

SUGGESTED SOLUTIONS

KC2 – Corporate Finance & Risk Management

December 2018



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SECTION 1

Answer 01

Relevant Learning Outcomes/s: 1.1.3, 2.1.1, 2.2.1, 5.1.1 and 5.2

- 1.1.3 Discuss internal resources and business strategy differences (external legislations, regulations, corporate governance, interest rates/yield curve, inflation rates, exchange rates, capital market activities, constraints to financial management).
- 2.1.1 Assess the short-term (working capital requirements) and long-term (long-term investment projects) financial requirements of an organisation and different financing options.
- 2.2.1 Evaluate working capital requirements and investment decisions using working capital cycle and permanent and temporary working capital estimations.
- 5.1.1 Discuss mergers, acquisitions and divestment as business strategies [including reasons, critical success factors and especially different types divestments such as trade sale, spinoff and management buy-outs (MBOs)].
- 5.2 Business valuation, merger, acquisition and divestment and other corporate growth strategies.

Study text reference: Pages 33 - 35, 104, 436, 487 - 488, 510 - 511, 528 - 533

(a)

| Pros | Cons |
|---|---|
| Affordable medicine to the public-the government of Sri Lanka, in order to make pharmaceutical drugs more affordable to the public, imposed maximum price limits on imported drugs. | Branded drugs (expensive, high quality, European) will exit, as it would not be profitable to be in Sri Lanka. |
| | Consumers who could afford the drugs will not have access to medicine of high quality. Instead, they would have to resort to purchasing generic products at a lower price. This results in a violation of rights. |
| | The market would be crowded with low quality drugs (active ingredients will be in low dosage). |

I believe that the Sri Lankan consumer should have the choice to access good quality medicine, where the government needs to discuss with the industry stakeholders, without just imposing price ceilings on all drugs.

| Year ended 31 March | 2017 | 2018 |
|-------------------------------|-----------------|------------------------|
| Stock holding period | <u> </u> | <u> </u> |
| | (225 – 50) | (200 – 35) |
| | 60.5 days | 77.4 days |
| | 61 days | 77 days |
| + Debtors' collection period | <u>38</u> x 365 | <u>50</u> x 365 |
| | 225 | 200 |
| | 61.6 days | 91.25 days |
| | 62 days | 91 days |
| (–) Creditors' payment period | <u>15</u> x 365 | <u> 14 </u> x 365 |
| | (225 – 50) | (200 – 35) |
| | 31.3 days | 31 days |
| Working capital cycle | 92 days | 137 days |

Due to the price controls, the working capital cycle has increased from 92 days to 137 days. This increase has occurred due to the increase in stocks; since sales have reduced due to price limits, as importers are unable to sell at a loss. Further, collections from drug distributors/pharmacies have also slowed down.

However, there have not been any changes in the time period taken to settle the overseas principals.

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|----|-----|
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| t | CJ. |
| `` | |

| | Sun Healthcare (Rs. million) | Ross Pharmaceuticals (Rs. million) |
|-----------------|---------------------------------|---------------------------------------|
| Inventory | 95% x 35 = 33.25 | 70% x 35 = 24.5 |
| Trade debtors | 90% x 50 = 45 | 55% x 50 = 27.50 |
| Trade creditors | 14 | 14 |
| Goodwill | EBITDA – 20 x 1.5 | 42.5 |
| | 30 | |
| Total offer | 122.25 | 108.5 |

While the Sun Healthcare offer is financially more and they are the market leaders in Sri Lanka, the fact that they are not willing to take employees is a negative. If the cost of retrenching employees is significant, the offer by Ross Pharmaceuticals could be better.

(d) Sun Healthcare, with its **market leadership** position, would add the Delta pharma range to its existing pharma portfolio gaining more economies of scale, utilising the same market channels, and reducing warehouse/logistics cost per unit.

There is no additional cost to Sun Healthcare to market these products of Delta as the infrastructure is already available.

It will also work well with the foreign principals, and it will be more aggressive than Delta in producing and marketing new products to the Sri Lankan market.

