Deconstructing an accounting paradigm shift: AASB 116 non-current asset measurement models

Link to publication record in USC Research Bank: http://research.usc.edu.au/vital/access/manager/Repository/15320

Document Version: Author accepted manuscript (postprint)


Copyright Statement: Copyright © 2014 Inderscience Enterprises Ltd. Reproduced with permission.

General Rights: Copyright for the publications made accessible via the USC Research Bank is retained by the author(s) and / or the copyright owners and it is a condition of accessing these publications that users recognize and abide by the legal requirements associated with these rights.

Take down policy The University of the Sunshine Coast has made every reasonable effort to ensure that USC Research Bank content complies with copyright legislation. If you believe that the public display of this file breaches copyright please contact research-repository@usc.edu.au providing details, and we will remove the work immediately and investigate your claim.
Deconstructing an Accounting Paradigm Shift: AASB116 Non-current Asset Measurement Models

Gregory K. Laing
School of Business
Faculty of Arts & Business
University of the Sunshine Coast
Maroochydore DC QLD 4558 Australia
Tel +61 7 5459 4675
Email: glaing@usc.edu.au

Ronald W. Perrin
School of Accounting & Finance
Faculty of Commerce
University of Wollongong
Email: r.perrin@uow.edu.au

ABSTRACT

This paper is a deconstruction of the Cost and Fair Value models implicit in the Australian Accounting Standard (AASB 116), derived from the International Accounting Standard IAS 16. The paper examines the justification for the paradigm shift through the lens of the very framework that supports each accounting model. The analysis renders visible the contradictions embedded in the models, raising serious doubts about the ability of either model to provide financial information that is sufficiently relevant or reliable to be any more useful to potential users than the historical cost model that they have usurped. In this regard the standard fails to provide any benefits to warrant the paradigm shift.

Keywords: deconstruction; measurement of non-current assets; AASB 116; cost model; fair value model; historical cost.

This paper is the version which was accepted for publication and as such is not in journal format. The paper was published in the journal and should be referenced as: Laing, G.K. & Perrin, R.W. (2104). Deconstructing an accounting paradigm shift: AASB 116 non-current asset measurement models, International Journal of Critical Accounting, 6(5/6), 509-519.
Introduction

Measurement of non-current assets has for a long time been a contentious issue in the accounting profession (Paton, 1950; Kam, 1986). The traditional method of using the actual cost, commonly known as historical cost, has been criticised for failing to provide relevant information especially in times of inflation. To address this problem a number of models were developed the two most notable models being Continuously Contemporary Accounting (CoCoA)- exit price model (Chambers, 1955, 1966a, 1966b, 1967a, 1967b, 1970) and Current Cost Accounting (CCA) - entry price model (Edwards & Bell, 1961). These models represented a departure from the traditional historical cost model and herald what may be termed as a paradigm shift. In Australia there have been accounting standards that have included their own method for valuing non-current assets however they were restricted in their application to the particular industry to which they applied. For example the Accounting standards for Local Government, Government Departments, General Insurance, Supperannuation, and Self Generating and Regenerating Assets. In Australia the project of international harmonisation of accounting standards has resulted in the adoption of the international accounting standards, with some minor modifications for local applications. Based on the International Standard IAS 16 the Australian standard AASB 116 employs measurement models that have been modified to such an extent that their theoretical justification is questionable due to their hybrid nature.

The previous Australian accounting standards were more consistent with the models and were arguably more appropriate for the specific industries and specific non-current assets to which they applied. By contrast the new standard (AASB 116) applies to all industries and establishes the basis for measurement for all non-current assets – in effect it has become the one standard to rule them all, and the one standard to bind them.

This paper proceeds with the intention to render visible the contradictions and anomalies which underlay the accounting practices inherent in the Australian Accounting standard (AASB 116) in particular as related to the measurement of non-current assets. In this paper the discourse underpinning the analysis emanates from a form of deconstruction.

