

Fair value accounting, financial economics and the transformation of reliability

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Abstract — This paper addresses the question of how and why the use of fair values in accounting acquired significance prior to 2007 despite widespread opposition. An answer is suggested in terms of four mutually supporting conditions of possibility which gave the proponents of fair value institutional support and strength which their opponents lacked. First, fair value enthusiasts could draw on the background cultural authority of financial economics. Second, the problem of accounting for derivatives provided a platform and catalyst for demands to expand the use of fair values to all financial instruments. Third, the transformation of the balance sheet by conceptual framework projects from a legal to an economic institution created a demand for asset and liability numbers to be economically meaningful, a demand which fair value could claim to satisfy. Fourth, fair value became important to the development of a professional, regulatory identity for standard-setters. These four conditions, though not sufficient in themselves, added up to a weakening of a transactions-based, realisation-focused conception of accounting reliability in favour of one aligned with markets and valuation models. An interesting consequence is that auditing standard-setters found themselves forced into a reactive role.

Keywords: fair value accounting; measurement; reliability; financial economics; accounting policy; financial instruments

1. Introduction

The conception and application of ‘fair value’ measurement within financial reporting has an ad hoc history which reaches back at least two decades (Omriros and Jack, 2008). In the 1980s the term was widely applied within the context of acquisition accounting as a basis for the allocation of entry values to acquired assets. The procedure yielded a figure for purchased goodwill and opening book values, but was not without its difficulties and controversies. For example, contractual and transaction cost incentives existed to identify any fair value ‘components’ of goodwill, such as brands and intangibles. Yet, despite these complications, this earlier period was marked by more or less tolerance of mixed measurement bases for financial accounting. A range of current value measurements were applied piecemeal and a certain style of ‘reactive’ pragmatism characterised the approaches of national standard-setters. Despite the widely acknowledged intellectual defects of historical

cost measurement and the sometimes large gap between accounting net book value and market capitalisation, pressures for a single dominant measurement convention were muted.

By 2007, just prior to the financial crisis, the status of fair value measurement had changed entirely, having acquired both an expanded significance and position of controversy within the financial accounting policy process. Indeed, the idea of fair value measurement for accounting came to be a motivating and quasi-philosophical principle at the centre of an accounting reform process led in different ways by specific members of FASB and IASB.¹ Fair value could be said to be much more than just a technical measurement convention; for its proponents it came to represent a change process which was global in aspiration and was increasingly intolerant of the apparent incoherence of mixed measurement systems.

Even before the largest financial crisis since the 1930s caused this change programme to stumble and compromise, fair value was the subject of heated debate by policy makers, practitioners and academics alike. However, the idea of fair value accounting seemed to have momentum and became institutionalised despite strident opposition from many quarters about features of its implementation, not least from European banks seeking to retain reporting discretion in key areas.

This essay addresses the following question: how and why did this change in the status and signifi-

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¹ Consistent with this view, Walton (2004: 9) suggests that a leading IASB member openly articulated fair value as a ‘meta-rule’ or guiding principle.

cance of fair value in accounting over two decades happen? Though it would be reasonable to answer this question by the forensic analysis of successive developments of accounting standards embodying fair value, a more thematic approach is adopted which takes a step back from the technical detail and interprets the rise of fair value in terms of a contest between fundamentally different conceptions of accounting reliability. Specifically, a notion of reliability grounded in market-based and market-simulating valuation processes is in competition with an older, transactions-based model.

Many commentators have hinted at the importance of measurement reliability in accounting, but it has been largely treated by all sides in the fair value debate as if it were a simple uncontested thing. Yet, close analysis suggests that actors operate with very different conceptions of reliability, and that measurement reliability in accounting is what might be called a 'social construct'. Accordingly, the arguments which follow about fair value also provide a tentative outline for a 'sociology of accounting reliability'.

In the next section the main contours of the contemporary debate about fair value are sketched, drawing on several summaries and analyses. The discussion focuses on how a distinctive notion of accounting, and therefore reliability, emerged and was articulated prior to the financial crisis. Subsequent sections explore the wider institutional conditions of possibility for this transformation which, at least for a time, became tightly interconnected and reinforcing – something which explains the relative ineffectiveness of some powerful opponents.² Section 3 deals with the rise of financial economics both as a challenge to, and as a cultural resource for, financial accounting. The preconditions for fair value lie in a progressive articulation of decision relevance for accounting which draws on highly abstract conceptions of users, markets and price formation. Section 4 argues that the problem of accounting for derivatives challenged the credibility of accounting but also acted as a catalyst for the expanded significance of fair value and as a technical platform for a new conception of reliability. Section 5 suggests that the de-legalisation of the balance sheet by successive conceptual framework projects created a demand for accounting numbers in the balance sheet to mean something more than a residual. In turn, this provided fertile ground for the promotion of fair value and for the marginalisation of the 'realisation' concept in accounting. Finally,

² Halliday and Carruthers (2009) refer to this intriguingly as the 'weakness of the strong'.

Section 6 draws on work in the political economy of international accounting policy to argue that the rise of fair value corresponds to the construction of a new 'technical' professional identity for accounting standard-setters as experts in a world-level system of global governance. However, underlying this professional identity are tensions between fair value idealists and pragmatists and their associated conceptions of accounting reliability.

These four different factors mutually reinforce each other and characterise a progressive intellectualisation of financial reporting policy in which the idea of fair value is central. Intriguingly, the pressures for change behind fair value accounting seem to be generated more by the visions and dreams of accounting policy-makers than by real market forces and external demands for change. Furthermore, the changing narrative of reliability for accounting numbers embodies a vision of the market as the ultimate 'auditor' of asset and liability values, supported by institutionally credible economic valuation methodologies. That the future is uncertain is obvious and trivial; actual and expected income are different concepts (Dean, 2008). Less obvious and less trivial is the process by which some technologies for knowing the future come to be regarded at specific times and places as more reliable and acceptable than others.