(Total: 25 marks)

Answer 02

Relevant Learning Outcomes/s: 6.1.1, 6.1.2, 6.2.1 and 5.2.1

- 6.1.1 Discuss various types of risks such as credit risk, interest rate risk, liquidity risk, foreign exchange risk, price risk, operational risk and reputational risk.
- 6.1.2 Discuss factors contributing towards each of the above risks.
- 6.2.1 Assess different tools/strategies to mitigate each of the risks identified above.
- 5.2.1 Evaluate business valuation techniques (asset based, earnings based, proxy PE based, cash flow based) for a specific merger or acquisition or divestment.

Study text reference: Pages 436, 450, 451, 591 – 592, 626 – 628

(a)

Areas/transactions that have resulted in forex exposure

The operations of ABC-Sierra branch have been primarily carried out from Sri Lanka. In other words all the operational cash flows have either been sent to or remitted out of Sri Lanka. This would have imposed a large forex exposure on ABC each time a cash flow took place on either side because they were uncovered forex transactions.

Therefore the operating model should have been where the head office is located and operated from ABC-Sierra itself, rather than shifting it to Sri Lanka. All the procurement should have been carried out from Sierra Land itself, and sales proceeds made locally should have been utilised to recover the costs.

This would have eliminated any exchange exposure on ABC financials, as none of the transactions would have needed to be converted to LKR.

The PPE required for ABC-Sierra is purchased by ABC as part of the internal procurement process, and paid for in multiple currencies. This would increase the foreign exchange risk when exchange rates are volatile.

The PPE should be purchased from Sierra using sales proceeds, or if cash is not adequate, by taking a loan from a local bank in SLC or purchasing currency. This again would ease the forex pressure arising on LKR.

Household appliances for ABC-Sierra are purchased by ABC in USD, and then shipped to ABC-Sierra. When the LKR depreciates against the USD and SLC, it would have an impact on the cash flow position of ABC. Hence ABC would be exposed to forex risk from two sides (USD and SLC).

Also a bank account needs to be opened in Sierra in SLC to manage day-to-day operations without any hassle.

Outsourcing of the administration costs to a global firm has also exposed the ABC- Sierra branch to foreign exchange risks.

Further the general administration costs could have been managed in any of the following ways.

• By setting up a local operating center in Sierra itself, where the expenses are paid in local currency.

• Agree with the global supplier to be paid in local currency (SLC).

In such a situation this operating model would end up with only two types of cash flows for ABC to get involved in.

- 1) Excess cash receipts from ABC-Sierra branch
- 2) Any capital infusion or unplanned cash requirements sent back to Sierra

The company could also consider forex hedging instruments, by looking at the timing and value of transactions, such as forward contracts.

Further, ABC can look at lagging and leading options in the event the forward contracts are too expensive.

(b)

Excess cash to be received from ABC-Sierra branch office

Leading and lagging attempts to capitalise on the ability to either delay the payments or make the payments early to take the advantage of foreign exchange rate movements.

For example if the local currency is expected to depreciate against a foreign currency 6 months from now, then the company would prefer to <u>delay the receipts in order to get the benefit</u>. In such an instance, ABC for example can instruct the branch to accumulate monthly excess remittances (from January to May) and then remit them only in June. The benefit arising from delaying the receipts would be as follows.

It is assumed that SLC is going appreciate by 30% in June (this implies that LKR would depreciate by the same %).

| Without Lagging | | |
|--------------------------------|---|-------------------|
| Total receipts from Jan to May | = | SLC 2,364 million |
| Converted to LKR | = | 2,364/42 |
| | = | LKR 56.29 million |

(Assuming that the forward rate would continue)

| With Lagging | |
|---------------------|---|
| The exchange rate w | vould be restated in June as given below. |
| Forward rate | SLC 42 = LKR 1 |
| Revised | SLC 29.4 = LKR 1 |
| Revised proceeds | 2,364/29 = LKR 80.41 million |

The comparison shows that ABC would gain LKR 24.13 million by lagging the receipts.

Administrative costs payable to the global firm

Similarly the branch may opt to make early payments to the global firm simply due to the reason that the Euro is expected to appreciate by 20% in February. It is assumed that early payment discounts would cover any negative impact arising from the time value of money for simplicity.

Leading action: First 6 months' payments made on 1 January 2019.

This would result in making a EUR 36,250 payment, equivalent to SLC 3,228 million. (refer Working 1 for details).

This needs to be compared with the situation where the payments are made without using any leading. Working 2 shows the situation in such a case where the branch will have to spend SLC 3,786 million due to the Euro appreciation. The benefit is equal to SLC 558 million.

