

**CHAPTER 2 FRAMEWORKS FOR FINANCIAL REPORTING****J. Problems****P2-1. Suggested solution:**

	Concept	Demand	Supply
a.	User needs	✓	
b.	Measurement criteria		✓
c.	Assumptions for the preparation of financial statements		✓
d.	Objectives of financial reporting	✓	
e.	Definitions of the elements of financial statements		✓
f.	Recognition criteria		✓
g.	Constraints		✓
h.	Desirable qualitative characteristics	✓	

**P2-2. Suggested solution:**

	Concept	Qualitative characteristics	Assumption	Constraint
a.	Understandability	✓		
b.	Going concern		✓	
c.	Relevance	✓		
d.	Benefits vs. costs			✓
e.	Accrual basis		✓	
f.	Reliability	✓		
g.	Comparability	✓		
h.	Financial capital maintenance		✓	

**P2-3. Suggested solution:**

	Concept	Reliability	Recognition	Measurement
a.	Matching		✓	
b.	Completeness	✓		
c.	Historical cost			✓
d.	Prudence (conservatism)	✓		
e.	Probable and measurable future flows of resources		✓	
f.	Neutrality	✓		
g.	Substance over form	✓		
h.	Realizable value			✓
i.	Faithful representation	✓		
j.	Present value			✓
k.	Current cost			✓

1.	Revenue recognition		✓	
----	---------------------	--	---	--

**P2-4. Suggested solution:**

An asset is:

- a resource controlled by an entity
- as a result of past events, and
- from which future economic benefits are expected to flow to the entity.

**P2-5. Suggested solution:**

A liability is:

- a present obligation of the entity,
- arising from past events,
- the settlement of which is expected to result in an outflow from the entity of economic resources embodying economic benefits.

**P2-6. Suggested solution:**

- \* Equity is defined as assets net of liabilities. It is not independently defined because the balance sheet and double-entry bookkeeping requires  $A = L + E$ .
- \* Income involves increases in equity (other than from capital transactions with owners). Since equity is defined in terms of assets and liabilities, income ultimately involves increases in assets or decreases in liabilities.
- \* Expenses involve decreases in equity (other than from capital transactions with owners). Since equity is defined in terms of assets and liabilities, expenses ultimately involve decreases in assets or increases in liabilities.

**P2-7. Suggested solution:**

Reasons for the lack of general acceptance of the current cost accounting model include:

*Cost and benefits constraint:* The cost to collect current cost information and to prepare current cost financial statements outweighs the likely benefits. Developing a system to produce current cost information for firms' assets and liabilities on an ongoing basis is an expensive undertaking. Auditors will also need to develop methods to independently verify the current cost data, which also entails substantial costs.

*Understandability:* Current cost arguably provides better information to users for decision making, in particular regarding the maintenance of physical capital. However, the complexity of the calculations and even the principle of current cost are difficult to understand, such that only the very sophisticated reader will be able to understand the financial statements. This lack of understanding could be so significant as to render the information useless, or at least significantly impair the benefits of having such information.

*Predictive value:* Virtually all prediction models involve extrapolation from past patterns. Historical cost accounting reflects the past and is verifiable, providing a solid base for trend analysis.

*Articulation:* Historical cost accounting produces internally consistent data that are articulated among the financial statements. Current cost accounting information is not necessarily articulated.

**P2-8. Suggested solution:**

It is true that financial statements are complicated by accounting methods, such as the method of accounting for deferred income taxes, financial instruments, and so on. However, some of these complexities cannot be avoided. The business environment and business transactions are themselves more complex. Since the financial statements try to reflect these business events, it is inevitable that the financial statements will be more complex. Thus, it is not accounting methods per se that make financial statements difficult to understand.

Financial statements are not directed at the average person, so they cannot be criticized on the grounds that they are beyond the comprehension of the “average person.” Instead, they are intended for users with a reasonable understanding of financial statements. The question then becomes: should additional explanations be provided for users who have a reasonable understanding of financial information? The answer depends on what type of information the “explanation” will contain.