Two important caveats about the discussion which follows are necessary. First, a great deal of the practical and academic debate about fair value accounting concerns the scope of its application, and the implications of asset-liability classification for the income statement. For example, the IAS 39 (IASB, 2004) controversy demonstrates how a consensus about the use of fair values for measuring and reporting trading assets quickly dissolves when it collides with business model issues about hedging and long-term finance. The arguments below do not address these issues and focus primarily on the measurement issue and related visions of accounting reliability. Second, the essay does not address in depth the obviously important role of specific individuals in the fair value debate, preferring to delineate broad features of the institutional space which these actors inhabit. A more complete analysis would need to address the role and power of key individuals in shaping the 'regulatory space' of fair value.

2. Fair value and the reshaping of reliability

The concept of 'fair value' measurement emerged in financial accounting and was accepted in the abstract long before it was a subject of analysis and dispute (Bromwich, 2007). Furthermore, 'fair

value' is not itself a single measurement methodology but encompasses a variety of approaches for the estimation of an exit value. So it is hardly surprising that many of the arguments which have been developed for and against the use of fair values in accounting are not well-supported by evidence (Laux and Leuz, 2009); disputants often talk past each other. However, the relative absence of justifications by standard-setters is also responsible for the power of fair value accounting as a reference point in debate. As with 'operational risk', policy concepts can be articulated in the abstract by regulators and accepted by industry before complex and messy issues of implementation come into play (Power, 2005).

Definitions of fair value vary in subtle ways that may end up mattering in law but from afar, and to the untutored eye, they look similar. FAS 157 (FASB, 2006) defines fair value as: 'the price that would be received to sell an asset or paid to transfer a liability in an *orderly transaction* between *market participants* at the measurement date'. IASB (2009) reproduces this as a core principle.

This definition, which has existed in various slightly modified forms for many years, might appear uncontentious. Yet, it is a complex hybrid of ideas and assumptions which point to the estimated prices that might be received in a market, one which turns out to have specific and assumed characteristics. This causes several commentators to remark on the 'fictional' and 'imaginary' nature of fair values (e.g. Casson and Napier, 1997) and to bemoan their 'subjectivity' and potential for manipulation and bias. Indeed, Bromwich (2007) outlines how many assumptions underlie the production of fair values and draws the conclusion that the understanding of fair value may vary considerably.

Regardless of whether these criticisms have substance, it is also the case that if enough people believe in fictions, then they can play a role in constituting markets. Mackenzie and Millo (2003) argue in the context of the development and institutionalisation of option pricing models that simplifying assumptions began life as being non-descriptive of pricing processes, then came to be the preferred and dominant methodology. Once accepted, the Black-Scholes model contributed to the development of the depth and liquidity of the market, although Mackenzie and Millo note how this relationship was looser again after the 1987 crash. The general message is that if key communities accept the usefulness of 'fictions', they have real consequences and can become regarded as 'real'.

Proponents of fair values in accounting often appeal to notions of telling things 'as they are' and of improving transparency. They point to areas such as pension accounting or the savings and loans industry in North America where fair values would have made problems (deficits, poor performing loans) visible much earlier, thereby enabling corrective action. An often heard trope is that one 'should not shoot the messenger' of poor asset quality. Yet sceptics argue that fair value accounting has created a false short-term visibility in the case of pension funding and hastened the demise of defined benefit schemes (Kiosse and Peasnell, 2009). More generally, critics argue that the financial crisis demonstrates the pro-cyclicality of fair values when accounting is tightly coupled to prudential regulatory systems, and the unreliability of marking to model in less than liquid asset markets, especially for assets which are being held for the long term.

According to Laux and Leuz (2009) the fair value debate should not be polarised. The use of fair values is neither responsible for the financial crisis nor entirely innocent.³ Furthermore, arguments *against* fair value do not automatically translate into arguments *for* historical cost accounting. Information about current values, or best estimates of those current values, is likely to be useful for management and market analysts in conjunction with lots of other bits of information. Contracts and covenants may be highly sensitive to mark to market strategies in a crisis, where breathing space may be valued over short-term volatility in contractual and regulatory compliance. This is echoed by the analysis in Plantin et al. (2004) of the different winners and losers from the shift to mark-to-market for financial instruments in general, and helps to explain the intensity of the politics of fair value accounting, even prior to the financial crisis.

While much of the heat generated by fair value concerns the politics of reporting discretion for banking institutions, Laux and Leuz (2009) suggest that the polarisation in the debate is founded primarily on different views about the goals of accounting. In parallel but somewhat differently, it can be argued that the debate is also driven by different, almost unconscious, views about what it is for an estimated accounting value to be reliable.

One of the explicit motivations for the expanded significance of the use of fair values is its perceived potential to minimise the freedom to manipulate accounting numbers (CFA, 2007). Market-based

³ On pro-cyclicality Laux and Leuz (2009) suggest that the situation is complex, the evidence is ambiguous and that there is a need for more work on the mechanisms of contagion.

values are, almost by definition, a non-management based referent and this is consistent with early standards on audit evidence quality hierarchies which prioritise sources of evidence which are independent of both auditee and auditor. So an important aspect of the 'fair value' concept is to establish distance from entity views of value and to locate reliability as far as possible in the collective judgment of the market.

Reliability is one of the fundamental qualitative characteristics of accounting information as articulated in early conceptual frameworks (FASB, 1980). Yet the reliability of accounting numbers is not a given: it is always founded on a consensus whose strength is an empirical and not a conceptual fact. The consensus is often implicit and taken for granted, but becomes more problematic at times of conflict and competition when questions of power and authority become visible. Ideas of accounting reliability may change over time, may have relative rather than absolute significance, and may only be grounded in the fiction of an ideal consensus among a community of reasonable measurers (Ijiri and Jaedicke, 1966).⁴

Barth (2007) challenges the transactionally based view of reliability by arguing that it is no longer to be identified with verifiability but has to do essentially with faithful representation: 'just because an amount can be calculated precisely, it is not necessarily a faithful representation of the real-world economic phenomena it purports to represent'. This statement, and others like it, constitute a reframing of the concept of reliability, essentially collapsing reliability into relevance. Against a transactionally grounded conception of reliability involving audit trails linking accounting events to reporting, Barth's conception shifts the centre of gravity for thinking about reliability to markets and the values they produce.