Deconstruction is a method derived from the work of Jacques Derrida, and relies on the notion that the language of dialectical materialism is riddled with metaphors disguised as concepts, and themes that carry with them presuppositions (Norris, 1985, 1988a, 1988b). The analysis typically seeks to find paradoxes in the logic, thereby undermining the pretensions of truth in any argument (Norris, 1988a). The formulation of a theoretical model must by implication involve language and logic in order to explain and predict the function of the model. Accordingly, a model will rely on assumptions or an underlying framework from which to claim support. This is the situation in accounting where an accounting framework was devised by the International Accounting Standards Board to provide central tenents from which all accounting standards would be derived. The IAS framework is itself derived from the beliefs or practices that have evolved in accounting and are more commonly referred to as principles or doctrines and conventions.

Deconstruction is more commonly used in the disciplines of architecture, art, literature and philosophy (Culler, 1987). However, there is precedence for the use of deconstruction in accounting as exemplified by Arrington and Francis (1989), Francis (1990) and McKernan and Kosmala (2007) which examine the discourse inherent in various aspects of accounting. However, there is a paucity of deconstruction in the accounting literature. This paper seeks to
redress this gap by examining the arguments used to justify the two pronged approach to the valuation of non-current assets. It should be apparent to observers that the creators of the accounting standard are not the best people to judge the harm or benefit of the standard. They are so closely tied to their creation that they are likely to be biased in their evaluation.

For the purpose of this paper the application of Deconstruction is based on the following principles which constitute the method for analytical application (Culler, 1987; Norris, 1985, 1988a, 1988b; Berman, 1988). The method is derived from the literature and is presented as a simplified method of instruction for the use of deconstruction. The intention of this paper is to establish a technique by which the application of deconstruction can be utilised. The steps or technique relevant to deconstruction are for the purpose of this paper:

1. Identify the key element or elements that underly the theory or argument of the matter to be deconstructed. This may be the objectives, aims, goals or the principles governing the subject of the matter to be deconstructed. These may be explicit in the matter or may be implicit and to be found in something related to the topic which the matter is claiming to be addressing.

2. Identify any faults or assumptions that lie within the key element or elements them self. There may be assumptions which are irrational or based on false beliefs – or they may be open to many alternative interpretations – or they may be of a circular nature (ie tautology or a self fulfilling prophecy). In any case they will provide the basis for contradictory argument in the next stage which involves the actual analysis of deconstruction.

3. Examine the arguments, explanations, and terminology used within the matter being deconstructed. The reason for this examination is to identify any parts or outcomes that are contradictory to the stated key element or elements – in other words does the matter achieve its stated objectives, aims or goals and also is it true to the stated principles.

Deconstruction analysis, employed in this paper, involves finding any aspects of the matter being investigated that are contradictory to the objectives, aims or goals (whether explicit or implicit). This is done to make visible the issues and contradictions inherent in the matter under investigation. In simple terms – find out what the matter is about and its underlying basis – check to see if there are any problems with the underlying basis – compare the matter against its underlying basis for any inconsistencies and or contradictions. Basically deconstruct it from within using its own basis to test whether it actually does or does not achieve its objectives, aims or goals.

AASB116 – Property Plant & Equipment
The accounting standard was promulgated in 2004 and is based primarily on the International Accounting Standard IAS 16 (Locke, 2012). For this reason the standard has global significance for society since the adoption of the International Financial Reporting Standards the application of the standard has ramifications for global financial reporting. AASB 116 is concerned with matters such as the recognition, measurement and disclosure of property plant and equipment. The standard does not cover assets that are held for sale there is a separate accounting standard that deals specifically with non-current assets held for sale and discontinued operations (AASB 5). For the purpose of the deconstruction a general overview of the key elements in the standard provides the matrix from which the analysis is drawn.
Step One of Deconstruction – identify key elements
In keeping with the stated method for deconstruction being employed in this paper the first step is to identify the main objective of the matter being deconstructed. This is provided in the standard itself under the heading “objective” which states:

The objective of this accounting standard is to prescribe the accounting treatment for property, plant and equipment so that users of the financial information can discern information about an entity’s investment in its property, plant and equipment and the changes in such investment. The principal issues in accounting for property, plant and equipment are the recognition of the assets, the determination of their carrying amounts and the depreciation charges and impairment losses to be recognised in relation to them.

