Solutions Manual

to accompany

Accounting Theory 7e

By

Allan Hodgson and
Victoria Wise

Chapter 2
Accounting theory construction

WILEY

Chapter 2 - Accounting theory construction

Questions

1. 'A theory that is purely syntactic is sterile.'. Is this true? How can this statement relate to accounting?

Syntactical: This represents the logical relations in the theory. This concerns the rules of the language employed, e.g., the rules of grammar for English or the rules of mathematics for a mathematically expressed theory. Syntactical relations are logical connections that cement together and explain the important concepts of the theory.

A purely syntactic theory, whilst important, may be sterile if it doesn't explain or predict anything about the real world. A less sterile theory can be concerned with predicting or explaining some phenomena or with prescribing a course of behaviour. It can be a collection of propositions and conclusions which are designed to illustrate the principles of a subject. Other terms such as 'hypothesis' or 'supposition' are often used instead of theory. In essence the syntactical part of the theory is the simplest form of the theory and is based on an explicit (or implied) statement of a belief expressed in a language such as written language or mathematical language.

Students should recognise that there are three recognised parts to a theory: the syntactic, semantic and pragmatic relations. Instructors should briefly review and explain each part.

At this point instructors may use a number of theories which have evolved in accounting and which probably reflect the different 'views of the world' or the way accountants see problems as individuals. For example theories of accounting can be described and classified as:

(i) an historical record-keeping activity (pragmatic or syntactic theory)
(ii) political theories (pragmatic theories)
(iii) communication — decision making (pragmatic, syntactic and semantic theories)
(iv) accounting as an economic good (pragmatic)
(v) accounting as magic or mythology (pragmatic)
(vi) accounting as a social commodity to exploit or aid policies or as a social club for accountants (pragmatic)

That is strictly speaking, not all relations are required in theory formulation. We may have separate syntactical, semantic and pragmatic theories and a number of branches of scientific enquiry can be classified under each heading; e.g. mathematics (syntactical), physics (semantic), political science (pragmatics) and so on. However, the instructor should now pose the question whether all these relations exist in accounting. The answer is yes to varying degrees and also according to the perceptions of the student (and the instructor) of the importance of each relation. Students should then have some understanding of the complexity of defining and studying 'accounting theory'.
(see the chapter for further brief descriptions)

2. One type of theory construction involves observing the practices and techniques of working accountants and then teaching those practices and techniques to successive accountants.

(a) What type of theory construction is this?

This is a pragmatic theory construction. This relation pertains to the effect of words or symbols on the behaviour of people, in this case, the practicing accountant.

(b) What are the advantages of this approach compared with a decision-usefulness approach to theory construction?

The advantage is that the theory (and practices) are formed by accountants who are at the coalface. If there is no special interests then they will produce the best accounting for their clients. They will react to the demand generated by the market. A pragmatic theory is where we observe the behaviour of practising accountants and then copy their accounting procedures and principles.
Advantages:

(i) the solutions of practising accountants are related to the requirements of the business world.
(ii) they have developed (and been handed down) over a number of centuries.
(iii) it is a pragmatic approach to solving the problems of accounting.

Disadvantages and comparison to a decision making approach:

(i) no logical assessment (not deductive)
(ii) does not allow change (or change occurs slowly)
(iii) we perpetuate current practice
(iv) concentrates on pragmatics and ignores the measurement issues (semantics) that allows the accountant to make decisions on value and possible investment.

(c) What are the disadvantages of this approach?

Not all theories have a pragmatic orientation, but the nature of accounting makes this relationship an important one. The problem here is a circular role in this theory. Accountants teach other accountants how they do things and they perpetuate this role by then teaching other accounting apprentices. The criticism of this approach is that it does not have syntactic or semantic input. See above (b).

(d) Do you believe that this is a good approach to developing a theory of accounting? Why or why not?

This is a question that asks the student to recognise that there are alternative interpretations in accounting theory. An overall theory of accounting can be an 'instrument' for recognising and measuring income and capital. Essentially, it is a set of rules, a 'blueprint', for constructing specific accounting systems for the recognition and measurement of the income and capital of the particular entity. The results of an

accountant driven specific accounting system of a particular firm provide an 'explanation' of what happened to the firm or serve as a basis for 'prediction' of what may happen. In other words the accountant may be the best judge.

Instructors should be aware that this debate is a common one argued between practising accountants and some normative decision oriented accounting theorists and will invoke a number of responses from students. A number will argue that an approach which lacks a decision making investor focus will have the danger of becoming dogmatic or self fulfilling. A pragmatic approach may mean that too much emphasis is placed upon the practices and techniques of accountants and little emphasis is placed upon the meaning of the actual 'financial statements'. Accounting then may revert to a procedural art.

On the other hand, others may rightly argue that accounting theory may become too obtuse if a completely decision making approach is taken, without regard to the other roles accounting plays in the real world. Theoretical argument without pragmatic application is likely to be of little benefit to business and society.

At this point the instructor can point out there are several theories that have evolved in accounting and which reflect the different 'views of the world' or the way accountants see problems as individuals. For example, theories of accounting can be described and classified as:

- historical record-keeping activity
  Example: firms use accounting principles to keep a record of their transactions so that they can advise how resources have been used.
- a language
  Example: financial statements are used by management to communicate to shareholders how well they have performed in running the business.
- political theories
  Example: management use accounting reports to allocate resources among different divisions within the firm, or different levels of employees.
- magic or mythology
  Example: Enron management used accounting techniques to hide the losses it suffered from transactions with its special purpose entities.
- communication — decision making
  Example: a local bank decided to give loans to a small business after analysing the business' financial position.
- an economic good
  Example: there are costs involved in producing financial reports (not free). Accounting information is demanded to make economic decisions, but there is a cost to its supply since accounting information is a scarce commodity itself.
- a social commodity
  Example: government uses accounting numbers (such as profits or research expenditure) to decide whether to give grants to particular firms.
- ideology and exploitation
  Example: firms cut down jobs in their unprofitable divisions.

3. Describe the semantic approach to theory construction.

Semantics: Semantics is sometimes referred to as rules of correspondence or operational definitions. It connects symbols, words, terms or concepts with real-world objects, events or functions and is seen to make a theory realistic.

(i) In accounting semantic theory concerns itself with the correlation of propositions to objects or events and manifests itself in terms of measurement theories: for example measuring the effects of inflation on assets and liabilities and adjusting the accounts to reflect these adjustments. Theorists in this area argue that by applying these adjustments, the accounts then have semantic content and can be related to the real world (which they see as being market prices). Input semantics – assigning numbers to the transaction inputs of accounting, e.g. assets, liabilities, revenue, expenses. This transactions based approach is often criticised as a mathematical system divorced from logical analysis or output semantics.

