

Some Conceptual Tensions in Financial Reporting

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Abstract

We examine four key conceptual tensions that are at the heart of many financial reporting dilemmas: stocks vs. flows, ex-ante vs. ex post, conventions vs. economic substance, and top-down design vs. bottom-up evolution as sources of accounting practice. Associated with each of these conceptual dimensions is an accounting duality; in some cases one side (e.g., stocks) is easier to measure in a reliable manner, while the other side (e.g., flows) is easier to measure in other instances. We suggest that financial reporting would benefit from a willingness to pay attention to, and find compromise between both sides of these tensions; forcing a choice of one over the other does not serve to improve financial reporting.

Keywords: Conceptual tensions, stocks-flows, ex ante-ex post, Conventions-economic features, design-evolution.

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Some Conceptual Tensions in Financial Reporting

Introduction

In the developing of financial reporting, accountants have had to repeatedly deal with some basic conceptual tensions that arise due to the very nature of accounting transactions and events. These tensions have colored and influenced debates on reporting controversies over the past century. In this paper, we identify and analyze four such sources of tension. For the sake of concreteness, we cite several illustrative examples of specific financial reporting controversies in which these issues become especially salient. However, it is not intended as a comment on any specific accounting controversy, proposal or standard.¹

We examine four basic facets of financial reporting to guide our exploration of financial reporting tensions: (1) stocks vs. flows, (2) ex ante vs. ex post, (3) conventions vs. economic substance, and (4) top-down design vs. bottom-up evolution of accounting practice. Tensions along these dimensions underlie many of the financial reporting issues debated over the past century. It is useful to reflect on these foundational issues in isolation from the debates on specific standards and financial reporting practices. Perhaps the Financial Accounting Standards Committee of the AAA can help stimulate further reflection and discussion on these issues by sharing its thoughts and analysis. The following sections are written in that spirit.

¹ In addition to analysis and commentary on specific regulatory proposals and actions, the charge of the AAA Financial Accounting Standards Committee includes bringing ideas and analyses for discussion and debate among the AAA membership and the larger accounting community. This document should not be read as a commentary on the FASB/IASB's Conceptual Framework and related documents.

1. Stocks vs. Flows

Stocks and flows are the most obvious and frequent dimension of accounting tensions, often reflected in debates about the relative importance of balance sheets and income statements. Stock and flow magnitudes are related by a simple law of conservation: ending stock equals the beginning stock plus the net flow over the interval of time between the two instants when the stocks are measured. This identity forms the basis of double-entry bookkeeping and the financial statements—balance sheet, income statement, and the statement of cash flows—and their linkages.

If magnitudes of all resources of interest in financial reporting were observable and measurable, or at least were equally so, many of the controversies of financial reporting would not arise. However, resources vary in how well we can observe and measure their magnitudes; even the stocks and flows of the same resource are not susceptible to measurement with the same degree of precision (i.e., objectivity and reliability). Further, the measurability may change over time. These variations give rise to many of the familiar challenges in financial reporting.

Consider a building as an example. At the time of its construction or acquisition in an arms-length transaction, the stock of this resource is measurable with reasonable objectivity. But the rate of flow of services deriving from it is more subjective, even at the outset. With the passage of a few years, even the stock of the remaining services becomes more subjective if such buildings are not traded in a relatively perfect market. On the other hand, a patent that earns periodic royalties presents a case in which periodic flows are measurable with a high degree of objectivity but given the uncertainty about the quantity and duration of future royalties—the stock magnitude associated with the patent—is more subjective, unless of course, its value is determinable in a relatively perfect market, which is often not the case.

Other than cash, virtually all resources share this problem of differential measurability of stocks and flows in varying degrees. Attempting to articulate the balance sheet to income/cash flow statements calls for either: (1) including unacceptably subjective magnitudes in one statement that correspond to not-so-subjective magnitudes in the other; or (2) excluding the not-so-subjective magnitudes from one statement because the corresponding magnitudes in the other are too subjective to justify their inclusion. It is difficult to give up articulation on one hand, just as it is difficult to accept either of the two combinations on the other.

This problem of financial reporting has generated a variety of proposals. FASB/IASB (2005) joint manifesto on conceptual framework declared in favor of stocks (the so-called asset-liability) view of accounting on grounds that it corresponds to *the* Hicksian (1946) definition of income.² However, conceptual consistency could have been achieved just as well by taking an approach in favor of flows (see for example the FASB/IASB [2008] customer consideration model). There is also a third possibility—rarely explicated—that we abandon neither stocks nor flows, and continue to prepare financial statements using an opportunistic mix of stock and flow measurements, sometimes based on accounting conventions that evolved in a world of ubiquitous measurement heterogeneity (discussed in a later section on accounting conventions).

