

Learning Module 7: Company Analysis: Forecasting

LOS 7a: explain principles and approaches to forecasting a company's financial results and position

Forecasting a company's financial results and position is a critical aspect of financial analysis. It involves predicting the future financial performance of a company based on various factors such as historical data, industry trends, and management guidance. The approaches to forecasting can vary significantly depending on the analyst, the company, and the industry.

An analyst at a public research firm often concentrates on short-term forecasts for revenue and earnings per share. Meanwhile, an investor holding a controlling stake in a private company typically develops comprehensive models for a longer-term perspective, spanning multiple years or even decades.

Let's consider two real-world companies for our discussion - Costco Wholesale Corporation and Amazon.com Inc. (an online marketplace). While these companies operate in different sectors, the principles of financial forecasting apply to both.

Key Elements in Financial Statements Forecasting

When forecasting a company's financial performance, analysts often focus on four key elements:

- **Drivers of Financial Statement Lines:** These are factors that influence the lines in a financial statement. For example, for a company like Costco, net sales can be analyzed using drivers like the average number of stores open and the average net sales per store. These drivers can be forecasted individually and then multiplied to get the forecast of net sales. Other key drivers include gross margin and SG&A expenses that can be forecasted as percentages of net sales.
- **Individual Financial Statement Lines:** Analysts can directly forecast individual financial statement lines. This approach is often used for lines without clear drivers, for less-material items, and for items that the analyst does not have a perspective on. Examples include lines such as amortization expense on the income statement, "other

non-current assets" on the balance sheet, and various lines on statements of cash flows for which minimal disclosures are provided.

- **Summary Measures:** These include metrics like total assets, earnings per share, and free cash flow. Efficiency is a benefit of employing these as forecasting objects. However, it comes with less transparency, making it difficult to audit the forecast. The summary measure must be steady and predictable for this strategy to be effective, or issuer disclosures must be highly limited.
- **Ad Hoc Objects:** These are things that prior financial statements might not have yet disclosed. Before the issuer records an accrual on its financial accounts, an analyst may occasionally be required to estimate a loss or gain and its timing in order to make an investment decision with regard to the company's equity or debt instruments. Examples of such situations include announcing a significant court proceeding, a government regulation, or a tax dispute.

Approaches to Financial Forecasting

There are several approaches to financial forecasting, each with its own strengths and limitations. These include:

1. Historical Results Forecast Approach (assumes the past is the precedent)

The Historical Results Forecast Approach is a method used to predict future outcomes based on past results. This approach is considered the easiest and often the default method due to its simplicity and the assumption that past events are likely to recur. However, it's important to note that past results were produced under specific conditions that may not be the same as current or future conditions.

Applicability of the Historical Results Forecast Approach

- This approach is suitable for companies operating in industries where the analyst does

not anticipate any changes in the industry structure.

- It is also applicable to companies that have a low sensitivity to changes in the business cycle.
- Commonly used for forecast objects that are not material or that the analyst does not hold an opinion on.

Limitations of the Historical Results Forecast Approach

- It is less appropriate for companies in cyclical industries. A future period is likely to be at a different point in the business cycle than the current or past period.
- An "over the cycle" average or median may be suitable for a multi-year forecast for a cyclical company but less appropriate for a specific year as it hides the year-to-year volatility.
- This approach is also not suitable for companies that are changing their competitive strategy or undergoing a restructuring, such as making a large acquisition. This makes historical results non-comparable.

2. Historical Base Rates and Convergence Forecast Approach

The Historical Base Rates and Convergence Forecast Approach is a strategic method in financial forecasting. This approach utilizes averages or medians from an industry or peer group as a "base rate" for forecasting, often considering macroeconomic variables such as GDP growth in the calculations.

Key Aspects of the Approach

- Relies on industry or peer group averages or medians as a base for forecasting.
- Requires analyst discretion in object selection and timeframe determination for convergence to the base rate.

- Suitable for established industries with numerous publicly traded counterparts.
- Effective for smaller companies maturing to match the financial profile of larger peers.

Applicability and Examples

- **Banks:** Useful in forecasting trends for regional banks aligning with industry standards set by giants.
- **Automakers:** Can be applied to budding electric vehicle manufacturers.
- **Restaurants:** Beneficial for local restaurant chains aiming to mirror the success patterns of established entities.

