	Quarterly Data Item #
Invested Capital (cont.)		
Total Debt as a % of Invested Capital (Long-Term Debt – Total plus Debt in Current Liabilities) divided by (Invested Capital – Total plus Deferred Taxes and Investment Tax Credit (Balance Sheet) minus Minorit Interest (Balance Sheet))	100	((51 + 45)/(62 + 52 – 53)) * 100
Definition 4 Long-Term Debt – Total <i>plus</i> Preferred Stock – Carrying Value <i>plus</i> Minority Interest (Balance Sheet) <i>plus</i> Deferred Taxes and Investment Tax Credit (Balance Sheet) <i>plus</i> Common Equity – Total	9 + 130 + 38 + 35 + 60 d	52 + 55 + 53 + 52 + 59
Common Equity – Tangible as a % of Invested Capital	(11/(37 + 35)) * 100	NA
Common Equity – Total as a % of Invested Capita	10 (60/(37 + 35)) * 100	(59/(62 + 52)) * 100
Deferred Taxes and Investment Tax Credit as a % of Invested Capital	(35/(37 + 35)) * 100	(52/(62 + 52)) * 100
Long-Term Debt as a % of Invested Capital	(9/(37 + 35)) * 100	(51/(62 + 52)) * 100
Minority Interest (Balance Sheet) as a % of Invested Capital	(38/(37 + 35)) * 100	(53/(62 + 52)) * 100
Preferred Stock – Carrying Value as a % of Invested Capital	(130/(37 + 35)) * 100	(55/(62 + 52)) * 100
Preferred Stock – Liquidating Value as a % of Invested Capital	(10/(37 + 35)) * 100	NA
Total Debt as a % of Invested Capital (Long-Term Debt – Total plus Debt in Current Liabilities) divided by (Invested Capital – Total plus Deferred Taxes and Investment Tax Credit(Balance Sheet))	((9 + 34)/(37 + 35)) * 100	((51 + 45)/(62 + 52)) * 100

Criteria of Financial Soundness

	Annual Data Item #	Quarterly Data Item #
(Item) as a % of Average Long-Term Debt		
Interest (Interest Expense <i>divided by</i> ((Long-Term Debt – Total t plus Long-Term Debt – Total t minus 1) divided by 2)	(15/((9t+9(t-1))/2)) * 100	(22/((52t + 51 + 51 + 1)/2)) * 100

	Annual Data Item #	Quarterly Data Item #
(Item) as a % of Average Total Debt		
Interest Interest Expense divided by ((Long-Term Debt – Total t plus Long-Term Debt – Total t minus 1 plus Debt in Current Liabilities t plus Debt in Current Liabilities t minus 1) divided by 2)	$(15/((9\mathbf{t} + 9(\mathbf{t} - 1) + 34\mathbf{t} + 34(\mathbf{t} - 1))/2)) *$ 100	(22/((51t + 51(t - 1) + 45t + 45(t - 1))/2)) * 100
(Item) as a % of Current Assets		
Cash and Short-Term Investments Cash and Short-Term Investments divided by Current Assets – Total	(1/4) * 100	(36/40) * 100
Current Assets – Other Current Assets – Other <i>divided by</i> Current Assets – Total	(68/4) * 100	(39/40) * 100
Inventory Inventories – Total <i>divided by</i> Current Assets – Total	(3/4) * 100	(38/40) * 100
Receivables Receivables – Total <i>divided by</i> Current Assets – Total	(2/4) * 100	(37/40) * 100
(Item) as a % of Intangibles		
Goodwill Goodwill divided by Intangibles	(204/33) * 100	NA
(Item) as a % of Total Assets		
Assets – Other Assets – Other divided by Assets – Total/Liabilities and Stockholders' Equity – Total	(69/6) * 100	(43/44) * 100
Current Assets Current Assets – Total <i>divided by</i> Assets – Total/Liabilities and Stockholder's Equity – Total	(4/6) * 100	(40/44) * 100
Goodwill Goodwill <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	(204/6) * 100	NA
Intangibles Intangibles divided by Assets – Total/Liabilities and Stockholders' Equity – Total	(33/6) * 100	NA

