An Introduction to Accounting Theory

Gabriel Donleavy



GABRIEL DONLEAVY

AN INTRODUCTION TO ACCOUNTING THEORY

An Introduction to Accounting Theory

2nd edition

© 2018 Gabriel Donleavy & <u>bookboon.com</u>

ISBN 978-87-403-2306-1

Peer review by Dr. Nicole Ibbett, <u>University of Western Sydney</u>, Australia

CONTENTS

	Learning outcomes	7
	About the author	8
	Preface	10
1	Accounting and agency theory	12
1.1	What theory is	12
1.2	Hypotheses	13
1.3	Theories, laws and theorems	14
1.4	Positive facts and normative opinions	14
1.5	Accounting theory, economics and law	17
1.6	Agency theory	19
2	The conceptual framework	22
2.1	Introduction	22
2.2	Key elements of the framework	25
2.3	The purpose of accounts	27



The Graduate Programme for Engineers and Geoscientists

www.discovermitas.com



2.4	Characteristics of accounting that conform to the framework	29
2.5	Accounting elements	33
2.6	Frameworks and legitimacy	36
3	Accounting standards	38
3.1	Introduction to regulation	38
3.2	Introduction to constructionism	39
3.3	Standards based on rules or on principles	40
3.4	Intangibles and goodwill	42
3.5	The reporting entity	44
3.6	Liabilities	44
3.7	Whose fair value?	46
3.8	Table of International Accounting Standards current at the start of 2016	47
4	Measurement and valuation	52
4.1	Introduction	52
4.2	Measurement scales	52
4.3	Valuation	58
4.4	Valuation under inflation	62
4.5	Two approaches and clean surplus theory	65
4.6	Fair value and faithful representation	67
5	Accountng and capital markets	69
5.1	Does accounting affect stock market prices?	70
5.2	Earnings management	79
5.3	HEURISTICS	82
6	Accountability	86
6.1	Introduction	86
6.2	Auditing's market role	88
6.3	Theories of Accountability	89
6.4	Critical Perspectives in Accounting	94
6.5	Ethical Paradigms of Accountability	99
6.6	Ethics, Ethical Development and Professional Accountants	109
7	Accounting pathologies – fraud, failure and evasion	119
7.1	Audit expectation gap	119
7.2	Fraud	121
7.3	Manipulation and Positive Accounting Theory	123
7.4	Accounting and Business Failure	127
7.5	Theory and accounting pathologies	130

8	The new accounting reports: sustainability and integration	134
8.1	Introduction – CSR	134
8.2	The Global Reporting Initiative (GRI)	139
8.3	The International Integrated Reporting Council (IIRC)	141
8.4	Conclusion	144
9	The unfinished work of accounting theory	149
9.1	Space Age Accounting	149
9.2	The Next Hundred Years	151
9.3	The Next Hundred Light Years	151
9.4	Public accounting for the actual public	152
9.5	Deep equity accounting	154
9.6	A Critical conclusion	155
	References	182

LEARNING OUTCOMES

After completing this book, the reader will be able

- · to explain why accounts are the way they are,
- to evaluate the competing theories of why accounting is the way it is,
- to understand the main alternative accounting treatments of items whose valuation is controversial,
- to appreciate the different developments taking place now and formulate a view about them
- And to think critically about any claim wherever it may be or wherever it may have come from

ABOUT THE AUTHOR

Gabriel Donleavy is the Professor of Accounting at Australia's University of New England and the Deputy Head of its Business School. He read Economics at Cambridge, Law at London and obtained his PhD from Glasgow on the uses and abuses of cash flow statements. He has published in the Journal of Business Ethics, the British Accounting Review, the International Journal of Accounting and Economics, Long Range Planning and has addressed three of the quinquennial meetings of the International Association for Accounting Education and Research.

He has worked in universities in England, Singapore, Hong Kong, Macau and Australia. He has held the posts of:

- Academic Director of the Hong Kong University Business School
- Head of the School of Commerce and Law at Central Queensland University
- Dean of Quality at Central Queensland University
- Dean of the Faculty of Business Administration at the University of Macau
- Dean of the Faculty of Business and Law at Victoria University (Melbourne)
- Acting Deputy Vice Chancellor at Victoria University (Melbourne)
- Principal and CEO of the Anglo European Chiropractic College.

He has designed, reviewed, had validated and accredited business and accounting courses with the national accounting bodies in England and Hong Kong, with England's Quality Assurance Agency, England's Higher Education Funding Council, with Hong Kong's Council for Academic and Vocational Quality, national and international chiropractic bodies, and the Association for the Advancement of Collegiate Schools of Business. He is a registered expert with the Hong Kong Council for Academic and Vocational Quality and been a member of several of its program validation panels in recent years.

He has published six books, 40 refereed scholastic articles and 90 papers and monographs in the fields of business education, accounting and business ethics. He has been a consultant to Hong Kong's Independent Commission Against Corruption, to the accounting division of the late Arthur Andersen, and been on the consulting register of the Asian Development Bank.

He was a co-founder of the UK's anti-cult Family Advice Information and Rescue group in the late seventies, an organizer of Hong Kong Amnesty International before and after Tian An Men in the late eighties, a National Trustee of England's Citizens' Advice Bureaux at the turn of the century and is now a member of the New South Wales advisory board of the National Seniors' Association.

He has dual Anglo Australian citizenship, speaks good French and is a published poet.

Gabriel D. Donleavy MA (Cantab), LLB (Lond), PhD (Glasg), CA, FCPA, FIMgt, FRSA, JP(Q)

E-mail: g.don@une.edu.au

Nicole Ibbett is a lecturer in accounting at Western Sydney University. She holds a doctorate in business administration from the University of Newcastle and has degrees in both accounting and finance and has been teaching in both areas for over 20 years. Before turning her focus to teaching, Nicole worked in a variety of finance and commercial accounting fields. Nicole is the author of a financial mathematics textbook, *Financial Mathematics for Decision Making*, which is designed to assist non-specialists with applying interest rates to making financial decisions. Her current interests are in the area of analysis and interpretation of financial reports.

PREFACE

This introduction to accounting theory book is different from other accounting theory books. It is only some 150 pages long instead of over 500. It is written by one person, not by a whole committee or consortium. It includes every major development on accounting up to the year of the book's publication 2016. That means, unlike other texts on accounting theory, it addresses the 2015 revision of the conceptual framework by the International Accounting Standards Board, the 4th version of the Global Reporting Initiative, and the postulates of the new Integrated Reporting with its new definitions of capital.

Another way in which this book differs from other accounting theory textbooks is that it meant for an international audience, not one circumscribed by the borders of the US, UK or Australia. It concerns global accounting issues, not national ones, but it is not a book on international accounting. It is an introduction to accounting theory.

The book is meant to be easy to read so I apologise for including references and citations. If I left them all out, you would not know whether what I was saying was my personal opinion or had some authoritative evidence to back it up. I have tried to minimize the references though, consistent with the requirements of the need to evidence statements and give credit to theory inventors and innovative thinkers. I hope I have made it very obvious when anything is just my personal opinion.

The final way in which this book differs from other accounting theory books is that it is deliberatively aimed at enhancing your critical thinking ability.

Provocative statements are made to get you thinking. Some widely held theories are reviewed skeptically to get you in the habit of casting a critical eye on sacred cows like the EMH that are delivering neither milk nor miracles. The social and economic context of accounting is regularly brought into discussion to stop you swallowing whole the idea that any aspect of social studies can be wholly neutral; and accounting, like all of business studies is a social study. It is done by people about people to people. It is not just about what things people own and what those things are worth.

This is the first edition. All being well, it will be updated every year, and reader feedback will be taken very seriously in writing subsequent editions too.

All the best for your studies in general and for accounting in particular.

Gabriel Donleavy,

Armidale, New South Wales, Australia

May 2016

1 ACCOUNTING AND AGENCY THEORY

LEARNING OUTCOMES

After completing this chapter, the reader will be able:

- a) to explain what agency theory is,
- b) to evaluate any statement as being one of fact rather than of opinion and vice versa,
- c) to understand the differences between a theory, a theorem, a postulate, a hypothesis and a law,
- d) to appreciate the need to surface assumptions when appraising statements of any kind.

1.1 WHAT THEORY IS

Accounting theory is about theory. How does theory differ from a law and from a hypothesis? A theory is an explanation, but not just any explanation. A theory asserts that wherever a set of circumstances occur, a similar result will be seen.

For example, suppose someone has a theory of speeding. It goes like this. Whenever a car is driven over the speed limit, the probability of an accident greatly exceeds the probability of an accident for cars driven below the limit. In plainer language, the theory says speeding drivers are more likely than regular drivers to have accidents. This is a proper theory, because it applies to any car anywhere there is a speed limit.

Also, a proper theory can be tested for its accuracy against the known facts. The facts here would be the number of accidents recorded in a particular jurisdiction, the number of cars driving over the limit and also the number under the limit associated with recorded accidents. As a matter of fact, accidents will generally show an association with speeding or they will not. If they do, the theory is supported by the facts. If they do not, the theory is not supported; but it is still a theory – just not a correct one.

A theory makes general statements, either of cause and effect or of association between two things, and a theory is testable against facts. A theory need not be right every single time, but it does need to be right often enough to be rely on most of the time. It differs from a law which needs be right all of the time; else it is not a law but still a theory.

A law is always right. A theory is usually right.

1.2 HYPOTHESES

Inside theories there are postulates. As atoms are to molecules, so postulates are to theories. Postulates we can test in real life are called hypotheses. Formulating a hypothesis is called hypothesizing. For example, I could hypothesize that if I sneeze, I will blow my nose. This is not a good hypothesis, because, since it only refers to me, it can tell us nothing about the world in general. A better hypothesis would be: whenever people sneeze, they blow their noses. Hypotheses should apply to a whole class of people, not just to one person.

In social science, hypotheses are tested in their negative form. In the nose blowing case, the hypothesis would be: whenever people sneeze, they do not blow their noses. This form of the hypothesis is called the null hypothesis. New theory is created when the null hypothesis is wrong and instead the facts support the positive form of the hypothesis. That support has to come from repeated observations of many different samples, so we can be sure we are looking at most of the ways that the circumstances occur in real life. If the results of all those observations show a pattern happening far more often than chance would predict, then the null hypothesis is not supported and the alternative, the positive hypothesis, is supported, which means our hypothesis is likely to be correct. That in turn builds a little bit of good new theory.



1.3 THEORIES, LAWS AND THEOREMS

A theory is not a law – it is sometimes wrong. It is also not a theorem. Only mathematics has theorems, because only in the abstract world of algebra, geometry and numbers can we transcend the assumptions and approximations of the real world. In geometry we have Pythagoras' Theorem that you probably had to learn in school it says the length of the hypotenuse of any right angled triangle is the square root of the sum of the squares of the lengths of the two other sides.

A theory would add, other things being equal. A theorem is a special kind of law. It is always true and has no exceptions. In addition it has "all particulars included" which means there is nothing left out of the theorem and its specifications are exact not approximate. Nothing left out means everything else is irrelevant such as the size and colour of the page, the thickness of the lines drawing the triangle or the size of the other two angles beside the corner right angle.

Theories on the other hand are rarely fully specified in this way – they tend to be simplifications of real patterns focusing on the most important patterns but not extending to all the patterns. So with a theory of cause and effect, such as A causes B, it may be true but it is not exhaustive. M N and O might also have some effect on B. A might also cause X Y and Z. A theorem on the other hand is exhaustive.

1.4 POSITIVE FACTS AND NORMATIVE OPINIONS

Theories can be normative or positive. Normative ones prescribe what should happen, assuming we want a specified outcome such as prosperity. Positive ones explain or predict facts and do not assume we want any particular outcome. Examples of normative theories are as follows. Normative stakeholder theory asserts firms will do best if they take on board the concerns of all their stakeholder groups instead of just maximizing the wealth of their shareholders alone (Friedman and Schwartz 1963). Milton Friedman's monetarist theory in financial economics holds that inflation is best controlled through controlling the money supply in the economy, especially but not exclusively through interest rates (Friedman 1962). In ethical philosophy the theory of act utilitarianism holds that the best decision in any situation is the one that promotes the highest net welfare of the largest number of people. These theories all prescribe behaviour. They do not describe it.

Examples of positive theories are as follows. Positive accounting theory holds that firms manipulate their reported profits upwards if bonuses are a major part of directors' pay package or if lenders have imposed dividend payout ratio limits on the firm as a condition of the

loan (Watts and Zimmerman 1986). In financial economics the theories of Modigliani and Miller (1958, Miller and Modigliani 1961) hold it makes no difference to overall share value whether a firm is or is not heavily in debt or whether its dividend payout ratio is high or low, many other things being equal like the effect of tax rules. In ethical philosophy the Kohlberg (1969) theory of ethical development holds that individuals evolve their morality in stages, some not getting past one stage where fear of punishment is the only effective incentive and a few evolving to stage six where an innate sense of right and right has become internalized as happens in many religious communities. These theories explain, describe and predict behaviour. They do not prescribe it, at least not explicitly.

Normative theories involve value judgments; positive theories are supposed to be value free. Positive theories are confined to statements of fact; normative theories include opinions, judgments and subjectivities. It is important to be able to distinguish fact statements from value statements when dealing either type of theory, as values can creep into positive theory and objectivity can be claimed for normative theories; but such slippage is invalid because the two kinds of statement have their own quite separate validity rules. A statement of fact and positive theories are statements of fact must be able to be tested against facts and to be rejected if the facts fall to fit the theory. In that sense positive theories are scientific. Statements of opinion and normative theories are elaborated statements of opinion cannot be falsified against fact but can be shown to be ineffective or inefficient in generating the results they claim, especially as regards economic results like inflation rates or share prices or returns on investment.

Any statement that cannot be tested against facts as known right now is an opinion statement. Thus, all sentences containing the verbs should, ought, must etc. are opinion statements. All subjective adjectives like good, bad, right, wrong, hot, cold, rich, poor etc are opinion statements. There is no universal human consensus on what is right as our many and continuing wars continue to prove. Words like hot or rich do lend themselves to objective measurement but it is the measurement of temperature or of income that is objective, not the word applied to the result. \$300,000 a year is a fact; rich is an opinion.

Because a fact statements can be falsified by testing it against actual facts, it follows that lies are also fact statements, A fact statement is true or false. A lie is a false statement of fact.

Finally any statement about the future, any prediction at all, cannot be a fact statement, because by definition we cannot test it now. However a positive theory may be predictive, so long as it is stated in ways we can test now as well as test again sometime in the future.

Here is a self test on distinguishing fact statements.

Choose which of the ten statements below are the fact statements. Answers and explanations for them are at the back of the book in the Appendix, as Test 1.1.

- a) My name is Bond, James Bond.
- b) You are so pretty.
- c) You are the prettiest girl I have ever seen.
- d) I said she was pretty.
- e) I have an appointment with Dr Vall tomorrow.
- f) I will see Dr Vall tomorrow.
- g) The sun ain't gonna shine anymore.
- h) To be or not to be: that is the question.
- i) To be or not to be: that is a question.
- j) Eating people is wrong.

Positive theories assume there is a set of observable facts that are independent of the theory itself but which can be used to verify the truth of the theory. Further they follow the philosopher Karl Popper (1972) who held that all theories are only capable of being disproved but not of being proved because the observations which support the theories are framed by the theory. These two sentences may look in opposition. The first says facts



which are independent can be reconciled through the metaphor of a camera. The camera only takes factual pictures but the operator frames which things get photographed. When a major theory is falsified because it fails to explain new observations and is replaced by a new theory which can explain them, this is referred to by Kuhn (1972) as a paradigm shift. Since any paradigm or theory can be falsified any time, Kuhn says there are some qualities which we can rely on to distinguish one theory's power from another, namely accuracy, simplicity and fruitfulness (Chua 1986).

However, because a theory may be falsified in the future, that does not make it false or invalid in the present. If a theory explains facts and enables accurate predictions, especially the social sciences such as economics and business and accounting, that is good enough. In other words, falsifiablity is not adequate grounds for asserting everything is relative, so one belief is as good another. Some beliefs fit the facts well; others hardly fit them at all.

Finally the very distinction between fact and value is itself a value judgment (Weber 1949 cited in Chua 1986, p. 611).

Now let's move from theory in general to accounting theory in particular.

1.5 ACCOUNTING THEORY, ECONOMICS AND LAW

Accounting is the child of law and economics, historically speaking (Chatfield 1974, ICAEW 2013). Law prescribes what is allowed. Law prescribes what a country recognizes as legal ownership. An asset is something you legally own, such as a house, a car or a share. You do not own your spouse or children – they are not your slaves – so the law says they are not your assets, though you may feel as if they are. Assets can be bought and sold, but most of them are held for a while before they are sold. The exception is stock (British English) or inventory (American), these being current assets which are meant to be sold as soon as possible, not held.

The other parent of accounting is economics. Economics explains and predicts how people behave towards their assets, how they decide what to buy and sell, how they decide how much to charge and how much to pay, how they decide what they can afford, what kind of work they are prepared to do, how much time effort or money they will invest in a project venture company service or any other kind of asset. Economics is concerned with how we acquire assets and how we use them. Economics is the stronger parent of accounting because when economics says the substance is different from the legal form, economics often prevails. The most conspicuous example of this is the lease. This is a legal agreement to convey the right to control the use of an identified asset for a period of time in exchange

for considerat. Accounting has decided such a lease is so much like full ownership that the leased asset must be shown on the balance sheet as if it was an owned asset. The principle here is said to be the predominance of economic substance over legal form in accounting reports. We can almost say that in accounting it is economics that provides the substance, law that provides the form.

Does that make law the father of accounting and economics the mother?

Accounting involves the valuation of assets, liabilities, income, expenditure and equity. In olden days this was a matter of accurately recording how much was paid for things, recording them in the books and at the end of the year adding up all the items under each heading (assets, liabilities, income, expenditure and equity) so we could see if the year was one in which we made money or lost it. Double entry bookkeeping was spread round the world in the early sixteenth century, as international trade became much more important. Merchants had to get to grips with foreign money and that meant valuation at the historical cost of things in our own currency started to include gains or losses on foreign exchange. The historical cost of a ton of spices was not the same in dollars as in francs, marks, rubles, yuan or pesetas. The value of something was affected by geography.

Even before the Industrial Revolution got under way in Britain in the late eighteenth century, there were periods of inflation. Inflation means prices rise. That means that the cost of a long lived asset such as a building is lower, often much lower, that the price for which it could now be sold — which of those is the real "value" of the building. Time affects value. Space affects value. Nothing affects historical cost however. Historical cost is a constant and a legal fact. Falsifying historical cost in accounting reports is illegal, criminal and deceitful. It is fraud. Unfortunately the clarity of this legal certainty helps very little finding out what today's true value of the asset is in any one place. Historical cost is one thing. Current value is another.

Current values are not fixed. In the case of the most heavily and frequently traded assets, shares of large multinational companies, the value on the stock exchanges can change every second of the trading day. That applies also to the value of the main trading currencies, the dollar, the euro, the yen, and the Swiss franc; in particular. With these liquid assets, when I tell you the current value of any of them during the trading day, I am already a few seconds out of date, at least. The value of these liquid assets as shown in a balance sheet is an instantaneous and momentary snapshot. The notes to the accounts have to comment on how much they may have changed by the time the accounting report is published. Valuation is not an exact science, but more of a craft.

1.6 AGENCY THEORY

Accounting has several theories relevant to it and we shall explore all of them. It is important to appreciate; however, that one theory is much more important than all the others and is central to understanding accounting practice, especially financial accounting practice. That theory is called agency theory. It began as a management theory in the work of Berle and Means (1933), was applied to financial management and stockholders' interests by Fama (1970, 1980) and arrived in its current form in a paper by Jensen and Meckling (1976) (For a historical review see Mitnick, 2013). It is a theory explaining the economic behaviour of the main people in large firms. Economics' previous theory of the firm assumed firms were managed by one sole proprietor, or that any larger firm behaved just like the one man band. Agency theory holds that modern companies are owned by shareholders but run by managers, and that the economic interests of the two are different. Managers are seen as agents of shareholders who are seen as the principals. Shareholders as principals own the firm and want to see their wealth conserved and enlarged, which means they want to see sustained and growing profits, sustained and growing dividend rates and steadily increased share prices as a result not only the substance of higher profits but also of the non-substance of steadily rising optimism about the companies' future.



Managers are assumed to regard shareholders' wants as constraints on their own wants which might include the highest possible standard of living financed by very high pay, a huge set of fringe benefits like first class airfares and subsidized accommodation and membership of exclusive clubs and the freedom to invest in prestigious projects. In some cases they may also want enough time to do community work so as to obtain marks of social distinction such as knighthoods. All of these things are a drag on profits and constitute the costs to the principals of employing agents. Agency theory says such costs can be greatly reduced by incurring monitoring costs and bonding costs.

Monitoring costs are costs of making management accountable to shareholders through accounting reports, through audits, through good corporate governance including a strong audit committee (more of this later) and holding the chief executive accountable to the shareholders in general and to the chair of the board in particular.

Much more important than monitoring costs in reducing the agency problem are bonding costs. These are the costs of bonding managers to shareholders so that the managers identify the shareholders' interests as the same as their own. This is done through issuing the mangers with enough shares and options on shares (usually called stock options) and by tying their annual bonuses so directly to profits that the managers' income and wealth are affected far more by these bonding ingredients than by straight pay and fringe benefits. Monitoring costs and bonding costs together make agency costs.

For a critical but sympathetic review of agency theory, a good starting point is Eisenhardt (1989).

The agency problem is solved in most large companies because bonding is effective, especially when reinforced by good corporate governance whose entire point is to structure senior management and shareholder voting processes. There are still a minority of companies however whose managers pay themselves bonuses even when the firm has made a loss and the shareholders are insufficiently strong, coordinated or determined enough to stop this. The agency problem persists and even family run businesses are susceptible to it.

Accounting is about valuation, but it is even more about accountability. The cave men 22000 years ago made different shapes of clay and stone to represent their livestock for a reason. It was crude but definite evidence of their wealth, of their assets (Schmandt-Besserat 1992). If the tally of animals failed to match the tally of clay tokens, then someone had been stealing. Accounting is an important way of managing trust between strangers in business and nearly all accounting practices arose to make trust easier to induce. From clay tablets to stock options, accounting has tried to promote and validate trust in business. It succeeds in this much more often than it fails.

End of chapter test

Complete the following sentences by supplying the missing word or phrase

- a) Accounting exists because people cannot be...with other people's property
- b) Agency theory assumes human nature is...
- c) The type of cost that is most effective in dealing with the agency problem is the...
- d) A new theory not yet proven is often called a...
- e) The individual components of a theory are called...or...
- f) A theory which is always true is really a...
- g) A theory which leaves nothing out, including even any assumptions is really a...



2 THE CONCEPTUAL FRAMEWORK

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to understand what conceptual frameworks' functions are,
- b) to explain the main features of the IASB conceptual framework,
- c) to evaluate the principles enshrined in the framework
- d) to appreciate the potential for conflict between the framework's list of desirable characteristics of accounting reports.

2.1 INTRODUCTION

A Conceptual Framework is a set of broad principles that provide the basis for guiding actions or decisions. Conceptual frameworks are designed when people decide they need the theories of something to be integrated into a single coherent structure, usually because they have inconsistencies, anomalies or represent tradition and habit without any known explicit rationale.

Before the nineteen-seventies, accounting was seen as a practical activity, with its own traditions, norms and principles. Its principles were simply descriptions of what had been received traditional ways of doing things. These principles were called Generally Accepted Accounting Principles, GAAP for short (AAA 1966, Grady 1965).

Different countries had different GAAP but basic things were universal. Those basic things included:-

- i) Income and expenses gathered on the Income Statement, assets, liabilities and equity on the Balance Sheet
- ii) Double entry bookkeeping was applied to all transactions
- iii) Inventory at year end was valued at the lower of cost or selling price
- iv) Timing differences between a transaction and its payment were recognized as receivables and payables on the Balance Sheet and the entire expense applicable to the current year was recognized in the Income Statement;
- v) The distribution of net profit to taxes, dividends and reserves was gathered together in the Appropriations section at the end of the Income Statement.

The GAAP became the first principles behind the first attempt by any country's accounting profession an accounting conceptual framework; namely the USA's American Accounting Association in 1936 with its Statement of Accounting Principles (AAA 1936). In 1959, the American Institute of Certified Public Accountants, AICPA for short, set up the Accounting Principles Board to establish or at least recognize a set of principles on which accounting statements might be based and it issued a number of tentative reports in subsequent years, but the first firm framework layout was FASB (1976), which was based on the Trueblood Report (AICPA 1973) which followed such earlier writers as Paton and Littleton (1940) in advocating usefulness to investors as the primary objective of financial statements. It was followed by the USA's SFAC 1 on Conceptual Framework which said a conceptual framework is "A coherent system of interrelated objectives and fundamentals that is expected to lead to consistent standards" (SFAC 1, Statement of Financial Accounting Concept No 1 – Objectives of Financial Reporting by Business Enterprises, 1978).

While GAAP described what was actually done, so was positive; a conceptual framework and the standards it rules over are normative. That is a big difference.

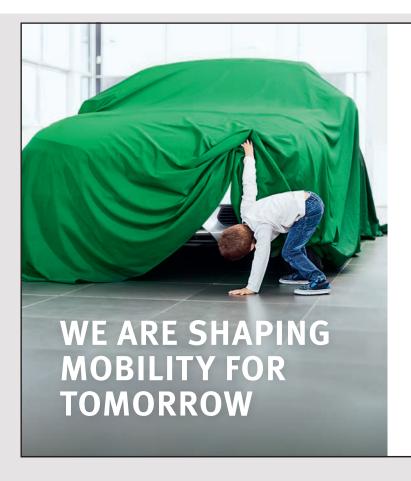
There was some resistance to the act of codifying principles into a conceptual framework by accounting professionals and academics who thought it was an unnecessary exercise that would not be bound to increase insight into a firm's financial affairs, but they were in a minority. The arguments are reviewed in Staunton (1984), Miller (1990), Bushman and Landsman (2010); but will not be repeated here, as the argument has been won many years ago in favour of a coherent set of accounting principles over ad hoc individual practices; so it would not be useful to reopen the debate here.

The International Accounting Standards Board, IASB for short, issued its framework in 1989 (IASC 1989); and the most recent official version was published in 2010 (IASB 2010) and in 2015 published an exposure draft of a revised framework which heralds a third version by the end of 2016. It was expecting to include the USA in its jurisdiction but the USA has stayed outside and its own framework is not identical to the IASB. The 2010 IASB Framework reflects the project of converging with the US Framework, but the 2015 revision reflects the failure of that project and the (possibly coincidental) reinstatement of stewardship as a major purpose of accounting reports (IASB ED 2015 1.22 p. 26) and the explicit approval of prudence as a value that reinforces neutrality rather than contradicts it (IASB ED 2015 2.18 p. 29). The American framework is published by the Financial Accounting Standards Board, FASB (SFAC1). As this book is intended for an international student audience, we will treat the IASB rather than FASB as our conceptual framework.

Standards are specific requirements for particular items of accounting, whereas the framework is general. To illustrate, the framework says when something is to be treated as a liability

and the standards will say exactly when to recognize and how value each different kind of liability. Accounting standards may go beyond their conceptual framework, such as when the framework does not specify the valuation of inventory but the accounting standard (IAS2) does, just as GAAP did. Moreover the framework does not take priority over any standard that conflicts with it, on the rare occasions that happens that happens (IASB 2010 A25, IASB ED 2015 IN2). However, this does mean that the continuing debate between those who favour rules based standards and those who favour principles based standards is a different debate from the old discussion whether or not it worthwhile having a conceptual framework. The case for principles based standards is similar to the case for a conceptual framework (coherence, consistency, protection of the public interest and intellectual rigor, for example); but it is not the same.

It is like the question of a written constitution. Most countries have one but a few like the UK do not; yet the UK would still claim to operate its government and laws under a coherent and clearly identifiable set of principles. Standards based on principles but not proceeding from a conceptual framework would be like the UK approach to its constitution. This in turn implies that a written constitution and a conceptual framework may help build trust in regulatory institutions if not enough was there before the framework was introduced.



How will people travel in the future, and how will goods be transported? What resources will we use, and how many will we need? The passenger and freight traffic sector is developing rapidly, and we provide the impetus for innovation and movement. We develop components and systems for internal combustion engines that operate more cleanly and more efficiently than ever before. We are also pushing forward technologies that are bringing hybrid vehicles and alternative drives into a new dimension - for private, corporate, and public use. The challenges are great. We deliver the solutions and offer challenging jobs.

www.schaeffler.com/careers

SCHAEFFLER

The framework allows probabilities. The new Conceptual Framework will not use the concepts of probability and reliability of measurements as recognition criteria. (IASB 2015 ED pars.5.9, 5.17–5.19) to be taken into account in recognizing assets and liabilities. That principle is implemented in IAS 38 – accounting for intangible assets. Sometimes neither the framework nor its standards cover enough, so the IASB will the issue Interpretations. For example, IFRIC 20 guides how to account for stripping costs in the production phase of a surface mine.

2.2 KEY ELEMENTS OF THE FRAMEWORK

The IASB framework aspires to meet the information needs of financial report users, with special reference to their decision making needs. It addresses only general purpose financial reports (not management accounts, prospectuses or bankruptcy accounts etc). It has in mind existing and potential investors, lenders and other creditors as primary users (IASB 2010 OB2, OB5, IASB ED. 2015 1.2, 1.5). It makes only one assumption but that is extremely important; and that is that reports are written on the assumption that the firm is a going concern (IASB 2010 4.1, IASB ED. 2015 3.10). This means valuations of assets and liabilities are NOT at break up and forced sale value, but on the assumption they will be held and used by the firm unless they are classed as inventory.

To be useful to users, reports must have two qualities which are:

- i) faithful representation of the underlying economic events and transactions (IASB 2010 QC 16/17, IASB ED 2015 2.14/15) and also
- ii) relevance to the user's decisions (IASB ED. 2015 2.6-2.10 p. 12)

Not as essential per the framework, but still desirable characteristics of accounting information are (IASB 2015 ED 2.22 p. 30)

- a) comparability,
- b) verifiability,
- c) understandability and
- d) timeliness.

There are five accounting elements identified in the framework: assets, liabilities, equity, income and expenses. Before any example of these elements can be included in the financial reports, IASB ED 2015 specifies three recognition criteria that must first be met:

- information a) relevant about the the liability asset orand about any income, expenses changes in equity; or
- b) a faithful of liability representation the the asset or and of any income, expenses changes in equity; and or
- c) information that results in benefits exceeding the cost of providing that information.

If these three criteria cannot be met, the item failing the test cannot be put in the accounts.

The Framework does not address valuation or measurement and does not define capital or capital maintenance. It is not a complete and comprehensive framework therefore. Revisions of the framework move slowly towards making the framework comprehensive for traditional financial accounting but slowly and now new frameworks like integrated accounting have appeared that may well be complete paradigm shifts away from traditional accounting, as will be elaborated in Chapter 8.

The framework in its 2015 revision defines what a reporting entity is (IASB 2015ED 3.11–3.18 pp. 36/7) thus:

- "3.11 A reporting entity is an entity that chooses, or is required, to prepare general purpose financial statements.
- 3.12 A reporting entity is not necessarily a legal entity. It can comprise a portion of an entity or two or more entities."
- 3.12 means to imply the boundary of a reporting entity is a matter of direct or indirect control rather than any other factor. In recent years it has become quite common to talk of business ecosystems, especially in the context of entrepreneurship and innovation. These are places where firms, public sector organisations and university centres meet and collaborate to enhance each other's rate of producing successful new products and services. The ecosystem has no definite boundary. Silicon Valley is such a system, almost always cited when business ecosystems are discussed. The IASB definition of an entity would exclude ecosystems with their fuzzy and porous boundaries. We will see in Chapter 8 that the Global Reporting Initiative tackles the entity problem by putting it back on the entity doing the reporting to state clearly what it considers to be its boundaries across a range of dimensions like headcount, physical facilities, land occupied and others. GAAP took it for granted the entity was first the firm, then the group and the implicit test of whether there was one entity or not was is there a single board or group of people controlling the activities if yes, the activities are done by one common entity. If not, by several. It was a matter of control.

The issue of what is a reporting entity is one of the questions that have to be answered in order to assure adequate accountability, a notion we will explore in Chapter 6.

2.3 THE PURPOSE OF ACCOUNTS

The revised framework draft Chapter 3, section 3.4 repeats the previous Framework's statement about report objectives as follows:

"The objective of financial statements is to provide information about an entity's assets, liabilities, equity, income and expenses that is useful to users of financial statements in assessing the prospects for future net cash flows to the entity and in assessing management's stewardship of the entity's resources."

Financial reporting *used* to be seen as fulfilling a primary objective of accountability. The agents/managers account to the principals/shareholders through annual accounts of what they have done with the assets entrusted to them. Before the modern age when feudal lords were the principals, their managers, collectively called stewards, were charged with accounting to their lords regarding how they had preserved his estate during the year. This



Chalmers University of Technology conducts research and education in engineering and natural sciences, architecture, technology-related mathematical sciences and nautical sciences. Behind all that Chalmers accomplishes, the aim persists for contributing to a sustainable future – both nationally and globally.



is the stewardship purpose of accounts, and it is still in GAAP, the Framework and in the new frameworks that have arisen in the last decade. However mainstream accounting has not seen stewardship as the primary purpose of accounting since the seventies. Instead it sees the primary purpose of accounting as producing information useful to decision makers. (IASB ED 2015, 1.2 p. 22)

Now the most useful information that could be given to investors is an exact prediction of future net profits for the next few years, so that these net earnings could be discounted to the present value that represents the "real' value of the firm and that value could be compared with the actual value currently given by the stock market – for publicly listed firms only, of course. Since perfect prediction either as to amount or as to timing is impossible even for fortune tellers, investors are permanently denied the information that would be most useful to their financial decisions. They have to make do with second best. That second best means accounts as accurate as possible with valuations as up to date as possible so that there is at least some relation between a firm's book value (what the accounts say) and its market value (what the stock market says). There is no getting round this, though there have been many attempts. Prediction is impossible, so users who rely on accounts for prediction, especially in the short term, will be forever frustrated, whereas users who read accounts to assess the trustworthiness and competence of mangers will be much more satisfied by the contents of an annual corporate report.

The revised 2015 draft Framework does say (in section 1.3 p. 23) that investors and creditors "expectations about future returns depend on their assessment of the amount, timing and uncertainty of the prospects for future net cash flows to the entity and their assessment of management's stewardship of the entity's resources", the reference to stewardship not having been in the 2010 edition of the framework. It is still, however, a secondary objective of reporting, not a co-equal primary one.

Lenders are different from equity investors. Lenders want to know if their existing loans are safe and if the company's management of risk and solvency inspires enough confidence for further lending to make sense. Lenders therefore are more interested in the financial architecture, the liquidity and the solvency of the company now than equity investors may be, so the accounts are more useful to then than to investors. However the Framework is about general purpose financial reports, regular annual accounts for example, but big banks can get past general purpose reports and demand special purpose reports from the firm as a result of the terms of the loan contract and as a result of their financial power over the company. So what a bank really wants to know, it can require the firm to tell it in a special purpose report. Its reliance on the general purpose report with which the Framework is concerned, is accordingly less.

The framework gives pride of place to the balance sheet, stating that it is a performance measure for the whole entity – the extent to which the fair value of the firm has grown over the accounting period – and is a better predictor of future prospects that information only covering the firm's current cash flows. This is the basis justification for the framework's preference for the measurement approach over the information approach to accounting reports. In fact the previous sentence is in itself the measurement approach.

2.4 CHARACTERISTICS OF ACCOUNTING THAT CONFORM TO THE FRAMEWORK

Relevance and faithful representation are the two essential characteristics the Framework requires for items of financial information.

Relevance means "capable of making a difference in the decisions made by users." (IASB ED 2015 2.6 p. 28) In elaboration IASB states as follows:

- 2.6 continued. "Information may be capable of making a difference even if some users choose not to take advantage of it or are already aware of it from other sources.
- 2.7 Financial information is capable of making a difference if it has predictive value, confirmatory value or both.
- 2.8 Financial information has predictive value if it can be used as an input processes employed by users to predict future outcomes. Financial information need not be a prediction or forecast to have predictive value...
- 2.9 Financial information has confirmatory value if it provides feedback about (confirms or changes) previous evaluations."

Relevance to financial decisions implies it is including all the information that is, or might very likely be, relevant to users' decisions. If all users were identical, this would be easy to do. If all users had the same decision horizon, say one financial year, that would be easy. If all users were equity investors or lenders, that would simplify matters. If the IASB or other standard setting bodies researched what decisions users find important and what information they would like, then the decision whether an item was relevant or not would be empirically grounded in fact. We shall see in Chapter 5 there is a long history of studying accounts to see which bits affect stock market prices, "event studies" they are called. If an item affects stock prices, it is said to have value relevance. For most standard setting purposes and most interpretations of the Framework favour value relevance as the best interpretation of the

single word, relevance, for accounting purposes. That cuts out lenders, consumers, suppliers and everyone who is not equity investor and therefore not interested directly in stock market effects of accounting disclosure. So relevance for general purpose financial reports turns out in practice to mean relevance for the one special purpose of equity investing. This is not so general, in the everyday meaning of the word, general.

A second shortcut to interpreting what relevance means in financial reports is the idea of materiality. The Framework says this is entity specific (IASB ED 2015 2.11 p. 28). If an item is small, it is irrelevant to user's decisions – is the idea here. What is the percentage of any line on the final accounts above which an item is material? No general agreement here. 5% of net profits is quite widely used but there is no standard on this matter and firms and their auditors are free to exercise their judgment on where the line is drawn below which an item is immaterial and therefore irrelevant. Risk is a factor. \$100 of cash is immaterial in looking at very large sales ledgers, but if any kind of fraud is suspected for any kind of reason then that suspect \$100 becomes very material indeed, like a tiny bruise on an organic apple that may warn of extended rottenness inside it.

The second essential qualitative characteristic is faithful representation. If you have a dictation app or software program, then faithful representation happens when the screen displays your



words correctly spelled in the correct word order just as you dictated them – including any mistakes. In financial reports it means the events and transactions that actually occurred are captured, described and valued exactly as they took place. It is economic substance rather than legal form that informs what faithful means here. A machine may be owned by someone else but if you have the right to obtain substantially all of the economic benefits from the use of the machine throughout the period of use and have the right to direct the use of it at the same time (but not sell it of course) then it is more like an owned asset in substance than the hired asset that its legal nature comprises, and accounting standards under the Framework accordingly require to put that machine in the accounts as a right-of-use asset as if you had full ownership of it.