Limitations of the Approach

- Not suitable for new or volatile industries where establishing a base rate is challenging.
- Less applicable to highly cyclical industries due to the potential masking of yearly volatility.
- Not ideal for industry leaders that significantly influence the industry base rate.

3. Management Guidance Forecast Approach

Management guidance includes earnings, revenue, and other targets that public company management may publicly provide for the next quarter, year, or longer. It can be specific or more general and is frequently revised during the year. Guidance is valuable because it provides forward-looking information based on the knowledge and insights of company management. Investors rely heavily on guidance as it forms a significant portion of the information used in quarterly financial analysis.

Characteristics of Guidance

- Guidance typically includes a range, like "2%-4% sales growth," and involves numerous forecasts and assumptions. These encompass factors like economic growth, cost increases, market share shifts, pricing decisions, and currency exchange fluctuations made by company management.
- Guidance will change if management's estimates change, and it is not uncommon for companies to suspend guidance altogether in periods of high uncertainty, such as during the COVID-19 pandemic or in recessions.

Investor Focus and Management Expectations

- A key focus of investors is understanding management's assumptions embedded in guidance and scrutinizing their plausibility.
- While the middle of a guidance range may seem to represent management's "true" expectations, the upper bound frequently does a better job of doing so. This is because the upper bound is "padded" by pairing it with a pessimistic lower bound in order to make the target easier to overcome and for which management can receive compensation.

Use of Guidance for Forecasts

- Using guidance for forecasts is appropriate when it is provided and when management has demonstrated a track record of reliable estimates. Analysts should analyze past guidance versus actuals.
- Guidance should not be used for companies that are highly sensitive to the business cycle, as management does not have an informational advantage over investors in forecasting macroeconomic variables like GDP or the prices of commodities.
- Investors are skilled at predicting macroeconomic trends, while management excels in predicting company-specific factors. Management's forecasts are typically more accurate for areas they can control, like operating costs and capital spending.

4. Analyst's Discretionary Forecast Approach

The Analyst's Discretionary Forecast Approach is a flexible method in financial forecasting that employs a combination of different techniques instead of relying on a single model or method. This approach comes into play, especially when traditional forecasting methods are found inadequate or non-applicable.

Techniques Included in the Analyst's Discretionary Forecast Approach

- **Surveys:** Gathering data through questionnaires to gain insights.
- Quantitative models: Using statistical models to analyze data and trends.
- **Probability distributions:** Utilizing statistical methods to predict various possible outcomes.
- **Analogy to historical precedents that differ from comparable companies or industry averages:** Drawing parallels with past events that are not necessarily in line with industry norms.
- **Other unobservable inputs:** Considering factors that are not directly measurable but influence the forecast.

Applicability of the Analyst's Discretionary Forecast Approach

This approach is particularly utilized for:

- Companies operating in cyclical industries, where there are recurrent ups and downs.
- Companies that have a limited number of comparables in the market.
- Companies that do not offer management guidance for forecasting.
- Companies witnessing a significant shift, be it in the competitive landscape or regulatory environment.

Examples of the Analyst's Discretionary Forecast Approach

Here are instances where this approach might be employed:

- **Energy Sector:** Analysts may use this approach to forecast trends in the energy sector, especially considering the unprecedented shift towards renewable energy and the adoption of new technologies like electric vehicles. Factors such as government emission reduction commitments, proposed legislation, and capital expenditure constraints would be considered.
- **Technology Startups:** In the case of technology startups that are carving out new niches, analysts might rely on a blend of surveys, expert opinions, and analogies to emerging trends to forecast financial outcomes.

Selecting a Forecast Horizon

Selecting an appropriate forecast horizon is a vital step in the financial forecasting process. It depends on various factors, including the investment strategy, the cyclicity of the industry, company-specific factors, and the preferences or guidelines established by the analyst's employer. Here, we explore these aspects in detail:

Investment Strategy

- The choice of the forecast time horizon is closely aligned with the investment strategy under consideration. It is crucial to establish a time frame that resonates with the objectives and average holding period stated in the investment strategy.
- Professional investment strategies generally indicate the investment time frame and the average holding period in their objectives. Adhering to these time frames is essential for achieving the expected outcomes.
- For instance, fund managers with a long-term perspective may predominantly concentrate their forecasts on a span of three to five years. In contrast, managers who have a shorter-term focus might prioritize the upcoming one or two quarters.