*Usefulness of additional information*

Explanations could be of three types:

- They could make information that is now in the financial statements easier to understand by explaining technical accounting terms and concepts used.
- They could provide more detail on information that is already contained in the financial statements. For example, certain dollar amounts might be broken down in more detail, or the significance of certain amounts might be spelled out.
- They could provide new information not now included in financial statements.

Additional information for the latter two categories may relate to the past or future. Future-oriented information would obviously be of considerable interest to someone with, say, a cash flow prediction objective. The difficulty, obviously, is that such information is very subjective and could be subject to biases. Auditors would find it difficult to provide any assurance on such future-oriented information.

It can be argued that additional information is already being provided in some financial statement packages (i.e., the remainder of the annual report outside of the financial statements). This information can include factual background relating to the year’s results, or it can include subjective projections of the company’s future.

There is significant evidence in support of the idea that capital markets are informationally efficient, thereby lessening the need for information that merely clarifies the financial statements or accounting methods used. However, even in efficient markets there will be a role for information that is not currently presented in the financial statements, to the extent that such information is not available elsewhere. The obvious disadvantage is that information might be disclosed that could also be useful to competitors or other interest groups, to the detriment of the reporting company.

We should also consider whether providing more information would overload users and whether the incremental benefit is worth the incremental cost of the information. One of the additional costs is the potential delay in the reporting time.

#### *Preparers of additional information*

We should also consider the issue of who prepares this additional information and the implications for its quality. While management is knowledgeable about the company's events, they can bias the information they provide, particularly with respect to subjective and forward-looking information that is difficult for auditors to verify.

#### *Role of standards*

Having standards for this additional disclosure will help to promote comparability between companies. However, the risk of attempting to control the provision of additional information via standards is that information may be restricted to that which is historically based, factual, and objective, making it less relevant for purposes such as forecasting and performance evaluation.

#### **P2-9. Suggested solution:**

This question requires the demonstration of understanding the interrelationships among the concepts of fair presentation, materiality, and users' needs. The following points could be raised:

*Fair presentation:* Fairness is an abstract concept and, therefore, is open to debate and interpretation. Although it would be impossible to develop a general rule that would apply to all circumstances, fairness has a particular connotation when considered in relation to financial statements. The determination of what constitutes fair presentation in a particular case requires the exercise of professional judgment. Auditors assess whether financial statements present fairly in relation to generally accepted accounting principles (IFRS, *CICA Handbook*, or other). Auditors also use judgment to evaluate the selection of accounting policies from among acceptable alternatives.

Users of financial statements expect that recommended practices have been followed and that variations from accepted practice have been disclosed. However, auditors also have an obligation to go beyond determining technical compliance to accounting standards; they must ensure that any information required for fair presentation has been disclosed in the financial statements (completeness). It is essential that published financial statements do not lead users to conclusions that preparers and auditors know to be unlikely or incorrect (i.e., not true and fair). Auditors should use judgment not only in the evaluation of individual items, but also in their assessment of the combined effect of these items.

*Materiality:* Materiality is based on the premise that financial statements should contain or disclose information that is relevant to users. An item is material if its omission or misstatement would influence users' economic decisions. Quantifying materiality is a matter of professional judgment and depends on management and the auditor's assessment of the firm's operations, industry, reporting requirements, and most importantly, the users.

*Users:* Financial statements are prepared for users. Accordingly, they should meet the needs of users and be understandable to them. However, there are challenges to defining the users and their needs: Who are the user groups? What kinds of information do they need? What other information do users have access to? How do users' needs change over time?