Another example would be consolidating a subsidiary that your firm owns only a minority of the shares in because in reality your firm controls and dictates what the subsidiary does. So why would you only have a minority of shares in such a case? Maybe for tax reasons, but the Framework does not consider tax minimization as a financial decision that accounting has to be useful for, even though it is accountants that generally design such schemes. They could say the annual tax return is itself a special purpose financial report, so outside the scope of the Framework and not relevant to general purpose financial reports. Usefulness to decision makers does not imply all decision makers are equal.

Faithful representation is addressed in the revised 2015 draft Framework in sections 2.14 and 2.15 in clear and concise language worth reproducing faithfully, as follows:

"2.14... A faithful representation provides information about the substance of an economic phenomenon instead of merely providing information about its legal form....

2.15 To be a perfectly faithful representation, a depiction would have three characteristics. It would be complete, neutral and free from error."

Faithful representation requires completeness so enough description of events and transactions must be given in reports for users to make decisions on the basis of being provided with ALL relevant information. Knowing exclusion of relevant information is fraud and leads to jail terms, even if all accounting standards have been complied with; for the Framework does require completeness, and the framework trumps the standards.

Faithful representation also requires freedom from error (obviously) and neutrality. Neutrality means freedom from bias, (IASB ED 2015 2.17 p. 29) but there are varying and conflicting views on what neutrality implies for accounting and even if it's really possible in the first place, as we shall see in later chapters. There is certainly no neutrality between users who are investors and users who are not investors or even lenders, but the Framework, its standards

and accounting reports themselves are produced for investors and only investors vote on them at a company's Annual General Meeting. Only equity investors have the vote.

The non essential but very desirable characteristics of financial reports are verifiability, understandability, comparability and timeliness, (IASB ED 2015 2.22 p. 30) all of which carry their usual day to day meanings. We do need to look at them a little further.

Verifiability (2.29 p. 31) means "that different knowledgeable and independent observers could reach consensus, although not necessarily complete agreement, that a particular depiction is a faithful representation." It implies auditability which entails the provision of adequate evidence for the entries in the accounts, by way of independently supplied vouchers such as invoices. Accounts with insufficient evidence from vouchers should not be given an unqualified audit report.

Understandabilty (s2.33–35) means not that a child of 5 can understand it but that someone with a 'reasonable' knowledge of business and economic affairs can so long as s/he conducts a conscientious study of the information – in other words, accounts can only be understood by someone who understands the basics of business and who reads the accounts carefully – that is, someone with relevant training. It is rather like learning a language and accounting is still sometimes called the language of business. Nobody is born speaking that language.

Understandability turns out to mean capable of being understood by a trained person (only) who works hard at reading the accounts. As IASB ED 2015 s2.35 puts it:

"Financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyze the information diligently. At times, even well informed and diligent users may need to seek the aid of an adviser to understand information about complex economic phenomena." Derivatives could well exemplify the complex economic phenomena IASB have in mind here.

Comparability (2.23) means accounts of any one firm in any one industry in any one country can readily be understood and compared with another firm, in another industry in another country – usually with the aid of ratio analysis, comparing net profits over net tangible assets for example. Accounting standards under the IASB have certainly enabled this quality to be achieved more effectively since the first framework was designed in the seventies.

Timeliness means the accounts have to be produced quickly enough for the information to be fresh enough for investors to make buy/sell/hold decisions before the information becomes stale and out of date. This it is a critical quality to facilitate decision usefulness.

The framework does not provide rules for giving one quality priority over another when they conflict, so there is scope for the exercise of professional judgment, subject to conformity with the applicable rules in the applicable accounting standards. So, if a firm decides it will make timeliness a top priority even at the expense of comparability, verifiability and understandability, it is free to do so. It cannot, however elevate any of the desirable four qualities over either of the essential two – relevance and faithful representation, so it has to argue that both of these are being given the appropriate priority in the treatment proposed. With the two essential characteristics, it cannot treat one of them as an optional extra. If it decides relevance trumps faithful representation, as it easily could, then it has to be extremely careful that sacrifices of faithful representation do not approach fraudulence.

2.5 ACCOUNTING ELEMENTS

The IASB 2015 draft Framework's definition of each the five accounting elements are concise and clear. In section 4.4 we find:

a) 'Income is increases in assets or decreases in liabilities that result in increases in equity, other than those relating to contributions from holders of equity claims.'



b) 'Expenses are decreases in assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to holders of equity claims.'

Notice these two definitions are the mirror image of each other, which is natural and a bit of a relief.

In section 4.4 of the 2015 draft revised framework, we find the Balance Sheet elements defined thus:

- a) "An asset is a present economic resource controlled by the entity as a result of past events. An economic resources is a right that has the potential to produce economic benefits."
- b) "A liability is a present obligation of the entity to transfer an economic resource as a result of past events."
- c) "Equity is the residual interest in the assets of after deducting all its liabilities."

4.4(c) on equity is clear but (a) and (b) are not; nor are they mirror images of each other, so we must look further into them.

In (a), we can ignore the phrase "as a result of past events" as redundant. Everything that a firm has now is a result of past events. There is no such thing as an asset resulting from present or future events, although in the future there may be; but the accounts are done as at a specific date at the end of the specific period. Liabilities are more problematic. "Arising from past events" is again redundant and for the same reason as for assets just discussed. The real problem here is that the word "obligation" has no helpful adjective preceding it, such as the word "legal". That enables an obligation to include a moral, religious, family or self imposed obligation to be included. Then the word "settlement" would usually mean paying off a debt in full, but it could sometimes mean paying it off in part or even not paying it at all through exercising litigation, discussion or pressure on the aspiring creditor. "Settlement" here therefore could include any kind of closure at all, so long as it is final. "Economic resources" at first sight looks straightforward and is meant to include any form of cash or security. That logically excludes pieces of paper, documents however formal that do not have any value but are simply records that the liability has been settled. If the entity expects that this is how the attempt by the creditor will end, whether through litigation or by other means, then the liability itself can be excluded from the accounts under this definition. This is not in accord with an everyday idea of liability, obligation, debt and so forth. It enables large powerful entities to disclose smaller liabilities than their smaller less powerful competitors, just by stretching the definition and using the loopholes just discussed. Unethical entities might just do that. This could be fixed if the word "legal" were placed before the word "obligation" and if a new section had been added to deal with provisions and reserves that can be classified in as liabilities under traditional GAAP but which do not depend on an obligation. The discussion paper accompanying the draft Framework discusses the desirability of including the word 'legal' but decides against it in favour of the notion of an obligation being one which the entity can only avoid with difficulty. At section 4.31(a) the entity has an obligation if it "has no practical ability to avoid the transfer" and this phrase is elaborated in section 4.32 thus:

"An entity has no practical ability to avoid a transfer if, for example, the transfer is legally enforceable, or any action necessary to avoid the transfer would cause significant business disruption or would have economic consequences significantly more adverse than the transfer itself. It is not sufficient that the management of the entity intends to make the transfer or that the transfer is probable."

Fortunately, common sense prevails in business most of the time and prevents abuse of slack definitions from occurring more often. Whether we can expect the economic benefits that flow from the exercise of common sense to persist into the far future is another matter.

Before an element can be admitted onto the accounts it must pass the Framework's two recognition criteria noted in its section 4.38

- a) it is probable that any future economic benefit associated with the item will flow to or from the entity; and
- b) the item has a cost or value that can be measured with reliability.

Probability is elaborated not in the Framework but an accounting standard. IAS 37, says an event is probable if it is "more likely than not to occur", i.e. more than 50/50 so it is the civil not the criminal standard of proof that guides the probability threshold for recognition. Reliability is applied to either the cost or to the value, and estimates are allowed. Here there is no boundary even in the standards, so what often happens is that a measurement is taken to be reliable if it is a historical cost or a market value or an estimate provided or verified by an independent professional valuer. There is danger in the last mentioned as we will explore in Chapter 4.

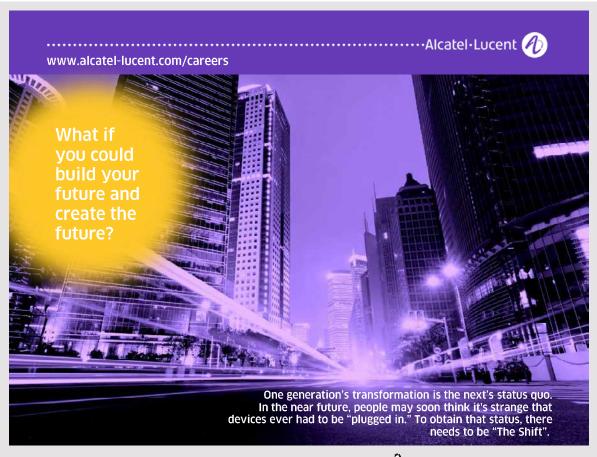
The 2015 draft revised Framework proposes qualitative characteristics as new recognition criteria. Three recognition criteria are noted in its section 5.9

about a) relevant information the asset the liability or and about any income, expenses changes in equity; or

- b) a faithful representation the liability of asset the of income, changes any expenses or in equity; and
- c) information that results in benefits exceeding the cost of providing that information."

2.6 FRAMEWORKS AND LEGITIMACY

A conceptual framework potentially enables accounting standards and accounting reports to be more consistent and comparable, more reliable as over time they are prepared in a similar manner and more meaningful because they would be produced in alignment with widely accepted and generally understood underlying principles. Moreover, a framework for Standards is like a Constitution for a country's laws – it gives authority for assessing the legitimacy of the rules and their application. The difference is that nobody doubts the role of a constitution as a source of legitimacy but even the IASB has not made the explicit claim that its particular Framework is to be seen as the basis of accounting legitimacy, only as a framework for good accounting practice. As we shall see in the next chapter accounting standards are not so shy about claiming to rule on what is legitimate.



Criticisms of the conceptual framework include the fuzziness and contestability of some of its key concepts and definitions, that it is too descriptive and insufficiently prescriptive (i.e. that it is not enough like a real constitution), it rates the problematic purpose of usefulness above the clearer and more traditional stewardship, it is silent on measurement and valuation issues and it is far too like the GAAP that preceded it so can be seen as an induced rationalization of common practice rather than an a priori principled base for designing specific accounting rules and standards (Horngren 1981, Nussbaumer 1992, Dean and Clarke 2003). Defenders of the Framework might reply that the primacy of usefulness over stewardship is a clear break from GAAP and that many standards introduced under the framework reflect this primacy (Miller 1990, Peasnell et al 2009).

One final point: the international harmonization of accounting would not have moved as far forward as it has done if there were not a Framework within which accounting issues could be discussed internationally (Nobes and Parker 2004, Perry and Nolke 2006). The authority of the IASB and its standards rests partially on its Conceptual Framework, imperfect, incomplete and pot-holed as it may be. It is a case of "half a loaf is better than no bread" as the old proverb puts it.

Test questions (suggested answers in the appendix)

- 1. What is faithful representation?
- 2. How is relevance not completely compatible with reliability?
- 3. Why do American regulators consider prudence is trumped by neutrality?
- 4. What are the advantages of rule based standards over principles based standards?
- 5. What are the accounting rules of recognition?
- 6. What is the significance of the going concern basis for accounting?
- 7. What is affected by the principle of substance over form in accounting?
- 8. What is the traditional concept of capital?

3 ACCOUNTING STANDARDS

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to understand how regulation differs from prescription and legislation,
- b) to explain the case for and against rule based as opposed to principles based standards,
- c) to evaluate the case for recognizing any particular book entry as a liability,
- d) to appreciate the effect of the conceptual framework on standards that deal with intangible assets

3.1 INTRODUCTION TO REGULATION

Regulation differs from legislation and from prescription. Legislation is enforced by courts and police and is validated by being passed by a country's sovereign body like congress, parliament or the national assembly. Regulation is enforced by a professional body or by a private agency or a government funded agency but does not have the full force of law. Usually conforming to regulation is a condition of retaining a licence to practice in a particular field such as accountancy. Prescription is a recommendation; not an instruction but regulations have the force of private instructions.

Regulation is not a set of direct instructions or targets in most cases. Usually it sets boundaries around what is permitted. In that respect it is like inventory control which sets limits and boundaries but not targets (maximum inventory, minimum inventory, order level and reorder quantity).

Regulation is like the rule of law in that it must be internalized and/or properly policed and enforced in order to be effective

The market theory of regulation holds that managers not working successfully to maximize stockholders wealth will get fired when a bidder takes over the firm as is inevitable in efficient markets. The market for lemons theory (Akerlof 1970) goes further and states that the market will think the firm is a lemon if fails to give the level of information the market expects, so no regulations are needed because the takeover is threat enough. In other words the market would express its dissatisfaction with the inadequate information provided by selling the firms' shares till the price falls so low that the firm gets taken over. Okcabol and Tinker (1993) consider the arguments of those who consider regulation to be unnecessary

and to be an interference with the smooth functioning of the market, demonstrating that real world markets, as opposed to those imagined in theories, are prone to systematic breakdown, failure and bypassing of the public interest. Accordingly regulation is not just socially desirable but also economically.

Faithful representation means the correspondence between a measure or description of events or objects and the events or objects themselves. The definition assumes that the task of accounting is to faithfully represent, i.e. mirror economic transactions and events. The concept of faithful representation implies the assumption of 'realism'. This implies that there is a reality that accountants can observe objectively/neutrally and faithfully describe – the realist view.

3.2 INTRODUCTION TO CONSTRUCTIONISM

Accounting cannot mirror transactions and events if there is not an objective social reality that is unaffected by our accounts of it. Those who believe in the alternative world view (materialist or social constructionist) argue that the concept of representational faithfulness



which has almost the same meaning with faithful representation in the IASB's conceptual framework is based on a flawed view of reality (Hines 1991).

The key point here is that financial reality, or financial 'facts' (such as profit, liquidity, asset levels) do not exist independently of our measures of them (Hines 1988). Accounting measures are not like natural phenomena (the sun, the moon etc.) that are there to be simply discovered. The problem is the numbers we report are not representations of objects. Accounting measures only arise via application of various rules and choices.

Descriptions of abstractions such as net profit or financial position do not exist independently of our measures of them. In this way, accountants can be said to construct financial reality (Hines 1988).

When an accounting practice has been consistently applied in accordance with GAAP or as guided by the conceptual framework, it will become a standard once it is backed by a regular body recognized by the laws of the country concerned, such as the AICPA, ICAEW, ICAANZ. That is for national accounting standards. For international accounting standards, the authoritative body is not the UN but the IASB which in turn is recognized by the International Federation of Accountants, IFAC. International accounting standards gain extra legitimacy as standards when a country decides to adopt an international standard as if it were a national one. This has been done in many countries including Australia. Standards issued by the IASB before 2000 were IAS, international accounting standards. Those issued after 2000 are termed IFRS, international financial reporting standards.

3.3 STANDARDS BASED ON RULES OR ON PRINCIPLES

Rules based standards cover every foreseen contingency relevant to the subject of the standard and prescribe the correct treatment for each contingency. Principles based standards are based on the conceptual framework and prescribe a general approach but may not cover every foreseeable contingency. A rules based standard on depreciation would prescribe the method and the rate to be applied in the accounts in a range of circumstances, but a principles based standard might instead prescribe that depreciation in any given case must reflect the reduction in the value of the asset due to wear and tear and obsolescence during the period.

Advantages of rules based standards include:

- a) Guidance when there is no clear principle
- b) Clarity when principles conflict
- c) Reduced opportunities for manipulation of ambiguities because these standards reduce ambiguities
- d) Increased verifiability for the auditing process
- e) Reduced exposure to litigation;

All of the above assume the rules based are properly and strictly applied.

Disadvantages include

- Covering every foreseeable contingency makes for complexity and possibilities of misunderstanding.
- ii) Circumventing even the widest scope standard may still be possible when a CFO designs circumstances deliberately to be outside the standard we will discuss one or two such cases in Chapter 7.
- iii) Detailed standards get out of date quicker than principle based ones.

The advantages of principle based standards are the reverse of the above points but there are a couple of extra advantages to principle based standards:-

A reporting entity is an entity that chooses, or is required, to prepare general purpose financial statements. (IASB ED 2015 Sec.3.11)

A reporting entity is not necessarily a legal entity. can of comprise portion an entity, or two or more entities. (IASB E D Sec. 3.12) 2015

- a) Faithful representation is more nearly achieved with principle based standards as they can apply to unforeseen situations.
- b) Principle based standards allow the application of professional judgment so enhance both the skill base and the status of the accounting profession.
 It is much harder to justify manipulation and evasion with principle based standards since non compliance is a question of substance not form with these standards.

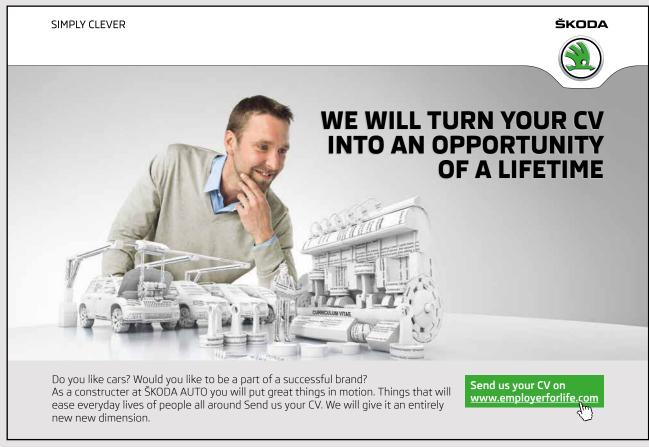
(For further reading on the issue of whether standards should be rule based or principles based, see Demski 1973, Maines et al 2003, Shortridge and Myring 2004, Nobes 2005, Jamal and Tan 2010).

3.4 INTANGIBLES AND GOODWILL

Issues associated with accounting for intangibles, goodwill, and other contentious items are handled with greater precision and clarity if discussed in the light of the applicable standards and the underlying principles that affect them.

Let's begin with some that affect the value of the firm but which fail the framework's recognition test.

Intangible assets are identified by IAS 38 as identifiable non-monetary assets without physical substance. IAS 38 prescribes when that if they are to be recognized in the accounts, it must be probable that future economic benefits derived from the intangibles will flow to the entity AND that these benefits can be *reliably* measured. The standard concludes that brands, customer lists and other intangibles without separable legal titles and ownership fail



its recognition test. Any intangible that is internally generated, such as research, training, advertising or product pilot tests, is likely to fail, which means employee know how and unique skills cannot be financially recognized. A consequence of this is that the book value of an entity diverges even further from its market value than before the advent of the internet and hi tech firms whose value is almost entirely about such intangibles (Lev 2008, Wyatt 2008). This is an example of a standard flying in the face of one of the essential principles of the Framework, faithful representation. The other essential principle, measurement reliability takes the higher priority in this case. Under one of the new frameworks that we discuss in Chapter 8, integrated reporting, that difficulty is resolved in a new way by new rules about reliability and measurement under its framework.

IAS 38 specifically prohibits the recognition of brands, mastheads, publishing titles, customer lists and expenditure on research, training, advertising and start-up activities. However, once an intangible is recognized, future revaluations are restricted to those intangibles for which there is still an active market.

One intangible that is always recognized is goodwill arising on consolidation (IFRS 10). If the acquired company's assets and liabilities are remeasured at fair value, then the measurement is the price paid to acquire the company minus the fair value of the net assets acquired. In this case goodwill, despite being an intangible and despite not being traceable to any one other item in the accounts, is recognized. The act of payment is certainly a reliable historical cost of acquisition. The fair value of the net assets acquired is accepted as sufficiently reliable for pass the recognition test. Never mind that the historical cost of acquisition represents only one thing - how much the buyer was prepared to pay to get control. Indeed in the consolidation accounts and working papers, it is usually named cost of control. That cost is almost always above the market value of the acquired company prior to takeover. The asset, goodwill, could be argued to fail one of the asset tests, the test of arising from past events. On Monday, XY Inc is worth 3m, but on Tuesday it is acquired for 4m - and the usual rationalization is that the buyer reckons the present value of the earnings s/he can get out of XY is over 4m. But this rationalization does not arise from a past event. It arises from a view of the future. The only past events are the company's track record whose fair market value is 3m and the desire of the bidder to control XY. This combination is rather a weak claim to be a pair of relevant past events. Goodwill could have been called "excess over fair value arising on acquisition" and that would have been fair comment. The word "goodwill" cannot be plausibly argued to be a faithful representation of any kind of intangible assets, far less a measurement of them. After all, not one cent has been earned for the new parent company at the time of acquisition because control has only just passed. So, goodwill is a very important accounting item that violates some very key framework principles. It is uncontroversial to say that goodwill should be written off, also known as "impaired", if the acquisition price is excessive; but the few firms that do that are usually ratifying the message they already received from the displeased shareholders who sold their shares and brought the market value of the expanded firm down. Accounting is supposed to be useful to decision makers. With accounting impairment it is the decision makers who are useful to accounting.

Turning to slightly less vexatious cases, intangibles that do get recognized are identifiable and separable ones, such as individual patents, trademarks, royalty rights and copyrights. They are usually valued at their historical cost of acquisition or, if internally generated, costs incurred up to the registration date. That is nice and easy, but we shall see in Chapter 4 that discovering their "fair value" is so difficult that reliable measurement may be impossible.

3.5 THE REPORTING ENTITY

The principles based standard for consolidations (IFRS 10) requires that entities must be consolidated whenever failure to do so would be misleading. The substance of power and control displaces for recognition purposes the ownership of a majority of the subsidiaries' shares, as the old rule based standard allowed – and thereby allowed Enron's special purpose entities to be known only to insiders.

The IASB Framework adopts the entity view of financial reporting whereby the reports reflect the perspective of the whole firm rather only that of its equity shareholders alone, top of the heap as they are. IAS 1 paragraph 9 states that the primary users need information about the firm's future cash flows; but this is really stating what the users *ought* to want as rational, long horizon investors rather than what they *do* want which the IASB does not systematically and regularly ascertain. (Young 2006)

3.6 LIABILITIES

Liabilities give rise to several accounting problems. We will leave the measurement problems to Chapter 4. Here we will deal with the recognition problems. Liabilities include loans of any kind, including securitized loans issued as bonds, debentures and loan stock. Loans are easily recognized because they begin with the event of money changing hands under a legally enforceable contract. Then we have bank overdrafts and they are a matter of looking at the bank statement at the close of business on the last day of the financial year. It is a less than faithful representation to value an overdraft at the full amount of the authorized facility instead of the amount actually overdrawn at the year end. Then we have payables, also known as trade creditors, and they too are traceable to valid legal contracts.

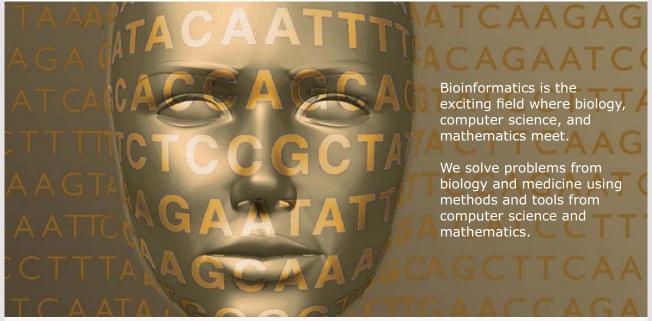
However, then the fog descends.

Accrued expenses are liabilities; and once the relevant item is invoiced we know the correct amount to accrue, while before that it is just an estimate. An estimate is ok by the conceptual framework and the only risk here is if the creditor is an internal member of the group, because then invoices can be issued that bear only slight relation to the value of what was actually provided. This can happen with groups who want to move profits from high tax countries to low tax ones, and there is nothing in the framework or the standards to outlaw this. The invoices and cash movements are faithfully represented in the books. It is the transactions themselves that are suspect.

Provisions, such as for bad debts or depreciation, may also be argued to be liabilities; but they are shown as subtractions from their source assets. Furthermore, depreciation could also be seen as the discharge of a prepaid expense, albeit that the expense concerned is the capital expenditure on the machine or asset that is being depreciated. Historical rates of default may provide an empirical base for provisions for bad debts and there will be a company policy on depreciation methods and rates, so we have the reliability and measurement tests passed. However, there is an irreducible element of subjective judgment in estimating the most suitable rates. The framework requires liabilities to proceed from an obligation (IASB



Develop the tools we need for Life Science Masters Degree in Bioinformatics



Read more about this and our other international masters degree programmes at www.uu.se/master

ED 2015 4.24 p. 43). There is no obligation to provide for anything at all. There is an obligation to value assets fairly, and it is that obligation that founds provisions. Not an obligation to eventually pay off a debt owed by the entity.

For products, inventory is identifiable, tangible, and clearly created or acquired, solely to obtain future economic benefits (from sales to come). For service firms, inventory comprises items that will be written off and disposed of within a year even though they may not be part of the service provided to customers. There is also work in progress which is service provided to clients but not yet invoiced, possibly not yet finished either. They have to be valued at cost, but the recognition issue here is that the job comprising work in progress must be real jobs with evidenced billable time costs for real customers, and these may be difficult to produce at the time of preparing the final accounts. The act of putting them in closing inventory means gross profit is accordingly increased so this can be a place where earnings get manipulated.

3.7 WHOSE FAIR VALUE?

Fair value accounting is the name for the way balance sheet items are valued under prevailing standards both internationally and in the USA. Assets and liabilities are valued, as we will elaborate in Chapter 4, not at cost but their market value. Market value means their sales value in the current market conditions between willing buyers and sellers under no pressure from any third party to have to buy or sell. A regular normal sales value is a value at level one. If there is no ready market for an item, then we have to move down to level two where the value is derived from the most similar item recently traded on the relevant market, with subjective adjustments being made for the difference between the item actually traded earlier and our own item we are trying to value, such adjustments usually being downwards. If there is no market at all and if we are holding the item in order to use it rather than trade it, then we are down at fair value level three, At this level, items are valued at their net present value, which means future net cash flows to and from the item discounting by our current cost of capital. Level three valuations are the most subjective in fair value accounting; level one the most objective.

In the GFC, (global financial crisis), markets were failing and fair value accounting assumes markets work. IASB and the US's FASB issued common guidance (FASB 2011) that when markets are inactive, firms could use net present value instead to value balance sheet items. This is different from level 3 fair value in that the guidance note did not say the firm had to value future cash flows as a prospective purchaser would but could instead use its own assumptions about future cash flows. The firm had to justify its assumptions and had to use a risk adjusted discount rate to obtain the present value, under the guidance. IASB revised

IAS 39 to allow the reclassification of some derivatives in the rare instance of a market failure, including the ability to transfer or reclassify receivable and loans from fair value to cost, even if fair value was below cost, as long as future cash flows from the items were expected to be greater than cost. In other words an unrealized loss disclosable in the comprehensive income statement becomes an unrealized gain instead. So much for faithful representation.

IFRS 9 effective from 1.1.2013 requires all financial assets, effectively all derivatives, to be recorded on acquisition at fair value and to stay recorded at fair value (as the market changes) unless the firm has the clear intention of holding the asset to collect interest and repay the principal in which case amortized cost is to be used instead.

It must still write down the asset if its fair value falls below its book value, but now it must also include expected credit losses in the calculation of expected cash flows when amortizing a financial asset's cost. Before IFRS9 it could wait till the asset became impaired as the loss became certain to occur.

Derivatives are contracts whose value depends on some external factor such an interest rate, exchange rate or stock price. With a call option, the holder has the right to buy a share at a predetermined price so offering a hedge against the market going too high for the buyer. The higher the market goes, the higher the market value of the call option. Options and other derivatives do not necessarily have to be settled with delivery of the associated share or other security but are often settled in cash instead – for the value of the option immediately before its expiry.

3.8 TABLE OF INTERNATIONAL ACCOUNTING STANDARDS CURRENT AT THE START OF 2016

IFRS	IAS	IFRIC	SIC
<u>Preface</u>	IAS 1 Presentation of Financial Statements	IFRIC 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities	SIC 7 Introduction of the Euro
<u>Framework</u>	IAS 2 Inventories	IFRIC 2 Members' Shares in Co-operative Entities and Similar Instruments	SIC 10 Government Assistance – No Specific Relation to Operating Activities

IFRS	IAS	IFRIC	SIC
IFRS 1 First-time Adoption of International Financial Reporting Standards	IAS 7 Statement of Cash Flows		
IFRS 2 Share-based Payment	IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors	IFRIC 5 Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds	SIC 25 Income Taxes - Changes in the Tax Status of an Entity or its Shareholders
IFRS 3 Business Combinations	IAS 10 Events after the Reporting Period	IFRIC 6 Liabilities arising from Participating in a Specific Market – Waste Electrical and Electronic Equipment	



48

IFRS	IAS	IFRIC	SIC
IFRS 4 Insurance Contracts	IAS 12 Income Taxes	IFRIC 7 Applying the Restatement Approach under IAS 29	SIC 29 Service Concession Arrangements: Disclosures
IFRS 5 Non- current Assets Held for Sale and Discontinued Operations	IAS 16 Property, Plant and Equipment	IFRIC 10 Interim Financial Reporting and Impairment	SIC 32 Intangible Assets – Web Site Costs
IFRS 6 Exploration for and Evaluation of Mineral Resources		IFRIC 12 Service Concession Arrangements	
IFRS 7 Financial Instruments: Disclosures	IAS 19 Employee Benefits	IFRIC 14 IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction	
IFRS 8 Operating Segments	IAS 20 Accounting for Government Grants and Disclosure of Government Assistance	IFRIC 16 Hedges of a Net Investment in a Foreign Operation	
IFRS 9 Financial Instruments	IAS 21 The Effects of Changes in Foreign Exchange Rates	IFRIC 17 Distributions of Non-cash Assets to Owners	
IFRS 10 Consolidated Financial Statements	IAS 23 Borrowing Costs	IFRIC 19 Extinguishing Financial Liabilities with Equity Instruments	
IFRS 11 Joint Arrangements	IAS 24 Related Party Disclosures	IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine	

IFRS	IAS	IFRIC	SIC
IFRS 12 Disclosure of Interests in Other Entities	IAS 26 Accounting and Reporting by Retirement Benefit Plans	IFRIC 21 Levies	
IFRS 13 Fair Value Measurement	IAS 27 Separate Financial Statements	IFRIC 22 Foreign Currency Transactions and Advance Consideration.	
IFRS 14 Regulatory Deferral Accounts	IAS 28 Investments in Associates and Joint Ventures	IFRIC 23 Uncertainty over Income Tax Treatments	
IFRS 15 Revenue from Contracts with Customers	IAS 29 Financial Reporting in Hyperinflationary Economies		
IFRS 16 Leases	IAS 32 Financial Instruments: Presentation		
IFRS 17 Insurance Contracts	IAS 33 Earnings per Share		
	IAS 34 Interim Financial Reporting		
	IAS 36 Impairment of Assets		
	IAS 37 Provisions, Contingent Liabilities and Contingent Assets		
	IAS 38 Intangible Assets		
	IAS 40 Investment Property		
	IAS 41 Agriculture		

Test on Chapter 3

(Suggested answers in the appendix)

- 1. What is the relationship between the conceptual framework and accounting standards?
- 2. What is faithful representation?
- 3. What do international accounting standards prescribe for the recording of liabilities?
- 4. What do accounting standards require for consolidated accounts when reviewing subsidiaries, associates and entities not formally owned by the group parent company?
- 5. Why do some intangible assets get recognized and disclosed in accounting reports but most do not?
- 6. How does goodwill arising on consolidation get valued in the financial reports?
- 7. In an economy where corruption and fraud are well above international average rates, would principle based standards or rules based standards be better for honest investors to use?

In a culture where there is widespread corruption and dishonesty, why would an investor prefer rules based standards to principle based standards?



4 MEASUREMENT AND VALUATION

LEARNING OUTCOMES

After completing this chapter, the reader will be able:

- a) to explain the 5 measurement scales and the 4 accounting valuation methods ,
- b) to evaluate which scale is appropriate to measure something,
- c) to understand the differences between the valuation methods accountants use,
- d) to appreciate the subjectivity involved in all evaluations and estimates

4.1 INTRODUCTION

Accounting is not only about financial evaluation. It is also about recognition, accountability and evidence. Valuation is seen by many nonetheless to be the central point of accounting. Accordingly, we need to understand in some depth the theory underlying measurement and valuation, and this is what we shall aim to achieve in this chapter.

Valuation presupposes measurement. Measurement involves counting and calibrating items, whatever we do or do not do with them. Measurement comes in 5 scales. All numbers, anywhere anytime, fit into one of these 5 scales; and no single number in any single context can occupy more than one scale at a time.

We need to understand the scales very well and be able to recognize which scale applies whenever we see a new number, as part of our professional accounting expertise which in turn assumes a requisite numeracy. As accountants we need to be very comfortable with numbers and to be able to appraise any numerical claims rigorously, critically and accurately.

The 5 scales are in ascending order of complexity, nuance and sophistication: binary, nominal, ordinal, interval and ratio.

4.2 MEASUREMENT SCALES

The binary scale is the foundation of all electronics and machine level programming, but is also used in modeling real world situations in accounting and financial research. There are only two members of the binary scale, 0 and 1.0 can represent an off switch state,

any even number in base 10 everyday numbering (at the end of a long binary string such as 0101110), the absence of a quality in research modeling – for example, not having a public listing might mean the variable P for public listing is set at 0. 1 represents the polar opposite of 0). In the cases just mentioned that means an on switch state, an odd in base 10 number ending such as 0100001, and the presence of the quality in a dummy research variable so that a listed company would have P=1, for example.

The nominal scale is ordinary regular counting and can include fractions or decimals. It does not measure how big, how heavy, how late etc but only measures how many. 5 apples, 6 dollars, 7.5 apples, half a loaf of bread, 35 shares, 89 dollars in cash (but NOT as a price of something else), 16.34 enrolled students on average, a standard deviation of 3.97 students from that average, receipts of 4532 yuan, expenditure of 5977 Euros, 15 votes in favour of the motion, 3 French hens and a partridge in a pear tree. Nominal scales simply count the items in question. Anything that can be counted can have descriptive statistics to summaries the totals, mean, median, mode, standard deviation, skew and kurtosis; all of which statistics are still nominal. Any statistic that is in the same units as the items it describes is in the same scale as the items themselves. Statistics can convert scales as we shall see in a minute but descriptive (as opposed to inferential statistics) rarely do so.

With nominal scales, there is incommensurability and non comparability across items. You cannot, in the nominal scale, add 5 apples to 6 oranges unless you change both their descriptions first, for example, to fruits then you would have of course 11 items of fruit. When you add nominal items together by taking your description from the particular to the abstract or general, you sacrifice an element of faithful representation. Of course apples and oranges are both fruits, but many other things such as mangoes, salads or figs are also fruit and going up to the fruit level means we no longer know that we only meant apples and oranges. We could now mean any 11 different fruits from a possible 50 or more. This shifting up of the descriptive level from specific to abstract therefore creates adverse selection and information asymmetry, for you know your numbers began as apples and oranges; but the listeners/viewers/readers do not know that until you tell them.

This asymmetry is inevitable in accounting reports, in order to keep the accounts readable as summaries of the period's relevant transactions and states of affairs; else accounting reports would be facsimiles of the ledgers themselves, item by item. However, the need to summarize means information is lost on the way up to the abstraction that the period end statements represent; and one of the main jobs of accounting standards and of accounting judgment itself, is to ensure such abstractions minimize the loss of faithful representation which requires a depiction to be complete, neutral and free from error. The adverse selection involved tempts unscrupulous management to manipulate the numbers within the legally enforceable rules to show the picture of the firm they want to show rather than a neutral, fair

and truthful one. Standards greatly restrict what can be done by such types of management but they cannot do a perfect job, because they cannot anticipate every possible economic circumstance and the existence of a rule cannot by itself guarantee there will be no rule breakers. A reader of accounts must therefore never put aside their critical faculties when reading accounts. Business is not religion, so there is nothing wrong with a skeptical approach to accounts and there are great dangers in being uncritically trusting.

A big step up from the nominal scale is the ordinal scale. The nominal scale uses cardinal numbers: 1, 2, 3 etc while the ordinal scales uses ordinal numbers 1st, 2nd, 3rd and numbers derived from such ordinals. Ordinal scales include all rankings, ratings, league tables, sports results (of which more in a moment), and lists where being higher in the list is considered better than being lower. Some ordinal scale items, especially ratings as by credit agencies or good university guides for potential students, do not look like ordinal scale numbers at first sight. A credit rating of AAA as opposed to one of C+ for example looks like a more precise measure of credit worthiness than applies to 1st, 2nd 3rd etc. But it is not. The reason it is not is that we do not know the size of the gap between AAA and C+ or between AAA and AA. When we do not know the gap between any two points in a scale and we are not just counting items, then we are in the ordinal scale. In fact we could almost say as a rule of thumb, the ordinal scale is our default assumption when we come across a new number

Trust and responsibility

NNE and Pharmaplan have joined forces to create NNE Pharmaplan, the world's leading engineering and consultancy company focused entirely on the pharma and biotech industries.

Inés Aréizaga Esteva (Spain), 25 years old Education: Chemical Engineer

– You have to be proactive and open-minded as a newcomer and make it clear to your colleagues what you are able to cope. The pharmaceutical field is new to me. But busy as they are, most of my colleagues find the time to teach me, and they also trust me. Even though it was a bit hard at first, I can feel over time that I am beginning to be taken seriously and that my contribution is appreciated.



or set of numbers but we do not know if the interval between each point on the scale is BOTH known AND uniform – and we doing a bit more than just counting items. In that sense the ordinal scale is the default assumption scale. If the scale is actually higher than ordinal, we will not have biased the analysis by wrongly assuming it was ordinal. We just will have used too little power in analyzing the numbers so we will have a lower resolution, fuzzier picture than we otherwise would have. Conversely if, especially with rating scales like credit ratings or Likert scales such as 1 strongly agree and 7 = strongly disagree, we were to assume the scale is higher than ordinal and we use statistical tools for those higher scales we will have biased and wrong results.

Sports scores are a good test of comprehension of measurement scales. Athletics medals, gold, silver, bronze are awarded for 1st 2nd and 3rd place respectively so are easily seen as ordinal scale. Any placement in any race from first to last is equally easily understood as ordinal. Goal difference in football codes 5:4, nil all etc, are however nominal because goals are items which are simply counted and nothing more than that. Same in cricket; with scores such 233 for 6 which is counting runs and wickets respectively, not ranking them. But then we come to tennis with scores such 40:15, 30:15, deuce (40:40). Here the intervals between the numbers are unequal but we are not simply counting wins so tennis scores within any one game are ordinal. 3 sets to 1 however is nominal as we are counting the sets. So tennis has ordinals within the game but nominal within the set and match. Worse still for the outsider is golf which hardly uses numbers at all for its scores but talks about bogies, birdies and eagles. These cannot be nominal because they are not simple counts, but since all of them relate to the number of puts a golfer takes to get the ball in the hole relative to what is said to be par for the course, it looks as if we may be in ordinal territory. However in this case, each nickname relates to a precise number of puts above or below par for that particular hole on that particular course, so within any one hole on any one course the interval between scores is known and equal, so we are at the next higher scales than ordinal, as it turns out. Similarly at the end of the game when we might have a score of say 3 below and our own handicap may be 5, these numbers relate to an already fixed expectation or norm, so are better than ordinal. Golf occupies a superior numerical measurement scale to football, cricket and tennis, therefore, and of course this is purely by coincidence, not by design.

