

'DEFICIENCIES' IN THE PRACTICE OF MANAGEMENT ACCOUNTING?

FROM CONDEMNATION TO EXPLANATION

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ABSTRACT

Commentators on management accounting have remarked on a perceived gap between theory and practice in management accounting (Scapens, 1991), and on deficiencies in the response of management accounting in many firms to competitive pressures and technological innovation (Johnson and Kaplan, 1986).

This paper examines the current practice or technique of accounting through the identification and examination of specific influences under-weighted in much of the management accounting literature. These include the requirements of internal control, financial markets and the use of accounting to co-ordinate globally distributed corporations. It considers the conservative effects of the political, social and constitutional functions of management accounting. It adopts a positive rather than a normative approach to the current practice of management accounting and its apparent deficiencies through the analysis of pressures to conserve existing accounting systems and maintain uniformity in systems across an organisation.

INTRODUCTION

The Gap Between Theory and Practice

While the study of Management Accounting predominantly adopts a positive approach, there remain concerns about the nature of some practices in the discipline. Scapens (1991) cites several studies which suggest a gap between theory and practice. For the purpose of this

comparison with practice, theory is equated with the current wisdom of management accounting as expressed in texts (Scapens, 1991, p. 3). Examples of this gap would include the continued prevalence of absorption costing systems, the lack of formal systems to identify opportunity costs, weaknesses in the process of evaluation applied to capital budgeting proposals (Kaplan, 1986), and the use of oversimplified volume-related allocation bases for overhead costs. Equally, there is a relative lack of advanced quantitative techniques in daily use as recommended in the literature.

In the US, figures such as Kaplan have argued that practice has lost its relevance and that researchers must seek out innovative practices which match the requirements of new modes of operation. Johnson and Kaplan state (1987, p. 26):

In the last 60 years the growth of the accounting profession with its emphasis on external reporting demands has prevented ideas from outside the profession from influencing the design of internal accounting systems. We need to learn again from engineers how to design internal accounting systems.

However, Scapens points out that this approach presupposes that researchers can identify innovative practices and distinguish fruitful ones from inferior practices.

Worries about the ability of management accounting to respond to new challenges have led some managers, accountants and commentators to believe that management accounting is in crisis and they have voiced calls to alter management accounting practices. Bromwich and Bhimani (1989), when considering this perceived crisis, point to the still tentative evidence supporting new practices and to considerable evidence that firms do not change their accounting practices easily. There is also strong evidence that existing accounting systems encompass other objectives not considered by those advocating change. So, for instance, a question such as 'Why has management accounting not adapted as rapidly as it should to Advanced Manufacturing Technology (AMT)?' can only be answered if technological innovation is seen as but one

influence on management accounting. Several strands of inquiry have examined why accounting systems adopt particular forms and help explain perceived gaps.

Information Economics, in attempting to explain why accounting is not what critics demand of it, has used the marginal approach of neoclassical economics to suggest that the cost of information is a factor in what information is produced.

Organisational Theory provides a broader perspective on change in accounting practices. This primarily focuses on the importance of the accounting phenomenon in the moulding of the organisation, its power structures, practices, norms and decisions. While acknowledging the reflexive nature of the relationship between the organisation as an institution and its accounting (for example, Hopwood, 1987), this work does not devote as much interest to the lesser problem of how the organisation moulds its accounting practices.

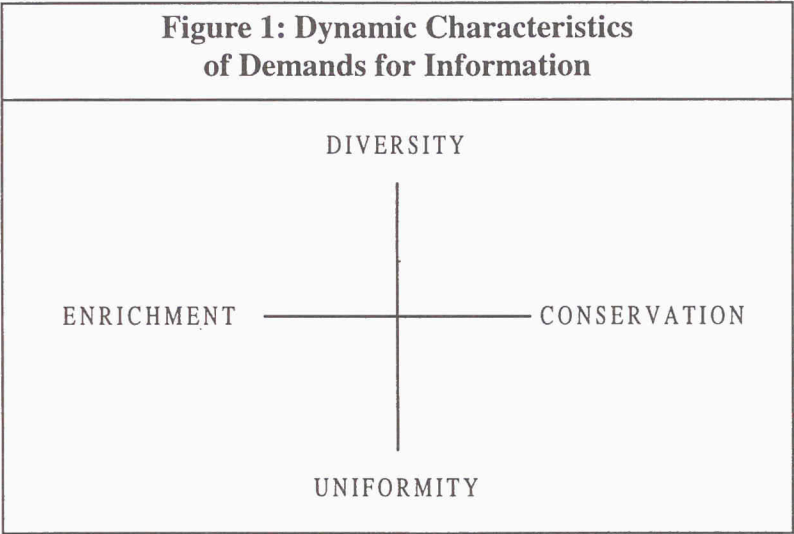
Contingency Theory: The effect of the organisation on accounting is a concern of contingency theories of accounting. The theoretical basis for contingency theory in management accounting is considerably derived from organisational theory. Contingencies are viewed as influencing organisational structures and processes — for example, Bruns and Waterhouse (1975). Accounting is then considered as a by-product or as just one of a number of outcomes. Alternatively, studies have tended to consider the effect of contingencies on single aspects of the accounting system — for example, budgetary style in Hopwood (1972).