	Annual Data Item #	Quarterly Data Item #
(Item) as a % of Total Assets (cont.) Investments and Advances (Investments and Advances – Equity Method plus Investment and Advances – Other) divided by Assets – Total/Liabilities and Stockholders' Equity – Total	((31 + 32)/6) * 100	NA
Investments and Advances – Equity Investments and Advances – Equity Method <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	(31/6) * 100	NA
Property, Plant, and Equipment – Total (Gross) Property, Plant, and Equipment – Total (Gross) divided by Assets – Total/Liabilities and Stockholders' Equity – Total	(7/6) * 100	((41 + 42)/44) * 100
Property, Plant, and Equipment – Total (Net) Property, Plant, and Equipment – Total (Net) <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	(8/6) * 100	(42/44) * 100
Total Debt (Long-Term Debt – Total <i>plus</i> Debt in Current Liabilities) <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	((9 + 34)/6) * 100	((51 + 45)/44) * 100
(Item) as a % of Total Debt Short-Term Debt Debt in Current Liabilities divided by (Long-Term Debt – Total plus Debt in Current Liabilities	(34/(9 + 34)) * 100	(45/(45 + 51)) * 100
(Item) as a % of Total Liabilities Current Liabilities – Total divided by Liabilities – Total	(5/191) * 100	(40/54) * 100
Deferred Taxes and Investment Tax Credit Deferred Taxes and Investment Tax Credit (Balance Sheet) divided by Liabilities – Total	(5/181) * 100 (35/181) * 100	(49/54) * 100 (52/54) * 100
Interest Interest Expense <i>divided by</i> Liabilities – Total	(15/181) * 100	(22/54) * 100
Liabilities – Other Liabilities – Other <i>divided by</i> Liabilities – Total	(75/181) * 100	(501/54) * 100
Long-Term Debt Long-Term Debt <i>divided by</i> Liabilities – Total	(9/181) * 100	(51/54) * 100

	Annual Data Item #	Quarterly Data Item #
(Item) as a % of Total Liabilities (cont.)		
Minority Interest Minority Interest (Balance Sheet) divided by Liabilities – Total	(38/181) * 100	(53/54) * 100
Preferred Stock – Carrying Value Preferred Stock – Carrying Value divided by Liabilities – Total	(130/180) * 100	(55/54) * 100
Preferred Stock – Liquidating Value Preferred Stock – Liquidating Value divided by Liabilities – Total	(10/181) * 100	NA
(Item) as a % of Total Liabilities and Stockholders'	Equity	
Common Equity – Total Common Equity – Total <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	(60/6) * 100	(59/44) * 100
Stockholders' Equity – Total Stockholders' Equity – Total <i>divided by</i> Assets – Total/Liabilities and Stockholders' Equity – Total	(216/6) * 100	(60/44) * 100
Capital Expenditure Coverage		
(Depreciation and Amortization <i>plus</i> Income Before Extraordinary Items – Adjusted for Common Stock Equivalents <i>minus</i> Dividends – Common)	(14 + 20 – 21)/30	NA
Current Ratio		
Current Assets – Total <i>divided by</i> Current Liabilities – Total	4/5	40/49
Debt/Equity Ratios		
Long-Term Debt – Definition 1 Long-Term Debt – Total divided by Common Equity – Total	9/60	51/59
Long-Term Debt – Definition 2 Long-Term Debt – Total <i>divided by</i> Common Equity – Tangible	9/11	NA
Long-Term Debt – Definition 3 Long-Term Debt – Total <i>divided by</i> Stockholders' Equity – Total	9/216	51/60

	Annual Data Item #	Quarterly Data Item #
Debt/Equity Ratios (cont.)		
Long-Term Debt – Definition 4 Long-Term Debt – Total divided by (Preferred Stock – Liquidating Value plus Common Equity – Tangible)	9/(10 + 11)	NA
Total Liabilities – Definition 1 Liabilities – Total <i>divided by</i> Common Equity – Total	181/60	54/59
Total Liabilities – Definition 2 Liabilities – Total <i>divided by</i> Common Equity – Tangible	181/11	NA
Total Liabilities – Definition 3 Liabilities – Total <i>divided by</i> Stockholders' Equity – Total	181/216	54/60
Total Liabilities – Definition 4 Liabilities – Total <i>divided by</i> (Preferred Stock – Liquidating Value <i>plus</i> Common Equity – Tangible)	181/(10 + 11)	NA
Interest Coverage		
After-tax (Interest Expense <i>plus</i> Income Before Extraordinary Items) <i>divided by</i> Interest Expense	(15 + 18)/15	(22 + 8)/22
Pretax (Interest Expense <i>Pretax Income</i>) <i>divided by</i> Interest Expense	(15 +170)/15	(22 + 23)/22
Quick Ratio (Acid Test)		
(Cash and Short-Term Investments <i>plus</i> Receivables – Total) <i>divided by</i> Current Liabilities – Total	(1+2)/5	(36 + 37)/49