This new conception of accounting reliability takes as its benchmark the most liquid, orderly markets, those typically associated with financial assets and liabilities. This benchmark, and the idea of reliability it embodies, is extended to analogies and models which simulate market prices using 'accepted economic methodologies' – the so-called levels 2 and 3 in the fair value hierarchy of valuation methods. It is not unusual for policy solutions in one

setting to migrate from their original context and expand their application in this way.

It should be remembered that accounting policy discussions have visited the issue of measurement reliability many times before. For example, in the late 1980s, brand valuers using a mix of analogical and model-based reasoning challenged the prevailing prohibition against valuing internally generated brands. The debate, while conducted in technical terms, was highly sensitive to the credibility of valuation expertise proposed by non-accountant valuers (e.g. Interbrand). The UK Accounting Standards Committee sought to undermine the analogy between accepted practice of reliance on chartered surveyors and brand valuers, but they were on increasingly weak ground, especially when accounting firms developed their own brand valuation capacity (Power, 1992a).

The brand accounting debate reminds us that conceptions of reliability in financial reporting can change as bodies of valuation knowledge become accepted as a basis for transactions. In turn, market liquidity may be increased by the credibility of such methodologies which further increases their credibility in a virtuous performative circle (Napier and Power, 1992). Just as with the brand debate of the late 1980s, level 2 and 3 fair values pose resource and expertise challenges both for audit firms who must draw on valuation specialists trained in financial economics, and for global regulatory bodies in addressing the need for guidance on how to find evidence for estimates (IAASB, 2008).⁵ The model dependency of level 3 fair values poses knowledge problems for auditors who must gain confidence about the input, assumptions, and parameters of valuation models (IAASB, 2008; Humphrey et al., 2009).

One common mechanism for the creation of auditor confidence is the outsourcing of opinion or reliance on other experts (Power, 1996). In this respect the re-emergence of the International Valuation Standards Council (IVSC) in 2009 is significant.⁶ Created originally to provide guidance on property valuation, the IVSC has developed closer relations with IASB with a view to providing guidance on the valuation of financial instruments. Significantly, IVSC criticised the IASB exposure draft on fair value measurement for being too

⁴ Similarly, in his *Theory of Justice*, the social philosopher John Rawls constructed an elaborate fictional choice mechanism for his principles of justice because the real consensus of real people and their interests was highly unlikely. See Power (1992b) for a more explicit analysis of the parallels between Rawls' project and the conceptual framework.

⁵ In the North American context, see 'PCAOB ponders how to audit fair value', CFO.com, 15 June 2007.

⁶ See www.ivsc.org. See also 'Valuation body prepares for global role', *Accountancy Age*, 3 September 2009: 'a valuation is always based on a hypothesis and, like any hypothesis, the credibility rests on the assumptions you make ... It's a collision between mathematics and philosophy.'

narrowly prescriptive about the range of possible valuation methods. It argued that accounting standard-setters should prescribe at the level of principle and leave space for the development of detailed valuation methods (IVSC, 2009).

The implication is that fair valuation might move 'offshore' in relation to accounting standard-setters leaving accountants as compilers rather than valuers. From this point of view, fair value can be understood as a potentially radical change programme for the expertise base of accounting. Far from being traded off against one another, reliability is progressively collapsed into relevance (Whittington, 2008) with clear implications for the need for external valuation expertise.

This change programme has been contested by proponents of other current value measurement bases, such as replacement cost within a 'deprival value' decision logic. These critics of fair value argue that they are subject to the very forms of management manipulation which they are intended to correct: 'discounting cash flows to derive a fair value invites deception' (Ronen, 2008). Fair values are never real market values but only estimates of market prices which would or could be obtained. They are necessarily 'as if' or fictional constructs which depend on critical assumptions about orderly markets (Bromwich, 2007).

Nevertheless, many critics of the subjectivity of fair values miss the real point of Barth's challenge; the very idea of reliability is being reconstructed in front of their eyes by shifting the focus from transactions to economic valuation methods, and by giving these methods a firmer institutional footing. Deep down the fair value debate seems to hinge on fundamentally different conceptions of the basis for reliability in accounting, making it less of a technical dispute and more one of the politics of acceptability. Indeed, the apparent three-level hierarchy of reliability is much 'flatter' than might be immediately apparent. Under level 1, accounting systems are, in theory, passive 'observers' of prices. Under level 3, accounting is a market value discovery system with the help of methodologies from financial economics. Yet once it is admitted that market prices may not reveal fundamental value, due to liquidity issues or other reasons, then it can be argued that the real foundation of fair value lies in economic valuation methodologies; level 3 methods are in fact the engine of markets themselves, capable of 'discovering' values for accounting objects which can only be sold in 'imaginary markets'. It follows that the hierarchy is more of a liquidity hierarchy than one of method, but overall it expresses the

imperative of market alignment which informs fair value enthusiasts.

The sociology of reliability to emerge from these arguments suggests that subjectivity and uncertainty can be transformed into acceptable fact via strategies which appeal to broader values in the institutional environment which even opponents must accept. Accounting 'estimates' can acquire authority when they come to be embedded in taken-for-granted routines – hence the significance of the IVSC and similar bodies. So long as a sufficient consensus holds, and asset markets are orderly and generally liquid, then the circle which links models and markets is virtuous and broadly performative. In this way fair values, for all their fictionality and apparent intellectual incoherence (Ravenscroft and Williams, 2009), could define what it is to be reliable at a point in time. Market liquidity would be the effect of consensus – the flip side of reliability. However, even before the 2007–2009 financial crisis, the consensus supporting the use of fair value measurement beyond highly liquid financial asset markets was problematic, thus making its social and institutional foundations more visible than they might ordinarily be.