This paper draws on the prior work, but particularly focuses on demands arising within the functional domain of accounting which directly impact on accounting system development. In particular, it looks at factors which may possess explanatory power for the alleged lack of innovation and diversity in management accounting and also at evidence that they do in fact have this effect.

A Model of Dynamic Demands on the Accounting System

To facilitate analysis, a model can be suggested where change within accounting systems can be considered as the product of two pairs of

tensions acting through demands for accounting information. One is the tension between Diversity and Uniformity, the other is a tension between Enrichment and Conservation. Each of these terms is intended to reflect a bundle of pressures pushing accounting systems in a particular direction.



The need for diversifying and enriching accounting information has been well documented in the literature. Diversity is used here to represent pressures to supply multiple representations of the same events or facts—for example, separate product costings for inventory valuation and profitability analyses. Enrichment represents pressures to supplement traditional financial measures with insights from non-accounting fields such as engineering and information systems to allow increased accounting for critical issues of time, quality and responsiveness. Normative papers criticise any delay in the adoption of new accounting technologies, or suggest reasons such as ‘organisational lag’ (Kaplan, 1988) if change is not rapid and widespread. The balancing pressures for Uniformity and Conservation offer positive explanations for apparent continuing anomalies in professional practice. They are not

meant to provide a case by case explanation for gaps such as those mentioned in the introduction, but rather highlight certain characteristics of the environment of accounting in practice.

The remainder of this paper first discusses the evidence for Uniformity or Integration within accounting systems. It then considers in detail three pressures which can act as constraints on a migration to diversified systems specific to local needs within organisations. These are:

1. Statutory requirements and the expectations of financial markets
2. Internal control requirements
3. Accounting as a mechanism for Integration. Accounting allows central managers to observe and compare large numbers of activities through a common framework and allows for efficient information exchange between subunits which may be interdependent although widely separated.

The pressures towards system integration mentioned above do not preclude system change over time. However, other pressures tend to support the Conservation of existing systems even where technically superior techniques appear to be emerging. Sources of these pressures include:

1. The constitutional role of management accounting systems
2. Political and social issues.

UNIFORMITY

The Development of Integrated Accounting Systems Evidence

The dominance of integrated accounting systems within organisations may be best observed through the continuing central role of the General Ledger in many, if not indeed most, accounting systems. Other accounting records and information largely comprise either a tree-like detailed expansion of the General Ledger, or alternatively, information derived ex-post from the General Ledger or its subsidiary documents. There is a pressure for remaining accounting information to be at least

reconcilable with the database of the General Ledger. Thus the integrated accounting system is likely to become dominant, although not necessarily exclusive. Other accounting information may be produced, and other records maintained, but will frequently be in a marginalised and localised environment, useful to a finite community of users, and perhaps unknown to the wider organisation. Nevertheless, this information may be highly significant and its non-accessibility to the wider organisation may increase its value.

A major indication of pressures to integrate accounting practices within large organisations are the corporate accounting manuals which develop in most corporations as they expand. In the experience of this author as an external auditor in a varied sample of businesses in Ireland, the majority of multi-locational enterprises, including multinational companies, use such accounting manuals to prescribe acceptable, and indeed required, accounting practice. This experience is supported by the findings of Clarke and O'Dea (1994). These manuals do not explicitly limit the accounting system from expanding beyond their parameters, but when combined with limited resources available to the accounting function ensure that any additional information produced is likely to be both limited and congruent with the prescribed system. The resources available to conduct accounting operations, both in the formal accounting and finance departments, and in other areas such as inventory management, are often a function of the information production required by the accounting manual.