**P2-10. Suggested solution:**

Concepts, principles, and ideas supporting treatment as <i>Asset</i> .	Concepts, principles, and ideas supporting treatment as <i>Expense</i> .
<ul style="list-style-type: none"> <li>▪ The training program has future benefits since employees would be able to operate new high-tech machinery.</li> <li>▪ The training has already occurred.</li> <li>▪ Management has the ability to direct employees to complete assigned tasks with the newly acquired skills, so this satisfies the criterion of control over future benefits.</li> <li>▪ Therefore, all three criteria in the definition of an asset have been satisfied.</li> <li>▪ The amount of \$45 million is definitively quantifiable.</li> <li>▪ The future amortization period is also quantifiable as the estimated average remaining service lives of the employees (similar to an estimate used for pension accounting; see Ch. 17).</li> <li>▪ Amortization over future years better matches expenses to revenues that will be recognized in future years.</li> <li>▪ Recognition as an asset provides relevant information to users to determine the potential productivity of employees.</li> <li>▪ Doing so also encourages better management stewardship by investing in employee development. Expense treatment would lead to underinvestment since the expense will negatively affect current profits (and thus management compensation) while the benefits are realized in the future.</li> <li>▪ Investment in employee development increases morale and commitment from employees, increasing productivity and retention.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The \$45 million expenditure fails to meet the definition of an asset (see below).</li> <li>▪ Public Company has no control over the employees since they are free to leave the company.</li> <li>▪ Indeed, the additional training makes the employees more attractive to competitors and other employers, increasing the opportunities for the employees to leave.</li> <li>▪ The 15 years of estimated average remaining service lives of the employees is not reliable given the increased outside opportunities of the employees.</li> <li>▪ While the amount of the expenditure is known to be \$45 million, the amount of future benefits is unknown and difficult to estimate. Without a reliable basis of measurement, this fails the recognition criterion.</li> <li>▪ Given the uncertainty of the future benefits, prudence (conservatism) suggests that the costs should be expensed.</li> <li>▪ Information about the program can be disclosed in the notes as this information is relevant to users of the financial statements for assessing management stewardship and the potential productivity of employees.</li> <li>▪ The ability to invest a significant amount on employee development even though the costs must be expensed is a credible signal that Public Company is strong; this signal should help increase stock price and equity-based compensation for management.</li> </ul>

**P2-11. Suggested solution:**

- \* Does knowledge have future economic benefits? Possibly.
- \* Due to past transactions? Yes.
- \* Do companies control employees? No, since slavery is not legally permitted.
- \* How can intellectual capital be measured? Are the measurements reliable?
- \* Estimated values are likely to be unverifiable.
- \* There will be severe problems with comparisons between companies.
- \* It will be difficult to come up with sensible amortization policies. How should the expenses be matched with future benefits?
- \* Provides opportunities for management manipulation (impairs reliability) and increases moral hazard problems.
- \* Information is relevant for predicting future cash flows if knowledge results in new products (revenue) or new processes (cost reduction).
- \* Information is not relevant because high intellectual capital may not reflect ability to generate future cash flows since employees can leave.
- \* Could lead to unintended reactions and behaviour from employees; e.g., “we’re valued less highly than another company’s employees.”
- \* Could also lead to high valuations for public and internal relations purposes, to show that the firm highly values employees.

**P2-12. Suggested solution:**

- Each acquisition on average is \$11 million, so they are immaterial.
- However, materiality should be assessed on a class of transactions, so the acquisitions are material as a group.
- \$8 billion is material relative to the market value of equity (\$60b) and earnings (\$5b).
- Materiality is defined with respect to users of the financial statements.
- The large negative stock price reaction is an indication that information on the acquisitions is material to investors.
- Information on how Tyco spends its money and what kinds of businesses it is buying is relevant to investors for predicting future cash flows.
- Summary disclosure of the net cash amount paid may be inadequate for investors; full disclosure of the nature of the acquisitions (e.g., line of business, price paid relative to book value) would be useful for predictions.
- Full disclosure may be very costly and impractical given the large number of acquisitions; management may have determined that the costs exceed the benefits of disclosure.
- Management may have selectively concealed information on acquisitions, disclosing information on those that may be viewed favourably and hiding the bad acquisitions.
- Such concealed information, if it exists, would bias the financial statements and make them unreliable.
- Unreliable financial statements increase the moral hazard problem by allowing management to cover up its mistakes.
- Market efficiency suggests that the WSJ article provided new information to investors—the information was not what they had expected.
- The WSJ’s revelation could indicate to investors that Tyco has been hiding bad news (adverse selection); therefore, they are now more skeptical of Tyco (it is now considered a “lemon”).