Some sports involve measurements of distance travelled, such as the high jump, long jump or pole vault and others involve weights lifted. In these cases the achievement is measured directly from the distance or weight so the applicable scale is the one that applies to the distance or weight. Their measurements are precise and the intervals between each unit, inches, centimetres, ounces, kilograms is known and uniform. The gap between 1 inch and 2 inches is the same as the gap between 45 inches and 44 or 46. When our measurements display known constant intervals like that, we are in the interval scale. To ensure such abstractions do minimize the loss of faithful representation, they need to complete, neutral

and free from error. So says section 2.15 of IASB's Conceptual Framework. As its name implies, interval scale measures are precise and are in units that cannot vary with what is normal, with who comes first or anything. They are objective, uniform and invariant. All distance measures, weight, mass, temperature, time, duration, price, volume, pressure, noise measures are interval at least, some being higher still as we will see in a minute. Interval measures always have measurement units, which are different in the US which still uses British imperial measures like inches, miles, ounces and pounds from metric measures that even the British use nowadays like metres, grams and litres. Imperial units can be precisely converted to their metric equivalents; and it is a characteristic of true interval scales that such conversions can easily, consistently and precisely be accomplished. With interval scales we are always measuring an item in some unit other than the item itself. We cannot say 5 apples weigh 5 apples. We have to say 5 apples weigh 3 pounds or 0.5 kilos for example. We can say 4 oranges, 2 mangoes or 1.5 bananas also weigh 0.5 kilos too of course so interval scale units give us a way to make nominal scale counts commensurable and comparable without losing any information content. Prices do the same and prices are interval scale.

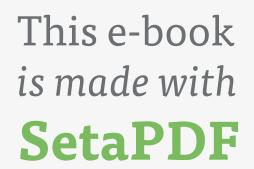
Before we deal with the highest scale, we need to look at the kinds of statistics that apply to the ordinal and the interval scales first.

Ordinal scale numbers are ranks so they have a set of descriptive statistics all about ranks. The chief of these is the median which divides a group of numbers exactly in half such that half the numbers are above the median, half are below. Spread or dispersion for ordinals is measured by the semi-interquartile range which is half the difference between the first and third (upper end) quartile scores ranks. Correlation is measured by Spearman's rho, coefficient of correlation. More generally, most non parametric statistical measures can be applied to ordinal scale numbers, such as the Mann Whitney U Test or the Kruskal Wallis Test. The tests that can be applied to the nominal scale numbers can also be applied to the higher scale numbers such as ordinal but the nominal mean has less informational value for ordinals than the median has as a measure of central tendency. Same goes for the standard deviation relative to the semi-interquartile range.

Interval scales can have the full range of both descriptive and inferential statistics applied to them but they need one extra quality first for most of the inferential statistics to be appropriate and that is their distributions need to be normal. A normal distribution of numbers is one where the spread of measures from lowest to highest can be graphed to look like an upside down U, usually referred to as a bell curve, as an upside down u looks like a old fashioned church bell. Given a normal distribution, we can use T tests, analysis of variance, sophisticated regression testing for patterns in linked variables and all the other parametric statistics. If our interval scale numbers have significant skew however, they are not normally distributed and we will usually (but not always) have to use only

no parametric statistics to analyze them except that Pearson's correlation coefficient can be used instead of Spearman's (ordinal) rho and a few others which aren't very biased by non normality. Non parametric statistics are fuzzier and lower resolution than parametric ones so researchers try and use parametric ones whenever they can, but it is inappropriate, indeed it is a manipulation, to use parametric statistics to analyze numbers whose distribution is significantly deviant from normal or whose scale is ordinal.

There is one statistic that can be used to analyze numbers on any scale and that is Chi Squared. This is the king of all statistics because it can apply to more situations and more scales than any other. It can test for significant differences between situations, significant associations between numbers, and goodness of fit between expectations or models and actual achieved. It is not as powerful and high resolution as other statistics like T tests but is not confined by assumptions about intervals, normality or other restrictions that apply to the more powerful statistical measures. It is like the Swiss Army Knife of statistics and always worth having when any sort of pattern is sought from any set of groups of numbers. This is not a statistics book, so we will not go any further into this topic. What we do need to appreciate is that statistics give pattern to raw numbers, and pattern for numbers is virtually equivalent to what meaning is for words and sentences. That is why all good accounting degree courses involve core units in statistics. Accounting theory does not require







PDF components for **PHP** developers

www.setasign.com

intimate mastery of statistical choices, but accounting research courses certainly do (For a good introduction see Salkind 2011). For accounting theory itself, we just need to know when statistics of any particular kind are appropriate to a situation and when not, and then only within a financial accounting context.

The highest measurement scale is called, misleadingly, the ratio scale. I say misleading because not all ratios like the consumer price index, return on investment, acid test ratio book to market ratio are ratio scale, so we have be careful here. Any interval scale measure is a candidate for the ratio scale, but only gets admitted to the ratio club if its zero is an objectively true zero. Temperature measures in Kelvin are ratio because zero Kelvin is a true physical zero that you cannot go below because at zero Kelvin no motion at the atomic scale occurs at all. Temperatures in Celsius (aka centigrade) or Fahrenheit are interval not ratio because their zeroes are artificially designated – the freezing point of water is an arbitrary choice for zero Celsius, not an objective true zero. If you can have a negative measure, such as minus 35 Fahrenheit temperature in Murmansk for instance, then we are in interval not ratio territory. Dates whether Christian, Islamic, French revolutionary or anything else are all interval because they all date from specific human event. Days of the week are interval because no zero is possible. Clock time is interval because there is a negative possible, any time in the past. However, duration and stop watch time are ratio because they have true zeroes defining when the time begins and negatives cannot exist until we are able physically to reverse time. The fact that when we start the time is arbitrary does not affect the impossibility of negative duration values, for it is inherent in the idea of duration that nothing relevant is there before the start. That is quite different from dates when the periods before the zero date clearly did exist and may be quite relevant for many purposes.

For accountants, the differences between interval scales and ratio scales do not matter much practically, and there are a few statistics that can be applied only to ratio scales and not interval ones, the difference is of greater interest to scientists and engineers than to us, in the present state of accounting at any rate, so we will move on.

4.3 VALUATION

Measurement is objective and can be automated. Valuation is subjective and can only be automated if subjective assumptions of the designer are built into the program. With sentimental and personal value, the subjectivity is there obviously and almost by definition. My granny's photo has immense sentimental value and I would never sell it, for example. Your emerald ring may have a market value of 5,000 dollars, a cost of 3,000 but its personal value to you is far more; and you would only contemplate selling it in the direst of circumstances. Accounting does not deal with this kind of value.

Value in use, Marx called it use value, does enter the world of accounting. Marx (2009) meant by this something quite close to personal value but on the restricted assumption that its personal value was a function of its usefulness (rather than its beauty, its personal origins or associations). Mainstream accounting has the same idea with value in use. This is the present value of expected (statistically expected that is) future benefits from an item discounted back through a discount rate to an equivalent present value. That expected Net Present Value, hereafter NPV for short, is a "usable" measure of the items' value in use. It does not directly or necessarily depend on anyone else's opinion than yours, so is about as highly subjective as accounting gets.

The nearest thing we have in mainstream accounting to an objective value measure is historical cost. Historic cost accounting records all cash receipts and payments exactly as they are made and accrues all expenses and provides for all prepayments exactly as they derive the actual invoices issued just after the period or as stipulated in advance in a pre-existing contract. Historic cost is a statement of fact and is evidenced by documents proving the transactions actually took place, the traditional vouching function of the traditional auditor of the books. The information approach to accounting uses historical cost because it is factual and emphasises stewardship and agency accountability through the income statement to faithfully represent how the managers as agents have husbanded the shareholders as principals' resources during the period. In the information approach, the value of the firm and any unrealized capital gains or losses associated with balance sheet items are secondary to the main task of evaluating managerial efficiency at generating operating surpluses from the firm's main lines of business and of controlling all costs, including their own remuneration, in a way that serves principally the principals (Mautz 1973). The information approach to accounting dominated public sector accounting and is still widely favoured in Europe and Asia over its newer rival approach called the measurement approach. The great advantage of the information approach is reliability. You cannot change the past and an accurate record of the past is as if written on tablets of stone and is indeed rock solid reliable. When accounting is involved in litigation, the evidentiary soundness of historical costs is welcome, but it cannot and does not give any idea at all of the value of the firm as a whole at any one date, as all its figures are historical therefore out of date, especially those on the balance sheet. This does not matter if we are looking for accountability from the accounts, unless the accountability we seek is for growing the value of the firm in which case the information approach will be woefully unsatisfactory and devoid of relevant current information.

When, as is now the dominant paradigm in IASB, FASB and Western accounting generally, we want accounting to help investors make good decisions about their investments in firms and the securities that firms issue, then we will prefer it if firms adopt the measurement approach to accounting. Now we have just covered the 5 scales of measurement but this is not what the measurement approach to accounting is about. Rather, it concerns measuring the

current value of the firm as a going concern and that involves converting the historical cost of items we still own at the end of the period and that we still owe to their current values.

IASB's Framework classifies measurement bases into two (IASB ED 2015 sec. 6.2). One is historical cost and the other is current value. The Framework says current value measures provide monetary information about assets, liabilities, income and expenses using information that is updated to reflect conditions at the measurement date. The Framework also classifies current value into two measurement bases. One is fair value and the other is value in use for assets and fulfilment value for liabilities. The Framework defines fair value is the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date, and value in use and fulfilment value are entity-specific values. So, in the Framework, current value means not only exit value but also value in use.

The current values we use are the exit values of those items and that means sales values in a current liquid market for all our assets and the value of our liabilities insofar as we can estimate the amount needed to discharge them either by paying them off altogether or by selling then off altogether, whichever applies. The fair values that result give investors a much better idea of the current value of the firm than is possible with historical cost, so enables



Employees at FOSS Analytical A/S are living proof of the company value - First - using new inventions to make dedicated solutions for our customers. With sharp minds and cross functional teamwork, we constantly strive to develop new unique products - Would you like to join our team?

FOSS works diligently with innovation and development as basis for its growth. It is reflected in the fact that more than 200 of the 1200 employees in FOSS work with Research & Development in Scandinavia and USA. Engineers at FOSS work in production, development and marketing, within a wide range of different fields, i.e. Chemistry, Electronics, Mechanics, Software, Optics, Microbiology, Chemometrics.

We offer

A challenging job in an international and innovative company that is leading in its field. You will get the opportunity to work with the most advanced technology together with highly skilled colleagues.

Read more about FOSS at www.foss.dk - or go directly to our student site www.foss.dk/sharpminds where you can learn more about your possibilities of working together with us on projects, your thesis etc.

Dedicated Analytical Solutions

FOSS Slangerupgade 69 3400 Hillerød Tel. +45 70103370

www.foss.dk

FOSS

The Family owned FOSS group is the world leader as supplier of dedicated, high-tech analytical solutions which measure and control the quality and production of agricultural, food, pharmaceutical and chemical products. Main activities are initiated from Denmark, Sweden and USA with headquarters domiciled in Hillerød, DK. The products are marketed globally by 23 sales companies and an extensive net of distributors. In line with the corevalue to be 'First', the company intends to expand its market position.



investors to make better decisions about whether to buy, hold or sell the securities (both stocks and bonds) issued by the firm than is possible under the information approach. The reasonable assumption involved here is that current values of assets and liabilities are closer to expected future values (which investors would really like to know if only such fortune telling were possible) than they are to past historical cost. Accordingly, fair values are seen by the accounting standard setting boards as more relevant and useful to investment decision makers than are historic costs. The argument is strongest when balance sheet items have an active liquid market where current prices for the identical items that the firm has can easily be seen. In such a case we are at fair value level one. (IFRS 13)

If we have an item for which a ready, liquid market does not exist, then under prevailing accounting standards, we have to move down to fair value level two (IFRS 13). There we find the nearest similar item in an active liquid market and we adjust the market price of the traded item to allow for the differences between it and our own item. That adjustment has to be reasonable but one person's reasonable is another person's unreasonable, in more than a few cases. We here allow subjectivity into valuation in a way that can be manipulated. We have moved away from faithful representation in the hope of salvaging as much as we can of relevance and usefulness.

If there is no ready and liquid market for our item at all, then we move down to the bottom step, fair value level three, where we meet once again our new friend, value in use. This expected NPV of future cash flows is almost entirely subjective, may or may be not be reasonable and is very much open to manipulation. Expected NPV is an attempt to rationalize – make appear rational – a guess about the future. It is the calculus of dreams (Rayman 2007).

We should always be conscious that the present value of anything is always an opinion and never a fact, because it always involves guesses about the future and the future is not completely predictable. Expected present value has the virtue of attempting to quantify the chances of various alternative guesses about the future, and in that respect is more rational than present value with no probabilities having been used as input. Rational guesses are, be it noted, still guesses. No economic reasoning or sophisticated modeling can transform an opinion of the future into a fact. The fact element is the market's response to the firm's communication of the present value of a project, subsidiary or any other situation expected to cause future cash flows. Remember too that the NPV is supposed to be the increase in the stock market value of the firm for taking on a profitable project, having discounted its future cash flows at a risk adjusted market based discount rate such as for example, the firm's current earnings yield (the reciprocal of its price earnings ratio). Thus, in fair value level 3 the value does, theoretically, reconnect with the market.

Valuation techniques used to measure fair value shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs. (IFRS 13 sec.67)

Fair value level 1; Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date. (IFRS 13 sec.76)

Fair value level 2; Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. (IFRS 13 sec.81)

Fair value level 3; Level 3 inputs are unobservable inputs for the asset or liability. (IFRS 13 sec.86)

4.4 VALUATION UNDER INFLATION

Returning to the information approach, there are two variations on historical cost that are used for balance sheet values in particular circumstances. When the currency of a currency is the victim of hyperinflation, meaning the purchasing power of a country's money falls by so much during a year that its usefulness to compare prices over a period is destroyed, then its accounts have to be restated in terms of constant purchasing power, in line with the requirements of IAS29 and its predecessors. This involves remeasuring the previous year's balance sheet figures by the change in the inflation rate over the year based on an appropriate index, often the Consumer Price Index. So if last year the index stood at 150 and at this yearend it has risen to 250, then all figures in last year's balance sheet need to be increased by 250/150 or by 5/3rds to convert them into their current purchasing power equivalent. Applying the standard involves a little more complication than this to deal with the difference between monetary items like cash itself and non-monetary ones like inventory. (Heath 1972)

Monetary items do not get remeasured at all. The loss on holding them during hyperinflation is a real loss of purchasing power, not an imaginary or opportunity cost type. Conversely the gain on owing money because its purchasing power falls during the year is a real gain. As a general rule we lose from holding monetary assets during inflation but gain from holding monetary liabilities. Under Current Purchasing Power accounting the gains or losses from holding monetary items are disclosed in the income statement after net earnings and contribute to the balance sheet value of the firm in constant dollar terms.

The gain from holding monetary items is the gain from being a debtor during times of high inflation. The loss from being a creditor is the mirror image of that. Thus the remeasurement

of historic cost accounts by adjusting for inflation creates a gain or loss which is directly attributable to inflation itself but it is a gain or loss in purchasing power, not in cash itself.

An assumption inherent in the remeasurement process is that purchasing power of money reduces steadily and systematically over time. If instead it is steady for a while then suddenly falls 10% in a day, steadies at the new level then falls 20% in one day, and continues in an irregular stepped pattern, then the remeasured numbers as at the year-end will be skewed and biased by more than is the case if inflation had had a steady momentum. In the stepped irregular case, the remeasured figures do show the fall in purchasing power between one date and another of course, but both dates represent the normal case for the business less than when inflation is steady. If wanted to measure profit half way through the year we would assume that inflation had progressed half way towards its yearlong figure, but with stepped irregular inflation, that is not true. The median price index for half way through the year will be skewed away from its mean for the year. This in turn prompts a consideration of money as a measuring unit. A unit that is subject to man-made variation such as stepped inflation is not objective or reliable. As a measure of value, it is apt to be unstable and subject to influences from all over the economy.



Money has too many uses to do all them equally well all of the time. It is a medium of exchange first and foremost – i.e. a means of paying for goods, services and securities. Second, but dependent on the first use, it is a store of value which means it holds its own value over time, but in the medium term and longer term it needs to be held in savings accounts or certificates of deposit to shield it from inflation. These however, are themselves forms of money as are credit cards and bitcoins. Money is not just coins and notes but the entire ocean of liquidity from M1 to M7 which finances transaction. Money is a means of payment, a store of value, a medium of exchange and a measure of value by way of being used for pricing. This is rather a lot to ask of one commodity, and it is not surprising that sometimes it proves too much to ask. Something is said to be "liquid" if it is quickly and easily sold for cash, and everything to do with money behaves more like a liquid than like a solid or a gas. Accounting assumes everything it recognizes has a value, but values can be frozen and they can evaporate, especially values of stocks and bonds.

The second variation on historic cost in the information approach is the current cost. This is not fair value or the measurement approach because current cost is an entry price not an exit price. It is a price to buy again an item you already hold not a price to sell. The current cost is the replacement cost, so valuing fixed assets at their current cost will ensure physical assets, now sometimes called physical capital is maintained over time.

A current cost is the cost to replace assets, and, where it can be readily ascertained, liabilities too. The replacement cost of assets is always greater than the historic cost, unless, as recently in Japan, inflation goes negative and becomes deflation. The revaluation of assets upwards to obtain their replacement cost creates a reserve which goes through other comprehensive income and could be available for dividends to equity shareholders even though the gain is notional and unrealized. The raised asset values also affect depreciation which will now be higher in dollar terms both for the current year and also for the backlog to be applied to the accumulated depreciation from previous years which can now be judged to have been too low. The accumulated depreciation, or backlog depreciation is a prior year adjustment in the income statement. Current cost accounting accordingly reduces historic cost earnings with its extra depreciation at the same time as it raises the balance sheet value of the firm. In the income statement, holding gains are shown after net earnings and include gains or losses on inventories and (separately) on fixed assets, reflecting the differences between their actual costs and their replacement (aka current) costs. Backlog depreciation arising from previous years would be a subtraction from fixed assets in the balance sheet and the revaluation upwards of assets would create a revaluation reserve there comprising holding gains on fixed assets and inventory from whenever revaluation under current cost accounting first began, with the depreciation arising accumulating as a deduction from the asset accounts. The income statement would also be done on a gross basis, with the holding gain from revaluation being separately disclosed from the year's depreciation charge against the current cost of the assets.

Although holding gains are associated with current cost accounting and gains or losses from holding monetary items arise from current purchasing power accounting, the two systems were mixed in the period of inflation between the mid seventies and mid eighties so accounts done under what was called a current cost accounting system but was really a mixed system which also included CPP elements, both types of adjustment were disclosed and both affected the book value of the firm. As inflation abated in the late eighties, both systems were dropped (Ferguson and Wines 1986). With the prevalence of exit price accounting under the fair value designation, it seems very unlikely that current cost accounting will reappear, but public sector bodies do still use it, as, for them, asset replacement and maintenance is more important than stock market perspectives, as they do not generally secure finance from the private capital market, certainly not in equity form.

A particular case of current cost accounting that is of interest to accounting theory is called deprival value accounting (Edwards and Bell 1961, Edwards 1975). The valuation here is of the full cost, direct and indirect, to replace the item if it were lost or destroyed including all consequential losses and costs to rent any temporary buildings, equipment and personnel.

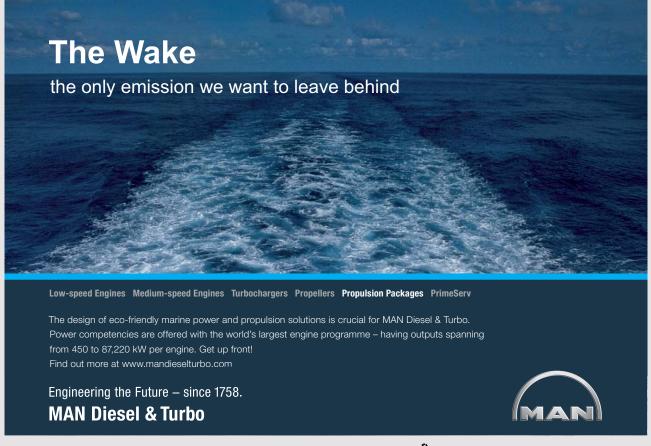
4.5 TWO APPROACHES AND CLEAN SURPLUS THEORY

The information approach aligns with a stewardship purpose for accounting and puts more emphasis on the income statement than on the balance sheet. The approach is concerned with how management have husbanded the owners' resources over the period, especially as regards operating profit and cash flow.

The measurement approach uses fair value accounting, prioritizes the balance sheet over the income statement and is concerned with obtaining a value for the firm as close as possible to its market value that means its stock market value. You might say why not simply read today's stock market price and the trades that drove it rather than expect accounts to do the valuation job when they are necessarily reporting the past rather than the immediate present. Proponents of the measurement approach would be likely to answer that question by saying the investors want information useful and relevant to estimating the future value of the firm and the accounts at fair value is the best available way to do this.

The clean surplus theory buttresses the measurement approach to accounting (Feltham and Ohlson 1995). It says that, given ideal conditions in capital markets and the associated irrelevance of dividend payout ratios, the value of a firm is its fair book value plus the present value of its future unexpected or abnormal earnings which the clean surplus theory terms goodwill. If there are no abnormal earnings expected (as should usually be the case, by definition of abnormal), goodwill has a PV of zero, all assets and liabilities are valued

at fair current values and this the theory calls "unbiased" accounting. If historical costs are used for book value of the firm, goodwill will be significant and Ohlson says this means the accounting is biased. This theory generates the same value for the firm irrespective of how the book value of the entity is measured, because any bias in that value is corrected by the market in its estimation of goodwill (Feltham and Ohlson 1995). "Unbiased" accounting requires convergence between the market value of the firm and its book value, which in turn explains the preference for fair values over historic costs, replacement costs and any other alternative valuations. Landsman et al (2011) found that real world investors do not correctly value "really dirty surpluses" which are gains or losses that arise when options are exercised at a different figure from their fair market value. Fair values are market values, so they must be closer to unbiased values for the whole firm. The theory does assume markets are rational, but is nevertheless highly regarded still in mainstream accounting literature.



4.6 FAIR VALUE AND FAITHFUL REPRESENTATION

Stock prices alone impound so much various information of so many different levels of quality and rationality, that they have limited use to predict a company's future earnings. The stock price is like white light in this view while the fair value accounts are like the colours of the rainbow so much richer and more meaningful sources of information. The measurement approach could be said in this metaphor to aspire to be the prism that relates the white light of the stock price to the spectrum of enlightenment enshrined within fair value accounts.

Fair value means market value where there is a market and NPV where is not. It has advocates on the main standard setting board round the world and a consistent body of academic critics not on those boards, such as Rayman (2007), Gwilliam and Jackson (2008) and Whittington (2008). The critics hold that mark to market accounting as happens with levels one and two of fair value reflects and maybe increases stock market volatility and irrationality which drives market values further away from intrinsic or fundamental values (underlying longer term exchange values).

The 'fair' in fair value does not in any way imply justice, social justice or equity. Instead it means fairness of process to arrive at the market value without manipulation, duress, undue influence and other factors which would invalidate the commercial contract to buy and sell shares in common law jurisdictions such as the USA, UK or Australia. The term 'fair' may not be a faithful representation of what 'fair' value actually is, and you should not assume that so long as something is decided by a market, it automatically must be fair in the everyday sense. Some would argue the exact opposite applies and we will meet these viewpoints in Chapter 6.

For now, let us note the view of Tinker et al (1982) that concepts of value are the result of social struggles, such that the dominant concept of value in a society at any point in time reflects mainly the interests of the most powerful group in that society. When market value is regarded as the normal meaning of the word value, this reflects the interests of owners of capital, investors and lenders. Such valuation is not a matter of scientific fact but rather a matter of social construction, therefore not neutral at all but politically infused and even partisan.

Test on chapter 4 (suggested answers in the appendix)

- 4.1 Explain the need to measure in accounting and what measurement involves.
- 4.2 Explain the difference between cost and value.
- 4.3 Explain the advantages and disadvantages of using historic cost as a measure. Historic cost is the money (dollars) sacrificed or given up to obtain an item.
- 4.4 Explain the difference between current and replacement costs
- 4.5 Explain the advantages and disadvantages of using current or replacement cost as a measure.
- 4.6 Explain the advantages and disadvantages of using fair value as a measure.
- 4.7 Explain the advantages and disadvantages of using present value as a measure.
- 4.8 Explain what is meant by deprival value.
- 4.9 What role does judgment have in measuring items in the financial statements?

5 ACCOUNTNG AND CAPITAL MARKETS

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to appreciate the importance of stock markets to the traditional theory and practice of accounting
- b) to understand the main research outcomes so far investigating the usefulness of accounting to stock market investors
- c) to evaluate the role of the efficient market hypothesis in studies of the significance of reports accounting,
- d) to explain the three main heuristics and how they modify the traditional economic view of rational financial decision making.



5.1 DOES ACCOUNTING AFFECT STOCK MARKET PRICES?

5.1.1 ADVERSE SELECTION AND MORAL HAZARD

Adverse selection is a term used often in accounting research. It means someone, usually a group of people inside a firm, have access to inside information not all of which they let out to the general investing public (Cutler and Zeckhauser 1998). It is a special instance of the more widespread phenomenon in business and society called information asymmetry, which is when two sides to a transaction do not have an equal amount of meaningful, accurate and relevant information affecting the transaction. Usually the seller and the supplier of information have much more information than the user and buyer and can accordingly be exploited. Allied to these ideas is the idea of moral hazard which is the situation of anyone who can be exploited through inability or incapacity to monitor the actions of someone supposed to adhere to an agreement already made because the other side may shirk their responsibilities when not checked or may be behave more irresponsibly than they otherwise would, because they assume some kind of insurance or safety net will save them from the consequences of any rash decisions they may make (Rogerson 1985, Dembe and Boden 2000). A classic example of moral hazard is the banks' rash and hazardous lending to people with bad credit in the lead up to the 2008 global financial crisis on the footing that they were banks who were too big to fail. And indeed the governments bailed out nearly all of them in every country affected, especially in the USA and UK. (For insights into the GFC in the USA, I recommend Attwood (2008) and for the UK ex minister of Trade and Business, Cable (2008))

The stock market, if working perfectly and in line with theories of market efficiency that we will look at shortly, will control information asymmetry, adverse selection and moral hazard, by penalizing any firm who perpetrates any of it. Accounting standards, principles and the monitoring of compliance with them by auditors and regulators are a principal means by which investors accomplish this aim, but they do so as a result more of historical political reaction to scandals than by way of spontaneous and organic market responses. The stock market is where investors in publicly listed companies buy and sell their stocks and shares. All stock markets have regulations about information that firms must disclose as a condition of their listing and all stock markets source such regulations from accounting principles and standards because that is the most efficient way for regulators to outsource their responsibilities for designing and reviewing the disclosures they believe investors need. The existence of regulation is proof that we live in a world where markets cannot be perfected without some outside help. It is possible in theory for a market to be imperfect but yet fully efficient. Because market efficiency is such a strong assumption of so much accounting theory, research and practice, we need to understand what is being claimed and to have a good idea of how well grounded the claims are. This is what we do next in this chapter.

5.1.2 EVENT STUDIES, INFORMATION CONTENT AND VALUE RELEVANCE

The highest prestige in academic accounting research and scholarship is associated with studies of stock market responsiveness to accounting information. Such studies are called event studies and their prestige derives from the insight they provide into the extent to which a given accounting item is useful to stock market investors. The more these studies show that an item, such as fixed assets valued at fair value level three for example, affect stock prices, the greater is that item's information content which is also called value relevance. The pioneering studies were Ball and Brown (1968) who showed good news pushed prices up, bad news pushed them down and Beaver (1968) who showed that stock market trading volumes were directly affected by the release of news, not just the prices.

Since 1968, a vast literature has accumulated and the top journals in academic accounting, notably the Accounting Review, Journal of Accounting Research, Journal of Accounting and Economics, Contemporary Accounting Research have far more event studies in their pages than any other kind of research. This is because these studies justify the idea that accounting really is useful to investment decision makers so justifying what the accounting bodies round the world, especially the IASB and FASB, assert to be the primary objective of accounting reports.

5.1.3 CAPITAL MARKET EFFICIENCY

A perfect market is one that allocates resources between competing buyers and sellers in such a way that no better allocation is possible, where "better" means with less waste, fewer unsold inventory or stock, fewer unsatisfied potential customers etc. In classical economics this requires perfectly competitive equilibrium conditions wherein there is a vast multitude both of buyers and sellers and a potentially infinite number of both buyers and sellers outside the market at any one, there is NO information asymmetry, there are no barriers of any kind to entry into or exit out of the market, there is one price for the item all over the world (after accounting for foreign exchange rates, transport costs and any other legitimate cost of getting the stock to the local market except for the price of the stock itself) and there is no pressure of any kind on the parties to do business or not to do business. Any taxes, interest charges or government fees are either zero or affect every single member of the market equally. The result is that no one buyer or seller can ever affect the market price, for there too many others, and this is a primary symptom of market perfection.

Here on planet Earth, no market is perfect but some are much more imperfect than others. Big stock markets, like in the USA, UK, Japan (Chan, Gup and Pan 1997) and Hong Kong (Kwong, Cheung and Coutts 2001) are widely held to be nearer to market perfection

than other kinds of markets in other places, so they are relatively more perfect rather than being absolutely perfect. (*Actually they are only weak form efficient*.) If they were absolutely perfect they would spontaneously regulate themselves to optimally allocate recourses. Notice the word optimally there. It is not the word perfect. Optimally means the best possible allocation of resources with the actually prevailing conditions, and these conditions prevent the allocation being perfect. So in real life we are very happy to identify what is optimum since we cannot have what is perfect.

An optimal stock market is an efficient stock market. In general a process is efficient when it has minimum input for maximum output, thereby maximizing productivity and minimizing waste. An efficient stock market takes information as its inputs and stock trades as its output. An efficient stock market *immediately and accurately* translates new information into a rise, fall or deliberate maintaining of the stock price.

Efficiency comes in three forms: strong, semi strong and weak. Strong form efficiency would prevail if there ever was a stock market where news immediately and accurately became impounded into the stock price, so that even inside information would not enable anyone to outperform the market in any systematic or sustained manner.



In a strong form efficient market, detailed accounting and other regulation would be unnecessary to impose from outside because the market would already be behaving optimally and efficiently. Accurate information processing means seeing through spin, propaganda, public relations, advertising, manipulation of words or numbers so as to perceive what really occurs. If accounts and other sources of investor information faithfully represent the business reality of the firm in every material respect, then accurate processing of information is easier. Immediate processing of information means there is no time lag between the release of information and the stock market response to it, and also that the stock market response is complete and does NOT drag itself or dribble over the consequent hours, days or weeks so that the import of the information takes a while to sink into the stock market.

Semi-strong form efficiency is the highest form of efficiency we see in the real world. With this form of efficiency inside information, information asymmetry, adverse selection and moral hazard exist to enable inside information holders to be able to beat the market average sustainably and systematically. The law and the stock market regulations, at least in the big stock markets of the world, make insider trading a criminal offence punishable by fines and jail, in order to minimize the prevalence. Public information and the patterns of the past stock price movements, however, cannot be used to beat the market, because in a semi strong form stock market those things are already fully impounded into the current stock price. The US stock market is widely believed to be semi strong form efficient, at least as far as its most actively traded sectors are concerned. There are parts of other stock markets that may be semi strong form efficient and international trading across exchanges has made for semi strong form efficiency much of the time in a country's major stocks that are traded internationally. There is a continuum rather than a firm and sharp boundary between the semi strong parts of a stock market and the rest.

Weak form efficient stock markets, the majority round the world, are ones where so called fundamental analysis pay. This means a person can beat the market by studying news and accounts as soon as they are released to get ached of other players in the market. Since the information being used to advantage by the investor or trader here is publicly available, no crime is committed by using it. The accounting framework defines understandability in relation to accounts with reference to diligent truly and pre-existing skill in reading accounts, so the framework might be said to be assume weak form efficient stock markets are the prevailing kind for which accounts have to be prepared. This is appropriate for the IASB with its worldwide remit.

Lastly there are inefficient stock markets. They may be closely controlled by the State or entirely unregulated or anywhere in between. What they have in common is that they are stock markets where technical analysis pays off and enables an analyst to beat the market systematically and sustainably. Technical analysis is a set of techniques for analyzing previous

share price movements in the hope of establishing patterns that will repeat. Technical analysis is popular with analysts even in cities with large stock markets with quite substantial semi strong sections, such as London and Hong Kong. Patterns undoubtedly do exist in stock price movements over time, both at the level of the individual stock and at the level of the market as a whole. Stock price movements over the medium term may therefore be to some extent predictable. In an efficient market, however, any gain from studying such patters is *already* in impounded into the stock price and therefore cannot be used to beat the market systematically and over time. Only in an inefficient market, it can be used. Now we are ready for the Efficient Market Hypothesis which a cornerstone of current ideas about decision usefulness to investors.

The efficient market hypothesis, was derived from the earlier random walk hypothesis (Malkiel 1999) and popularized by Fama (1970). It holds (as had the random walk hypothesis) that you cannot systematically and sustainably beat the stock market, if it is efficient and subject to the loopholes mentioned above for the two junior forms of efficiency. The hypothesis does not assert that all stock markets everywhere are efficient. It does not even assert that the US market is efficient. It does say though that efficient markets are unbeatable and this implies that the market is a valid and reliable arbiter and determinant of a firm's value. An efficient stock market cannot be manipulated by a small number of traders. Accounting in its current form assumes the efficient market hypothesis, EMH for short, is true and therefore a stock market price is the ultimate benchmark of corporate value (Scott 2009).

5.1.4 THE CAPITAL ASSET PRICING MODEL (CAPM)

The capital asset pricing model, CAPM for short, asserts that the only kind of financial risk (of loss) that an efficient capital market rewards is beta risk, also called systematic risk, which means risk related to the movement of the stock market as a whole (Sharpe 1964, Lintner 1965). Returns on holding securities are said to be dependent on the market risk and on the covariance of the security's returns with the return from the market.

Covariance is correlation times the variances of the market and the security, so the more the security behaves like the whole market, the higher the correlation so the higher the covariance.

Unsystematic risk is related exclusively to the security itself excluding the part of its risk which is associated with the market's movement – systematically associated – hence systematic risk. The unassociated risk, also called the alpha risk, is not rewarded in an efficient market, because the rational investor minimizes unsystematic risk through a strategy of diversifying into other securities whose risks and returns are inversely correlated with those of the original security.

Anyone rich enough to continue this diversification until all unsystematic risk was eliminated from his/her portfolio would end up holding every security on a stock market in proportion to their respective risks, and that ultimate portfolio is called the market portfolio. The rational return to any one security, according to the capital asset pricing model, is a function of its return from its beta risk and the return on the market portfolio itself. Aggressive stocks have beta more than one which means their returns exaggerate market movements, while defensive securities have betas below one so their returns muffle the market ones.

However, while beta is the only relevant risk measure according to the CAPM, there is evidence that other variables, such as firm size and book-to-market ratio, do a better job than beta of predicting share return (from Fama and French 1993, inter alia). If so, perhaps accountants should take more responsibility for reporting on firm risk. The evidence suggests that rather than looking to beta as a risk measure, the market acts as if firm risk increases with book-to-market and decreases with firm size. This implies that beta is not an empirically important risk measure, and that CAPM as a theory of actual stock market behavior is inadequate, en if one of its inventors (Sharpe 1964 and Lintner 1965) won Nobel prizes for it.



To the extent that beta is not the only relevant firm-specific risk measure, the role of financial statements in reporting useful risk information (the book to market ratio is an accounting-based variable, for example) becomes more important, not less. Beta is still widely used as a risk measure among investment advisors, but it is now widely acknowledged that it is far from constant, being just as variable, volatile and sometimes unpredictable as is the market itself (Ball and Kothari 1989, Shiller 2000). That limits its decision usefulness to investors interested in making best guesses about future returns to any one security in which they could be interested.

There are reasons why excess volatility may exist. One reason derives from the variability of beta itself for reasons not deriving from the market as a whole (but we do not know what those reasons actually are yet)... Other reasons derive from behavioural factors, especially investors jumping on the bandwagon of a price movement they may not understand but from which they fear to be excluded.

5.1.5 POST EARNINGS ANNOUNCEMENT DRIFT

Once a firm's current earnings become known, the information content should be quickly digested by investors and incorporated into the efficient market price. However, it has long been known that this is not exactly what happens for firms that report good news (GN) in quarterly earnings, their abnormal security returns tend to drift upwards for some time following their earnings announcement. In the CAPM, abnormal returns are unexpected and also deviate from what the model's beta predict them to be – in other words "abnormal" means non beta bases or unsystematic.

Similarly, firms that report bad news (BN) in earnings tend to have their abnormal security returns drift downwards for a similar period. This phenomenon is called post earnings announcement drift (PEAD). It seems that investors underestimate the implications of current earnings for future earnings (Rogerson 1985, Bernard and Thomas 1989, Dembe and Boden 2000, Narayanamoorthy 2006). It is often true that quarterly seasonal earnings changes are positively correlated for up to three subsequent quarters. Thus, if a firm reports that this quarter's earnings are greater than the same quarter last year, there is a greater than 50% chance that its future-quarter earnings will also be up. Rational investors should anticipate this and, as they bid up the price of the firm's shares in response to the current GN, they should bid them up some more due to the increased probability of GN in future quarters. The size of the market response to GN and BN alike has been argued, possibly even demonstrated, to be smaller than would occur in an efficient market by Lev (1989) and Kim and Kross (2005).

Accruals should not have any value relevance in an efficient market, but in real world markets they do have (Sloan 1996, Lev and Nissim 2006).

The combination of separate evaluation of gains and losses and the weighting of probabilities can lead to a wide variety of "irrational" behaviours. For example, fear of losses may cause investors to stay out of the market even if prospects have positive expected value. Also, they may under react to bad news by holding on to "losers" so as to avoid realizing a loss, and may even buy more of a loser stock, thereby taking on added risk.