The overlapping and integration of accounting functions might be illustrated by reference to one of the conclusions of Simons (1990). He points out that although sailors have many words for different forms of rope and Eskimos for various forms of snow we use only a single description, 'management control', to cover monitoring, learning, signalling, constraint, surveillance, motivation and other functions. Normatively, Simons argues that we need a more precise vocabulary, but he ignores the positive interpretation of his observation, i.e. the use of a single term may be seen as an indicator of the existence of a single multi function system carrying out the functions he describes in parallel.

The benefits of the discipline imposed by consistency between different accounting information systems were identified from an early stage in

the development of cost accounting systems. Hopwood (1987) presents a case study from the extensive correspondence and records of Josiah Wedgwood, one of the leading entrepreneurs of the early Industrial Revolution. As his first cost accountings emerged in response to economic recession, price competition and falling demand, Wedgwood noted that they did not agree with the production expenses of the financial accounts upon which he had previously relied. On investigation, the source of inconsistency was found to be 'a history of embezzlement, blackmail and chicanery' (Hopwood, 1987, p. 216). As Hopwood states, it was only when the source of the inconsistency was revealed that Wedgwood felt confidence in his newly fledged costing 'facts'. This led to the birth of a system of weekly accounts. The financial and costing information symbiotically lent credence to each other. Reliable information in turn empowered accounting within the organisation by allowing management control to be exercised at a distance both in time and space. It could complement personal observation and supervision.

Only occasional published reference to the effects of integration and conformity in accounting systems can be found in the literature. One of these, Baxendale (1987), reports a study of cost accounting practices at five major US defence contractors. In none of the five cases were separate reports prepared for contract cost reimbursement and management performance evaluation. As a consequence, allocated uncontrollable head office cost influenced the performance evaluation of defence division managers, even in firms where managers of the non-defence divisions were evaluated on the basis of performance reports which included only controllable costs.

Financial Markets Focus

Johnson and Kaplan (1987) identify the reporting needs of financial accounting as the primary cause of deficiencies in cost accounting systems. The cost of handicapped management accounting systems has been traded off against the lower finance costs arising from more confident investors. To improve the usefulness of management accounting, Johnson and Kaplan advocate the use of product-based, rather than time-based Profit and Loss Accounts for internal reporting. They also advocate the greater use and reporting of non-financial

measures of performance. Enterprises may need to use measures of time rather than costs. Time-based measures include throughput times, set-up times and other cycle times. While the use of such measures has grown, they have not, in the opinion of Johnson and Kaplan and other commentators (for example, Simmonds, 1983), achieved the widespread usage or status within management reporting which they deserve.

One possible explanation is that the need to articulate management accounting information to financial reports has hindered the independent development of management accounting systems. This articulation acts as a quality control and requires consistency between the two systems. Johnson and Kaplan perhaps underestimate the importance of articulation as an internal control device to ensure the integrity of both the financial and management accounting information. Other possible models of the interrelationship between external and management reporting do exist, and Hopwood (1985) suggests that in other periods in time and in other national settings, such a tight link does not exist. To help explain the current phenomenon, let us consider Porter's (1992) report on a comparative review of capital investment practices in different countries. In particular, the US is compared with Germany and Japan. These studies consider accounting as only one of the influences on capital investment, but they provide a powerful description of the environment within which accounting operates.

The chain for the supply and management of investment funds to productive projects in the US could be summarised as illustrated in Figure 2. This chain is both very long and has wide gaps between links. In consequence, direct observation of proposed projects and outcomes is obscured for diverse participants. The functioning of the system requires highly standardised information flows understandable to participants at all points in the chain. This leads to the pre-eminence not just of accounting, but of a particular type of accounting. Information must be summarised and highly standardised. Detailed accounting standards require it to show minimal differences even across widely differing industries. These characteristics will apply not just to published information *but will also extend to those parts of the chain which lie completely within the corporation*. Pre-consolidation reports, monthly reporting packages and budgets will all tend to be presented in a form which facilitates a 'management by the numbers' approach. Consequently,

Uniformity is a prerequisite for much information in the system. This both allows efficient parallel processing of data from large numbers of sources and imposes the quality checks of internal control which must be exercised in the absence of personal supervision and detailed technical knowledge.

