CFA® Level I (2025) Financial Statement Analysis notes

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LOS 1d: describe implications for financial analysis of alternative financial reporting systems and the importance of monitoring developments in financial reporting standards

The goal of global convergence has been advanced by adopting IFRS in many countries outside the US as the required financial reporting standard. However, several differences exist between US GAAP and IFRS that affect how companies report their financial statement. The following are the significant differences between US GAAP and IFRS.

Basis for Comparison	US GAAP	IFRS
Developed by	FASB	IASB
Basis	Rules	Principles
Inventory write-down reversal	Prohibited	Permissible if certain conditions are met
Valuation of inventory	LIFO, FIFO, and Weighted Average Method	Weighted Average Method and FIFO.
Development cost	Expensed	Capitalized if it meets the criteria for capitalization.
Interest paid	Cash flows from operating activities	Cash flows from operating or Cash flows from financing activities

Analysts comparing two companies that use different accounting standards must be aware of areas where accounting standards have not converged since reconciliation disclosures between IFRS and US GAAP are not required. It is often difficult to make the specific adjustments necessary to achieve comparability between financial statements prepared under different accounting standards without sufficient information.

Comparative financial measures generated under different accounting standards must be interpreted carefully by analysts, and significant developments in financial reporting standards need to be monitored, as these factors can affect company performance and security valuations in essential ways.

Monitoring Developments in Financial Reporting Standards

LOS 2c: describe the financial reporting treatment and analysis of non-recurring items (including discontinued operations, unusual or infrequent items) and changes in accounting policies

When assessing a company's possible future performance, it is advisable to separate recurring and non-recurring items. Recurring items are items of income and expense likely to continue in the future, while non-recurring items are less likely to continue.

The effects of changes in accounting policies should also be considered when assessing a company's possible future performance. Changes in accounting policies can materially change how information is presented in the financial statements.

Examples of non-recurring items are discontinued operations and unusual or infrequent items.

Discontinued Operations

IFRS and US GAAP require that a company reports the effect of discontinued operations separately in its income statement. Discontinued operations are operations in which a company has disposed of or intends to dispose of and in which it will no longer be involved. Since the company will no longer obtain earnings or cash flow from discontinued operations, it can be eliminated in any assessment of its potential future financial performance.

Unusual or Infrequent Items

Since December 15, 2015, US GAAP requires material items that are unusual, infrequent or those that fall in both categories to be presented separately as part of a company's continuing operations. One example would be the costs associated with a company's restructuring exercise.

Changes in Accounting Policies

Changes in accounting policies may be applied to a company's financial statements prospectively or

LOS 3b: explain the financial reporting and disclosures related to goodwill

Goodwill is a unique intangible asset that arises when one company acquires another company for a price **higher than the fair value** of its net identifiable assets. It represents the excess of the purchase price paid over the fair value of the identifiable net assets acquired in a business combination. There are two types of goodwill: economic goodwill and accounting goodwill.

Economic goodwill relates to intangible elements associated with a business that make it more valuable than just the sum of its tangible assets and liabilities. This can include factors such as brand recognition, customer loyalty, employee morale, management expertise, and relationships with suppliers. It refers to the ability of a business to generate profits in the future over and above the returns required on its tangible and intangible assets. Economic goodwill is not recorded on the company's balance sheet and is often determined based on the company's market value, which is the price an investor is willing to pay for the company above its book value.

Accounting goodwill, on the other hand, is related to accounting standards and is reported only when an acquisition is involved. Both IFRS and US GAAP require capitalizing accounting goodwill that arises from acquisitions. It is, however, not amortized. Instead, it is tested for impairment on an annual basis. Impairment losses are charged against income in the current reporting period and result in the reduction of current earnings and total assets. Accounting goodwill must be disclosed in the financial statements with detailed notes explaining changes in the goodwill balance, methodology, and assumptions used for impairment testing.

The following steps are used to recognize goodwill:

I. Determine the total purchase cost of the target.
II. Measure the target's identifiable net assets at fair value.
III. The goodwill is the excess of (I) the purchase cost of the target company over (II) the identifiable net assets acquired. Occasionally a bargain purchase occurs, and any gain from the bargain purchase is recognized in the profit and loss statement.

Disclosures such as the acquisition date amount recognized for each major class of liabilities and assets, the acquisition date fair value of the target purchase cost, etc., help users evaluate the

LOS 4b: describe the steps in the preparation of direct and indirect cash flow statements, including how cash flows can be computed using income statement and balance sheet data

The first step in preparing the cash flow statement involves the determination of the total cash flows from operating activities. The cash flow from the operations section of the cash flow statement can be prepared using either the direct or indirect method.

The second and third steps in preparing the cash flow statement entail the determination of the total cash flows from investing and financing activities. Irrespective of the method used to prepare the cash flow from the operating activities section, the cash flow from investing and financing activities are each prepared using one format only.