Industry Cyclicality

- Industry cyclicality is a significant determinant in deciding the forecast time frame. The period chosen should cover a business cycle to facilitate the attainment of anticipated mid-cycle levels of sales and profitability.
- The cyclic nature of the industry necessitates a forecast period that extends sufficiently to capture the fluctuations and trends accurately.

Company-Specific Factors

- Company-specific elements, such as recent acquisitions or restructuring initiatives, play a pivotal role in determining the forecast horizon.
- It is imperative to allocate a time span that allows for the manifestation of the benefits arising from these activities in the financial statements, thus offering a realistic view of the financial prospects.

Analyst's Employer's Preferences

- At times, the selection of the forecast horizon may be dictated by the guidelines or preferences set by the analyst's employer, leaving little room for individual discretion.
- This standardized approach ensures consistency and alignment with the organizational objectives and strategies.

Question #1

A financial analyst is working on a forecast for a company in the energy sector. The company is facing unprecedented changes due to the potential shift to renewable energy and the adoption of technologies like electric vehicles. The analyst needs to consider various factors such as government emission reduction commitments, proposed legislation, and capital expenditure constraints. Which forecasting approach is the analyst *most likely* to use in this scenario?

- A. Quantitative Forecasting Approach.
- B. Analyst's Discretionary Forecast Approach.
- C. Historical Forecasting Approach.

The correct answer is **B**.

The analyst is likely to use the Analyst's Discretionary Forecast Approach in this scenario. This approach is often used when there are significant changes in the external environment that are likely to impact the company's future performance. It involves the use of subjective judgment and expertise to make forecasts. In this case, the company is facing unprecedented changes due to the potential shift to renewable energy and the adoption of technologies like electric vehicles.

The analyst needs to consider various factors such as government emission reduction commitments, proposed legislation, and capital expenditure constraints. These factors are complex and interrelated, and their impact on the company's future performance is uncertain. Therefore, the analyst needs to use his or her judgment and expertise to assess these factors and make a forecast. This approach allows the analyst to incorporate the latest information and changes in the external environment into the forecast.

A is incorrect. The Quantitative Forecasting Approach is based on mathematical models and statistical techniques. It uses historical data to make forecasts. While this

approach can be useful in many situations, it may not be appropriate in this case because the company is facing unprecedented changes that are not reflected in the historical data.

C is incorrect. The Historical Forecasting Approach is based on the assumption that the past performance of a company is a good indicator of its future performance. This approach may not be appropriate in this case because the company is facing unprecedented changes that are likely to significantly impact its future performance. The historical data may not provide a reliable basis for forecasting the company's future performance in the face of these changes.

Question #2

An investment analyst is preparing a forecast for a security that is being considered for a professionally managed investment strategy. The investment objectives of the strategy describe a long-term time frame and an average holding period. In this context, what time period is the analyst *most likely* to focus their forecasting on?

- A. One or two quarters.
- B. Three to five years.
- C. Indefinite.

The correct answer is **B**.

Given the long-term investment objectives and average holding period described in the strategy, the analyst is most likely to focus their forecasting on a time period of three to five years. This is because long-term investment strategies typically involve holding securities for several years, and the performance of these securities over this time frame is crucial to the success of the strategy.

The analyst would therefore need to forecast the performance of the security over this period to determine whether it is likely to meet the strategy's objectives. This would involve analyzing the security's fundamentals, such as its earnings, cash flows, and financial health, as well as external factors such as economic conditions and industry trends, over a three to five-year horizon.

A is incorrect. A time period of one or two quarters is typically considered short-term in the context of investment forecasting. While short-term forecasts can be useful for certain types of investment strategies, such as trading or tactical asset allocation, they are less relevant for a long-term, buy-and-hold strategy.

C is incorrect. An indefinite time period is not practical for investment forecasting. While it is true that some investment strategies, such as value investing, involve holding securities for an indefinite period until their intrinsic value is realized, this does not mean that forecasts can or should be made over an indefinite time period. Forecasts need to be based on specific assumptions and data, which are typically only available or reliable for a certain time horizon.