This now sets the stage for the deconstruction analysis to follow. There are some key elements in the wording of the stated objective and these will be used to test whether the accounting standard is internally consistent or not. There are some underlying principles in this objective which are derived from the Accounting Framework of the International Accounting Standards Board – and the major items for this analysis are within that framework (FW) the details of which are derived from the book published by the International Accounting Standards Committee Foundation (2003):

- Users and their information needs FW 9-11
- Going concern FW 23
- Understandability FW 25
- Relevance (including Materiality) FW 26-30
- Reliability FW31-32
- Substance over form FW 35
- Prudence FW 37
- Constraints on Relevant and Reliable Information FW 43-45

Step Two of Deconstruction – identify faults or assumptions in key elements
The objective assumes “…that users of the financial information can discern information about an entity’s investment in its property, plant and equipment and the changes in such investment.” by virtue of the method of measuring the non-current assets that standard is proposing. This assumes firstly that the users are capable of understanding what the outcomes of the valuation measurements represent and secondly that they are capable of “discerning” the meaning for themselves. The matter of identifying who the users are and their needs is covered in the framework (FW 9-11) and in summary the details are:

FW 9 – “The users of financial statements include present and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies and the public.”

FW 10 – “While all of the information needs of these users cannot be met by the financial statements, there are needs which are common to all.”

FW 11 – “…Management is also interested in the information contained in the financial statements even though it has access to additional management and financial information…”

This indicates that there are so many different potential users that their ability to discern the information can hardly be known and that their needs are going to be very different as indicated in FW 10. This aspect of the key element is based on assumptions which are subjective by their very nature.
The objective also implies that the information will meet the “understandability” requirement as per FW 25. This provides a definition and some further comment intended to clarify the expectation about the users that was absent in areas FW 9-11. In summary this paragraph states that it is essential that the information is “readily understandable by users” and then provides the additional clarification about users:

FW 25 - “… users, are assumed to have a reasonable knowledge of business and economic activities and accounting and a willingness to study the information with reasonable diligence.”

Interesting that this assumption places the burden of understanding back on the users – so if you know little or nothing about business, economics or accounting it is your fault and if you are not willing to study the information diligently then its your problem.

The next item of importance is the element of “Relevance” this a matter that arises in the argument for the methods of valuation proposed in the standard and as such warrants examination at this juncture. The definition and details provided are:

FW 26 – “… Information has the quality of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming, or correcting, their past evaluations.”

FW 27 – “The predicitive and confirmatory roles of information are interrelated. For example, information about the current level and structure of asset holdings has value to users when they endeavour to predict the ability of the enterprise to take advantage of opportunities and its ability to react to adverse situations.”

These statements introduce some interesting notions that are an attempt to justify relevance of information in a very narrow perspective – that is economic decisions. The claim that the predicitive and confirmatory roles are interrelated is not always the case. In any event what makes something relevant is open to debate and what may be relevant for one person may not be relevant to another.

The next item is the element of “Reliability” and this is something which stands in contrast to the element of relevance. The definiton and comments provided are:

FW 31 – “… Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent.”

FW 32 – “Information may be relevant but so unreliable in nature or representation that its recognition may be potentially misleading.”

At this juncture the element of reliability throws doubt on the argument for relevance and certainly provides a clear contradiction within the framework. However, an attempt to clarify this aspect arises later in the framework at FW 43-45.

Substance over Form is an element that provides an attempt to reconcile some of the conflict which has arisen between relevance and reliability.

FW 35 - “If information is to represent faithfully the transactions and other events that it purports to represent, it is necessary that they are accounted for and presented in accordance with their substance and economic reality and not merely their legal form.”

There are two important aspects to be drawn from this – firstly that information must relate to transactions or events and secondly that it should be related to the substance of the economic reality not merely the legal form. Now this is important because it raises questions about the
need for a transaction or event – something which the standard seems to overlook – at least in terms that valuing assets without actually buying or selling them would seem to breach this.