Management Decision Statistics

	Annual Data Item #	Quarterly Data Item #
(Item) as a % of Cash Flow		
Cash Dividends – Definition 1	(107//100 107)	(001/ 5
Cash Dividends (Statement of Cash Flows) divided by (Income Before Extraordinary Items (Statement of Cash	(127/(123 + 125)) * 100	(89/(76 + 77)) * 100
Flows) <i>plus</i> Depreciation and Amortization (Statement of		
Cash Flows))		

Management Decision Statistics (cont.)

	Annual	Quarterly	
	Data Item #	Data Item #	
(Item) as a % of Cash Flow (cont.)			
Cash Dividends – Definition 2			
Cash Dividends (Statement of Cash Flows) divided by (Income Before Extraordinary Items (Statement of Cash Flows) plus Depreciation and Amortization (Statement of Cash Flows) plus Deferred Taxes (Statement of Cash Flows) plus Equity in Net Loss (Earnings) (Statement of Cash Flows) plus Extraordinary Items and Discontinued Operations (Statement of Cash Flows) plus Minority Interest (Income Account))	(127/(123 + 125 + 126 + 106 + 124 + 49)) * 100	(89/(76 + 77 + 79 + 80 + 78 + 3)) * 100	
Cash Dividends – Definition 3			
Cash Dividends (Statement of Cash Flows) divided by (Income Before Extraordinary Items (Statement of Cash Flows) plus Extraordinary Items and Discontinued Operations (Statement of Cash Flows) plus Depreciation and Amortization (Statement of Cash Flows) plus Deferred Taxes (Statement of Cash Flows) plus Equity in Net Loss (Earnings) (Statement of Cash Flows)	(127/(123 + 124 + 125 + 126 + 106)) * 100	0 (89/(76 + 77 + 78 + 79 + 80)) * 100	
(Item) as a % of Income Before Extraordinary Item. Cash Dividends	s – Adjusted for Commor	n Stock Equivalents	
Cash Dividends (Statement of Cash Flows) divided by Income Before Extraordinary Items – Adjusted for Common Stock Equivalents	(127/20) * 100	(89/10) * 100	
(Item) as a % of Property, Plant, and Equipment –	Total (Gross)		
Depreciation Expense			
Depreciation and Amortization divided by Property, Plan, and Equipment – Total (Gross)	(14/7) * 100	(5/(41 + 42)) * 100	
Property, Plant, and Equipment – Total (Net) Property, Plan, and Equipment – Total (Net) <i>divided by</i> Property, Plant, and Equipment – Total (Gross)	(8/7) * 100	(42/(41 + 42)) * 100	
(Item) as a % of Property, Plant, and Equipment – Total (Net)			
Depreciation Expense Depreciation and Amortization <i>divided by</i> Property, Plant, and Equipment – Total (Net)	(14/8) * 100	(5/42) * 100	

Price and Market Data

	Annual Data Item #	Quarterly Data Item #
Price – High – Adjusted		
Calendar Year Price – High <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	22/27	NA
Fiscal Year Price – Fiscal Year – High <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	197/27	NA
1st Month of Quarter Price – High – 1st Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	63/17
2nd Month of Quarter Price – High – 2nd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	64/17
3rd Month of Quarter Price – High – 3rd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	65/17
Price – Low – Adjusted		
Calendar Year Price – Low <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	23/27	NA
Fiscal Year Price – Fiscal Year – Low <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	198/27	NA
1st Month of Quarter Price – Low – 1st Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	66/17
2nd Month of Quarter Price – Low – 2nd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	67/17
3rd Month of Quarter Price – Low – 3rd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	68/17
Price – Close – Adjusted		
Calendar Year Price – Close <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	24/27	NA

Price and Market Data (cont.)