5.1.6 EVENT STUDIES AND EARNINGS RESPONSE COEFFICIENTS (ERCS)

Studies have considered the magnitude of the effect of unexpected earnings on stock prices. The greater the change in unexpected firm earnings, the greater the stock market response. For any given amount of unexpected earnings, the stock market response is greater for some firms than for others. An earnings response coefficient, ERC for short, measures the size of the stock market's abnormal return in response to the unexpected component of a firm's reported earnings. The abnormal share return is divided by the period's unexpected earnings to obtain the ERC.

Differential responses to unexpected earnings varies across firms. One reason is differences in current beta between one firm and another. After GN, investors buy more of the firm's stock, but if the firm has a high beta, portfolio risk will increase with the new acquisition. Since the rational investor trades off risk and return, high beta restrains an investor's demand for the GN stock. The higher the beta, the lower the new demand for GN shares. In sum, higher betas are associated with lower ERCs and this expectation is well evidenced in accounting research studies (Collins and Kothari 1989, Easton and Zmijiewski 1989).

When firms with high levels of debt have unexpected GN the benefits flow mostly to the creditors rather than the equity investors, so the ERC of highly leveraged (also called geared or indebted) debt firms is lower than other firms, and this expectation too is supported by empirical studies in the accounting research literature (Dhaliwal, Lee and Fargher 1991, Beatty and Weaver 2003).

5.1.7 EARNINGS QUALITY EFFECTS

Earnings quality is partly sourced in the spread of probabilities about future earnings. The higher the level of probabilities is, the better able are investors to forecast performance and

the higher the firm's ERC will be. However, a more important element of earnings quality is earnings persistence. The longer the persistence of GN is expected to be, the higher will be the ERC. This expectation is another with strong empirical support in the research literature. Earnings only have quality to the extent that they persist, but earnings of a once off non persistent nature may have a definite ERC too, though not as large as persistent expected earnings will have. Persistence into the future involves discounting future expected earnings to the present and that in turn means the ERC will vary inversely with interest rate used to discount future cash flows (Kormendi and Lipe 1987).

A third dimension of earnings quality is accruals quality – changes in working capital as well as provisions etc. Accruals are high quality in one period to the extent that display as cash flows in the next period. There is good research evidence here too that high quality accruals are associated with high ERCs (Dechow and Dichev 2002).

Finally, the existence of high quality earnings evokes a high ERC but by definition, persistent earnings stop being abnormal or unexpected in the second and subsequent years, so the redesignation of a firm as a growth firm attracts new investors who now see permanently higher earnings in prospect. Expectations are permanently raised and for future GN earnings to be regarded as unexpected and therefore relevant to the ERC, they will have



be unexpectedly still better than they were in the year when the market first decided the earnings were of high enough quality for the market to regard the firm as a growth firm. This of course increases the risks for the firm of disappointing the market in future years. The ratio of market value of the firm to its book value has been used in accounting research [first by Collins and Kothari 1989] as a measure of growth opportunities on the grounds that the market is alleged to be aware of such opportunities before they affect net earnings so the market will raise the stock price in anticipation. This assumes at least weak form efficiency of the stock market. It also follows that that the more informative and useful for decisions about investing a share price is, the lower the ERC will be, and even the original 1968 event study by Ball and Brown (1968) found stock price movements anticipated news by as much as a whole year before earnings were reported in the accounts – so the eventual GN or BN was no surprise and therefore did not affect the share price further.

5.1.8 EVENT STUDIES' IMPLICATIONS FOR ACCOUNTING

The implication of low ERCs for high debt firms is that firms should fully disclose all their liabilities and not contrive to have any of them off the balance sheet. This is also a lesson of the 2007 market slump that precipitated the global financial crisis. Surprising bad news is the worst news of all for stock market investors.

The implication of market sensitivity to growth opportunities and to earnings persistence as well, is the usefulness to investors of reporting firm earnings by segment as well as in aggregate, since different segments have different growth opportunities and therefore different ERCs. The Management Discussion and Analysis section of the annual financial report is where firms usually do this.

Under fair value accounting, there is no motivation to sell loan assets since unrealized losses are included in income; but under historical cost there is a strong motive to "do a Lehman Bros" i.e. to window dress the accounts by selling before the year end and buying back after if the sale can be arranged to show a paper profit (Gandel 2010, Wolff 2011).

5.2 EARNINGS MANAGEMENT

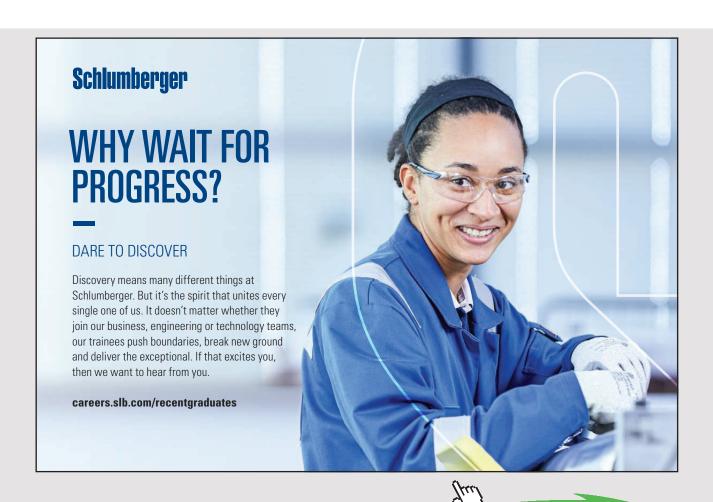
1. Income smoothing is done to give an impression that earnings vary less between reporting period than they really do (Hepworth 1953, Beidleman 1973 and Ronen and Sadan 1981). This increases the apparent earnings quality and protects

- managers from being fired in years of deep reductions in profits. Standards make the possibilities of smoothing quite restricted.
- 2. Income maximisation is done to boost management bonuses that depend on income calculations (Healy 1985, Holthausen, Larcker and Sloan 1995) and to avoid breaching covenants with loan creditors that stipulated minimum earnings figures before dividends may be paid or before the debt becomes immediately repayable (DeFond and Jiambalvo 1994, Sweeney 1994). Standards limit how much of this is possible.
- 3. Income minimization is done by firms who are too much in the public eye for their own comfort especially following a scandal or pollution disaster that will entail large lawsuits (Jones 1991, Cahan 1992, Key 1997). The firm seeks to appear as if it can ill afford big payouts of claims but will perhaps write off assets at a higher rate than it had done before, expense rather than capitalize advertising, research and any other kind of expenditure carrying future benefits but where standards allow. Or even encourage, the exercise of managerial judgment.
- 4. "Taking a bath" or "big bath accounting" is the extreme form of income minimization (Healy 1985, Cameron and Stephens 1991). It occurs when a firm has to report a real loss so has little to lose, and it involves making the loss bigger still by wrote offs and providing for possible future outlays to such an extent that the probability of reporting a good profit next year is maximized when the excessive write offs come to be reversed.

Since accounting reports are publicly available for listed companies, the firm paying for the accounts to be prepared and published has to accept there are free riders in the general public getting the benefit of the information for free – the free rider phenomenon. This makes the firm disinclined to produce more than the law and standards mandate, unless there is public relations benefit as we examine in Chapter 6. The existence of free riders restrains the supply of further information in a totally free market so the law and society through its professions have to step in to ensure minimum levels of information get disclosed. Free riding is the receipt of a benefit from an externality. An externality is anything committed or omitted by an entity that creates costs or benefits of other entities but does not entail any associated cost or income for the entity creating the externality.

Before we leave the rarified rigor of event studies, we need to consider a methodological issue. When my camera or phone snaps a tree in a park, we generally accept the image is a faithful representation of a real tree in a real park. If the photo is printed or posted online with blue leaves, this is abnormal and we suspect photoshopping or misuse of lens colour filters. When we use CAPM and EMH to do event studies and discover value relevance of accounting disclosures, we are assuming that the translation of the information in the accounts into buy, sell or hold decisions by the investing public takes place according to

both those paradigms. When we find abnormal or unexpected returns or when we find under-reaction to accounting news, sometimes the reason must be that EMH and/or CAPM do not apply to the circumstances. Perhaps the investors are being irrational and not doing cold calculations to maximize the NPV of their wealth. This is like having a wobbly camera. When we do event studies, we are not only measuring ERCs, we are also testing the validity of EMH and CAPM, because they tell mainstream accounting scholars what expected and normal returns would be, so determine the actual size of abnormal ones. This is like going to a clothes shop and trying on a suit or dress, finding it the wrong size for you and blaming yourself rather than the garment for not fitting properly. Much of the activity on the big stock markets of the world and their responses to news roughly fits with weak or semi strong form efficiency. Some even fits with CAPM to a certain extent. But we know real stock markets are never strong form efficient and we know CAPM does not fit real world investor behavior well enough, because these pesky investors do not know what's good for them, just as accounting users need to be told by the authorities what they need for the sake of "usefulness" and not the other way round. Future generations may look at all this and think it rather similar to medieval scholars debating how many angels could dance on the end of a pin.



The longer our investment horizon, the better the fit between financial theory and actual returns. Firms that perform well in terms of generating earnings, dividends and capital gain show steadily rising stock prices. Irrationality for investors is a short term disease. EMH and CAPM remain hypotheses, however, especially in investment horizons of a financial year or less. Whether they are "useful" because they illuminate the financial truth or because most other investors believe them and often act accordingly remains a matter of opinion, not of proven fact.

It is clear, then that to understand real world accounting and investment behaviour we have to look at actual behaviour and its irrational patterns, and we next consider the most important elements of those.

5.3 HEURISTICS

Efficient markets have investors processing GN and BN immediately and accurately. The existence of post earnings announcement drift shows that actual stock markets do not process news quickly. We have also seen that the valuation of accruals equally with cash flows suggests the processing of news may not always be accurate either. The disillusion with the efficient market hypothesis has led to an increasing acceptance of the findings of psychological research into people's irrational economic behaviour, work associated especially with Tversky and Kahneman (1974) who discovered the prevalence of three so called heuristics when people process information. These affect readers of accounting reports so we will benefit from understanding how they bias judgment and decision making in the real world.

The first of the three heuristics is called representativeness. Here, the individual assigns too much weight to evidence that is consistent with the individual's impressions of the population from which the evidence is drawn. This is a kind of stereotyping. For example, suppose that a firm's profits have grown strongly for several years The investor subject to representativeness will assign this firm to the growth firm category, ignoring the fact that true growth firms are a rare event in the economy – the individual assigns too much weight to the recent evidence of earnings growth and not enough to the prior information that the base rate of growth firms in the population is low. This behaviour seems particularly likely if the evidence is salient, anecdotal, or extreme – for example, a firm's earnings growth may be the subject of sensational media articles. Thus, the investor overreacts to the evidence, revising his/her belief's that the firm in question is a growth firm by more than prescribed by Bayes' theorem. In effect, the individual takes the evidence of a few years of growth in earnings as representative of a growth firm, ignoring the fact that it is quite likely that earnings will revert to normal in the future. If enough investors behave this way, share price will overreact to the reported growth in earnings.

The second heuristic is called availability. This is the tendency to overweight the importance of information easily remembered or recently acquired. It can make an investor buy or sell on recently heard rumor, on opinions in today's newsfeeds or on a recent phone call from a broker. We act on what we can remember and act most on what we can easily remember. This is a kind of impulsiveness, to which a rational investor would never be subject but real world investors may well be.

The third heuristic is called anchorage and adjustment and may be the most important one for accounting theory. The anchoring part is the guess, estimate, judgment, assessment, opinion or declaration someone makes. For example, someone estimates a project's future cash flows. The second part, adjustment, occurs when the person has to change their original view in the light of new evidence, new opinions or new factors of any kind. The heuristic bias lies in the tendency to adjust the original estimate by only a little relative to the size of the adjustment actually needed. This derives from the person investing too much ego in the original estimate which prevents then conceding, sometimes even to themselves, that their original guess was so far wrong. This heuristic is the one that is apt to cause major revisions in accounts, of prior year earnings, of provisions and of valuations of risky assets such as derivatives.

Psychological theory and evidence also suggests that individuals are often overconfident – they overestimate the precision of information they collect themselves (Daniel, Hirshleifer and Subrahmanyan (1998), empirically demonstrated by Daniel and Titman (1999)).

As is implied by the foregoing, behavioural characteristics can produce a wide variety of share price behaviours over time. For example, overconfidence leading to share price momentum implies positive serial correlation of returns while the momentum continues (and negative longer-term correlation as the overconfidence is eventually revealed), whereas representativeness implies negative serial correlation (i.e., share price overreacts to evidence, leading to subsequent price correction as overvaluation is revealed). All of these patterns are contrary to the random walk behaviour of returns under market efficiency.

Test on Chapter 5

- 1. What is the earnings response coefficient.
 - a) the size of the response of stock prices to new information
 - b) the size of the stock price response to abnormal earnings of the firm
 - c) the size of the change in the returns from holding a stock in response to a new piece of information

- 2. Why is the efficient market hypothesis relevant to accounting theory?
 - a) Accounting assumes stock market valuations are the ultimate benchmark of value
 - b) Accounting works in different ways for efficient markets than it does for inefficient markets
 - c) Both of the above
- 3. Is ERC a measure of information content and value relevance?
 - a) Yes
 - b) No
 - c) Yes it is a measure but no it is not the measure
- 4. What is the significance of post earnings announcement drift?
 - a) It shows that rational investors take time to digest new information
 - b) It shows that stock markets are not very efficient
 - c) It shows that stock markets are inefficient



- 5. Why does the stock market valuation of accruals imply the market is not very efficient?
 - a) because accruals are settled soon after the year end
 - b) because an efficient market would see through all year end window dressing
 - c) because accruals have no significance in themselves
- 6. Information content and value relevance refer to what?
 - a) the effect of news, accounts' items and individual disclosures on stock returns
 - b) the usefulness of accounts' items to investors
 - c) the beta change in response to any new disclosure
- 7. What is the heuristic of availability?
 - a) decisions are made on the basis of available information
 - b) decisions are made on the basis of the things which are easiest to recall
 - c) decisions are made on the most up to date data
- 8. What do heuristics have to do with the usefulness of accounts to investors' decisions?
 - a) heuristics bias rational decisions
 - b) heuristics mean decisions will be made on wrongly selected accounts information
 - c) heuristics make accounts all the more useful by way of compensation
- 9. Why does the capital asset pricing model fail to describe the pricing of investments over a period?
 - a) because beta is not stationary
 - b) because beta is not the only kind of risk actually rewarded
 - c) both the above
- 10. What information is most useful to investors?
 - a) anything that helps predict the future value of firm
 - b) financial analysts' reasoned forecasts
 - c) accurate and complete historical records of the firm's transactions

6 ACCOUNTABILITY

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to explain stakeholder, legitimacy, institutional, critical and Kohlberg theories,
- b) to understand the nature of accountability and its dependence on particular social contexts and philosophical assumptions,
- c) to evaluate the extent to which various theories shed light on accounting behaviour,
- d) to appreciate the ways in which various theories used to explain accounting and accountability support or subvert each other.

6.1 INTRODUCTION

Accountability (per Gray, Owen and Adams 1996) is:

The duty to provide an account or reckoning of those actions for which one is held responsible.

Accountability involves two responsibilities or duties, these being:

- i) the responsibility to undertake certain actions (or to refrain from taking actions); and
- ii) the responsibility to provide an account of those actions.

Inherent in the word accounting is the idea of accountability. Accounting without accountability would be like writing a letter you never posted or emailed.

Communication to other people is an inherent part of accounting, and that is reflected in accounting employers preference for graduates with good communication and presentation skills. Accounting is not for hermits, although not all accounting communication is face to face – very little of it in fact. But it is still communication, and that means the message must be clear and understandable.

Accountants are accountable for their reports being clear and understandable, and such a requirement is directly stated in the Conceptual Frameworks of the USA' FASB and the international IASB too (IASB ED 2015 2.22 p. 30) the reason that the whole process of accounting used to be seen as an exercise in stewardship.

Stewardship is guardianship of someone's assets. In the European Middle Ages the steward of a Lord's estate was the man who managed the property, the livestock, the agriculture and the services required of the peasants on behalf of the Lord of the Manor. The Lord was the principal and the steward was the agent, but in those days nobody thought about agency costs, because the feudal system was built on the notion of personal fealty and loyalty of master to servant and of servant to master, and the breaking of an oath was regarded as a mortal sin. Even then though, it was expected that the steward would account to his lord with regular written reports, inventories and explanations. As the Middle Ages gave way to the Renaissance and trade opened up the world, so began the agency problem in its modern form as the feudal system transformed into private enterprise capitalism. The steward agents accounting to his lord principal had to be more focused on money and assets, the form being the lord has trusted you the steward with assets, now shoe precisely what you have done with them since your last report. Critically, had the principal's assets been kept safe from theft, embezzlement, mismanagement and shrinkage? If yes, the steward was a good steward. Initially that was good enough, but in the special case of voyages across the ocean to the new world or to the eastern hemisphere, the captain of the ship (the agent) had to come back with plenty of goodies, they called them bounty back then, and keep them safe from pirates. Ship captains were more than stewards then, as they were charged not just with protecting the owner's assets but explicitly with increasing them.



Early companies, such as the Hudson's Bay Company and the East India Company, were built on and around voyages of discovery and the expectation of bounty. Company accounting similarly evolved to show not just the preservation of assets by way of a good balance sheet but also the enhancement of wealth through bounty shown on the income statement. The agent was by modern times accountable not only for asset preservation but also for its increase, not only for wealth but also for income.

6.2 AUDITING'S MARKET ROLE

As the industrial revolution gathered momentum in the nineteenth century, transactions became more sophisticated, more frequent, more international and more voluminous. Companies that were competently managed became accordingly more prosperous and that meant that company owners needed to employ accountants to assure them that they were profitable as well as solvent.

As more and more shares were sold to people not closely connected to the firm, so the new outside shareholders needed, or at least were assumed to need, the assurance of external auditors that the annual accounts could be trusted. Thus the trustworthiness of the audit report was and is fundamental to the efficiency of the stock markets, as it is a fundamental document in the chain of accountability from a company's agents (management) to its principals (shareholders). It could possibly be argued that even if the law had not made auditing of public companies mandatory, capital markets would have demanded them in the interests of the efficiency of the capital market as a system for raising funds for new business enterprise. However, such an argument would be very hard to support with empirical evidence that any actual stock market behaved in such a way. In the last twenty years, this chain of accountability has been further reinforced by audit committees of public company boards, by the spread of good corporate governance practices and by the voluntary disclosure of a whole range of information in annual reports beyond that required by law (O'Donovan 2002). Why companies would want to make voluntary disclosures when the law does not force them do is explained up to a point by several different accountability theories that we will consider next in this chapter.

6.3 THEORIES OF ACCOUNTABILITY

6.3.1 STAKEHOLDER THEORY

Stakeholder theory was invented by Edward Freeman (1984). Appearances are deceptive; and when I met Freeman at a conference in London, I thought for a moment I was seeing a resurrected Karl Marx. His theory is almost the polar opposite of Marxism, however.

Freeman (2008) says stakeholder theory is an integrated normative positive and instrumental theory. That means it says what ought to be, it says what already is and it also says how to convert what is into what ought to be. A stakeholder is anyone or any group of people who affect the firm or whom the firm affects. The normative aspect of the theory says firms should take the interests of all stakeholders into account when making major decisions. The positive aspect of the theory says firms can only maximize the welfare of shareholders over time if they also improve (but not necessarily maximize) the welfare of other stakeholders.

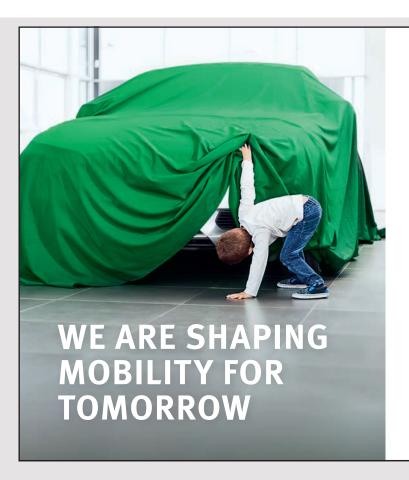
The instrumental aspect, in the form posited by Mitchell, Argyle and Wood (1997), holds that the stakeholders affecting the form's decisions most are those who have the most salience. Salience is a combination of power, legitimacy, and proximity. Weak stakeholders with no legal claims on the firm, no power to affect its supplies or sales and who operate at a far distance from the firm's activities have very little salience so will not influence the firm's decisions much. Striking workers may have power but the law may say they lack legitimacy. Small customers and small suppliers have the legitimacy conveyed by their contracts with the firm but they may lack the power to affect how quickly the firm pays them (suppliers) or they pay the firm (customers). A dissatisfied mail order customer who happens to be a foreign government has power and legitimacy but its geographical distance means it lacks proximity so it may not have the salience to impose its will on the firm.

Freeman (2002) holds that conflicts between stakeholders, even between management and workers, are unnecessary as the underlying interest of both parties consists in co-operation. Stakeholder theory has become mainstream in recent years, especially after the global financial crisis of 2008. However it is quite unusual to read of any firm or any country's accounting professional bodies accepting and promulgating the full normative/positive/instrumental theory as envisaged by Freeman, because so much of business involves competition rather than co-operation but co-operation is the core of stakeholder theory as promulgated by Freeman, so it may be a little unrealistic. It is the only theory we will come across that claims to be positive and normative at the same time, and this claim requires an act of faith rather than rational analysis. It is easy to see what the normative message of the theory is. It is also easy to see that as a description or analysis of the real business world, it is inaccurate. Worse than that, it is incompatible both with agency theory and with good corporate governance. Let me justify this statement.

Agency theory makes shareholders as principals and as owners of the firm top priority. Stakeholder theory makes all stakeholders equal subject perhaps to their relative salience. Any conflict between principals and agents is in stakeholder theory illusory as the parties fail to realize they ought to be co-operating. Good corporate governance too involves organizing the board and the constitution of the company so as to ensure the unimpeded maximisation of shareholders welfare and the subordination of the board to the generality of shareholders. In stakeholder theory all stakeholders have some salience and it falls to the board to arbitrate and choose between the various claims of the various stakeholders. The board can only do this if it is the sovereign body of the firm. If it were sovereign even over the shareholders, then the agents become the principals. The shareholders cannot tell the board what to do because under fully implemented stakeholder theory they would just be one stakeholder group among many. Therefore good corporate governance and agency theory are both incompatible with stakeholder theory.

6.3.2 LEGITIMACY THEORY

Legitimacy theory explains why firms make voluntary disclosures of information when the law does not compel them. It is so that firms can acquire legitimacy in the eyes of the salient



How will people travel in the future, and how will goods be transported? What resources will we use, and how many will we need? The passenger and freight traffic sector is developing rapidly, and we provide the impetus for innovation and movement. We develop components and systems for internal combustion engines that operate more cleanly and more efficiently than ever before. We are also pushing forward technologies that are bringing hybrid vehicles and alternative drives into a new dimension - for private, corporate, and public use. The challenges are great. We deliver the solutions and offer challenging jobs.

www.schaeffler.com/careers

SCHAEFFLER

part of the public, usually investors but sometimes customers or even the general public as a whole. Legitimacy theory is widely used in accounting research as the framework to explain voluntary disclosures by organisations (O'Donovan 2000, 2002).

The theory postulates that the object of corporate communications with the outside world, including its accounting reports, is to maintain, defend or increase the organisation's legitimacy (Lindblom 1994). The idea of legitimacy here is the idea that the firm is authorized to do what it does. Society authorizes the firm, and the firm in turn respects and protects the public interest.

In legitimacy theory, the exchange between the firm and society is termed the social contract. This social contract is not like an enforceable legal contract with offer, acceptance, consideration, free negotiation and sanctions for breach. The social contract idea in legitimacy theory is an idea that society is a real entity with real force and that its interests are real and are summarized in the phrase "the public interest". It is an idea of citizenship, an idea that corporations have responsibilities just like individuals do, to be good citizens – not necessarily to show corporate social responsibility – that is one step further on.

The opposite of legitimacy is criminality. Legitimacy is therefore respectability. The other side of the social contract idea is freedom for the firm to carry on its business under the law, to regulate its own affairs, so long as it continues to display legitimacy by its words and by its actions. Of course any crime by the firm voids its legitimacy. When this happens, even a very profitable venture might be closed down by its owners. This happened to Arthur Andersen in the wake of the Enron scandal at the beginning of this century and to England's News of the World newspaper by Rupert Murdoch after the phone hacking scandal at the beginning of this decade. (Baker 2003, The Week 2012)

6.3.3 INSTITUTIONAL THEORY

The key concept in institutional theory is isomorphism, defined broadly as the propensity of organizations in a population to resemble other organizations that operate under similar environmental conditions. The proclivity toward emulation of dominant institutional models is sustained by a variety of mechanisms and processes that induce a degree of homogeneity of organizational forms and practices. DiMaggio and Powell (1983) argue that professions are also subject to pressures that produce homogenization. Indeed, professions shape institutional forms and in turn mirror these forms in a self-perpetuating confirmation of the original institutional models.

6.3.3.1 Mimetic Isomorphism

Mimetic isomorphism emerges in a field's formative phase or during a reformulation phase brought about by a major innovation. In these cases, high levels of uncertainty exist about appropriate processes and valid dimensions for differentiating good from poor performance. In response, actors survey the terrain and "borrow" legitimized practices from other, apparently superior, performing actors in the field. Change is voluntary and associated with one entity copying the practices of another. Mimetic pressures include benchmarking and identifying of best practices and leading players in the field. Mimetic isomorphism occurs when the processes motivated by these pressures become institutionalized so that copying continues because of its institutional acceptance rather than its competitive necessity.

6.3.3.2 Coercive Isomorphism

Coercive isomorphism arises from asymmetric power relationships. Change is imposed by an external source. The primary motivator is conformance to the demands of powerful constituents and stems from a desire for legitimacy as reflected in the political influences exerted by other members of the organizational field. These influences may be formal or informal and may include persuasion as well as invitations to collude. If the influencing group has sufficient power, change may be mandated.

6.3.3.3 Normative Isomorphism

Normative isomorphism arises as a field matures. It consists of conforming to a privileged worldview within the organizational field where change occurs through the development and communication of this worldview by peers and/or common socialization experiences. The professionalization of a group of participants through training regimes, trade associations, and other socializing mechanisms within the organizational field, represents a source of institutional values. Social networks and/or common background experiences, such as attending universities with similar ideals, goals, and programs, create common expectations (Mizruchi and Fein 1999).

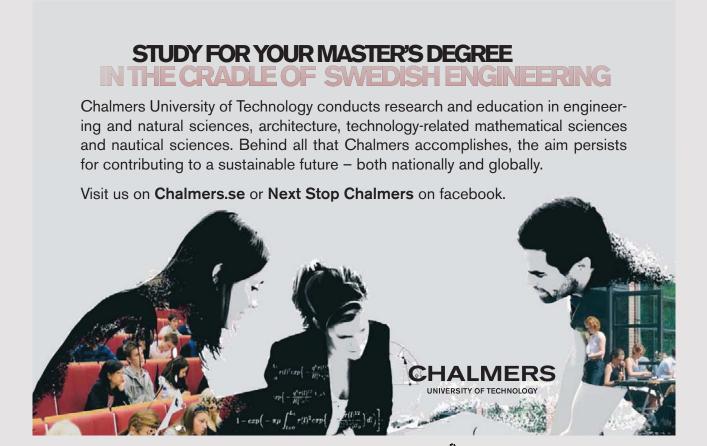
Normative isomorphism also occurs through the hiring of individuals from a select set of educational institutions and subjecting them to rigorous socialization. A second source of normative isomorphism is the formal professional institutions that span organizational units within the field (DiMaggio and Powell 1983). These institutions provide leaders in the field with a means to disseminate norms, influence the field, and otherwise direct other members.

Coercive, mimetic, and normative isomorphism may occur simultaneously. For instance, members of an accreditation team may evaluate schools using ambiguous criteria. In this instance, evidence of acceptable behaviour may come from benchmarking against other "model" organizations with a similar mission. When this happens, both mimetic and coercive pressures occur simultaneously, reinforced by the normative legitimacy of the accrediting body's standards.

6.3.3.4 Decoupling

The other dimension of institutional theory, decoupling, implies that while managers might perceive a need for their organisation to be seen to be adopting certain institutional practices, and might even institute formal processes aimed at implementing these practices, actual organisational practices can be very different to these formally sanctioned and publicly pronounced processes and practices (Richardson and Dowling 1986).

Thus, the actual practices can be decoupled from the institutionalised (apparent) practices. In terms of voluntary corporate reporting practices, this decoupling can be linked to some of the insights from legitimacy theory whereby social and environmental disclosures can be



used to construct an organisational image very different from actual organisational social and environmental performance.

Thus, the organisational image constructed through corporate reports might be one of social and environmental responsibility when the actual managerial imperative is maximisation of profitability or shareholder value.

6.4 CRITICAL PERSPECTIVES IN ACCOUNTING

6.4.1 INTRODUCTION

Critical theory is the examination and critique of society and culture, drawing from knowledge across the social sciences and humanities. The term has two different meanings with different origins and histories: one originating in sociology and the other in literary criticism. This has led to the very liberal use of 'critical theory' as an umbrella term to describe theoretical critique.

6.4.2 CRITICAL THEORY CONCEPTS

Social justice is important and everyone has an implicit position for capital or for labour, say the critical perspectives writers, so the idea that accounting is a neutral, objective or value free way of reporting economic events is a fraudulent idea.

Core concepts are:

- 1) That critical social theory should be directed at the totality of society in its historical specificity (i.e. how it came to be configured at a specific point in time), and
- 2) That critical theory should improve understanding of society by integrating all the major social sciences, including geography, economics, sociology, history, political science, anthropology, and psychology.

6.4.3 MARXIST THEORY AND ACCOUNTING

Marxist scholarship on accounting has been led for four decades by Tony Tinker (1980, 1988, 1991 for a start) who has founded 2 journals: Critical Perspectives in Accounting and the International Journal of Critical Accounting. In the Marxist perspective, accounting serves capital in helping it extract surplus value from the labour force. This is especially

true of management accounting which is entirely about control and productivity (Lehman 1992). Accounting systems control labour and staff for the benefit of senior management and their capitalist principals.

Marx employed a labour theory of value, which holds that the value of a commodity is the socially necessary labour time invested in it. Marxists tend to allow no role for scarcity or demand factors like fashion in their theory of value, but say scarcities and fashions are manipulated by capitalists on the supply side and have no valid or organic role by themselves. In this way they alienate many potential sympathizers as mainstream demand and supply explanations of price and value are easy to perceive, but Marxist insistence that all economic value stems from labour is hard to accept. Capitalists do not pay workers the full value of the commodities they produce, but compensate the worker for the combination of skill and time required to produce a given commodity by paying as little as possible by way of wages. Marx theorized that the gap between the value a worker produces and his wage is a form of unpaid labour, known as surplus value (Marx 2008 Chapter 8). Moreover, Marx notes that markets tend to obscure the social relationships and processes of production, a phenomenon he termed commodity fetishism (Rubin 1990).

People experience social relationships as value relations between things, e.g., between the cash in their wage packet and the shirts they want. The cash and the shirt appear to conduct social relations independently of the humans involved, determining who gets what by their inherent values. This leaves the person who earned the cash and the people who made the shirt ignorant of and alienated from their social relationship with each other. So the individual "resolves" the experiences of alienation and oppression through a false conception based on a "natural law" argument that there is a fundamental need to compete with others for commodities. In other words, consuming things replaces a full community and social life. That assumes both that people are investing things with emotional significance very widely and also that if they were not doing so, they would be enjoying a full social life and feel themselves to be valuable and valued members of society. These assumptions are rather far from self evidently valid.

The Marxist view of economics, society and accounting is the oldest, most incisive and most contested critical perspective. It is especially plausible in its refusal to countenance the possibility that accounting is objective and neutral. Rather, it is the enthusiastic agent of the rich, property owning and investing groups in society whom it is still fair to characterize as the capitalist class, even in this day and age. The attempt to build accounting theory centering either on the public sector or on the economic welfare of the majority of people who are not capitalists is still in its infancy. At the time of writing, stakeholder theory, sustainability accounting and integrated accounting are the most high profile challenges to traditional accounting and we will discuss the latter two in Chapter 8.

6.4.4 HABERMAS AND HERMENEUTICS

Accounting is a language. It is sometimes called the language of business. However it is rarely analyzed or managed as a type of language. The Habermas led Frankfurt School is a second type of critical perspective on accounting after Marxism. Marxism is materialistic, whereas the Frankfurt School is idealistic and saw its role as perpetuating the intellectual legacy of the eighteenth century enlightenment which mid twentieth century totalitarian dictatorships had gravely threatened; and the subsequent rise of mass higher education had steadily diluted, in the interest of getting jobs for graduates rather training their minds and characters to be good and thoughtful citizens.

They believed that political and economic power can be domesticated and tamed by consensus building, that accounting serves the powerful now but need not do so exclusively in future. Rational behaviour and rule by reason are worthwhile and achievable in their idealistic view. Enlightenment goals and capable of being achieved, but they require honesty and transparency (Habermas 1985).

Critical theory is for the Frankfurt School ultimately a form of hermeneutics, i.e. knowledge via interpretation to understand the meaning of human texts and symbolic expressions – including the interpretation of texts which are themselves implicitly or explicitly the interpretation



of other texts. Hermeneutics applied to accounting reports is about extracting the meaning from those reports, reading them insightfully. (Habermas 1996)

Legitimacy theory is one accounting theory that analyses accounting reports and the words in them to extract meaning, especially the kind of meaning that is easily understood to be directed to improving public perceptions of the firm.

Habermas (1994) criticized the one-sided process of modernization led by forces of economic and administrative rationalization, which turned the "public sphere" into a site of self-interested contestation for the resources of the state rather than a space for the development of a public-minded rational consensus. Habermas has the view that capitalism has ignored the public interest and its language has attempted to delegitimize it in the name of individual free enterprise and the idea that any public interest argument by the State is a step on the 'road to serfdom' as von Hayek (1945), a principal theorist of raw capitalism put it.

Boundaries between public and private, the individual and society, the system and the life world are deteriorating. Democratic public life only thrives where institutions enable citizens to debate matters of public importance. He describes an "ideal speech situation", where actors are equally endowed with the capacities of discourse, recognize each other's basic social equality and speech is undistorted by ideology or misrecognition (Habermas 1998). In this situation we have minimum adverse selection or moral hazard and even information asymmetry itself is greatly reduced. This is very idealistic indeed but its day may come in some remote future society, and we might all be happier people in such a context.

6.4.5 POSTMODERNISM

The third critical perspective has been fashionable in universities for a whole generation now. It is sourced mostly in France and its principal exponent is Foucault (not the one with the pendulum). Postmodern critical theory has one strand running through all its various and complex expressions, namely relativism. It asserts that all claims to universal explanations, universal values and other "grand narratives" as they call them are wrong. Values and truths are context dependent. Accordingly, the very worst behaviour for a postmodernist is to be, or to seem to be, "inappropriate". This relativistic denial of the validity of universal ethical postulates is critically reviewed succinctly in Tinker (2005).

The dominant stream in postmodernism which says there is no one grand narrative or universal truth or universal law in any human affairs (Foucault 1970). It looks for decoupling and for internal contradictions in documented claims to delegitimize those claims. It regards

the idea of rationality as a matter of sociology not of psychology. It also sees accounting as a servant of those presently in power

Ancient prisons have been replaced by clear and visible ones, but Foucault cautions that "visibility is a trap." It is through this visibility that modern society exercises its controlling systems of power and knowledge. Increasing visibility leads to power located on an increasingly individualized level, shown by the possibility for institutions to track individuals throughout their lives. Foucault suggests that a "carceral continuum" runs through modern society, from the maximum security prison, through probation, social workers and teachers, to our everyday working and domestic lives (Foucault 1977). All are connected by the supervision (surveillance, application of norms of acceptable behaviour) of some humans by others, in order to ensure what the supervisors regard as "appropriate" behaviour.

6.4.6 DECONSTRUCTION

Deconstruction means breaking up documents into their component parts and seeing where things do not fit together or are contradict each other. The more such items are found, the more impaired is the document's claim to legitimacy (Arrington and Francis 1989). All critical perspective writers deconstruct, but the postmodernists do it most. Deconstruction is a kind of audit, aimed at uncovering inconsistency, hypocrisy, clarifying obscure and ambiguous statements and surfacing subtexts. Accountants who claim to be able to think critically need to display the skill to deconstruct financial statements, corporate reports and any financial communication aimed at soliciting money – not just formal prospectuses for an initial public offering of securities.

6.4.7 CRITICAL PERSPECTIVES IN ACCOUNTING – WHAT ALL FACTIONS AGREE ON

- 1 Accounting is not and cannot be neutral
- 2 It serves and is controlled by suppliers of capital
- 3 It controls agents, managers and employees by measuring those aspects of their performance capital wishes to see
- 4 It aligns closely with capital so ignores accountability to other stakeholders

6.5 ETHICAL PARADIGMS OF ACCOUNTABILITY

6.5.1 INTRODUCTION

A natural source of ideas in exploring accountability is ethics, and we look there to gather any useful tools for clear thinking about the centre and periphery of accountability.

What are we to be accountable for and how far beyond our immediate circles should this accountability stretch? These are normative questions and so one can cop out by hiding behind relativist chic, by saying, for example, it's all only a matter of personal taste, personal preference, or of national culture or accidents of geography. That may be true up to a point empirically of any actual manifestation of ethical norms and their behavioural consequences in action; but it is not necessarily so analytically or formally. For there is no general consensus that relativism not only explains adequately actually observed behaviour but also that it is itself the superior ethical paradigm formally, developmentally, ethically or in any sense at all, normatively.

Universalists hold that it is intrinsic in the very word and concept of ethics is the idea that the ethic in question applies to everyone everywhere always in the same set of circumstances (Kohlberg 1986). That is, they assert that relativistic ethics are not ethics at all, but simply



applied anthropology or merely good manners. However, universalists have to deal with the fact that ethics are a human creation. They do not have the reproducible and invariant quality of, say, chemical elements whose every interaction is measurable, predictable and describable. Universalists thus have to show that at least one ethical proposition is hard wired into the human condition. Murder, rape and theft cannot do this, because each of these is permitted by some ideologies and religions, at least when applied to enemies. We need to go down below these not quite universals to the brain itself to see if we can locate conscience, empathy and feelings of kinship in the physical tissue of the brain itself. If we can do so, we might have a physical rather than linguistic basis for thinking universalist ethics rather than relativistic ones may ground a general theory of accountability (Donleavy 2012).