(ii) Output semantics – testing the outputs of the accounting system against some external reference, e.g. increases in profits against share price changes (see also Theory in Action 3.1).

(iii) It seems logical to conclude that if the purpose of undertaking accounting is to impart semantic content to the numbers then they should be verified. This can be undertaken by checking market prices, stock prices or even the historical cost depending on the stated purpose of the accounting. However, this is a difficult question as there are very few external referents other than the stock market and market prices. Further, market prices exist for a minority of businesses. In most cases the financials determined by accountants are the sole determinant of a firm's financial health. Many students, recognising this problem, will revert to a 'reasonableness test'.

(a) Should the outputs of accounting systems be verified?

The debate in the 1970's about inflation was a normative debate in that researchers argued that *we should* change the accounting methods and output reports produced according to the prescriptive judgement of the writer. That is we should use some form of market based accounting to adjust for inflation instead of historical cost accounting. Normative accounting research is more concerned with policy recommendations and is concerned with what should be done in contrast to explaining why current practice is carried out in the manner that it is.

Normative theorists usually attempt to derive either the 'true income' or adopt the 'decision — usefulness' approach whereby accounting reports are an input into users' decisions (e.g., to buy or sell shares, management decisions on the financial wealth of firms, etc.).

The major issues are the impact of the changing price environment (prices) and the impact on income, assets, liabilities and equity. As a consequence many normative theorists are measurement theorists who attempt to incorporate the effects of inflation into accounting reports. In this sense they take a semantic viewpoint — relating the figures in the accounting reports to actual objects (assets, liabilities) or events (changes in inflation).

(b) If so, how can this be achieved? If not, why?

Certainly if we have a valuation approach to accounting then inflation affects value and should be taken into account in making decisions. Whether accounting should be purely a semantic science (or a syntactic or pragmatic science) is in itself a normative statement and whichever way students answer this point should be brought to their attention.

Inflation may matter to some accountants but not to others. For example a management accountant who is trying to control costs or projects may have to pay a great deal of attention to the inflation rates in various sectors, an accountant who is responsible for hedging money market funds will be interested in the real rate of return on funds or look to inflation induced hedges (e.g., in real assets). On the other hand taxation accountants, auditors or record keepers may have very little interest in the effects of inflation.

4. In the 1970s there was much debate about how to account for inflation.
(a) Did this debate involve positive theory or normative theory?

Compare the above normative approach to a positive approach, which would ask the empirical questions: 'Why do accountants manipulate data under the accrual system?' or, 'Is accrual data more useful than cash flow data?' Instead of simply normatively recommending change. The approach is basically whether we understand the world as it is or suggest change based upon assumed premise.

(b) Is it important to account for the effects of inflation? Why or why not?

However both approaches may or may not be individually valid but compliment each other. Both approaches need to be more rigorously examined before any conclusion is warranted and normative theories should contain pragmatic and semantic input and similarly positive theories should have logical and normative reasoning.

5. Researchers who develop positive theories and researchers who develop normative theories often do not share the same views about the roles of their respective approaches to theory construction.
(a) How do positive and normative theories differ?
(b) Can positive theories assist normative theories, or vice versa? If yes, give an example. If not, why not?

Normative accounting research makes policy recommendations and is concerned with what should be done in contrast to explaining why current practice is carried out in the manner that it is (positive theory).

Normative theorists usually attempt to derive either the 'true income' or adopt the 'decision — usefulness' approach whereby accounting reports are an input into users' decisions (e.g., to buy or sell shares, management decisions on the financial wealth of firms, etc.). The major issues are the impact of the changing price environment (prices) and the impact on income, assets, liabilities and equity. As a consequence many normative theorists are measurement theorists who attempt to incorporate the effects of inflation into accounting reports. In this sense they take a semantic viewpoint — relating the figures in the accounting reports to actual objects (assets, liabilities) or events

(changes in inflation). To some extent the approach of the IASB is a normative approach.

Positive accounting theory was a reversion to testing or relating accounting theories back to the 'facts' or 'experiences' of the real world. Examples of such research were questionnaires and surveys of bank officers or investors regarding their use of financial reports for decision making; or whether inflation adjusted accounting reports actually aided decision making. Current positive accounting research is aimed at explaining the reasons for actual accounting practices and in predicting the role of accounting data in economic, political and social decision making. Positive theory has expanded accounting theory from the purely decision making focus of normative theorists into analysis of political and economic factors.

Using the normative recommendation of IFRS, that fair values should be used in financial statements, a positive theorists would first undertake a number of empirical tests to see if they are actually useful/used by decision makers in their valuation models. In this sense they complement each other – normative theory the deductive analysis with positive theory the empirical verification.

6. Can accounting theory be constructed as a purely syntactical exercise? Why or why not?

The major problem with syntactics is that the truth value of any proposition is ascertained by logic or reasoning alone. If the underlying accepted premises of the logic have no reference to the real world or are false, then the conclusions have either no pragmatic usefulness or the conclusion is incorrect. The tutor should mention here the reaction of logical positivism against metaphysical or abstract theorising (see text). Logical positivism argued that all theoretical statements should be capable of being reduced to statements which can be immediately observed and that anything that cannot be empirically verified is meaningless. The reaction was against romantic theorising which had no practical application. Logical argument should be precise and serviceable.

Science usually progresses via logical debate and counter debate. However, syntactics alone cannot act as a source of true statements about the world. Syntactics alone are only concerned with the derivation of statements from other given statements. This is the real weakness of syntactics as a stand alone method.

As an example of syntactics in accounting theory the instructor can use the theory of double-entry and historical costs which has been confirmed and verified by auditors many times.

The criticisms of this approach are:

(i) all manipulations are correct as long as the rules of mathematical bookkeeping are applied
(ii) there are many acceptable sets of 'equations'
(iii) no semantic verification — not descriptive of real world objects or events.

Under this approach science progresses by trial and error. The non falsification of bold hypothesis or the falsification of cautious hypothesis mark significant advances in science.
See also the answer to question one.

In addition instructors may wish to channel discussion towards a discussion about how we view the world. For example, using ontological assumptions and the Morgan and Smircich six-way classification that we may assume reality as being anything from a concrete structure (realist — objectivist viewpoint) down to reality as a projection of human imagination (unstable — human specific).

If we have an ontological viewpoint that the accounting world is relatively concrete and stable then it is more appropriate to choose a syntactic-scientific approach to accounting theory. That means that we are more likely to have a structured, prior theoretical base but this must be backed up by empirical validation. On the other hand if we view the world of accounting as being a product of human imagination we are more likely to have an unstructured research methodology with no prior syntactic other than the assumption that we are facing a soft ontology.