Working 1

| | Tatal | Jan19 | Feb19 | Mar19 | Apr19 | May19 | Jun19 |
|--|---------|---------------|-------|-------|-------|-------|-------|
| | TULAI | (SLC million) | | | | | |
| Administrative costs payable to global firm (converted at spot rate) | 3,228 | 440 | 475 | 513 | 554 | 599 | 647 |
| Liability in Euros (SLC 9,600 = EUR 1) | 336,250 | | | | | | |

Working 2

| | Total | Jan19 | Feb19 | Mar19 | Apr19 | May19 | Jun19 |
|--|---------|--------|--------|--------|----------|--------|--------|
| | TULAT | | | (SLC | million) | | |
| Administrative costs payable to global firm (converted at spot rate) | 3,228 | 440 | 475 | 513 | 554 | 599 | 647 |
| Liability in Euros | | | | | | | |
| (SLC 9,600 = EUR 1) | 336,250 | 45,833 | 49,479 | 53,438 | 57,708 | 62,396 | 67,396 |
| Exchange rate | NA | 9,600 | 11,520 | 11,520 | 11,520 | 11,520 | 11,520 |
| Required (SLC million) | 3,786 | 440 | 570 | 616 | 665 | 719 | 776 |
| Benefit | 558 | | | | | | |

Alternative answer

Administrative costs (from Feb 19 – Jun 19) with leading action = SLC 2,788 million

Administrative costs without leading action:
SLC 9,600 = EUR 1
SLC 11,520 \rightarrow 1.2SLC 11,520 \rightarrow 1.2Administrative costs would be: 2,788 x 1.2 \rightarrow =
SLC 3,345.60 million
=
SLC 557.60 million

(c)

The cost of capital of the company remains at 14%, as calculated under Working 3. The estimated post-tax return from the proposed investment is 15% per annum. Therefore, it will clearly have a positive impact on the share price in the long run.

The attempts taken to compare the current position (no change in dividends) and revised dividend policy indicate that the shareholder value will increase by Rs. 175 for each share held (refer Working 4).

Therefore, the shareholders should welcome this approach and go ahead with it.

Working 3

| Required rate of return (RRR) | |
|-------------------------------|--------|
| Risk-free rate | 8% |
| Beta factor | 1 |
| Marker rate | 14% |
| RRR | 14.00% |

Ке

 $Rf + \beta (Rm - Rf)$ = =

8% + 1 (14% - 8%)

= 14%

Working 4

| Average growth over the past years | 6 | | | | |
|------------------------------------|-------|-------|-------|-------|-------|
| | 2018 | 2017 | 2016 | 2015 | 2014 |
| EPS (Rs.) | 70 | 68 | 65.5 | 63.5 | 61 |
| | 3% | 4% | 3% | 4% | |
| Average growth | 3.5% | | | | |
| Cumulative growth | 1.035 | | | | |
| | | | | | |
| Dividend pay-out ratio (DPR) | | | | | |
| | 2018 | 2017 | 2016 | 2015 | 2014 |
| DPR | 0.585 | 0.595 | 0.603 | 0.614 | 0.631 |
| Average DPR | 60.0% | | | | |

Alternatively

Arriving the growth rate based on earnings/dividend

Based on dividend I.

$$4\sqrt{\frac{41}{38.5}} - 1$$

1.0158 - 1 = 0.0158 = 1.6%

Π Based on earnings

$$4\sqrt{\frac{70}{61}} - 1$$

1.03500 - 1 = 3.5%

A. Dividend valuation model

 $d_1/(\text{ke} - \text{g}) = \frac{41(1.035)}{(0.14 - 0.035)} = 404.21$

B. Earnings growth model

 $p_o = E_0 (1 - b)(1 + b_r)/k_e - b_r$

| Retention % | 50% |
|-----------------------|-----|
| RRR | 14% |
| New investment return | 15% |
| EPS | 70 |
| | |

 $p_o = E_0 (1 - b) (1 + b_r)/k_e - b_r$

 $= \frac{35(1+0.075)}{(0.14-0.075)} = \frac{37.625}{0.065} = \frac{578.85}{174.64}$