In summary, it has been argued that different conceptions of what it is for an accounting estimate to be reliable underlie the fair value debate as it has taken shape in the last decade. The language of subjectivity and objectivity is unhelpful in characterising what is at stake; it is more useful to focus on the question of how certain valuation technologies do or don't become institutionally accepted as producing facts (Napier and Power, 1992). This is a sociological question which will be further explored below. The analysis which follows is less concerned to adjudicate on the rights and wrongs of fair value and more focused on understanding the deep conditions of possibility for fair values to be widely promoted. From this point of view, the use of fair values in accounting represents a new basis for accounting fact production which, as we shall see, is grounded in the cultural authority of financial economics.

3. Financial economics, users and relevance

The emergence of 'fair value' measurement in accounting takes place against the backdrop of larger transformations in financial markets and in finance as a body of knowledge. Whitley (1986) analyses the transformation of business finance into financial economics in the US as part of the post-second world war expansion and scientisation of economics. With the shift from a largely descriptive discipline to the use of advanced statistical tech-

niques, finance aspired to be part of a new body of analytical economics dealing with asset valuation in idealised settings of perfect markets. According to Whitley, this analytical work in finance was low in uncertainty because of its ideal-typical nature, but it faced the problem of correspondence rules which might link its insights with testable empirical enquiry. The priority of theory as high status work meant that econometric difficulty was subservient to analytical models operating with relatively simple axioms of behaviour.

Whitley is not alone in suggesting that the efficient market hypothesis (EMH) is only seemingly descriptive. To say that current market prices provide the best estimate of the fair value of securities in fact says little about actual markets; it 'simply specifies the conditions under which market equilibrium occurs in terms of expected returns reflecting available information', conditions which cannot be falsified without elaborate correspondence rules and which in any case say little about the process of adjustment to equilibrium.

Whitley (1986) also suggests that portfolio theory, as a separate strand of development, formalised the benefits of investment diversification and led to the Capital Asset Pricing Model (CAPM) which is now part of the standard syllabus for professional accounting students. In developing the idea that asset prices depend on the sensitivity of expected returns to market variance (β), CAPM is in effect an elaboration and definition of what is meant by rationality (Whitley, 1986: 177). Despite its unreality and difficulty of empirically testing, the distinctive combination of analytical cohesion, empirical ambiguity and the absence of competition drove the expanded significance of CAPM. According to Whitley, employers and financial elites embraced and supported the institutionalisation of the underlying neoclassical conceptions of economic theory and analysis because of the demand for knowledge created by the rise of capital markets. The growth of intermediaries, pension funds, corporate treasury and portfolio management all concerned with the management of capital assets provided a benign setting for the growth of teaching and research in finance, using skill sets also in demand by employers. Despite the unreality of the core elements of knowledge, such as the tendency to assume perfect markets, the knowledge base of financial economics gained legitimacy and value for practitioners in a way that no other sub-field of management studies has achieved because:

'The transfer of knowledge from finance theory to investment practitioner, then, was largely a

transfer of technical procedures and skills through the educational system and a direct transfer of a particular measuring instrument for particular purposes. It was not, I suggest, the transfer of a true theory which transformed and directed practical activities.' (Whitley, 1986: 185)

Accordingly, Whitley suggests that the close links with practice had more to do with financial economics as a reputational system and less to do with the direct applicability of its analytical core. This is consistent with Hopwood's (2009: 549) critique of the 'growing distance of the academic finance knowledge base from the complexities of practice and practical institutions.' Yet, as Abbott (1988) has argued, purely 'academic' knowledge has always played a significant role for professions, providing the rational theorisations need by practice. Financial economics is almost the perfect example of this.

The financial crisis has provided the occasion for widespread criticism of finance and economics as disciplines, not least from within economics itself.⁷ And when leading UK economists feel it is necessary to write to the Queen, it is clear that something is amiss.⁸ Colander et al. (2009) argue that the economics profession has 'failed' and that this failure has deep methodological roots in highly stylised macro-economic models developed in periods of low volatility: 'Market participants will ignore the influence of their own behaviour on the stability of the system.' In addition, the mathematical rigour of models yields only control illusion and

⁷ 'Few economists saw our current crisis coming, but this predictive failure was the least of the field's problems. More important was the profession's blindness to the very possibility of catastrophic failures in a market economy ... the economics profession went astray because economists, as a group, mistook beauty, clad in impressive-looking mathematics, for truth ... economists fell back in love with the old, idealized vision of an economy in which rational individuals interact in perfect markets, this time gussied up with fancy equations ... Unfortunately, this romanticized and sanitized vision of the economy led most economists to ignore all the things that can go wrong. They turned a blind eye to the limitations of human rationality that often lead to bubbles and busts; to the problems of institutions that run amok; to the imperfections of markets – especially financial markets – that can cause the economy's operating system to undergo sudden, unpredictable crashes; and to the dangers created when regulators don't believe in regulation ... When it comes to the all-too-human problem of recessions and depressions, economists need to abandon the neat but wrong solution of assuming that everyone is rational and markets work perfectly.' (Paul Krugman, 'How did economists get it so wrong?' *New York Times*, 2 September 2009.) Furthermore, the Efficient Markets Hypothesis as one of the leading tenets of modern financial theory has been proclaimed 'dead' (*Time*, 22 June 2009; Fox, 2009).

⁸ Besley, T. and Hennessy, P. 'Letter to Her Majesty the Queen', 22 July 2009, British Academy, 2009.

'model uncertainty should be taken into account by applying more than a single model.' More specifically, it is suggested that 'the introduction of new derivatives was rather seen through the lens of general equilibrium models: more contingent claims help to achieve higher efficiency' (p. 12). It is argued that models which assume away the dynamic interaction of heterogeneous actors will fail to grasp how the price system itself can be destabilising as expectations change.

In short, finance as a body of knowledge failed to internalise principal-agent problems in the investment arena; it has been and is bad organisation theory (Vayanos and Woolley, 2009). To the extent that fair value accounting has been implicitly dependent on many tenets of finance theory, it is necessarily implicated in the critique: '“fair value” is accounting trying to be finance. This produces an illusion of intellectual rigour and opaque financial statements.'⁹ A further consequence of this for accounting policy has been an abstracted conception of the user of financial statements (Young, 2006).