**P2-13. Suggested solution:**

## Pros:

- \* The alternative income number Amazon is using could be more relevant for predicting future cash flows by removing items that are not recurring; e.g., restructuring charges.
- \* Amazon provides full disclosure of the accounting policies that have been used to come up with the alternative income numbers.
- \* Given the full disclosure, sophisticated readers can interpret these numbers and undo Amazon's policies if they wish.
- \* Information is provided in addition to GAAP income, so at least the GAAP number is reliable as it is audited.
- \* The accounting method is popular in the high-tech industry so the information is comparable to those of similar firms.

## Cons:

- \* The alternative numbers are less reliable because management has discretion over how "pro forma operating profit" and "pro forma net profit" are defined.
- \* The alternative numbers are biased because they "inevitably make the numbers look a lot better"—only expenses and losses (and not gains) are being excluded.
- \* Lower reliability increases moral hazard; management can present good results even if things don't turn out to be so good.
- \* Measuring income excluding certain costs provides management with the incentive to classify costs into those categories.
- \* The income numbers could mislead naïve investors who interpret them as if they are GAAP income numbers.
- \* Could also mislead investors if there is inadequate disclosure of how the non-GAAP income number is derived.
- \* Comparability of non-GAAP numbers is lower because different firms could define their income measures differently.
- \* Consistency is also lower because Amazon can change the income definitions from year to year.

The non-GAAP numbers are not based on standards and are not auditable, lowering their quality (reliability, comparability, consistency).

**P2-14. Suggested solution:**

## Graduates:

- \* They have a tendency to favour the school they attended.
- \* This increases the prestige of their degree, which is better for their careers.
- \* They will be biased.
- \* BUT, all graduates face the same incentives, so they are all biased.
- \* If bias is constant, it does not affect the results.
- \* However, responses from some schools may be more biased than others (e.g., if a school lobbies its students to answer the survey positively).
- \* Students at schools with a stronger emphasis on ethics may answer the surveys with less bias, and such schools would be unjustifiably harmed in the rankings.

**Recruiters:**

- \* Not as much incentive to be biased toward a particular school.
- \* Could be biased toward the schools from which they graduated (MBA or other degree).
- \* Could be biased in favour of the schools from which they hire the most in order to justify their past hiring decisions. (This is related to an effect called confirmation bias in psychology.)
- \* Again, the bias incentive affects everyone.
- \* Recruiters can only rank schools they recruit from; many smaller schools would be ranked lowly by this exclusion.
- \* Geography affects where firms recruit. Only very large global firms would recruit from a diverse range of locations.
- \* Schools with long histories and large programs (e.g., Harvard, with 900 full-time MBAs per year) will have more grads who are recruiters, so there may be more bias toward these schools.
- \* Past reputation of schools can bias recruiters' rankings.

**General comments:**

- \* Consistent rankings year to year suggests that the rankings are reliable—not just noise.
- \* Large swings in rankings could reflect events causing extreme bias in a particular school that year (e.g., deliberate efforts to have students bias their surveys).
- \* Response rates are fairly high for surveys.
- \* Samples are large enough so that errors cancel out.

**P2-15. Suggested solution:****Arguments for keeping prudence:**

- \* Conservatism contributes to reliable information; information that is more reliable is more useful for evaluating managers' performance.
- \* Management, which prepares the financial statements, has a tendency to be optimistic; applying conservatism helps to counteract that optimism.
- \* Conservatism also increases reliability by demanding a higher degree of verifiability for gains (than for losses) when there is uncertainty.
- \* Conservatism does not allow deliberate understatement, so there is no undue pessimistic bias in the financial statement numbers.

**Arguments for excluding prudence:**

- \* Conservatism involves a pessimistic bias and reduces neutrality of information.
- \* Less neutral information is less reliable and consequently less useful.
- \* Conservatism information is not representationally faithful, again reducing the reliability of financial reports.
- \* Excluding conservatism would allow write-ups (as well as write-downs), which is information that is relevant for valuation.
- \* Different managers/accountants will apply a different amount of conservatism, making it difficult for users to know how much conservatism is embedded in the reported numbers.
- \* Users are better able to apply their own conservatism given their own risk tolerance.

