

Fair Value vs Conservatism? Aspects of the History of Accounting, Auditing, Business and Finance from Ancient Mesopotamia to Modern China

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ABSTRACT

To help understand modern financial accounting theory ['FAT'] and its role in the development of finance and business, I consider two current mainstream histories of its development and offer a third alternative. The standard setters' version is that increasingly FAT is rationally derived from a basically coherent conceptual framework, currently focussed on 'comprehensive income' as measured by 'changes in assets and liabilities', in turn preferably measured at fair values. However, examination here of several recent FASB/IASB standards and exposure drafts shows that instead they unavoidably bear the marks of the history of a variety of now embedded practices that have shaped thinking about, and vested interests in, what is 'good accounting'. By contrast, some recent academic versions of history focus on how 'conservative', historical-cost based accounting principles have rationally evolved to provide an anchor on which to base appraisal of firms' and managers' performance, prospects and risks, and supply the kind of information that investors and other parties in the capital markets need to help overcome the information asymmetry between them and corporate managers. After analysing the limitations of this second type of history, I argue that even a brief genealogical examination of the conditions of possibility that have led to the growth and changes in accounting and auditing practices and discourses, and in the power-knowledge relations that they have engendered at different stages over the millennia of recorded history, suggests that their power has always been more that of 'institutional rationalised myth'. The twin rational myths of the objectivity of accounting and of auditing together provide the structure that offers the comfort necessary to enable the various agents in the modern, increasingly global, economy to undertake and finance the risks of acting 'at a distance' and across time. This modern, grammatocentric accountability increasingly extends throughout the institutions that coordinate modern societies, in the rising East as well as in the established West. Exploring how much of FAT is rational and reflects some objective 'economic reality' and how much is myth and is subjectively, socially constructed; and, again, how much might be improved and how much is intractable, are the major questions now for accounting, auditing and finance policy-making and research. This requires further detailed comparative international historical understanding of how accounting and auditing have variously operated, within businesses and other organisations and in shaping markets, across different countries and cultures.

KEYWORDS: Business history; China; comparative international accounting history; conceptual framework; conservatism; fair value; institutional rationalised myth.

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‘...distinguish clearly each item...assigning the usual value to each. *Set the price higher ('fatter') rather than lower ('leaner'), so that if you believe it is worth 20, attribute 24 etc. so that you can more easily obtain a profit*. [Luca Pacioli, 1494, Ch.12: instructions for the journal entries for opening assets (emphasis added)]¹

‘The definition [of Prudence] basically says that if you are in doubt about the value of an asset or a liability it is better to exercise *caution*. This is plain common sense which we all should try to apply in our daily life.’ [Hans Hoogevoorst, Chairman IASB, 2012, *The Concept of Prudence: dead or alive?* (emphasis added)]²

1. Introduction³

1.1 Fair Value [‘FV’] vs ‘conservatism’

Pacioli’s easy-going instruction on valuing inventory (favouring target pricing over historical cost [‘HC’], or even over current value, for its desirable behavioural consequences—Macve, 1996; 2010a) indicates that valuation issues in accounting were not always regarded as matters of central principle. However, today they are central to the debates on modern accounting standards where the promotion of FV by standard setters has met increasing academic as well as practitioner resistance (e.g.

¹ The English translation of the bookkeeping section of Pacioli’s 1494 *Summa*, called *Particularis de Computis et Scripturis*, is by von Gebssattel (1994, p.54).

² Speech to FEE Conference on Corporate Reporting of the Future, Brussels, Belgium, Tuesday 18 September 2012:
<http://www.ifrs.org/Alerts/PressRelease/Documents/2012/Concept%20of%20Prudence%20speech.pdf>
(accessed 7/11/2012).

³ It was both a great honour and a great surprise to receive the 2010 Distinguished Academic Award from the British Accounting Association (BAA), now the British Accounting and Finance Association (BAFA). This paper is based on my plenary addresses at the 2011 BAFA annual conference at Aston University, the 2011 5th MBS/LSE/LUMS Conference at LSE and the 2012 World Conference of Accounting Historians at Newcastle University, together with related presentations at workshops held in 2011, 2012 and 2013 at Saïd Business School, University of Oxford; at SMBA, Aberystwyth University; and at Zhongnan University of Economics and Law (ZUEL), Wuhan, PRC. I am grateful for all the comments received on those occasions as well as from the editors of this special edition of *BAR*, Mike Jones and David Oldroyd, and from Liu Tianran of Xiamen University, PRC. Now that I have retired from my full-time chair at LSE and become an ‘Emeritus Professor’ I suppose this could be regarded as an *exaugural* lecture (cf. Macve, 1979). This is my excuse for unashamedly citing my own (and my co-authors’) work throughout. But I hope to show there is plenty still to do to continue the work I have been engaged in so far, and also hope to encourage some of my readers to join the journey along the road that still lies ahead.

Penman, 2007; Kothari *et al.* 2010; cf. Power, 2010)⁴. Do the arguments over ‘financial accounting theory’ [‘FAT’] simply go ‘round and round’ or is there some discernible progress (or indeed regress) with each iteration? (cf. Macve, 2013a).

I aim to illustrate here how we cannot understand modern FAT (or ‘the conceptual framework of financial accounting principles’ [‘CF’]) in isolation from the history of its social, institutional and market contexts; and also how, in spite of their lack of an agreed conceptual basis, the development of FAT and its twin—auditing—have shaped and will continue to shape important developments in business, financial, accounting and auditing history [‘BFAAH’]. Some of my arguments may be familiar (cf. Jones & Oldroyd, 2009; Carnegie & Napier, 2012) and others speculative, but I attempt here to make a tighter connection between the broader historical context and individual modern accounting events and issues. However, this is still work in progress so there will be many unanswered questions for further research.

1.2 Setting the scene

How does one explore the historical linkages between BFAAH and FAT? And what light does the development of each shed on the other? In this paper I can only skim the surface of a history that stretches back millennia and across many arenas, although what we nowadays call FAT (or coherent ‘financial accounting principles’, or the CF) may be regarded as a relatively recent phenomenon. It only took off with the development of joint-stock companies, the increasing separation of ownership and control, and the emergence of ‘big business’, of the accounting and auditing profession, and from then on of the increasingly international stock markets—which have led to the movements first for domestic and now for international financial accounting standardization (Yamey, 1977; Macve, 1983b; Zeff, 2009; 2013) alongside the growth of multinational audit firms (cf. Deng & Macve, 2013). Will the fascinating historical and geographical diversity of accounting practices soon disappear into a standardized, uniform, international rule-book and remain of interest

⁴ Plantin, Sapra and Shin (2008) explore potential adverse behavioural consequences of FV (relative to HC) for financial institutions—at least when ‘short-term’ horizons dominate decision making. However, their main analysis is based on a mischaracterisation of normal HC accounting practice (which is actually ‘lower of HC and recoverable amount’, e.g. Solomons, 1961), so the policy implications remain unclear.

only to antiquarian curiosity-hunters? Does accounting face a Fukuyama-type ‘end of history’? I will argue it does not.

In Macve (2002) I briefly addressed how *ancient* accounting history illuminates four of the ‘big’ historical questions: (1) *the relationship between accounting and ‘economic rationality’ / business decision making*; (2) *the significance of accounting as writing*; (3) *the significance of ‘double-entry bookkeeping’* and (4) *the relationship between accounting and the State*.⁵ I do not want to repeat that analysis here so instead will focus on some important historical work that has emerged in the last few years and just pick out a few illustrative examples from today’s topical issues.⁶

1.3. ‘Old laudanum in new bottles?’⁷

The ‘official’ history of the evolution of the current state of financial accounting principles—the creed of the FASB and IASB—is that financial accounting and reporting is continually improving, largely through the efforts of the standard setters. Through developing their ‘accounting principles’ and more recently their CF, they claim to have gradually articulated an increasingly coherent set of concepts (i.e. FAT), that guides practice towards ever more consistent recognition and measurement of assets and liabilities, and thereby of the changes in them that constitute accounting income, profit, or earnings.⁸ Although the occasional crisis on both sides of the Atlantic (e.g. the 1929 Crash, the Royal Mail Case, Enron, and most recently the Global Financial Crisis) is necessary in order for their reform proposals to become widely accepted and bring about change in practice (i.e. when everyone agrees ‘something must be done’—e.g. Gwilliam, Macve & Meeks, 2000—so that the current equilibrium must be ‘punctured’—Waymire & Basu, 2007, p.103; 2011), the standard setters’ story is one of increasingly triumphing over the tangled mess of

⁵ However, with respect to government, I did not fully address either the roles of accounting and audit in government administration in ancient societies (e.g. Guo et al., 2011 for Imperial China; Ezzamel, 2012 for Ancient Egypt) or the how the relationship has changed under the phenomenon of modern ‘governmentality’ (e.g. Miller & Rose, 2008; cf. Hoskin, 2013a). Power (2009) has now addressed the current situation where the rapid spread of international accounting standardisation is increasingly detached from the historically developed practices and discourses within any one state.

⁶ References here to recent developments are generally based on knowledge publicly available at 14 December 2012.

⁷ This was the title of my plenary presentation at BAFA 2011.

⁸ Such consistency is of course desired both to reduce opportunities for ‘accounting arbitrage’ and earnings management (e.g. Athanasakou *et al.* 2011) and to improve comparability across time and across businesses globally (Barth, 2013; cf. Macve, 2013b).

conflicting ‘conventions’.⁹ Good accounting, they assert, should be the product of clear concepts, not historical accidents (FASB/IASB, 2005).

The FASB/IASB do have some authoritative historical support for their current ‘clean surplus’ view of how business income *should* be measured, and indeed support for moving to FV (albeit not defined precisely as they do). According to Fletcher Moulton LJ in *Re Spanish Prospecting Co Ltd* [1911] (1 Ch 92 at 98 = All ER Rep 573 at 576):

For practical purposes these assets in calculating profits must be valued, not merely enumerated...We start, therefore, with this fundamental definition of profits, namely, if the total assets¹⁰ of the business at the two dates be compared, the increase which they show at the later date as compared with the earlier date (due allowance, of course, being made for any capital introduced into or taken out of the business in the meanwhile) represents in strictness the profits of the business during the period in question....

But with due deference to the learned judge (who is correct about the articulation of financial statements—the ‘clean surplus’ equation—but whose reference to ‘valued’ seems also to imply that a current valuation of the assets is needed), modern business practice (reinforced by the orientation of the accounting and audit profession) has not often followed his view but has generally preferred the ‘matching costs and revenue’ approach to ‘realised profits’ based on HC (Ernst & Young, 1996; cf. French, 1977). And this is the approach that still generally prevails.