Despite these recent criticisms of financial economics and its implications for fair value, we should not overlook its dominant cultural and technical authority as a style of reasoning spanning academia and practice. We cannot yet know where contemporary criticism of financial economics will lead, but the absence of an obvious alternative discourse suggests that it will continue to be a highly legitimised body of knowledge. For example, one of the dominant research traditions of financial accounting developed with the use of financial econometric methods involves the investigation of security price reactivity to accounting information. For many years this 'market-based' research has been regarded as remote from accounting policy, even drawing complaints from practitioners that it was irrelevant to policy makers. Nevertheless leading representatives of this research tradition have been drawn into the policy process (e.g. Katherine Schipper – FASB; Mary Barth – IASB). Individuals like this are not automatically in a position to apply the results of market-based accounting research directly and their appointments should be interpreted as partly reputational and partly technical in nature. Indeed, Barth herself recognises that market-based accounting research results are a resource for regulators but not determinative because of the need to make 'social welfare trade-offs' (Barth, 2007). Yet, such appoint-

ees are also themselves part of the reputational system generated by financial economics and in this respect can be regarded as 'carriers' of a certain style of knowledge into the accounting policy process.

All disciplines and professions require a degree of abstraction in their knowledge base (Abbott, 1988). In principle there is nothing wrong with this. No doubt conceptualising the heterogeneity of real users via the lens of, say, behavioural economics or the psychology of risk perception would create significant knowledge burdens for any accounting policy process. But financial accounting is, and always will be, something of a hybrid discipline, drawing on, and adapting, specific elements of law and economics. In this section it has been suggested that financial accounting has increasingly drawn on the cultural authority of financial economics – even though that authority is now in question. Within the narrative of fair value accounting which financial economics supports, relevance and reliability are not the opposing values often taught to accounting students. Both are mutually supportive constructs mediated by deep seated beliefs about markets and market-facing valuation methods, as the problem of accounting for derivatives demonstrates.

4. Derivatives: the fair value catalyst

The relationship between accounting and economics is not a new topic and has been discussed in different national settings.¹⁰ However, the rise of fair value in general, and the specific challenges of accounting for derivatives and other financial instruments, suggest a new and distinctive episode in this relationship – what might tentatively be described as the 'financialisation of financial accounting'. Perhaps the most established and practical element of financial economics is discounting, founded in theories of the time value of money. Notwithstanding technical issues to do with choice of discount rate and projection of cash flows, discounting is so highly institutionalised that it is hard to believe that there was a time when its use in investment appraisal was deeply distrusted by practitioners (Miller, 1991). The history of lease accounting provides a self-contained example of how discounting techniques over relatively short time horizons helped to define finance leases with implications for the balance sheet recognition of related assets and liabilities. Yet, this aspect of business finance was very far from challenging the prevailing mixed measurement accounting system,

⁹ Letter from Mr Alex Pollock, American Enterprise Institute, *Financial Times*, 9 April 2007.

¹⁰ See the special issue of the *European Accounting Review* 1996 5(3) on this topic.

predominantly historical cost modified by asset-specific revaluations.

Pension scheme accounting provides another important example of the intersection of accounting and financial economics (Napier, 2009). Questions of pension definition and liability recognition have been challenging for accounting policy makers and debate has focused on whether actuarial funding calculations should be the basis for liability measurement or whether some 'fair value' of those liabilities' exchange value in an open market should be used. Actuaries and accountants might dispute the discount rate together with other life and salary growth assumptions, but both operate with models which project cash flows.¹¹

In these and other possible examples, valuation elements of financial economics within financial accounting were to a greater or lesser extent adopted in a reactive and piecemeal fashion. The problem of accounting for financial instruments and, in particular, derivatives (options, swaps and instruments whose value depends on – is 'derived' from – some conditional variable) took these accounting debates to a new place. Derivatives rapidly became a critical object for the FASB following a series of public scandals in the mid-1990s and initial policy responses focused on improving disclosure and basic risk visibility until FAS 133 *Accounting for derivative instruments and hedging activities* was published (FASB, 1998). This became a script for later iterations, not least IAS 39 *Financial instruments: recognition and measurement* issued by the IASB in 2004 (Dunne, 2004).

Derivatives by their very nature posed a fundamental challenge to existing accounting 'logics of appropriateness' (Young, 1994) grounded in the realisation concept, largely because their 'historical' cost, if such existed, was widely agreed to be irrelevant to their value over time. Furthermore, there was a general problem of financial classification based on managerial intention to hold such instruments to maturity or as stock for trading. The hedging debate was, and remains, so heated precisely because management intention and strategy simply does not fit easily into financial reporting logic. As a result, accounting policy quickly developed a highly problematic and politicised relationship to the business models it aspired to represent. In the EU there was pressure for a 'carve-out' or exemption for European banks using

¹¹ The near collapse of Equitable Life in 2000 created pressure for reform within the UK actuarial profession, one dimension of which was to encourage closer methodological alignment with financial economics. It was argued that actuarial science needed to 'modernise'.

IAS 39. So it is clear that derivatives and other financial instruments posed significant difficulties for accounting policy makers.

In 2000 a Joint Working Group (JWG) of international standard-setters led by IASC published a draft standard on financial instruments. Walton (2004) suggests that this group operated outside of normal IASC business and was therefore able to adopt a more radical and 'pure' position, namely the wide promotion of fair value for all financial instruments and a prohibition on hedge accounting. The JWG was also clear on the issue of reliability: 'sufficiently *reliable* estimates of the fair value of financial instruments are obtainable for financial reporting purposes . . . if the fair value of a financial instrument cannot be based on observable market prices, it should be estimated using a valuation technique that is consistent with *accepted* economic pricing methodologies.' (emphases added).

