Chapter 8
Usefulness of Accounting Information
to Investors and Creditors

# TRUE/FALSE

1. The FASB has implicitly adopted the cash flow valuation model.
**ANS: T**
2. The FASB maintains that accrual accounting systems are more useful for predicting net cash flows that are simpler cash-based systems.
**ANS: T**
3. The value to investors of the information in financial reporting lies in its role as an historical record.
**ANS: F**
4. According to the *clean surplus theory*, ending book value of equity equals beginning book value plus earnings.
**ANS: F**
5. The underlying premise of the *clean surplus theory* is that all profit and loss elements go through income.
**ANS: T**
6. The *efficient-markets hypothesis* refers to the speed with which financial analysts are able to predict a firm’s cash flows.
**ANS: F**
7. Most testing of the efficient-markets hypothesis has dealt only with past information reflected in security prices.
**ANS: F**
8. The theoretical foundation of capital market or security price research comes from the efficient-markets hypothesis.
**ANS: T**
9. According to portfolio theory, systematic risk can be reduced by holding a portfolio of investments.
**ANS: F**
10. The expected portfolio return decreases as risk increases.
**ANS: F**
11. In portfolio theory, systematic risk is defined as the variance of expected investment returns.
**ANS: T**
12. The assumption of the capital asset pricing model is that individual securities are priced solely on unsystematic risk.
**ANS: F**
13. In the capital asset pricing model, beta is used to represent systematic risk or individual securities and to predict the risk-based price of securities.
**ANS: T**
14. The strongest evidence from capital market research concerns the information content of annual according earnings numbers.
**ANS: T**
15. Capital market research has shown that investors do not appear to adjust accounting income to compensate for artificial bookkeeping differences.
**ANS: F**
16. Research studies have predominantly supported the naïve-investor hypothesis.
**ANS: F**
17. When accounting numbers are used to monitor agency contracts, there can be indirect consequences from changes in accounting policies.
**ANS: T**
18. The student by Lev that examined earnings numbers and stock returns found a high explanatory relationship between earnings and stock returns.
**ANS: F**
19. The study by Ou and Penman, which used traditional accounting measures to predict whether a company’s income would increase or decrease, indicated that markets are not as efficient as previously thought, and that fundamental analysis is important for investment purposes.
**ANS: T**
20. *Post-earnings-announcement drift* refers to the fact that it takes up to 90 days for security prices to react significantly to earnings announcements.
**ANS: F**
21. Because *post-earnings-announcement drift* shows that there is at least some amount of efficiency in the market, it is even more important to attempt to improve the quality of accounting standards.
**ANS: T**
22. Capital market research is supportive of the assertion that alternative accounting policies do not affect security prices because there are no direct cash flow consequences to the firm.
**ANS: F**
23. The usefulness of accounting information may be determined by directly asking investors how they use annual reports.
**ANS: T**
24. Surveys of individual investors have generally indicated a high readership of accounting information.
**ANS: F**
25. It may be assumed that accounting information has no usefulness to investors because many individual stockholders do not read annual reports.
**ANS: F**
26. Accounting information ranks at the top on surveys that ask investors to weigh the importance of different types of investment information.
**ANS: F**
27. Accounting-based ratios have not been very useful in discriminating between firms that subsequently went bankrupt and those that did not.
**ANS: F**
28. Capital market research in the area of alternative accounting policies does not support the arbitrariness of accounting allocations.
**ANS: F**
29. A limitation of information economics is that real-world decision-makers face more complex decisions than can be illustrated in the model.
**ANS: T**
30. Information economics analysis can determine only the value of specific information for a narrowly defined decision.
**ANS: T**

