**Business Analysis for Investment (FNCE2003)**

**Tutorial Solution**

**Module 1: Introduction**

**Question 1: Differentiate between profit and cash flow.**

**Answer:**

Profit and cash flow are not equivalent. Cash flow reflects cash receipts (inflow) and cash disbursements (outflow). For example, net operating cash flow of a firm is the difference between cash inflow from operations and cash outflow incurred for operating expenses. Profit (or loss) represents the difference between the prices at which goods or services are provided to customers and the expenses incurred to provide those goods and services. In addition, profit (loss) includes other income (such as investing income or income from the sale of items other than goods and services) minus the expenses incurred to earn that income. Profit is generally recorded when the sale is made and cash flow is recorded when the money is actually received/paid. Overall, profit (or loss) equals income minus expenses, and its recognition is mostly independent from when cash is received or paid.

**Question 2: Profit versus cash flow**

Mixon Computer (MC) sells computer on a retail basis. MC began operations during October 2015 and sold computer for $300,000 in cash. Bird Corporation (BC) and Apple Corporation (AC) are two suppliers for MC. The computers sold by MC was purchased on credit for $120,000 and $80,000 from BC and AC during October, respectively. The credit terms granted by the suppliers required MC to pay the full amount in November for the computer it received during October. In addition to the purchase and sale of computer, in October, MC paid $20,000 in cash for rent and salaries, $10,000 for renovation expenses and $5,000 for utilities bills.

1. How much is MC’s profit for October 2015 if no other transactions occurred?
2. How much is MC’s cash flow for October 2015?
3. If MC purchases and sells exactly the same amount in November and paid similar operating expenses as it did in October and under the same terms (receiving cash for the sales and making purchases on credit from BC and AC that will be due in December), how much will the company’s profit and cash flow be for the month of November?

**Answer:**

1. MC’s profit for October 2015 is the excess of the sales price ($300,000) over the cost of the goods that were sold ($120,000 +$80,000=$200,000) ,rent and salaries ($20,000), renovation expenses ($10,000) and utilities bills ($5,000), or $65,000
2. The October 2015 cash flow is $265,000, the amount of cash received from the customer ($300,000) less the cash paid for rent and salaries ($20,000), renovation expenses ($10,000) and utilities bills ($5,000)
3. MC’S profit for November will be identical to its profit in October: $65,000, calculated as the sale price ($300,000) minus the cost of the goods that were sold ($120,000 +$80,000=$200,000), rent and salaries ($20,000), renovation expenses ($10,000) and utilities bills ($5,000).

MC’s cash flow in November will also equal $65,000 , calculated as the amount of cash received from the customer ($300,000) minus the cash paid for rent and salaries ($20,000), renovation expenses ($10,000), utilities bills ($5,000) and minus the $200,000 ($120,000 +$80,000) that MC owes for the goods it had purchased on credit in the prior month.

**Question 3: Use of Balance sheet to evaluate a company**

Use the Balance sheet of the LINDT&SPRUNGLI GROUP from the slide (page 12&13) and answer the following questions:

* Has the company’s liquidity (ability to meet short - term obligations) improved?
* Is the company solvent (does it have sufficient resources to cover its obligations)?

**Answer:**

Though frequently used interchangeably, liquidity and solvency are different measures and the differences should be understood. Liquidity refers to the ability to quickly access cash and near-cash assets to satisfy current debt service and operations, whereas solvency refers to strong balance sheet with manageable debt ratios, leverage, and risk that is low enough to maintain access to ongoing funds should the need arise. More specifically, solvency ratios include financial obligations in both the long and short term, whereas liquidity ratios focus more on a company's short-term debt obligations and current assets. Ratios commonly used to measure liquidity and solvency are:

Liquidity: Current ratio = [Current assets](http://www.investopedia.com/terms/c/currentassets.asp) / Current liabilities

Solvency: Debt to assets = Total debt / Total assets

|  |  |  |
| --- | --- | --- |
|  | **31 Dec. 2018** | **31 Dec. 2017** |
| Current assets | 2,933 | 2,781.1 |
| Current liabilities | 1,028.1 | 1,049.8 |
| Current ratio | 2.85 | 2.65 |
| Total debt | 2,763.4 | 2,780.6 |
| Total assets | 7,249.8 | 6,975.6 |
| Debt to assets ratio | 0.38 | 0.40 |

Based on the above calculation, the current ratio of 2018 is more than that of 2017, so the company’s liquidity has improved. Since the company’s total assets are greater than its liabilities in both years, the company is solvent, i.e. it has sufficient resources to cover its obligations.

**Question 4: Use of income statement to evaluate a company**

How will you comment on Qantas profitability in 2019/2020 using its income statement? What is your conclusion?

**Answer:**

The company’s profitability declined substantially in 2020, primarily because of lower revenue. This was not unexpected given the COVID-19 pandemic. A better understanding of Qantas’s profitability could likely be gained by examining income statements over a longer time period.

**Question 5:**

The following numbers appeared in the annual report of DM Goodrich, the consumer foods manufacturer, for the fiscal year ending May 2016 (in millions of dollars):

|  |  |  |
| --- | --- | --- |
|  | **Fiscal 2016** | **Fiscal 2015** |
| Total assets | 18,691 | 18,875 |
| Total stockholders’ equity | 6,893 | 6,617 |
| Total revenues | 12,352 | 12,781 |
| Common share issues | 705 | 621 |
| Common dividends | 753 | 693 |
| Common stock repurchases | 796 | 1,548 |

The firm has no preferred stock.

For fiscal 2016, calculate

a. Total liabilities at year end.

b. Comprehensive income for the year.

**Answer:**

1. Total liabilities = Total assets – stockholders’ equity

=18,691– 6,893

=11,798

(b) Total Equity (end) = Total Equity (beginning) + Comprehensive

Income – Net Payout to Common Shareholders

=> 6,893= 6,617+ ? – 844

=> ? = 1120

Net payout to common = cash dividends + stock purchases – share issues

= 753 + 796 - 705

= 844

**Question 6:** Discussion on chapter-end questions.

**Answer: Please see the uploaded file under Week 1 folder – “Chapter end question-solution W1”**