6.5.2 INNER ORBITS OF ACCOUNTABILITY

Accountability in its narrowest sense is a matter of law. Statute law prescribes what we must do and what we must not. In common law jurisdictions, statute law is underpinned and overlaid by case law. This is especially so for tort law with its notions of fiduciary duty, negligence, and nuisance and even, occasionally, notions of the public interest. The rationale for holding ourselves accountable to people with whom we do not have contracts is the idea that there really is a public interest out there somewhere, and it has to be preserved through restraining our individual selfish drives.

Accountants are sensitized to the public interest through their professional codes which are a key element in their social contract with the country in which they operate, even when the code defines the public as merely the investing public. This means the law holds accountants accountable for acts which affect other people than their contractual clients in a restricted number of situations. Just too whom they are accountable has varied over time. The unifying thread longitudinally behind the variation is the idea of a 'neighbour' as defined thus by Lord Atkin in the English case of Donoghue v Stevenson (1932, AC 562 at 580): "There must be, and is, some general conception of relations giving rise to a duty of care, of which the particular cases found in the books are but instances... The rule that you are to love your neighbour becomes in law you must not injure your neighbour; and the lawyer's question, Who is my neighbour? receives a restricted reply. You must take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour. Who, then, in law, is my neighbour? The answer seems to be persons who are so closely and directly affected by my act that I ought reasonably to have them in contemplations as being so affected when I am directing my mind to the acts or omissions which are called in question."

In the US, the test for the existence of a remedy of any breach of tort law, and not just negligent misstatement, is the test propounded by Judge Learned Hand in the case of the United States v. Carroll Towing Co. (1947; 159 F.2d169, 2d Cir.). Learned Hand's test for legal culpability for fault defines the defendant's duty of care as a function of three variables: (1) the probability that the accident will occur, (2) the gravity of the injury which will be suffered by the victim if the accident does occur, and (3) the burden of precautions adequate to prevent such accidents. If the cost to the defendant of avoiding the accident would have been less than the cost of the accident, discounted by the probability of its occurrence, the defendant's failure to avoid the accidents is termed negligence. (Calabresi and Hirschoff (1972, 1057).

The official rationale for a very narrow restriction of legal accountability is the 'floodgates' rationale of Chief Justice Cardozo, in the leading US case, Ultramares v Touche, Niven & Co (1931; 174 NE 441, New York). He said the law was concerned to avoid a scenario which creates "a liability in an indeterminate amount for an indeterminate time to an indeterminate class". In other words, the accountability line must be drawn somewhere, and drawing it only just outside the borders of contractual privity was not offensive to business interests. What the floodgates argument actually achieves, however, is a significant extra privileging of business and its ancillary professions over the rest of society in the matter of litigation risk. Business was already privileged over everyone else with the adoption of limited liability, since this protects stockholders of failing businesses from the claims of creditors. Cardozo's followers in the common law courts extended that privilege to the possible claims of those actually harmed by business and professional misstatement. It is one thing to point to the practical desirability of closing floodgates. It is quite another to apply a tourniquet to a wound that has not begun to bleed. A further side effect of the floodgates position is to equip firms with a respectable reason for non disclosure, since any disclosure at all carries a risk of being sued for negligent mis-statement. (Cohen 2001)

The inner orbits of accountability are, in conclusion, legally circumscribed. Anyone to whom I am responsible for my actions, omissions or statements at any particular time in any particular situation in any particular jurisdiction is in my inner accountability orbit/s. This is a matter of empirical observation of what legally is, not a normative matter of to whom I should have been accountable according to my religion, my conscience or my amygdala – nor according to yours or anyone else's either.

6.5.3 MIDDLE ORBITS OF ACCOUNTABILITY

The courts would only be likely to open the locked Cardozo floodgates a little if clearly obliged by statute to do so. That would only happen if a majority in a legislature were

persuaded to vote in favour of a change in the law. That has scarcely happened against the banksters in response to the GFC, and we have to go back to the crisis before that to see what spurs legislatures into tightening regulations on normal business practices. The crisis before the GFC was the Enron, World Com etc accounting frauds that led the US Congress into passing the 2002 Sarbanes Oxley Act which required new disclosures, renewed levels of commitment to probity and (in section 407) the dawn of financial literacy within the corporate audit committees, inter alia.

Legislatures react to outrage expressed loudly by a sufficiently large volume of the voting public. The extension of legal accountability to a wider range of stakeholders would, accordingly, be in response to outrage by a sufficiently big and/or influential section of the public to a future evasion by prominent businesses of its perceived responsibilities to stakeholders. Perhaps it is slightly more likely that significant omissions rather than positive commissions might be the proximate causes of the outrage. Existing law and stock market regulation already covers failure to disclose price sensitive information. Stakeholders other than stockholders or creditors would need to be involved then, as these two categories already have laws to rely on, especially in takeover, bankruptcy or solicitation of new financing situations. Other stakeholders are, principally, customers, neighbours, employees, tiers of government, suppliers. Of these, suppliers and customers have legal remedies already available for non-



supply, non-payment and defective supplies; and have the law of contract's quite tough rules on misrepresentation to provide them with remedies against negligent misstatement, and indeed against torts generally committed by the business against them.

Tiers of government have many political and economic instruments to pressure businesses with. Neighbours and employees are the least legally protected, and it is from these groups that it is therefore most plausible to expect the sources of sufficient outrage to drive the next legislative changes in corporate accountability. When considering employees' capacity for politically significant outrage, it is apt to be worth keeping in mind the huge difference in "utility" between the dollars constituting dividends and capital gains/losses on the one hand and the same amount of dollars representing the exclusive source of a livelihood, on the other hand.

However, we need also to consider the causes of the considerable inertia and opposition to the prospect of any extension of legal accountability within the business sector of society. Key to such a consideration is the contest between ideologies to dominate the generally accepted idea of what constitutes the public interest. That contest is currently, and for many years past, dominated by the voices of the Right. Underpinning that domination is the privileging of the economy over society and polity as a result of a process described next.

Disembeddedness is rooted in the belief that the economic system operates according to universal, natural laws (Polanyi 1957a, Granovetter 1985). The essence of disembeddedness is that the economy operates according to this natural order, but society does not. The will of human beings as expressed in cultural norms or political processes is reduced to a "constraint" on the economic sphere of life. The "natural" economy has no need for overt human control and essentially runs on automatic pilot. Indeed, interference by the state or other institutions threatens the very existence of the "natural" economy. This ideology evolved slowly from Hobbes, Newton and Montesquieu to Adam Smith, who collectively embedded the ideal of a natural order to supplement, later to replace, the divine one. It was not until the nineteenth century that the belief in a natural order gave rise to disembeddedness. The economy is governed by natural laws, while the rest of society operates according to social laws and customs. Natural laws are universal and invariant; social laws are not.

According to Polanyi (1975b), markets were extended to all areas of cultural life, creating fictitious commodities for land, labour, and money with the effect of reducing all of social existence to a single motivation, the desire for gain. As a result of the mercerization of social life that occurred during the nineteenth century and later, "economic" became synonymous with "market," and the "economy" was transformed into a system that is somehow capable of being understood separately from the political system, social norms, or cultural history. In the disembedded economy, the economy, governed by natural a priori laws, takes precedence

over the transitory, limited, and possibly ill-considered activities of the "noneconomic" sector. The result is that in a disembedded economy, democracy and the public interest are inevitably trumped by economic concerns.

The natural law of the market is based on the individual's inherent desire for gain. Thus, in the economic sphere, there are only individuals and only private interests. The atomism of economic liberalism means that there is no separate concept of the whole. Society, or "the public," is merely an aggregation of individuals, and the "public interest" is the aggregation of private interests. In Ayn Rand's inimitable words: The "public interest" is the "intellectual knife of collectivism's sacrificial guillotine." "Since there is no such thing as the 'public interest' (other than the sum of the individual interests of individual citizens), since that collectivist catchphrase has never been and can never be defined, it amounted to a blank check on totalitarian power..., granted to whatever bureaucrats happened to be appointed." (Rand 1967, p. 126). The expropriation, in her childhood, of her father's business in Russia by the Bolsheviks may perhaps have affected Rand in her subsequent views.

To the extent that such problems as poverty, inequality, segregation, education, or family structure are viewed as social issues, they remain firmly outside the purview of "the economy." For example, poverty was clearly viewed as a social problem during the nineteenth century. As a social problem, poverty can have no effect on the economy, and policies designed to alleviate poverty through economic means were wrong and unnatural, because one should not attempt to solve social problems by economic means, and any failure to solve social problems will have no effect on the economy. David Ricardo, discussing the Poor Laws, stated, "The principle of gravitation is not more certain than the tendency of such laws to change wealth and vigour into misery and weakness...until at last all classes should be infected with the plague of universal poverty" (Principles of Political Economy, quoted in Polanyi 1957b, p. 127). In other words, in a disembedded economy, disembeddedness is viewed as preferable, and any attempt to merge the separate spheres of economy and society is doomed to failure.

The ideology of disembeddedness not only excludes and denigrates social problems and democracy; it attempts to make them irrelevant. Economic objectives always take precedence (Mazumdar 1996). Often, the primary objective of the economic sphere is economic growth. Consequently, any alternative social goals must be discussed in terms of their relationship to economic growth.

Disembeddedness has been a persistent and convenient ideological lens for many economists and politicians through which to view the economy and to abdicate any responsibility for the public interest. The disembedded economy relies on the myth that the natural laws of the marketplace will naturally serve the "public interest."

In a disembedded economy, the aggregation of private interests is presumed to add up to the collective public interest. Thus, the ideology of disembeddedness reduces the "public interest" to a quantitative and individualistic judgment that is the outcome of natural economic laws. In contrast, an embedded economy is defined as a society where economic values are not necessarily the preeminent values, and the public interest is determined by social and political processes. Changing the boundary between the inner and middle orbits of accountability will require a successful assault on economic embeddedness, the very assault on which critical perspective writers have been engaged, indirectly, for decades.

The characterization of a group as a stakeholder is not nearly enough to establish a purely legal duty towards it, but it does establish the possibility of an ethical duty. Law requires someone affected by our actions or statements to be sufficiently proximate to us, but ethical paradigms other than contractarianism, have no such requirement. If our actions or omissions are foreseeable likely to harm some group of people, then that suffices to deem that group a stakeholder group. Inherent in that characterization is the imputation of a fiduciary duty on the firm to act as a trustee for the stakeholder at least to the extent of taking positive care to avoid causing harm to the stakeholder. Inherent in the Corporate Social Responsibility (CSR for short) body of literature, actual CSR actions and disclosures



and in the green accounting protagonists is the assumption of both the ethical validity and the empirical existence of a fiduciary relationship.

According to Litman (2007, 14), there are three preconditions for fiduciarity. They are:

- i. fiduciaries have scope for the exercise of some discretion or power;
- ii. fiduciaries can affect the legal or practical interests of beneficiaries through the unilateral exercise of their discretion or power; and
- iii. beneficiaries are peculiarly vulnerable to or at the mercy of fiduciaries holding the discretion or power.

Litman's test for fiduciarity works for the middle orbit of accountability. It is not constrained by legal recognition of a duty, as is the case for the inner orbit.

In the middle orbits of accountability, then, are stakeholders and what Atkin called "neighbours". They are outside the legal protection available to the inner circle. They are, however, readily identifiable as people affected by the firm's actions, omissions or statements, to the point where it is reasonably possible that the protection of the law would be extended to them but for the floodgates and forseeability barriers currently preventing them. It may itself have an inner zone of Kami people – kith, kin, clan and close peers; and have an outer zone of strangers. Ethical considerations extend to all in this middle orbit.

6.5.4 OUTER ORBITS OF ACCOUNTABILITY

In the outer orbits of accountability lie animals (other than our middle orbit pets), plants, aliens, androids and posterity. A number of writers have developed ethical paradigms that include accountability to and for non-humans, including plants (Lawler 2007; Van Bueren et al 2005, Birch 1993, Regan 2003, Plumwood 2000). With none of these can we have the communications or interactions that we have with the humans alive and kicking in the inner and middle orbits of accountability. The difficult issue with this set of accountability orbits is where the outermost boundary lies.

In the outer orbits, forseeability of harm is not as clear as in the inner and middle orbits. If a firm cannot reasonably foresee the consequences of their actions and omissions beyond a certain period, because of technological, scientific or other factors entirely beyond their control, then the firm cannot ethically be burdened with a fiduciary duty to someone adversely affected by their acts or omissions. Causation of harm is not enough to ground accountability for it. We cannot sue someone from the sixteenth century for causing the death of the last dodo. We cannot hold tobacco companies culpable back in the First World

War for subsequent lung cancer of the troops in the trenches, because they then had no basis for guessing the existence of the chain of causation we now take for granted. There is a valid technological and epistemological limit here that is relativistic over time periods, and indeed over epistemes, but which is not ethical relativism, because it is not culturally driven as regards the values that energize it. Within the sustainability list of issues, there are many acts and omissions whose consequences are foreseeable and whose risks are appreciable. There are also, however, developments such as genetically modified food where the risks and consequences are almost entirely unknown.

The more difficult issue with sustainability is the ethical claim of posterity.

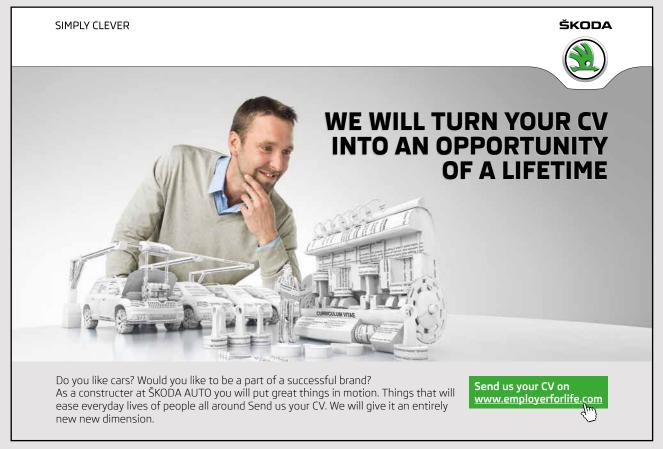
It is not a matter of why should I do anything for posterity as it has never done anything for me. It is not a matter of hoping to avoid the hatred of a group of people I will never meet for the harm I/we did them. It is not a matter of being childless and therefore not having in one's brain anything to make me care about the descendants of strangers.

It is a matter of the green and planetary equivalent of the well-known stock-market-driven cost of financial capital. How do I compare the claims of different generations in the future and by what do I discount their futurity to get their present value? If the number of future members is finite, then their present value is infinitesimal. Do I, alternatively, say there are infinite numbers of future generations, so the present value of posterity's interests always must exceed the present value of those now alive? Do I take a deontological line and say any possibility of harm to any possible future inhabitant of the Earth is inherently bad and must be avoided? If I say either of the last two in order to justify taking posterity seriously as a group about whom I ought to care, then, logically at least, my views on right to life issues are affected.

To elaborate the last remark, I have to reconcile my view with whatever I may happen to believe in the debate between pro-life and pro-choice. If future lives have an ethical claim on me, what claim does a foetus have? If I am pro-choice, I say it has none, because it is not yet a life. Nor yet, however, is any member of posterity. If I value unborn posterity over an unborn foetus, I am implying the ethical value of a general group of unborn people who will eventually be alive is ethically more valid than a singular identity of a person whose entry into life is under my control (Torcello 2009). This is a tenable but slightly awkward pair of positions to reconcile logically, so it is as well that our amygdalas and prefrontal cortices do not require logical consistency across our ethical positions. Rather, they are care theorists for whom the particularities of the individual situation are everything. However, if our root ethical value is not life itself but the minimization of suffering, then a pro-choice position is entirely consistent with a wish to avoid harming posterity.

Indeed even the law in certain jurisdictions already has a tort of wrongful birth and wrongful life (Fordham 2005). Wrongful birth and wrongful life become actionable torts only when the primary ethical value becomes (in the context) freedom from suffering and not life itself. Writers in bioethics have debated whether previous definitions of the boundaries of life will do any longer, not only in the context of abortions but also of organ donation, prolonged vegetative states and self-determined euthanasia. (Harvey 2000, Isch 2007, Veatch 2004).

Religions have tended to praise suffering while being sure to point out the good do not have to endure it in the afterlife. All religions put a primary ethical value on life itself, and they tend to see suffering as quite a good thing that educates the soul to behave better. Religions in that sense are not so much the opiate of their people as the scourge. Even religions such as Hinduism and Buddhism, that believe in reincarnation, value life over freedom from suffering. Buddhism in particular aims to eliminate suffering by eliminating attachment and desire; but it privileges authorized disciples and their teachers with a fast track to getting off the wheel of incarnation altogether. Moreover, anyone who believes in reincarnation has a strong reason to support sustainability perspectives, as they are thereby saving their own lives, even though they will not in future remember that they did so in this life.



Where then can we draw the outermost boundary of accountability in building a general theory of accountability? One answer is that we cannot draw one at all in any ultimate way. All we can do is to array orbits of people, things, animals, plants, posterities, and alien or artificial life forms in sets of steadily decreasing power to fire up our amygdalas or stimulate or prefrontal cortices. The outer set of orbits will scarcely have any power to change our actions or attitudes at all, and the discounted net present value of their welfare for us will tend to zero. However, the decreasing power of remote stakeholders is asymptotic and no valid case can be made for setting an arbitrary boundary so far away from us. In the realm of ideal states and ethical correctness, there is no equivalent of Cardozo's floodgates to fear.

In summary what is posited in this section is an orbital theory of accountability. It holds that the inner orbit of accountability by me or by my firm is those people the law obliges me to account to. In the middle set of accountability rings are kin, peers and animals I care about and who constitute my 'Kami' - who is 'one of us'. To these individuals I will willingly account for those actions, statements and omissions I know have made, if I am concerned to be a good person or a socially responsible firm. Finally, there are outer sets of accountability orbits including posterity for whom I am persuaded that care is due but with whom there is no probability of reciprocal relations. This is a 'positive' theory of accountability. A normative theory begins with the assertion that we ought to feel a fiduciary duty to everyone, everywhere, throughout time and we should hence minimize the harm we do to others and maximize the good. Such a normative theory of accountability is itself the core of many ethical and religious paradigms from the Golden Rule onwards. It seems so unrealistically unattainable as to be incapable of being useful for decision making purposes. For the foreseeable future then, the orbital theory of accountability will remain more of a positive theory than a normative one, but it is not a pure positive theory as it is making its own value judgments in the designation of three accountability orbits.

6.6 ETHICS, ETHICAL DEVELOPMENT AND PROFESSIONAL ACCOUNTANTS

6.6.1 **ETHICS**

Ethics concerns what is believed to be right and wrong; good and bad Ethical relativists say what you believe to be right depends where you were born and how you were brought up, so there is no such thing as universal ethics. Universalists believe some things are always right or wrong wherever you are – such as murder is always wrong. Universalists include religions, western ethical philosophers, eastern ideas of karma, the UN's Declaration of Human Rights and ideas of the existence of a public interest and a duty to posterity.

Professional ethics could be viewed in either of the above ways, depending on whether you think some of its values come from universal values or that all of its values are driven by its own interests only.

6.6.2 ETHICAL DEVELOPMENT

Within the field of ethics there is one theory of how an individual's ethics mature and develop over time, Kohlberg's theory and it is not accepted by all ethicists by any means. However it is a very useful tool for clear thinking about ethics and accountability so we will profit from understanding its main points.

Kohlberg (1966,1976; Kohlberg, Levine and Hewer 1983) postulated that morality begins with fear of punishment when discovered doing wrong, as used to happen with children before smacking became unacceptable.

From this first level a child starts to be motivated by reward for good conduct as well as by fear of punishment for bad behaviour. This "stick and carrot" phase is where most people naturally are, but many people are motivated even more by peer pressure and an idea of what is normal, respectable and socially acceptable — which is the motivator at level three. The peer group can be the family, the gang, the clan, the football team, the profession or the race or country. It enables people to transcend fear and greed, which makes it higher than levels one and two. Armies operate at level three and at level three loyalty is a primary virtue.

Few people develop above level three, thought Kohlberg. At level four, the peer group becomes society as a whole and the public interest and a person at level four has internalized the primacy of the public interest of society as a whole above any factions within it.

At level five, ethics become conscious and are consequentialist where a person considers the consequences of their actions before acting and takes the decision that promotes the best consequences. A widespread form of consequentialism is utilitarianism which holds that the ethical decision is the one which promotes the greatest good of the greatest number. A higher form of that is Kant's Categorical Imperative which holds you should behave as you would accept everyone else behaving. Anyone able to do that would have got to the top of Kohlberg's level six where ethics are deontological, seen to have an inherent worth; but this cannot be just religious conviction as that could operate at levels one or two. There must also be some rationale such as that provided by Kant.

The relevance of Kohlberg to accountability is the tension between level three factional loyalty and level four public interest. Accounting professions justify their legitimacy through

their alleged commitment to the public interest, but legislatures from the USA to the whole of the rest of the world have found it necessary to pass laws to protect the public interest from accounting and auditing harm caused by fraud or negligence.

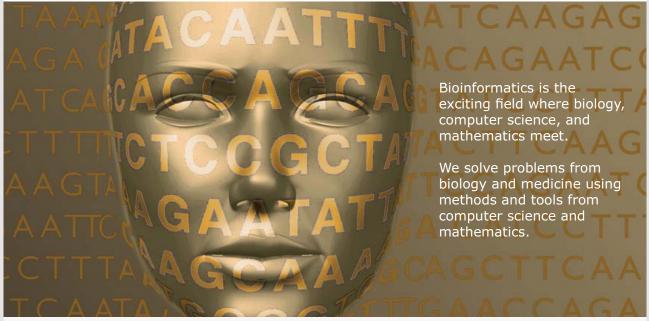
6.6.3 IESBA'S CODE FOR PROFESSIONAL ACCOUNTANTS

Professional accounting ethics are found in the codes issued by the major professional accounting bodies around the world and they all hold, usually in their preface or introduction, they are serving and defending the public interest. The International Federation of Accountants, IFAC, has a template issued by its subsidiary, the International Ethics Standards Board for Accountants, titled "Handbook of the Code of Ethics for Professional Accountants" and in the text that follows we will quote from its 2015 edition.

They require that anyone entering the profession is a fit and proper person, which means honest and conscientious, not a criminal and not a bum. They require that accountants should keep their clients' affairs strictly confidential, unless the law compels otherwise, as is often the case with tax laws. They require that accountants should exercise "due care"



Develop the tools we need for Life Science Masters Degree in Bioinformatics



Read more about this and our other international masters degree programmes at www.uu.se/master

when attending to clients' affairs. This means they should work hard, carefully and using up to date knowledge and expertise.

The final requirement is integrity, which is generally taken to mean respectability and honesty.

However, the founder of sociology, Max Weber, has a deeper notion of integrity which resonates with institutional theory's idea of decoupling. Weber (2004, p. 34) distinguished ethics of responsibility from ethics of conviction and most people have these two sets of ethics separate, but people with true integrity have them united. Ethics of responsibility covers what you do to feed yourself and family, which usually means what you do to keep your job. Ethics of conviction means what you think society, politicians and other people in general should do. Only rarely will the two ethics meet but when they do, that is true integrity.

The professional bodies mean something less than that. They just mean honesty and respectability, although most professional bodies do not specifically define what integrity means to them.

Ethics and proper professional conduct of the accountant

IFAC set up its subsidiary, the IESBA (the International Ethics Board for Accountants) to issue ethical guidelines for professional accountants around the world, including those who work in industry and government as well for accountants in professional practices. The IESBA Handbook declares in section 100.5 (IESBA 2015, p. 10):- "A professional accountant shall comply with the following fundamental principles:

- a) Integrity to be straightforward and honest in all professional and business relationships.
- b) Objectivity to not allow bias, conflict of interest or undue influence of others to override professional or business judgments.
- c) Professional Competence and Due Care to maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional service based on current developments in practice, legislation and techniques and act diligently and in accordance with applicable technical and professional standards.
- d) Confidentiality to respect the confidentiality of information acquired as a result of professional and business relationships and, therefore, not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for the personal advantage of the professional accountant or third parties.
- e) Professional Behaviour to comply with relevant laws and regulations and avoid any action that discredits the profession.

The principles are elaborated in the Handbook thus:-

"Integrity

110.1 The principle of integrity imposes an obligation on all professional accountants to be straightforward and honest in all professional and business relationships. Integrity also implies fair dealing and truthfulness

110.2 A professional accountant shall not knowingly be associated with report returns, communications or other information where the professional accountant believes that the information:

- a) Contains a materially false or misleading statement;
- b) Contains statements or information furnished recklessly; or
- c) Omits or obscures information required to be included where such omission or obscurity would be misleading.

When a professional accountant becomes aware that the accountant has been associated with such information, the accountant shall take steps to be disassociated from that information. (p. 16)

Section 120 Objectivity

120.1 The principle of objectivity imposes an obligation on professional accountants not to compromise their professional or business judgment because of bias, conflict of interest or the undue influence of others. (p. 17)

Section 130 Professional Competence and Due Care

130.1 The principle of professional competence and due care imposes the following -obligations on all professional accountants:

- a) To maintain professional knowledge and skill at the level required to ensure that clients or employers receive competent professional service; and
- b) To act diligently in accordance with applicable technical and professional standards when performing professional activities or providing professional services.

Section 140 Confidentiality

- 140. The principle of confidentiality imposes an obligation on all professional accountants to refrain from:
 - a) Disclosing outside the firm or employing organization confidential information acquired as a result of professional and business relationships without proper and specific authority or unless there is a legal or professional right or duty to disclose; and
 - b) Using confidential information acquired as a result of professional and business relationships to their personal advantage or the advantage of third parties.
 - 140.6The need to comply with the principle of confidentiality continues even after the end of relationships between a professional accountant and a client or employer.
 - 140.7 covers the exceptions which include "a professional duty to disclose" 140.7(c) p. 20.



Click on the ad to read more

150 Professional Behavior

150.2 In marketing and promoting themselves and their work, accountants shall not bring the profession into disrepute. Professional accountants shall be honest and truthful and not:

- a) Make exaggerated claims for the services they are able to offer, the qualifications they possess, or experience they have gained; or
- b) Make disparaging references or unsubstantiated comparisons to the work of others.

In pursuing the above principles of professional behaviour an accountant is apt to be confronted by a variety of threats which s100.12 of the Handbook (IESBA 2015 p. 12) lists and explains as follows:

- a) Self-interest threat the threat that a financial or other interest will inappropriately influence the professional accountant's judgment or behavior;
- b) Self-review threat the threat that a professional accountant will not appropriately evaluate the results of a previous judgment made, or activity or service performed by the professional accountant, or by another individual within the professional accountant's firm or employing organization, on which the accountant will rely when forming a judgment as part of performing a current activity or providing a current service;
- c) Advocacy threat the threat that a professional accountant will promote a client's or employer's position to the point that the professional accountant's objectivity is compromised;
- d) Familiarity threat the threat that due to a long or close relationship with a client or employer, a professional accountant will be to sympathetic to their interests or too accepting of their work; and
- e) Intimidation threat the threat that a professional accountant will e deterred from acting objectively because of actual or perceived pressures, including attempts to exercise undue influence over the professional accountant."

A professional accountant may market his/her services but only within the constraints of professional integrity and section 250 of the Handbook specifies what this means as follows: "250.1 When a professional accountant in public practice solicits new work through advertising or other forms of marketing, there may be a threat to compliance with the fundamental principles. For example, a self-interest threat to compliance with the principle of professional behavior is created if services, achievements, or products are marketed in a way that is inconsistent with that principle.

250.2 A professional accountant in public practice shall not bring the profession into disrepute when marketing professional services. The professional accountant in public practice shall be honest and truthful, and not:

- a) Make exaggerated claims for services offered, qualifications possessed, or experience gained; or
- b) Make disparaging references or unsubstantiated comparisons to the work of another.

If the professional accountant in public practice is in doubt about whether a proposed form of advertising or marketing is appropriate, the professional accountant in public practice shall consider consulting with the relevant professional body."

Also central to professional integrity and objectivity is professional independence which section 290.6 (p. 47) explains thus:-

"290.6 Independence comprises:

a) Independence of Mind

The state of mind that permits the expression of a conclusion without being affected by influences that compromise professional judgment, thereby allowing an individual to act with integrity and exercise objectivity and professional skepticism.

b) Independence in Appearance

The avoidance of facts and circumstances that are so significant that a reasonable and informed third party would be likely to conclude, weighing all the specific facts and circumstances, that a firm's, or a member of the audit team's, integrity, objectivity or professional skepticism has been compromised."

One circumstance that creates an impression of insufficient independence is when a partner in an audit firm has been in charge of a client's assurance (and possibly other) affairs for so long that there exists a degree of closeness between them that makes objectivity harder to apply than if their relationship were new, arms length and not socially underpinned. Accordingly, s290.149 (p. 75) requires the firm sets a seven year limit on the period a senior partner can be in charge of an audit of a "public interest" entity (which includes all companies with stock exchange listings), and further requires that in the two years following the seven, the partner has nothing professionally or commercially whatsoever to do with the client or with his audit colleagues now auditing the client.

Another threat to the accountant's perceived objectivity is when a client accounts for over 15% of the firm's fee income and in this case s290.219 requires the firm to engage a third party to review the key aspects of the audit, or for the firm to take steps to reduce its relative dependence on the client.

Summary of Chapter 6

In this chapter we have learnt about some theories of accountability; stakeholder, legitimacy and institutional. We have learnt the orbital theory of accountability. We have looked at the Kohlberg paradigm of ethical development. We concluded with the IESBA's main requirements in its code of ethics for professional accountants, which is reflected in most countries' national professional bodies' code of conduct. The core assertion is that the purpose of ethics is to safeguard the public interest, and this periodically involves placing it above personal gain, greed and corporate wealth. In the next chapter we will look at situations where both public and private interests are harmed by self seeking or incompetent corporate conduct.



Test Questions

- 6.1 What are the roles and relationships that an accountant may take? Is there an inherent possibility of conflict?
- 6.2 Discuss the application of professional judgment in accounting decisions.
- 6.3 What is professional independence and what are the main threats to professional independence? How can the threats to independence be minimized?
- 6.4 Explain the five objectives of the accounting profession.
- 6.5 What must the professional accountant display by way of professional conduct and expertise?
- 6.6 What does legitimacy theory postulate as the thing that protects the public interest when professions are allowed to regulate themselves?
- 6.7 How can you tell which kind of isomorphism applies to a situation where behaviour is converging?
- 6.8 How is stakeholder theory in conflict with agency theory?
- 6.9 What connects legitimacy theory with the idea of a middle orbit of accountability?
- 6.10 Why is posterity relevant to present values of anything?
- 6.11 What Kohlberg level do professional groups operate at and what level might they claim to operate at?
- 6.12 What is surplus value and how is it different from value in use?
- 6.13 What is the principal assertion of postmodernism and what is the implication for the idea of legitimacy?
- 6.14 What has Habermas got to do with accounting theory?
- 6.15 What is integrity?
- 6.16 What is the single criticism of accounting all schools of critical perspectives agree on?

7 ACCOUNTING PATHOLOGIES – FRAUD, FAILURE AND EVASION

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to explain the prerequisites and nature of fraud, the three main hypotheses in positive accounting theory and the three trajectories in the Argenti model of business failure,
- b) to understand the importance and nature of the two types of insolvency
- c) to evaluate the likelihood of failure of a non listed firm on the evidence available,
- d) to appreciate how fraud, failure and accounts manipulation overlap

7.1 AUDIT EXPECTATION GAP

A widespread view persists with the general public that the principal job of an auditor is to detect fraud and report it, and that auditing firms can reasonably and validly be sued and be subject to the payment of large damages if the court finds them guilty of negligence.

Research that examines the practice and effectiveness of fraud prevention and detection is premised on the auditor's obligation to detect materially misstated financial statements.

The accounting profession itself believes, however, that this is not a possible job to do and certainly not a responsibility of theirs. This rather large gap is called the expectations gap. One of the original justifications put by the founding fathers of the accounting profession in the nineteenth century was that their specialist expertise required statutory recognition and the granting of a monopoly on the right to practice, so as to protect the public interest from unqualified, unscrupulous and improper financial behaviour, which did indeed include the prevention of fraud (Howitt 1966, Kedslie 1990). By the early twentieth century, as the accounting profession had become recognized and established as a learned profession, the idea arose that the prevention and detection of fraud was not something always reasonable to expect (Howitt 1966). The English legal principle here was to assert that an auditor was a "watchdog but not a bloodhound." This meant that that obvious, egregious or readily detectable cases of fraud should indeed be detected by the auditors but concealed, not material and clever cases could not be reasonably expected to be blamed on auditor negligence. Towards the end of the nineteenth century it had become established in the courts of the English speaking common law jurisdictions that even when an auditor should have detected fraud,

the injured plaintiff would not get recompense through the courts unless the court believed the plaintiff was 'proximate' enough to the firm for the firm to have his/her interests at the front of their minds when issuing any financial statements. The idea of the word 'proximate' is like stakeholder theory's idea of salience – someone or some group a firm would have in mind when it makes its decisions because it is OBVIOUS that the stakeholder significantly affects, or is significantly affected by, the firm's decisions.

Proximate is therefore both near and also important.

With the virtual abandonment of the original idea that the auditors were obliged to further the public interest by defending the public against fraud in financial statements, two responses evolved in parallel. The first was that the state through regulatory bodies such as first the SEC, Securities and Exchange Commission, and more recently the PAOB, Public Accounting Oversight Board, took over the job of defending the public interest and regulating the publication statements by listed companies, albeit closely advised in that duty by the accounting profession. The accounting profession in its evolving design of its conceptual framework placed renewed verbal emphasis on the public interest as central to its mission, just the same (IESBA 2015 Introduction).

Trust and responsibility

NNE and Pharmaplan have joined forces to create NNE Pharmaplan, the world's leading engineering and consultancy company focused entirely on the pharma and biotech industries.

Inés Aréizaga Esteva (Spain), 25 years old Education: Chemical Engineer

– You have to be proactive and open-minded as a newcomer and make it clear to your colleagues what you are able to cope. The pharmaceutical field is new to me. But busy as they are, most of my colleagues find the time to teach me, and they also trust me. Even though it was a bit hard at first, I can feel over time that I am beginning to be taken seriously and that my contribution is appreciated.



The second response was the rise of a new profession to do the job mainstream accountants and auditors were not willing and able to do, namely the prevention and detection of fraud. That profession is forensic accounting which means the investigation and prevention of financial crime. Unlike the forensic pathologist whose job is all about detections, forensic accountants also have an interest and a role in prevention, so the prefix "forensic" stretches a little further for the new accountants.

7.2 FRAUD

Forensic accounting deals with fraud and we have yet to define that word. Fraud means the dishonest manipulation of accounts and/or the improper appropriation of cash or other resources for the purposes of enriching oneself at the expense of someone else. The real, apparent or imagined consent of the victim is irrelevant to the question of whether or not the criminal activity of fraud has taken place but may well affect the punishment for it. Fraud is a kind of theft. Theft is any act or any omission which uses someone else's property as if it were your own to your own advantage at their expense. Good stewardship, being a faithful agent of a principal also involves using someone else's property as if it were yours but doing so to their clear advantage without your taking any secret or unjust gain from it. Motive counts, as in most traditional crimes. There has to be "mens rea", a guilty mind (with an intention to steal or borrow without permission).

Stealing from one's employer is called embezzlement and generally carries a jail sentence. Robbery, burglary, mugging, chugging (near mugging by charity collectors), demanding money with menaces, oppressive debt collection tactics are examples of actions that are crimes in many countries and that all have an aroma of theft about them. Misleading or deliberately false accounting is not such an obvious case of theft however, so we need to make the connection between the two things.

When someone lies about their profits, that deprives someone of the money they would have got if the profits had been fully and honestly described. The tax authorities are the most obvious victims of such lies and many countries have especially strict penalties for firms and their auditors who are successfully prosecuted for deliberately misleading the tax arm of government. In many countries too, the tax authority is the most likely unpaid creditor to bankrupt a person or firm for unpaid bills. If a firm says its profits are less than they actually were, shareholders will accept a lower dividend level than they otherwise would, so they suffer the opportunity cost of such lying. Lying is not a crime in itself, but lying about money and accounts in a public document is the crime of false accounting which is a subdivision of fraud.

Fraud always involves deceit, almost always involves dishonesty and always resides in producing numbers that lie to stakeholders on the inner orbit of accountability – i.e. stakeholders whose rights to accurate information are legally recognized.

When police or private detectives investigate a crime, they seek a combination of motive, means and opportunity on the part of their suspects. Did the suspect have the tool, instruments, knowledge, expertise and or skills to commit the crime is what "means" is all about. Did the suspect have a reason, a motivation, desire, will or drive to commit the crime – and such a motive has to be sufficiently proximate to the crime and its victim to establish guilt in court beyond reasonable doubt – usually beyond a 95% probability. Lastly, did the suspect have access and time enough to have the opportunity to commit the crime. If the answer to all three is yes, the suspect becomes a prime suspect. It then remains to prove beyond reasonable doubt the suspect was the one that committed the crime.

Fraud has its close equivalent of the three necessities for successfully detecting a criminal. They constitute the fraud triangle as it is called (Cressey 1972, 1973).

The three elements of the fraud triangle are motive, opportunity and rationalization.

Cressey (1973) thought motivation to commit fraud often arose from a person suffering a problem they cannot or will not "share" with someone else such as a counselor, often out of shame or sometimes guilt. That problem causes an accumulation of pressure and stress on the person which crystallizes into a motivation to obtain a solution, or a catharsis, through crime such as fraud (Albrecht et al 2012). However, we should not ignore the possibility that greed alone, with no non-shareable problem involved at all, may be motivation enough in some cases. In others, addiction can be a driver, including addiction to gambling especially.

The second element of the fraud triangle is opportunity. This can arise from weak internal control, weak enforcement of rules and regulations; a perception that even if caught, punishment will be light; and a brief or unexpected situation of being in authority or in a place when the ability to sign for cash or resources presents itself, as acting for a temporarily absent boss (Tinker and Okcabol 1991, Barlett et al 2004).

The third element of the triangle is rationalization. This means avoidance of guilt by the perpetrator of fraud through an internal dialogue of excuses (Rossouw et al 2000, Willott et al 2001). A common rationalization is to blame other people for being forced into the position where the perpetrator had to commit the fraud – technically this is switching the "locus of control" from internal to external. Another rationalization is that fraud is a victimless crime, so nobody is really hurt. A third is that anyone would do it if they could get away with it. The idea here is that for someone to commit fraud, they must be able

to excuse it to themselves inside their head. There may, however, be people who believe so deeply in a kind of social Darwinism, law of the jungle or the notion that there is no room for morality in the struggle for survival. Such people are not even at level one in the Kohlberg (1969) schema and they do not need excuses as they are effectively sociopathic.