LOS 7b: explain approaches to forecasting a company's revenues

Forecasting a company's revenues is a critical aspect of financial analysis. It involves estimating future revenues using various approaches and considering different risk factors that might influence a company's financial standing. In this lesson, we delve into different forecasting objects and approaches, highlighting their real-world applications and importance in modern financial analysis. Let's begin by understanding the types of forecast objects that are commonly used.

Forecast objects for revenues, instrumental in company analysis for predicting future revenues, can be classified as either **top-down** or **bottom-up** drivers. These drivers aid in formulating an accurate picture of a company's potential future revenue streams. Below, we will explore each of these drivers with real-world examples.

Top-Down Forecast Objects

1. **Growth relative to GDP growth** Utilizing this approach involves comparing the growth rate of a company with the nominal GDP growth rate. For instance, if a telecommunications company has historically grown at 1.5 times the rate of GDP growth, analysts may use this ratio to forecast future revenues. Further, the company's position in its life cycle or sensitivity to business cycles is considered to derive premiums or discounts in percentage points.
2. **Market growth and market share** In this approach, the focus is on predicting the growth rate of the company's product market and evaluating the changes in market share over time. For instance, if a smartphone manufacturing company holds a 20% market share and the market is expected to grow by 10%, the company's revenue forecast might be adjusted accordingly. Regression analysis might be employed to estimate the relationship if a predictable relationship between product market revenue and GDP exists.

Bottom-up Forecast Objects

1. **Volumes and average selling prices:** This method entails preparing individual

forecasts for the volumes and prices of the company's products and then multiplying them to get a revenue forecast. For example, a car manufacturer may estimate revenues by forecasting the number of cars to be sold and the average price per car.

2. **Product-line or segment revenues:** Here, forecasts are made for individual products, business lines, geographical areas, or reporting segments and then aggregated to form a total revenue forecast. For instance, a multinational corporation might forecast revenues separately for different regions and then aggregate them.
3. **Capacity-based measures:** This approach, commonly used in retail, bases forecasts on parameters like the number of stores and sales per store or the growth in sales from new-store openings. For instance, a retail chain might estimate future revenues based on projected sales per store and the planned number of new store openings.
4. **Return- or yield-based measures:** Forecasts in this category are based on account balances and revenue yields on them. For example, for a bank, net interest income can be calculated using the formula:

$$\text{Net Interest Income} = (\text{Loans} \times \text{Average Interest Rate}) - (\text{Deposits and Liabilities} \times \text{Their Yield})$$

Using a combination of both top-down and bottom-up objects can assist in uncovering implicit assumptions or errors that might arise from employing a single approach.

Top-Down Drivers

Forecast Method	Examples
Historical Results	<ul style="list-style-type: none"> –Utilizing past GDP growth rates to anticipate potential market size for the real estate industry. –Assessing previous years' consumer behavior patterns during holiday seasons to project market share for retail businesses. –Analyzing past economic conditions to predict market trends for investment sectors.
Historical Base Rates and Convergence	<ul style="list-style-type: none"> –Leveraging industry average profit margins from the past decade to estimate future market share for manufacturing firms. –Utilizing historical data on market penetration rates in similar markets to predict potential market size for a new product launch. –Predicting market trends for the automotive industry based on peer group average growth rates over the past 5 years.
Management Guidance	<ul style="list-style-type: none"> –Using management's projections on the expansion into new markets to gauge potential market size growth for a telecommunications company. –Incorporating management's guidance on product innovations to estimate market share expansion for a tech company. –Considering company's forecasted trends in consumer preferences to adapt market strategies for a food and beverage company.
Analyst's Discretionary Forecast	<ul style="list-style-type: none"> –Conducting expert surveys to gauge anticipated market trends in the renewable energy sector. –Developing customized quantitative models to forecast market size for emerging technologies. –Synthesizing data from different sources to project market share dynamics for e-commerce platforms.