7. Classify the following hypotheses according to whether they are conclusions of positive or normative theories. Explain your answers.

(a) Historical cost accounting should be replaced by a market value system.
(b) Historical cost accounting provides information used by creditors.
(c) Historical cost accounting is used by many managers to allocate costs in determining divisional performance.

(a) normative
(b) positive
(c) positive

8. Give an example of the types of issues that might be resolved by accounting theories developed using the following methods of theory construction.
(a) psychological pragmatic approach
(b) scientific approach
(c) naturalistic approach
(d) normative approach
(e) positive approach

(a) the behaviour of investors to the release of accounting data
(b) the reaction of all stock prices to the release of accounting data and why
(c) the reaction of employees in one particular firm to the release of accounting data
(d) all accounting reports should be adjusted by inflation before they are released
(e) what type of accounting do firms in one particular industry use for inventory before they release their accounting reports

9. Explain the naturalistic and syntactic approach to theory construction. Are these approaches mutually exclusive?

The difference between scientific and naturalistic research is set out in table 2.2 on page 32. The instructor should aid students' understanding by briefly categorising accounting research into scientific and naturalistic. The International View (2.2) is an excellent backdrop to illustrate the difference and to show how research has delineated.

10. The decision-usefulness approach to theory development can be used to develop theories of accounting.
(a) Explain what is meant by the decision-usefulness approach to theory development.
(b) How can the decision-usefulness approach relate to accounting theory formulation?
(c) Give two examples of decisions that require data obtained from accounting reports.

The decision-usefulness approach is an instrumentalist approach (see diagram p.25). In a narrower sense, one direct test of an overall theory of accounting would be to determine whether the output data of the accounting systems, which are constructed on the basis of the overall theory, are useful to users. The data of the accounting systems are utilised by users in their prediction models, and the conclusions (predictions) are then used in their decision models. The problem is that if the prediction is verified, it verifies the prediction model, not the accounting system and its output. There are other variables besides accounting data that affect the prediction. We do not know how the accounting data were utilised. Also, if the decision turns out to be right, it verifies the decision model, not the accounting system.

Interpreting the evidence on decision-making is extremely difficult. We do not know how to interpret the evidence to determine that accounting information is useful. Thus, a direct test is virtually impossible. Accounting standard setters usually determine usefulness with the weaker, more direct tests which are usually advanced by accounting committee setting bodies and include: relevance, verifiability, freedom from bias, timeliness, comparability, reliability and understandability.

Some decisions:
(i) To invest in a firm's stock
(ii) To loan funds to a firm
(iii) To purchase or buy an asset.

11. What type of a theory is historical cost? How has it been derived? Do you have any criticisms of historical cost accounting?

Historical cost is usually described as a pragmatic theory whereby premises are determined by observing the practice of accountants. Criticisms: no logical analysis of accountants' actions, does not allow change, does not focus on measurement, circularity of logic in the rules, outputs not verified, doublethink, conventions not subject to falsification. The argument is pragmatic positive as it is observable and descriptive of the behaviour of accountants over a number of centuries.

It is also true that historical cost accounting provides a system of allocating costs over different reporting periods (accrual accounting). In this sense it is a deductive argument. A point of logical contention, however, is whether the allocation of costs is truly systematic (in a deductive sense), because a number of the ways in which the costs are allocated appear to be done in an ad hoc fashion without inductive reference to events that occur in the real world of asset valuation.

12. Explain the psychological pragmatic approach to accounting theory. Give a example of how it can be applied.

The psychological pragmatic approach to accounting theory is examining the reactions by investors and the general public to the release of accounting data. One research question is whether investors are fooled by cosmetic accounting numbers or are they financially rational. This research issue is covered in a later chapter but has gained greater prominence after the failure of ENRON and their questionable accounting practices.

13. Give an example of an accounting convention usually adopted in historical cost accounting. Conventions govern the way accounting is practised, and conventions are, by definition, known from practice.
(a) What theoretical approach is used to derive conventions?
(b) What does your answer to (a) imply about the potential for accounting theories based on conventions to be innovative in providing useful information?

Accounting conventions (assumed premises) in historical cost are:

- Conservatism – stewardship and accelerating the reporting of bad news over good news
- Matching costs – calculation and focus on the income statement as a valuation metric (the balance sheet is the cost residual from this outcome)
- They are innovative in providing solutions to stewardship problems and agency problems such as the payment of CEO bonuses.

14. How do you think massive amounts of data now available from information technologies will affect
(a) the development of accounting theories
(b) the testing of accounting theories

The massive amount of data now available from information technologies will affect:
the development of accounting theories by making theories capable of being tested in by the application of semantic (availability of prices, and accounting data) and pragmatics (the reaction of accountants, investors and society) to the release of accounting reports. This means a probable move away from syntactic and normative theories towards more empirical based positive theories.
However, be aware of the British school that tends to have a closer relationship with syntactic arguments from sociology, history and psychology.
In combination the trend may be towards a combination of these two approaches.

15. What are some common criticisms of a scientific approach to professions such as accounting and law? Are they valid? Why or why not?

The instructor should start by providing or asking for a brief overview of the scientific method, defined as a systematic approach of observation, hypothesis formation, hypothesis testing and hypothesis evaluation in testing a theory. A discussion of the methods used and the advantages/disadvantages should be analysed in class. (See the text for a more detailed description.)

The answers given by students to this question will be varied, but the tutor should aim to impart knowledge of the different forms of scientific methods and the way in which science is seen to advance. The essential components are:

i. Syntactics
ii. Semantics
iii. Pragmatics
iv. Hypothesis formulation
v. Testing
vi. Evaluation

Whether the scientific method is valid is a question of degree but a comparison between alternatives will help. For example:

The dogmatic basis is used when we believe in a statement because of confidence in the person or group issuing the statement. This confidence may be due to a religious or political belief, or due to the credentials, position or charisma of the speaker or writer. We employ this basis frequently, since we cannot be expected to personally 'test' everything. We believe in what we read in the newspapers, in textbooks we use in school, in what our teachers tell us, etc. The weakness of this basis is that personal opinion, rather than evidence, is the critical factor. Introspective evidence is acceptable.

The self-evident basis is used when we believe in a statement because it appears to be sensible or obviously true, based on our general knowledge and experience. For example, the statement 'children love to eat candy' would be accepted as self-evidently true by most people. They would not feel an empirical study needs to be conducted. The

weakness of this basis is that what is sensible or obvious to one person is not to another. What appears to be so obvious may turn out to be incorrect.