Alternative answer

| $d_1/k_e - g$ | = | $\underline{41(1.035)} = 404.21$ |
|----------------|--------|----------------------------------|
| | | (0.14 – 0.035) |
| Implied P/E | = | <u>404.21</u> |
| | | 70 |
| | = | 5.77 times |
| New EPS | = | 70 + 3.075 (41*0.5*0.15) |
| | = | 73.075 |
| New price (Rs. |) = 73 | 3.075 * 5.77 = 421.64 |

(Total: 25 marks)

SECTION 2

Answer 03

| Relevant Learning Outcomes/s: 4.1.2/2.3.2/5.2.1/2.2.1 |
|--|
| 4.1.2 Evaluate investment projects using discounting factor/non-discounting factor |
| techniques with. |
| - Tax |
| - Inflation (monetary and real method) |
| - Unequal life projects (annual equivalent method only) |
| - Asset replacement |
| - Capital rationing (including multi period capital rationing) |
| - Under uncertainty (certainty equivalent, adjusting discounting factors/payback, |
| using probability and sensitivity analysis) |
| - foreign investments (using forward exchange rates or country specific discounting |
| factors) |
| 2.3.2 Analyse various methods (IPO, introduction, private placement, right issues) of issuing |
| instruments to capital markets. |
| 5.2.1 Evaluate business valuation techniques (asset based, earnings based, proxy PE base, |
| cash flow based) for a specific merger or acquisition or divestment. |
| 2.2.1 Evaluate working capital requirements and investment decisions using working capital |
| cvcle and permanent and temporary working capital estimations. |
| Study by traference: Dages 227/147/151/152/104 |
| Study text reference. rages 52//14//151/152/104 |

(a) (i)

The project seems to generate adequate cash despite volatile macroeconomic conditions. The expansion project reports a positive NPV of Rs. 472 million when discounted with the cost of debt.

(Refer Working 1 – Working 3)

Working 1

| | | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|--------------------------------|-------|---------|---------|-------------|---------|---------|
| EBIT (Rs. million) (W2) | | 70 | 105 | 147 | 195 | 251 |
| Revised EBIT | | | | | | |
| Inflation below 6% | | 77 | 116 | 162 | 215 | 276 |
| Inflation between | | | | | | |
| 6% - 10% | r | 70 | 105 | 147 | 195 | 251 |
| Inflation above 10% | | 35 | 53 | 74 | 98 | 125 |
| Probability | | | | | | |
| Inflation below 6% | | 20% | 20% | 20% | 20% | 20% |
| Inflation between | | | | | | |
| 6% - 10% | | 40% | 40% | 40% | 40% | 40% |
| Inflation above 10% | | 40% | 40% | 40% | 40% | 40% |
| | | | | | | |
| | | | | Rs. million | | |
| Expected EBIT | | 57 | 86 | 121 | 160 | 206 |
| EBIT * (1 – t) | | 41 | 62 | 87 | 115 | 148 |
| Depreciation (W3) | | 95 | 112 | 132 | 155 | 181 |
| Investment | | -115 | -85 | -90 | -100 | -85 |
| WC changes (W3) | (106) | (19) | (22) | (25) | (29) | |
| Free cash flows | (106) | 2 | 67 | 104 | 141 | 244 |
| WC realisation | | | | | | 150 |
| Investment realisation | | | | | | 200 |
| | (106) | 2 | 67 | 104 | 141 | 594 |
| Discounting factor 11% | 1 | 0.901 | 0.812 | 0.731 | 0.659 | 0.593 |
| Discounted cash flow | (106) | 2 | 55 | 76 | 93 | 352 |
| NPV | 472 | | | | | |

Discounting factor = 15% (1 - t) = 10.8% = 11%

Working 2

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|-----------------------|---------|---------|---------|---------|-------------------|---------|
| | | | (Rs. m | illion) | | |
| Profit before tax | 3 | 55 | 75 | 102 | 131 | 164 |
| Finance cost | 68 | 93 | 116 | 140 | 168 | 201 |
| EBIT | 71 | 148 | 191 | 242 | 299 | 365 |
| 2017/18 based EBIT | 71 | 78 | 86 | 95 | 104 | 114 |
| EBIT of the expansion | | 70 | 105 | 147 | 195 | 251 |
| project | | | | | | |
| Working 3 | | | | | $\langle \rangle$ | |