I shall argue that the FASB/IASB view of what is ‘good accounting’ is naive and potentially dangerous and correspondingly its story of the triumph of FAT is largely a myth. Not only does it conflict with much of the evidence that accounting and finance researchers have painstakingly examined over the last 40 years or so since Ball & Brown (1968) and Beaver (1968) launched the ‘capital markets based accounting research’ revolution (Beaver, 1998) into the roles of audited accounting earnings and other disclosures. It also ignores the constellation of forces—not just ‘free’ markets but also organisational and institutional, legal, political, religious and social forces—

⁹ Sunder (1997) restricts ‘conventions’ to rules that are wholly arbitrary (e.g. a country determining which side of the road to drive on). I use the term in a wider sense to include rules and practices which may originally have been chosen for a particular purpose but which have become socially embedded even though the original purpose may no longer be relevant or their purpose is no longer unambiguous (see also Bromwich *et al.*, 2010).

¹⁰ Strictly this should be *net* assets. But Hicks (1979) argued that conceptually this is not the relevant comparison for decision making but rather the change in the estimated value of the business as a whole (Bromwich *et al.*, 2010), as in the practice of partnerships adjusting for estimated goodwill on a partnership change.

that have shaped accounting and related financial and commercial institutions in the past, and will continue to do so even, or perhaps even more, in the increasingly globalized present and likely future (e.g. Wysocki, 2012; Macve, 2013a). And we must also think about how in turn FAT has helped to shape the modern forms of this constellation of forces (including accountability in Government and NGOs).

In the remainder of the paper I will therefore first look in section 2 at modern disputes over FAT. To bring out the underlying problems I will take three examples (executive stock options [‘ESOs’]; liabilities; and life insurance). In each case there has been more than an element of conflict between the recent balance-sheet oriented FV approach to attempting to resolve the problems and the more traditionally based approach reflecting HC thinking about ‘earnings’ and profit.¹¹ After drawing out some implications of these examples, in section 3 I will critique recent arguments that there is an alternative to the standard setters’ purported ‘rational design’ of FAT (with its underlying logic of FV), namely that accounting’s history (until interfered with by regulation), showed an overall ‘natural’ rational evolution to the widely accepted accounting principles of traditional GAAP, and especially conservatism. I will suggest instead that a different kind of Foucaultian ‘genealogical’ history can better explain how the ‘institutional rationalised myths’ of the objectivity of accounting and auditing have spread and shaped modern individuals, organizations, institutions and society. In section 4 I will critique some recent analyses of how FAT should now develop and in section 5 consider what future possible paths and related research issues I now see ahead. Section 6 concludes the paper—but not the arguments.....

2. Some examples of modern FAT

2.1 Executive Stock Options [‘ESOs’]

The debate over ESO accounting has now become mired in technicalities about the applicability of the Black-Scholes model to provide relevant information about the FV of the options expensed where trading is restricted and where risk may be more

¹¹ Other examples from the current IASB agenda would include both the revision of the CF itself (e.g. Bromwich *et al.*, 2010; Macve, 2010b; Macve, 2013b) and the issues over revenue recognition (e.g. Horton *et al.*, 2011; cf. Nobes, 2011) and leases.

concentrated than in an optimal investment portfolio that the executives might hold (cf. Ravenscroft & Williams, 2009).

But the most remarkable thing to my mind is that the standard (internationally IFRS2—IASB, 2004) was passed at all, given the longstanding opposition first in the US and then in Europe (e.g. Zeff, 1997).¹² Moreover, ESO accounting does not seem to fit the ‘asset/liability’ model of FASB/IASB’s CF, and in terms of ‘value relevance’ it appears to recognise the cost without also recognising the asset for future performance enhancement that the stock-market appears to acknowledge. This only partial recognition of the ESO impact (i.e., the expense without the intangible for the benefit) means that evaluation of any accounting choice, or of change in accounting standard, already faces the economic problem of the ‘second best’ (Lipsey & Lancaster, 1956), i.e., that fixing only one element of the problem may make the overall situation worse (e.g., Landsman *et al.*, 2006).

Paradoxically there is actually *no overall change* in recognised net assets under IFRS2/SFAS123R as option expense is simply offset by increase in paid-in capital.¹³ So there appears to be some much more conventional notion of proper ‘matching’ providing the justification for this treatment. As Warren Buffet famously said (see e.g., Macve, 1998):

‘If options aren’t a form of compensation, what are they? If compensation isn’t an expense, what is it? And, if expenses shouldn’t go into the calculation of earnings, where in the world should they go?’

It is clear that the CF definitions of income, assets and other such fundamental elements can serve as signposts but cannot provide definitive answers to practical questions such as this. The opportunity for the IASB and the FASB finally to succeed in 2004 in requiring expensing of stock options probably had more to do with changes in attitudes to business transparency following the Enron debacle (e.g., Gwilliam & Jackson, 2008). As the summary of FASB’s SFAS 123R noted:

‘Over the last few years, approximately 750 public companies have voluntarily adopted or announced their intention to adopt Statement 123’s fair-value-based method of accounting for share-based payment transactions with employees’.

¹² This section is drawn from the Appendix to Bromwich *et al.*, 2010.

¹³ Landsman *et al.* (2006, pp.211-12) helpfully illustrate the alternative bookkeepings for different possible accounting methods. Although it has been argued that there is a creation of an asset accompanied by its instantaneous simultaneous expensing, thereby constituting a change in net assets (e.g. FASB SFAS123R BC88 fn.14), this is essentially a metaphysical assertion from the perspective of the reporting process, as at no time is this asset visible in the accounts themselves.

The cost (in lower reported earnings) to companies of adopting option-expensing could thus be interpreted as a ‘countersignal’ that companies’ accounting numbers were now more credible overall. Of course, this also created new incentives for different kinds of firms to underreport that expense either as free-riders or because the immediate crisis of public confidence had soon abated (Aboody *et al.*, 2006).

Understanding the history points up that there would appear to have been perceived changes in societal expectations of business legitimacy that made the new *convention* now more useful and acceptable to society. The resulting political forces were probably more important than the conceptual niceties, which had been insufficient to resolve the controversy during the period leading to the issue of FASB’s previous version of SFAS123 in 1998 (e.g., Zeff, 1997). That is not to say that the conceptual considerations are irrelevant: clearly the anomaly of the asymmetric recognition of the cost of the grant vs its anticipated future benefits has added yet another factor (alongside other cases such as Research & Development) that undermines the consistency of the Boards’ CF as ‘asset/liability’ based, while increasing opportunities for ‘earnings management’ (e.g. Athanasakou *et al.*, 2011).

2.2 Liabilities

There are many ways in which liabilities are troublesome for accounting. In the FASB/IASB’s CF they are essentially just defined as ‘negative assets’, and their FV is defined as ‘the price that would be paid to transfer a liability in an orderly transaction between market participants at the measurement date’ (IASB, 2011a). The current attempt to revise IAS37 has stumbled over what used to be called ‘contingent liabilities’ such as lawsuits (cf. Morley, 2011) and is currently ‘paused’.

Here I will just mention a key issue that has undermined the FASB/IASB ‘asset/liability’ approach to the measurement of income.

2.2.1 Credit risk changes¹⁴

¹⁴ This section is updated from Macve (2010a) and from my comment letter of 2nd Sept 2009 on the IASB Discussion Paper: (IASB, 2009a) and on other IASB papers referred to there. Arguments about reflecting risk in initial recognition of liabilities are also further developed there (available at <http://www.lse.ac.uk/collections/accounting/facultyAndStaff/profiles/macve.htm>).

The arguments in the IASB's Exposure Draft (IASB, 2010a) illustrate why it is not clear that accounting for liabilities at FV is always useful. Although the issue of credit risk arises whatever the underlying measurement basis, FV, which conceptually clearly requires *remeasurement* when credit risk *changes*, makes the question more acute. The major controversy arises from the related issue of the appropriate reporting of the change in value with regard to the measurement of the entity's income or profit.

Three observations on this crucial aspect of the arguments are relevant:

- (i). As acknowledged by IASB, changes in credit risk have counter-intuitive consequences for earnings if these are measured as change in FV, unless the complementary falls in asset values could also be recognised. Recent empirical research by Barth *et al.* (2008) claims that in practice, for a majority of 'ordinary' US firms, downward asset revaluations¹⁵ do outweigh the debt revaluation effect to give an overall value-relevant net downward effect on equity.¹⁶ But even if their measurements are accepted, this is not the most important issue. By definition any *reported* asset devaluations cannot include what (in addition to falls in previously unrecognised upward asset revaluations) may be the biggest impact for previously successful firms, i.e. the fall in the value of their unrecorded internal goodwill as their credit risk rises (e.g. Macve, 1984; Horton & Macve, 2000).¹⁷
- (ii). In the case of liabilities representing contractual business obligations, such as 'deferred revenue' for long term contracts, there is widespread unease that using FV could often give a 'Day 1' profit. The latest FASB/IASB ED on revenue recognition (IASB, 2011c) is therefore against using FV as the Boards' members were 'uncomfortable' about this outcome (see e.g. Horton *et al.* 2011; cf. Nobes, 2011).¹⁸ Obviously, their discomfort should be even greater at the idea that a 'Day 2' (or later) profit can arise simply through the contractor's credit rating having subsequently worsened (and therefore the FV of its liability fallen).

¹⁵ Insofar as these can be satisfactorily proxied by the reported fall in net income before extraordinary items (p.657). However, this fall could represent only the effect of *current* adverse trading results, without any recognition of consequences of the deterioration in expected future results that largely drives long-term asset impairments.

¹⁶ If the company defaults on its debt the equity holders will receive zero. The value to the equity holders of the limited liability 'put option' is that it protects their value from becoming *negative*.

¹⁷ The paradox is mirrored when credit rating *improves*. Now the FV of the liability rises so, with 'clean surplus' accounting, comprehensive income *falls* even though the entity's financial position has now improved overall.

¹⁸ Although this 'discomfort' intuitively seems very wise, it is surely a new CF 'concept' that has not been exposed before?

(iii). The issues get even more complex with pension and other post-retirement benefits and with life insurance liabilities: should we be accounting on the basis of immediate transfer (FV / ‘CEV’?) or ‘settlement over term’ (i.e. a PV of future cash flows measure) (e.g. Horton *et al.*, 2007).¹⁹ Either way, the issue of ‘credit risk’ requires special consideration. From the point of view of the pensioners and policyholders (and the regulators who act to protect them and aim to ensure they are paid in full—e.g. Harte & Macve, 1991), should the institutions promising these future protections be allowed to show that their liabilities have got less because their credit rating has fallen—thereby giving an improvement in their statement of financial position just when it has in fact become less likely (in the eyes of the market) that they will be able to pay them in full? This is more likely to conceal the reality of what is happening to pensioners’ or policyholders’ security than to reveal it.