In contrast, the scientific basis is used when we believe in a statement because of the logical relationship of the terms and the objective, empirical evidence in support of the statement. The demand for objective, empirical evidence is the significant factor. The scientific basis was formulated to overcome the weaknesses of the other two.

16. Early auditing theories were constructed by observing the practices of auditors. What type of theory construction is this? What are the advantages and disadvantages of this approach?

The theory construction is pragmatic positive as it is observable and descriptive of the behaviour of auditor practices over a number of centuries. The major system audited over this period is historical cost accounting that provides a system of allocating costs over different reporting periods (accrual accounting). Advantages: In this sense because it is historical the major advantage was the ease of confirming transactions by reference to vouchers. Another advantage of this approach is that auditors are close to clients and they are able to assess the accounting needs of business. Disadvantages: A point of logical contention, however, is whether the allocation of costs is truly systematic (in a deductive sense), because a number of the ways in which the costs are allocated appear to be done in an ad hoc fashion without inductive reference to events that occur in the real world of asset valuation. It may be that auditors are acting in the interests of managers rather than equity owners. It may also be that auditors are maintaining a system of accounting that is easy to verify rather than one that provides a more up-to-date information set.

17. How would you design an experiment to provide evidence on how auditors make judgements? What competing issues would arise?

The discussion should address the problem of making the experiment realistic enough for auditors to make decisions in the same way they would in 'real life' by providing the sort of information they would normally receive and under the conditions they would normally work. When the experiment is sufficiently realistic, it is said to have external validity.

The researcher would also have to design the experiment so that there are not too many variables, or factors being changed between the auditors. For example, if the researcher is trying to determine the effect of providing information in a different order on the auditors' decisions, the experiment has to hold other factors constant. The aim is to be able to attribute the change in the decision to the change in the order in which information is provided. If this is achieved, the experiment has internal validity.

How many things could upset the internal validity of an experiment?

Examples include bias in selection of the auditors (more experienced auditors are assigned to one group), repeated testing (if the experiment is repeated auditors could learn, grow tired, start to anticipate the researcher's aims) and experimenter bias (where the researcher unconsciously sends signals to the participant auditors about the desired action).

International View

2.1 IFRS is a Big Four gravy train

This is an article that succinctly points out the dangers of having (i) one vision of accounting, and (ii) the contagion effect of standard setting.

1. The differences – investor decision making and a balance sheet valuation approach matching expenses against revenues with a focus on stewardship and performance over time. Local authorities should not be assessed the same as listed stocks.
2. Students are encouraged to address this issue and consider that accounting is not one-dimensional. The "simple" answer is yes!
3. Murphy is using both a systematic argument - local councils have different objectives and a semantic argument – they require different measures. There is also a hint of pragmatics in the behaviour of the big 4.
4. Lack of scientific consideration but students should be encouraged to debate the issues raised.

International View

2.2 Financial accounting: an epistemological research note

After reading this article students should realise the complexity of accounting and the far reaching impact of the various theories and different research approaches. All the primary accounting theories in the chapter are touched on but there is an emphasis on the competing North American and British approaches:

1. (i) The North American approach – ontology – reality is objective to satisfy the man made concepts of investor and management financial decision making. Epistemology is generally as described under scientific research in Table 2.2.

   (ii) The British approach – ontology – reality is socially constructed based upon the sociology, psychology, history and political disciplines. Epistemology is shaped by various social interactions and cannot be reduced to single normative statements or hypotheses to be tested.

2. All accounting theories are normative. The instructor should encourage students to explain further with the view that a normative assumption is always made about the objective i.e. Decision making, stewardship, society etc.

3. Effects on society are numerous. Questions of resource usage efficiency, decision making, there are economic gainers and losers, there are affects on accountants, investors, managers, and society at large. This list is not exhaustive and students are encouraged to explore their observations and ideas.

Theory in Action 2.1

Do share prices rise when profit improves?

1. The article describes a market reaction to accounting profit news. This description involves an example of which approach to theory:
(a) Pragmatic
(b) Syntactic, or
(c) Semantic?

Explain your answer.

Describing this reaction to a profit announcement is an example of a semantic approach to theory, in particular output semantics. An output of the accounting system (that is, the profit figure) is being tested against an external reference (that is, share price). Share prices react to *unanticipated* increases or decreases in earnings, because these represent *new information* that will cause investors to *revise their expectations* regarding the firm's future cash flows. In an efficient capital market, changes in expectations of a firm's cash flows will lead to changes in the firm's share price if share prices represent a capitalisation of future cash flows. The article describes how the shares in Metcash rose by 7 cents following the announcement of expected future organic and acquisition growth driving sales and earnings. This is because the market expected Metcash to perform better in the future.

The description is also pragmatic in that it is useful in terms of its potential to assist managers in knowing how to deal with earnings announcements in order to maximise firm value.

To the extent that the market reaction is compared against a theory developed using syntactic relations, there is a syntactic component to the theory as well. Overall, though, we would argue that the primary approach is semantic, by relating theoretical constructs to real world references.

2. Consider the following syllogism:

When a company reports better prospects than previously, investors force that company's share price to increase.
- **Metcash is a company that has reported better earnings per share than previously.**
- **Investors forced Metcash's share price to increase.**

(a) Is there a flaw in the syntax or semantics within the syllogism that means its conclusion is not true? If so, what is the flaw? (*Hint*: Consider whether the general premise at the start of the syllogism must always be true.)

There is no flaw in the syntax of the syllogism. The syntatics is valid as it follows a logical reasoning, which means if both premises were true, the conclusion would also be true. The fact that the conclusion is not true is caused by a semantics problem.

In the argument above, although the logic is sound, there is a problem with the semantics of the syllogism. After Metcash announced that it increased earnings by 13.3 per cent in 2009 its share price rose. The flaw is in the premise 'When a company reports higher earnings than previously, investors force that company's share price to increase'. The reality shows that when a company reports higher earnings, its share price may not always increase. A company's share price will generally increase when its earnings exceed those anticipated by the market. But for numerous reasons, for example, the presence of short term traders on the share register of a company, its share price might fall as the traders exit the share as the earnings improvements are not expected to be affecting the very short term cash flows of the firm.

(b) What is the practical significance of this theory being invalid and its conclusion false?

The practical significance is that it is not sufficient for a firm just to make *any* earnings to increase its share price, as the market will only value any increase in earnings that is *above or supplemental to its expectation*. In other words, the firm has to exceed the market's expectation to increase its share price.

Theory in Action 2.2

Normative theories of investment

1. What is a bull market? A bear market?

A bull market is a market which is experiencing a prolonged period of generally rising share prices. A bull market often occurs when the market is recovering from recession or experiencing an economic boom. A bear market is a market that is experiencing a prolonged period of decreasing share prices. A bear market often occurs when a market is moving towards or is in recession.

