Reading 40

# INTRODUCTION TO FINANCIAL STATEMENT MODELING

1. **(B) consider both inside and outside views to generate forecasts.**

   **Explanation**

   Representativeness bias occurs due to a tendency to classify data based on past information and known classifications. This can be mitigated by considering both inside (taking a situation-specific view) and outside (focusing on the base rate, the rate of incidence in a larger population) views. Performing scenario analysis can help mitigate overconfidence bias, and using flexible models with few independent variables can help mitigate conservatism bias.

   **(Module 40.1, LOS 40.b).**

2. **(B) low bargaining power of suppliers.**

   **Explanation**

   Low bargaining power of suppliers means the firms have more control over contracts with suppliers, such as successfully requesting price reductions. A high threat of substitute products means the firms will have less pricing power and may struggle to maintain volumes against these substitutes. If there are low barriers to entry, the threat of new entrants is high, which can make it difficult to maintain ROIC.

   **(Module 40.1, LOS 40.c)**

3. **(B) Revenue will decrease.**

   **Explanation**

   If the product has elastic demand, the percentage reduction in unit sales (demand) will be greater than the percentage increase in selling price, causing revenue to fall.

   **(Module 40.1, LOS 40.d)**

4. **(B) estimating the company's revenue growth trend.**

   **Explanation**

   The first step in creating a sales-based pro forma company model is to estimate revenue growth and future revenue.

   **(Module 40.1, LOS 40.a)**

5. (A) **illusion of control bias.**

**Explanation**

The illusion of control bias is a false sense of security in one's forecasts. One way to mitigate this is by focusing only on variables with known explanatory power, or by seeking outside opinions from those who have a unique or specific perspective. Confirmation bias can be mitigated by considering and including opinions from analysts or colleagues who have different views and no emotional investment. Overconfidence bias may be mitigated by analyzing the efficacy of past forecasts and performing scenario analysis.

**(Module 40.1, LOS 40.b)**

6. (B) **barriers to entry.**

**Explanation**

High barriers to entry imply a low threat of new entrants, which tends to increase the pricing power of the existing companies in an industry. High intensity of industry rivalry and high bargaining power of customers tend to decrease companies' pricing power.

**(Module 40.1, LOS 40.c)**

7. (C) **Estimate the financing costs.**

**Explanation**

The pro forma cash flow statement is constructed from the income statement and balance sheet; therefore, this statement cannot be built until the others are completed. The pro forma income statement should be completed first, including the financing costs, as the balance sheet is modeled based on items that flow from the income statement.

**(Module 40.1, LOS 40.a)**

8. (C) **A new export tariff being imposed on the company's products.**

**Explanation**

While all of these are likely to have an impact on future performance, inflection points are instances where the future will not be like the past, due to changes in the overall economic environment, business cycle stage, government regulations, or technology. The new export tariff is a change in government regulation—and, therefore, likely to signal an inflection point.

**(Module 40.1, LOS 40.e)**

9. (A) **Until the middle of the business cycle.**

**Explanation**

Although it would be useful to have two full business cycles in a forecast, it is likely that the information will be difficult to forecast with enough accuracy. Forecasting for only one year may give a higher level of accuracy, but it will present earnings that are above or below trend depending on the firm's current position in the business cycle. Forecasting until the middle of the business cycle means the forecast will include this midcycle, average level of sales, and profits, which will ensure the current phase does not skew the forecast.

**(Module 40.1, LOS 40.e)**

**10. (B) Conservatism bias.**

**Explanation**

Conservatism bias, also called anchoring, is where the analyst makes only small adjustments to his prior forecasts when new information becomes available. Confirmation bias causes an analyst to seek out data that affirms his earlier convictions and to disregard or underestimate information that disputes those opinions. We do not have enough information in the scenario to know whether the new information disputes the analyst's previous opinions or may actually support them. Representativeness bias occurs due to a tendency to classify data based on past information and classifications.

**(Module 40.1, LOS 40.b)**

**11. (B) short term only.**

**Explanation**

Cutting some costs to help preserve operating margins in the face of cost increases is a strategy that can be appropriate in the short term, but it is not appropriate in the long term, as the operations of the business (e.g., missing out on revenue generated from the advertising) will most likely suffer.