Working 3

| | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|-------------------------------|---------|---------|-------------|---------|---------|
| | | | (Rs. millio | n) | |
| Revenue | 634 | 749 | 881 | 1,033 | 1,208 |
| Depreciation (15% of revenue) | 95.1 | 112.35 | 132.15 | 154.95 | 181.2 |
| Working capital | 106 | 125 | 147 | 172 | 201 |
| Change in working capital | 106 | 19 | 22 | 25 | 29 |

Alternatively expected EBIT could be calculated as follows.

| | Impact | Probability | Net |
|----------------------------|--------|--------------|--------------|
| Inflation below 6% | 10% | 20% | 2% |
| Inflation between 6% – 10% | 0 | 40% | - |
| Inflation above 10% | (50%) | 40% | <u>(20%)</u> |
| | | Net decrease | <u>(18%)</u> |

| | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|---------------|---------|---------|---------------|---------|---------|
| | | | (Rs. million) | | |
| EBIT | 70 | 105 | 147 | 195 | 251 |
| Expected EBIT | 57.4 | 86.1 | 120.54 | 159.9 | 205.82 |

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 |
|------------------------------|---------|---------------|---------|---------|---------|---------|
| | | (Rs. million) | | | | |
| EBIT per the 5-year forecast | | 133 | 175 | 224 | 279 | 344 |
| EBIT of the current business | | 68 | 75 | 82 | 90 | 99 |
| EBIT from the expansion | | 65 | 100 | 142 | 189 | 245 |
| Expected EBIT | | | | | | |
| 10% increase in EBIT (0.2) | | 71.5 | 110 | 156.2 | 207.9 | 269.5 |
| No change in EBIT (0.4) | | 65 | 100 | 142 | 189 | 245 |
| 50% decrease in EBIT (0.4) | | 32.5 | 50 | 71 | 94.5 | 122.5 |
| | | 53 | 82 | 116 | 155 | 201 |
| Expected EBIT (1 – t) | | 38.4 | 59.0 | 83.8 | 111.6 | 144.6 |
| Add: Depreciation | | 95 | 112 | 132 | 155 | 181 |
| Working capital | -106 | -19 | -22 | -25 | -29 | |
| Investment | | -115 | -85 | -90 | -100 | -85 |
| Investment realisation | | | | | | 200 |
| Working capital realisation | | | | | | 150 |
| Net cash inflow/(outflow) | -106.00 | -0.58 | 64.34 | 100.98 | 137.55 | 590.85 |
| DCF (11%) | 1 | 0.901 | 0.812 | 0.731 | 0.659 | 0.593 |
| PV of cash flows | -106.00 | -0.53 | 52.24 | 73.81 | 90.64 | 350.38 |
| NPV | 461 | | | | | |

Alternative answer (based on the assumption that the finance income includes non-operating income)

(ii) Key strategies that can be used by the company to manage profitability under inflationary conditions

Planning for inflation

Financial management will take on a large role in an inflationary environment. Inflation has vital importance in both the balance sheet and income statement of all businesses. Anticipating the future effects of inflation can work to an advantage over competitor firms. The fundamental principle to be followed in an inflationary situation is that cash is guaranteed to lose value over time while the physical assets will gain in value. Incorporating this principle into all financial transactions will become critical for success.

The balance sheet

Since inflation erodes the value of cash, firms should reduce their working capital and shift assets towards inventory or longer-term fixed assets. The obvious first step is to become more efficient in the use of cash, reducing cash and other financial assets.

The organisation should try to reduce accounts receivable and increase accounts payable. Further, a proper assessment needs to be done in terms of timing of large capital cash flows due to the inflationary effect. On the liability side of the balance sheet, debt becomes more attractive in an inflationary environment. Businesses should increase their leverage and consider obtaining longer-term fixed-rate debt whose real interest rate will decrease as inflation increases.

The income statement

Hedging of key input material costs is a key strategy. Hedging will be on price as well as on currency. Long-term agreements with vendors with price caps could also be considered.