As a practical matter and in spite of their protestations to the contrary, rule-makers end up muddling through this third route. Large gaps appear between their professed conceptual frameworks and actual pronouncements. For example, in their lease accounting exposure draft, the FASB/IASB (2010) find it difficult to ensure that accounting for leases and executory contracts for services is done in a mutually consistent fashion by the lessee and the lessor (AAA,

² See Bromwich et al. (2010) for arguments as to why the asset/liability view cannot be justified by reference to Hicksian analysis.

December 2011). Yet, standard setters claim that they are pursuing global logical consistency of which FASB/IASB's asset/liability approach is an example (Barth 2008).

2. Ex ante vs. Ex post

Looking at what happened in the past, and anticipating what may happen in the future is the second perennial tension of financial reporting. Accounting stands at the present, on the knife edge boundary between the past and the future. Inevitably, it struggles to define itself relative to the events of the past (what Hicks, 1946 refers to as statistical record) and anticipation of future events that have not yet occurred, may never occur, and possibly remain to be conceived of in their details.

Looking back into the past, financial reports can be seen as consequences of decisions, commitments, and events that have already occurred. This statistical record is essential to establish accountability for creating and operating organizations as Ijiri (1975) has shown. In addition, to the extent we live in a world that retains some continuity and persistence through time (i.e., does not continually and totally reinvent itself), this record helps form useful expectations about the behavior and events of the future, and thus serves as a common knowledge basis for formation of reputation. Absent historical record, accounting will not serve its function of communicating and implementing the social contracts that constitute organizations, or provide a validated database, and state variables that might help make better decisions for the future, and at the very least, reduce repetition of mistakes of the past. This is the conceptual justification for historical cost accounting based on actual transactions, though even this form of accounting has to rely on subjective estimates about future events (Ijiri 1975, Sunder 1997).

Looking into the future, decision-making (including negotiation and design of contracts) calls for estimates of anticipated consequences of alternative courses of action. Current values of the relevant state variables, and any anticipated changes over time, are prized knowledge. To the extent financial reports can fulfill this role, they become more important. However, with the exception of resources whose stocks or flows may be traded in relatively deep, perfect, and efficient markets, most future magnitudes call for use of subjective judgment aggravating problems of verification and moral hazard in our imperfect world. Besides imperfection of markets that do exist, many important resources are not actively traded. This imperfection and incompleteness of markets raises difficult challenges for measurement of income (see Beaver and Demski, 1979, and Christensen and Demski, 2003).

Hicks (1946), whose analysis of income is often cited in accounting literature to support a variety of (frequently contradictory) positions, considered both stocks- as well as flows-based versions of ex ante and ex post concepts of income (along with others), and came to no clear conclusion about the dominance of any one over the rest (see, e.g., Bromwich et al. 2010).

In some cases accounting practices require ex post judgments. For example, in US practice, revenue is recorded at the time of a credit sale and a receivable is set up. At the same time, an allowance for estimated bad debt is established by recognizing a bad debt expense. When specific receivables are identified as uncollectable, they are written off against the allowance already set up. Ex post adjustment is made for any differences between actual bad debt experience and the ex ante allowance set up at the time of sale. The amount of this ex post adjustment is chosen so, at each date, the balance in the Allowance for Bad Debts account is equal to an estimated amount determined from applying ex ante percentages to receivables of various age categories. FASB/IASB discussion paper on revenue recognition (2010) pursues

another direction: at the time of sale, revenue recorded could be discounted based on an expected loss from sales to clients of different quality of credit worthiness, assuming that the interest charged on credit already includes the adjustment for creditworthiness of the customer.

The debate on incorporation of the so-called “fair values” in financial reporting also concerns the balance between reporting based on past events and transactions versus anticipations of the future (e.g., unrealized gains and losses). Reporting standards in all countries use a mixture of the two, combining actual verifiable transactions with some judgment about future values and events. There is no known way of improving financial reporting either by abandoning actual transactions (the past), or removing all subjective judgments about the future.

3. Conventions vs. Economic Features

There are two ways of identifying financial reporting practices that have long run stability: one is conventions that act as co-ordinating devices, and the other is measurement methods which reflect the long run economic substance of transactions. The consequences of these two approaches are quite different, and worth an examination.

Conventions

Most textbooks and standards enumerate accounting conventions in a variety of ways. The Accounting Principles Board (1970), taking a narrow view, listed items that are frequently cited as conventions by other writers (e.g., accounting entity, going concern, time period, monetary unit, and exchange price) out of a larger set, called “basic features of financial accounting”. APB labeled all generally accepted accounting principles as conventions because “they become generally accepted by agreement (often tacit agreement) rather than formal derivation from a set of postulates or basic concepts. The principles have developed on the basis of experience, reason, custom, usage, and to a significant extent, practical necessity.” (Paragraph

139). This interpretation of accounting convention is consistent with the idea of social norms (Sunder 2005a).