The status of the fraud triangle is that of a theory that criminologists and audit and forensic accounting scholars use extensively, but like the EMH and CAPM in event studies, the triangle is often seen as a good starting point to analyze frauds but probably not the whole story. There we can leave it.

7.3 MANIPULATION AND POSITIVE ACCOUNTING THEORY

According to prospect theory, an investor considering a risky investment (a "prospect") will separately evaluate, prospective gains and losses. This separate evaluation contrasts with decision theory I, where investors evaluate decisions in terms of their effects on their total wealth. Separate evaluation of gains and losses about a reference point is an implication of the psychological concept of narrow framing, whereby individuals analyze problems in too isolated a manner, as a way of economizing on the mental effort of decision-making. This



economizing on mental effort may derive from limited attention. As a result, an individual's utility in prospect theory is defined over deviations from zero for the prospect in question, rather than over total wealth.

Prospect theory also assumes that when calculating the expected value of a prospect, individuals under- or overweight their probabilities (i.e., posterior probabilities are less than or greater than those resulting from application of Bayes' theorem) Underweighting. This bias may lead to earnings manipulation for firms who are in danger of reporting small losses.

Prospect theory has been found to provide plausible explanations of actual accounting behaviour by many researchers including most recently by Kothiyal et al (2014) but has been disconfirmed in a number of contexts too (Birnbaum et al 2008), so it is one of those theories which depend on context and the validity of underlying assumptions to be true and useful. However, even in the research which fails to support prospect theory, it is usually the case that fear of small loss is more powerful than desire to gain equally small profits.

Positive accounting theory claims to explain aspects of actual accounting behaviour and to be a value free neutral explanation of it. Critics have said there can be no such thing as value free explanations of accounting behavior as we saw in Chapter 6. Watts and Zimmerman (1986) say nevertheless their theory and its hypotheses do provide real insight into cause and effect relationships in the world of manipulated accounting reports.

Under positive accounting theory, management of a firm will choose among permitted accounting choices to produce the picture they want to communicate to the investing public. The picture will be especially affected by three possible circumstances:

- 1. The extent to which managerial remuneration comprises bonuses based on company earnings,
- 2. The extent to which the firm is in debt and the proximity of its debt or of its earnings to targets and ceilings set by restrictive covenants imposed by the lenders in the loan agreement; and
- 3. The extent to which the firm assesses its political, publicity or litigation risks as severe, such that large claims may be made against it for an act or omission it is alleged to have committed.

The first of the above gives rise in positive accounting theory, invented by Watts and Zimmerman (1986, 208–210), to the bonus plan hypothesis. This postulated that when managers' own remuneration is significantly composed of bonuses based on the firm's earnings, the accounts will be manipulated to make the current earnings look as large as possible within the law, the accounting framework and the auditor's tolerance. Thus, accrued expenses will

be minimized, provisions will be constrained and closing inventory will be high relative to the level that ratio of opening inventory to last year's sales. All these manipulations are legal and within the accounting framework, but all of them increase the size of reported earnings by the firm. These manipulations are intended to enrich management at the expense of investors, so they are not value neutral, but are legal so cannot be fraudulent.

Bonuses are payable to managers when profits fall above a minimum figure called the bogey but there is a ceiling to the amount of bonuses payable governed by the size of the profits gap fixed in advance in the managers' contracts. Between the bogey and the cap, managers have an incentive to manipulate reported accruals so as to show the biggest possible figure for this year's profits. The elements of working capital can be physically manipulated as discretionary accruals to achieve this objective. Provisions for doubtful receivables can be reduced, closing inventory can be increased, payables and accrued expenses can be minimized just before the books close. Since all these manipulations are of real items, the accounts will still faithfully represent the firm's current economic reality; for it is that reality that has been manipulated, not its reflection in the accounting mirror. Research such as by Healy (1985) demonstrates empirically that firms with profits between the bogey and the cap will adopt income increasing accruals but firms whose profits are outside that zone in either direction will tend to adopt income decreasing accruals (to help get next year's earnings into the zone). McNichols and Wilson (1988) found the same phenomena for manipulation of the provision of doubtful debts.

A bonus plan does not always give managers incentives to increase earnings. If earnings are below the minimum level required for payment of a bonus, managers have incentive to reduce earnings this year because no bonuses are likely paid. Taking such an "earnings bath" increases expected profits and bonuses in future years. Similarly many bonus plans have bonus caps or ceilings, so any earnings of the firm above the ceiling level do not feed more bonus money into the pockets of the managers, so here too they have an incentive to manipulate earnings down rather than up. What is clear is that tying managerial bonuses to corporate earnings creates a moral hazard wherein managers may be more likely to manipulate earnings than if their bonuses were to those not tied indicators.

The second hypothesis is the debt covenant hypothesis (Watts and Zimmerrman 1986, 216–217). It postulates that a firm will manipulate earnings upwards, in the same ways as we just described for the bonus plan hypothesis. The debt covenant will require the firm to restrict dividends and new debt below definite pre-specified limits until the loan is paid back in full. It will be entitled to demand the whole loan back immediately if the firm breaks one of the covenant limits, so the firm takes these covenants seriously. Such covenants are the norm in America but not as frequently used elsewhere in the world. Elsewhere it is common to take personal guarantees from the major stockholders, to take first mortgages on

corporate premises but not always to restrict dividends and further debt. Suppose a covenant requires that the debt to total assets ration not exceed 50% and the dividend percent not rise by more than the rate of inflation, the managers can only increase the dividend payout and the amount of debt by increasing earnings and retaining that increase as reserves so as to increase the asset base of the firm and the income base of the dividends. This provides strong pressure to increase reported earnings.

The third situation gives rise to the political cost hypothesis (Watts and Zimmerman 1986, 234–240, 245) where earnings are manipulated downwards though not necessarily through big bath write downs. All that we considered as manipulation for the bonus plan hypothesis applies the other way round for the political cost hypothesis, so provisions and accrued expenses go up, closing inventory comes down and future liabilities such as pension fund payouts are discounted at a lower discount rate so their present value seems higher. All of this is to persuade the public in general and potential legal claimants in particular, that the firm does not have deep pockets to pay fines, settle damages or bear the full costs of oil spills, radioactive fallout or destruction of water purity (for example) that angry claimants may seek. This manipulation favours existing investors at the expense of external claimants, so is unethical, but not by itself illegal or fraudulent.

Sharp Minds - Bright Ideas!

Employees at FOSS Analytical A/S are living proof of the company value - First - using new inventions to make dedicated solutions for our customers. With sharp minds and cross functional teamwork, we constantly strive to develop new unique products -Would you like to join our team?

FOSS works diligently with innovation and development as basis for its growth. It is reflected in the fact that more than 200 of the 1200 employees in FOSS work with Research & Development in Scandinavia and USA. Engineers at FOSS work in production, development and marketing, within a wide range of different fields, i.e. Chemistry, Electronics, Mechanics, Software, Optics, Microbiology, Chemometrics.

We offer

A challenging job in an international and innovative company that is leading in its field. You will get the opportunity to work with the most advanced technology together with highly skilled colleagues.

Read more about FOSS at www.foss.dk - or go directly to our student site www.foss.dk/sharpminds where you can learn more about your possibilities of working together with us on projects, your thesis etc.

Dedicated Analytical Solutions

Slangerupgade 69 3400 Hillerød Tel. +45 70103370

www.foss.dk

FOSS

The Family owned FOSS group is the world leader as supplier of dedicated, high-tech analytical solutions which measure and control the quality and production of agricultural, food, pharmaceutical and chemical products. Main activities are initiated from Denmark, Sweden and USA with headquarters domiciled in Hillerød, DK. The products are marketed globally by 23 sales companies and an extensive net of distributors. In line with the corevalue to be 'First', the company intends to expand its market position.



Empirical research gives strong support to all three of positive accounting theory's main hypotheses (Healy 1985, McNichols and Wilson 1988). However, Tinker, Merino, and Neimark (1982) have argued that there is, and can be, no such thing as value free neutral positive theory of accounting; since its assumptions about market fairness, true value, income distribution and the underlying organisation and context of the economy and society within which accounting takes place are all endorsements of the economic and social status quo. Arguing that accounting is only concerned with looking at means and not at ends is, they say, patently disingenuous, for the disregarding of ends is tantamount to endorsing them.

7.4 ACCOUNTING AND BUSINESS FAILURE

Business closures, failures, bankruptcies, foreclosures and closures are normal feature of all business sectors of all economies'. Capitalism is about competition for resources, for customers, for prime locations, for productive managers and staff, for cheap labour and for maximum net after tax earnings. In all competitions there are winners, survivors and losers. In business, losers fail. It is therefore a bit of a shock to learn that there are no widely accepted theories of business failure, whether for large corporate groups, for sole traders, for car makers or for bankers, for cafes or for mining conglomerates. Mainstream economics says that firms fail when costs and expenses systematically and continually exceed sales revenue until the original equity capital is completely spent. If that capital is overspent, so there is a deficiency of net assets on the balance sheet which necessarily means equity is itself negative, such a situation is termed economic insolvency.

The trigger of business failure is the decision to close down the business. The business will usually conform to economics expectation that cumulative losses cause failure; but not always. Some failures cause the firm to be taken over by another for a cheap price and then the business continues as a going concern usually in slimmed down form. Some failures cause the State to take a controlling interest or give a large loan, because the damage to the rest of the economy or community of the failure becomes a closure is considered to represent an unacceptable political risk by the government. Usually, however, repeated losses trigger failures eventually.

Just as there is no general theory of business success, so there is no general theory of business failure. Given that failure is driven by repeated losses, why is it that sometimes quite profitable firms fail? In most cases the answer is insolvency, technical insolvency. This kind of insolvency is defined as inability to pay debts and installments on time. The reason technical insolvency often leads to bankruptcy of an individual trader and closure of a corporate business is this. Unpaid creditors are willing and able to pursue their claim through the courts. Some creditors who sue debtors will enforce their debt by getting

to court to seize the assets of the debtor and sell them. If the proceeds of that so called execution does not yield enough to pay off the creditors in full, then the court may be asked to wind up the company and/or bankrupt the sole trader. Bankruptcy is not just an economic and financial state of being broke, i.e. technically insolvent, but is also a legal status whose penalties vary between countries. In many countries, bankrupts are barred from voting, from holding public office, from directing any limited companies and from taking any loans from anybody without the express permission of a relevant court official. It may be better than being in jail, but being bankrupt is not being a free citizen either. It makes getting credit after the bankruptcy is over quite difficult. Tax authorities, customs offices, large credit card firms tend to bankrupt people and firms who do not pay their debts. Large business firms prefer to use debt collectors but will bankrupt in cases where they want to make a special example of someone.

Although there is no general theory of failure, there is a model that is useful for understanding some common pathways to failure. The model was invented by John Argenti (1976) in his book, Corporate Collapse. In it he describes three types of failure pathways that differ very considerably from each other.

The vast majority of failures and bankruptcies by number of firms is the type one failure. These failures are sole traders, small companies and partnerships and shops. Type one failures are doomed to fail from the start. They are in the wrong location or wrong market niche. The owner cannot keep records properly and may think of his personal expenses as no different from business ones, especially as regards travel and entertainment; but the tax authorities will teach him/her a hard lesson in the need to separate the two and not claim any personal expenses against tax as if they were business ones. The owner may have gone into a kind of business for which special skills, networks or licences were necessary without having them. Any one of these deficiencies can lead to failure. Two or more of them almost guarantee it. Accounting is basic here. Without proper records and accurate books, a sole trader cannot know the state of the business and misses early warning signs of financial disaster. Many small businesses have accountants do their tax every year. If they can afford it, they also have accountants keep the books between tax returns.

Type one failures are always small, almost always in less than five years since the business was first registered and almost always show no profits ever, certainly not enough for the proprietor/s to live on. Anyone can start a business. Anyone can then become a type one failure. Banks will lend to small businesses if the owner/s' house and other assets are taken as collateral and are valued far above the amount loaned. Then when the business fails, the owner loses the assets to the bank who sells them off to repay the loan. The possession of a mortgage title to the business owners' assets creates a moral hazard whereby the bank may lend to businesses it knows to be high risk, likely failures if the value of the security

it talks for the loan far exceeds the loan amount. Accordingly it is a mistake to equate the obtaining of a bank loan or overdraft with bank endorsement of a proprietor's business. It is sometimes the exact opposite of an endorsement. Of course a bank that makes an *unsecured* loan to a business is making a very strong statement of support for the business, but these are quite rare. Type one failures do not so much die as never succeed in achieving viability at any stage. We are all born to die, but type one firms are born dying.

We will skip type two for now as it makes a good conclusion to the all the areas covered in this chapter.

Type three failures happen to large old firms so they are opposite to type one failures. Rolls Royce, General Motors, Northern Rock Building Society, Penn State Railroads, Ansett Air: these firms all had type three failures but many were resurrected and reconstructed afterwards. Type three failures therefore may not mean the end of the brand, or even of the firm itself, but only of its flawed business arrangements. Type three failures are triggered by technical insolvency, sometimes by being unable to pay the latest wage bill, and the banks refuse to lend any more. In the few years before a type three failure, the firm's traditional line of business declines both in sales and profits, costs may inflate often because of a blow out on a development project and the firm faces slow decline and unavailability if it does not make



fundamental changes. It hires management consultants who tell it to diversify into different line of business, often by buying up successful businesses already in the suggested line. The firm accepts that advice and commits its resources to a new portfolio of products, services and processes that it has no previous familiarity with. There may be initial success especially if it retains the services of the CEOs of the firms it acquires and who were already driving successful firms. More often, however, those CEOs start their own businesses as soon as they are legally able to, and the large firm runs its new lines of business too much like it ran its old lines and this makes for failure. In some ways the type three firm struggling with new business is like the type one, in that it is doomed to failure when it diversifies into an area it knows nothing about unless it can bond to itself people who do have the requisite knowledge, experience and contacts. Both type one and type three, with hindsight, arrive at a point where they are doomed to fail for they should never have begun the business at all, as they were unfit to compete in it.

Finally, the type two failure is even easier to identify than the other two. It always fails suddenly. It has an initial period of spectacular success. It is always dominated by one person who is lionized as a business genius on the way up, but often regarded as a fraud on the way down, whether or nor s/he is convicted of any actual fraud. The type two firm often expands too fast, gets into too much debt, evades or avoids tax by means that propel it into the sights of the tax investigating branch, and often manipulates its earnings upwards even without bonus plans and debt covenants. A type two failure cannot also be type one because the little type one firm was doomed to fail from that start but the type two firm does very well in its early years. A type three failure could also be type two however if there is a charismatic individual in charge of the new line of business, if the failure is sudden and if the firm is large and old.

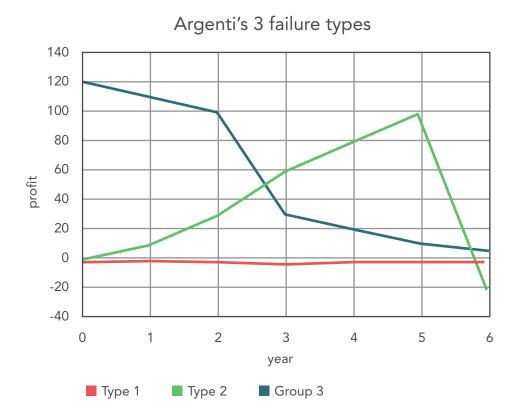
7.5 THEORY AND ACCOUNTING PATHOLOGIES

Argenti's typology is not a theory of financial failure. It is a description only, of three distinct ways to fail.

The fraud triangle is not a theory of fraud but just a generally accepted practice of investigating it.

The three hypothesis of positive accounting theory are not themselves theories and positive accounting theory itself is a set of hypotheses whose underlying assumption, that people will try and manipulate information they have to present in order to benefit themselves is highly plausible but not (yet) an empirically verified law. Positive accounting theory has no

other grand narrative, and critical perspective writers on accounting have objected to the claim that the theory is neutral or objective, even though it is not normative.



Test on Chapter 7

- 1. Distinguish the political cost hypothesis from the bonus plan hypothesis.
 - a) only the bonus plan hypothesis involves reducing current reported earnings
 - b) only the bonus plan hypothesis involves increasing current reported earnings
 - c) the political cost hypothesis only covers scandals and environmental disasters
- 2. Distinguish the debt covenant hypothesis from the bonus plan hypothesis
 - a) only the debt covenant hypothesis involves reducing current reported earnings
 - b) only the bonus plan hypothesis involves increasing current reported earnings
 - c) the cause of earnings manipulation is entirely different in each case

- 3. What are the necessary conditions to prove the crime of fraud?
 - a) proof beyond reasonable doubt the suspect perpetrated the office and did so intentionally
 - b) proof beyond reasonable doubt the suspect committed the offence
 - c) as (a) plus actual loss suffered by identifiable victim/s
- 4. What are the components of the fraud triangle?
 - a) motive, means and opportunity
 - b) motive, intention and rationalization
 - c) intention, opportunity and rationalization
- 5. Why are most failures and business bankruptcies type one?
 - a) economic insolvency
 - b) most failures happen to people who should never have been in business
 - c) most failures are of little firms



- 6. What is the critical trigger of virtually all business failures?
 - a) economic insolvency
 - b) most failures occur to people who should not have been in business at all
 - c) most failures are small firms not in business very long
- 7. How are fraud and failure brought together in many type two failures?
 - a) a dominant CEO commits fraud and triggers insolvency
 - b) overspending allied to theft
 - c) dictatorship of an immoral and incompetent single person
- 8. Distinguish economic from technical insolvency.
 - a) economic is a deficiency of assets; technical is inability to pay debts in full on time
 - b) technical is a deficiency of assets; economic is inability to pay debts
 - c) economic is inability to pay debts; technical is refusal to pay them
- 9. What causes type three failures?
 - a) nobody knows
 - b) an excessively dominant CEO
 - c) unsuccessful diversification away from traditional lines of business

8 THE NEW ACCOUNTING REPORTS: SUSTAINABILITY AND INTEGRATION

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to understand the antecedents and nature of the innovation in annual reports introduced by the GRI and IIRC,
- b) to explain the main requirements of the GRI and of the IIRC when issuing reports under their frameworks,
- c) to evaluate the different type of accountability provided by an <IR> report relative both to a traditional report and a GRI G4 report,
- d) to appreciate the differences and the overlap between the treatment of stakeholders and between ways of considering externalities in the <IR> compared to the G4.

8.1 INTRODUCTION - CSR

8.1.1 CSR

Accounting is for the entity, e. g. the firm, and only expenses and income affecting equity are recognized in financial reports. All externalities are ignored. Therefore firms can harm society, the next generation and the planet without penalty unless a specific law is enforced to curb them. This is an example of outer orbit accountability being made effective only when public opinion and political pressure move it into the middle orbit, so that current society replaces unborn posterity as the body to whom an account is due.

If political pressure is strong enough, the issue attracts legislation which moves it to the inner orbit of accountability where law enforcement officers will be authorized to ensure compliance.

Corporate Social Responsibility, CSR for short, is an idea that overlaps, but is not exactly the same as, legitimacy theory's social contract. With CSR the obligation is grounded not in the idea of contracts with their implication of willing and voluntary agreement between the parties. Rather it is grounded in the normative idea of good citizenship which is held

to impose obligations irrespective of the agreement of the citizen. Firms may well have a responsibility to society to promote general welfare under the social contract; and conformance with society's expectations sustains corporate legitimacy, as per Lindblom (1983).

However CSR asserts something slightly different. CSR normatively asserts that good citizenship involves serving one's country and not harming it. That means not funneling profits made in the country out to tax havens outside the county. It means not closing down operations only to open up cheaper ones in lower wage countries to benefit the investors in some other country. It means not contributing to serious pollution. It means not appropriating public goods such as lake water by slapping privately owned patents on them. In general it means having the public interest affect business decisions before public opinion becomes so loud and strident that it becomes bad business in the conventional sense to ignore it. CSR is not a description of how firms are but a prescription of how many political and social thinkers would like them to be, especially as regards externalities affecting the natural environment.



In Chapter 6 we defined accountability as involving two responsibilities or duties, these being:

- i) the responsibility to undertake certain actions (or to refrain from taking actions); and
- ii) the responsibility to provide an account of those actions.

CSR presupposes such accountability.

An alternative definition of CSR is offered by the World Business Council for Sustainable Development (2000): "The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large". This links social responsibility with wealth creation. It is compatible with the definition of CSR just given.

8.1.1.1 CSR and Legitimacy Theory

Legitimacy theory predicts that firms will undertake various actions to ensure that they operate in a manner consistent with the norms and expectations of the community in which they conduct their operations. That is, that they comply with the terms of the 'social contract'. Hence, various social responsibility disclosures will be made in an effort to make legitimate the ongoing existence of the organisation. If it is considered that the community does not expect the firm to make social and environmental disclosures (that is, it is not part of the social contract), then no disclosures will be made. Where the legitimacy of an organisation has been brought into question (perhaps as the result of a major environmental accident or event), corporate management often use media such as the annual report in an effort to restore legitimacy.

8.1.1.2 CSR and Stakeholder Theory

Under the managerial branch of the theory, disclosures are used as one strategy to control the actions of powerful stakeholders. Powerful stakeholders are those who have resources which are important to the ongoing survival of the organisation. Under this perspective, it is the needs of the powerful stakeholders that are attended to over and above the needs of other parties affected by the entity's operations. If the powerful stakeholders expect social responsibility disclosures, then the firm is predicted to make them. By contrast, under the ethical or normative branch of stakeholder theory there is a view that disclosures are responsibility driven and that all stakeholders that are impacted by the operations of the entity have a right to information about its operations (the notion of right-to-know). Hence, under this perspective, social responsibility disclosures are made in response to an ethical responsibility, rather than in response to any desire to maximize wealth or to appease particular, powerful parties.

8.1.1.4 CSR and Institutional Theory

Institutional theory provides a number of reasons why corporations might make corporate social responsibility disclosures. There is a view that both organisational form and organisational practices might tend towards some form of homogeneity – that is, the structure of the organisation and the practices adopted by different organizations tend to become similar to conform to what is considered to be 'normal'. Organisations that deviate from expected normality will potentially have problems in gaining or retaining legitimacy.

8.1.2 TRIPLE BOTTOM LINE REPORTING

Triple bottom line reporting was defined (by Elkington, 1997) as reporting which provides information about the economic, environmental and social performance of an entity. The notion of reporting against the three components (or 'bottom lines') of economic, environmental and social performance is directly tied to the goal of sustainable development.

Benefits of triple bottom line reporting include:

Producing a values-driven, integrated culture
Better management of risk and resource allocation
Attracting better staff – becoming an employer of choice
Better access to financial markets

There is a question over motive firms have when they adopt triple bottom line reporting. It is likely in some cases that it is done simply to influence market perceptions rather than to genuinely address economic, environmental and social issues, but it is unwise to generalize in the absence so far of extensive empirical evidence on the matter.

The social reporting zone in triple bottom line reporting includes the following:

Employees, pensions, welfare etc.

Health and safety incidents, new measures etc

Minorities, gender balance and equity

Community activity, charitable work and good neighbour actions

Indigenous development promotion

Political donations, lobbying and activism

The environmental reporting zone concerns reporting on sustainable development which is defined as: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs".

(United Nations World Conference Environment and Development, 1987, p. 8).

Similar to triple bottom line reporting but not identical is the Balanced Scorecard Approach of Kaplan and Norton (1992). This is both a management system and a system for measuring and reporting performance. It integrates financial and operating performance measures in a way that communicates the strategic goals, and focuses on building future value by investing in customers, suppliers, employees, processes, technology and innovation.

It views the organisation from four perspectives:

- 1 Financial while it is core, it is not to be solely relied upon
- 2 Business process all about how the business is running internally, aim is to identify which elements affect strategy
- 3 Customer tracking customer satisfaction levels, market share, demographics
- 4 Learning and growth focuses on staff quality, experience and skills, training and development systems, time and support available for R&D etc.



8.2 THE GLOBAL REPORTING INITIATIVE (GRI)

8.2.1 SUSTAINABILITY AND CAPITAL OF THE EARTH

A sustainable cost is 'A cost that maintains the Earth's capital' – Rob Gray (1992). The earth's capital comprises:-

Human made capital e.g. cars, machines; Substitutable natural capital e.g. oil and coal; Renewable natural capital e.g. water, wood; and Sustainable natural capital e.g. ozone layer (which can be neither renewed nor replaced).

For an organisation (or a community) to be sustainable, it must be financially secure (as evidenced through such measures as profitability); it must minimize (or ideally eliminate) its negative environmental impacts; and its actions must conform to societal expectations. These three factors are highly interrelated.

8.2.2 GRI AND SUSTAINABILITY REPORTING

The Global Reporting Initiative (GRI) was started by the Ceres organisation in 1997 and became independent from Ceres in 2002 when its first sustainability reporting guidelines were released. Trends then identified included: expanding globalization, the search for new forms of global governance, and the role of emerging economies e.g. Brazil, India, South Africa, and both the Governments' and market's interest in sustainability reporting. The GRI has become the world's most authoritative source of guidelines on sustainability reporting and the latest version of them is the set of guidelines known as G4.

8.2.2.1 Perceived Benefits of adopting GRI guidelines in annual reports include:

Effective management in a global economy

Greater emphasis on company relationships with external parties

Sustainability reporting provides links between functions

Helps sharpen ability to assess organisation's contribution to natural, human and social capital

May reduce share price volatility

8.2.2.2 Key issues of sustainability reporting identified by the GRI include:

Achieving the goal may seem more of an aspiration than a reality with uneven distribution of opportunities;

Improvements in the quality of life for some are heavily offset by continuing poverty and famine of others;

Technological improvements have potential to solve many current problems; and Urgency and magnitude of risks and threats make transparency fundamental.

8.2.2.3 Defining Aspects and Boundaries

The preparation of a G4 report starts with the process of defining Material Aspects and Boundaries.

Material Aspects are issues that are significant to a business' economic, environmental and social impacts and that substantively influence the assessments and decisions of its stakeholders. In other words, Material Aspects concern externalities, stakeholder impacts and political cost. Having identified its Material Aspects, an organization must assess and describe whether the impact of each one lies inside or outside the organization. This is the 'Boundary'. For example, for some companies, biodiversity is an issue. The impacts related to this Material Aspect could be associated with the organization's own operations, or to entities outside the organization, such as suppliers or distributors.

8.2.2.4 Standard G4 Disclosures

There are two kinds of disclosures in G4:

1. General Standard Disclosures:

These disclosures set the overall context for the report, providing a description of the organization and its reporting process. They apply to all organizations, regardless of their materiality assessment. There are seven types of General Standard Disclosures, ranging from the organization's strategic perspective on addressing sustainability issues, and how it involves stakeholders in this process, to how it approaches key issues such as governance and ethics and integrity.

2. Specific Standard Disclosures:

The Disclosures on Management Approach (DMA) in section of the G4 report where firms explain how they are managing their material economic, environmental or social impacts (Aspects), thus provide an overview of its approach to sustainability issues. The DMA focus on three things:

describing why an Aspect is material,

how its impacts are being managed,

and how the approach to managing this Aspect is being evaluated.

8.3 THE INTERNATIONAL INTEGRATED REPORTING COUNCIL (IIRC)

8.3.1 AUDIENCE AND OBJECTIVES OF <IR>

IIRC specifies the content of an "integrated report", hereafter <IR>, thus: "An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term." Notice that the <IR> is not a sustainability report, but rather a new kind of general purpose report, aimed to show how an organisation claims to be creating value.



The Graduate Programme

The target audience of the <IR> is claimed to be the providers of financial capital. The IIRC says that the primary purpose of an integrated report is to explain to providers of financial capital how an organization creates value over time. It therefore contains relevant information, both financial and other. Value means not only an increase in the stock market value of the firm but also any increase in any of the six types of capital IIRC has identified. These are Financial, Manufactured, Intellectual, Human, Social & Relationship, and Natural. The organization's activities and outputs lead to changes in the level of one or more of the capitals. These must be reported. Notice this includes changes downwards as well as upwards, but while <IR> remains voluntary and not subject to mandatory audit, research is already showing that bad news by way of reduction of any one capital appears in <IR>s far less frequently than good news.

An integrated report should answer the question: What is the organization's business model? An organization's business model is its system of transforming inputs, through its business activities, into outputs and outcomes so as to fulfill the organization's strategic purposes and create value.

An integrated report should answer the question: How does the organization's governance structure support its ability to create value in the short, medium and long term?

8.3.2 <IR> EXTENDS THE SCOPE OF THE IDEA OF CAPITAL

The six capitals are radical innovations proposed by <IR> (2C 2.15) and we need to understand what each one covers.

Financial capital means funds from any source.

Manufactured capital means fixed assets including infrastructure such as roads, bridges and water treatment plants owned by the firm.

Intellectual capital is the patents, knowhow and intellectual assets of the firm, some of which are recognized on traditional balance sheets because they pass the traditional tests of recognition, but most do not. Intellectual capital would include all the knowledge people like software engineers possess who are employed by the firm. That knowledge is valuable but cannot be reliably measured in dollar equivalents. This type of capital also includes "systems, procedures and protocols" (<IR> 2013 Fundamental concepts p. 12).

With the next category, human capital, we are off the balance sheet altogether into the realm of intangibles that cannot be measured and we are also in a realm that overlaps the intellectual capital realm and the social capital one. The <IR> definition of human capital (ibid) is:-

"Peoples competencies, capabilities and experience, and their motivations to innovate, including their:-

Alignment with and support for an organization's governance framework, risk management approach and ethical values.

Ability to understand, develop and implement an organization's strategy.

Loyalties and motivations for improving processes, goods and services, including their ability to lead, manage and collaborate."

Existing <IR> examples on human capital tend to talk about the firm's head count, the way in which employees are aligned to the firm's corporate goals and the programs the firm has funded to develop employee skills. The idea of human capital is almost like the NPV of the future earnings to the firm arising from employing the particular individual – almost a deprival value. Putting numbers on human capital is so contrived that most firms do not attempt to do so at all but rather to use words to describe how they value the human resources they employ. So far, there is not one single example of a firm using the human capital section of its <IR> to shed light on any conflict between the employer and employee's conflicts of interest or industrial relations problems. Accordingly it is not easy to see the usefulness to decision makers in any stakeholder group of IIRC requiring firms to disclose increases or decreases in their human capital while keeping silence on how this could usefully be done.

Social and relationship capital refers to the building (or dissolving) of coherent networks of individuals and to actions done to benefit or harm groups outside the firm (who need not necessarily be stakeholders in any direct sense). It is the same idea as social reporting in triple bottom line approaches to reporting, and especially includes any kind of community building activity or charity work for people (as opposed to being for animal or the environment). It also includes "the ability to share information", "shared norms, and common values and behaviours" and "intangibles associated with the brand and reputation" and "an organization's social licence to operate."

The sixth capital is natural capital and it refers only to natural resources owned by the firm that "support the past, current or future prosperity of an organization". It is not about externalities. It is not about sustainability either. It enables natural capital to be monetized by way of charging amenity fees, offset fees or traditional rent on anyone using the land

or other natural resource owned by the organisation. Such monetization has begun already, and there is already a natural capital market in embryonic form in the USA. Section 2.18 recognizes that the capital definitions in the <IR> framework on page 12 may be varied by users and even completely redefined.

8.4 CONCLUSION

Scholars within the social and environmental accounting fields have not all been supportive the IIRC initiative. In particular Gray (2006) while endorsing the search for value in terms beyond financial returns to equity, has grave reservations about the IIRC's continuing use of mainstream ideas of ownership rights to restrict, indeed to constrict, the social and environment "values" of a firm's operations and their effects. He considers the question 'value creation for whom?' has not been satisfactorily answered. There are early signs in 2016 on the IRRC website that it is contemplating a slight movement away from its initial alignment with investor needs in favour of a more inclusive perspective, but at the time of writing, these are not yet crystallized into proposals or changes in the <IR> framework. Clearly <IR> is a work in progress and updates in future to this book will record the progress it makes in resolving its main issues. Meantime just enough time has passed since <IR> began earlier



this decade to say that it has the makings of a revolution in accountability and accounting, because it is a *comprehensive* accountability by the firm that it envisages. That is new.

Test Questions Chapter 8

Choose the best alternatives

- 1. Integrated reporting is primarily aimed at better informing
 - a) society
 - b) stakeholders
 - c) investors
- 2. Wood in forests is an example of what kind of capital?
 - a) renewable natural
 - b) sustainable natural
 - c) substitutable natural
- 3. GRI(4) requires
 - a) the costing of externalities
 - b) the disclosure of "material aspects" and "boundaries"
 - c) the disclosure of six categories of capital
- 4. A firm building a football ground for a local school as a donation would affect which one of its integrated reporting capitals?
 - a) human
 - b) financial
 - c) social and relationship
- 5. A new factory building is what kind of capital?
 - a) manufactured capital
 - b) renewable capital
 - c) share capital
- 6. A new version of the software a firm sells to the public is what kind of capital?
 - a) human capital
 - b) intellectual capital
 - c) manufactured capital
- 7. Gray et al.'s definition of accountability is

- a) The duty to honour the social contract by voluntary disclosures
- b) The obligation to exercise due care in the performance of duties
- c) The duty to provide an account or reckoning of those actions for which one is held responsible.

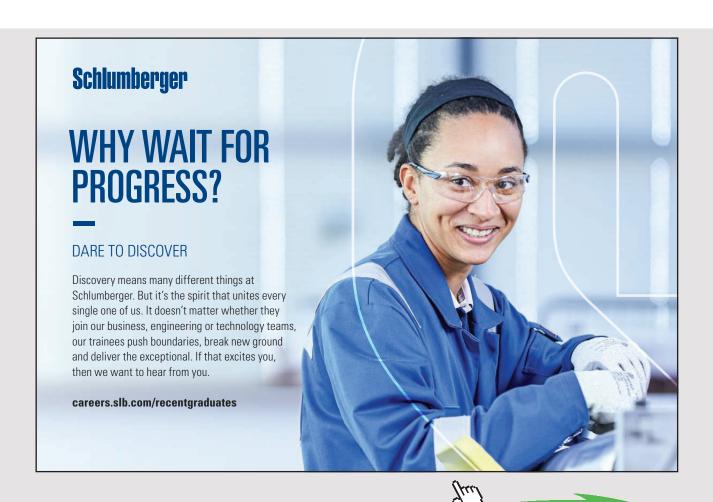
8. G4 defines material aspects as

- a) issues that are significant to a business' economic, environmental and social impacts and that substantively influence the assessments and decisions of its stakeholders.
- b) issues central to a business model such that they materially affect earnings, externalities and ecology
- c) issues that the directors judge to have the most salience.
- 9. In G4, how a firm approaches governance and ethics and integrity will be found its
 - a) Global Reporting Initiative
 - b) General Standard Disclosures
 - c) Specific Standard Disclosures

10. An externality is

- a) a stakeholder not employed by the firm
- b) a cost imposed by the firm on its environment but not born by the firm itself
- c) a revenue stream from outside the firm benefitting the firm's investors
- 11. An example of social and relationship capital is
 - a) employee stock options
 - b) regular meetings with major stakeholders
 - c) a heritage asset such as a Picasso inherited from a rich uncle
- 12. The business model of a university might be
 - a) doing research funded by grants but not costing as much as the grant amounts
 - b) producing "great courses" in permanent formats that are sold to any customer willing to buy
 - c) selling educational experiences to eligible students at a price partly subsidized by government
- 13. How have GRI based reports to account for a firm's interactions with stakeholders?
 - a) by disclosing material aspects that substantially affect its interactions with them
 - b) by disclosing how stakeholders have been attended to in the period
 - c) by disclosing the relative salience of each stakeholder

- 14. The purchased value of a patent in integrated reporting would be included with category of capital?
 - a) intellectual
 - b) social and relationship
 - c) working
- 15. The three ingredients of triple bottom line reporting are
 - a) financial, social and environmental
 - b) social, natural and manufactured
 - c) charity, pollution and earnings
- 16. Gray says a sustainable cost is one which
 - a) maintains the Earth's capital
 - b) sustains the earnings of the firm
 - c) a cost which never diminishes



- 17. Which of the following is a substitutable natural capital?
 - a) clean air
 - b) gasoline oil
 - c) river water
- 18. Which of these is one of the requirements of the GRI's Disclosures of Management Approach?
 - a) how the approach is to be justified
 - b) how the approach to managing a disclosed aspect is being evaluated.
 - c) where the entity sees its boundaries
- 19. What is the relationship between corporate governance and the integrated report?
 - a) there is no relationship at all
 - b) integrated reports must show how governance has improved in the reporting period
 - c) an integrated report should answer the question: How does the organization's governance structure support its ability to create value in the short, medium and long term?
- 20. Can something be human capital, intellectual capital and social and relationship capital all at the same time under integrated reporting guidelines?
 - a) Yes because these capitals are written about in words not accounted for in quantitative bookkeeping terms
 - b) No, a choice must be made in accordance with the item's main use
 - c) The guidelines don't address this point

9 THE UNFINISHED WORK OF ACCOUNTING THEORY

LEARNING OUTCOMES

After completing this chapter, the reader will be able

- a) to evaluate the preparedness of accounting to face the future,
- b) to understand the existence of a wide range of scenarios outside of investing on the stock market to which accounting may be relevant,
- c) to appreciate the accounting challenges of predictable social and technical changes in the future.

9.1 SPACE AGE ACCOUNTING

Accounting has been in existence since before the dawn of civilization. Cave people used different shaped stones to represent different animals they owned by way of a primitive inventory system. The fact that they needed to do this so early on in human history suggests that accounting was invented as a means of evidencing title to assets that were at risk of being stolen by others. In other words, accounting served to prevent distrust and suspicion from overwhelming the clan thereby making trading civilization impossible.

Accounting is one way of handling mistrust about entitlements to benefits.

In the early Middle Ages double entry book keeping developed to enable accounting to deal with monetary transactions and asset valuations in such a way as to measure the value of the owners' wealth as the residue of assets less liabilities. Bookkeeping applied to all entities, private or public, businesses or social institutions. Accounting was universal.

In the nineteenth century with the maturing of the industrial revolution and the emergence of modern stock markets under a coherent regime of regulation to encourage stock trading under the motto "verbum meum pactum" – my word is my bond, maintenance of trust was a dominant objective.

As humanity moves further into the third millennium, it will colonize and mine other planets, transact with aliens, live longer, not take air and water as being in effectively infinite supply and will have to deal with androids who have at least as much intelligence as we do and who may not work for nothing. All these contexts will require accounting to adapt to them.