The IASB has acknowledged the widespread criticisms of its original DP and has finally revised IFRS9 by requiring that where the ‘fair value option’ is taken for financial liabilities, changes in ‘own credit risk’ are to be excluded from the P&L account and only included in ‘other comprehensive income’ [‘OCI’].²⁰ But OCI is now itself becoming a major focus of concern as it increasingly becomes the ‘basket’ in which ever more of the ‘too difficult’ gains and losses are dumped. Its purpose needs to be addressed directly (e.g. Horton & Macve, 1996) but the related FASB/IASB project is currently ‘paused’ pending progress on the revised CF (cf. IASB, 2013; Macve, 2013b).

Apart from the problem of changing credit risk (where the essential problem is the ‘second best’ problem arising from the failure to report the much greater asset and intangible value that will have changed in the opposite direction) there is a related but distinct problem arising from changes in the interest rate at which liabilities are discounted to give current market value, where these changes reflect changes in interest rates generally. In the case of liabilities that are financial instruments, if they are traded then FV works reasonably well (subject to issues about transaction costs); but where they are not traded, the paradoxes of ‘Hicks’s Income No. I’ [has value

¹⁹ CEV = ‘Current Exit Value’ was proposed in the IASB 2007 Discussion Paper *Preliminary Views on Insurance Contracts*. At that time, the Board could not identify any difference between this and FV (Horton *et al.*, 2007). Now the ED (IASB, 2010b) proposes measurement based on the consideration received (see e.g. Horton *et al.*, 2011 and section 2.3 below).

²⁰ <http://www.ifrs.org/News/Press+Releases/IFRS9+October+10.htm> (accessed 27/03/2011).

changed?]) vs ‘Hicks’s Income No. II’ [has maintainable income changed?]) make deciding how most usefully to report earnings *conceptually* intractable.²¹ Rather than further debate over the concepts, what is needed is more focus on what are the most socially useful *conventions* to adopt / retain to meet the objectives of financial reporting (e.g. Bromwich *et al.*, 2010; Ryan, 2012).

2.2.2 Can we explain the persistence of the present confusion over liabilities by taking a historical perspective?

Liability accounting has become ever more complicated. Initially debts owed to their depositors were recorded by banks, supplemented by merchants recording purchases on credit and other accruals for unbilled expenses (e.g. Hoskin *et al.* 2013). These required almost no ‘estimation’. Today liabilities include not only long-term loans at fixed-interest rates but all manner of complex financing instruments (including hybrid debt-equity instruments). It is not just insurers who face ever more long-term and uncertain potential costs. Provisions are needed in ‘ordinary’ businesses too, from product warranties through to liabilities for pensions and other post-retirement benefits, environmental liabilities, and contingent liabilities for legal fines and damages, while professional accountants have added their own creation, ‘deferred taxation’. There are also contracts where consideration is received in advance of performance of the obligation to provide goods or services, some of which may extend over many years. In parallel the growth of financial markets has both expanded the ‘treasury’ operations of major companies—offering an increasing array of (originally off-balance sheet) leases and derivatives—and also offers market benchmarks (e.g. ‘replicating portfolios’) for estimating the value of such liabilities, given that they all ultimately represent an obligation to pay out future cash flows.

This higgledy-piggledy growth has resulted in a plethora of seemingly inconsistent treatments as accounting standards, which have traditionally focussed on problems of accounting for assets, have been struggling to catch up with these developments (e.g. Barker and McGeachin, 2013). While ‘discounting at the effective interest rate’ was an early US solution, now adopted almost universally despite resistance from lawyers who generally regard the ‘face value’ as the liability (e.g. Macve, 1984), standard

²¹ A ‘Hicks No. II’ approach would exclude the effect of interest rate changes from income (whether or not the value change is ‘realised’ by redemption in the market) (e.g. Macve, 1984; Horton & Macve, 2000: cf. IASB, 2009a, paras. 41; 60).

setters have increasingly looked to FV and its basis in financial economics (Power, 2010) for a more clear-cut universal solution that can better reflect *changing* interest rates during the life of the liability. But they have run up against the corresponding income measurement problems that derive from changes in interest rates, from changes in credit risk, and from uncertainty about the risks of failing to perform on obligations within the consideration obtained, and have begun to surrender the FV ideal to ‘fixing’ the problems along more traditional lines by adapting, but not abandoning, more traditional conventions in the manner outlined above. How far these approaches can be reconciled remains an open issue (Horton *et al.*, 2011; cf. Nobes, 2011) but finding one overall solution that resolves all these issues is surely conceptually intractable.

2.3. Life insurance—and ‘Embedded Values’

The latest Exposure Draft on insurance contracts (IASB, 2010b)²² has abandoned the FV oriented approach of the 1997 Discussion paper (Horton *et al.* 2007) in favour of a ‘spreading of initial consideration’ approach (with some partial revaluation of only elements of the valuation, cf. Foroughi *et al.* 2011). While this change of approach will help preserve comparability with that now proposed for contract revenue recognition more generally, it remains unclear how useful such an approach will be to investors. There is also divergence between IASB and FASB on how to measure the elements of the liability and their changes. IASB still believes that insurance companies’ share prices suffer because of the information asymmetry resulting from the lack of a comprehensive and reliable international accounting standard to provide the most relevant information for investors to rely on.²³

However, Serafeim (2011) provides evidence that information asymmetry has been reduced by the voluntary production of supplementary ‘embedded value’ [‘EV’] performance measurement by European life insurers, which casts doubt on the relevance of the GAAP accounts. The EV approach is based on the changes in an ‘economic balance sheet’ reflecting ‘market consistent’ valuation of insurance assets and liabilities relating to the inforce business. Correspondingly it provides a

²² revised June 2013.

²³ Comment in discussion at Public Lecture at LSE, 6 November 2012, by IASB chairman, Hans Hoogervorst. <http://www.ifrs.org/Features/Pages/Hans-Hoogervorst-Speech-LSE-November-2012.aspx> (accessed 13/11/2012).

comprehensive analysis of the impact of changes in assumptions, and calculation of the ‘new business profit’, i.e. the NPV (or present value of economic residual incomes) on the new contracts undertaken during the reporting period (e.g. Horton *et al.*, 2007).

Without going further into the technical details here and the conceptual confusion now surrounding the FASB’s and IASB’s (somewhat differing) proposals for reforming IFRS4,²⁴ it is important to note that the apparently valuable EV information does not comply with the model of ‘accounting useful for investors to anchor on’ promoted by Penman (2011). It is unashamedly based in a ‘balance sheet approach’ and oriented to the future rather than the past (as it is an ‘economic balance sheet’). So why is it (alongside a focus on current cash flows) apparently emphasised by preparers and focussed on by investors, while the IFRS4 accounts appear to have become increasingly redundant?

Again history can help us to understand. The early 19th century saw many large life insurance scandals and, although it may be argued that dealing with these rather than ‘ordinary’ companies was perhaps the main objective of the Companies Act 1846, no satisfactory way could be found of measuring the liability on the policies written (which if accounted for at potential maturity/death value would completely dwarf any assets held). So the temptation was to pretend the liability did not exist and run companies as ‘Ponzi’ schemes, i.e. covering claims on existing policies out of the premiums on new policies—until the music finally stopped hopefully many years in the future (Horton and Macve, 1994).

It was not until the actuarial profession became seen as sufficiently respectable and reliable that their ‘discounted present value’ valuations of policies were accepted in the 1870 Life Assurance Companies Act as more than ‘mere puffs’. For a long time the accounting then followed the extremely conservative practices required for regulators’ supervisory purposes (i.e. the determination of solvency and capital adequacy), albeit with increasing modifications, in particular following the implementation of the EU Insurance Accounts Directive in 1995—although this still left many measurement options open (Struyven, 1995).

Meanwhile in the USA (and perhaps because each state has its own regulatory rules), US GAAP was developed as a nationwide alternative to the solvency bases of

²⁴ See my comment letter at <http://www.lse.ac.uk/accounting/facultyAndStaff/profiles/MacveInsED13.pdf>

accounting. This was more like the normal spreading of revenues and the matching of costs associated with other long term contracts, giving a fairly even spreading of profit over the contract life by ‘locking in’ the original assumptions (unless deterioration became manifestly so severe that some provision for overall loss became necessary). So US insurers and US analysts appear to have become conditioned to using the GAAP numbers and remained largely uninterested in the economically more relevant developments, especially in Europe and increasingly globally, of EV reporting and in the intense debates that have surrounded the IASB’s insurance project since the IASC started it in 1997. FASB joined the project much more recently, and it has veered away from moving towards FV preferring more conventional revenue and profit spreading.

Given that the EV provides at least a relevant triangulation, from an alternative and expert perspective, on the constituents of a life insurance company’s financial position and performance, it is hard to explain the apparent irrationality of the continuing lack of interest in EV shown (at least publicly) in the US, although there is some evidence that US industry experts, and companies themselves internally, are taking more interest. There has been much lower hostile takeover activity in the US than in the UK and Continental Europe which may explain the relative lack of concern by US executives (Serafeim, 2011). But one might have expected a more prominent role for EV (which is much closer to FV) and so the continuing support for traditional US GAAP again seems to be more a product of historical conditioning than the result of rational analysis of its strengths and weaknesses.²⁵

3. Some lessons about FAT from BFAAH

3.1 FAT—‘intelligent design’ or ‘evolution’?

Reviewing these recent examples of standard setting clearly shows that they are not the rational outcomes of the standard setters’ professed CF and its ‘balance sheet’ model. Private sector standard setters need to claim conceptual legitimacy for their activity by representing it as the sphere of technical experts (e.g. Macve, 1983b), and

²⁵ Amid the volatility following the global financial crisis of 2008 UK analysts have again shown greater interest in the IFRS4 results but this may simply reflect their own need for a more stable ‘EPS’ number to extrapolate for their routine earnings forecasts.

so they attempt to caricature the resistance they often encounter, where not due to alleged ‘misunderstanding’ of what they say, as resulting from vested interests or ‘political interference’. But the ‘trick’ of defusing political etc. debate by creating so-called ‘expert’ agencies is itself part of the history of modern governmentality—political action ‘at a distance’ mediated by calculative routines (Miller & Rose, 2008; cf. Hoskin, 2013a, 2013b). For example US agencies, such as the Corps of Engineers (which developed ‘cost-benefit analysis’) and the SEC (charged with the development of accounting standards that it has largely delegated to FASB and its predecessors), represent a form of supposedly disinterested action at a distance. Their invention was a means of helping to reconcile divided interests across a vast new country, that lacked a shared cultural history, to try and mitigate the recurring tendency to pork-barrel politics (e.g. Porter, 1996; Vile, 1999). As there are now multiple competing actors and networks claiming legitimacy in the international ‘regulatory space’ of accounting standard setting (e.g. Macve & Chen, 2010; Freeman & Rossi, 2012; Zeff, 2013; Macve, 2013a), FASB/IASB must assert their technical expertise through their CF.