# MULTIPLE CHOICE

1. Which of the following is **not** a true statement?
a. There is empirical evidence that future cash flows are better forecasted with accrual data than with cash flow data.
b. Accrual accounting numbers incorporate the attribute that determines firm valuation – net cash flow data.
c. Changes in reported accounting earnings affect firm valuation through changes in stock prices.
d. The value to investors of the information in financial reporting lies in its role as an historical record. **XXXXX**
2. Which of the following applies to the *clean surplus theory*?
a. It is a theory that is applied to security valuation, but is not very attuned to accounting concepts and numbers.
b. The theory values a firm’s equity based on the beginning of the period book value plus the present value of expected future abnormal earnings. **XXXXX**
c. The theory considers a firm’s abnormal earnings amount to be equal to its beginning of the period book value multiplied by the cost of equity capital.
d. This theory does not tie in well with the FASB’s concept of comprehensive income.
3. Which of the following would give rise to abnormal earnings?
a. Accelerated depreciation
b. LIFE costing for inventories and cost of goods sold
c. Immediate write-off of research and development
d. All of the above **XXXXX**
4. Which of the following are possible sources of abnormal earnings?
a. Recognizing the positive excess present value above the cost of a project on the balance sheet.
b. The use of current values in reporting marketable securities.
c. Conservative matching and recognition procedures under historical costing. **XXXXX**
d. All of the above.
5. The three forms of the efficient-markets hypothesis are:
a. Weak, semistrong, strong **XXXXX**
b. Slow, quick, instantaneous
c. Past, current, future
d. Private, semipublic, public
6. Which of the following statements does **not** apply to portfolio theory?
a. It is the foundation for the capital asset pricing model.
b. It is the foundation for capital market or security price research.
c. It holds that risk can be eliminated by holding a portfolio of investments. **XXXXX**
d. It is a theory of rational investment choice and utility maximization.
7. Which of the following statements applies to the capital asset pricing model?
a. It assumes that individual securities are priced solely on unsystematic risk.
b. It uses beta to represent unsystematic risk of individual securities.
c. It assumes that if the rate of return on an individual security is greater than the market average, systematic risk of the security must be smaller.
d. It assumes that if beta equals 1, the systematic risk of an individual security is equal to the average risk of the market as a whole. **XXXXX**
8. Which of the following statements does **not** apply to the *market model*?
a. It is a simpler approach than the standard version of the capital asset pricing model.
b. This approach is seldom used in accounting research. **XXXXX**
c. In this model, the risk-free return is dropped from the equation.
d. Abnormal returns are captured in the error term of the model.
9. Which of the following is a finding of previous capital market research studies?
a. The market is not fooled by arbitrary accounting numbers. **XXXXX**
b. The direction of change in reported accounting earning is inversely correlated with security price movements.
c. The market is affected by alternative accounting income numbers that do not affect cash flow, such as those related to a change from deferral to recognition of unrealized holding gains on marketable securities.
d. Security prices are affected by a change from the deferral to flow-through method of accounting for the investment credit.
10. In security-price research, which of the following is an *indirect consequence* of an accounting policy change?
a. The value of the firm is affected through an effect on cash flow.
b. The value of the firm is affected through an effect on net income.
c. The value of the firm is affected through an effect on owners. **XXXXX**
d. The value of the firm is not affected.
11. Which of the following findings would support the naive-investor hypothesis?

a. A finding that security prices respond to income levels that differ solely because of alternative accounting methods with no cash flow consequences. **XXXXX**
b. A finding that security prices do not respond to artificial book-income differences.
c. A finding that security prices do not respond to the adoption of LIFO for accounting for inventories and cost of goods sold.
d. A finding that security prices do not respond to a change in reported accounting earnings from the prior year.

