

- Types of Questions
- Discounted cash flows –debt (expedition problem)
- Discounted cash flows – investment (contribution margin, jdc)
- Accrual Basis Income (journal entries, nursery)
- Financial statements (direct or indirect)

Gross Profit (Gross Margin) = Sales Revenue – Cost of Goods Sold

Gross Profit (Gross Margin) Percentage = Gross Profit / Sales Revenue

Operating Income = Gross Margin = Operating Expenses + Other Net Operating Revenues

Operating Income Ratio = Operating Income / Sales Revenue

Ability to meet debt payments: Times Interest Earned = Income before Interest and Taxes / Interest Expense

Cost Behavior = how costs change as sales volume changes. Common model is to classify as Fixed and Variable Costs

Fixed Costs = do not change as sales volume changes

Variable Costs = costs that change proportionately as sales volume changes

Ability to pay current liabilities with current assets, aka liquidity: Current Ratio = Current Assets / Current Liabilities

Ability to meet immediate debt: Quick Ratio = Monetary Current Assets / Current Liabilities

number of dollars of sales generated during the year by each dollar of assets: Asset turnover = Sales / Average Total Assets

Extent to which the company is financed with borrowed resources (debt) and with investor resources (equity): Debt-equity ratio = Total Debt (or long term debt) / Stockholder’s Equity

Percentage of total assets financed through debt of any kind: Debt Ratio = Total Liabilities / Total Assets

Proportion of assets financed by the direct and indirect investment of owners: Equity Ratio = Total Stockholders’ Equity / Total Assets

Compares what the company earns to the amount it has invested: Return on assets (ROA) = Net Income / Total Assets

What the stockholders earn on their investment in the company: Return on Equity = Net Income / Total Stockholders’ Equity

Difference between ROA and ROE: Leverage = Average Total Assets / Average Total Stockholders Equity

ROA = Profit Margin Ratio x Asset Turnover

ROE = Profit Margin Ratio x Asset Turnover x Leverage

Net income expressed on a per-share, basis: Earnings per share = Net income / Weighted number of shares outstanding

How the market values the firm’s earnings: Price-earnings ratio = Market price per share / Earnings per share

Percentage of net income paid out to the stockholders as dividends: Dividend payout ratio = Cash dividends / Net income

- Reasons for purchasing outstanding stock
- Employee Compensation plans – stock issued to employees in exchange for services

Improve earnings per share – company repurchases shares, outstanding shares decreases allocating more earnings to each remaining share

Corporate Acquisitions – company exchanges shares in exchange for shares of another company

Stock Price – company may increase the market price of its stock by purchasing outstanding shares, thus reducing the supply

- Reasons for issuing stock dividends
- Companies may wish to retain its cash yet still appear to offer some type of dividend to its shareholders

Companies may also want to reduce the market price per share to make stock more attractive to small investors

Income Statement Accounts

Operating section: Revenue, Expenses, Cost of Goods Sold / Cost of Sales, Selling expenses, General and Administrative expenses, Depreciation / Amortization, Research and Development Expenses

Non-Operating section: Other revenues or gains, other expenses or losses, finance costs, income tax expense

Balance Sheet Accounts

Current assets: cash and cash equivalents, inventories, accounts receivable and prepaid expenses

Non-current assets: property (plant and equipment), investment property, intangible assets, financial assets, investments, biological assets

Liabilities: accounts payable, provisions, financial liabilities, liabilities and assets for current tax, deferred tax liabilities and assets, unearned revenue for services paid for by customers and not yet provided

Equity: Issued capital and reserves attributable to equity holders of the parent company (controlling interest), non-controlling interest in equity

Amortization table

|              |                   |                  |              |                      |                                    |
|--------------|-------------------|------------------|--------------|----------------------|------------------------------------|
| Payment Date | Beginning Balance | Interest         | Cash Payment | Change in Principal  | Ending Balance                     |
|              | Starting          | (strating)(rate) | Standard     | (payment – interest) | (starting) – (change in principal) |

List of Revenues and Expenses for cash income model

Revenues

Cash from sales

NOT sales revenue on cash income

Expenses

Salaries, utility bills, rent, taxes, depreciation, insurance

Not cash paid for equipment or investment

Revenue – Expenses = Net Income

Cash from customers = accts receivable past yr + sales = accts receivable current yr

Notes for Accrual Journal Entries

1 Prepaid insurance-cash, insurance expense-prepaid insurance, 2 cash-notes payable, interest expense-cash, interest expense-interest payable, 3 supplies inventory-cash, supplies expense-supplies inventory, 4 cash-unearned revenue, unearned revenue-revenue