	Annual Data Item #	Quarterly Data Item #
Price – Close – Adjusted (cont.)		
Fiscal Year Price – Fiscal Year – Close <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	199/27	NA
1st Month of Quarter Price – Close – 1st Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	12/17
2nd Month of Quarter Price – Close – 2nd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	13/17
3rd Month of Quarter Price – Close – 3rd Month of Quarter <i>divided by</i> Adjustment Factor (Cumulative) by Ex-Date	NA	14/17
Common Shares Outstanding – Adjusted		
Common Shares Outstanding <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date	25 * 27	61 * 17
Common Shares Traded – Adjusted		
Common Shares Traded <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date	28 * 27	18 * 17
Common Shares Used to Calculate Earnings per Share (Basic) – Adjusted		
Common Shares Used to Calculate Earnings per Share – (Basic) <i>multiplied by</i> Adjustment Factor (Cumulative) by Ex-Date	54 * 27	15 * 17

Common Shares Used to Calculate Earnings per Share – 12 Months Moving – Adjusted

Common Shares Used to Calculate Earnings per Share – 12 NA 28 * 17 Months Moving *multiplied by* Adjustment Factor (Cumulative) by Ex-Date

Market Return

by Ex-Date (Fiscal Year End) This excludes the affects of cash equivalent distributions

Price and Market Data (cont.)

-		
	Annual Data Item #	Quarterly Data Item #
Market Return (cont.)		
by Ex-Date (Quarter End) This excludes the		
affects of cash equivalent distributions ((Price – Close – 3rd Month of Quarter <i>plus</i> Dividends per	NA	(((11 + 164 + 1644 - 1)
Share by Ex-Date <i>t plus</i> Dividends per Share by Ex-Date	INA	$(((14 + 16\mathbf{t} + 16(\mathbf{t} - 1) + 16(\mathbf{t} - 2) + 16(\mathbf{t} - 2))$
t minus 1 plus Dividends per Share by Ex-Date t minus 3)		3))
divided by Price – Close – 3rd Month of Quarter t minus 1)		/14(t-1))-1)*100
minus 1 To calculate a total return including the affects of cash		
equivalent distributions, you must use the PDE file, see the		
calculation for <i>Total Investment Return</i> on page 32.		
by Payable Date (Fiscal Year End)		
((Price – Fiscal Year – Close t plus Dividends per Share by	(((199t + 201)/199	NA
Payable Date) divided by Price – Fiscal Year – Close t minus 1) minus 1	(t-1))-1)*100	
manus 1) manus 1		
by Payable Date (Quarter End)	27.4	(//14 52) 52(; 4)
((Price – Close – 3rd Month of Quarter <i>plus</i> Dividends per Share by Payable Date <i>t plus</i> Dividends per Share by	NA	(((14 + 72t + 72(t - 1) + 72(t - 2) + 72(t - 3))
Payable Date <i>t minus 1 plus</i> Dividends per Share by		$+72(\mathbf{t}-2)+72(\mathbf{t}-3)$ $/14(\mathbf{t}-1))-1)*100$
Payable Date t minus 3) divided by Price – Close – 3rd		,,,,,
Month of Quarter t minus 1) minus 1		
Market to Book (Fiscal Year End/Quarter End)		
Price – Fiscal Year – Close (3rd Month of Quarter) divided	199/(60/25)	14/(59/61)
by (Common Equity – Total divided by Common Shares Outstanding)		
		
Treasury Stock – Number of Common Shares		
Treasury Stock – Number of Common Shares <i>multiplied by</i>	87 * 27	NA
Adjustment Factor (Cumulative) by Ex-Date		

Market Value Statistics

Annual	Quarterly
Data Item #	Data Item #

Income Before Extraordinary Items Adjusted for Common Stock Equivalents per \$100 of Market Value

Calendar Year End

Income Before Extraordinary Items – Adjusted for Common Stock Equivalents *divided by* (Price – Close *multiplied by* Common Shares Outstanding)

20/((24 * 25)/ **100**)

NA

Market Value Statistics (cont.)