The challenge of accounting for derivatives was also a crucial transformative catalyst in the history of fair value because it demanded a return to fundamentals and was in an important sense a test case for the ambition and coherence of conceptual frameworks for accounting which had been developing since the early 1970s. In the consideration of fundamentals it was logically necessary to consider financial instruments as a whole, a process through which the fair value concept was inevitably made potentially expandable in scope.¹² The JWG process was an important stage for the construction of fair value as a world-level accounting measurement principle despite the operational issues in implementing specific standards. JWG focused on the use of fair value for financial assets and liabilities in well-organised markets. The 'steadily expanding volume of financial assets' (Perry and Nölke, 2006) characterising the rise of financial capitalism made this a solid platform for the promotion of fair values, not just as a technique but as a belief system for its, often beleaguered, proponents.¹³

Via successive documents, fair value accounting came to be articulated as an abstract principle of accounting measurement with the implied support and authority of financial economics. This is consistent with Bromwich's (2007) view that there

¹² The UK context can be contrasted with the US where the conceptual framework created pressures for consistency, and hence generalisability, of fair value arguments. Given FASB's institutional commitment to the credibility and utility of the conceptual framework project, there was no limit in principle to the expansion in scope of fair value accounting.

¹³ The support for fair value accounting by the CFA Institute in the US has been important for these proponents. See CFA (2007).

is a manifest absence of developed rationale for fair value throughout its meteoric rise. Principles are, almost by design, removed from the dirty world of implementation; because of this they can be durable at the conceptual level despite surface level conflict and opposition. Indeed, this is a powerful strategy; by displacing the heat of the debate into issues of scope and application, a principle can be protected.

The catalytic role of derivatives for the promotion of fair value accounting is only partly to do with the relative importance of derivatives specifically or financial instruments generally in the balance sheets of any specific institution, although clearly their materiality for many financial institutions was a driver of the politics. Similarly, it is only partly to do with the use of valuation models as a basis for measuring and reporting less liquid financial assets on balance sheets, although this has undoubtedly been a hot spot during the crisis. These two factors, while important, don't explain the rapid world level institutionalisation of the idea of fair value accounting against considerable resistance. The reason is that supporters of fair values managed to occupy a conceptual space which implicitly redefined accounting reliability with the foundational support of financial economics. Fair value at the level of principle is becoming a kind of 'rational myth' in the sense of depending for its efficacy and reality on the fact that it is widely believed (Scott, 1992: 14); the many critics of fair values have had no clearly definable alternative abstract rational myth to offer in its place, notwithstanding their appeal to values such as stewardship.

To summarise: proponents of fair values in accounting argue for their greater relevance to users of financial information, but the deeper point is that they also redefine the reliability of fair values supported by financial economics, both in terms of specific assumptions and in terms of its general cultural authority. Against sceptics, key accounting policy makers were able to acquire confidence in a knowledge base for accounting estimates rooted in a legitimised discipline. Derivatives accounting was a rough ride at one level, but it has also served to embed further the principle of fair value accounting as the 'mirror' of the market. The absence of a competing grand narrative is telling; it means that critics are forced to compete at the level of implementation, which is necessarily messy.

5. The de-legalisation of the balance sheet

The balance sheet is the core institution of financial accounting, with a history of formation reaching back centuries to the mercantile invention of the double-entry method. Since the earliest steps

towards a formal conceptual framework by FASB in the 1970s, and subsequent work by national standard-setters and lately the IASB, this institution has undergone a process of radicalisation, increasingly via the reforming pressure of basic concepts from financial economics. Beginning with core definitions of assets and liabilities in terms of future cash flows, an asset-liability emphasis has progressively taken hold, leaving the income statement as conceptually residual. As a consequence, the concept of 'realisation' no longer has the position and authority which it once did. An obvious consequence of this shift has been a heightened focus on accounting measurement grounded in the asset-liability 'logic' rather than the transactional view, with controversial implications for traditional ideas about income recognition. This balance sheet approach, which has been under construction for decades, generated a need for its components to be meaningful rather than residual and thereby provided fertile ground for the promotion of varieties of current value approaches, including fair value.

In recent times the balance sheet has been a 'juridical' representational device embodied in the legal systems of many different countries. This may be an obvious statement but not a trivial one. Fair value is not itself a legal concept and its emergence depends on a broader process of what we might call the 'de-legalisation' of accounting. Legal systems at the state and supra-state levels now delegate accounting rule-making authority to national agencies which are highly autonomous. The IASB is conspicuously autonomous, having no delegated authority from states, but seeks their individual and collective recognition for its standards.

It is particularly noticeable that the debate about fair value seems not to involve law and commercial lawyers, at least not in the central dispute about measurement. Again this may seem obvious, but both the proponents and opponents of fair value do not seem to operate or argue in the 'shadow' of law. That shadow appears to be largely absent because the background narrative and source of authority is that of financial economics and the assumed information needs of users in markets.

So the 'institutional' nature of the balance sheet has been progressively transformed and de-legalised over the last three decades, creating the conditions of possibility for its further radicalisation by the proponents of fair value. It can be said that the 'shadow of law' is being replaced by 'the shadow of financial economics.' From this point of view, measurement issues are much more than mere accounting methods but represent an entire basis for re-engineering the intellectual ecology of the bal-

ance sheet. This helps to explain the ‘weakness of the strong’ opposition to fair value; they cannot deny the significance of measurement of the kind that is core to financial statements, and they cannot deny the difficulties of using historical costs in many accounting categories. They must occupy the narrower space of an alternative measurement philosophy (e.g. deprival value), must risk suggesting that the balance sheet primacy has been mistaken or must resort to naked political power.

There may be serious difficulties ahead for the radicalisation of the balance sheet via fair values. First, the increasing importance of the need to understand risk is a challenge to the logic of the balance sheet: ‘Fair values reflect point estimates and by themselves do not result in transparent financial statements. Additional disclosures are necessary to bring meaning to these fair value estimates’ (Bies, 2004). Yet, risk disclosures, such as those which appear in what is now called the ‘front half’ of UK annual reports do not articulate easily with balance sheet point values without some pro-forma mediating statement indicating possible variations and sensitivities in those values. Second, there are some outright income statement anomalies which FASB and IASB have been forced to recognise. A deterioration in credit risk may create income effects using fair values which are counter-intuitive. As Macve puts it, this reflects a ‘general failure by standard setters *directly* to consider the income effects of their proposals for asset and liability valuation’. Perhaps, he suggests, ‘consequences for reported income should dominate the standard-setting decision’.¹⁴ It is worth noting that these conceptually embarrassing effects of fair value are products of an intellectual landscape in which the authority of law has been displaced by that of financial economics.