An early statement on accounting conventions is also one of the best: Gilman (1939) identified two characteristics of accounting propositions that constitute a convention: (1) they are based on general agreement and (2) they are more or less *arbitrarily* established. Among all generally accepted propositions, only those that are arbitrarily determined qualify. The definition and some of the examples given in Kohler's Dictionary (Cooper and Ijiri 1983) have a similar flavor. The idea that convention is an arbitrary social choice—whose value lies in the mere fact of its general acceptance rather than in the particular choice made—captures its essence.

As an example, Hardin (1982) analyzes contracts by convention using a simple game between two persons. When coordination by direct communication is difficult, costly, or impossible, it may be socially advantageous to coordinate through such a convention. Certain conditions must be satisfied for a pattern of behavior to be a convention. First, it must apply to recurrent situations and not to one-of-a-kind events. Second, a convention has to be common knowledge. Third, it is in everyone's interest for one more person to conform to the convention. Finally, for a convention to be meaningful there must be an alternative pattern of behavior that is preferred by everyone, on the condition that everyone else conforms to that alternative. Thus, driving on the right (or left) side of the road could be regarded as a convention. The social or economic value of the convention arises not from the particular choice (e.g., driving on the left or right), but from the fewer collisions that coordination—everyone driving on the same side of the road—yields in this example.

An accounting convention survives by familiarity from current use, and the costs of search and adjustment imposed by its abandonment. Therefore, agents have a stake in

maintaining the status quo on conventions as long as the environment does not change much. The bookkeeping practice of writing debits on the left and credits on the right-hand side of a sheet of paper is a convention in this sense. The same is true of listing of assets and liabilities in order of decreasing liquidity.

Other candidates for accounting conventions include depreciation methods (e.g., straight line), goodwill amortization periods (which have historically ranged from 0 to 40 years), one year as a cut-off for separating current from non-current assets and liabilities, and netting versus grossing income statement items such as revenues and returns. Once a convention is in place and acknowledged to be arbitrary, there is little advantage to tinker with it unless there is some drastic change in the economy that renders the convention substantively inefficient as a general practice.

Economic Features

Aspects of financial reporting which are not conventions in the sense discussed above can be regarded as economic feature. These features are valued for their direct consequences (as opposed to the indirect coordination benefits of conventions). Conservatism, entity, going concern, period, accrual, matching, unit of account, and various valuation methods for revenue recognition, leasing and financial instruments are not conventions in the sense described above because the specific choices made in practice are not arbitrary and reflect economics of the firm.

Stability of conventions as well as of economic features of accounting depends on stability of the environment of financial reporting. Longer term stability of an accounting practice—double entry, for example—should not be mistaken for a convention. Under Ijiri's (1967, Chapter 5) causal interpretation of double-entry (as contrasted to the more traditional classification interpretation) the “double” is rooted in simultaneous consideration given to the

causes and effects of economic events and actions, and match with two-valued (true-false) system of logic human beings use.

When new, more complex, and poorly understood economic practices arise (e.g., financial derivatives), we need to resolve whether they should be subject to an accounting convention or to a substantive standard. If there is no adequate accounting methodology for addressing the issue, it is deemed to be a convention, and an arbitrary rule can expeditiously be adapted, perhaps through a separate and simpler process. If the new practice is deemed to be amenable to a reliable measurement and is intended to measure economic substance, then it could be a candidate to enter the normal standard setting process.

4. Top-Down Design vs. Bottom-Up Evolution

Finally, there is the tension between design and evolution as the basis of financial reporting practice. Financial reporting existed for long before any common standards were written down. Accounting Principles Board's Statement (1970, paragraph 139) quoted earlier captures this evolutionary process of financial reporting as a social norm. In the recent decades, written standards, deliberately designed by the Boards have become increasingly important source of accounting practice. There are good reasons why total dependence on either top-down design or bottom-up evolution may not be the best approach for financial reporting (Sunder 2007).

Design

Rule makers face a difficult problem in identifying better rules (Sunder 2010). One can appreciate this challenge by asking a simple question: what is a good rule for determining pass interference in the game of American football? Rules affect different members of society (and players in a game) in diverse ways. The direct effect of the rules on people depends on their

individual circumstances, of which the rule maker can have only limited knowledge at best (see Hayek, 1945). Rules are designed in the hope that they will change or constrain the behavior of at least some people; however, changes in individual behavior interact in complex ways, generating aggregate consequences that are difficult for the rule-makers to anticipate and analyze.