But what kind of historical explanation should we be looking for? It is often argued that, without the ‘interference’ of regulation, accounting (including audit) would have ‘evolved naturally’ in the private sphere to reflect the needs of businesses and markets. This evolutionary story, in different forms, is also reflected in the ‘economic rationalist’ school of accounting history that I discuss further in section 3.2 below, with regard primarily to management accounting; and also by the more explicitly ‘efficient-contracting’ school of Ball and Watts in the US with regard to financial accounting. They have explored an impressive array of historical archives in building their stories and I do not propose to challenge their data in detail here. If only the stories they build on it were true! And that I will contest.

3.2. Economic rationalism and accounting history.

First I briefly examine the arguments that accounting history shows a rational evolution both in particular adaptations to new demands, and overall in supporting, and even enabling, overall economic progress.²⁶

²⁶ Clear challenges have previously been raised, for example, by Napier (2001) and now by Carnegie & Napier (2012), but I will add some emphases of my own.

A balance towards ‘rationality’ would be supported by those who see the history of accounting and auditing as continually evolving to adapt to new economic and business demands, albeit with ‘interference’ from regulation. So Johnson & Kaplan argued that early US management accounting practices were later ‘perverted’ by regulated financial accounting rules for inventory costing, depreciation etc.: but both their history and their theory of the respective roles of management and financial accounting must be challenged (see Ezzamel, Hoskin & Macve, 1990 which introduces the ‘alternative history’ outlined in section 3.3. below). Others, such as Fleischman & Parker and Boyns & Edwards for the UK and Tyson for the US, have argued for the role of industrial revolution cost accounting in adapting to provide useful information for management of the new technologies: but its efficacy in this sphere must similarly be challenged (e.g. Hoskin and Macve, 2000).

In similar vein Watts and Zimmerman (2003)—followed by Waymire & Basu (2007) [henceforth ‘W&B’] and Penman (2011)—see the principle of ‘conservatism’ as evolving to meet an essential business need, although the important question is surely not ‘FV vs conservatism’ but ‘how much conservatism for different purposes?’ (Lambert, 2010; cf. Ewert & Wagenhofer, 2012; Ryan, 2012) as it has not always been universal (e.g. Yamey, 1977).²⁷ Moreover, Zeff (2007a) notes that until recently it was successive chairmen of the SEC (each a pupil of his predecessor) who would not countenance proposals to depart from historical cost [‘HC’], which casts doubt on any thesis that HC has been the natural evolutionary state that ‘unfettered markets’ prefer while FV has been constructed by accounting regulators such as the FASB and IASB (cf. Penman, 2011, p. 158).²⁸

But deeper than the contesting of the interpretation of individual episodes lies the historiographical question of what is the *social* evolutionary process for accounting principles? It cannot be simply the same as Darwinian biological evolution which requires both random mutation (i.e. experiment with alternatives) and genetic

²⁷ W&B note (2007, p.100) that ‘even before Pacioli...Italian organisations were...writing down inventories under lower of cost and market’ citing Chatfield and Littleton. But Chatfield’s reference to the Datini accounts of around 1400 gives no illustrative examples (and nor does de Roover, 1956); while Littleton (1966) (e.g. pp. 151, p.341) gives examples of writers as late as the 19th century recommending valuation at selling price and Littleton (1941), while arguing that the general rule *now* should be FIFO cost, also illustrates the variety of practices found at different times in different places.

²⁸ Serafeim (2011) provides a strong contemporary counter-example of ‘unregulated’ experiment with FV (see section 2.3 above).

inheritance (to pass on the successful mutations).²⁹ W&B (pp. 80ff) explain that we need to consider the interactions between genetic and cultural evolution—‘gene-culture co-evolution’—in the development of social institutions (like accounting).

Culturally evolved economic institutions thus result from a social process rooted in learning through imitation or knowledge transfer via education....Culture alters an organism’s environment through specific *cultural variants* (ideas, concepts, or institutions) that have average fitness consequences for all members of the group that adopts such practices.

They have attempted to demonstrate statistically the already generally accepted argument that basic record-keeping in early societies is correlated with the extent of economic exchange (Basu *et al.*, 2009 cf. Goody 1996). Beyond bookkeeping, their arguments for the development as a social institution of the ‘traditional’ accounting principles of HC accrual accounting (such as ‘conservatism’, ‘going concern’, ‘matching’) rest more on their claimed consilience with characteristics of the human brain. Here they emphasise tendencies towards risk avoidance and to building the trust over time that facilitates exchange relationships on the basis of reliable evidence of satisfactory outcomes consistently measured (as exhibited for example in neuroscientific experiments with individual humans and other primates—Dickhaut *et al.*, 2011).

The conceptual problems with W&B’s arguments must include, first that individuals alone and individuals within social institutions may be very different in their behaviour. Indeed social institutions are in many cases designed to overcome individual traits such as excessive risk avoidance or excessive aggression (both within and across individuals).³⁰

Secondly, their ‘accounting principles’ (which are like those in the UK’s SSAP2—ASSC, 1971) have long been recognized to be inconsistent and inadequate to explain

²⁹ However Darwin himself was not immune to transposing concepts such as ‘survival of the fittest’ between the biological and social mechanisms (Rogers, 1972). See also Napier (2001). Padgett & Powell (2012) now draw on the biochemistry of evolutionary biology to explain the ‘autocatalytic’ invention of new organizations and markets (cf. Hoskin *et al.*, 2013)

³⁰ History is full of socially organized ‘risk-seeking’ adventures that go beyond simple cost-benefit calculation: as, for example, when in 1492 the Spanish government (together with private Italian financiers) enabled the highly risky and uncertain venture of seeking a route westward to Asia that instead discovered America. By contrast, many legal institutions are designed to restrain individuals’ aggressive impulses and reactions. (Explaining structured forms of social cooperation in other life-forms, ranging from ‘collectivised’ insects, such as ants, bees and wasps, through schools of fish, swarms of birds, hunting packs of wolves etc. to non-human primate individuals, e.g. West African chimpanzees, remains an area of intensive scientific research with highly contested implications for the understanding of human forms of cooperation and ‘rule-making’.)

actual accounting choices (e.g. Macve, 1997a: Introduction). Moreover the vaunted consistency of conventional money measurement of HC in accounts evaporates when the *numéraire* is distorted across time by inflation (e.g. Baxter, 1984).

W&B do agree that, beyond the broad ‘principles’, it is difficult to demonstrate how *individual* accounting policy choices are advantageous for good management, or for other organizational or social advantage, given the low ‘signal to noise ratio’. An alternative explanation to ‘Whiggian’ rational progress (cf. Fleischman, 2009) would suggest that their spread may mainly reflect the various forms of an ‘institutional isomorphism’ (copying of peers, aided by prevailing educational doctrines), such that it is not verifiable that they are the most ‘efficient’ (DiMaggio & Powell, 1983).³¹

Moreover a key characteristic of Darwin’s biological evolution is the need for adaptation if there is to be survival, as current environmentally optimal species solutions (such as the dinosaurs once were) are made extinct by environmental changes (Jones, 1999). However, ‘economic rationalist’ histories of accounting tend to be supportive of current practices and the *status quo*, or else of returning to the practices of some supposed previous ‘golden age’ when they were not ‘distorted by inappropriate regulation’.

So there are both theoretical and historical doubts about an ‘economic rationalist’ history as explaining the development of current accounting practices. From the theoretical perspective, Edwards (1937), Coase (1938) and Wells (1978) challenge their rationality and argue for the irrelevance, if not danger, of historical costs and overhead allocations for rational management decision making. Similarly Hicks (1979) argues (implicitly contradicting for example Bryer, 2006) that accounts are largely irrelevant to the assessment a 19th-century mill-owner would rationally make to estimate his income (Bromwich *et al.*, 2010). From the historical perspective, Littleton (1941; 1968) and Yamey (1977) illustrate the variety of financial accounting principles for income and valuation that co-existed before the influence of the 19-20th century accounting profession and regulation (and later, standards); while Hoskin & Macve (2000) (following Chandler, 1977) observe the ‘excessive’ level of accounting/administrative routines in new 19th century US ‘big business’ beyond the needs of economic efficiency. One must not ignore the essential interdependency between ‘markets’ and ‘regulation’ (e.g. Sunder, 1997; Moran, 2010), as illustrated by

³¹ Consistent with Basu *et al.* 2013. But cf. now Lunawat *et al.* 2013.

the infrastructure of the regulation of financial activity that was established in the UK in the 19th century (e.g. Edey & Panitpakdi, 1956; Horton & Macve, 1994). ‘Rational natural evolution’ is not sufficient, and often appears invalid, as an explanation of changes in accounting and auditing.

We need an alternative history where the functional usefulness of accounting and auditing techniques is at best only part of the story.

3.3. A different historical perspective?

Let us start again with trying to understand, in the light of BFAAH, how FAT and its partner auditing have reached their present form in our world of global capital markets—and how they have helped to provide the basis of confidence that has shaped and continues to support that world.

First we need some working definition of ‘accounting’ (cf. Hacking, 1999), so we can theorise accounting and its history, even though its margins are continually shifting (e.g. Miller, 1998). In line with Ezzamel & Hoskin (2002) one can say:

- First, [it] is a *practice* of entering in a visible format³² a record (an account) of items and activities.
- Secondly, [it] involves a particular kind of *signs* which both *name* and *count* the items and activities recorded.
- Thirdly, [it] is always a form of *valuing*:
 - (i) *extrinsically* as a means of capturing and re-presenting values derived from outside for external purposes, defined as valuable by some *other* agent; and (ii) *intrinsically*, in so far as this practice... in itself constructs the possibility of *precise valuing*.³³

It is important to note that the appearance of ‘money of account’ (i.e. a *numéraire* such as equivalent quantities of grain, copper, silver, gold in Egypt) predates physically exchangeable money.

³² This includes scratches on stone, marks on shells, knotted Inca *quipus* and notched tally sticks, although our primary interest will be in later written records containing ‘words’ and ‘numbers’ (Basu, 2009; cf. Robinson, 2009).