Bottom-Up Drivers

Forecast Method	Examples
Historical Results	<ul style="list-style-type: none"> – Analyzing historical sales data per store to forecast future sales for a retail chain, considering seasonal variations and promotions. – Using past membership growth rates to forecast future membership numbers for a gym, factoring in new location openings and marketing campaigns. – Evaluating historical data on store expansions to anticipate future growth for a supermarket chain, considering market saturation and consumer trends.
Historical Base Rates and Convergence	<ul style="list-style-type: none"> – Utilizing industry average sales per store data to project company sales, considering economic factors and consumer preferences. – Estimating future membership pricing trends based on industry averages, considering competitive pricing strategies and market demand. – Leveraging industry average data on store expansion to project company growth, considering regional market dynamics and consumer behavior.
Management Guidance	<ul style="list-style-type: none"> – Considering management's guidance on store expansion plans to predict future growth for a retail business, taking into account market competition and consumer behavior. – Integrating company's projections on sales per store to develop a comprehensive sales forecast, considering product innovations and marketing strategies. – Incorporating management's strategies on membership pricing to anticipate future revenue streams, considering market trends and consumer preferences.
Analyst's Discretionary Forecast	<ul style="list-style-type: none"> – Applying advanced statistical models to forecast sales per store for a new retail brand, considering market dynamics and consumer insights. – Using specialized surveys and market research to predict membership growth for a subscription-based service, considering industry trends and consumer behavior. – Developing complex predictive models to anticipate the growth trajectory of a startup, considering various market and company-specific factors.

Separating Recurring and Non-recurring Revenue or Revenue Growth

In forecasting, it is essential to separate non-recurring items and effects from recurring ones, as they have different drivers. This separation helps in avoiding inflation or deflation of the forecast object's size. These items can be classified into **disclosed** and **non-disclosed** non-recurring

items.

Disclosed non-recurring items are disclosed by the company's management, including the effects of changes in exchange rates, extra selling days, acquisitions/divestitures, and other "one-time" revenues or gains. These are separated to focus the forecast on "underlying" revenue or growth. Analysts might also incorporate proprietary exchange rate forecasts in revenue projections.

Non-disclosed, non-recurring items are not quantified by management, requiring analyst judgment to estimate. For instance, during the COVID-19 pandemic, a surge was seen in e-commerce sales. However, many e-commerce companies saw a decline in revenue in 2022, indicating that some of the growth was non-recurring.

Forecasting revenues is a vital aspect of financial analysis, involving various approaches such as using historical results, base rates and convergence, management guidance, and discretionary forecasts by the analyst. While forecasting, analysts must consider several risk factors, which might vary across companies. The common risk factors to consider include competition, changes in business cycles, inflation or deflation, and technological developments.

Due to the considerable range of possible results, analysts frequently create multiple forecasts for a company's financial statements, known as scenarios. These scenarios are developed using varying perspectives on critical risk factors.

Question

When conducting revenue forecasts, analysts must take into account various risk factors. These factors can differ from one company to another, but some are common to all businesses. Which of the following is *least likely* considered a common risk factor in revenue forecasting?

- A. Competition.
- B. Technological developments.
- C. Company's brand image.

The correct answer is **C**.

While a company's brand image can certainly impact its revenue, it is not typically considered a common risk factor in revenue forecasting. Revenue forecasting is a financial projection that is based on the sales that a company expects to generate in the future. It is influenced by a variety of factors, including market conditions, competition, and technological developments. These factors can directly impact a company's ability to generate sales and, therefore, its revenue. However, a company's brand image is more related to its reputation and customer perception, which can indirectly impact revenue but is not a direct risk factor. It is more subjective and difficult to quantify, making it less suitable for inclusion in a revenue forecast. While a strong brand image can certainly contribute to higher sales, it is not a risk factor in the same way that competition or technological developments are.

A is incorrect. Competition is indeed a common risk factor in revenue forecasting. The presence of competitors can impact a company's market share and pricing power, both of which can directly impact its revenue. Therefore, analysts must take into account the competitive landscape when conducting revenue forecasts.

B is incorrect. Technological developments are also a common risk factor in revenue forecasting. Technological advancements can disrupt industries and change the way

business is conducted, potentially impacting a company's revenue. For example, a company that fails to adapt to new technologies may lose market share to competitors that do, resulting in lower revenue. Therefore, analysts must consider the potential impact of technological developments when conducting revenue forecasts.