Steps in Preparing Cash Flow from Operating Activities

Under the Direct Method

- ***Determination of the Amount of Cash Received from Customers***
  - Revenue is adjusted by the net change in accounts receivable during the accounting period. If accounts receivable increase during the period, then the revenue on an accrual basis is higher than cash receipts from customers, and vice versa.
- ***Determination of the Amount that was Paid to Suppliers and Employees***
  - In identifying purchases from suppliers, the cost of goods sold is adjusted for the change in inventory during the accounting period. If inventory increased during the period, then purchases during the period exceeded the cost of goods sold and vice versa. Once the purchase amount has been determined, the cash paid to suppliers can be calculated by adjusting purchases for the change in accounts payable. If all purchases were made in cash, accounts payable will not change, and the cash outflows will equal purchases. However, if accounts payable increased during the year, then purchases on an accrual basis will be higher than

Solution

The correct answer is A.

An operating cash flow or net income of one or more indicates that all the earnings recognized on an accrual basis on the income statement have also been recognized on a cash basis on the cash flow statement. The cash realization of earnings gives these earnings a higher value than similar earnings with less corresponding cash from operations since the latter earnings are less likely to be realized in cash.

LOS 6c: describe the presentation and disclosures relating to inventories and explain issues that analysts should consider when examining a company's inventory disclosures and other sources of information

Disclosures benefit users of financial statements, especially when analyzing a company's performance. The disclosure and presentation requirements are similar under IFRS and US GAAP.

Presentation and Disclosures Relating to Inventories

Under IFRS, the following financial statement disclosures concerning inventories are required:

- the accounting policies that were adopted in measuring inventories, including the cost formula used;
- the total carrying amount of inventories and the carrying amount in classifications that are appropriate to the entity;
- the carrying amount of inventories that are carried at fair value less the costs to sell;
- the amount of inventories that are recognized as an expense during the reporting period;
- the amount of any write-down of inventories that are recognized as an expense in the reporting period;
- the amount of any reversal of any write-down that is recognized as a reduction in the cost of sales during the reporting period;
- the circumstances or events which have led to the reversal of a write-down of inventories; and
- the carrying amount of inventories that are pledged as security for liabilities.

The inventory-related disclosures under US GAAP are quite similar to those under IFRS. However, the second and third requirements from the bottom of the above list are irrelevant since US GAAP

XYZ company follows a straight-line depreciation method and reports the information below for its production machines:

Annual depreciation expense: $50,000;

accumulated depreciation expense: $200,000;

carrying value: $650,000.

What is the machines' estimated remaining useful life, and how long has the company held them?

A. The remaining useful life is five years, and the company has held the machines for three years.
B. The remaining useful life is eight years, and the company has held the machines for four years.
C. The remaining useful life is 13 years, and the company has held the machines for four years.

Solution

The correct answer is C.

$$\begin{aligned} \text{Remaining useful life} &= \frac{\text{Asset's carrying value}}{\text{Annual depreciation expense}} \\ &= \frac{\$650{,}000}{\$50{,}000} \\ &= 13 \text{ years} \\ \text{Asset's holding period} &= \frac{\text{Accumulated depreciation expense}}{\text{Annual depreciation expense}} \\ &= \frac{\$200{,}000}{\$50{,}000} \\ &= 4 \text{ years} \end{aligned}$$

Question 1

Which statement is *most likely* correct about the financial reporting of defined benefit pension plans under IFRS?

A. Actuarial gains and losses are recognized as pension expenses over time.
B. The service cost component includes interest income on plan assets.
C. The net pension asset or liability changes have three components recognized on the income statement.

Solution

The correct answer is C.

Under IFRS, the change in the net pension asset or liability each period is generally viewed as having three components, two of which (service costs and net interest expense or income) are recognized as pension expense on the income statement. The third component, remeasurements, is recognized in other comprehensive income and is not amortized into profit or loss over time.

A is incorrect because under IFRS, actuarial gains and losses (part of remeasurements) are recognized immediately in other comprehensive income, not recognized as pension expenses over time.

B is incorrect because the service cost component does not include interest income on plan assets. Instead, it represents the present value of the increase in pension benefits earned by employees during the current period, and it does not have a direct connection with the interest income on plan assets. The interest income on plan assets is part of the net interest on the net defined benefit liability (asset), which is another component separate from the service cost.

Dolcie, a confectionery manufacturer, operates in countries C and E. Exhibit 1 contains information on both countries' tax rates. In year one, both countries' earnings before tax (EBT) are the same.

Exhibit 1: Tax rates in different jurisdictions.

	C	E	Total
EBT	250	250	500
Effective tax rate	15%	35%	25%
Tax	37.5	87.5	125
Net profit	212.5	162.5	375

If earnings before tax for country C increase by 10 percent per year while earnings before tax for country E remain the same for the next three years, what will happen to the effective tax rate?