Assets- cash, prepaid insurance, supplies

Liabilities- notes payable, interest payable, unearned revenue

Direct Statement of Cash Flows

Cash from operating activities:

Cash from customers

Cash to suppliers

Cash for administrative

Cash for insurance

Cash for salaries

Cash for selling

Cash for interest

Cash for income taxes

Cash From Operating Activities

|                                 |            |           |
|---------------------------------|------------|-----------|
| Cash from Operating Activities: |            |           |
| Cash from customers             | 140,000    |           |
| Cash to suppliers               | (57,500)   |           |
| Cash for rent                   | (5,000)    |           |
| Cash for salaries               | 0          |           |
| Cash for supplies               | (10,000)   |           |
| Cash for interest               | 0          |           |
| Cash for income tax             | 0          |           |
| Cash from operating activities  | -----      | 67,500    |
| Cash from Investing Activities  |            |           |
| Cash paid for equipment         | (\$42,000) |           |
| Cash From investing activities  |            | (42,000)  |
| Cash from Financing Activities  |            |           |
| Cash from issue of stock        | \$75,000   |           |
| Cash from bank loan             | 25,000     |           |
| Cash from financing activities  |            | 100,000   |
| Net Change in Cash              |            | 125,500   |
| Beginning balance in cash       |            | -         |
| Ending balance in cash          |            | \$125,000 |

|                         |           |         |
|-------------------------|-----------|---------|
| Find NI for Indirect    |           |         |
| Sales Revenue           |           | 750,000 |
| -CGS                    |           | 360,000 |
| Gross Margin            |           | 390,000 |
| Less Operating Expenses |           |         |
| Wages                   | (280,000) |         |
| Depreciation            | (43,000)  |         |
| Other                   | (15,000)  | 338,000 |
| Operating Income        |           | 52,000  |
| + Interest Revenue      |           | 6,000   |
| Net Income              |           | 58,000  |

|                                                                |  |
|----------------------------------------------------------------|--|
| Indirect Statement of Cash flows (only balance sheet accounts) |  |
| Cash From Operating Activities                                 |  |
| Net Income                                                     |  |
| +Bad Debt Expense                                              |  |
| +Depreciation Expense                                          |  |
| Change in Accounts Receivable                                  |  |
| Change in Inventory                                            |  |
| Change in taxes receivable                                     |  |
| Change in prepaid insurance                                    |  |
| Change in accounts payable                                     |  |
| Change in salaries payable                                     |  |
| Change in interest payable                                     |  |
| Cash from operating activities _____                           |  |
| Cash From Investing Activities                                 |  |
| Cash paid for Equipment                                        |  |

|                                                       |
|-------------------------------------------------------|
| Notes for indirect:                                   |
| Change in Account: Ending Balance – Beginning Balance |
| Add back depreciation                                 |
|                                                       |
| Increase liability → add                              |
| Decrease liability → subtract                         |
| Increase asset → subtract                             |
| Decrease asset → add                                  |

|                                 |                             |
|---------------------------------|-----------------------------|
| Cash from Customers             | Cash paid for interest      |
| Sales                           | Interest expense            |
| + Beginning Accounts Receivable | +Beginning interest payable |
| -Ending Accounts Receivable     | -Ending interest payable    |
| Cash paid to suppliers          | Cash paid for Rent          |
| Cost of Goods Sold              | Rent Expense                |
| -Beginning Inventory            | -Beginning Prepaid Rent     |
| +Ending Inventory               | +Ending Prepaid Rent        |
| +Beginning Accounts Payable     |                             |
| -Ending Accounts Payable        |                             |
| Cash Paid for Supplies          | Cash Paid for Salaries      |
| Supply Expense                  | Salary Expense              |
| -Beginning Supplies Inventory   | +Beginning Salary Payable   |
| +Ending Supplies Inventory      | -Ending Salary Payable      |
| Cash paid for income taxes      |                             |
| Income tax expense              |                             |
| +Beginning income tax payable   |                             |
| -Ending income tax payable      |                             |

|                                             |
|---------------------------------------------|
| JDC Setup                                   |
| Cost of studio                              |
| -salvage value                              |
| =Depreciable basis                          |
| ÷ expected life                             |
| =yearly depreciation                        |
| CM = #students*tuition - salaries           |
| Contribution Margin                         |
| -taxes                                      |
| +taxshield (tax rate * yearly depreciation) |
| =ATCF                                       |
| *PV(series, periods, rate)                  |
| =NCF                                        |
| +expected disposal * PV(single)             |
| -cost of building                           |
| +value of old building                      |
| =value of project                           |