2. Why would high commodity prices and low interest rates help to maintain share prices?

As Australia is a producer of commodities, high commodity prices due to increases in global demand and/or decreases in global supply will increase commodity export revenues. High commodity export revenue could enable Australian firms to increase their retained earnings and allow Australia to build its reserves and maintain a strong balance of payment position. This will encourage more investment in Australian businesses, and cause share prices to rise. Similarly, low interest rates will result in more consumer spending or investment in shares as there will be a larger portion of disposable income available to be spent after paying for debt and interest, and less incentive to invest in interest bearing securities since returns are lower.

3. What is the theory underlying the advice to 'buy the dips'? Is this a normative theory? Explain your answer.

The theory underpinning the advice to 'buy the dips' is that firms with volatile share prices may present opportunities for investors to acquire equity at competitive prices as the market is *inefficient*. Those investors who buy at lower prices may be able to reap profits by trading the shares when the market becomes more efficient (and the trend reverses) either on a short term or a longer term basis.

The advice that investors should look for firms with volatile share prices and 'buy the dips', is a normative statement, in that it prescribes what investors should do to achieve a desirable outcome (gains).

On the other hand, a theory that firms will (say) distribute higher dividends and thus push their share prices to increase, is a positive theory as it explains/predicts the movement of share prices in relation to rising revenues, profits, and dividends.

Theory in Action 2.3

Alternative approaches to accounting theory construction

1. What market backlash do businesspeople fear if they do not meet their forecast earnings or growth targets? Why?

Businesspeople who do not meet their forecast earnings or growth target will face pressure first of all from their shareholders. As shareholders demand higher profits, inability to meet profit target will result in some sort of personal penalty, for example via reputation effects, reduced or removed performance bonuses, or threats to their employment tenure. In general, the market would penalise firms that do not meet their forecast target by marking the firms down, that is reducing the firms' share prices.

2. Mr. Fletcher describes how he has learned not to publicly disclose five-year annual profit growth targets. Explain what is likely to have caused him to learn that lesson. In coming to the conclusion, what approach to theory construction has Mr. Fletcher applied? Explain your answer.

Mr. Fletcher mentioned that he 'has done it once', that is he has publicly disclosed five-year annual profit growth targets before, against the board of directors advice. It is likely that during that five years he was not able to deliver the targeted performance, putting pressure on himself and risking his position as Coles Myer CEO, and putting pressure on the board of directors. Since then, he has learnt not to disclose any profit growth because the risk of doing that is too high in such a susceptible market. In this case, Mr. Fletcher applies the psychological pragmatic approach, which observes users' responses to accountants' outputs (the five-year profit growth targets). After profit targets are disclosed, users react when firm's performance is not according to what was predicted. His is also an inductive approach, leading from an initial premise of individual personal experiences.

3. Can the scientific approach to theory construction and testing be useful in relation to predicting when and how investors will react to earnings announcements? How/Why not?

Yes, the scientific approach can be used to predict when and how investors will react to earnings announcements. In this case, investors' reactions are measured through the changes in share prices (increase/decrease) following the earnings announcements, allowing abnormal gains/losses to be made. The research problem to test is whether share prices will respond to new information associated with the announcements, and when that will happen relative to the announcement day. This can be examined by conducting an event study investigating the share returns associated with the release of information relating to share trades. It would be expected that investors would react to earnings announcements. The question, however, is when investors will react to the release of such information. Data associated with earnings announcements and any abnormal gains/losses can be gathered from a sample of firms. Data are then analysed

and evaluated to determine how and when investors would react to earnings announcements.

4. What is the importance to society of developing a theory to explain the relationship between earnings forecasts, earnings announcements, and share price movements?

The importance is to provide guidance to the society on how share prices move in relation to earnings forecasts and earnings announcements. By developing and then testing the theory, researchers will contribute to explain and predict what happen in the share market surrounding earnings announcements. Society would benefit in terms of gaining knowledge to guide them in making decisions. For example, firms will consider carefully whether they would announce earnings forecasts if there is a theory suggesting that share price will move downward when actual earnings do not reflect earning forecasts. Similarly, the theory will also help investors to make decisions, for example whether to buy or sell their shares, following earnings announcements. Overall, the pragmatic significance of the theory is that it affects individuals' wealth distributions and the distribution of wealth amongst businesses, and also the generation of wealth by firms whose ability to raise capital is affected.

Theory in Action 2.4

Alternative approaches to accounting theory construction

1. What market backlash do businesspeople fear if they do not meet their forecast earnings or growth targets? Why?

Businesspeople who do not meet their forecast earnings or growth target will face pressure first of all from their shareholders. As shareholders demand higher profits, inability to meet profit targets may result in some sort of personal penalty, for example via reputation effects, reduced or removed performance bonuses, or threats to their employment tenure. In general, the market would penalise firms that do not meet their forecast target by marking the firms down, that is reducing the firms' share prices.

2. Can the scientific approach to theory construction and testing be useful in relation to predicting when and how investors will react to earnings announcements? Why or why not?

Yes, the scientific approach can be used to predict when and how investors will react to earnings announcements. In this case, investors' reactions are measured through the changes in share prices (increase/decrease) following the earnings announcements, allowing abnormal gains/losses to be made. The research problem to test is whether share prices will respond to new information associated with the announcements, and when that will happen relative to the announcement day. This can be examined by conducting an event study investigating the share returns associated with the release of information relating to share trades. It would be expected that investors would react to earnings announcements. The question, however, is when investors will react to the release of such information. Data associated with earnings announcements and any abnormal gains/losses can be gathered from a sample of firms. Data are then analysed and evaluated to determine how and when investors would react to earnings announcements.

3. What is the importance to society of developing a theory to explain the relationship between earnings forecasts, earnings announcements, and share price movements?

The importance is to provide guidance to society on how share prices move in relation to earnings forecasts and earnings announcements. By developing and then testing the theory, researchers will contribute to explaining and predicting what happen in the share market at the time surrounding earnings announcements. Society would benefit in terms of gaining knowledge to guide them in making efficient decisions. For example, firms will consider carefully whether they would announce earnings forecasts if there is a theory suggesting that share price will move downward when actual earnings do not reflect earning forecasts. Similarly, the theory will also help investors to make decisions, for example whether to buy or sell their shares, following earnings announcements. Overall, the pragmatic significance of the theory is that it affects individuals' wealth distributions and the distribution of wealth amongst businesses, and also the generation of wealth by firms whose ability to raise capital is affected.