**(Module 40.1, LOS 40.d)**

**12. (A) conservatism bias.**

**Explanation**

Conservatism bias, or anchoring, reflects reluctance to incorporate new information into an outlook and may cause an analyst to make only small changes to a prior forecast even when new information makes a large adjustment more appropriate. Confirmation bias refers to seeking out information that confirms one's views. Base-rate neglect, in the context of financial analysis, refers to focusing on company-specific information while not adequately considering factors that affect its industry or the wider economy.

**(Module 40.1, LOS 40.b)**

**13. (C) Accounts receivable and inventory.**

**Explanation**

Selling fewer units will reduce accounts receivable, all else (e.g., credit terms) being equal. Also, a reduction in sales will likely impact inventory: if the firm continues to purchase or produce the same number, then a reduction in sales will lead to higher inventory levels. Alternatively, if the firm adjusts its inventory strategy to reflect lower demand, it may see a reduction in inventory levels. Prepayments represent the amount paid for future period expenses (not purchases) and are unlikely to be affected by a change in sales demand.

**(Module 40.1, LOS 40.a)**

**14. (B) Long-term growth rate.**

**Explanation**

Depreciation is not a cash flow and should not be included in the discounted cash flow approach. Changes in the statutory tax rate will impact the forecast, but not by as much as the long-term growth rate. This is due to the terminal value taking the growth rate to perpetuity and applying the growth exponentially.

**(Module 40.1, LOS 40.e)**

**15. (C) Statement 2 only.**

**Explanation**

Statement 1 is incorrect. COGS may grow at the same rate as sales, but it may also include some fixed costs or have cost price changes which are different to sales. COGS should be estimated either based on a percentage of sales, or on a more detailed method based on business strategy or competitive environment. Although SG&A is commonly seen as fixed costs, it can also grow with sales (e.g., if labor costs are included which are dependent on units sold).

**(Module 40.1, LOS 40.a)**

**16. (A) Operating profit.**

**Explanation**

The 20X9 income statement will be forecast as follows:

| | |
|---|---|
| Revenue | \$ 736,000 (\$ 800,000 × 0.92) |
| COGS | (\$ 557,786) (\$ 570,000 / 140,000 × 137,000) |
| Gross profit | \$ 178,214 |
| SG&A | (\$ 96,000) |
| Operating profit | \$ 82,214 |

Revenue will decrease by 8.00% [(\$800,000 \$736,000) / \$800,000]; gross profit by 22.52% [(230,000 \$178,214) / 230,000)]; and operating profit by 38.65% [(\$134,000 \$82,214) / \$134,000]

**(Module 40.1, LOS 40.d)**

**17. (B) Capital structure.**

**Explanation**

When considering the impact of price changes, an understanding of any hedging activities used to mitigate these changes is important. The analyst should understand the vertical structure of the business to consider whether industry or market-wide price changes impact the firm (e.g., if a large amount of a firm's sales are internal to a subsidiary, the pricing strategy may differ). While capital structure is crucial from an overall analysis perspective, this is not as relevant when analyzing sales and cost price changes.

**(Module 40.1, LOS 40.d)**

**18. (A) Availability of substitute products.**

**Explanation**

The elasticity of demand is most affected by the availability of substitute products. In a competitive industry, the pricing decisions of other firms in the industry can affect the market shares of all firms in an industry. Therefore, the greater amount of available substitute products, the more sensitive consumers are likely to be to price changes.

**(Module 40.1, LOS 40.c)**

**19. (A) Low threat of substitute products.**

**Explanation**

Pricing power is low when there are high levels of competition in the industry, when it is easy for customers to switch between products or have high bargaining power. Given a low threat of substitute products, the company is likely to have higher pricing power as there are fewer alternatives for the customers to choose from.

**(Module 40.1, LOS 40.c)**

**20. (C) 6 years.**

**Explanation**

The expected holding period for a stock would be a sensible length of time to forecast the performance of the firm in question. An annual turnover of 17% gives an average holding period of approximately six years (100 / 17 = 5.88).

**(Module 40.1, LOS 40.e)**



**21. (B) The two firms have differing capital structures.**

**Explanation**

ROIC is the return to both equity and debt as opposed to ROE, which only looks at the return to equity. ROIC can be helpful in analyzing firms with different capital structures. The industry or country that the firm operates in is less likely to make a difference to the choice of ROIC or ROE.

**(Module 40.1, LOS 40.c)**