1. Which of the following is a possible reason why security prices were found to respond to changes from pooling to purchase accounting for combinations?
a. A change from pooling to purchase accounting does not affect cash flow.
b. Differences between purchase and pooling accounting affect only book income.
c. The change could have affected dividend distribution because of debt covenants. **XXXXX**
d. Income would normally be higher under purchase accounting than pooling.
2. Which of the following is an assumption of *fundamental analysis*?
a. Securities markets are efficient.
b. Prices of securities rapidly reflect all publicly available information.
c. The strong form of the efficient markets hypothesis is true.
d. Underpriced shares can be found in the securities market by means of financial statement analysis. **XXXXX**
3. Which of the following is **not** a finding or conclusion of the research study by Ou and Penman that used traditional accounting measures to predict whether a company’s income would increase of decrease.
a. The researchers were unable to describe the following year earnings changes correctly in most cases. **XXXXX**
b. Markets are not as efficient-market advocates would like to believe.
c. Better accounting standards might improve the predictive ability of accounting information.
d. Fundamental analysis is still important for investment purposes.
4. Which of the following statements does **not** apply to the study by Lev that examined earnings numbers and stock returns?
a. According to Lev, over time, the correlation between earnings numbers and stock returns has been low.
b. Lev believed that earnings have very little explanatory power relative to changes in stock prices.
c. Lev believed that one of the primary reasons for the level of correlation between earning and stock returns lies with the low quality of reported income numbers.
d. The study’s results contradicted those of the Ou and Penman study. **XXXXX**
5. Which of the following statements is true regarding post-earnings-announcement drift?
a. Security prices do not react significantly at the time of earnings announcements.
b. At least part of the blame for this effect has been laid at the feet of financial analysts. **XXXXX**
c. This effect is more important for larger firms than for smaller firms.
d. Security prices never fully reflect the effects of earnings announcements.
6. Which of the following is **not** a possible cause of post-earnings-announcement drift?
a. Financial analysts overreact to fundamental signals stemming from securities. **XXXXX**
b. Shareholders do not distinguish well between the cash flow portions and the accrual portions of earnings.
c. Financial analysts’ forecast errors lead to incomplete security price adjustments.
d. Transaction costs are too high relative to the potential gain that can be earned from the mispricing of the securities.
7. Which of the following is **not** true regarding capital market research?
a. Studies have found a low correlation between the variability of accounting earnings and beta. **XXXXX**
b. Studies have found a strong association between accounting-based ratios and the market measure of risk.
c. Studies have found that supplemental segment (line of business) disclosures resulted in a revision of systematic risk, indicating that such information is useful for risk assessments.
d. At least one study has found that pension information is not useful for risk assessments.
8. Which of the following statements is **not** supported by empirical evidence from capital market research?
a. Accounting earnings appear to have information content and to affect security prices.
b. Alternative accounting policies with no apparent direct or indirect cash flow consequences to the firm do not seem to affect security prices.
c. There are no incentives to choose certain alternative accounting policies over others because there are never cash consequences. **XXXXX**
d. Accounting-based risk measures correlate with market risk measures, suggesting that accounting numbers are useful for risk assessment.
9. Early advocates of security-price research now recognize there are limitations to this research for use in choosing the best accounting policies and evaluating the economic consequences of alternative accounting policies on security prices. Which of the following is not a reason for these limitations?
a. The public-good nature of accounting information
b. The existence of free riders
c. The resultant market failure in terms of optimal resource allocation
d. The use of historical costing distorts financial statement amounts. **XXXXX**
10. Which of the following ranks below annual reports on surveys that ask investors to weigh the importance of different types of investment information?
a. Information from company reports
b. Information about general economic conditions
c. Company announcements on products and markets
d. None of the above rank below annual reports. **XXXXX**
11. The research approach that examines the association between accounting data reported in annual financial statements and the levels of stock prices is called:
a. Cross-sectional valuation **XXXXX**
b. Investor survey analysis
c. Accounting information usefulness research
d. Time series analysis
12. Which of the following is **not** true regarding the auditor’s role in the financial reporting process?
a. Financial statements are understood as jointly prepared by the firm and the auditor.
b. The auditor enhances outside credibility of financial statements but does not serve a control function within the firm. **XXXXX**
c. The demand for audits can be explained by agency theory.
d. The auditor attests that financial information is reliable in the sense of having been prepared in accordance with generally accepted accounting principles applied on a consistent basis.
13. Which of the following is true regarding accounting allocations?
a. Allocation-free financial statements cannot be accomplished under historical costing.
b. Usefulness of accounting allocations is a matter of deductive logic.
c. In spite of allocations, investors appear able to achieve comparability by adjusting for the effects of arbitrary allocations. **XXXXX**
d. Accounting allocations are rarely arbitrary.
14. Which of the following statements does **not** apply to the *information economics* approach.
a. It provides answers to normative questions, such as what sets of accounting information are optimal. **XXXXX**
b. It has increased appreciation of how accounting information is likely to have value in the decision-making process.
c. It is limited by the fact that it is impossible to generalize to all decision- makers from the analysis of individuals.
d. It offers an explicit individual-demand-based analysis of accounting policy questions.