Case Study 2.1

New accounting rules 'don't add up'

1. What are International Financial Reporting Standards?

International Financial Reporting Standards are accounting standards developed by the International Accounting Standards Board (IASB), which is an independent international organisation supported by professional accounting bodies. Formerly known as the International Accounting Standards (IAS), the objective of IFRS is to achieve uniformity and transparency of accounting principles used by entities for financial reporting around the world.

2. Many arguments are expressed in this article. List three factors that you think are causing concern about the impact of adoption of IFRS.

Three of the factors causing concern about the prospect of adopting IFRS include:

- Companies are required to recognise, present or disclose information in a transparent way.
- The use of fair value accounting which requires asset and liability revaluations to be passed through the income statement both (a) increases earnings and leverage measures of volatility; and (b) takes more effort to implement.
- IFRS do not provide more insight into firm risk than existing accounting standards.

3. Consider each of the three factors you mentioned in response to question 2.
(a) Is there empirical evidence to support the factor?
(b) Is the analysis leading from the factor to the concerns about adoption of IFRS scientific or naturalistic in its approach? Explain your answer.

(i) Companies are required to recognise, present or disclose information in a different way.

Yes. For example, adoption of IFRS in Australia also requires companies to recognise share-based transactions, which was not the case previously. The accounts of companies adopting IFRS differ from those of firms using different national accounting standards.

The evidence used as the basis for the claims is naturalistic if it is evidence from firms' individual accounts that underpins the claims by individuals in many cases. These accounts have been observed by individuals who have become concerned about the nature of the changes required under IFRS.
However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing many firms' financial statements, or reconstructions of their past financial statements, to come to a general conclusion regarding the view that firms are required to recognise, present or disclose information differently from their current approach.

(ii) The use of fair value accounting which requires asset and liability revaluations to be passed through the income statement both (a) increases earnings and leverage measure volatility; and (b) takes more effort to implement.

Yes, there is some empirical evidence that fair value accounting creates more volatility. For example, Barth, Landsman, and Wahlen (1995) examined fair value of US banks' investment securities and found that fair value-based earnings are more volatile than historical-based earnings.

The use of fair value accounting leads to a complaint that it introduces volatility into reported profits, as revaluations must be brought into the income statements. The evidence used as the basis for the claims is naturalistic if it is evidence from firms' individual accounts that underpins the claims by individuals in many cases. These accounts have been observed by individuals who have become concerned about the increase in earnings and leverage volatility reported under IFRS.

However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing many firms' financial statements, or reconstructions of their past financial statements, to come to a general conclusion, statistically tested, regarding the view that volatility increases after IFRS adoption.

(iii) IFRS do not provide more insight into firm risk than existing accounting standards.

The empirical evidence can include the type of risk disclosed and its impact on profit and financial position; the difficulty in risk compared with the audit of financial statements prepared under national standards, etc.

The evidence used as the basis for the claims is naturalistic if it is evidence from individuals learning to prepare/auditing firms' individual accounts that underpins the claims by individuals in many cases.

However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing the time spent by accountants and/or auditors in relation to numerous firms' financial statements, or reconstructions of their past financial statements, or statements pre- and post- IFRS adoption.

4. How could researchers evaluate the decision-usefulness of adopting International Financial Reporting Standards?

The decision-usefulness approach builds from a basic assumption that the objective of accounting is to assist users of accounting reports in their decision-making process by providing useful and relevant information in the accounting reports. To evaluate the decision-usefulness of adopting IFRS, researchers need to examine whether financial reports prepared under IFRS are useful for users in making economic decisions. There are a number of ways to do that. One way is to undertake a value-relevance study investigating whether certain items disclosed in financial reports, such as financial

instruments or intangible assets, are value-relevant (i.e. provide relevant and reliable information for users). Another way is to conduct a survey among firms that have adopted IFRS, or survey users of their financial reports. Other research methods can be teased out with the class.

5. What role can positive theory play in resolving the issue(s) described in the article?

Researchers can conduct positive accounting research to examine and find empirical evidence that can support or reject the issues described in the article. Investigating how adoption of IFRS works in the UK can be used to enhance the theory of how global accounting standards should provide more benefits, as it will describe and explain the issues and consequences associated with adopting IFRS.

6. What role can normative theory play in resolving the issue(s) described in the article?

Commencing with premises regarding the desirable attributes of a global accounting system and premises regarding how well different national and other accounting systems (including IFRS) meet those attributes, (this may be the outcome of either positive or normative theories, depending upon the nature of the attribute in question). A normative theory can lead to hypotheses regarding the best way to achieve accounting's goals.

Case Study 2.2

The thrill is gone

1. Lend Lease reported a 13.5% increase in profit for 2004–2005. Why was the share market unimpressed?

The Lend Lease 2004–2005 profit did not meet the market's expectations. During that period, Lend Lease did well to produce a growth business through its retail and residential development, including some prominent projects in the US such as cleaning up the WTC site after the September 11, 2001 attack. However, the market expected Lend Lease to do more infrastructure works, such as toll roads and tunnels, which Lend Lease has no plans to do. Therefore, the market was unimpressed by the Lend Lease results.

2. In trying to explain shareholders' subdued reaction to Lend Lease reported earnings, explain whether and/or how you could use the following approaches to accounting theory construction:

(a) pragmatic

The pragmatic approach (especially the psychological pragmatic approach) observes how users respond to accounting outputs (in this case profit announcement). In the Lend Lease case, shareholders were unimpressed with the profit announcement, causing the share price to fall. To assess reasons for the subdued reaction, a study using protocol analysis of shareholders' reactions to other firms' earnings announcements and the Lend Lease earnings announcement, after subjects had been provided with different sets of prior information about analysts' forecasts of earnings would be useful to build cumulative evidence. Alternatively, researchers could survey the users of the financial statements. This approach could also be undertaken under the positive accounting or scientific method approaches.

(b) decision-usefulness

The decision-usefulness approach assumes that accounting outputs provide useful information for users in the decision-making process. This approach would try to determine whether accounting outputs (Lend Lease profit announcement) provide useful information for the shareholders to make decisions. Shareholders could be given a set of prior information and the accounts of Lend Lease, and then in a separate experiment give a set of different prior information and the accounts of Lend Lease. At the end of each analysis of the financial statements, they might be asked to bid for shares, to see which set of accounts/prior information leads to the lower share price.

(c) positive accounting theory

Positive theory deals with explaining or predicting what actually happens in the real world. Using positive theory, researchers would try to explain why, in reality, shareholders were not impressed with Lend Lease performance despite its 13.5% profit.

They would probably collect data concerning earnings announcements and analysts' forecasts, and statistically compare the returns for different circumstances: when analysts' forecasts are above, below, or at the amount of profit reported.