³³ Although the earliest records may appear to ‘simply’ count objects (e.g. sheep, grain) the fact that the record was worth making implies the objects were valuable and normally that the record was needed to attest to the relationship between the accountable parties.

This implies that there are two main dimensions of historical change (Macve 2002). First there are *technological* changes—in both *practices* and *discourses*—comprising both a) *what* kinds of ‘thing’ are ‘named and counted’ (e.g. late C13th AD fully monetised items in double-entry bookkeeping [‘DEB’]; mid-C18th (depreciable) industrial capital assets; mid-C19th statistical populations and probable outcomes (Hacking, 1990); C20th intangibles, standardised profit measures, and environmental and social externalities (Macve, 1997b); and b) *how* (e.g. the introduction of writing, Arabic numerals, paper, printing, IT (Macve, 1996)).

The second dimension is the *interpersonal*, where new ‘accountability’ relationships are established: so one must ask ‘accounting *by* and *to* whom?’ (both public and private / individual and collective).

An important feature is that accounts are normally bounded to include only some of all the possible accountable items and relationships and so are compartmentalised (as for example with the various Schedules for UK income tax which have then to be combined to obtain ‘total *taxable* income’ e.g. Sabine, 1966). But what is ruled in and out of an account can change over time and within different contexts: so interpretation always requires understanding what has been ‘left out of account’. Psychologically it is within these compartments that individuals and groups score their ‘gain’ or ‘loss’ and construct their ‘mental accounts’ (Kahneman, 2011, 342-6).

Some key historical features emerge. Audit (internal or external) is accounting’s twin, although audit by and for whom varies with the particular ‘agency’ relationship involved. Accounting and audit have always played a role from the earliest city states in taxation and redistribution (which provides incentives to bias the reporting). Although accounting and audit’s ‘professionalisation’ dates only from C19th AD, we can also identify high-status cadres of ancient Egyptian ‘scribes’ and Chinese Imperial civil servants in the public sector.³⁴ From the later C19th roles for information intermediaries (analysts, press etc.) have grown rapidly with the growth of capital markets and ‘passive’ stockmarket investment.

In the ancient form of accounting and audit for the public state, its written ‘naming and counting’ is part of the visible ordering of political, social and economic life across space and time, and also across the physical and the spiritual words, which

³⁴ However it may be noted that in the ‘private sector’ in ancient Greece and Rome the roles of what are now modern ‘professions’ (with the exception of lawyers who had high status through their connections to political life) were all carried out by slaves—including most physicians (Macve, 2002; cf. Hoskin & Macve, 2012).

enables both public accountability (e.g. to the gods and for city/state administration) and private contracts and work organization (Ezzamel, 2012). Transaction records ('bookkeeping') are the origin of writing and support impersonal exchange (Basu *et al.*, 2009) and economic coordination. This is seen, not only in Ancient Egypt but also, for example, in Mesopotamian bakeries (Macve, 2002); in Ancient China (Guo *et al.* 2011); and in Classical Greece and Rome and Roman Egypt (where evidence has even been found of 'accruals'—Rathbone, 1994). However in Europe in the 'Dark Ages' almost all was apparently lost until rediscovered from Arab sources (e.g. Jack, 1966; Goody, 1996; cf. Oldroyd, 1997).

Clearly a major step was the introduction of DEB with its full monetisation of all recorded assets and liabilities, which has now become the iconic emblem of modern commercial accounting and of the accounting and auditing profession—and has recently been introduced into UK government accounting too as part of the transition to full accrual accounting and adoption of IFRS.³⁵ There is not space here to discuss the controversies over DEB's origins and significance (or otherwise) both for the economic development of Western capitalism and its business organizations, and for wider social and cultural influences in the West.³⁶ DEB has acquired a status that is now surrounded by myth. For example, W&B (2007, p. 87) appear to accept what Goethe had Werner say about DEB: 'It is among the finest inventions of the human mind' (*Wilhelm Meisters Lehrjahre*, I.10). But, along with many others who have quoted this, they overlook the significance of the fact that Werner is an anti-hero to Wilhelm and is the equivalent of a modern day 'computer nerd'³⁷—so Goethe's intention was surely ironic (Macve, 1996).³⁸

The DEB myth has become so deep-rooted (e.g. Macve & Yamey, 2013) that it is hard to disentangle the surviving evidence and gauge how far it is has been either a sufficient or necessary response to meeting the information-processing demands for decision-making and control within a new economic and social order, or a sufficient or necessary instrument in creating that order—or exhibits both characteristics in a

³⁵ See http://www.hm-treasury.gov.uk/d/wga_200910_cpack_guidance.pdf (accessed 14/12/12).

³⁶ W&B (2007) regard DEB as very significant, citing several previous authors, although they do not include Bryer's (e.g. 2006) purported Marxist restatement of DEB's Sombartian significance, which however appears to be unsupported either by reading Marx (Macve, 1999) or by the archival evidence (Toms, 2010; Fleischman & Macve, 2012).

³⁷ See e.g. http://www.101funjokes.com/nerd_jokes_2.htm (accessed 28/11/12).

³⁸ This illustrates clearly the dangers of doing history without re-checking original sources (cf. Funnell, 2007), which is not to say that the texts must be privileged over other historical evidence (e.g. MacGregor, 2010; cf. Gaffikin, 2011).

‘positive feedback system’.³⁹ These issues can now perhaps now more fruitfully be re-debated in the wider context of parallels and contrasts with the successful development of the economy in late Imperial China and emerging evidence of the limits of the ‘duality’ that can be found in its bookkeeping and accounting, which tends to reinforce scepticism about the claims for the significance of DEB in the West (Goody, 1996, Chapter 2; Hoskin & Macve, 2012; Yuan *et al.*, 2012; Hoskin *et al.*, 2013).

More significantly, the invention of DEB in the West around C13th has been shown to have been more a precipitate of the new textual orientations in the new universities—that produced *examined* graduates—than a wholly business invention (Hoskin & Macve, 1986). The linkages between its development and advances in examination processes in the educational sphere would continue. Much later at USMA West Point, in an arguably even more important breakthrough after 1817, new practices of ‘writing and counting’ were now coupled with those of written examination, in new ‘grammatocentric’ ways of learning, examining and grading. These were internalized by West Point’s elite engineering graduates, who through their subsequent involvement in early American ‘big business’ (the armories and then the railroads) translated their examination marks into accounting dollars, thereby *constructing* objective performance and ‘calculable persons’ (Hoskin & Macve, 1988; Miller, 1992) and enabling the ‘administrative coordination’ of new business organizations (Hoskin, 2013b). These unprecedented grammatocentric practices and discourses of norms, performance and accountability (Hoskin & Macve, 2000) became the modern internalized systems of control that ‘quietly order us about’ (Foucault, quoted by Megill, 1979).

This dramatic new power of accounting then permeated external financing and accountability and thereby ‘accountancy’ as a new profession. It inexorably extended beyond ‘big businesses’ to networks of financial markets, regulation, and now international financial reporting standards. It extended beyond listed companies, e.g. into slave plantations (Fleischman *et al.*, 2011); Oxford colleges (Jones, 1992); Lloyd’s of London (Gwilliam *et al.*, 1992; Gwilliam *et al.*, 2000, 2005); and beyond the private sphere into ‘New Public Management’ and ‘Whole of Government

³⁹ It may act as an ‘autocatalyst’ (a product that then further speeds up a reaction), e.g. Padgett & Powell (2012).

Accounting’.⁴⁰ It has now established its place among many other such modern constructs: indeed it may be seen to have been instrumental in ‘spawning’ these as, following ROI in the late 19th century (Toms, 2010), we are now obsessed with how to construct the most meaningful ‘performance index number’ in a world of increasingly powerful indices that give (the illusion of?) control at a distance, including IQ (intelligence); HPI (poverty); HDI (development); RoL (rule of law); GII (gender equality), as well as providing the essential ‘proxies’ needed for statistically based empirical research on these policy issues (Rottenburg, 2012).⁴¹

This new power of ‘human accountability’ had not evolved in the British Industrial Revolution, even though accounting then embraced technological advances in assets and changes in the organization of and the accounting for labour costs (‘piece rates’ vs ‘day rates’) (Hoskin & Macve, 2000) as shown by studies of the C18th Newcastle mines (Fleischman & Macve, 2002), of the C18th Carron Co ironworks (Toms, 2010; Fleischman & Macve 2012; cf. Bryer 2006) and in the early C19th Boulton & Watt Soho foundry (Fleischman *et al.*, 1995). Nor had it evolved in early C19th US textile mills (Hoskin & Macve, 1996).

This accounting and accountability regime is now so pervasive that it has become almost invisible—we can now only think and express ourselves within it. It is only when particular rows over detailed measurements break out—whether over new accounting standards; over alleged fixations on ‘short-term’ performance measures in financial markets (e.g. Kay, 2012); over alleged grade inflation in ‘A’ level examination marks and in university degree classifications; or in other social arenas such as tracking the success of Government policies on reducing crime statistics—that we are prompted to try and ask the bigger question of whether there could be an alternative to the perceived inadequacy of the current forms of representation and measurement (‘naming and counting’) in these systems of accountability (and associated ‘audit’ inspection) within which we seem historically trapped (Power, 1997). But the embeddedness of this discourse as a ‘truth-regime’ for our thinking and action is more significant than the technical rationality or irrationality of any

⁴⁰ <https://www.gov.uk/government/publications/whole-of-government-accounts-guidance-for-preparers-2012-to-2013> (accessed 15/11/2013)

⁴¹ As Gendron & Baker (2005, pp. 558-9) document, serendipitous discussion of the claimed ‘objectivity’ of IQ by Solomons as a model for accounting was the entry point for the start in 1983 of the interdisciplinary collaboration between Hoskin and Macve looking at the relationships between educational and accounting practices and discourses, that led to the writing of Hoskin & Macve (1986) and subsequent papers.

particular individual measure, and recognition of its power has little to tell us about how we could improve those particular measures, although we know we are bound to be continually striving to do so.⁴²

3.4. Rationality and myth

We have already seen that W&B believe that DEB is a crucial tool for capitalism, albeit that they recognise that we cannot *wholly* explain FAT (either as it is or should be) as rationally designed (the aim of the standard setters' CF (e.g. FASB/IASB 2005)) given that individual developments are the outcome of a constellation of historical and institutional factors (Burchell, Clubb & Hopwood, 1985)—but, W&B believe, with 'survival of the fittest' (cf. Fleischman's review, 2009)

However as I have argued I believe this view of modern accounting and auditing as an evolutionary success story is not only historically insufficient but also rests on two underlying myths on which its apparent rationality is based.