This change in the intellectual centre of gravity for balance sheet reliability – from the juridical to the economic – has profound implications for auditors. Whereas it might be argued that auditing values have been the dominant force in shaping and constraining the historical development of financial accounting, the fair value programme is forcing traditional auditability values into a subsidiary position. In the fair value world, auditing is more or less forced to hitch a ride on the numbers produced by the fair value measurement process or subcontract modelling expertise where necessary. It is hardly surprising that this has led to some tension

between the International Auditing and Assurance Standards Board (IAASB) and IASB. The former has been forced to react to fair value accounting with auditing guidance, rather than having a seat at the accounting development table (IAASB, 2008). Indeed, one of the most significant effects of the rise of fair value is that a large part of audit ‘quality’ is now in the hands of accounting standard-setters.

6. The professionalisation of accounting standard-setters

The rise of the IASC and its reconstitution as the IASB has caught the attention of political scientists as a powerful case study in the emergence of a transnational institution (Botzem and Quack, 2006, 2009). It can be hypothesised that the emerging significance of fair value is closely bound up with the development of an independent professional and expert regulatory identity for those who work in standard-setting bodies and for the bodies themselves. Thus, Perry and Nölke (2006: 578) suggest that fair value is central to the transnational authority of IASB – ‘technical solutions are never purely technical’. Similarly, as Abbott (1988) notes, ‘technical innovation is simultaneously a jurisdictional claim about the authority of expertise’.

Barth (2007) addresses the expertise issue very directly and outlines the demands posed by fair value accounting for both preparers and standard-setters: ‘accountants must become more *comfortable* with valuation theories, techniques and practicalities’ (emphasis added). So the intellectualisation of financial reporting in the shadow of financial economics is not simply an issue of technical measurement – it is a blueprint for redesigning the knowledge base of an entire profession. Accounting standard-setters have been at the forefront of this change programme, raising the intellectual entry costs for being both a credible regulator and a credible participant in the debate. It is possible that accounting policy communities have consequently become smaller and more specialised, although this is an assertion that needs to be tested.

The rise of asset–liability centred conceptual framework projects discussed in the previous section involved considerable professional and resource commitment. For this reason – intellectual sunk costs – standard-setting forums may be less sensitive to questions of cost-benefit and to implementation frictions than they might profess. The rise of fair value measurement is correlated with an increasingly ‘autonomous’ institutional basis for standard-setting (ICAEW, 2006) and key individuals have been important in establishing styles of reasoning about accounting policy. So the fair value

¹⁴ See R. Macve, Comment Letter on IASB Discussion Paper: Credit Risk in Liability Measurement DP/2009/2, 2 September 2009.

project, and the cultural authority of financial economics noted above, also reflect the construction of a new kind of professional identity for standard-setters. This identity is more decoupled from the accounting professions than might be imagined because the reference points and reputational constituencies for standard-setters have shifted towards a larger system of transnational regulation and world governance (Djelic and Sahlin-Andersson, 2006).

It can also be argued that the embedding of accounting standard-setters in a system of world governance renders these bodies less sensitive to specific private interests, though perhaps more sensitive to other transnational bodies such as the SEC, the Basel Committee, the 'G4 + 1', IOSCO and, as the experience of IAS 39 has shown, specific nation states wishing to exercise veto rights. Perry and Nölke (2006) argue that fair value is also part of the disembedding and isolation of accounting standard-setting from society, by which they mean the decline of non-business commentators such as trade unions. In a similar way, Walton (2004) analyses the early politics of IAS39 in terms of a collision between different models of the standard-setting process, namely between an autonomous technical process on the one hand and, on the other hand, a 'multi-disciplinary cooperation and the representation of the widest possible range of different users of accounting.' (Hoarau quoted in Walton, 2004).

The recent financial crisis has reconnected accounting policy rather abruptly to society and the technical autonomy of the IASB has been challenged again, creating a dilemma for critics of fair value who are also supporters of policy independence. The expanded idea of fair value accounting, as much as its specific applications, has been important to the positioning of the accounting policy process in a world governance architecture. From this point of view, the pursuit of market relevance for financial accounting is also the pursuit of relevance for standard-setters on the world stage. It is therefore hardly surprising that financial accounting has become increasingly remote from rank and file accountants; accounting policy simply has very little to do with them and their local conceptions of reliability in accounting. The official concept of reliability has been subsumed by a professional and technical quest for standard-setting relevance defined in terms of the market.

The political economy of the world of accounting standards and fair value measurement might be analysed using a distinction developed elsewhere (Power, 2005) between *calculative idealists* and

calculative pragmatists.¹⁵ As Whittington (2008) notes, policy bodies are not homogenous and dissent is increasingly public, so it is useful to think more of two worldviews which may be represented to varying degrees within the membership of these bodies. Calculative idealists regard mixed measurement systems as being deeply flawed and of limited value to users; there needs to be a single measurement basis for accounting which is, as far possible, independent of management estimates (CFA, 2007: 8–9). Calculative idealists would expand the scope of fair value accounting into non-financial items, drawing on credible valuation expertise where necessary:

'Although the FASB's present fair value accounting focus is on financial instruments, our discussion applies to all assets because ... the most important attribute of an asset as it relates to fair value accounting is whether an estimate of its value is easily obtainable, either because active markets exist for it or there are accepted techniques for estimating its fair value, and not whether it is a financial or non-financial asset' (Barth and Landsman, 1995: 98 fn 2).

Calculative idealists tend to have a strong background or affinity with elements of financial economics which, while admitting to not always being applicable to 'realistic settings', nevertheless provide an intellectual centre of gravity for thinking about value and underwriting the expandability of fair values. Theirs is in essence a 'financialised accounting model' based on principles of fair value which are remote from managerial needs and decision making (Bignon et al., 2009: 6).