(d) normative theory

Normative theory is concerned with prescribing what should be done. One of the issues which becomes the focus of some normative theorists is how to derive the 'true income' (profit). In trying to explain the shareholders' response to Lend Lease profit announcement, normative theory would concentrate on whether Lend Lease has measured its profit figure correctly, and if it is the case, whether the profit figure would provide useful information for shareholders (decision-usefulness approach). The normative theory approach does not explain the subdued reaction; rather it might come up with recommendations for how firms should calculate and report their profits.

(e) scientific approach

Based upon observations that firms' share prices generally increase after positive earnings announcements, but sometimes do not, the scientific approach would cause researchers to develop theories about why that was the case. See the explanation for the positive theory approach.

(f) naturalistic approach

The naturalistic approach is appropriate to use in explaining an individual shareholder's reaction to the Lend Lease announcements, as it focuses on firm-specific problems. Using case study as a method, this approach will try to answer the question why the market is unimpressed with Lend Lease's performance, although it has delivered 13.5% profits during 2004–2005 and predicted a double-digit growth in 2006.

3. Which of the approaches described in answer to question (2) do you believe is most useful? Why?

The approaches are generally not necessarily incompatible. We would argue that the best approach is through triangulation: the use of multiple approaches to see if they all deliver consistent outcomes. Overall, though, we argue that the scientific approach provides a more generalisable result. This approach is likely to be applied in a positive accounting theory context. It could be supplemented by case studies conducted using the naturalistic approach.

4. Are the approaches you described in answer to question (2) mutually exclusive, or can they be used to complement each other? Explain?

There are some approaches that are mutually exclusive within the one study and some others that are not. For example, positive accounting theory approaches are generally a subset of the scientific method approach. However, positive accounting theory simply refers to the development of explanatory theory, and it is thus consistent with the decision-usefulness approach, etc. All approaches can be used to complement each

other. Scientific and naturalistic approaches, for instance, are mutually exclusive, in that they cannot be applied at the same time due to different perspectives. The scientific approach is a highly structured approach to analyse problems based on prior knowledge. It also relies on predetermined procedures and statistical techniques to validate or refute tested hypothesis, which results in answers that can be applied in general understanding. The naturalistic approach, on the other hand, starts from the view that reality is socially constructed and a product of human imagination. In other words, reality is not objective, but a result of people's interpretations of situations and events they experience. Hence, this approach is best used to analyse problems with unique setting and no preconceived assumptions or theories (such as shareholders' reaction of Lend Lease profit announcement). It aims to solve individual problems, and thus the result may be difficult to generalise.

Some approaches can be used to complement each other. For example, the pragmatic approach provides a usefulness test for the decision-usefulness approach — one way to test whether accounting outputs provide useful information is by examining users' responses to the reports. As mentioned in question 5(b), positive and normative theory can also complement each other. Normative theory prescribes what should be done, and one way to do that is by using the decision-usefulness approach. Positive theory identifies and tries to explain what is actually being practiced in the real world using scientific approach. This, in turn, can form the basis of developing normative theory to improve current practices.

Case Study 2.3

Intergovernmental working group of experts on international standards of accounting and reporting

1. What are International Financial Reporting Standards (IFRS)?

International Financial Reporting Standards are accounting standards developed by the International Accounting Standards Board (IASB), which is an independent international organisation supported by professional accounting bodies. Formerly known as the International Accounting Standards (IAS), the objective of IFRS is to achieve uniformity and transparency of accounting principles used by entities for financial reporting around the world.

2. Many concerns are expressed in this article. List three factors that you think are causing concern about the impact of adoption of IFRS.

Three of the factors causing concern about the prospect of adopting IFRS include:

- Companies are required to recognise, present or disclose information in a transparent way.
- The use of fair value accounting which requires asset and liability revaluations to be passed through the income statement both (a) increases earnings and leverage measures of volatility; and (b) takes more effort to implement.
- IFRS do not provide more insight into firm risk than existing accounting standards.

3. Consider each of the three factors you mentioned in response to question 2.

(a) Is there empirical evidence to support the factor?

(b) Is the analysis leading from the factor to the concerns about adoption of IFRS scientific or naturalistic in its approach? Explain your answer.

(i) Companies are required to recognise, present or disclose information in a different way.

Yes. For example, adoption of IFRS in Australia also requires companies to recognise share-based transactions, which was not the case previously. The accounts of companies adopting IFRS differ from those of firms using different national accounting standards.

The evidence used as the basis for the claims is naturalistic if it is evidence from firms' individual accounts that underpins the claims by individuals in many cases. These accounts have been observed by individuals who have become concerned about the nature of the changes required under IFRS.

However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing many firms' financial statements, or reconstructions of their past financial statements, to come

to a general conclusion regarding the view that firms are required to recognise, present or disclose information differently from their current approach.

(ii) The use of fair value accounting which requires asset and liability revaluations to be passed through the income statement both (a) increases earnings and leverage measure volatility; and (b) takes more effort to implement.

Yes, there is some empirical evidence that fair value accounting creates more volatility. For example, Barth, Landsman, and Wahlen (1995) examined fair value of US banks' investment securities and found that fair value-based earnings are more volatile than historical-based earnings.

The use of fair value accounting leads to a complaint that it introduces volatility into reported profits, as revaluations must be brought into the income statements. The evidence used as the basis for the claims is naturalistic if it is evidence from firms' individual accounts that underpins the claims by individuals in many cases. These accounts have been observed by individuals who have become concerned about the increase in earnings and leverage volatility reported under IFRS.

However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing many firms' financial statements, or reconstructions of their past financial statements, to come to a general conclusion, statistically tested, regarding the view that volatility increases after IFRS adoption.

(iii) IFRS do not provide more insight into firm risk than existing accounting standards.

The empirical evidence can include the type of risk disclosed and its impact on profit and financial position; the difficulty in risk compared with the audit of financial statements prepared under national standards, etc.

The evidence used as the basis for the claims is naturalistic if it is evidence from individuals learning to prepare/auditing firms' individual accounts that underpins the claims by individuals in many cases.

However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing the time spent by accountants and/or auditors in relation to numerous firms' financial statements, or reconstructions of their past financial statements, or statements pre- and post- IFRS adoption.

4. Is the analysis leading from the factor to the concerns about adoption of IFRS scientific or naturalistic in its approach? Explain your answer.

(i) The evidence used as the basis for the claims is naturalistic if it is evidence from firms' individual accounts that underpins the claims by individuals in many cases. These accounts have been observed by individuals who have become

concerned about the nature of the changes required under IFRS. However, if a research study has been conducted, say by academics, then that research study is likely to follow the scientific approach of analysing many firms' financial statements, or reconstructions of their past financial statements, to come to a general conclusion regarding the view that firms are required to recognise, present or disclose information differently from their current approach.