Myth *ONE*: *HC accounting is 'objective'*.⁴³

Authors such as W&B (2007), Penman (2011) and Shivakumar (2013) subscribe to the view that 'engineering good accounting' requires maintaining as much objectivity as possible through conservative, auditable HC accounting.⁴⁴ But every first-year accounting student knows that there is no objective HC for items such as self-constructed assets (e.g. how much overhead to allocate?) or inventory (e.g. is the 'cost' FIFO, LIFO or weighted average?—Macve, 1979). There are many uncertain items requiring subjective estimates, e.g. short-term provisions against recoverability of receivables and inventory as well as provisions for longer term liabilities and impairment of long-term assets.⁴⁵ Indeed, modern HC accounting is more accurately described as 'recoverable cost accounting' (Solomons, 1961) but the relevant level of

⁴² The claimed advantages of a standardised accounting regime like IFRS probably lie more in the 'network effects' (Liebowitz & Margolos, n.d.) of its increasing mandatory worldwide adoption (together with the increased knowledge about and focus on accounting reports emphasised thereby) and the increased 'comparability' thereby provided than in the supposed 'quality' of its individual standards (e.g. Barth, 2013, although Horton *et al.* (2013) identify indications of both advantages—cf. Zeff, 2007b; Meeks & Swann, 2009; Macve, 2013b).

⁴³ It cannot be assumed that 'cash flows' are more objective. Their timing can be manipulated for period-end 'window dressing' and there is still a need to account for liabilities.

⁴⁴ On the other side, much of the appeal of FV (at least at 'Level 1') is that market prices also provide an equally objective alternative, consistent with modern financial economics (cf. Power 2010).

⁴⁵ And here management incentives have scope for affecting the quality of reported numbers (e.g. Ball *et al.* (2003)).

asset aggregation (what the FASB/IASB (2005) call the ‘unit of account’) at which to determine ‘recoverable amount’ is a matter of accounting convention/rule (as in oil and gas accounting (e.g. Macve, 1983a)). HC’s much vaunted ‘asymmetric timeliness’ (e.g. Basu, 2009) only requires recognition of losses that bring expected NPV⁴⁶ below cost, while ignoring losses of originally expected NPV above this bar, even though the latter may also signal that management should switch investment plans or investors should divert their resources to where a better more-than-competitive rate of return can still be obtained (e.g. Edey, 1963). Intangibles may be argued to be too uncertain to include in published accounts (Solomons 1989; cf. Macve, 1989), but surely highly specific tangible plant and equipment also has very uncertain economic value—while consolidation standards such as IFRS3 currently assume that FV can readily be assigned to intangibles in ‘acquisition accounting’, itself a departure from the full-bloodied HC approach of ‘merger’ (or ‘pooling’) accounting. And where there are managerial choices of accounting treatment, Positive Accounting Theory (Watts & Zimmerman, 1986) can at best explain choices between alternative available policies that are / could be accepted as GAAP but does not explain what limits the available range of acceptable choices (cf. Basu *et al.*, 2013). The modern form of HC accounting is a relatively recent invention and a by-product of particular historical circumstances (e.g. Parker, 1965).

Myth TWO Audit is an effective control monitor in reducing agency problems

This is a very ancient myth and still a mantra (e.g. Ball *et al.*, 2012). Ancient Mesopotamian bakeries in 3rd millennium BC had a strict system of accountability and inspection but the fact that the audited overseers were apparently able to pay the very large amounts surcharged for shortages implies they were probably concealing even larger underperformance and diversions of resources (Macve, 2002); and the same appears to be true with regard to the English medieval manorial audits (Noke, 1991). And despite the professionalization of the auditing profession since the 19th Century, and the establishment of international auditing standards [‘ISAs’], scandals and audit ‘failures’ clearly still abound today, including in the most sophisticated Western economies (e.g. Jones, 2011).

This myth is fuelled by Myth ONE: if the accounts are objective it should be straightforward to check objectively if they are correct. However what is regarded as

⁴⁶ Or, in much accounting practice, only when the prospective undiscounted cash flows themselves no longer equal the cost.

‘auditable’ is also necessarily socially constructed (Power, 1996). Nevertheless, continually extending the audit regime (e.g. the Sarbanes-Oxley Act) is the only remedy we know for its failures—auditing (like many other social institutions) grows on the back of its ‘expectations gap’ (Power, 1997: 9-10).

The combined influence of the two myths enables audited accounts to sustain corporate and public sector activity and its financing by providing a perception of risk reduction that may be in large part be no more than an illusion of ‘control / action at a distance’ (Miller & Rose, 2008). It can also have alienating and amoralising effects on its practitioners (Mennicken, 2012). Nonetheless, it may be objected, there is surely *some* objectivity in both accounting and auditing. The question is ‘how much?’. It is therefore helpful to regard FAT and IFRS as ‘powerful institutional rules which function as *highly rationalised myths*’ (Meyer & Scott, 1992; McMillan, 1998) and thereby become ‘taken for granted’. But how much is rational? And how much is myth? What is the linkage between the ‘end’ of maximising profit and the ‘means’ of tracking performance through (audited) IFRS accounts? (e.g. Bromley & Powell, 2012). Modern-day individuals and organizations face the demands of an array of such rational myths (each with their own performance metrics), through which they have to negotiate a survival path and which are more or less loosely coupled with, or even decoupled from, their main goal⁴⁷—but in many spheres, and not just in ‘for profit’ enterprises, it is still the demands of the original myths of accounting and auditing that remain the most powerful.

In these last two sections (3.3 and 3.4) I have argued for an alternative history, namely that a ‘genealogy’ of accounting and of the examination—as ‘rational institutional myths’ that are mutually supportive—traces their modern characteristic discourses and practices through a history of disciplinary power-knowledge (Hoskin & Macve, 2000; cf. Power, 2011) that cannot be reduced to rational evolution. And this must in turn influence the possibilities for future development.

4. Future FAT?

What are the implications for the future of FAT and for the contribution of accounting and auditing research? I consider next the two recent influential

⁴⁷ E.g. Power (2013) traces the development of the Foucaultian ‘apparatus’ of modern ‘fraud risk’ management.

monographs/books I have already referred to—Penman (2011) and W&B (2007)—that seek to draw insights from history into the shaping of the future of FAT.

4.1 Penman (2011)

Penman (2011) argues that for valuation purposes investors do not want the kind of accounts that FASB/IASB have been promoting—on the basis of increasing recognition of FVs—but want to get back to a balance sheet that ‘cannot come back to hit you significantly’ (p. 200). Starting from this, and from the information in recent earnings that enables a reasonable estimate of ongoing ‘residual income’ [‘RI’] or ‘abnormal earnings’ in the near-term (i.e. income/earnings in excess of the required rate of return on capital employed) that they can capitalise, they can ‘challenge the stockmarket price’ as to its apparent assumption about future earnings growth. But, of course, obtaining such a balance sheet and its related earnings measure needs ‘good accounting’. Here (pp.195ff.) Penman offers some appealingly simple utilitarian remedies. The primary need is for earnings based on historical (or transaction) costs from arms-length transactions and earned revenues from sales for measuring the results of operating (success in adding value through converting factor inputs into more valuable outputs) not of speculating (success in guessing changes in market values, i.e. FV). Operating and financing activities must be kept distinct with FV (at Level 1) useful only for financial items where return depends wholly on external market price movement. Accounts should be conservative and not attempt to include ‘soft, speculative’ intangibles: their value (e.g. that of Coca-Cola’s brand) can be ‘reverse-engineered’ from the high rate of return earned on the tangible assets (e.g. Penman, 2007, pp.37-8).

But Penman does not get to discussing what his recommendations would be for most of the accounting issues that are currently in the ‘too difficult box’, such as leases, pensions, insurance, deferred tax, hedging and goodwill.⁴⁸ He does not address the issues relating to determining control of other entities and accounting for business combinations.

⁴⁸ Note that many of these issues relate to liabilities where there often is no ‘historical cost’ (just as there may not be for some derivatives, so that using a FV is the only option for recognising them). See again the discussions in section 2 above

Penman is suspicious of deferred revenues and ‘big baths’ (‘cookie-jar’ accounting) but nevertheless insists that revenues and profits must be ‘earned’—even though what this means of course remains one of the most fundamental accounting issues that has so far defied resolution by FASB/IASB (Stubben, 2010; Horton *et al.*, 2011). At what point from the original gleam in an entrepreneur’s eye to the final liquidation of the firm and settlement of all its liabilities is it sufficiently certain that revenue and profit have been earned?—cf. Jones (2011). Standard setters and accounting theorists deplore the messy variety of revenue recognition conventions to be found in practice and assume this represents a lack of theoretical consistency.⁴⁹ But there may be good reason why different conventions have emerged as suitable for different industries or in different settings, and before they are swept away in the name of comparability, historical understanding is needed to analyse whether these conventions have advantages that need to be preserved under different conditions, or whether they have indeed outlived their usefulness (Bromwich *et al.*, 2010).⁵⁰

At the theoretical level Penman does not engage with the ‘business reality’ that today’s large, multinational corporations have to make decisions that span not only how best to operate with existing physical resources but include the related financing options (e.g. by raising long-term fixed interest borrowings to ‘hedge’ investment in long-term productive assets; or through securitisations); and also need to evaluate whether to sell existing facilities and relocate to a location with cheaper labour and other costs (which requires estimating the ‘deprival value’ of the existing assets).⁵¹ His arguments for ignoring value changes are suspect: rather than HC it is surely ‘replacement cost’ (and even future replacement costs) that are relevant for forecasting ‘sustainable margins’ in the near future (as well as for dealing with price regulation) and for hedging decisions (cf. Macve, 2010a).⁵² And if intangible values can be ‘reverse engineered’ from rates of return, why not tangible fixed assets too given that, especially in the case of highly specialized assets, their continuing value may be equally speculative? Consider for example the difficulties that were faced by

⁴⁹ See IASB (2011c). A deeper question would ask if it is now time to separate ‘revenue recognition’ and ‘profit recognition’ (Horton *et al.*, 2011; cf. Nobes, 2011) as well as profit recognition and ‘change in net assets’ (Horton & Macve, 1996; 2000).

⁵⁰ Penman (2011, pp.150ff) suggests that these various deferrals of revenue recognition may signal risk conditions that may require a higher hurdle rate for residual income measurement of the growth in earnings to come, therefore properly keeping market to book (MB) low: cf. Ryan (2012).

⁵¹ See e.g. Macve, 2007. Penman also ignores the distortions of inflation on accounting numbers.