**P2-16. Suggested solution:**

- \* First need to make an assumption that genetically modified (GM) food is perceived to be bad, so that consumers will pay more for good (non-GM) food. If there is no difference to the consumer, then there is no demand for information/labelling.
- \* Manufacturers know whether the food is GM or not, and consumers know that they know.
- \* Consumers will assume unlabelled food to be GM products, which are inferior, so they are willing to pay less for these.
- \* So non-GM foods will be labelled to be distinguished from GM foods.
- \* This is an application of adverse selection and disclosure principle.
- \* The role for standard setting is not clear. Market forces should lead to labelling of non-GM products, which imposes costs on traditional non-GM producers. Standards to require labelling GM products would shift the cost to those products and away from the non-GM products.
- \* There are possible litigation costs for not labelling (for example, due to allergic reactions).

**P2-17. Suggested solution:**

- a. In addition to accounting, the collection also includes standards and guidance for
  - assurance
  - public sector accounting
  - management's discussion and analysis, and
  - several other areas.
- b. The five definitions identify the five types of entities to which Parts I to V of the *Accounting Handbook* apply. For example, the first definition (publicly accountable enterprise) identifies the types of entities that would fall under the scope of Part I (IFRS). The second definition (private enterprise) identifies the types of entities that would fall under the scope of Part II (ASPE).
- c. Paragraphs 12 to 14 discuss the objectives of financial statements. Paragraphs 15 to 20 discuss the needs of financial statement users.
- d. The standards are as follows:
  - IAS 1 Presentation of Financial Statements
  - IAS 2 Inventories
  - IAS 16 Property, Plant and Equipment
  - IFRS 6 Exploration for and Evaluation of Mineral Resources
  - IAS 18 Revenue
- e. There is no logical ordering of the IFRS/IAS. The standards are numbered chronologically according to when the particular standard was first issued. There are no meaningful differences between IFRS and IAS other than the fact that IAS preceded IFRS; new standards will be labelled IFRS ##.

**P2-18. Suggested solution:**

- a. Paragraphs 15 to 21 discuss the qualitative characteristics of financial statements. Paragraphs 36 to 47 discuss recognition criteria.
- b. The standards are as follows:
  - 1100 – Generally Accepted Accounting Principles

- 1400 – General Standards of Financial Statement Presentation
  - 1521 – Balance Sheet
  - 3031 – Inventories
  - 3061 – Property, Plant and Equipment
  - 3400 – Revenue
- c. The ASPE section numbers are distinguished between “General accounting” (Sections 1000 to 1800) and “Specific items” (Sections 3000 to 3870). Within each of these two broad categories, related items are grouped together. For example, standards for the income statement, balance sheet, and cash flow statement are placed together as Sections 1520, 1521, and 1540, respectively). Likewise, share capital, equity, and reserves are together in Sections 3240, 3251, and 3260.
- d. Paragraph 1100.02 defines primary sources of GAAP as Sections 1400-3870 of ASPE including their appendices, and Accounting Guidelines including their appendices, with the former having higher authority than the latter. Paragraph 1100.03 indicates that “an entity shall apply every primary source of GAAP that deals with the accounting and reporting in financial statements of transactions or events encountered by the entity.” Entities may consult other sources of GAAP should the primary sources not deal with a particular circumstance.
- e. A search for “inventories” results in numerous hits. The numbers of instances are summarized on the left side in the table of contents. The right side shows excerpts of the documents that contain the search term.

### **P2-19. Suggested solution:**

For uniformity:

- \* Increases comparability of financial reports for companies in different countries.
- \* Decreases costs to users; they don’t need to learn many different GAAPs.
- \* Investors need to be less sophisticated to understand financial statements of companies from different countries, thereby decreasing information asymmetry, increasing the size of the pool of potential investors.
- \* Increased geographical diversification of investments reduces risk and lowers the cost of capital.
- \* Resources can be focused on developing and refining one set of standards, resulting in a superior set of standards.

Against uniformity:

- \* Uniform standards do not imply uniform application; differing circumstances in each country lead to different interpretations of standards and different reporting outcomes.
- \* Global accounting standards result in conflict with local laws and regulations.
- \* Uniformity does not respect diversity of cultures, history, and legal structures.
- \* Uniformity hinders innovation by eliminating competition.
- \* Flaws in standards have potentially catastrophic effects around the world.
- \* Increases systemic risk since most of the world is covered by the same set of standards.