5. What role can normative theory play in resolving the issue(s) described in the article?

Commencing with premises regarding the desirable attributes of a global accounting system and premises regarding how well different national and other accounting systems (including IFRS) meet those attributes, (this may be the outcome of either positive or normative theories, depending upon the nature of the attribute in question). A normative theory can lead to hypotheses regarding the best way to achieve accounting's goals.

Case Study 2.4

Tabcorp costs trouble market

1. Tabcorp reported an increase in profit for 2008–2009. Why was the share market unimpressed?

The Tabcorp 2008-2009 profit did not meet the market's expectations. During that period, Tabcorp faced mounting licence fees and taxes and an upgrade of the Star City Casino – a cost that its managing director described as 'challenging'. The market was concerned about the impact of these additional costs, and 'pounded' its shares by 5 per cent.

2. In trying to explain shareholders' subdued reaction to Tabcorp's reported earnings, explain whether and/or how you could use the following approaches to accounting theory construction:

(a) pragmatic

The pragmatic approach (especially the psychological pragmatic approach) observes how users respond to accounting outputs (in this case profit announcement). In the Tabcorp case, shareholders were unimpressed with the extra costs announcement, causing the share price to fall. To assess reasons for the subdued reaction, a study using protocol analysis of shareholders' reactions to other firms' earnings announcements and the Tabcorp earnings announcement, after subjects had been provided with different sets of prior information about analysts' forecasts of earnings would be useful to build cumulative evidence. Alternatively, researchers could survey the users of the financial statements. This approach could also be undertaken under the positive accounting or scientific method approaches.

(b) positive accounting theory

Positive theory deals with explaining or predicting what actually happens in the real world. Using positive theory, researchers would try to explain why, in reality, shareholders were not impressed with Tabcorp's performance despite its improved profit. They would probably collect data concerning earnings announcements and analysts' forecasts, and statistically compare the returns for different circumstances: when analysts' forecasts are above, below, or at the amount of profit reported.

(c) naturalistic approach

The naturalistic approach is appropriate to use in explaining and individual shareholder's reaction to the Tabcorp announcements, as it focuses on firm-specific problems. Using case study as a method, this approach will try to answer the question why the market is unimpressed with Tabcorp's performance, although it has delivered improved profits during 2008–2009.

3. Are the approaches you described in answer to question (2) mutually exclusive, or can they be used to complement each other? Explain?

There are some approaches that are mutually exclusive within the one study and some others that are not. For example, positive accounting theory approaches are generally a subset of the scientific method approach. However, positive accounting theory simply refers to the development of explanatory theory, and it is thus consistent with the decision-usefulness approach, etc. All approaches can be used to complement each other.

Scientific and naturalistic approaches, for instance, are mutually exclusive, in that they cannot be applied at the same time due to different perspectives. The scientific approach is a highly structured approach to analyse problems based on prior knowledge. It also relies on predetermined procedures and statistical techniques to validate or refute tested hypothesis, which results in answers that can be applied in general understanding. The naturalistic approach, on the other hand, starts from the view that reality is socially constructed and a product of human imagination. In other words, reality is not objective, but a result of people's interpretations of situations and events they experience. Hence, this approach is best used to analyse problems with unique setting and no preconceived assumptions or theories (such as shareholders' reaction of the Tabcorp profit announcement). It aims to solve individual problems, and thus the result may be difficult to generalise.

Some approaches can be used to complement each other. For example, the pragmatic approach provides a usefulness test for the decision-usefulness approach — one way to test whether accounting outputs provide useful information is by examining users' responses to the reports. Positive and normative theory can also complement each other. Normative theory prescribes what should be done, and one way to do that is by using decision-usefulness approach. Positive theory identifies and tries to explain what is actually being practiced in the real world using scientific approach. This, in turn, can form the basis of developing normative theory to improve current practices.

4. What is meant by 'normalised earnings'? Why would a firm disclose 'normalised' earnings?

Normalised earnings are earnings that have been adjusted to take into account the effect of cyclical variations. A firm would disclose normalised earnings to remove the volatility effect of including one-off or non-controllable events, such as (say) the expropriation of foreign-located assets of a firm by a national government.

Case Study 2.5

Alumina jumps on bad news

1. Alumina reported an 86.3 per cent fall in first half-year profit, and suspended its final dividend. Why did its share price rise by 9.79 per cent on the announcement date?

Although the company reported an 86.3 per cent fall in first half-year profit to $14.6 million, it exceeded market expectations which predicted a loss of around $19 million. The market reaction to this unexpected information was a rise in the share price of Alumina. Furthermore, the price of aluminium was also rising, a factor which the market regarded as positive to the expected level of future profits and cash flows of the company.

2. In trying to explain the positive response to Alumina's reported earnings, explain whether and/or how you could use the following approaches to accounting theory construction:

(b) Decision-usefulness.
(c) Normative.
(d) Scientific.

(a) decision-usefulness

The decision-usefulness approach assumes that accounting outputs provide useful information for users in decision-making process. This approach would try to determine whether accounting outputs (Alumina profit announcement) provide useful information for the shareholders to make decisions. Shareholders could be given a set of prior information (such as the expected price of aluminium) and the accounts of Alumina, and then in a separate experiment give a set of different prior information and the accounts of Alumina. At the end of each analysis of the financial statements, they might be asked to bid for shares, to see which set of accounts/prior information leads to the lower share price.

(b) normative theory

Normative theory is concerned with prescribing what should be done. One of the issues which become the focus of some normative theorists is how to derive the 'true income' (profit). In trying to explain the shareholders' response to Alumina profit announcement, normative theory would concentrate on whether Alumina has measured its profit figure correctly, and if it is the case, whether the profit figure would provide useful information for shareholders (decision-usefulness approach). The normative theory approach does not explain the reaction; rather it might come up with recommendations for how firms should calculate and report their profits.

(c) scientific approach

Based upon observations that firms' share prices generally increase after positive earnings announcements, but sometimes do not, the scientific approach would cause researchers to develop theories about why that was the case.

3. Which of the approaches described in your answer to question (2) do you believe is most useful? Why?

The approaches are generally not necessarily incompatible. We would argue that the best approach is through triangulation: the use of multiple approaches to see if they all deliver consistent outcomes. Overall, though, we argue that the scientific approach provides a more generalisable result. This approach is likely to be applied in a positive accounting theory context

4. Explain the importance to investors of developing a theory to explain the relationship between earnings announcements and share price movements.

The importance lies in the ability to accurately predict the reaction of share price movements to earnings announcements. A reliable theory provides a basis for making more accurate predictions, thus improving the efficiency of the market.