⁵² While Penman introduces the possibility of FV as ‘entry value’ (2007, p.34, ‘model (2)’) his arguments are directed against FV as exit value (‘model (3)’).

19th century railways and other enterprises, investing for the first time in history in such unprecedentedly large scale capital projects, in determining how they should deal with these expenditures in their accounts—how is the problem of intangibles now different for us?⁵³

So the argument that tangibles have sufficient reliability while intangibles do not remains unconvincing when standard setters, at the same time as they virtually ban the capitalisation of internally generated intangibles, also assert that identifying intangibles and measuring their ‘fair value’ in mergers and acquisitions is always achievable. The reliability line does not map neatly onto the tangible-intangible line (Macve, 1989 re Solomons, 1989), given both that many tangible fixed assets are so highly specific that they will have virtually no value if the product they make fails in the market place, and more generally that what is measurable/auditable is socially constructed (Power, 1996) and what is regarded as sufficiently ‘hard’ data is the result of situated organisational and institutional processes.⁵⁴

Penman accepts FV has its place—it is the natural basis for measuring the outcomes of operations that are based on movements in market value, such as investment funds (2007, p.36). However he does not pursue the conceptual difficulty that, when considering income from marketable financial instruments, one needs to distinguish the effects on their FV of changes in discount rates from changes in estimated future cash flows, as ‘Hicks No. 1’ income may not be the most relevant measure (Horton & Macve, 2000; Bromwich *et al.*, 2010). Nor does he look more closely at businesses that are a mixture both of market dealing in financial instruments and of operating as intermediaries between savers and borrowers (i.e. performing ‘value-adding’ activities’), such as banks and life insurers where the distinction between operating and financial activities is necessarily blurred.

While initially appealing in their straightforward ‘back to basics’ directness, Penman’s prescriptions for accounting are therefore essentially for more of the old ‘laudanum’: they are yet another of the stirrings of the conventional accrual accounting pot that have so far been unable to produce a conceptually consistent

⁵³ Many of the issues were surveyed in the ICAEW Information for Better Markets conference in December 2007, the papers from which are collected in *Accounting & Business Research*, 2008, vol. 38(3).

⁵⁴ China’s latest accounting standards (under the control of its Ministry of Finance) still differ from IFRS with respect to more restrictive application of FV and prohibition of reversal of all impairment losses on tangible and intangible fixed assets (Deloitte, 2006), presumably reflecting continuing caution about dangers of excessive managerial manipulation (cf. Ball *et al.*(2003)).

framework for resolving accounting issues and for reconciling the different purposes for which accounts may be useful (cf. Macve 1983b).⁵⁵ And Penman does not venture into issues relating to corporate environmental and social reporting [‘CESR’], presumably as he does not see their potential relevance to investors, even though the ‘business case’ has long been acknowledged (e.g. Macve 1997b; Eccles *et al.*, 2012; Servaes & Tamayo, 2013).

4.2 W&B (2007)

W&B (2007, pp.111ff.) offer suggestions how future research, including more ‘cliometric’ quantitative research may, through adopting their ‘evolutionary perspective on accounting...offer fresh insights on several fundamental issues that accounting historians have grappled with for decades’. Consistent with their view that the high ‘noise to signal’ ratio in evolutionary processes means that the fitness consequences of highly specific methods are often difficult to identify’ (p.94; 112) they do not draw implications from their historical review for specific individual controversial accounting issues in modern FAT (or address CESR). Nevertheless, their overall view tends towards preferring spontaneous ‘rational evolution’ to regulation and standard setting (which can have ‘unintended consequences’) in order to produce the best outcomes. They see general principles such as ‘conditional conservatism’ as having evolved in this way and also that the ‘unconditional conservatism’ of writing-off intangibles can also be useful as a ‘countersignal’ of companies’ strength and their evolutionary advantage for survival. They give the example of the favourable reaction to General Electric’s write off of its patents, franchises and goodwill down to \$1 in 1907 (p.114). But the full context (pp.21-3) in fact makes clear that the company also wrote off nearly two-thirds of the book value of its expenditure on *tangible* plant too—this would nowadays be regarded as ‘creating secret reserves’ that allow the ‘cookie jar accounting’ that Penman (2011) excoriates.

⁵⁵ Penman’s intriguing suggestion (p.205) to circumvent the ‘cookie jar’ accounting that may come from impairment write-downs (cf. Mennicken & Millo, 2012) is that they be capitalized and smoothed into earnings over the next few years. This is a reincarnation of the policy adopted by the directors of the Carron Company, then on the road to financial ruin, in the early 1770s when faced with the realisation that much of the original capital had been lost (Bryer, 2006; cf. Fleischman & Macve, 2012).

Clearly I agree with W&B's endorsement of historical understanding as 'especially important if conceptual frameworks guiding future accounting principles and practices are based on inaccurate mental models that could be easily falsified by reference to historical events and data' (p.111). But, apart from what I have already argued is their mis-located veneration of the power of DEB, I fear they overstate the rationality of accounting's evolution. Certainly the myth that historical cost accounting is objective and conservative (and therefore valued by investors) is still pervasive: but is it persuasive? I have already argued in section 3 why I am sceptical.

An interesting comparison is with the standard QWERTY keyboard (David, 1985; Sunder, 1997).⁵⁶ It is inefficient, but universal (outside specialist typing competitions). An efficient keyboard would, at its mid-C19th invention by C.L. Sholes, have been centred according to the relative frequency of the use of the individual letters in writing the English language. But because this would have caused the original 'hammer' typewriters to jam, they had to be 'slowed down' by spacing out the most frequent characters. However, to help the marketing of the new mechanical writing machine (to replace several thousand years of clerks' familiarity with handwriting), Remington, so the widespread belief goes, designed the top row so that it contains all the letters of 'typewriter' (plus Q, U and O for camouflage), which is the word the salesforce would type when demonstrating the machine's superior speed. So the interactions between mechanical and marketing efficiency were historically contingent on conditions at that time. But now the QWERTY keyboard is so embedded (due *inter alia* to the ever increasing potential cost of retraining those who have become familiar with using it) that we are still using it for *electronic* machines, even though the most efficient layout to achieve maximum speed is now known for each language.⁵⁷ It still appears on the latest i-Pad (and British station ticket-machines), so QWERTY seems likely to stay now, until keyboards themselves are obsolete. And now that its use is worldwide, speed in *which* language should be the criterion for any change?⁵⁸

⁵⁶ cf. <http://home.earthlink.net/~dcrohr/myths.html> [accessed 15/11/2013]. There is similar controversy over whether Brunel's wider gauge was the better engineering approach for railways but the advantages were lost because of the need to standardize since Stephenson's narrow gauge was already so widespread e.g. <http://www.brunel.ac.uk/about/history/isambard-kingdom-brunel/broad-gauge-trilogy/broad-gauge-trilogy2> [accessed 15/11/2013].

⁵⁷ E.g. the 1930s Dvorak system for English. However Liebowitz & Margolis (1990) dispute the evidence.

⁵⁸ Levinson (2008) shows how many factors beyond engineering efficiency led to the now-standard sizes for shipping containers.

Does the same apply to the ‘relevance’ and ‘reliability’ of accounting numbers, given changing relative costs in different places at different times? The accounting model we have is the outcome of many such past trade-offs (W&B, 2007) and is now so embedded in many spheres that it is not clear, even if accounting theory could set out a CF for a ‘best’ model, that we would find it worthwhile to adopt it, given the costs of transition, including re-education. And would a ‘best model’ as defined for example by a ‘Washington consensus’ that includes IASB be best for all kinds of economies (cf. Walker, 2010)?

Until some (necessarily unpredictable) breakthrough, perhaps in response to a crisis, ‘punctuates the equilibrium’ (W&B, 2007, p.7, 103) and produces a ‘paradigm shift’ (Kuhn & Hacking, 2012) that creates a wholly new vision and model for accounting development, ‘fixing what’s broke’ may continue to have to be sufficient (e.g. ICAEW 2009), especially if this is complemented by empowering users (e.g. through internet ‘drilling down’ to finer information levels) to tailor the accounting to their own needs so that they are not constrained by the straight jacket of the ‘standard model’ and can again become more like the freely-contracting actors in scenarios such as those outlined by Christensen (see Macve, 2010b).

Potential stimuli for such a major shift might include the impact of the rapid growth in the Chinese accounting and auditing profession as China heads to becoming the world’s largest economy (Deng & Macve, 2013), or the demands of developing adequate CESR as the implications of climate change reach a ‘tipping point’ (e.g. Macve & Chen, 2010). Although neither Penman (2011) nor W&B (2007) venture here, some historians—including Chinese accounting historians—have tentatively begun to consider CESR to be the next arena for major development in accounting (e.g. Macve, 1997b; Guo & Du, 2010).

5 Some implications for policy and research

5.1 Lessons from history?

From my review here of a number of instances of recent FAT development I have argued that, although standard setters claim they are driven by the ‘balance sheet model’ of their current Conceptual Framework, the practical policy outcomes cannot be understood without a more nuanced understanding of the historical context and the

constellation of organisational, institutional, political and social pressures within which they arose (Burchell *et al.*, 1985).

So, more important than any of its particular recognition and measurement characteristics is the claimed, but still contested, role for FAT and the ‘calculative mentality’ it represents, first in promoting the historical development of capitalism and now, in particular, in providing relevant and reliable information for investors, creditors (and others) in capital markets.⁵⁹ But measuring the comparative value of a coordination network (like that of traffic-light systems) is generally beyond any conventional micro-level cost-benefit analysis and raises wider issues of how different regions and jurisdictions approach the political and social organisation of finance and investment, and of how accounting and auditing shape the decision-making and control, both internally of businesses and other organisations as well as externally of those who finance and regulate them (Sunder, 1997).

History is central to this understanding but I have argued that ‘rational evolution’ of accounting is inadequate as an explanation of the genealogy of the ‘history of the present’ (Roth, 1981) and of its dominant ‘institutional rationalised myths’ and so cannot be relied on as the mechanism that will automatically secure the optimal future development of accounting.