In contrast, calculative pragmatists are more tolerant of mixed accounting measurement systems. They recognise the merits of fair value accounting and marking to market for liquid tradeable assets, and are often as critical of historical cost accounting as the idealists. Yet pragmatists also sense the benefits of disclosure and are more sensitive to the balance sheet as a source of information hygiene – a point of triangulation in a wider information ecosystem (Miller and O'Leary, 2000). This means that they are less hung up on getting measurement 'right'. For example, Ronen (2008) argues that risk analysis can only take place as reflection on the triangular relationship between firm market value, management's value in use, and the exit value of individual assets. Fair value

¹⁵ This distinction is very similar, though not identical to that developed by Lennard (2002) between 'reds' and 'blues' and also taken up by Whittington (2008).

provides only one component of this triad. Similarly, supporters of deprival value are inherently pragmatists, suggesting that exit values only make sense in very specific circumstances. From this point of view, accounting valuation and financial valuation are 'two distinct logics and two complementary sources of information' with different markets for interpretation (Bignon et al., 2009: 21).¹⁶ The fair value project is an elision of these two logics with their respectively different conceptions of reliability.

It should be emphasised that the working distinction between idealists and pragmatists cuts across and is not reducible to other convenient dualisms. For example, it is not a distinction between academic and practitioner viewpoints, or between economic and non-economic viewpoints. Many practitioners and academics fall into the pragmatist camp, and pragmatists might draw on different areas of economics, such as game theory. Yet it is also true that political pressures in 2009 have forced idealists to be more pragmatic, and pragmatists' concerns about the politicisation of accounting policy have seen them come to the support of idealists. The picture is complex and changing, not least because proponents of fair value have managed to establish a predominantly 'exit value' approach at the expense of other would be idealisms, such as 'replacement cost' and value to the business. This suggests that 'fair value' initially operated as a 'boundary object' for different current value idealists, each of whom saw the concept in different ways, but over time became determined and specified by the proponents of exit value.¹⁷

The idea that fair value measurement is part of a professional identity project for technical standard-setting helps to explain a striking feature of the accounting policy discussions; the predominantly self-generated, even missionary nature of pressures for reform. If the balance sheet is an institutionalised point of triangulation in a wider information ecology, it is unlikely that the pressure for change, i.e. for the expanded use of fair values in accounting, comes from real users in real markets. Of course there are many parties who would find

disclosed information on fair values useful if it were provided, such as institutional investors and analysts. But this is not the same as saying that there has been a stampede of demands for accounting reform. The overwhelming impression is that the rise of fair value has been driven by conceptions of 'good accounting' from within a community of technical accounting enthusiasts pursuing a closer alignment of accounting and markets. As many commentators have noted, if this alignment were possible, accounting would become unnecessary. So the underlying pursuit of alignment may be paradoxical in itself.

7. Conclusion

The financial crisis has certainly raised the stakes in the fair value debate and standard-setters have been forced to compromise on asset classifications and other matters. At the time of writing the future direction of FASB and IASB on fair value is uncertain. Banks have undoubtedly used the crisis to strengthen their opposition to aspects of the use of fair values in accounting and their arguments mingle 'potentially well-founded concerns with a general desire for flexibility' (Laux and Leuz, 2009). Proponents of fair value have warned against its suspension, holding to the belief that it must be used regardless of the condition of markets. Even opponents of the wide use of fair value have expressed concern at the extent of political intervention in what should be an independent policy process. At the same time there has been extensive criticism of the foundations of financial economics and macro-economics. Yet, while the intellectual premises of fair value accounting have been shaken, the absence of an obvious competitor means that these arguments cannot provide a decisive knock out at the policy level. The picture has been and remains complex.

This essay began with an ambition to address how and why fair value accounting acquired significance. The arguments above step back from the technical detail in order to focus more on the underlying conditions of possibility for the rise of fair value, despite apparent widespread opposition. Four key conditions of possibility have been analysed: the cultural authority of financial economics; the necessity of addressing the problem of derivatives accounting; the transformation of the balance sheet from a juridical into an economic institution; and the professionalisation accounting standard-setters as actors in a world governance system. These mutually reinforcing processes help to explain the rise of fair value as an abstract

¹⁶ These two logics were also distinguished in a fascinating exchange of letters between Chambers and Shackle in terms of the difference between a balance sheet and a prospectus (Dean, 2008: vi).

¹⁷ A boundary object inhabits 'several communities of practice and satisf[ies] the informational requirements of each of them. Boundary objects are both plastic enough to adapt to local needs and constraints, yet robust enough to maintain a common identity across sites' (Bowker and Star, 1999: 297). In this respect, the status of 'fair value' is not dissimilar to that of 'value-added' as analysed by Burchell et al. (1985).

principle, promoted by a minority in the face of considerable opposition and critique.

Finally, a tentative 'sociology of reliability' underlies the arguments above. Accounting reliability is ultimately a matter of sufficiency of social consensus and powerful proponents of fair value have succeeded, at least for a while, in shifting the basis of that consensus from the legal reality of documented transactions to the financial reality of asset and liability values based on discounted estimates of future cash flows. Critics who point to the 'imaginary' world of fair values also underestimate how intellectually impure fictions can become institutionalised and have real effects. We often assume that a valuation technology is accepted in practice because of its technical superiority, but it is also a sociological truth that such technologies will seem superior if they are widely accepted and if they can appeal to deeply held cultural values, such as those provided by financial economics (Napier and Power, 1992). Yet, the importation of financial economics into accounting via fair value measurement is also partial, impure and pragmatic. This suggests that the 'financialisation' of financial accounting is not absolute but highly selective; that accounting will always be – whatever the extent of use of fair values – an impure hybrid of elements within a highly institutionalised presentational frame. Notions of relevance and reliability, which may seem to be intuitive and commonsensical, in fact cannot be defined independently of this system of elements and are always subject to change. Future historians are likely to look back at the high point of fair value idealism as an interesting episode in the otherwise largely pragmatic development of financial reporting.

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