Figure 2: Chain for the Supply and Management of Investment Funds



In contrast, the German and Japanese capital allocation systems are perceived by Porter to be defined by dedicated capital. The dominant owners are principals rather than agents. They hold significant and often effectively controlling stakes. As their ownership is virtually permanent, they seek long-term appreciation in the value of their shares. In addition, suppliers and customers often have cross shareholdings in each other. The objective of these investments is not direct capital appreciation, but rather to cement business relationships and reduce business risk. (Porter does not consider the potential monopolistic benefits to owners so arising). Equity providers may also be providers of debt capital.

In these countries also, managers are more likely to hold technical qualifications relevant to the firm's products or process and their careers are more likely to progress within one firm. Thus their knowledge of the business and ability to assimilate relevant information are far greater than those of their American counterparts. There is less autonomy and there are greater information flows between business units within the firm. The sources of difference between the US and German or Japanese capital models are varied, including cultural and legal conditions. Indeed, some practices would be frowned on by business law in the US.

The consequences for accounting are to place less reliance on formalised and standardised reports both externally and internally in Japanese and German firms. Porter reports greater horizontal and vertical information flows and involvement by management in decisions. These lead to innovation such as the widespread use of just-in-time, total quality management techniques and cross-functional work teams. Although not necessarily developed in these countries, these techniques appear to have had the greatest acceptance in these corporate environments. This may lead to inefficiency in the short run, but to greater effectiveness and efficiency over time as knowledge and capabilities accumulate. A comparison of the effects of the two systems on accounting points to accounting forms being embedded in a wider business and financial culture, with the US system being prone to a higher degree of Uniformity in both internal and external accounting. Ireland and Britain would be historically closer to the US model.

The reasons for the development of different capital systems in different national settings is beyond the scope of this paper. However Armstrong (1985 and 1987) has argued in the case of Britain that accountants have positively contributed to the pre-eminence of accounting. He attributes the ascendancy of accountants in British management, compared to the importance of engineers in Germany, to the relative success of each profession in ensuring the adoption of their particular approach to the control of the 'labour process' (1985, p. 130).

Accountants in particular benefited from the exaggerated significance of the audit in British financial markets, together with the particular forms of intervention by government in economic life in two world wars, and

the diversified nature of corporations as a result of waves of mergers. This study is incomplete as it does not, for instance, explain how the management of wartime production differed in Germany. It does give a flavour of the complex antecedents of diversity in management cultures.

Internal Control

Internal control is put into practice through the simultaneous use of procedures such as segregation of duties and reconciliation of different accounting records. In order to conduct these procedures, a burden of consistency is placed on the Cost Accounting System. Given that the system is expected to produce information for diverse and sometimes conflicting purposes, it is easy to see how at least some of the cost accounting system's objectives must be compromised. This deficiency in the cost accounting system will be institutionalised where the costing system's integration into the general accounting framework is a vital and compulsory part of internal control. An integrated single accounting framework can easily be seen as vital for internal control purposes in many organisations because of the dangers of 'keeping two sets of books'.

A high priority is attached to the internal control function in practice. This is evidenced by the professional pronouncements on the subject and the frequency with which deficiencies in internal control are cited as a primary cause of business collapses and unanticipated crises in continuing businesses. As such, internal control is looked upon as a source of high risk to many corporations, and consequently as a high priority. Despite the fact that the needs of internal control may take precedence over other purposes of the management accounting system, its influence on the form and priority of cost and management accounting systems is not reflected in standard accounting textbooks.

One possible reason for this treatment of internal control is that almost all academic management accounting and decision models assume a neutral producer of information. Behavioural research has largely been confined to the areas of budgeting and optimal incentive schemes. Agency Theory models have remained isolated from the design of working accounting systems and decision models. Current Agency Theory models also rarely consider the complex case of how to build an accounting system which can withstand deliberate attempts to subvert its working.

Internal control issues enjoy a similar low profile in the journals. Exceptions include a case study of the costing system in the Weyerhaeuser Corporation where Johnson (1987) identifies the issue of accountability as a key factor. A lack of accountability arose because of the matrix management system where a set of regional production units served a sales system differentiated by product line. While such a matrix structure is sometimes advocated in the organisational literature as promoting communication, it led to dissatisfaction with accountability. This led to rejection of the matrix structure in Weyerhaeuser in favour of a product-based divisional structure. While the emphasis of the paper is on the implications for product costing and expense control of the matrix structure, the issue of accountability is at the heart of internal control. Internal control may act as a powerful explanatory factor for accounting system integration.