The notion of “Prudence” is also known as the Doctrine of Conservatism and is defined in this case as:

FW 37 – “… Prudence is the inclusion of a degree of caution in the exercise of the judgements needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated.”

This is a pivotal point and certainly is a major contradiction to aspects of the accounting standard. Just how is it possible to allow for assets to be revalued and remain true to this element is not clear.

The final element is the argument that seeks to rationalise the conflict between Relevance and Reliability. This discourse introduces three additional sub-elements into the debate.

FW 43 - Timeliness – “If there is undue delay in the reporting of information it may lose its relevance. … In achieving a balance between relevance and reliability, the overriding consideration is how best to satisfy the economic decision-making needs of the users.”

This is interesting and to some degree a circular argument – it throws it back on the needs of the users – a concept which is not adequately defined so it really does not provide a definitive answer.

FW – 44 Balance between Benefit and Cost – “The balance between benefit and cost is a pervasive constraint rather than a qualitative characteristic. The benefits of derived from information should exceed the cost of providing it. ... substantially a judgemental process”

This is also a tautology – of course it must be cost efficient but how is this to be calculated given that there are so many potential users with varying needs. Just how a judgement is to be made is far from clear.

FW – 45 Balance between Qualitative Characteristics – “In practice a balancing, or trade-off, between qualitative characteristics is often necessary. ... in order to meet the objective of financial statements. ... a matter of professional judgement.”

Again this offers little in the way of explicit instructions it states the obvious and perpetuates the myth that some how professional judgement will make it all work out.

Step Three of Deconstruction – examine the arguments, explanations, and terminology
The standard itself states that once it has been determined that an asset should be recognised (paragraph 7 provides the two basic tests to determine recognition) there is now a choice as to the method for measuring the value of the asset. The choice does carry an important stipulation that which ever model is chosen then that model shall apply to the entire class of that property, plant or equipment. In effect what this is seeking to establish is that all buildings would be subject to the same model, all equipment would be subject to whichever model was chosen for equipment. The text of this imposition is to be found in paragraph 29 of the standard. The two methods are referred to as the ‘cost model’ and the ‘fair value model’.

The cost model is defined in paragraph 30 as “… cost less any accumulated depreciation and any accumulated impairment losses.” At this point the standard introduces the first major deviation from the traditional measurement of historical cost, that is the notion of impairment
losses and then the standard abrogates its responsibility for this to another standard AASB 136. AASB 136 entitled Impairement of Assets sets out the conditions for the treatment of assets that are to have a reduction in their value. The discourse used to explain the notion of an impairement loss is “If a non-current asset’s carrying amount exceeds its recoverable amount it must be written down to its recoverable amount.” The basis for the recording is to be found in AASB136 and the important concept introduced in this is the meaning given to “recoverable amount” – simply put it is the “higher of an asset’s fair value less costs to sell, and value in use.”. So in this sense the cost model is not talking about cost as the basis for measuring an assets value but rather a fair value or value in use. This seemingly incongruent paradox becomes even more confusing when the alternative model is in fact a fair value model.

The fair value model is defined in paragraph 31 in a rather convoluted set of terminology “…an asset … whose fair value can be measured reliably shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated imairment losses. Revaluations shall be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the reporting date.” The very extent to which the standard has attempted to clarify the notion of the fair value model is both concise and incomplete, and these aspects will be explored more fully in the appropriate section of this paper.

Cost Model
At first glance the cost model is very closely aligned to the traditional historical cost model in all but one very significant aspect and that is the requirement for impairment testing. The argument here would seem to echo the longheld doctrine of conservatism, which in simple terms held that the value of assets should be understated and the value of liabilities over stated so as to present a conservative value of a business entity (the value of course being presented in the Balance Sheet). This perspective is hardly consistent with the argument that accounting infomation should be useful to decision makers. Just how this fits into the framework of accounting is not addressed in the standard nor is it self evident in the obvious outcome from the application of the cost model since the standard provides for a business entity to change from the cost model to fair value model or reverse. The only requirement for this is that the change should generate financial information that is more relevant and reliable and that adequate disclosures are made.