	Annual Data Item #	Quarterly Data Item #		
Income Before Extraordinary Items Adjusted for Co Value (cont.)	Income Before Extraordinary Items Adjusted for Common Stock Equivalents per \$100 of Market Value (cont.)			
Fiscal Year End/Quarter End Income Before Extraordinary Items – Adjusted for Common Stock Equivalents divided by (Price – Fiscal Year – Close multiplied by Common Shares Outstanding)	20/((199 * 25)/ 100)	10/((14 * 61)/ 100)		
Income Before Extraordinary Items per \$100 of Mai	rket Value			
Calendar Year End Income Before Extraordinary Items divided by (Price – Close multiplied by Common Shares Outstanding)	18/((24 * 25)/ 100)	NA		
Fiscal Year End/Quarter End Income Before Extraordinary Items divided by (Price – Fiscal Year – Close multiplied by Common Shares Outstanding)	18/((199 * 25)/ 100)	8/(14 * 61)/ 100)		
Market Value of Common Stock	Market Value of Common Stock			
Calendar Year End Price – Close <i>multiplied by</i> Common Shares Outstanding	24 * 25	NA		
Fiscal Year End/Quarter End Price – Fiscal Year – Close multiplied by Common Shares Outstanding	199 * 25	14 * 61		
Pretax Income per \$100 of Market Value				
Calendar Year End Pretax Income divided by (Price – Close multiplied by Common Shares Outstanding)	170/((24 * 25)/ 100)	NA		
Fiscal Year End/Quarter End Pretax Income divided by (Price – Fiscal Year – Close multiplied by Common Shares Outstanding)	170/((199 * 25)/ 100)	23/((14 * 61)/ 100)		
Sales per \$100 of Market Value				
Calendar Year End Sales (Net) divided by (Price – Close multiplied by Common Shares Outstanding)	12/((24 * 25)/ 100)	NA		
Fiscal Year End/Quarter End Sales (Net) divided by (Price – Fiscal Year – Close multiplied by Common Shares Outstanding)	12/((199 * 25)/ 100)	2/((14 * 61)/ 100)		

Price Ratios

	Annual Data Item #	Quarterly Data Item #
Price – Earnings Ratio		
Fiscal Year End Price – Fiscal Year – Close <i>divided by</i> Earnings per Share (Basic) – Excluding Extraordinary Items	199/58	NA
Quarter End Price – Close – 3rd Month of Quarter <i>divided by</i> Earnings per Share (Basic) – Excluding Extraordinary Items – 12-Months Moving	NA	14/27
Dividend Payout Ratio Dividends – Common divided by Income Before Extraordinary Items – Adjusted for Common Stock Equivalents	21/20	NA
Dividend Yield		
Fiscal Year End Dividends per Share by Ex-Date <i>divided by</i> Price – Fiscal Year – Close	(26/199) * 100	NA
Quarter End Dividends – Common – Indicated Annual divided by Price – Close – 3rd Month of Quarter	NA	(20/14) * 100

Formulas Used in COMPUSTAT Prices, Dividends, and Earnings (PDE) Financial Calculations

Company Data

The following is a list of formulas used in various calculations. These formulas are by no means all-inclusive and can be used in most cases for monthly, quarterly, yearly, 5-year, and 10-year analysis. Remember that the data on the PDE file is *adjusted*. To readjust the data to its originally reported state, multiply all per share data (price, earnings) by the cumulative adjustment factor and divide the shares traded data by the cumulative adjustment factor.

Annualized Dividend Rate

Book Value per Share

Cash Equivalent Distributions per Share by Ex-Date

Common Shares Outstanding

Common Shares Traded

Common Stock Float Shares (Canadian PDE file)

Dividends per Share

Earnings per Share from Operations - 12 Months Moving

Earnings per Share - 12 Months Moving

Historical Earnings per Share (Canadian PDE file)

Net Asset Value per Share

Price - Close

Price - High

Price - Low

Price to Earnings Ratio

Price (High, Low, or Close)/Earnings per Share - 12 Months Moving

Price – High to Earnings as a Percentage of Price – Low to Earnings

((Price – High/Earnings per Share)/(Price – Low/Earnings per Share))* 100

Average Monthly Price

 $\sum A / B$

A = prices B= months

Price - High to Earnings as a Percentage of Price - Low to Earnings

((Price - High/Earnings per Share)/(Price - Low/Earnings per Share))* 100

Company Data (cont.)