The Pressures for System Integration in the Global Firm

Recent advances in information technology might suggest a proliferation of accountings. Information cost is no longer a function of the quantity of information, and multidimensional relational databases are more likely to provide information redundancy than information scarcity. However, technology and its possibilities also throw up new forces for system integration. The global information highway emerging within many firms requires standard protocols to allow the meaningful transfer of operational information. It is not sufficiently recognised yet that the efficient transfer of information between accounting entities requires not just compatibility in the hardware and software of the information channels. It also requires some level of common understanding of the message's content and structure, between senders and recipients.

As mentioned above, most decentralised organisations tend to develop prescriptive accounting manuals as they expand, and, in expanding, find that they require a set of uniform accounting procedures throughout the enterprise. Empirical evidence comes from a study of accounting practices at the Irish operations of 16 multinational companies conducted through interviews with financial controllers by Clarke and O'Dea (1994). The study revealed that certain inadequacies were perceived by the controllers in their existing systems. One barrier to improvement cited was that uniform systems were used to facilitate inter-firm comparison.

In six of the 16 cases, head-office approval was required for changes to the costing system.

Globally integrated accounting systems are reinforced by the movement documented by McGrath and Hoole (1992). Their work with Rank Xerox and other international corporations highlights the economies of scale to be obtained by corporations when they integrate their operations into a single supply chain internationally. Traditionally, such corporations have emphasised decentralisation of management. This is now being reversed because of the perceived efficiencies of eliminating duplicated design and manufacturing capacity in different countries and regions. Falling trade barriers have also lessened the need for high-profile manufacturing plants in every major end market. (For example, pharmaceutical firms are rationalising the number of plants that produce each drug within the European Union following the advent of the Single Market.) Firms endeavour to downsize and simplify their operations, leading to lower costs per unit of output and higher market share. Product quality and delivery times can also be improved by reducing the number of suppliers, assembly plants and distribution channels.

In Rank Xerox, management reversed a strategy of subunit autonomy in purchasing, assembly and distribution as the company's share of the world copier market fell rapidly from a dominant 57 per cent share in 1982. It created a central purchasing group for raw materials. This reduced the global supplier base from 5000 to 400. Purchasing overheads fell from 9 per cent to 3 per cent of materials costs — an annual saving of \$100 million. Savings in purchasing from bulk discounts were supplemented by the arbitrage advantage from price differentials in different markets. Design and production were reorganised into product-specific teams. The needs of several markets could be included in the initial product design, with later savings in customisation costs to individual markets.

The net result of Xerox's reorganisation was a chain of scattered but globally integrated final assembly, subassembly and component plants. The plants contained a minimum of overlapped capacity and redundancy. These were managed by a global system analogous to a single plant just-in-time inventory management system. Forecast demand from selling subsidiaries formed the basis of capacity and materials planning

forecasts of the production plants. Real customer orders become 'pull signals' for upstream plants to produce necessary components.

Vertical balancing is accompanied by horizontal balancing of plants handling the same steps in the manufacturing process. Production orders are assigned based on cost, plant capacity, technical capabilities, availability of materials and distance from customers. Work is allocated so that plants concentrate on activities in which they display greatest comparative advantage.

McGrath and Hoole do not consider the accounting implications of the global integration of production capacity. However, it is clear that the process is far more problematic than the clean decision process that they summarise. The global integration described depends on the timely and continuous supply of accounting information to global management in a level of detail previously only available at subsidiary level. This information, particularly on product costs, must be evaluated and compared across plants to make operating decisions. Previously, Xerox would have considered such a span of information only on a strategic level as the input to investment decisions. Management of individual plants was based on summarised performance measures.

Global integration not only requires accounting systems to be enriched in the range and speed of distribution of accounting information, but decision systems must also exist at head-office locations, to process the range of cost information available across plants and to make rapid decisions. Finally and most problematically, control systems must cope with the selective supply of routine information by individual subsidiaries to the centre in order to give them competitive advantage over fellow subsidiaries in what is clearly a competitive game being arbitrated by Head Office. It is this control requirement that converts market integration into accounting integration. McGrath and Hoole detail that part of the process of global integration in Xerox was to adopt global standards for various processes such as materials and product management databases. Site-specific processes were only set for those systems which must conform to local needs, such as governmental reporting requirements. They specifically emphasise that top management must make compatibility of computer and communications equipment a corporate priority, together with a common management 'language' — a

universal set of management practices and measurement systems (McGrath and Hoole, 1992, p. 101). This has clear implications for accounting.