5.2. *Some research implications?*

Since Ball & Brown (1968) and Beaver (1968), statistically based empirical capital markets research, complementing research in finance (Pope, 2010), has dominated US accounting research and increasingly become the ‘global’ standard. It is important to continue to promote the much greater diversity of British and Continental European Research (e.g. Ashton *et al.*, 2009). While advanced statistical ‘data mining’ of old and new ‘big data’ (Meyer, 2012) can reveal new patterns in the evidence (as now in cosmology or the Fama-French ‘factor’ models in finance), critical questioning and analysis and the search for explanatory theories remain even more important,

⁵⁹ There is a danger that focussing too much on the historical arguments about the role of DEB itself can obscure this more far-reaching claim (cf. Hoskin & Macve, 2012 and Hoskin *et al.*, 2013 in relation to China’s history).

especially given the low ‘signal to noise’ ratios in statistical data relating to hypothesised accounting impacts.⁶⁰

Although the information needs of capital markets have now become the dominant focus of financial accounting research (e.g. Ravenscroft & Williams, 2009) they may not be the most fruitful place to look to understand the genealogy of accounting’s roles and continuing power.⁶¹ Like Pacioli in 1494, we should probably begin with asking what is most useful for (owner/) management decision-making and control purposes (e.g. Macve, 2010a; W&B, 2007, p.112) although naturally this will soon extend to the contracts and other relationships made with employees and third parties (including sources of finance, both equity and debt). Interestingly, Ronald Coase—the Nobel Prizewinner in Economics who first wrote about accounting in the 1930s (e.g. Coase, 1973)—on approaching his 100th birthday, recently said in an interview:⁶²

Most decisions regarding what people do are not made through the work of a pricing system, but as a result of what their boss told them what to do. What people do in the business is largely a result of administrative decision. It is thus critically important to understand how firms operate, how they make decisions, how they conduct business with each other, how they interact with the government, and so on. We have done so little work on these questions. As a result, we are very ignorant about how the economic system operates.

This follows from the observations in his earlier retrospective (Coase, 1990) where he acknowledged the powerful role played in these business decisions by the transfer prices, internally generated by accounting, relative to external market prices and that it is not just ‘transaction costs’ but ‘the cost of organizing activities’ that seems likely to determine the institutional structure of production: and the ‘cost of organizing’ depends to a large degree on the efficiency of the accounting system (p.11). ‘A theory of the accounting system is part of a theory of the firm’ (and economics would benefit from further development of it) (p.12). So we need to understand accounting’s central role in the ‘administrative coordination’, strategizing and risk management of firms, and the history of this modern power (Chandler, 1977; Sunder, 1997; Hoskin & Macve, 2000; Hoskin *et al.*, 2006; Hoskin, 2013b).

⁶⁰ See for example Penman’s discussion (2011 pp. 150ff.) of how the ‘anomaly’ of the book to price [‘B/P’] ‘risk’ factor found empirically in the Fama-French model might be explained; cf. Ryan (2012).

⁶¹ Much capital markets based research focusses on ‘information asymmetry’ and ‘moral hazard’, i.e. the governance risks that poor information allows distorted division—and consequential reduction—of the potential wealth ‘pie’. An equally significant role of accounting is in assisting managers and others to understand what is needed to maximize the size of the ‘pie’ efficiently.

⁶² LSE Beaver interview 17/3/2011 by Richard Dewey and Dominik Nagly: *The Problem of Social Coase*: <http://thebeaveronline.co.uk/2011/03/17/the-problem-of-social-coase/> (accessed 14/11/2012).

Accounting has provided the conceptual vocabulary for economics and finance, but their discourses have moved ever further away from the real households and firms that practice them to abstract formal theorising (e.g. Hatfield, 1934; Klammer & McCloskey, 1992; Hoskin & Macve, 1993; Chiapello, 2007). Research that is based in understanding why particular practices survive in different contexts is the best starting point for asking whether improvement is necessary and how desirable the consequences of change might be (Bromwich *et al.*, 2010; Dennis, 2008)—both its cost-benefit ratio and on whom the cost and the benefits might fall: cf. Gwilliam *et al.*, 2005.

But the cost-benefit ratio can be extremely complex to determine. We should not be surprised if such alternative kinds of CF—focussed on asking the relevant questions rather than delivering answers (Macve, 1997a: Introduction)—lead to piecemeal, evolutionary improvements in accounting practice and disclosures rather than wholesale replacement by a new, much more logically consistent ‘accounting model’ (e.g. ICAEW, 2009).⁶³

I hope I have shown why I have learned that understanding the current and potential role of the ‘rational myth’ of accounting within firms and in capital markets also requires understanding comparative international accounting history [‘CIAH’] (Carnegie & Napier, 2012). Accounting history is indeed more than ‘just one damn thing (or even just one damn person) after another’ (cf. Oldroyd, 1999). But a ‘rational evolution’ version not only faces the QWERTY kind of problem in explaining how we have reached where we are today, or what constraints face us going forward, but more seriously it privileges response to external ‘needs’ over accounting’s *performative* role in the constitution of new possibilities. Ever since the first written ‘naming and counting’, accounting has shaped accountabilities and thereby the pattern of behaviour within public and private organisations. What were initially ‘supplementary’ practices have later become central in new discourses that enable new forms of economic, political and social interaction—and their subversion (Hoskin & Macve 2000; Ezzamel & Hoskin, 2002).

Generally, well educated practitioners, policy makers and the public are responsive to the value of historical insights.⁶⁴ But the majority of academic accounting

⁶³ This passage follows Macve, 2010b.

⁶⁴ E.g. Jolyon Jenkins’s 10-part series on Radio 4 in 2010: *A Brief History of Double Entry Book-keeping* (<http://www.bbc.co.uk/programmes/b00r401p>) (accessed 14/11/2012).

researchers (especially in US and increasingly mimicked by Continental Europe and South East Asia, including most recently China—e.g. Sunder, 2008) are now trained towards a narrow, specialist quantitative focus which even usurps traditional historical vocabulary (e.g. ‘archival research’)—cf. Fleischman, 2009. Such empirical investigation can yield useful information about current economic behaviours but perhaps little insight into what the next major development will/should be.⁶⁵ UK research has so far been more eclectic (Ashton *et al.*, 2009) but the initial journal rankings by the Association of Business Schools [‘ABS’] were ominous.⁶⁶ However, as W&B (2007, p.112) suggest, quantitatively trained new researchers may be attracted to accounting history through perceiving cliometric research as being more ‘scientific’.

Historical understanding of modern accounting and auditing’s complex path-dependency has to face the triumphalist conviction of standard setters wedded to achieving the victory of rational ‘concepts’ over historically inherited ‘conventions’ (FASB/IASB 2005; Bromwich *et al.*, 2010). But their ‘balance sheet’ focussed model seems out of alignment with investors (and others’) preoccupation with ‘earnings’.⁶⁷ And is challenging the purported usefulness of individual accounting ‘improvements’ rendered near impossible if the value of audited financial accounting lies more in coordination at ‘network’ level (like traffic signals) rather than at the level of individual firms (Edwards, 1938; Macve, 2010b), so that impacts on ‘regional’ costs of capital may be more significant than on those of individual firms? But this is very difficult economics and unavoidably intertwined with social and political priorities. Technical solutions must often seem as far away as ever.

On the other side, the ‘rational evolution’ histories of W&B (2007) and Penman (2011) tend to imply that ‘things will work out for themselves’ if ‘the market’ is not interfered with so much by ‘regulators’. But this pays inadequate attention to the

⁶⁵ I believe it was Robert R. Sterling who pointed out that empirical research among users in relation to road transport in the 1870s would have revealed continuing preferences (subject to cost) for such features as thicker straw on the floor, plumper seat cushions, better springs and maybe faster horses, all of which would enhance the passengers’ current environment of horse-drawn carriages; but there could have been no mention then of what they would soon show they ‘really’ wanted: motor cars (first patented by Karl Benz in 1886).

⁶⁶ See BAFA letter to ABS 19/04/10: <http://www.bafa.ac.uk/assets/files/BAA%20-%20Letter%20to%20ABS%20-%20April%202010.pdf> (accessed 15/11/2013).

⁶⁷ Walker (2013) observes that in a well-known survey of US executives, responding to the question: ‘Rank the three most important measures reported to outsiders’, 51% ranked earnings first, and the next most popular metrics were pro forma earnings (12%), revenue (12%), cash flow from operations (10%) and free cash flow (10%). As Marshall (2013) comments, there is no mention of balance sheets here.

networked constellations of actors and institutions that have and will continue to interact in shaping accounting and auditing's future (e.g. Macve, 2013a).

6. Concluding remarks

In what has unavoidably been the broad sweep of a 'reduced history',⁶⁸ I have reviewed—and attempted to bring together—the main areas in BFAAH I have been interested in over nearly forty years. It is a long list: the CF of financial accounting and reporting and its relationship to the setting of individual accounting standards (whether based on HC or FV) and to 'conservatism'; insurance accounting and accounting in other 'non-mainstream' arenas; CESR accounting; the genealogy of the power of modern accounting and auditing in the West that enables the various agents in the modern, increasingly global, economy to reduce information asymmetries (and the accompanying risks to incentives) and to act 'at a distance' and also across time (the domain of finance); and now the further development of accounting and auditing's power in modern China (Deng & Macve, 2013).

In attempting to link these various strands I have cast doubt on both the standard setters' and recent academic versions of the kind of rationality underlying progress in accounting and auditing, which I have argued to be more like that of 'institutional rationalised myths'. The twin rational myths of the objectivity of HC accounting and of auditing—despite frequent, and occasionally catastrophic, failings—as reinforced by 'conservatism' now together sustain financial markets across the globe, coupled with the belief that regulators can control them. Exploring how much of FAT is rational and reflects some objective 'economic reality' and how much is myth and is subjectively, socially constructed (Hacking 1999) and, again, how much might be improved—including potential extension to accountability for CESR—and how much is intractable are the major questions now for accounting and finance research. As in other public policy arenas, implementing successful change will require historical understanding of current practices as a precondition for identifying what may be feasible in seeking to couple the 'myths' more tightly to desirable real world outcomes and for minimising adverse unintended consequences (Bromley & Powell, 2012). Innovations may continue to come from outside the regulators' own projects

⁶⁸ With acknowledgments to: <http://www.reducedshakespeare.com/productions/the-complete-works-of-william-shakespeare-abridged/> (accessed 15/11/13).

but then have to compete with them in regulatory space (e.g. Horton *et al.*, 2007; Serafeim, 2011). Unravelling the various forces at work internationally in turn requires further detailed CIAH for understanding how accounting and auditing have variously operated, with differing degrees of ‘fair valuation’ and ‘conservatism’, within businesses and other organisations, across different countries and cultures. Such interdisciplinary research can complement and enrich—as well as challenge—the more familiar, statistically focussed research in accounting and finance (e.g. Pope, 2010) and help us to understand how arguments within FAT (such as FV vs conservatism) may play out.

So there is still much more to be researched and understood and I should remember Wittgenstein:

‘My work consists of two parts: the one I have presented here plus all that I have *not* written. And it is precisely the second part that is the important one.’⁶⁹

⁶⁹ In a personal letter to the editor of *Der Brenner*, in 1919.

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