The rule makers try to ameliorate this inherent informational disadvantage by soliciting information from the parties potentially affected by their actions. These parties may or may not have the incentive to report truthfully. Their strategic responses can muddy the waters, create a gaming problem and often force the rule maker to deal with unintended consequences of the rules. Whether evolved norms (since they emerge over longer intervals of time through trial-and-error) or designed rules (since they arise from careful deliberations) incorporate more and better information remains an open question.

Corporate bodies created to set standards face choices of structure, people and resources. Legislative structures emphasize representativeness; judicial structures emphasize impartiality, while bureaucratic structures value rules of procedure. It is difficult to attain representativeness, impartiality, and consistency of procedure all at once in a single institutional structure (Sunder, 1988). Finding people to operate the rule-making organizations raises parallel problems. The best experts may not be representative or impartial, and they may be inclined to use their judgment instead of following pre-defined procedures. Representative bodies may lack expertise in the substance of the technical matters of accounting. Furthermore, some board members may not place impartiality high on their agenda. Those who pay the cost of developing written standards understandably may also seek to further their own agenda through their influence over the finances of the standard-setting entity.

Evolution

In accounting, as in law, many practices, language and their meaning evolve over long intervals of time as social mores and norms (see Baxter, 1953 and 1979; Kitchen, 1954; and Sunder, 2005a and b; Basu and Waymire 2006; Madsen 2011). Even then, the meaning of words must have an element of ambiguity for words to have the generality and applicability to more than one object or incidence.

Dependence on social norms does not provide a clearly superior route either. Norms take a long time to develop, and cannot be expected to develop expeditiously in response to urgent new developments. Societies can also get stuck in inefficient norms for long periods of time (e.g., slavery), and it takes concerted action to break from the shackles of self-fulfilling expectations that sustain social norms.

Given the limitations and weaknesses of designed standards and evolved norms, it is perhaps inevitable that accounting and business practices combine the two elements (e.g., see Jamal et al., 2003; 2005 for such examples in e-commerce). The conceptual challenge before accounting is to develop a coherent method of combining the two along the lines achieved by statutory and common law. For example, the FASB/IASB are currently in the process of developing a new lease standard that is supposed to be principles-based (right-of-use model) and requires all leases to be reported on the balance sheet at the present value of the cash flows involved in the lease (FASB/IASB 2009). The proposed new lease standard maintains current definitions of a lease (excluding executory contracts), scope paragraph, definitions and measurement rules (renewal options are not counted), but removes the four bright line tests that currently separate leases into operating and capital leases. A recent experiment by Jamal and Tan (2010) indicates that for these new rules to make a difference in reporting behavior, the auditor must be able to exercise substantial discretion, which implies a subtle shift in the norm that

governs auditor-management negotiation (Jamal and Tan 2010). Note that even when FASB/IASB use the so-called “fair value” reporting and attempt to bring leasing standards into compliance with underlying principles (a lease is a financing transaction), the proposed standard change is for a “local” adjustment (existing scope, definition, measurement rules and their associated loopholes remain in the standard), rather than a global adjustment where leasing rules are brought into conformity with all other rules especially those covering executory contracts, revenue recognition, consolidation and financial statement presentation. This attests to the practical difficulty of changing standards to make them globally consistent with all other standards.

Concluding Remarks

We have a poor track record of improving financial reporting. In many cases, it is difficult to claim that particular accounting standards that seem to exhibit an evolutionary stability (and general acceptance) are consistent with one another, let alone any conceptual framework. As Hatfield remarked in 1939, “[i]t will indeed be fortunate ... if one can really recognize a principle when one comes face to face with it in the jungles of accounting literature.” As Paton (1922) observed, even when accounting has tried to adhere to “fundamental propositions”, many have been “largely assumptions of expediency”. Since the days of Hatfield and Paton, much effort has been devoted to build conceptual foundations of financial reporting but progress remains doubtful. Perhaps, accounting practice is inherently better served by a mix of concepts and expedient conventions and design and evolution (see Dopuch and Sunder 1980).

It is in this spirit that we present this discussion of four facets of financial reporting subject to perennial tension from pull of reason in opposite directions: stocks and flows, ex ante and ex post, conventions and economic features, and evolution and design. These four

dimensions capture a good part of the dilemmas that face accountants in virtually every aspect of financial reporting. We highlight these dichotomies in the hope of stimulating further reflection, discussion, and debate to deepen our understanding and enlighten the practice of accounting. We also raise the question about whether it is possible to ever achieve accounting global coherence and consistency across all transactions (and time), as opposed to more local muddling through the issues on a case-by-case basis. We do not think that it is wise to choose one side of the dichotomy over the other (e.g., stocks over flows or ex-ante over ex-post). An explicit recognition that consistency and reliability of measurement have to be traded off may provide a better understanding of the current standard setting process and make it easier for standard setters to exercise and justify their professional judgment.

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