(b) (i)

Agree with the managing director's viewpoint that the current volatile macroeconomic conditions would have a negative impact on the IPO valuation, especially given circumstances where the exchange rate and inflation are under pressure. However this statement is not entirely true as there are other factors in addition to macroeconomic conditions as tabulated. Similarly the CEO's statement is partially incorrect, as the asset base together with goodwill is part of the equation only, but there are other <u>significantly important items</u> that would affect an IPO valuation as tabulated below.

| (1) | <> |
|----------|------|
| (h) | (ii) |
| 101 | 1111 |
| <u> </u> | · · |

| Industry comparable | This is one of the key factors. Every company belongs to a sector of the economy and has one or more competitors in that sector. These competitors can be categorised into private or public. Either way there should be already established parameters in setting a price for a newly trading company. It could be earning multipliers or otherwise. The investors are ready to pay a similar or close price to the market price in such events. |
|---|---|
| | For example, there are other film industry players in the market that are quoted, hence their price earnings ratio would have a direct impact on the IPO price. TWPL cannot go largely underpriced or overpriced. |
| Timing of the IPO | This is one of the key important factors affecting the IPO valuation. Per historical studies, identical companies do receive quite different valuations merely because of the timing of the IPO. |
| | As already mentioned by the managing director of TWPL, the timing of the business environment is "on hold" due to the rupee depreciation and anticipated inflation. |
| Company's future earnings potential | This is the most important factor for a more rational investor. While the share price is highly dependent on market speculations, it heavily depends on the company's future growth potential too. The primary reason for fund raising via IPOs, in most companies, is to fund further growth. Proper execution of the growth plan and resources available will allow investors to decide how much they would believe in such plans/projections. |
| | TWPL has provided a solid expansion plan with a healthy NPV. This would have a positive impact on the IPO valuation. |

| Marketing | Companies tend to advertise IPOs targeting potential investor portfolios, |
|-----------------|---|
| strategy of the | and the effectiveness of those portfolios is a key factor in valuing an IPO. |
| business | |
| | This would depend on how creative or effective TWPL's marketing team |
| | is in communicating the proposed IPO issue to potential investors. This |
| | would be challenging, as the cinema industry in Sri Lanka at the moment |
| | is quite stable with very little room for substantial growth. |
| Key executives | The successfulness of a business heavily depends on its key executives |
| and consultants | and consultants. Therefore the appearance of such high profiles would |
| | decide how sustainable the business is and accordingly determine the IPO |
| | price. |
| | |
| | The directors of TWPL are quite experienced, educated and have held positions in the industry for a long time. This would be a positive factor. |
| | |

(c) (i)

The change in the business value as a result of the expansion and capital infusion is summarised below.

| | Rs. million |
|-------------------------------|-------------|
| Existing market value (W4) | 773 |
| NPV of the expansion project | 472 |
| Share issue cost (600 * 0.5%) | (3) |
| Capital infusion | 600 |
| Expected total market value | 1,842 |

Working 4

| Adjusted net asset value | Rs. million |
|-------------------------------|-------------|
| Equity | 638 |
| Net assets before adjustments | 638 |
| Revaluation reserve | 150 |
| Investments | -15 |
| Adjusted value of the company | 773 |

If equity capital is used entirely to fund the expansion project:

| Bu | = | β _g x <u> E </u> | K _e = | $R_f + \beta_u$ (risk premium) |
|----|---|--|------------------|--------------------------------|
| | | E + D (1 – t) | | 9.5 + 0.405 (3.5%) |
| | = | 0.6 x <u>60</u> | K _e = | 11% |
| | | 60 + 40 (1 - 0.28) | | |
| | = | 0.6 x <u>60</u> | | |
| | | 88.8 | | |
| | | | | |

B_u = 0.405 KC2 - Suggested Solutions December 2018 (c) (ii)

| P/E-based valuation | |
|------------------------------|------------------|
| Public company | |
| EPS (Rs.) | 14.5 |
| Market price for share (Rs.) | 22 |
| P/E ratio | 1.517 times |
| | |
| Private company | |
| EPS | 1.34 |
| Market price per share | 2.033 |
| No. of shares | 1,500,000 |
| | Rs. 3,049,655.17 |

- The value computed in (c) (i) above cannot be compared with the P/E-based valuation due to the difference in the two bases.
- P/E reflects the current status of the business whilst net adjusted value accounts for the future expansion.
- Expected market value reflects post-money, whereas P/E indicates pre-money in its computation.

Hence, in such a situation, it is not practical to use the P/E-based valuation for comparison purposes.

(d)

Subject: Working capital management related disputes

The note to the board of directors should address the following.

- Acceptability of the working capital cycle calculated, especially the debtors' collection period.
- Whether the inventory holding period is maintained at 60 days.
- Whether the company is running with a zero working capital cycle
- Acceptability of the early payment discount proposed by the marketing director.