LOS 7c: explain approaches to forecasting a company's operating expenses and working capital

Issuer's Disclosures about Operating Costs

When it comes to operating costs, issuers tend to provide less detailed information compared to their revenue disclosures. Analysts often work with broader financial statement categories like cost of sales or SG&A. They might also use summary measures like EBITDA margins to evaluate costs across different geographic regions, business segments, or product lines.

The forecasts for revenues and costs should be coherent. If the sales of a low-margin product, segment, or geography are forecasted to grow faster than other revenues, a certain level of overall profit margin deterioration should be forecasted. This is applicable even if the analyst is uncertain about the precise margins earned on each object.

Cost of Sales and Gross Margins

Analysts should forecast any change in the product mix sold. For instance, in the case of a company that also sells higher-margin items, such as alcoholic products or pharmaceutical products, the analyst would want to forecast any change in the product mix sold.

Cost of sales, also known as cost of goods sold (COGS), is usually the largest cost for companies that manufacture and/or sell products. It is directly linked to sales, making it a crucial factor in forecasting. This cost can be forecasted as a percentage of sales or as a gross margin. The gross margin can fluctuate based on the company's market position.

If a company is losing market share due to the introduction of cheaper substitute products, the gross margin is likely to decrease. Conversely, if a company is gaining market share through the introduction of differentiated products and achieving cost advantages, the gross margin is likely to increase.

Given the significant impact of the cost of sales, even a single basis point change in the gross margin forecast can materially affect the forecasts of operating profit and free cash flow.

Therefore, a detailed analysis of these costs, such as by segment, input, product line, volume, and price components, can provide a better justification for the forecast.

For instance, companies that face fluctuating input costs that can only be passed on to customers after a time lag need to be considered. Particularly for companies with low gross margins, sudden shocks in input costs can significantly affect operating profit.

Analysts should also consider a company's hedging strategy in their forecasts. Companies that rely heavily on commodities often see their gross margins decline when input prices increase significantly, as variable costs rise faster than output prices.

Through hedging strategies, companies can mitigate the impact on profitability. For example, brewers often hedge the cost of barley, a key raw material, one year in advance. While companies may not disclose specific hedging positions, their hedging strategy is often disclosed in the notes to the financial statements.

Another factor to consider is the impact of increasing sales prices on sales volume, especially if product demand is price elastic. This can be mitigated by a policy of gradual sales price increases. For instance, if a brewer anticipates higher barley prices due to a poor harvest, they can slowly increase prices to avoid a sharp price jump the following year.

While competitors' gross margins can provide a useful cross-check for forecasting gross margins, differences in business models can make these margins incomparable. For example, some retailers own and operate their own stores, while others operate as wholesalers with franchised retail operations. In the franchise model, most of the operating costs are incurred by the franchisee, and the wholesaler sells products with only a small markup to these franchisees. Compared to a retailer with its own stores, a wholesaler will have a much lower gross margin but also much lower operating costs.

Selling, General and Administrative (SG&A) Expenses

SG&A expenses, also known as Selling, General, and Administrative expenses, are a major type of operating costs. Unlike the cost of sales, these expenses often have a less direct relationship with revenues. This means that they may not increase or decrease in direct proportion to the

company's sales.

It's crucial to recognize that not all SG&A (Selling, General, and Administrative) expenses share the same degree of correlation with revenue. For instance, expenses related to sales and distribution often contain a significant variable element and can be projected as a percentage of sales. In contrast, general corporate expenditures tend to be more fixed in nature and might be more appropriately forecasted using a fixed growth rate derived from anticipated wage inflation.

Regarding segment disclosures, they commonly feature profitability indicators like operating and EBITDA margins for each segment. However, they typically do not provide detailed cost breakdowns such as cost of sales or SG&A by segment. If an analyst is creating a model based on segment projections, they may opt to utilize aggregated metrics specific to each segment instead.

Working Capital Forecasts

Working capital forecasts are crucial financial projections that help in predicting the future financial health of a business. They are typically made by using efficiency ratios, which are combined with sales and cost forecasts to project various elements of working capital. These elements include accounts receivable, inventories, accounts payable, and other current assets and liabilities.

Efficiency ratios are used as the forecast object in working capital forecasts. These ratios, which were discussed in earlier modules, are used to measure the effectiveness of a company's use of its assets and liabilities. They are crucial in predicting the future financial health of a business.