# ESSAY QUESTIONS

1. What is the underlying premise of clean surplus theory and how is it applied in determining the valuation of a firm’s equity?

**ANSWER:** The underlying premise of clean surplus theory is that all profit and loss elements go through income. The valuation of a firm’s equity is based on the beginning of the period book value of equity plus the present value of expected future abnormal earnings, which are defined as earnings in excess of expected normal earnings.
2. a. What is meant by market efficiency?
b. What does the efficient-markets hypothesis imply about the value of accounting information?
c. Describe the three forms of the efficient-markets hypothesis.

**ANSWER:**
a. Market efficiency means that (1) the market fully reflects available information, and (2) by implication, market prices react instantaneously to new information.
b. If the efficient-markets hypothesis is correct, an item of information has value (information content) to investors only if there is evidence of a price response to the new information.
c. The three forms of the efficient-markets hypothesis are the weak, the semistrong, and the strong form. The weak form says that security prices reflect information contained in the sequence of historical prices; the semistrong form says that prices reflect all past and current information that is publicly available; and the strong form says that prices reflect all information (both public and private).
3. a. Describe the capital asset pricing model.
b. What is the market model?

**ANSWER:**a. The capital asset pricing model has been developed for the theoretical pricing of individual stocks. Its first step is to relate the risk of an individual security relative to the market as a whole. The market is assumed to be a diversified portfolio. A correlation is made between the returns on individual stocks and market returns over a period of time. Regression analysis is used to fit a line to a scattergram of these correlations. The slope of this line is called beta and represents a market- based measure of the systematic risk of an individual security relative to the average risk in the market as a whole. If beta equals 1, the returns are perfectly associated and the risks are equal. If beta exceeds 1, the returns on the individual stock are greater than the market.

 The assumption of the capital asset pricing model is that individual securities are priced solely on systematic risk. Beta is used to predict the risk-based price of securities. A standard version of the capital asset pricing model defines the predicted rate of return for an individual security as a function of the risk-free rate of return, beta, and the expected return on the market portfolio.
b. Empirical studies in accounting use a simpler approach to the capital asset pricing model, the market model, in which the risk-free return is dropped and unexpected (or abnormal returns) for any time period are captured in an error term.
4. What are the weaknesses of capital market research?

**ANSWER:** Determining cause and effect between information and security prices is difficult because new information is continuously causing price movements. Since the set of information affecting security prices is large, it is extremely difficult to isolate the effects of one piece of information. In addition, only a relatively small group of investors, those at the margin who influence stock prices, are examined. The methodology is not always capable of detecting information content; so, stronger evidence form efficient-markets research exists where there is information content rather than where there is none.

Another weakness of capital market research is that it is a joint test of both market efficiency and information content. The absence of price responses is usually interpreted to mean the information tested has no information content; however, this interpretation is correct only if the market is efficient. If the market is inefficient, there is no way of determining what the absence of a price response means.

Finally, market-based research necessarily considers only the aggregate effect of individual investor decision making. The role of accounting information is modeled as a black box: an event, the reporting of accounting information, occurs, and the effect of this event is then inferred from whether there was a market reaction.
5. Discuss whether alternative accounting policies have a systematic effect on security prices and what this implies about the information content of accounting policy changes. Include a discussion of previous research in this area.

**ANSWER:** If security prices do not respond to artificial book-income differences, then there is evidence that investors are sophisticated and are able to see through superficial bookkeeping differences. If security prices do respond to income levels that differ solely because of alternative accounting methods, with no cash flow consequences, then there is support for the naïve-investor hypothesis.