Exhibit 2: Tax Estimate Problem

	Year			
	0	1	2	3
EBT, Country C	250	275	302.5	332.75
Growth rate		10%	10%	10%
EBT, Country E	250	250	250	250
Growth rate		0%	0%	0%
Total EBT	500	525	552.5	585.75
Effective tax rate, Country C	15%	15%	15%	15%
Effective tax rate, Country E	35%	35%	35%	35%
Total tax	125	128.75	132.88	137.41
Total effective tax rate	25%	24.5%	24%	24.5%

The effective tax rate will gradually decline since a higher proportion of EBT is generated in the country with the lower tax rate.

Question #1

Which of the following statements is the *most* accurate?

A. Conservative accounting choices may lead to upward biases in current-period financial reports.
B. Aggressive accounting choices may lead to downward biases in current-period financial reports.
C. Conservative accounting choices may lead to downward biases in current-period financial reports.

Solution

The correct answer is C.

Conservative accounting choices may lead to downward biases in current-period financial reports. This results from conservative accounting choices decreasing a company's reported performance and financial position in the current period.

A is incorrect because conservative accounting choices lead to downward biases and not upward biases in current-period financial reports.

B is incorrect because aggressive accounting choices lead to upward biases and not downward biases in current-period financial reports.

Question #2

Concerning conservatism and aggressiveness, what are the preferences of managers, investors, and regulators?

A. Managers prefer aggressiveness, investors prefer conservatism, and regulators prefer neutrality.
B. Managers prefer aggressiveness, investors prefer conservatism, and regulators

When classifying payments, company management must determine the category in which a payment will fall. The payment can either benefit the current period, in which case it would be an expense, or benefit future periods and thereby be classified as a cost to be capitalized as an asset.

The classification depends on the judgment of the management, which can be biased based on the significant impact that the choice can have on current earnings.

Acquisitions

The fair value of acquired assets must be estimated. This estimation may, however, be biased downwards for the values of depreciable assets to keep future depreciation expenses low.

Goodwill

Goodwill estimates may depend on projections of future financial performance. To avoid a goodwill write-down, these projections may be biased upwards.

The Preparation of the Statement of Cash Flows

Company managers may be able to improve the appearance of cash flow from operations without improving it. For example, managers can deliberately lengthen the accounts payable credit period to make the cash flow from operations look better on the balance sheet date. Furthermore, in cases where net income is significantly greater than the cash flow from operations, it is likely due to management's use of an accounting method to 'artificially' raise net income. It is equally noteworthy that misclassification of operating uses of cash either into the investing or financing sections of the cash flow statement can make cash flow from operations better than it is.

Additionally, the choice of operating or financing cash flow for the placement of interest and dividends received or paid provides an opportunity for managers to select the presentation method which gives the best appearance of operating performance.

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

Interpretation: The ratio can be used to measure the effectiveness of inventory management. A higher inventory turnover ratio implies that inventory is held for a shorter period.

- **Days of Inventory on Hand (DOH)**

$$\text{DOH} = \frac{\text{Number of days in period}}{\text{Inventory turnover}}$$

Interpretation: The ratio can also be used to measure the effectiveness of inventory management. A lower DOH implies that inventory is held for a shorter period.

- **Receivables Turnover**

$$\text{Receivables turnover} = \frac{\text{Revenue}}{\text{Average receivables}}$$

Interpretation: This measures the efficiency of a company's credit and collection processes. A relatively high receivables turnover ratio may indicate a company has highly efficient credit and collections. Similarly, it could imply that a company's credit or collection policies are too stringent.