While a historical results approach is common for working capital efficiency ratios, analysts can also use other forecast approaches. These approaches can be used to predict a company's operating costs and working capital.

Operating costs and working capital are two key elements that are predicted in working capital forecasts. Operating costs refer to the expenses associated with running a business while working capital refers to the difference between a company's current assets and current

liabilities.

Question #1

A company is looking to improve its financial health and is focusing on its efficiency ratios. These ratios are crucial for the company as they measure certain aspects of the company's financial performance. What do efficiency ratios *most likely* measure in a company?

- A. The company's profitability.
- B. The company's market share.
- C. The effectiveness of a company's use of its assets and liabilities.

The correct answer is **C**.

Efficiency ratios primarily measure the effectiveness of a company's use of its assets and liabilities. These ratios are used to analyze how well a company is managing its assets and liabilities internally. They are also known as activity ratios or asset utilization ratios. Efficiency ratios include inventory turnover, receivables turnover, payables turnover, and asset turnover, among others. These ratios provide insights into the effectiveness of a company's management in using its assets to generate sales and profits.

For example, a high inventory turnover ratio indicates that a company is efficiently managing its inventory and is able to quickly sell its goods. On the other hand, a low ratio may indicate poor inventory management or low demand for the company's products. Therefore, by focusing on improving its efficiency ratios, a company can enhance its financial health by optimizing the use of its assets and liabilities.

A is incorrect. While efficiency ratios can indirectly impact a company's profitability, they do not primarily measure profitability. Profitability ratios, such as the gross margin ratio, operating margin ratio, and net profit margin ratio, are used to measure a company's profitability.

B is incorrect. Efficiency ratios do not measure a company's market share. Market

share is a measure of a company's sales in relation to the total sales of all companies in the market. It is not directly related to the company's use of its assets and liabilities.

Question #2

An analyst is preparing a working capital forecast for a company. She is considering various approaches to predict the company's operating costs and working capital. Which of the following is *most likely* a common approach used for forecasting working capital efficiency ratios?

- A. Historical results approach.
- B. Current market trends approach.
- C. Competitor analysis approach.

The correct answer is A.

The Historical results approach is a common method used for forecasting working capital efficiency ratios. This approach involves analyzing the company's past performance to predict future trends. The historical results approach is based on the assumption that the past is a good predictor of the future. This method is often used because it is straightforward and easy to implement. It involves analyzing the company's historical financial statements and calculating the working capital efficiency ratios for each period.

These ratios are then used to forecast future ratios. The historical results approach is particularly useful when the company's operations have been stable over time. However, it may not be as effective if the company's operations have changed significantly or if the company is facing new challenges or opportunities.

B is incorrect. The Current market trends approach is not typically used to forecast working capital efficiency ratios. While current market trends can provide useful information about the overall economic environment and industry conditions, they do not provide specific information about a company's working capital management.

Therefore, this approach is not typically used to forecast working capital efficiency ratios.

C is incorrect. The Competitor analysis approach involves comparing a company's performance to that of its competitors. While this can provide useful insights, it is not typically used to forecast working capital efficiency ratios. This is because working capital management is highly company-specific and depends on a variety of factors, including the company's business model, industry, and management practices. Therefore, while competitor analysis can provide useful context, it is not typically used as the primary method for forecasting working capital efficiency ratios.

LOS 7d: explain approaches to forecasting a company's capital investments and capital structure

Long-term Assets Projections

Long-term assets projections are primarily based on the cash flow statement and income statement projections. The net Property, Plant, and Equipment (PP&E) and intangible assets on the balance sheet mainly increase due to capital expenditures and decrease due to depreciation and amortization expenses.

Types of Capital Expenditures

Capital expenditures can be divided into two categories:

- **Maintenance capital expenditures:** These are necessary to sustain the current business. Forecasts for these are often based on historical depreciation and amortization expenses, usually with a small upward adjustment to account for inflation in capital goods. For businesses with low fixed asset turnover, maintenance capital expenditure requirements can be quite high.
- **Growth capital expenditures:** These are needed to expand the business. These forecasts are more discretionary and are tied to management's expansion plans and revenue growth.