Current Price Deviation from Mean Price

$$\sum n \frac{C}{\left(\left(A_n + B_n\right) \, / \, \boldsymbol{2}\right) \, / \, n}$$

A = monthly high price

B = monthly low price

C = current close price

n = number of months

Dividend Yield - High

(Annualized Dividend Rate/ Price – High) * 100

Dividend Yield - Low

(Annualized Dividend Rate/ Price - Low) * 100

Dividend Yield - Close

(Annualized Dividend Rate/ Price - Close) * 100

Dividend Payout Ratio

(∑ Dividends per Share Paid – 12 Months /Earnings per Share) * **100**

Total Investment Return

$$(((A + (\sum B + \sum D))/C) - 1 * 100$$

A = current close price

B = dividends per share, beginning month through last month

C = close price, beginning month

D = cash equivalent distributions

Market Value of Shares Traded

Price - Close * Common Shares Traded

Index Data

The index data contained in the PDE file has a wide range of potential uses. Some of these general areas of usage are:

- ☐ Relative Performance Analysis
- Industry Analysis
- ☐ Industry Comparisons
- ☐ Beta Analysis
- ☐ Technical Price Analysis

Relative Performance Analysis

This technique involves the comparison of various company data with industry data for the industry in which the company is classified or with the total market as identified by the S&P Industrial Index or S&P 500 Index data. For example, price relatives can be calculated by dividing the company price by the index price at the same point in time. Price relatives, when observed over time, can be useful in projecting the company's future price performance compared to the market or compared to the company's industry.

The same type of analysis can be performed with earnings, price to earnings ratios, dividends, dividend yields, book values, returns on book value, and total investment returns (holding period returns). For instance, both the industry price and 12 months—moving earnings per share can be obtained from the PDE file for any selected month and used to calculate the industry price to earnings ratio. This figure can then be divided into the calculated price to earnings for the company for the same month. This company data is available via the various COMPUSTAT data files.

Industry Analysis

The index data in the PDE file can also be used independently of other data in attempting to obtain a clear picture of the performance of specific industries. For example, compound or least-squares growth rates of various index data such as earnings per share, price, dividends per share, annualized dividend rate, and book value per share can be calculated over varying periods to aid in determining the future direction and growth of the industry.

Industry Comparisons

The various calculations performed with the industry data can be compared with the same calculations for other industries and for the market in order to determine past relative performances and project future performance. For example, various regression techniques could be used to compare monthly price variability of selected industries with each other or with the market.

Beta Analysis

The S&P Industrial Index and S&P 500 Index contained on the PDE file are exceptionally well-suited for the calculations necessary in beta analysis.

Technical Price Analysis

It is possible to apply various technical formulas to the price data available on the PDE file. Technical analysis can also be applied to price to relative data calculated from the industry index data on the PDE file.

S&P Industry Relatives

Relatives may also be calculated against the S&P 500, S&P Industrial, S&P Transportation, S&P Utilities, and S&P Financial indexes, as well as, the New York Stock Exchange.

Virtually all items, which can be calculated for an individual company, can also be calculated on a relative basis.

Year End Price

(Company Price - Close /Industry Price - Close) * 100

Earnings per Share - 12 Months Moving

(Company Earnings per Share – 12 Months Moving/Industry Earnings per Share – 12 Months Moving) * 100

Year End Close Price to Earnings

((Company Price – Close /Earnings per Share – 12 Months Moving)/(Industry Close Price/Earnings per Share – 12 Months Moving)) * **100**

Year End Yield

((Company Annualized Dividend Rate/company Price – Close)/(Industry Annualized Dividend Rate/Industry Price – Close)) * 100

(Example: Comparing the company return in relation to the S&P Industry Index return over a 12-month period.)

$$B = \frac{n\sum XY - \sum X\sum Y}{n\sum X^2 - (\sum X)^2}$$

B = Beta

X = S&P Industrial Index Δ in Price + Yield ((Annualized Dividend Rate/Price)/12)

 $Y = Company \Delta$ in Price + Yield ((Annualized Dividend Rate/Price)/12)

n = Number of time periods minus 1; 13 months - 1