Accounting in 2016 is financial accounting aimed at private business investors. Other kinds of accounting have other words on front of the word 'accounting'; management accounting, public sector accounting, not for profit accounting, environmental accounting, turf accounting, for example. A general theory of accounting would need to explain all of these other kinds of accounting as well. It would need some coherent conceptual framework that is invariant in its principles to the type of accounting to which it may be applied. Such a theory, when it arrives, should also be capable of applying to any of the non financial, non economic fields where the phenomena are suitable for accounting treatment.

One such field is nutrition. Dieters may be as inclined to manipulate their weight and waist measurement downwards as bonus plan beneficiaries are inclined to manipulate corporate accounting earnings upwards, as Positive Accounting Theory postulates. When one's comfort, approval or status depends on figures, a general theory of accounting might predict manipulation to be likely. When a system can be conceived of as having a set of measurable inputs that get converted into a set of measurable outputs, double entry booking may be applied if there is a common unit. In nutrition calories or joules are such units. Inputs are food and drink which can be captured as proteins, carbohydrates, fats, sugars and roughage; while equity is weight and output is expended energy in movement and heat and net assets are fat and muscle. If there were a general theory of accounting, anything it



postulates about the business and wider economic and ecological fields should also apply in most essential ways to nutrition and dietetics.

9.2 THE NEXT HUNDRED YEARS

Returning to monetary accounting, we can consider what theory can offer to help us deal with the further future of humanity. Water accounting has already begun, and air accounting is bound to be mimetically isomorphically influenced by it. If pollution becomes toxic in any city, the authorities and private enterprise will start commodifying the air into saleable products in cans, and there may eventually air pumps in petrol stations where families refill their air canisters as they get low, and the companies delivering cooking gas now can easily diversify into air supply. Accounting for rare air will then be no different from accounting for any other commodity. Integrated accounting reports will count air as natural capital and future GRI guidelines may advise how to account for externalities affecting other stakeholders' air supply.

9.3 THE NEXT HUNDRED LIGHT YEARS

Further into the future, air will be the most critical resource for interplanetary colonizers and miners to such an extent that units of air may become a reserve monetary currency, or at least the base from which other monetary units derive. In other words, air may come to fulfill the monetary role once played by gold. If that happens it creates no new problems for accounting, merely a new valuation unit.

Looking several thousand years ahead to interstellar travel, people will travel near the speed of light but the journeys to nearby stars will take many years and the crews may well be cryonically sealed in suspended animation for much of the journey. Time will pass faster for such travelers than it does for people who stay on their home planet. This creates a new accounting problem with no precedent. Should the pension and other future cash flows of space travelers be discounted over earth years they are away or over space years that correlate with the travelers' own experience of passing time. The traveler will prefer the latter as more useful for their financial decision making, but the issuers of policies will find traditional earth years more faithfully represent their experience of the liability. This means there will be two seriously different present values of the future pension liability and it would not take long for some recent graduate from a future business school to create derivative instruments to arbitrage the difference between the two. What would be the fair value of such a derivative? It would depend who is selling and in which market.

How would states or companies account for people in suspended animation over hundreds of earth years? Are they livestock? Are they human capital with a definite net present value – if we can translate "present" into a scientifically justified earth based equivalent? Are they an asset at all or just a continuing expense, until they revive and start working? How a future entity accounts for them depends on how the entity decides to categorize and value them, and that depends on the contracts they sign with the people, assuming contracts are still used in the far future.

Of course if humanity destroys itself before the above scenarios can eventuate, then we can be quite sure that the future of accounting will be to recreate its past. It will be back to stones and pebbles all over again. However, this chapter so far has assumed that future accounting will be driven by the currently mainstream concerns of stock market focused financial accounting and that the foundations of such accounting will not suffer any tectonic shifts. In the next section we will upturn those assumptions.

9.4 PUBLIC ACCOUNTING FOR THE ACTUAL PUBLIC

Mainstream accounting and its higher profile scholars are apt to see accounting as more like a science than an art, effectively neutral and objective in its quest for fair representation and as a field focused on economic and business means to ends rather than on the ends themselves. Sterling (1979, 89) and Chambers (1966, 40-58 cited in Chua 1986, 610) for example, asserted accountancy can only provide information about the financial means available to achieve economic ends, not the ends themselves, and that such information is necessarily neutral by virtue of being strictly instrumental, Solomons, in debate with Tinker, (Solomons and Tinker 1991) held a neutralist position to be essential to the validity and usefulness of accounting. The critical perspective scholars all agree that the neutralist position is untenable, as accountants and their scholars operate within a society which has a form of economic organisation that is, and should remain, entirely open to criticism. If the critical perspective is rejected, it means that accounting is so much a creature of capitalism that it would die with the death of capitalism itself when (or if) it eventually occurs. Public sector accounting in this bipolar scenario is ignored, but clearly public sectors persist beyond the life of any organisation of the private sector's capital markets. Public sector accounting has its own professional bodies, its own academic journals and its own practices. This accounting apartheid reflects practical reality now, and the public private partnership movements of the 1990s and 2000s decades hardly affected the depth and breadth of the conceptual separation at all. We have to ask therefore, is public sector accounting really accounting? The answer is yes and moreover the range of information useful to political and administrative decision makers in the public sector is far bigger than the range that is useful to private sector investors.

Public sector accounting is about public and taxpayer resources. It could not for one second claim to be not interested in ends but only in means. It has current cost (replacement cost) dominant in its asset valuation arsenal rather than the private sector's fair value, because it is more concerned to maintain the value of its physical capital than to sell off its assets to hedge funds and other private bidders. Accounting theory books, including this one, are not really properly named, because they are about only financial accounting theory. If states were stronger than corporations in western style societies, it would be public sector accounting that would be the basis of accounting, not private sector accounting. As it is, public sector entities are often under party political pressure to conduct their affairs as much like private sector entities as possible, but this imports private sector values of maximizing the NPV of shareholder wealth into a public sector where agency problems are so complex and extensive that pretending the taxpayer is effectively the same as a private sector shareholder is absurd, deceitful and thoughtless. In economics itself, public sector studies, macroeconomics and the economics of taxation have been far from immune from the neoliberal assault on Keynesianism that Milton Friedman successfully initiated half a century ago. The result is an unconfidence and a relative poverty of robust testable theory of public economics. This in turn makes the concept of a accounting theory, leave alone a general theory of accounting, a project fraught with difficulty. Even if someone were to come up with one, vested professional and academic interests would be unlikely to give



it any oxygen as it would subvert too many people's comfort zones. Nevertheless, such a project must eventually be attempted because accountancy has been going ever since the last ice age but the only theories we have for it are partial theories about partial aspects of financial private sector accounting and its disclosure symptoms. The new accounting reports promulgated by the GRI and IRRC are still partial, albeit not as partial as their mainstream predecessors.

9.5 DEEP EQUITY ACCOUNTING

Imagine a society where everyone earns the same, where it is illegal to leave any assets at all to children or other individuals on death, where any rights to property of any kind are temporary and renewable, and where investment was permitted only for registered funding entities. Capital markets could still exist and arguably would all be far more efficient in the EMH sense than what we have now because they would not be distorted by concentrations of wealth and power nor by gross income inequalities and feudal attitudes to inheritance rights. Such a society, so utterly different from our own, would still need accounting. Just as in the Ice Age, people would still own things and there would still be exchange value. Accordingly, bookkeeping and accounting would still serve to validate and evidence ownership and valuation claims. Equity would still exist but in its other meaning. The residual assets after subtracting liabilities would be a mark of savings and provisions and insurance for setbacks, misfortunes and old age - precautionary money, not a reservoir for socially irresponsible speculation. And public sector accounting would generalize from the initial tentative steps of today's IIRC to consider accounting for ends and not just means to have become an accounting firmly based in a political economy of all citizens with due regard for future generations and the ecosphere. It would not be stakeholder accounting because not everyone is a stakeholder but everyone is an end in themselves, not a means, and accordingly, everyone is someone to whom agents in command of resources, private or public, owes accountability. Stewardship takes its "throne" back from the twentieth century usurper called "decision usefulness" in such a scenario. Accounting, accounting theory and a general theory of accounting start and end in a view of accountability, in that utopia. Of course such a scenario is imaginary, idealistic, politically partisan and of no use whatever to present day investors or lenders. But then again, the idea of rational investors correctly gauging the value of good news and bad news and instantly transforming it into buy, sell or hold decisions about their portfolios, valuing only beta risk if it would keep still long enough to be measured in a "useful;" way - this scenario is not exactly realistic either and is certainly politically partisan.

9.6 A CRITICAL CONCLUSION

Critical thinking is a graduate attribute most universities wish to claim their education develops in their students. This claim is empty, if not actually fraudulent, if it fails to subject all of society's institutions to critical review. Accounting theory books do not usually do that. This one has done. Accordingly it is full of contestable propositions, self aware subjectivity and provocative remarks. If the reader is thereby enabled to think more critically, hopefully also more clearly, about the accounting issues we all face, this book will not have been written in vain.

FINAL QUESTIONS

Question 1: Which of the following is true about theories in general?

- A) Theories can include any coherent set of ideas or statements to explain or provide guidance in respect of certain phenomena
- B) Theories must be empirically based to describe what is, rather than what should be
- C) Theories must be based on inductive reasoning to provide a generalization or prediction
- D)All of the above

Question 2: Which of the following is not a rationale for regulating financial accounting information?

- A) To protect users from fraudulent or misleading information
- B) Market for information without regulation is inefficient and may result in production of sub optimal amount of information
- C) To assist management with better information and reports for use by management and parties within the organisation
- D)To ensure equal access to information by all interested parties, including those that have limited power to demand it

Question 3: The free market perspective of accounting regulation suggests that accounting information:

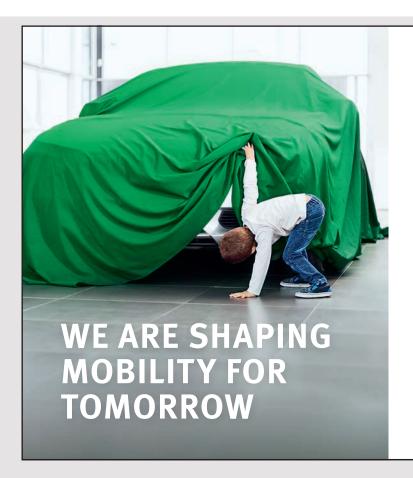
- A) Should be provided free of charge
- B) Should be free of considerations and lobbying of the market
- C) Should be provided like any other good that is subject to demand and supply
- D)Will require regulation to avoid underproduction of information

Question 4: Which of the following is a qualitative characteristic of financial information in general purpose financial reports if it is to be useful?

- A) Understandability
- B) Comparability
- C) Reliability
- D)All of the above

Question 5: A theory (or model) that states that the most useful information for economic decision making is the current cash equivalents, as measured by the current net market values, is:

- A) Current Price Accounting
- B) Continuously Contemporary Accounting theory
- C) Current Cost Accounting theory
- D)Replacement Value Accounting theory



How will people travel in the future, and how will goods be transported? What resources will we use, and how many will we need? The passenger and freight traffic sector is developing rapidly, and we provide the impetus for innovation and movement. We develop components and systems for internal combustion engines that operate more cleanly and more efficiently than ever before. We are also pushing forward technologies that are bringing hybrid vehicles and alternative drives into a new dimension - for private, corporate, and public use. The challenges are great. We deliver the solutions and offer challenging jobs.

www.schaeffler.com/careers

SCHAEFFLER

Question 6: In evaluating theories of accounting, which of the following is not true?

- A) Different theories are often the result of working in different paradigms, which provide greatly different perspectives
- B) Positive accounting theory is an example of a theory that is value free
- C) Selecting a theory, topic, design or method for research, is based on value judgments
- D)All theories of accounting, and assumptions on which they are based, are abstractions of reality, and so choice is based on how closely the theory fits our own perceptions

Question 7: Which of the following is NOT a criticism of Positive Accounting Theory?

- A) It is based on the assumption that all action is driven by wealth maximisation
- B) It is not value-free
- C) It has developed little in the past thirty years
- D)Its claims cannot be objectively verified

Question 8: The difference between the managerial and moral perspectives of Stakeholder Theory is that:

- A) The moral perspective is empirically testable
- B) The moral perspective is more "organisation centred"
- C) The managerial perspective is empirically testable
- D)The managerial perspective holds that all stakeholders have certain minimum rights that must not be violated

Question 9: The objective of general purpose financial reporting is stated in most conceptual frameworks as providing decision-useful information to users of financial reports. Which of the following are not regarded as legitimate users of financial reports according to the IASB Framework?

- A) Users without some proficiency in financial accounting
- B) Recipients of goods and services
- C) Special interest groups in the general public
- D)All of the above

Question 10: Given efficient markets, the disclosure of favourable new information about a firm would be evidenced by:

- A) A share price increase
- B) No change in the share price
- C) A share price decrease
- D)None of the above

Solution	to	the	above	10	multiple	choice	questions:

- 1. A
- 2. C
- 3. C
- 4. D
- 5. B
- 6. B
- 7. C
- 8. C
- 9. A
- 10.A

.....

Tests in Chapter 1

Choose which of the ten statements below are the fact statements.

My name is Bond, James Bond.

Yes fact because it can be tested easily to see if it is true or false.

You are so pretty.

No, opinion even if everyone agrees.

You are the prettiest girl I have ever seen.

No, still opinion.

I said she was pretty.

This however is fact as I either did or did not say it.

I have an appointment with Dr Vall tomorrow.

Fact because testable by reference to his appointment book.

I will see Dr Vall tomorrow.

Opinion because future tense.

The sun ain't gonna shine anymore.

Opinion because future but the probability of it becoming true is almost zero, so for practical purposes it can be regarded as a false fact statement, but strictly speaking it is still an opinion.

To be or not to be: that is the question.

Opinion only.

To be or not to be: that is a question.

Fact, even though we missed out the question mark.

Eating people is wrong.

Opinion even though it is held by all sane people, I assume.



ing and natural sciences, architecture, technology-related mathematical sciences and nautical sciences. Behind all that Chalmers accomplishes, the aim persists for contributing to a sustainable future – both nationally and globally.



Test 1.2

Complete the following sentences by supplying the missing word or phrase:

Accounting exists because people cannot be trusted with other people's property Agency theory assumes human nature is selfish.

The type of cost that is most effective in dealing with the agency problem is the bonding cost A new theory not yet proven is often called a hypothesis.

The individual components of a theory are called postulates or hypotheses.

A theory which is always true is really a law.

A theory which leaves nothing out, including even any assumptions is really a theorem.

Tests for Chapter 2

- 1. What is faithful representation?

 Depicting a situation accurately, objectively, neutrally.
- 2. How is relevance not completely compatible with reliability?

 Because the most relevant information for decision making is good estimates of the future but these are unreliable because all statements about the future are opinion not fact.
- 3. Why do American regulators consider prudence is trumped by neutrality?

 Because they consider prudence as an unduly negative bias when considering making provisions against future write offs and liabilities.
- 4. What are the advantages of rule based standards over principles based standards? They are certain, unambiguous and do not depend on any personal or subjective judgment – unless the standard explicitly permits it
- 5. What are the accounting rules of recognition?

 If an item meets the definition of assets, liabilities, equity, income or expense and its recognition will bring relevance and faithful representation of financial information and will meet cost-benefit test, an entity needs to recognize it.
- 6. What is the significance of the going concern basis for accounting? It means assets must not be valued at their break up or forced sale value, and it means that fair value assumes continuing use of an asset measured at NPV or a ready market for one valued by reference to sales value in a market but see Chapter 4 for elaboration of the value issues.

- 7. What is affected by the principle of substance over form in accounting? A contract will be recognized as an asset if it conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Such an asset was called a lease but IFRS 16 names it as a 'right-of-use' asset.
- 8. What is the traditional concept of capital?

 It is the owners' stake in the business, initially by cash injection to buy shares, then by owning the retained earnings by way of reserves that build up the value of equity

over time. Traditional capital is represented by traditional net assets that must meet the traditional rules of recognition.

Tests for Chapter 3

- 1. What is the relationship between the conceptual framework and accounting standards? Standards abide by the principles laid down by the framework but standards trump frameworks when the two conflict.
- 2. What is regulatory capture?
 Faithful representation is a leading principle of the Conceptual framework and means the books and accounts should accurately and neutrally reflect the economic reality of the firm in all respects.
- 3. What do international accounting standards prescribe for the recording of liabilities? They must result from a contractual obligation or a highly likely adverse result of lawsuits or negotiations in lieu of them. The liability must be measurable and any discount rate applied to future liabilities must be justified.
- 4. What do accounting standards require for consolidated accounts when reviewing subsidiaries, associates and entities not formally owned by the group parent company? If, as a matter of fact, the parent can direct the business decisions of the entity, the entity must be consolidated, even if no shares are held in it.
- 5. Why do some intangible assets get recognized and disclosed in accounting reports but most do not?
 - Most cannot be isolated and estimated or measured but some intangibles are purchased and the cost of the asset is treated as if it was the value of the intangible. With goodwill, a subsidiary or associate is purchased for more than fair book value and the excess is deemed to be goodwill.

- 6. How does goodwill arising on consolidation get valued in the financial reports? Initially as the cost minus fair value of all the investees' net assets but thereafter it should reduce by way of impairment as the investment's true value becomes apparent and the initial payment seems to have been an overpayment in many cases, at least.
- 7. In a corrupt economy, the honest investor wants to use accounts that gove dishonest preparers minimum scope for manipulation and distortin, so will prefer a rules based over a principles based set of standards. The corrupt environment is unsuitable for a principles based set of standards as the accountants could not e trusted to exercise their judgment with integrity so the principles applied would be manipulated, distorted and subverted. Even in a rules based environment, fraud can still occur but the risks of manipulation are higher in a rules based environment than in a principles based one from the viewpoint of the preparer, so the honest reader will prefer such an approach to accounting standards in that environment.



Tests for chapter 4

4.1 Explain the need to measure in accounting and what measurement involves.

Measurement in financial reporting is required to be able to put a number (a monetary amount) against the items in the financial statements. Without these amounts, the financial statements would be of little use.

Measurement involves two steps:

Deciding what attribute to measure. The choice of the appropriate attribute will depend on the purpose for measurement.

Deciding how to measure the chosen attribute. This requires a choice of scale and unit. In accounting we use monetary amounts as the scale and traditionally use nominal dollars (although constant dollars is an alternative unit).

4.2 Explain the difference between cost and value.

Cost is a sacrifice

Cost is something that a person or entity 'gives up or foregoes'. It is a behavioural concept. In economic theory, the sacrifice pertains to the next best alternative forgone. We can measure the sacrifice by determining what was sacrificed, if that is quantifiable. If money is used, then this is simple to determine, since the sacrifice is the amount of money given.

Value

Something has value because it is desired, that is, preferred to something else. In economic theory, the sacrifice pertains to the next best alternative forgone. We can measure the sacrifice by determining what was sacrificed, if that is quantifiable.

Cost and value

Cost relates to value because one must forego something of value if there is to be a sacrifice. If the 'thing' given up has no value, there is no sacrifice. If money is used, then this is simple to determine, since the sacrifice is the amount of money given.

At the time the sacrifice is made, we can say that value is at least equal to cost. Presumably a rational person would not sacrifice more than the value then placed on the object or right obtained.

In accounting, we usually think of cost as represented by the amount of money or other consideration given (sacrificed) to acquire something. Objectively, value is quantified by the market price system.

4.3 Explain the advantages and disadvantages of using historic cost as a measure. Historic cost is the money (dollars) sacrificed or given up to obtain an item.

The key advantages are:

It is reliable because it is objective (the amount paid can usually be verified)

It is easily understood by both preparers and users

Also the cost of measuring is minimal (usually there is no need to undertake valuations or make estimates)

The main disadvantage of historic cost is relevance as:

What you have paid for an item is not relevant to future decisions

It provides no indication of the value of an item to an entity

It fails to take into account the time value of money and price changes

It can restrict recognition of items which are not purchased or where cost is difficult to establish

4.4 Explain the difference between current and replacement costs.

Both current and replacement costs are entry prices (i.e. the costs that would be incurred to bring the asset into the entity). The difference relates to the view of what the 'asset' is; one views as identical in form to the current asset; the other as identical in terms of future economic benefits that the current asset provides.

Replacement cost

Replacement cost is the present cost of replacing an asset with an identical or similar asset. The focus is on the replacement of the asset currently held. The availability of an identical or similar asset must be considered. If an identical or similar asset is not available, then the cost of the modern equivalent would be used. For example, an entity purchased a forklift truck with a useful life of 10 years, for \$40 000 three years ago. The replacement cost would be:

The market price of a second-hand forklift in identical condition to the forklift currently held (that is, at the end of the three years); or

if no second-hand market existed, the current market price of a new forklift, adjusted (via depreciation charges) to take into account the fact that the new forklift would provide 10 years' service, yet the current forklift has only seven years' service remaining; or

if forklifts were no longer available, then the current market price of the 'modern equivalent' asset (for example, a conveyor belt) would be used, and adjusted as before, for any difference in future years of service between the forklift currently held and the conveyor belt.

Current cost

The current cost of an item is the lowest amount that would be paid at the current time to provide or replace the future economic benefits expected from the current item.

Current cost is the lowest cost at which the service potential (i.e. the future economic benefits) of the asset could be obtained. Its focus is on the service potential (the benefits for which the asset is acquired) rather than the form of the asset itself. In many cases this will be identical to the replacement cost. However, this concept takes into account the fact it may be possible to replace the existing asset with a different asset which would replace the service potential at a lower cost (than replacing it with the same asset).

4.5 Explain the advantages and disadvantages of using current or replacement cost as a measure.

The key advantages of using current or replacement cost is that these are:

Reliable in the sense that it is determined by market prices and therefore, less able to be manipulated by management. Also, as it reflects current prices, it does not have the disadvantage of historic cost in relation to ignoring time, value of money and price changes.

Possibly more relevant as it is assumed that if a business is to continue it needs to be able to replace the resources that it consumes. The costs measure the costs of replacing the resources that the entity currently has.



The key disadvantages of using current or replacement cost is that these are: May not be relevant.

Recall that accounting is to provide information relevant to decision making.

Replacement and current costs are relevant if deciding whether or not to replace an item; however, the entity already has the item.

As these are costs, they do not provide any measure of the benefits that are expected from the asset by the entity. Also, as these costs are entry prices they are determined by the market and do not take into account the specific entity context.

4.6 Explain the advantages and disadvantages of using fair value as a measure. Fair value is the amount for which an item could be exchanged between knowledgeable, willing parties in an arm's length transaction

The key advantages of using fair value as a measure is that:

It is reliable in the sense that it is objective as determined by market forces and hence, less open to influence by management. This assumes that fair value can be readily obtained in the market place.

It has relevance. Many consider that what an asset could obtain in the market place (i.e. its fair value) is relevant. However, this would depend on the asset and how it is used by the entity. For example, a machine could have little resale value in the market place but could be used to generate high revenues by an individual company. Fair value would be assumed to be relevant to decisions relating to creditors if trying to determine whether the company, if closed, would have enough funds to pay off debts.

The key disadvantages of using fair value as a measure is that: Unless there is an active market estimating fair value can be subjective

4.7 Explain the advantages and disadvantages of using present value as a measure. The key advantage of using present value as a measure is that it is often considered the ideal measure of 'value' because:

it is conceptually consistent with the definitions of the elements of the financial statements (as it measures inflows/outflows of economic benefits) it measures cash flows which are the source of 'value' for business entities It takes into account the time value of money.

The present value concept measures 'value' as the present value of the future net cash flows expected to be obtained from the asset. The present value of money is the value now of a sum of money arising in the future. Money now is worth more than money in the future, because it could be invested now to produce a greater sum in the future. The present value

of money in the future is calculated by discounting the future money at a rate of interest equivalent to the rate at which that money could be invested.

Disadvantages/Problems in Measuring Present Value

Although present value may be theoretically the ideal measure of value, the lack of reliability (recall that the recognition criteria in the Framework require that 'a cost or other value that can be measured reliably') limits the use of present value. There are three problems in calculating present value:

How to predict the amounts and timing of future cash flows

We need to determine what cash flows will be realised and when. This involves predictions of a number of variables including the services expected to be provided by the asset and conversion of these into cash flows; the length of time the asset will last and future demand, prices, operating costs.

How to allocate cash flows between assets

Many assets are used jointly to produce a cash flow – it is the combination of a number of assets that produces the cash flows; not any single asset. In such cases, it is impossible to determine the cash flows specifically identifiable with any particular asset. For example, how much of the cash flow belongs to the spray painting equipment used by Mitsubishi?

Choice of interest/discount rate

There is a number of alternative interest or discount rates that may be used (for example, interest rate implicit in the contract, current market rate, cost of capital) and various views as to which is the most appropriate rate to use. Thus, the choice of the interest or discount rate to use is problematic.

Given that the above is based on expectations and management's predictions about cash flows, this is also problematic if used for assessing the performance of management.

For the above reasons, the use of present value has historically been restricted to: monetary assets and liabilities

Some assets hired out (for example, buildings).

In these cases unique cash flows for the assets concerned can be predicted relatively easily as such assets produce cash flow streams relatively independently of other assets held.

4.8 Explain what is meant by deprival value.

Deprival value (or value to the owner as it is often known) is the loss that a rational businessman or businesswoman would suffer if he or she was deprived of the asset

To decide the deprival value of an item, what action would be taken if the item that the entity currently holds was lost needs to be considered? The entity could either:

Do nothing, in which case the loss suffered is the value or recoverable amount that would have obtained from the asset (either present value if the asset was held for use, or net realisable value if the asset was held for sale), or

Replace the services that would have been provided by the asset, in which case the loss suffered is the current cost of replacing the services (by replacing the services the owner regains the value and is restored to the original position).

A rational owner will choose the action that minimizes the loss. Deprival value assumes that the entity will take the action that results in the lowest cost or loss.

This choice requires two comparisons to be made:

Compare PV (value in use) and NRV (value in exchange) to determine the value/recoverable amount of the asset (value is the greater of the two)

Compare CC and value/recoverable amount (established from first comparison) to determine the minimal loss.

4.9 What role does judgment have in measuring items in the financial statements? Professional judgment has two key roles in measuring items in the financial statements:



Choosing the way in which an item is to be measured (i.e. choosing attribute/scale). The Framework allows a choice and does not prescribe a specific measurement method. Particular accounting standards may prescribe the way in which particular items are to be measured. However, in relation to other items, measurement may not be prescribed by a standard or there may be a in such cases, judgment will be required to determine the most appropriate measurement basis to use. This requires consideration of users' needs and the relative relevance and reliability of alternative measures.

Estimating particular measures. For example, we need to use judgment in estimating useful life and residual value of assets that are being depreciated; we need to use judgment in determining how to estimate fair value if market values are not readily available for an item.

Test on Chapter 5

- 1. What is the earnings response coefficient?
 - a) the size of the response of stock prices to new information
 - b) the size of the stock price response to abnormal earnings of the firm
 - c) the size of the change in the returns from holding a stock in response to a new piece of information
- 2. Why is the efficient market hypothesis relevant to accounting theory?
 - a) Accounting assumes stock market valuations are the ultimate benchmark of value
 - b) Accounting works in different ways for efficient markets than it does for inefficient markets
 - c) Both the above
- 3. Is ERC a measure of information content and value relevance?
 - a) Yes
 - b) No
 - c) Yes it is a measure but no it is not the measure
- 4. What is the significance of post earnings announcement drift?
 - a) It shows that rational investors take time to digest new information
 - b) It shows that stock markets are not very efficient
 - c) It shows that stock markets are inefficient
- 5. Why does the stock market valuation of accruals imply the market is not very efficient?
 - a) because accruals are settled soon after the year end
 - b) because an efficient market would see through all year end window dressing
 - c) because accruals have no significance in themselves

- 6. Information content and value relevance refer to what?
 - a) the effect of news, accounts' items and individual disclosures on stock returns
 - b) the usefulness of accounts' items to investors
 - c) the beta change in response to any new disclosure
- 7. What is the heuristic of availability?
 - a) decisions are made on the basis of available information
 - b) decisions are made on the basis of the things which are easiest to recall
 - c) decisions are made on the most up to date data
- 8. What do heuristics have to do with the usefulness of accounts to investors' decisions?
 - a) heuristics bias rational decisions
 - b) heuristics mean decisions will be made on wrongly selected accounts information
 - c) heuristics make accounts all the more useful by way of compensation
- 9. Why does the capital asset pricing model fail to describe the pricing of investments over a period?
 - a) because beta is not stationary
 - b) because beta is not the only kind of risk actually rewarded
 - c) both the above
- 10. What information is most useful to investors?
 - a) anything that helps predict the future value of firm
 - b) financial analysts' reasoned forecasts
 - c) accurate and complete historical records of the firm's transactions

1	2	3	4	5	6	7	8	9	10
C	C	а	b	Ь	а	b	а	С	а

Test on Chapter 6

6.1 What are the roles and relationships that an accountant may take? Is there an inherent possibility of conflict?

Each day, accountants must fulfill many varied roles and maintain many different relationships. On any given occasion, they are required to interact with supervisors, other employees and their individual clients to perform their duties. Accountants are individuals whose behaviour is greatly influenced by aspects of their personality and family background (Warnock 2006). These characteristics, in combination with various other attributes, greatly increase accountants'

ability to fulfill their role as professionals. Other qualities include knowledge, experience, professional education, ethical evaluations, personal judgment and cultural background. It is important to understand the ethical role of accountants in society. Accountants must conduct themselves in a manner consistent with the good reputation of their profession and avoid any conduct that may damage its reputation. However, for accountants to be considered ethical and professional, they are not merely required to comply with the written rules of conduct. In addition, the accountant's role and relationships have an inherent possibility of conflict. Further, an accountant is required to exercise reasonable professional care in the performance of his or her work and ensure, at all times, that the information that he or she provides is presented in a way that best supports their client's interests.

The accountant must further ensure that his or her conduct does not conflict with the duties and loyalties he or she owes to the community because, along with the aforementioned professional responsibilities, the accountant also has particular obligations to the public (including clients) and others who rely on accountants to help the systematic and proficient functioning of commerce.



6.2 Discuss the application of professional judgment in accounting decisions.

Professional judgment may only be applied by the accountant when there is doubt as to the propriety of any course of action and when the issue cannot be resolved by reference to the Code, then the accountant must seek guidance from their professional body. Professional bodies provide a basis on which the accountant's concerns can be discussed objectively and in confidence. However, this requires time, and if the accountant has to make an urgent decision he/she should comply with the five fundamental principles of professional behaviour. These are integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. An accountant should be able to identify, evaluate and address threats to comply with the above fundamental principles and should follow the conceptual framework provided by the Code in order to apply certain safeguards to eliminate the threats to professional judgment or at least reduce them to an acceptable level.

6.3 What is professional independence and what are the main threats to professional independence? How can the threats to independence be minimized?

Compliance with the five fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour, may be jeopardized by certain circumstances, which consequently may threaten independence. The concept of independence is fundamental to compliance with the principles of integrity and objectivity.

The following are some situations in which the independence of the accountant may be compromised:

- self-interest threats or familiarity, which arises because of financial or other interests with a close relationship or a family member
- intimidation threats, in which the accountant is pressured into acting subjectively
- self-review threats, which may take place when a previous judgment requires reevaluation.

Accountants must be independent at all times because the characteristics of objectivity and integrity are essential to their role as advisers. To maintain this ideal state, accountants must ensure that they are not influenced by any financial considerations or placed in a position of conflict. Clearly, the advice provided by an accountant will only have value when the professional is free (actual independence) and appears to be free (perceived independence) from any interest that is contrary to integrity and objectivity.

Professional independence may be preserved when particular measures are taken to avoid the influence of third parties on accountants, and when external support from legislation and from professional bodies is provided. Professional bodies play an important role in the preservation of independence in that they can provide education and practical advice on ethics to accountants.

Safeguards available to the accounting professional may include education, training and continuing professional development and experience requirements for entry into the accounting practice, corporate governance regulations, professional standards, professional or regulatory monitoring and disciplinary procedures and external reviews by third parties.

6.4 Discuss the five objectives of the accounting profession

Accountants must observe five fundamental principles of the accounting profession. It is the accountants' professional responsibility to ensure strict compliance with these principles and any departure from them can have severe consequences. The five principles are:

- Integrity refers to the accountant's obligation to be frank and honest. The principle of integrity also implies fair dealing and truthfulness.
- Objectivity imposes an 'obligation to accountants not to compromise their professional
 or business judgment because of bias, conflict of interest or the undue influence
 of others'.
- Professional competence and due care impose the obligation 'to maintain professional knowledge and skill' and 'to act diligently in accordance to the applicable technical and professional standards'.
- Confidentiality imposes restrictions on the disclosure of confidential information without client authority and the use of this information for the accountant's personal advantage or the advantage of third parties.

Professional behaviour 'imposes an obligation to comply with relevant laws and avoid any action or omission that may have a negative effect on the profession'.

6.5 What must the professional accountant display by way of professional conduct and expertise?

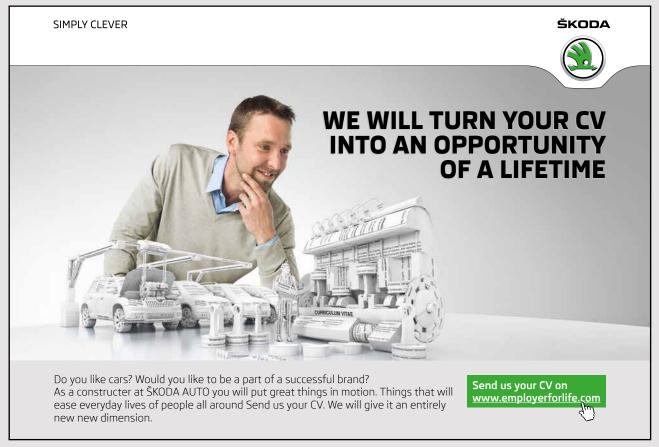
Accountants must be fair and should not compromise their independence by allowing prejudice, conflict of interest, bias or undue influence from others to factor into their decisions. Objectivity and disinterestedness are fundamental characteristics of the accounting profession. Accountants must perform their duties and roles with these essential qualities in mind. To serve the interests of their clients, the public and the profession, accountants must remain, at all times, unbiased and impartial. Neutrality is of vital importance. True independence requires high standards of honesty and objectivity, as well as the strength of

character needed to maintain those standards regardless of the pressures that may be brought to bear on them by third parties (Brown 2002).

Further, accountants must perform professional services with due care, competence and diligence (s.130). Accountants have a continuing duty to maintain their professional body of knowledge and their requisite level of skill. This ensures that they are able to offer their clients or employers a competent professional service that incorporates current developments in practice, legislation and techniques.

The competence and proficiency of accountants are integral to maintaining the esteem of the profession. The level of competence is defined by the accounting societies, which indicate to practitioners the level of education and professional development required. This may serve to protect accountants from litigation by establishing what is necessary to be competent and perform their function with due care.

6.6 What does legitimacy theory postulate as the thing that protects the public interest when professions are allowed to regulate themselves?



A social contract

6.7 How can you tell which kind of isomorphism applies to a situation where behaviour is converging?

If the group is adopting the norm of another group, it's mimetic. If acting under regulation, law or obvious pressure, it's coercive. If it emerges organically and from within the group, it's normative.

6.8 How is stakeholder theory in conflict with agency theory?

For stakeholder to apply fully, the Board must be sovereign but agency theory requires the Board to be subordinate to the stockholders.

6.9 What connects legitimacy theory with the idea of a middle orbit of accountability?

Social pressure, even sometimes a social contract idea, compelling changes of behaviour towards the public interest. This contrasts with the inner orbit where enforcement of law or regulation is available to compel less anti social behaviour.

6.10 Why is posterity relevant to present values of anything?

Because it has legitimate and recognizable interests. Note this question is not about the discount rate relevant to discounting posterity's claims.

6.11 What Kohlberg level do professional groups operate at and what level might they claim to operate at?

Actually 3 but they claim 4 where the public interest lies.

6.12 What is surplus value and how is it different from value in use?

Surplus value is the Marxist idea that the price of a commodity minus the cost of paying the labour that produced it is a surplus appropriated by the owners of the firm, i.e. the capitalists, to increase their own wealth.

Value in use includes NPV and means the value created by holding an asset rather than selling it. Accordingly, valuing a firm as a going concern is estimating its value in use rather than its saleable value. Fair value one and two are sales values but level three is a value in use.

6.13 What is the principal assertion of postmodernism and what is the implication for the idea of legitimacy?

There is no 'grand narrative' or universal set of values, therefore legitimacy only means anything inside one society, jurisdiction or setting and has no universal or international meaning at all.

6.14 What has Habermas got to do with accounting theory?

Accounting is said to be the language of business and Habermas is a philosopher of language and communication.

6.15 What is integrity?

In professional codes, it just means honesty and square dealing; but in a stricter sense, as employed by Max Weber, it means unifying ethics of conviction with ethics of responsibility.

6.16 What is the single criticism of accounting all schools of critical perspectives agree on?

That it is not, and never can be, neutral or value free.