Acceptability of the working capital cycle calculated, especially the debtors' collection period.

The accountant claims that she maintained a debtors' collection period between 30 - 38 days for the last two years. It seems that she has calculated the debtors' collection period without giving consideration to the fact that 35% of sales were from owned theatres, which are on cash basis or cash equivalent sales (web sales via payment gateway). Therefore 35% of sales need to be taken out in the debtors' collection period. The debtors' collection period calculated post such adjustment would give 59 days for 2017/18 and 49 days for 2016/17 (refer Working 5). The calculations shown under Working 6 indicate that the accountant has not considered such an adjustment for whatever the reason, possibly to report a quicker collection period, which is incorrect.

Whether the inventory holding period is maintained at 60 days

The inventory holding period reported by the accountant is incorrect per the independent calculations carried out. Accordingly the correct inventory holding period for both years is given under Working 7. Accordingly the inventory <u>holding period is greater than 3 months</u>, which makes the accountant's statement factually incorrect.

Whether the company is running with a zero working capital cycle

The company's working capital cycle can be calculated as follows.

| Working capital cycle (days) | | |
|------------------------------|---------|----------|
| | 2016/17 | 2017/18 |
| Debtors' collection period | 49.01 | 58.60 |
| Inventory holding period | 106.82 | 125.74 |
| Creditors' payment period | (70.98) | (131.59) |
| | 84.85 | 52.74 |

The working capital cycle is not zero but shows improved results as a result of the almost doubled creditors' settlement period. Therefore a zero working capital cycle is factually incorrect. The accountant made this statement by omitting cash sales in the debtors' collection period, and she also gave an incorrect inventory holding period.

- The credibility of the company amongst suppliers is badly damaged. The company is running with a risk of losing some of its key vendors.
- The company has a long inventory holding period.
- The debtors' collection period has almost doubled compared to the target in the most recent year.

Therefore, cannot agree with the comments given by the accountant.

Acceptability of the early payment discount proposed by the marketing director

The company is offering its customers a 2% discount in return for the loss of 20 days credit. This represents an annualised rate of interest of 36.5% (2% x 365/20). The cost of offering the discount must be compared with the opportunity cost of capital in deciding whether to accept it or not.

Per the current status scorecard, the company is capable of obtaining medium-term loans at 10% per annum. Therefore on the surface it seems that the 36.5% annualised cost is higher than the current cost.

| | | 2016/17 | 2017/18 |
|-----|---|---------|---------|
| | Debtors' turnover ratio | | |
| | Annual sales (Rs. million) | 660 | 529 |
| 35% | Own theatre sales (Rs. million) | 231 | 185 |
| 65% | Franchise and other sales (Rs. million) | 429 | 344 |
| | Total receivables | 96 | 92 |
| 60% | Trade debtors (60% of receivables) | 57.6 | 55.2 |
| | Debtors turnover ratio (times) | 7.45 | 6.23 |
| | Debtors' collection period (days) | 49 | 59 |

Working 5

Working 6

| Debtors' collection period (as reported by the accountant) | 2016/17 | 2017/18 |
|---|---------|---------|
| Annual sales (Rs. million) | 660 | 529 |
| Debtors (Rs. million) | 58 | 55 |
| Debtors' turnover ratio (times) | 11.46 | 9.58 |
| Debtors' collection period (days) | 31.85 | 38.09 |

Working 7

| Stock turnover ratio | 2016/17 | 2017/18 |
|----------------------------------|---------|---------|
| Other income – F&B (Rs. million) | 40.20 | 27.32 |
| Cost of sales (85%)(Rs. million) | 34.17 | 23.22 |
| Inventory (Rs. million) | 10.00 | 8.00 |
| Stock turnover ratio (times) | 3.42 | 2.90 |
| Stock holding period (days) | 106.82 | 125.74 |
| | | |
| Creditors turnover ratio | 2016/17 | 2017/18 |
| Cost of calor (Ps. million) | 262 | 249 |

| | / | |
|-----------------------------------|--------|--------|
| Cost of sales (Rs. million) | 363 | 248 |
| Credit purchases (Rs. million) | 308.55 | 210.8 |
| Creditors | 60.00 | 76.00 |
| Creditors' turnover ratio (times) | 5.14 | 2.77 |
| Creditors' payment period (days) | 70.98 | 131.59 |

(Total: 50 marks)



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