Impairment testing in turn requires that a business entity under take a revaluation of the entire class of asset regardless of whether they are subject to the cost model or the fair value model. The only difference being that with the assets that are subject to the cost model only the diminution or devaluation can be recognised. Where as those assets, which are subject to the fair value model, where there was an increase or a decrease such change would be recorded. What this means is that a business entity will incur the cost of monitoring valuation regardless of the choice of model.

Impairment is in effect a form of depreciation - to be specific it is an accelerated form of depreciation. The accounting treatment for recording impairment losses as recommended by the standard is to rename the general ledger account for accumulated depreciation to reflect the combination of the two under the title Accumulated Depreciation and Impairment Losses account and thi impairment loss amount is offset against a contra Owner’s Equity account.
entitled Impairment Losses. The effect is that the value of the Total Non-current Assets is reduced as is the Total of the Owner’s Equity – all of this occurs within the confines of the Balance Sheet. Whilst the depreciation amount is treated as an expense the impairment loss is not - this is a contradiction and contravenes the matching principle upon which depreciation is based - for if it is an accelerated form of depreciation then why is it not treated as an expense (i.e. match revenues against expenses in the period in which they occur). To what extent this provides relevant or reliable information for decision makers is not evident nor is there any attempt to justify this treatment in the standard.

This cost model is a hybrid derived from the traditional historical cost model but modified in such a way as to render it incongruent with the very principles that gave the historical cost model a solid foundation. For example, the cost model would seem to lay claim that it provides relevant information rather than mere reliable information which historical cost is attributed with. This may seem like a logical progression however, scratch the surface and there is neither relevance nor reliable information in the cost model. Relevance can hardly be claimed when the cost is only ever a reflection of a decrease in value never an increase. Then the basis for determining the actual value of a non-current asset can hardly lay claim to being reliable since it is reliant on values defined as fair value less cost to sell, or value in use. Both of these are undermined by the need for subjective determination as to what constitutes fair value and as an alternative just what the value in use may be for a non-current asset.

How this is an improvement on the traditional historical cost is difficult to decipher since it neither provides relevant nor reliable information. More importantly by the introduction of the alternative approach to measurement the hybrid becomes more complex for shareholders and society in general to understand. What this does for the improvement of decision making by the users of financial accounting information is rather difficult to conceive especially since it only reflects the declining value completely ignoring any increases in the value of the non-current asset. Under the cost model impairment is the only adjustment allowable other than the traditional accumulated depreciation - in effect there can never be an adjustment that increases the value of the assets above its original cost value. The need to regularly monitor the values imposes a further financial burden upon business entities and these must be born in the first instance by the shareholders and eventually passed on to customers thereby impacting on society as a whole.

**Fair Value Model**

The fair value model would seem to be a better compromise and certainly when compared to the cost model a more pertinent approach to the problems that are inherent in the cost model or the criticisms that have plagued the historical cost model. The fair value model stipulates that the values should be derived from prices in an active market or recent market transactions (paragraph 77) this approach is closely aligned with the valuation method commonly referred to as exit prices – that is the selling price. Now this approach has a theoretical structure which would be useful for providing the much needed support and justification for the value measurement of non-current asset. The accounting model that is based on exit prices is referred to as Continuously Contemporary Accounting initially proposed by Chambers (1955) and more fully developed in his latter works (1966a; 1966b; 1967a; 1967b; 1970). While the standard draws from the basic principle espoused by Chambers it deviates on a number of important issues which render this fair value model weak as to a theoretical justification and inconsistent as to the desired outcome for financial information. Such detractions away from a philosophical base are likely to render the so called fair value model impotent.
In comparison to the cost model the fair value model does allow for the recording of increases in the values of non-current assets and this is certainly more in line with the notion of providing relevant information for the users of financial information. It is intended to address the issue of rising values in times of inflation. The terminology used when the fair value model is employed is different to that which is used for the cost model. For example, the reduction in the value of a non-current asset is referred to as an impairment loss under the cost model but it is known as a revaluation decrement under the fair value model. Where the value of a non-current asset increases the terminology used under the fair value model is revaluation increment. So as if to confer some level of approval different terminology is used — whether this differentiation serves to confuse shareholders and society in general is something which is never explored nor addressed. The next distinction is that under the cost model the value of the non-current asset is never changed the impairment is recorded as a separate amount as an accumulated amount for impairment by contrast under the fair value model the actual value of the non-current asset account is changed and the accumulated depreciation account is closed off to restart with the depreciation based on the new value. Another notable difference is that the amount of any decrease (revaluation decrement) is recorded as an expense under the fair value model — this is the opposite to the cost model — the implication is that the profit of a business entity will be reduced by such an amount. So there is an inconsistency between the models within the accounting standard.