Projection for Depreciation and Amortization Forecasts

Projections for depreciation and amortization hinge on the net value of property, plant, and equipment (PP&E) and intangible assets listed on the balance sheet, which grow as a result of capital expenditures. These projections align with the estimated useful lifespans established by management's accounting policies. One way to estimate this is by considering the ratio of gross fixed assets to depreciation and amortization expenses. Further details can often be located in the financial statements accompanying notes.

Future Capital Structure Projections

Analysts must also make projections about a company's future capital structure. **Leverage ratios**-such as debt to capital, debt to equity, and debt to Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)-are often used as the forecast object to project future debt and equity levels.

When projecting the future capital structure, analysts should consider historical company practices, management's financial strategy, and the capital requirements implied by the capital expenditure assumptions. Management may provide guidance on target capital structure, debt covenant ratios (e.g., net debt to EBITDA), and capital expenditures, sometimes broken down into maintenance, growth, and acquisitions.

Question

Which of the following factors should analysts *most likely* consider when projecting the future capital structure of a company?

- A. Company's product portfolio, marketing strategy, and customer base.
- B. Company's market share, competitive landscape, and industry growth rate.
- C. Historical company practice, management's financial strategy, and the capital requirements implied by the capital expenditure assumptions.

The correct answer is **C**.

When projecting the future capital structure, analysts should consider historical company practices, management's financial strategy, and the capital requirements implied by the capital expenditure assumptions. Historical company practice provides insights into the company's past financial decisions and can serve as a guide for future capital structure decisions.

Management's financial strategy is crucial as it outlines the company's approach to financing its operations and growth, including its preferences for debt versus equity financing. The capital requirements implied by the capital expenditure assumptions are also important as they indicate the amount of funding the company will need to support its planned investments. These factors are directly related to the company's capital structure and can significantly influence its future capital structure decisions.

A is incorrect. The company's product portfolio, marketing strategy, and customer base can influence its revenue and profitability, but they do not directly determine its capital structure. The capital structure is a financial decision made by the company's management based on factors such as the company's financial strategy, capital requirements, and historical practice.

B is incorrect. While the company's market share, competitive landscape, and industry growth rate can influence its financial performance and, thus, its ability to raise capital, they are not directly related to the company's capital structure. The

capital structure is determined by the company's financing decisions, not its market position or industry dynamics.

LOS 7e: describe the use of scenario analysis in forecasting

Industry and Business Risks

Industry and business risks can lead to future outcomes that deviate from expectations. These risks are crucial in the final step of forecasting, where the possibility of different outcomes based on key risk factors is considered, along with their likelihood of occurrence.

Generic risk factors are those that affect all companies but to varying degrees. These include:

- Changes in the business cycle.
- Competition.
- Inflation and deflation.
- Technological developments.

Scenario Analysis

Instead of developing single-point estimate forecasts, analysts create several forecast scenarios that vary based on different outcomes with respect to key risk factors. These scenarios are then compared with other analysts' forecasts for a company, as well as forecasts implied by current valuations, to make investment decisions.

For instance, scenario analysis can be used to assess the impact of technological developments that threaten to cannibalize demand for an existing product. Technological developments can affect both the demand for a product and the quantity supplied of a product.

For example, when technological changes lead to lower manufacturing costs, the supply curve shifts to the right as suppliers can produce more of the product at the same price. On the other hand, if technological changes result in the development of attractive substitute products, the demand curve shifts to the left.

Question

In scenario analysis, how are different forecast scenarios typically created?

- A. By comparing them to historical data.
- B. By making single-point estimates.
- C. By varying outcomes related to key risk factors.

The correct answer is **C**.

Scenarios are created from varying outcomes related to key risk factors. Scenario analysis involves developing multiple scenarios, each of which represents a different set of conditions or assumptions, including variations in key risk factors. They are used to explore a range of possible outcomes and assess how different risk factors can influence the outcome being analyzed.

A is incorrect. Scenarios in scenario analysis are not necessarily created directly from historical data, but historical data can serve as an important input and reference point in the process of creating scenarios.

B is incorrect. Scenarios are not typically created from single-point estimates. Scenarios are constructed to consider a range of possible outcomes, and they are characterized by a set of assumptions that deviate from a single-point estimate. The purpose of scenarios is to explore different conditions and uncertainties rather than relying on a single, deterministic forecast.