### **P2-20. Suggested solution:**

- \* The *CICA Handbook* provides guidance in general circumstances to service the largest numbers of situations and users. Although these standards provide definitive guidance

under certain circumstances, it is impossible to deal specifically with all possible situations. Therefore, standards are general in order not to restrict the exercise of professional judgment.

- \* Where there is no authoritative guidance, accountants rely on their professional training and judgment to fairly present the economic reality of the situation. In such cases, they can consider basic concepts and principles from the conceptual frameworks as well as the spirit and intent of the related standards. They can also consider current prevailing practice in the profession.
- \* Leaving application open to judgment, however, in the presence of client pressure, may result in general acceptance of a minimal amount and quality of reporting. The eventual outcome may be a lack of comparability of financial statements. With no standards at all, these problems would be even more acute.

Points favouring the existence of standards:

- \* In a complex world, standards are a means of transmitting wisdom and avoiding unintentional error due to ignorance. They present the “aggregate wisdom” of the accounting profession on complex issues.
- \* Many standards arose because market and other mechanisms failed to prevent the occurrence of serious errors or misinterpretations.
- \* The fact that certain legal requirements, such as the *Canada Business Corporations Act*, refer to GAAP in the *CICA Handbook* as authoritative practice indicates that the standards are filling a need.
- \* GAAP are so important to our financial reporting system that the codification of best practices is legally and administratively essential.
- \* Proactively setting standards may be a more efficient way of creating a body of GAAP than the development of case law after specific reporting failures.
- \* Compliance with a documented set of standards can provide a better defence against legal liability.
- \* In some instances, prevailing practice may not be well thought out conceptually. Adopting standards can result in new practices that are conceptually more sound.
- \* Standards instil confidence in the fairness and reliability of financial statements to users.

Points against the existence of standards:

- \* Many people believe that there is a free market for information. If the market were unrestricted by standards, information would be available to the extent that it was demanded.
- \* Capital market research suggests that accounting numbers prepared in accordance with many standards do not assist the operation of the market.
- \* Users’ information needs are diverse and not well understood, so it may be presumptuous of the accounting profession to design information standards for these users.
- \* Standards interfere with management’s freedom to report to shareholders in the way it believes is in the best interest of the company (i.e., to best alleviate adverse selection).
- \* Some standards encourage uneconomic decisions merely to improve the appearance of financial statements.
- \* Compliance with more stringent reporting standards is expensive for companies.
- \* Standard setting is expensive for the accounting profession.

- \* The existence of standards reduces the exercise of professional judgment by constraining their choices and eliminating options that, in accountants' judgment, may be the most appropriate for the circumstance.
- \* General standards have a tendency to evolve into narrow, restrictive rules.
- \* Given the complexity of the economic reality that financial statements attempt to portray, no set of standards can be theoretically correct nor deal appropriately with all situations.

## K. Mini-Cases

### Case 1. *Suggested solution:*

Issue	Supporting WP	Supporting OSC
#1	<p>Mortgages receivable can be removed because they are no longer assets.</p> <ul style="list-style-type: none"> <li>* WP no longer controls the mortgages.</li> <li>* WP does not retain future benefits from the mortgages.</li> </ul>	<p>Receivables cannot be removed because they are assets to WP.</p> <ul style="list-style-type: none"> <li>* WP retains risks and rewards of mortgages.</li> <li>* 0.6% fee is a future benefit to WP.</li> <li>* WP maintains control of mortgages since it manages the collection of mortgage payments.</li> </ul> <p>Asset cannot be removed if corresponding liability remains on books.</p> <ul style="list-style-type: none"> <li>* WP's guarantee of timely payment to investors is an unavoidable obligation.</li> </ul>
#2	<p>PV of 0.6% fee can be recognized when MBS is sold because earnings process is largely complete at that time; most of the work required has been completed. CMHC guarantee ensures that future payments will be received, so the future benefits are probable and measurable with reasonable accuracy.</p>	<p>Revenue should be recognized as the earnings process is completed, which is over the duration of the mortgage contracts.</p> <p>There is uncertainty in the amount and timing of future payments, so revenue should be delayed until the time when payment is received.</p>
#3	<p>The short amount of time that the mortgages are held suggests that cost is a good reflection of value at year-end. Any differences between cost and market value at year-end are likely to be immaterial.</p> <p>The costs of revaluation are high and likely to exceed any benefits.</p>	<p>Since WP regularly sells these mortgages, they are short-term investments or inventory; therefore, they should be revalued to reflect market prices (especially declines).</p>