Most of the initial research in this area supported rejecting the naïve investor hypothesis. Research studies have examined security-price responses to a reported change in accounting policy by a company, and they have compared companies using different accounting methods. The evidence from this research supports the claim that there is no information content in accounting policy changes, at least where there are no apparent underlying changes in cash flows. This finding has also been interpreted as a rejection of the naïve-investor hypothesis. Investors appear to adjust accounting income to compensate for artificial bookkeeping differences with no real substance.

One type of change in accounting policy that does produce a security-price response is a change from FIFO to LIFE inventory accounting. Changes to LIFO have been associated with a positive security-price movement. The suggested reason for the price response is that a change to LIFO does generate real cash flow consequences by lowering taxable income, and thus income taxes. Other studies, however, contradict these findings, showing no evidence of price response or a negative price response. If these studies are correct, there may be some support for the naïve-investor hypothesis. A negative price response could be interpreted as a mechanistic response to a lower accounting number, ignoring the real positive cash flow consequence due to lower taxes. However, another reason for the negative price reactions could be that investors are considering the potentially high adoption costs relative to LIFO such as accounting system changes and higher probability of violating debt contract provisions, possible diluting presumed future tax savings.

Research studies have also investigated the effect on security prices of indirect cash flow consequences, such as a reduction of dividend paying ability because of restrictive debt covenants. Studies in this area have found negative security-price responses in the case of such indirect consequences.
6. What is post-earnings-announcement drift, and what are possible causes for this phenomenon?

**ANSWER:** Post-earnings-announcement drift refers to the fact that while markets do react significantly at the time of earnings announcements, it takes up to 60 days for the full effect to be reflected in security prices. One possible reason for post-earnings-announcement drift is that financial analysts under-react to very fundamental signals. This leads to forecast errors, which, in turn, lead to incomplete security price adjustments. It is also possible that shareholders do not distinguish well between cash flow portions of earnings and the accrual portion. The cash flow portion persists longer into the future and is less subject to manipulation than the accrual part of earnings. Another possibility is that transaction costs are too high relative to the potential gain that can be earned from the mispricing of the securities. Securities markets may not be as efficient as we once believed.
7. What is cross-sectional valuation and how has this approach been used in research studies?

**ANSWER:** Cross-sectional valuation examines the association between accounting data reported in annual financial statements and the levels of stock prices. This approach has been used to investigate how specific components of the financial statements are associated with the market valuation of the firm. If an item is considered an asset/revenue, it should normally have a positive relation to market value, whereas if the item is considered a liability/expense it should normally have a negative relation with market value.

Several studies have used this framework to determine that a firm’s pension plan assets and liabilities, as reported in footnote disclosures, are consistent with their being viewed as real (on-balance sheet) assets and liabilities. Another study determined that components of pension expense are not weighted equally in terms of their association with market valuation. The transitional asset amortization component of pension expense was implicitly valued at zero, which is consistent with the fact that there are no cash flows associated with the item.

Another study examined the association of research and development expenditures with firm value. On average, each dollar of R&D was associated with a five-dollar increase in market value. This shows that the market interprets R&D as an asset rather than an expense, contrary to the required accounting treatment.

Studies have also examined supplemental disclosures of nonperforming loans and interest rate risk in banks and thrifts. Nonperforming loans were negatively associated with firm value and interest rate risk was negatively associated with firm value only for banks. Another study reported that banks’ supplemental disclosures of the “fair market value” of investment securities is associated with market value over and above that explained by historical costs alone, a finding that gives credence to the SEC’s and FASB’s recent push for mark-to-market accounting.
8. What is the auditor’s role in the financial reporting process and how can the demand for audits be explained?

**ANSWER:** The auditor’s role in the financial reporting process is to attest that financial statement information is reliable in the sense that it is prepared in accordance with generally accepted accounting principles applied on a consistent basis. For this reason, financial statements are properly understood as jointly produced by the firm and the auditor.

The demand for auditing can be explained by agency theory. Because of conflicting incentives between owners and managers, monitoring or control of managers occurs via mechanisms such as boards of directors and independent audits. In addition, companies have voluntary incentives to signal to outsiders that the financial statements are reliable. Thus, independent audits also serve the role of enhancing outside credibility of financial statements in addition to the control function within the firm of monitoring managers.