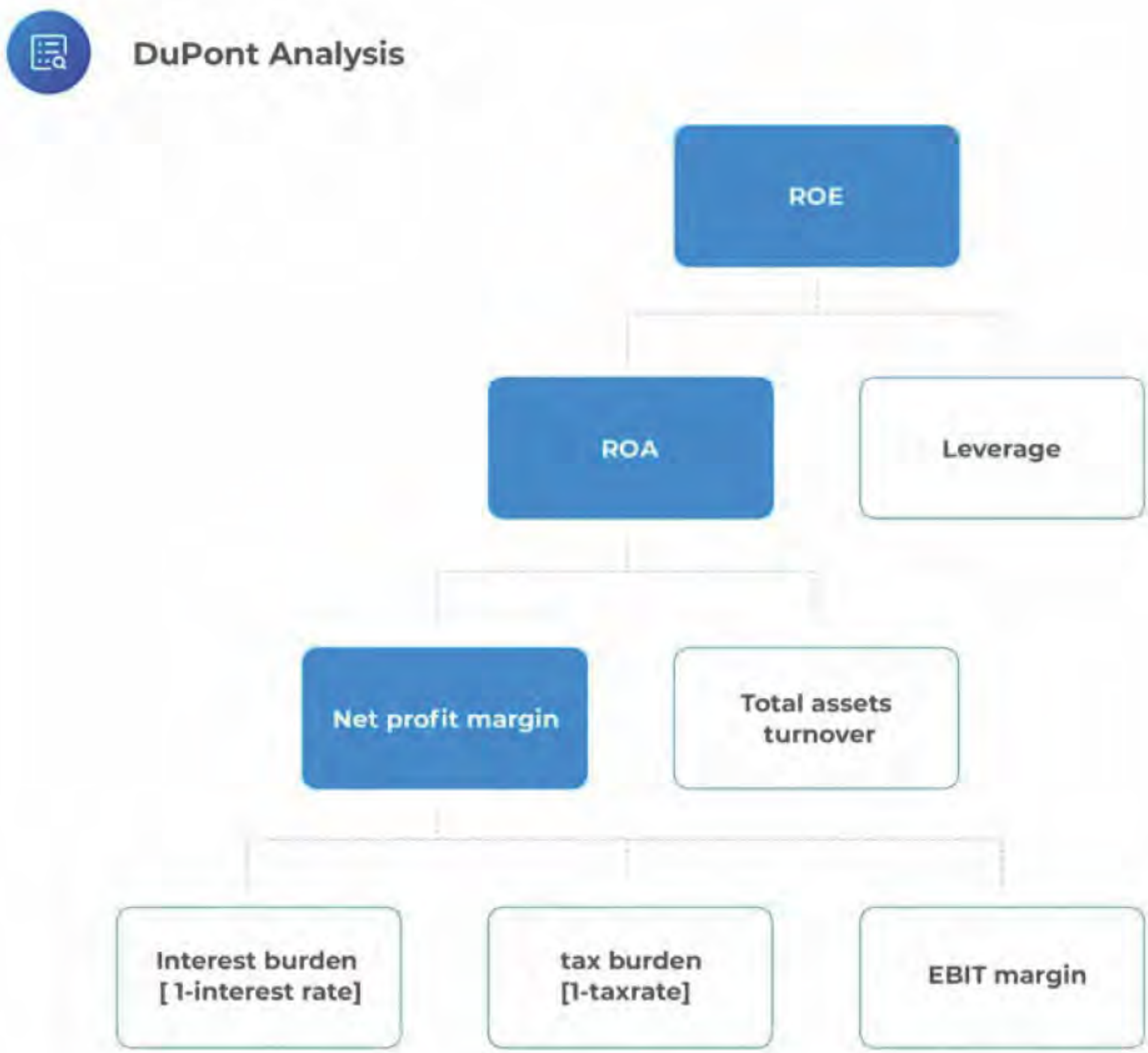
- **Days of Sales Outstanding (DSO)**

$$\text{DSO} = \frac{\text{Number of days in period}}{\text{Receivables turnover}}$$

Interpretation: This measures the time that elapses between a sale and cash collection. It reflects how fast a company collects cash from customers to whom it extends credit. A low DSO indicates that a company is efficient in its credit and collection processes.

- **Payables Turnover**

$$\text{Payables turnover} = \frac{\text{Purchases}}{\text{Average trade payables}}$$



Application of Dupont Analysis

There are several methods for decomposing ROE using simple algebra.

Method 1:

$$ROE = \frac{\text{Net income}}{\text{Average shareholders' equity}}$$

Question

Sophia, a financial analyst, has been closely monitoring the growth of a start-up tech company, TechGrowth Inc. The firm has experienced consistent revenue growth over the past five years, leading many analysts to predict a continuation of this trend. Despite a recent report highlighting potential legal issues that could affect TechGrowth Inc.'s operations, Sophia is convinced the company's revenue will continue to grow unimpeded. She bases her projection on the company's past performance, assuming it will consistently replicate its success in the future.

Which of the following biases is Sophia ***most likely*** exhibiting in her analysis?

A. Representativeness Bias
B. Conservatism Bias
C. Illusion of Control Bias

Solution

The correct answer is A.

Sophia exhibits representativeness bias. This bias occurs when individuals unjustly categorize new information based on past experiences or classifications, often leading to base rate neglect. Sophia's assumption that TechGrowth Inc. will persistently replicate its past success in the future, despite new information about potential legal issues, is a manifestation of this bias. She erroneously believes that the firm's future growth will mirror its past growth based on the pattern observed in the previous years.

B is incorrect. Conservatism bias involves the reluctance to revise one's belief upon receiving new information. Although it might appear that Sophia is ignoring the report about potential legal issues, her decision is based on the perceived relevance of past performance to future growth rather than an unwillingness to adjust her predictions in light of new information, making representativeness bias a more accurate characterization of her behavior.