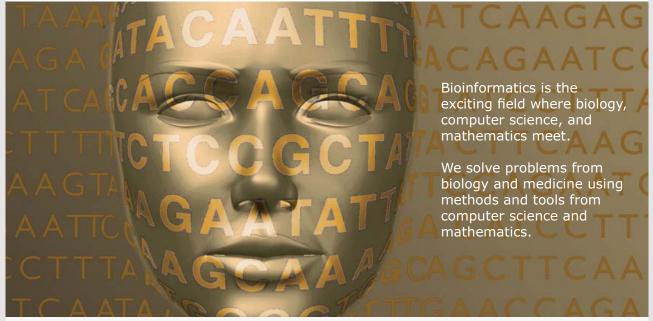
Test on Chapter 7

- 1. Distinguish the political cost hypothesis from the bonus plan hypothesis.
 - a) only the bonus plan hypothesis involves reducing current reported earnings
 - b) only the bonus plan hypothesis involves increasing current reported earnings
 - c) the political cost hypothesis only covers scandals and environmental disasters
- 2. Distinguish the debt covenant hypothesis from the bonus plan hypothesis
 - a) only the debt covenant hypothesis involves reducing current reported earnings
 - b) only the bonus plan hypothesis involves increasing current reported earnings
 - c) the cause of earnings manipulation is entirely different in each case
- 3. What are the necessary conditions to prove the crime of fraud?
 - a) proof beyond reasonable doubt the suspect perpetrated the office and did so intentionally
 - b) proof beyond reasonable doubt the suspect committed the offence
 - c) as (a) plus actual loss suffered by identifiable victim/s

- 4. What are the components of the fraud triangle?
 - a) motive, means and opportunity
 - b) motive, intention and rationalization
 - c) intention, opportunity and rationalization
- 5. Why are most failures and business bankruptcies type one?
 - a) economic insolvency
 - b) most failures happen to people who should never have been in business
 - c) small unviable businesses form the majority of failures and this unviability from the very start is the essence of type one
- 6. What is the critical trigger of virtually all business failures?
 - a) economic insolvency
 - b) most failures occur to people who should not have been in business at all
 - c) most failures are small firms not in business very long
- 7. How are fraud and failure brought together in many type two failures?
 - a) a dominant CEO commits fraud and triggers insolvency
 - b) overspending allied to theft
 - c) dictatorship of an immoral and incompetent single person



Develop the tools we need for Life Science Masters Degree in Bioinformatics



Read more about this and our other international masters degree programmes at www.uu.se/master

- 8. Distinguish economic from technical insolvency.
 - a) economic is a deficiency of assets; technical is inability to pay debts in full on time
 - b) technical is a deficiency of assets; economic is inability to pay debts
 - c) economic is inability to pay debts; technical is refusal to pay them
- 9. What causes type three failures?
 - a) nobody knows
 - b) an excessively dominant CEO
 - c) unsuccessful diversification away from traditional lines of business

1 2 3 4 5 6 7 8 9 b c a c c c a a c

Test on chapter 8 - correct choice is in italics

- 1. Integrated reporting is primarily aimed at better informing
 - a) society
 - b) stakeholders
 - c) investors
- 2. Wood in forests are an example of what kind of capital?
 - a) renewable natural
 - b) sustainable natural
 - c) substitutable natural
- 3. GRI(4) requires
 - a) the costing of externalities
 - b) the disclosure of "material aspects" and "boundaries"
 - c) the disclosure of six categories of capital
- 4. A firm building a football ground for a local school as a donation would affect which one of its integrated reporting capitals?
 - a) human
 - b) financial
 - c) social and relationship

- 5. A new factory building is what kind of capital?
 - a) manufactured capital
 - b) renewable capital
 - c) share capital
- 6. A new version of the software a firm sells to the public is what kind of capital?
 - a) human capital
 - b) intellectual capital
 - c) manufactured capital
- 7. Gray et al.'s definition of accountability is
 - a) The duty to honour the social contract by voluntary disclosures
 - b) The obligation to exercise due care in the performance of duties
 - c) The duty to provide an account or reckoning of those actions for which one is held responsible.
- 8. GRI (4) defines material aspects as
 - a) issues that are significant to a business' economic, environmental and social impacts and that substantively influence the assessments and decisions of its stakeholders.
 - b) issues central to a business model such that they materially affect earnings, externalities and ecology
 - c) issues that the directors judge to have the most salience.
- 9. In GRI(4), how a firm approaches governance and ethics and integrity will be found its
 - a) Global Reporting Initiative
 - b) General Standard Disclosures
 - c) Specific Standard Disclosures
- 10. An externality is
 - a) a stakeholder not employed by the firm
 - b) a cost imposed by the firm on its environment but not born by the firm itself
 - c) a revenue stream from outside the firm benefitting the firm's investors
- 11. An example of social and relationship capital is
 - a) employee stock options
 - b) regular meetings with major stakeholders
 - c) a heritage asset such as a Picasso inherited from a rich uncle

- 12. The business model of a university might be
 - a) doing research funded by grants but not costing as much as the grant amounts
 - b) producing "great courses" in permanent formats that are sold to any customer willing to buy
 - c) selling educational experiences to eligible students at a price partly subsidized by government
- 13. How have GRI based reports to account for a firm's interactions with stakeholders?
 - a) by disclosing material aspects that substantially affect its interactions with them
 - b) by disclosing how stakeholders have been attended to in the period
 - c) by disclosing the relative salience of each stakeholder
- 14. The purchased value of a patent in integrated reporting would be included with category of capital?
 - a) intellectual
 - b) social and relationship
 - c) working



Click on the ad to read more

- 15. The three ingredients of triple bottom line reporting are
 - a) financial, social and environmental
 - b) social, natural and manufactured
 - c) charity, pollution and earnings
- 16. Gray says a sustainable cost is one which
 - a) maintains the Earth's capital
 - b) sustains the earnings of the firm
 - c) a cost which never diminishes
- 17. Which of the following is a substitutable natural capital?
 - a) clean air
 - b) gasoline oil
 - c) river water
- 18. Which of these is one of the requirements of the GRI's Disclosures of Management Approach
 - a) how the approach is to be justified
 - b) how the approach to managing a disclosed aspect is being evaluated.
 - c) where the entity sees its boundaries
- 19. What is the relationship between corporate governance and the integrated report?
 - a) there is no relationship at all
 - b) integrated reports must show how governance has improved in the reporting period
 - c) an integrated report should answer the question: How does the organization's governance structure support its ability to create value in the short, medium and long term?
- 20. Can something be human capital, intellectual capital and social and relationship capital all at the same time under integrated reporting guidelines?
 - a) Yes because these capitals are written about in words not accounted for in quantitative bookkeeping terms
 - b) No, a choice must be made in accordance with the item's main use
 - c) The guidelines don't address this point

REFERENCES

AAA (1936), "A Tentative Statement of Accounting Principles Affecting Corporate Reports", *Accounting Review*, 11(2), 187–191.

AICPA (1973), Report of Study Group on Objectives of Financial Statements, The Trueblood Report, New York: American Institute of Certified Public Accountants.

Akerlof, George A. (1970). "The Market for "Lemons": Quality Uncertainty and the Market Mechanism" (PDF). *The Quarterly Journal of Economics* 84 (3): 488–500. doi: 10.2307/1879431. Retrieved 3 March 2013.

Albrecht, W.S., Albrecht, C.O., Albrecht, C.C., & Zimbelman, M.F. (2012). *Fraud examination* (fourth edition). OH, USA: South Western Cengage Learning.

American Accounting Association (1966). A statement of basic accounting theory, New York: AAA.

Argenti, John (1976); Corporate Collapse: the causes and the symptoms; New York and London: J Wiley and sons.

Arrington, C. Edward; and Jere R. Francis; (1989). "Letting the chat out of the bag: Deconstruction, privilege and accounting research", *Accounting, Organizations and Society* 14 (1/2), 1–28.

Attwood Margaret, (2008). Payback: Debt and the shadow side of wealth; London: Bloomsbury

Baker, R.C. (2003), 'Investigating Enron as a public private partnership', *Accounting, Auditing and Accountability Journal*, 16(3), 446–466.

Ball, R. and Brown, P. (1968). 'An empirical evaluation of accounting income numbers', *Journal of Accounting Research*, 6(2), 159–178.

Ball R and Kothari SP; (1989); "Non-stationary expected returns: implications for tests of market efficiency and serial correlation in returns"; *Journal of Financial Economics*, 25(1), 51–74.

Bartlett, N., Endo, R., Tonkin, E., & Williams, A. (2004). "Audit planning for the detection of fraud", in R. Johnson (Ed.), *Readings on auditing*. Milton, Queensland: J. Wiley & Sons.

Beatty, A. and Weber, J. (2003). The effects of debt contracting on Voluntary Accounting Method Changes', *The Accounting Review*, 78, 119–142.

Beaver, W. H. (1968). "The Information Content of Annual Earnings Announcements", *Journal of Accounting Research*, 6, Empirical Research in Accounting: Selected Studies 1968, 67–92.

Beidleman, C.R. (1973), "Income Smoothing: The Role of Management", *The Accounting Review*, 48(4), 653–667.

Berle, Adolf A and Gardiner C. Means, *The Modern Corporation and Private Property* (New York: Harcourt, Brace & World, [1932] 1968).

Bernard, V.L. and Thomas, J.K. (1989), "Post-Earnings-Announcement Drift: Delayed Price Response or Risk Premium", *Journal of Accounting Research*, 27, Current Studies on The Information Content of Accounting Earnings, 1–36.

Birch, Thomas. (1993). "Moral considerability and universal consideration". *Environmental Ethics* 15: 313–32.



Birnbaum MH, Johnson K and Longbottom J-L; (2008); "Tests of cumulative prospect theory with graphical displays of probability," *Judgment and Decision Making* 3(7), 528–546, October.

Bushman, R. and Landsman, W.R. (2010), "The Pros and Cons of Regulating Corporate Reporting: A Critical Review of the Arguments", *Accounting and Business Research*, 40(3), 259–273.

Cable Vince (2008) The Storm, London: Atlantic Books.

Calabresi, G., & Hirschoff, J.T. (1972). "Toward a test for strict liability in torts", *The Yale Law Journal*, 81, 1055–1085.

Cahan, S.F. (1992), "The Effect of Antitrust Investigations on Discretionary Accruals: A Refined Test of the Political-Cost Hypothesis", The Accounting Review, 67(1), 77–95.

Cameron, A.B. and Stephens, L. (1991), "The Treatment of Non-Recurring Items in the Income Statement and their Consistency with FASB Concept Statements", Abacus, 27(2), 81–96.

Chambers, R.J. (1966), Accounting, Valuation, and Economic Behavior, Englewood Cliffs, N.J., Prentice-Hall

Chatfield, Michael, 1974, A history of accounting thought, Hinsdale IL: Dryden Press.

Chua, Wai Fong (1986); "Radical developments in accounting thought", *Accounting Review* 61(4) 601–6.

Cohen, Zipora, (2001), "Directors' negligence liability to creditors: A comparative and critical view", *Journal of Corporation Law*, 26(2), 351–391.

Collins D W and Kothari S P; (1989); "An analysis of the intertemporal and cross-sectional determinants of earnings response coefficients," *Journal of Accounting and Economics*, 11(2–3),143–181, July.

Cressey, Donald;(1972); Criminal Organization: Its Elementary Forms. New York: Harper and Row, 1972. ISBN 0-06-131692-X.

Cressey, Donald; (1973) Other People's Money: A Study in the Social Psychology of Embezzlement. Montclair, N.J.: Patterson Smith, 1973. ISBN 978-0-87585-202-7.

Cutler, David M.; Zeckhauser, Richard J. (1998). "Adverse Selection in Health Insurance". Forum for Health Economics & Policy 1: Article 2. doi:10.2202/1558-9544.1056.

Daniel K D, Hirshleifer D and Subrahmanyam A: (1998); "Investor psychology and security market investor under- and over- reactions," *Journal of Finance* Vol 64,1839–1885, December.

Daniel KD and Titman S; (1999); "Evidence on the characteristics of cross sectional variation in stock returns," *Journal of Finance*, Vol 56, 28–40.

Dean G and Clarke F, (2003); "An evolving conceptual framework?" *Abacus* 39(3), 279–297.

DeChow PM and Dichev I; (2002); "The quality of accruals and earnings: the role of accrual estimation errors," The *Accounting Review* Supplement, Vol 77, 35–59.

DeFond, M. L. and Jiambalvo, J. (1994), "Debt Covenant Violation and Manipulation of Accounting and Economics, 17 (1–2), 145–176.

Dembe, Allard E. and Boden, Leslie I. (2000). "Moral Hazard: A Question of Morality?" *New Solutions* 2000 10(3). 257–279.

Demski Joel S, 1973, "The general impossibility of normative accounting standards," *Accounting Review* 718–723, October.

Dhaliwal DS, Lee KJ and Fargher NL; (1991); "The association between unexpected earnings and abnormal security returns in the presence of financial leverage," *Contemporary Accounting Research*, 8(1), 20–41, Fall.

DiMaggio, P.J. and Powell, W.W. (1983), "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields", *American Sociological Review*, 48(2), 147–160.

Donleavy GD, 2012; "Floodgates and Accountability: Issues in an Orbital Theory", *International Journal of Economics and Accounting*, 3(2), 101–114.

Dowling, J. and Pfeffer, J. (1975), "Organisational legitimacy: social values and organisational behavior", Pacific Sociological Review, Vol. 10 No. 1, pp. 122–136.

Easton PD and Zmijewski ME; (1989); "Cross-sectional variation in the stock market response to accounting earnings announcements," *Journal of Accounting and Economics*, 11(2–3),117–141, July.

Edwards, E. (1975), The state of current value accounting', *Accounting Review*, 50(2), pp. 235–245.

Edwards, E.O. and Bell, P.W. (1961), *The Theory and Measurement of Business Income*, Berkeley University of California Press.

Eisenhardt, K. (1989). "Agency theory: An assessment and review". *Academy of Management Review* 14 (1): 57–74. doi:10.5465/amr.1989.4279003.

Elkington John; 1997; Cannibals With Forks: The Triple Bottom Line of 21st Century Business. Capstone, Oxford, 1997, 402 pp. ISBN 1-900961-27-X.

FASB (1976), FASB Discussion Memorandum No. 9: Scope and Implications of the Conceptual Framework Project, FASB.

FASB 2011:news release 05/12/11;"IASB and FASB issue common fair value measurement and disclosure requirements". http://www.fasb.org/cs/ContentServer?pagename=FASB/FASBContent_C/NewsPage&cid=1176158544944

Trust and responsibility

NNE and Pharmaplan have joined forces to create NNE Pharmaplan, the world's leading engineering and consultancy company focused entirely on the pharma and biotech industries.

Inés Aréizaga Esteva (Spain), 25 years old Education: Chemical Engineer

– You have to be proactive and open-minded as a newcomer and make it clear to your colleagues what you are able to cope. The pharmaceutical field is new to me. But busy as they are, most of my colleagues find the time to teach me, and they also trust me. Even though it was a bit hard at first, I can feel over time that I am beginning to be taken seriously and that my contribution is appreciated.



Fama, E (1980), "Agency Problems and the Theory of the Firm", *Journal of Political Economy*, 88(2), 288–307.

Fama, EF, "Efficient Capital Markets: a Review of Theory and Empirical Work." *Journal of Finance* (May 1970).

Fama, E. and French, K.R. (1993), "Common risk factors in the returns on stocks and bonds", *Journal of Financial Economics*, 33 (1), 3–56.

Feltham G A and Ohlson JA: (1995); "Valuation and clean surplus accounting for operating and financial activities," *Contemporary Accounting Research* 11(3), 689–731, Spring.

Ferguson, C. and Wines, G., (1986), 'Incidence of the use of current cost accounting in published annual financial statements', *Accounting Forum* (March).

Fordham.Margaret, (2005), "A Life Without Value", Singapore Journal of Legal Studies, 395–406, December.

Foucault, M. (1970). The order of things. New York: Pantheon.

Foucault, M. (1977). Discipline and punish. New York: Pantheon.

Freeman, R.E.: 1984, Strategic Management: A Stakeholder Approach, Marshfield, MA: Pittman.

Freeman, R.E.: 2002, 'Stakeholder Theory of the Modern Corporation', in T. Donaldson and P. Werhane (eds.), *Ethical Issues in Business: A Philosophical Approach*, 7th Edition (Prentice Hall, Englewood Cliffs, NJ), pp. 38–48.

Freeman, R.E.: 2008, 'Managing for Stakeholders', in T. Donaldson and P. Werhane (eds.), *Ethical Issues in Business: A Philosophical Approach*, 8th Edition (Prentice Hall, Englewood Cliffs, NJ), pp. 39–53.

Freeman, R.E., J.E. Harrison and A.C. Wicks: 2007, *Managing for Stakeholders: Survival, Reputation, and Success*, New Haven, CT: Yale University Press.

Freeman, R.E. and R. Philips: 2002, 'Stakeholder Theory: A Libertarian Defense', *Business Ethics Quarterly* 3(12), 331–350. doi:10.2307/3858020.

Friedman, M. (1962), Capitalism and Freedom, Chicago: University of Chicago Press

Friedman, M. (1980), Free to Choose: A Personal Statement New York: Harcourt.

Friedman, Milton, and Anna Jacobson Schwartz, (1963). A Monetary History of the United States, 1867–1960. Princeton University Press.

Gandel, Stephen, (2010), "Lehman examiner finds fraud, probably", *Time Magazine* 12.3.2010; http://business.time.com/2010/03/12/lehman-examiner-finds-fraud-possibly/

Global Reporting Initiative (1999), 'GM Vision and Mission Statements', www.globalreporting.org/about/mission.asp, accessed 11 July 2005.

Global Reporting Initiative (2002), Sustainability Reporting Guidelines, Boston, MA: Global Reporting Initiative.

Global Reporting Initiative (2006), Sustainability Reporting Guidelines: G3 Version for Public Comment, Amsterdam: GRI.

Grady, Paul, (1965), "An inventory of generally accepted accountinh principles in the United States of America", *Accounting Review* 21–30, January.

Granovetter, Mark. (1985), "Economic Action and Social Structure: The Problem of Embeddedness". *American Journal of Sociology* 91 481–510, November.

Gray, R. (1992), 'Accounting and environmentalism: An exploration of the challenge of gently accounting for accountability, transparency and sustainability', *Accounting Organizations and Society*, 17(5), 399–426.

Gray, R. (2006). Social, environmental and sustainability reporting and organisational value creation? Accounting, Auditing & Accountability Journal, 19(6), 793–819.

Gray, R., Owen, D. and Adams, C. (1996), Accounting and Accountability. Changes and Challenges in Corporate Social Reporting and Environmental Reporting, Hemel Hempstead: Prentice Hall.

Gray, R., Owen, D. and Maunders, K. (1991), "Accountability, corporate social reporting, and the external social audits", *Advances in Public Interest Accounting*, Vol. 4, pp. 1–21.

Gwilliam, D & Jackson, RHG (2008), 'Fair value in financial reporting: problems and pitfalls in practice: a case study analysis of the use of fair valuation at Enron, *Accounting Forum*, 32(3), 240–59.

Habermas, Jurgen. (1975). Crisis of Legitimation. Boston: Beacon Press.

Habermas, Jurgen. (1985). *The Theory of Communicative Action*, vol. 2: Lifeworld and System. Boston: Beacon Press.

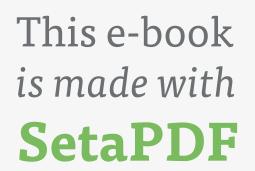
Habermas, Jurgen. (1994). "Struggles for Recognition in the Democratic Constitutional State." In *Multiculturalism: Examining the Politics of Recognition*, ed. Amy Gutmann. Princeton: Princeton University Press.

Habermas, Jurgen. (1996). Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy. Cambridge, Mass.: MIT Press.

Habermas, Jurgen. (1998). *The Inclusion of the Other*, ed. Ciaran Cronin and Pablo De Greiff. Cambridge, Mass.: MIT Press.

Harvey, Peter, (2000), An Introduction to Buddhist Ethics, Cambridge University Press.

Hayek, F.A. von (1945), *The Road to Serfdom*, the condensed version edited by Reader's Digest, The "Rediscovered Riches" series of the Institute of Economic Affairs (IEA) published







PDF components for **PHP** developers

www.setasign.com

in 1999, available at: www.iea.org.uk/sites/default/files/publications/files/upldbook43pdf.pdf (accessed on 9 January 2016).

Healy P, (1985); "The effect of bonus schemes on accounting decisions," *Journal of Accounting and Economics* 7 85–107.

Heath LC, (1972), Distinguishing between monetary and non monetary assets and liabilities in general price level accounting, *Accounting Review* 458–468, July.

Hepworth, S.R. (1953), "Smoothing Periodic Income", *The Accounting Review*, 28(1), 32–39.

Hines Ruth D. (1988); Financial accounting: In communicating reality, we construct reality *Accounting, Organizations and Society* 13(3), 251–261.

Hines Ruth D. (1991); The FASB's conceptual framework, financial accounting and the maintenance of the social world; *Accounting, Organizations and Society*, 16(4), 313–331.

Holthausen, R.W., Larcker, D.F. and Sloan, R.G. (1995), "Annual Bonus Schemes and the Manipulation of Earnings", *Journal of Accounting and Economics*, 19 (1), 29–74.

Horngren CT; 1981; "Uses and limitations of a conceptual framework, *Journal of Accountancy* 151(4) 86–95, April.

Howitt H, 1996; The history of the ICAEW – 1880–1965 and of its founder accountancy bodies 1870–1880, London: Heinemann.

IASB (2017), Exposure Draft: Conceptual Framework for Financial Reporting, International Financial Reporting Standards Foundation.

IASC (1989), Framework for the Preparation and Presentation of Financial Statements, International Accounting Standards Committee Foundation.

International Accounting Standards Board (IASB) 2010, Conceptual Framework for Financial Reporting, London:IASB.

ias2 38 37.

International Integrated Reporting Council (2013), *The International <IR> Framework*. http://integratedreporting.org/wp-content/uploads/2015/03/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf

ICAEW, (2013) Timeline of the History of the Accountancy Profession, Institute of Chartered Accountants in England and Wales, 2013, retrieved December 28, 2013.

IESBA (International Ethics Standards Board for Accountants) 2015, Handbook of the code of ethics for professional accountants, New York: IFAC.

IFRS 13 Fair Value Measurement London:International Accounting Standards Board 2011.

Isch, D.J. (2007), "In defense of the reverence of all life: Heideggerean dissolution of the ethical challenges of organ donation after circulatory determination of death", *Medicine, Health Care and Philosophy* 10:441–459.

Jamal, K and Tan, H (2010), 'Joint Effects of Principles-Based versus Rules-Based Standards and Auditor Type in Constraining Financial Managers' Aggressive Reporting', *The Accounting Review*, vol. 85, no. 4, pp. 1325–46.

Jensen, Michael C. and William H. Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* (October), 3(4): 305–360. http://www.sfu.ca/~wainwrig/Econ400/jensen-meckling.pdf

Jones, J. (1991), "Earnings Management During Import Relief Investigations", *Journal of Accounting Research*, 29(2), 193–228.

Kahneman Daniel and Tversky Amos, (1979); "Prospect Theory: An Analysis of Decision under Risk"; *Econometrica* 47(2), 263–292, March.

Kam C. Chan, Benton E. Gup and Ming-Shiun Pan; (1997); "International stock market efficiency and integration: a study of eighteen nations,"; *Journal of Business Finance & Accounting*, 24(6), July 1997, 803–813.

Kaplan, Robert S; Norton, D.P. (1992). "The Balanced Scorecard – Measures That Drive Performance". *Harvard Business Review* (January–February): 71–79.

Kedslie MJM, 1990, Firm foundation: the development of professional accounting in Scotland 1850–1900; Hull: Hull University Press.

Key, G.K. (1997), "Political Cost Incentives for Earnings Management in the Cable Television Industry", Journal of Accounting and Economics, 23(3), 309–337.

Kim, M. and Kross, W. (2005), "The Ability of Earnings to Predict Future Operating Cash Flows Has Been Increasing-Not Decreasing", *Journal of Accounting Research*, 43(5), 753–780.

Kohlberg, L. (1966), "A Cognitive-Developmental Analysis of Children's Sex-Role Concepts and Attitudes', in Maccoby, E. (ed.) *The Development of Sex Differences*, London, Tavistock.

Kohlberg, L. (1969), "Stage and Sequence: The Cognitive Development Approach to Socialization", in Goslin, D. A. (Ed.), *Handbook of Socialization Theory*. 347–480, Chicago, IL, Rand McNally.

Kohlberg, L. (1976), "Moral Stages and Moralization: The Cognitive-Developmental Approach", in Lickona, T. (ed) *Moral Development and Behavior: Theory, Research and Social Issues*, Holt, NY, Rinehart and Winston.

Kohlberg, L., Levine, C. and Hewer, A. (1983), Moral Stages: a Current Formulation and a Response to Critics, Basel, Karger.

Kohlberg, L. (1986). "A Current Statement on Some Theoretical Issues", in Modgil and Modgil (Eds.), *Lawrence Kohlberg: Consensus and Controversy*. Philadelphia, PA, The Falmer Press.

Sharp Minds - Bright Ideas!

Employees at FOSS Analytical A/S are living proof of the company value - First - using new inventions to make dedicated solutions for our customers. With sharp minds and cross functional teamwork, we constantly strive to develop new unique products - Would you like to join our team?

FOSS works diligently with innovation and development as basis for its growth. It is reflected in the fact that more than 200 of the 1200 employees in FOSS work with Research & Development in Scandinavia and USA. Engineers at FOSS work in production, development and marketing, within a wide range of different fields, i.e. Chemistry, Electronics, Mechanics, Software, Optics, Microbiology, Chemometrics.

We offer

A challenging job in an international and innovative company that is leading in its field. You will get the opportunity to work with the most advanced technology together with highly skilled colleagues.

Read more about FOSS at www.foss.dk - or go directly to our student site www.foss.dk/sharpminds where you can learn more about your possibilities of working together with us on projects, your thesis etc.

Dedicated Analytical Solutions

FOSS Slangerupgade 69 3400 Hillerød Tel. +45 70103370

www.foss.dk

FOSS

The Family owned FOSS group is the world leader as supplier of dedicated, high-tech analytical solutions which measure and control the quality and production of agricultural, food, pharmaceutical and chemical products. Main activities are initiated from Denmark, Sweden and USA with headquarters domiciled in Hillerød, DK. The products are marketed globally by 23 sales companies and an extensive net of distributors. In line with the corevalue to be 'First', the company intends to expand its market position.



Kormendi R C and Lipe R; (1987); "Earnings innovations, earnings persistence and stock returns," *Journal of Business*, 60(4), 323–346, July.

Kothiyal, Amit; Spinu, Vitalie; and Wakker, Peter P; (2014); "An experintal test of prospect theory for predicting choice under uncertainty," *Journal of Risk and Uncertainty* 48, 1–17. DOI 10.1007/s11166-014-9185-0.

Kuhn, TS (1972) The Structure of Scientific Revolutions, University of Chicago Press.

Kwong-C. Cheung & J. Andrew Coutts; (2001); "A note on weak form market efficiency in security prices: evidence from the Hong Kong stock exchange," *Applied Economics Letters* 8(6), 407–410 DOI:10.1080/135048501750237865

Landsman, Wayne R; Miller, Bruce L; Peasnell Ken and Yeh, Shu; (2011); "Do Investors understand really dirty surplus?" *Accounting Review* 86(1) 237–258. DOI: 10.2308/accr.00000014.

Lawlor, Leonard, (2007); This is not sufficient. An essay on animality and human nature in Derrida, Columbia University Press, New York, 2007.

Lehman, C.R. (1992), Accounting's Changing Role in Social Conflict, Markus Wiener Publishing, Princeton, NJ.

Lev, B 2008, 'A rejoinder to Douglas Skinner's "Accounting for intangibles – a critical review of policy recommendations", *Accounting and Business Research*, 38(3), 209–13.

Lev B and Nissim D; (2006); "The persistence of the accruals anomaly"; *Contemporary Accounting Research*, 23(1), 193–226, Spring.

Lev, B. (1989), "On the Usefulness of Earnings and Earnings Research: Lessons and Directions from Two Decades of Empirical Research", *Journal of Accounting Research*, 27, Current Studies on The Information Content of Accounting Earnings, 153–192.

Lindblom, C.K. (1983), "The Concept of Organizational Legitimacy and Its Implications for Corporate Social Responsibility Disclosure", *American Accounting Association Public Interest Section*, Working paper.

Lindblom, C.K. (1994), "The Implications of Organizational Legitimacy for Corporate Social Performance and Disclosure", Conference Paper, Critical Perspectives on Accounting Conference, New York.

Lintner, J. (1965), The valuation of risk assets and the selection of risky investments in stock portfolios and capital budgets', *Review of Economics and Statistics*, 47, pp. 13–37.

Litman, Moe, (2007), "Fiduciary Law In The Hospital Context: The Prescriptive Duty Of Protective Intervention", *Health Law Journal*, 15, 295–352.

Maines, LA, Bartov, E, Fairfield, P, Hirst, DE, Iannaconi, TE, Mallett, R, Schrand, C & Vincent, L 2003, 'Evaluating concepts-based vs rules-based approaches to standard setting', *Accounting Horizons, vol.* 17, no. 1, pp. 73–90.

Malkiel, B., (1999), A Random Walk Down Wall Street, 7th ed., W.W. Norton & Co., New York, N.Y.

Marx, Karl; (2009); Capital I [Chapter 1, two paragraphs starting "The utility of a thing makes it a use value." http://www.efm.bris.ac.uk/het/marx/cap1/chap01 accessed 18 May 2015, and for surplus value Chapter 8].

Mautz, R.K. (1973), 'A few words for historical cost', *Financial. Executive* (January), pp. 23–27 and 93–98.

Mazumdar, Krishna. (1996) "An Analysis of Causal Flow between Social Development and Economic Growth: The Social Development Index", *The American Journal of Economics and Sociology* 55(3), 361–84, July.

McNichols, M. and Wilson, G.P. (1988), "Evidence of Earnings Management from the Provision for Bad Debts", *Journal of Accounting Research*, 26 (Studies on Management's Ability and Incentives to Affect the Timing and Magnitude of Accounting Accruals), 1–31.

Miller, Merton H and Franco Modigliani; (1961); Dividend Policy, Growth, and the Valuation of Shares *The Journal of Business* Vol. 34, No. 4 (Oct., 1961), pp. 411–433.

Miller PBW, 1990; "The conceptual framework: reformation and counter-reformation," *Accounting Horizons* 4(2) 23–32.

Mitchell, RK, Angle, BR & Wood, DJ 1997, 'Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts', *Academy of Management Review*, vol. 22, no. 4, pp. 853–86.

Mitnick, B.M. (2013), "Origin of the Theory of Agency: An Account By One of the Theory's Originators". https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020378

Mizruchi, M. and Fein, L.C. (1999), "The Social Construction of Organizational Knowledge: A Study of the Uses of Coercive, Mimetic, and Normative Isomorphism", *Administrative Science Quarterly*, 44(4), 653–683.

Modigliani, F. and Miller, M. (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment". *American Economic Review* 48 (3): 261–297. JSTOR 1809766.

Narayanamoorthy, G. (2006), "Conservatism and Cross-Sectional Variation in the Post-Earnings Announcement Drift", Journal of Accounting Research, 44(4), 763–789.

Nobes, CW (1996); International Harmonisation of Accounting, London: Elgar Publishing.

Nobes, CW (2005), 'Rules-based standards and the lack of principles accounting', *Accounting Horizons*, 19(1), 25–34.

Nobes, CW and Parker, RB (2012), Comparative International Accounting 12th edition, Pearson Higher.



Nussbaumer, N. (1992), 'Does the FASB's conceptual framework help solve real accounting issues?', *Journal of Accounting Education*, **10(1)**, pp. 235–242.

O'Donovan, G. (2000), "Legitimacy Theory as an Explanation for Environmental Disclosures", PhD thesis, Victoria University of Technology, Melbourne.

O'Donovan, Gary; Environmental disclosures in the annual report: Extending the appplicability and predictive power of legitimacy theory; Accounting, Auditing & Accountability Journal 15.3 (2002): 344–371.

Okcabol, F., & Tinker, T. (1993). Dismantling financial disclosure regulations: Testing the stigler-benston hypothesis. *Accounting, Auditing & Accountability Journal*, 6(1), 10.

Paton WA and AC Littleton (1940); An introduction to corporate accounting standards: monograph no 3, Sarasota:AAA.

Peasnell, KV, Dean G and Gebhardt C (2009); Reflections on the revision of the IASB framework, *Abacus* 45(4), 518–527.

Perry, J. and Nölke, A. (2006), "The Political Economy of International Accounting Standards", *Review of International Political Economy*, 13(4), 559–586.

Plumwood, V. (2000), "Integrating Ethical Frameworks for Animals, Humans and Nature: A Critical Feminist Eco-Socialist Analysis", *Ethics And The Environment*, 5(2), 285–322.

Polanyi, K. (1944). The Great Transformation. Beacon Press, Boston.

Polanyi, Karl.(1957a) "The Economy as Instituted Process." In *Trade and Market in the Early Empires*, edited by Karl Polanyi, Conrad M. Arensberg, and Harry W. Pearson. Glencoe, IL: The Free Press.

Polanyi, Karl, (1957b) The Great Transformation. Boston: Beacon Press.

Popper, KR, (1972); The Logic of Scientific Discovery; London: Hutchinson.

Rand, Ayn, (1967), Capitalism: The Unknown Ideal, New York, NY: Signet Books.

Rayman, R, 2007, 'Fair value accounting and the present value fallacy: the need for an alternative conceptual framework', *The British Accounting Review, vol.* 39, no. 3, pp. 211–25.

Regan, Tom, (2003), "The case for animal rights". In *The animal ethics reader*, eds.Susan Amstrong and Richard Botzler, 17–24. New York: Routledge.

Richardson, A.J. and Dowling, J.B. (1986), "An Integrative Theory of Organizational Legitimation", *Scandinavian Journal of Management Studies*, 3(2), 91–109.

Rogerson, William P. (1985). "Repeated Moral Hazard". *Econometrica* 53 (1): 69–76. doi:10.2307/1911724.

Ronen, J. and Sadan, S. (1981), Smoothing Income Numbers: Objectives, Means, and Implications, Boston, MA: Addison-Wesley Publishing Company.

Rossouw, G.J., Mulder, B., & Barkhuysen, B. (2000). Defining and understanding fraud: A South African case study. *Business Ethics Quarterly*, 10(4), 885–895).

Rothschild, Emma, (2000). *Economic Sentiments: Adam Smith, Condorcet, and the Enlightenment.* Cambridge MA: Harvard UP.

Rubin, II (1990); Essays on Marx's Theory of Value. Montreal: Black Rose Books.

Salkind, Neil; 2011; Statistics for people who think they hate statistics, 4th edition, Los Angeles: Sage.

Schmandt-Besserat, Denise; (1992); Before Writing; Austin TZ: University of Texas Press.

Scott W 2009 Financial accounting theory, NJ: Prentice Hall, 195/6.

SFAC 1, (1978); The objectives of financial reporting by business enterprises, Stamford CT: FASB.

Sharpe, W. F. (1964), 'Capital asset prices: A review of market equilibrium under conditions of risk', *Journal of Finance*, **19**, pp. 425–442.

Shiller RJ; (2000); Irrational Exuberance, New York: Broadway Books.

Shortridge, RT & Myring, M 2004, 'Defining principles-based accounting standards', *The CPA Journal*, 74, (8), 34–8.

Sloan RG; (1996); "Do stock prices fully reflect information in accruals and cash flows about future earnings?" *Accounting Review*, 71(3), 289–315, July.

Solomons, D. (1991a), "Accounting and Social Change: A Neutralist View", *Accounting, Organizations and Society*, 16(3), 287–295.

Solomons, D. (1991b), "A Rejoinder", Accounting, Organizations and Society, 16(3), 311–312.

Staunton, J. (1984), 'Why a conceptual framework of accounting?', *Accounting Forum*, 7(2), pp. 85–90.

Sterling, R.R. (1979), Toward a Science of Accounting, Houston, Texas, Scholars Book Co..

Sterling, R.R. (1989), "Teaching the Correspondence Concept", *Issues in Accounting Education*, 4 (1), 82–93.

Sweeney, P. (1994), "Debt-Covenant Violations and Managers' Accounting Responses", *Journal of Accounting and Economics*, 17 (3), 281–308.

Sy, A., & Tinker, T. (2010). International journal of economics and accounting's introducing the classics: Abraham Briloff's 'the gap in GAAP'. International *Journal of Economics and Accounting*, 1(3), 181–183.



Tinker, A.M. (1980), "Towards a political economy of accounting: an empirical illustration of the Cambridge controversies", *Accounting, Organizations and Society,* Vol. 5 No. 1, pp. 147–60.

Tinker, T. (1988), "Panglossian accounting theories: the science of apologising in style", *Accounting, Organizations and Society,* Vol. 13 No. 2, pp. 165–89.

Tinker, T. (1991), "The accountant as partisan", *Accounting, Organizations and Society,* Vol. 16 No. 3, pp. 297–310.

Tinker, T. (2005). The withering of criticism: A review of professional, foucauldian, ethnographic, and epistemic studies in accounting. *Accounting, Auditing & Accountability Journal*, 18(1), 100–135.

Tinker, T., Merino, B.D. and Neimark, M.D. (1982), "The normative origins of positive theories: ideology and accounting thought", *Accounting, Organizations & Society*, Vol. 7 No. 2, pp. 167–200.

Tinker, T., & Okcabol, F. (1991). Fatal attractions in the agency relationship. *British Accounting Review*, 23, 329–354.

Torcello, Lawrence, (2009), "A Precautionary Tale: Separating the Infant from the Fetus", *Res Publica* 15:17–31.

Tversky, A. and Kahneman, D. (1974), "Judgment Under Uncertainty: Heuristics and Biases", *Science*, 185(4157), 1124–1131, September 27th.

Tversky, A. and Kahneman, D (1992); "Advances in prospect theory: cumulative representation of uncertainty" *Journal of Risk and Uncertainty* 5(4) 297–323, October.

Van Bueren, Edith T. Lammerts, and Struik, Paul C., (2005), "Integrity and Rights Of Plants: Ethical Notions in Organic Plant Breeding and Propagation", *Journal of Agricultural and Environmental Ethics* (2005) 18: 479–493.

Veatch, Robert M. (2004), "Abandon the Dead Donor Rule or Change the Definition of Death?", *Kennedy Institute of Ethics Journal*, Vol. 14 (3), 261–76, September.

Watts, R.L. and Zimmerman, L.L. (1986), Positive Accounting Theory, Prentice Hall, Upper Saddle River, NJ. [Bonuses pp 208–10; Debt 216/7; Political cost 234–40; Evidence 245].

Watts, R.L. and Zimmerman, J.L. (1990), "Positive accounting theory: a ten year perspective", The Accounting Review, Vol. 65 No. 1, pp. 131–56.

Weber M, 2004; Politics as a vocation; Indianapolis: Hackett, p. 34ff.

The Week 2012; http://theweek.com/articles/483185/rupert-murdochs-phonehacking-scandal-timeline

Whittington, G 2008, 'Fair value and the IASB/FASB conceptual framework project: an alternative view', *Abacus, vol.* 44, no. 2, pp. 139–68.

Willott, S., Griffin, C., & Torrance, M. (2001). Snakes and ladders: Upper-middle class male offenders talk about economic crime. *Criminology*, 39(2), 441–446.

Wolff, R. (2011), "Lehman Brothers: financially and morally bankrupt", *The Guardian*, 13 Dec. 2011; https://www.theguardian.com/commentisfree/cifamerica/2011/dec/12/lehman-brothers-bankrupt

World Business Council for Sustainable Development (2000), *Corporate Social Responsibility: Making Good Business Sense*. http://www.ceads.org.ar/downloads/Making%20good%20 business%20sense.pdf

World Commission on Environment and Development (1987), Our Common Future (The Brundtland Report), Oxford: Oxford University Press.

Wyatt, A. 2008, 'What financial and non-financial information on intangibles is value-relevant? A review of the evidence, *Accounting and Business Research*, 38, (3), 217–56.

Young, Joni (2006) Young, Joni J (2006) "Making up users", Accounting, Organizations and Society 31(1), 579-600.