**Case 2. Suggested solution:**

- \* The fraud demonstrates that significant information asymmetry existed between insiders and outsider investors in this case.
- \* Insiders used their information advantage to divert funds from the company/shareholders.
- \* Having lost significant amounts, investors lost trust in the company.
- \* Skeptical investors would have demanded a high cost of capital to invest in the technology.
- \* The high cost of capital prevented further development of this technology until this century.
- \* As a consequence, the history of public transportation was changed forever, probably for the worse.
- \* Battery technology would probably have developed more rapidly had these electric buses been commercially viable.
- \* This article illustrates that information asymmetry and the lack of trust can destroy markets and substantially alter the allocation of resources in the economy.
- \* Better standards and regulations could have prevented the frauds.
- \* Better disclosure of related party transactions would have alerted investors to be suspect of the company.
- \* Better disclosure requirements would have made it more difficult for insiders to perpetrate the fraud.
- \* Having an independent audit would also have made the fraud more difficult.
- \* Independent audits also alleviate skepticism from investors about the veracity of the company's financial reports.
- \* The article also illustrates the importance of aligning the interests of owners and managers.

A compensation system that better rewards managers for the company's success would have provided them with incentive to make the company successful instead of siphoning money using the fraudulent scheme.

**Case 3. Suggested solution:**

a.

- \* "Real" earnings are more reliably measured.
- \* "Real" earnings are subject to a set of standards of measurement (i.e., GAAP), whereas "pro forma" earnings could be defined in ways that best suit management.
- \* "Pro forma" earnings lead to confusion among investors.
- \* "Real" earnings could be less relevant if they poorly predict future earnings and cash flows.
- \* "Real" earnings could lack comparability with past results if they contain one-time items.
- \* "Pro forma" earnings could lack comparability because management can change the definition from year to year.

b. .

- \* Stock options involve an economic sacrifice from the shareholders and should be expensed.
- \* They should be expensed in the period they are granted because they are a form of compensation to pay employees for services (benefits) received. This matches expenses to economic benefits.
- \* Some or most of the benefit to the company is realized subsequent to the grant date in the form of employee motivation, so matching can be used to argue that the expense should be recorded later.
- \* These future benefits suggest that the value of these options should be recorded as an asset.
- \* The value of stock options is difficult to measure, so the criteria for recognition in the financial statements are arguably not satisfied.

c.

- \* Whether to consolidate depends on whether the company has control over the assets of the SPEs and whether it is obligated to satisfy the liabilities of the SPEs (i.e., are the definitions of assets and liabilities satisfied?).
- \* If the company is responsible for the SPEs' debts, that would argue for consolidation.
- \* The entity concept in the conceptual framework suggests that SPEs should be consolidated if the company exercises control, enjoys substantial benefits, and faces most of the risk of SPEs.
- \* Shareholders need to know the full extent of the company's activities to properly estimate future cash flows and risks in order to make informed investment decision.

d.

- \* If one believes markets are fairly efficient, these comments don't make sense, especially because the author believes that most of the information is already available.
- \* More information would not lead to dramatic downward price adjustments if investors form expectations rationally.
- \* Based on adverse selection, the lack of information would actually depress stock prices, so more information would dispel some uncertainty and lift stock prices.
- \* Less information asymmetry would encourage more investors to trade equities (instead of some other securities), thus increasing demand and liquidity in the market.
- \* Additional debts reported on balance sheets may affect contracts that companies have (particularly debt contracts), increasing costs to the company; therefore, shareholder value may decrease.