However, the fair value model cannot claim theoretical justification from the Chambers model. A comparison of the fair value model against the Chambers model reveals there are significant differences. At the heart of the Chambers model is the use of exit prices and this is consistent with the fair value model. However, there is a significant difference in how the changes are to be recorded in the financial records. Chambers model adopts a simple and straightforward approach in which all changes should be recorded against the profit — that is an increase would be added to profit and a decrease would be subtracted from profit — the fair value model only deducts decreases from profit and creates a reserve or surplus account in the Owner’s Equity side of the Balance Sheet.

A further distinction is in the use of depreciation the Chambers model is based on the argument that the increase or decrease in the value of the asset removes the requirement to have any depreciation. On this point the fair value model is in conflict since the standard requires the recalculation of depreciation on the new value whether it be a reduction (decrement) or an increase (increment). The use of depreciation is often misunderstood as being a means for accumulating money to pay for the replacement of an asset — this is not the case — depreciation does not involve money being set aside it is a book entry only. In fact the reason for calculating and recording depreciation is more aligned with the matching principle which is the key to the accrual method of accounting. In effect the depreciation is a form of charge against profit for a period to recognise the use of non-current asset in earning that profit — there is no money or cash involved. Chambers model is based on the premise that the movement in the value of the asset reflects the use of the asset in deriving the profit so depreciation is rendered unnecessary. Thus to continue the use of the depreciation of an asset and to differentiate on the recording of increases and decreases are matters which are not consistent and the fair value model is therefore taking a major deviation that would render it void of any claim to legitimisy for coverage under the theoretical justification afforded by the Chambers model.
Conclusion
There does not appear to be a logical nor theoretical based argument for departure from the historical cost model to the hybrid valuation models espoused under the accounting standard AASB 116. There are no apparent benefits or justification upon which a business entity can rely in order to make a decision to adopt the cost model or the fair value model. Further given that under both models a business entity is required to monitor the values (fair value and value in use) on a regular basis the financial burden exists regardless of which model is choosen. So why would a business entity choose to use the cost model – perhaps the alternative exists only as a means to placate those that still favour the traditional historical cost model. If that is the case then the standard holds a surprise since the cost model is a hybrid and is not consistent with the historical cost model.

Once the aberrant logic is revealed it is evident that the standard does not provide a definative model for the measurement of non-current assets but rather it undermines the traditional historical cost – with a hybrid version – and then introduces the fair value model which is yet another hybrid derived in part from the Chambers CoCoA model with overtones of the Current Cost model seemingly thrown in for good measure.

Rather than resolving the issue by providing an appropriate model for measuring non-current assets the standard adds to the confusion in the Balance Sheet – with some classes of non-current assets valued on the cost model and others on the fair value model. As for providing financial information which is useful it presents an agregated set of numbers which is neither relevant nor reliable and is of such a dubious nature that threatens the very fabric of usefulness. The indeterminance of the standard instead of providing useful financial information has the reverse effect. Figuratively speaking the one standard intended to rule all standards and to bind them all has in effect permeated a pernicious form of undecidability.

References