The long-term survival of the subsidiary is not equally dependent on every product. Certain products will emerge as more valuable. These are products with a longer expected life span, or greater profitability or market share. An obvious example would be technology at an early stage of its life cycle. Clear advantages will accrue to firms that can develop overhead allocation procedures so as to direct product costs away from such 'prize' products and perhaps onto more mature, or even dying, products, which head office is unlikely to remove from an existing plant to begin production elsewhere. Head-office accountants must look out for 'dust-bin' products onto which plant managers dump discretionary excess costs when aware that production orders are less likely to be lost.

This phenomenon of inter-plant competition was cited to this writer as a barrier to the implementation of Activity Based Costing in one multinational subsidiary in Ireland. The 'true' costs of low-volume leading-edge products would have made a plant using ABC appear uncompetitive by comparison with one using more conventional costing procedures. The potentially destabilising effect of ABC for multi-plant firms was also noted in Innes and Mitchell (1990). Accounting innovation can make figures non-comparable if the innovation is not uniform across the organisation. This can lead to dysfunctional decision-making at both corporate and plant level, but also acts as a unifying influence on accounting practice. The world headquarters of corporations is being displaced by a global web. The role of accounting becomes more complex in this web as the parts are more interdependent than in a traditional hierarchical corporate structure.

CONSERVATION

The Nature of Conservation

Attempts to explain management accounting practices in both theoretical and empirical terms have concluded that the nature of such practices is quite subtle in that they may operate in ways that are not intuitively

obvious. Practices have evolved in organic ways to meet the specific needs of firms, and their importance to the working of a firm may exceed the purely functional task which a practice may appear to fulfil. While firms may benefit from new patterns of accounting, there is also value in the conservation of some apparently dysfunctional existing patterns. The term 'Conservation' is not intended to connote pressures to maintain accounting systems in an unchanged, fossilised state. Rather, it involves pressures to protect particular aspects, components or practices during a period of change. These pressures arise on political, economic or strategic grounds.

Accounting 'ecosystems' have evolved over long periods of time in response to the individual circumstances of each firm and its industry. These embedded accounting systems may well serve their purposes in subtle and non-intuitive ways, which risk damage or loss in periods of turbulent change. An example of this might be Strategic Influencing in Japanese industry as described by Hiromoto (1988), where costing and allocation systems are designed to promote specific strategies, rather than optimise the accuracy of measurement. The understanding and protection of these 'ecosystems' leads to the 'conservation' of aspects with continued relevance.

The pressures towards conservation may be explained on strategic or political grounds, or by reference to economic rationales as proposed by Zimmerman (1979). In other cases, they may derive from the power structure of the organisation. Any move to change the accounting system may rebalance this structure by changing lines of reporting, by highlighting certain activities or by altering reported performance. Conservation may present itself either as active resistance to change, or only as a passive sense of information lost after an accounting change. In different circumstances, it is either a political force or a strategic or economic need.

The Constitutional Role of Management Accounting Systems

The value of conserving existing management accounting systems may also be considered in a wider context. Tiessen and Waterhouse (1983) draw on contingency theory, agency theory and the markets and

hierarchies literature. They suggest that economically rational reasons exist for the preservation of existing management accounting systems in certain circumstances, even where technical improvements to the system are possible. Paradoxically, this applies most strongly in conditions of moderate technological and environmental uncertainty where adaptive and flexible behaviour is required. The constitutional role that management accounting plays in defining the positions of different economic agents within the organisation becomes more important in these conditions.

Tiessen and Waterhouse use the term 'constitutional' to denote a set of rules for the governance of an organisation, which will be clearly distinct from operating rules and procedures. The analogy with the constitution of a country or state is a clear one in that these constitutional rules are fairly rigid, relatively inflexible and necessarily arbitrary. Such measures and allocations can only assist in fostering co-operative behaviour if they are well specified, agreed upon and beyond dispute. The rules must be rigid or constant over time since they would lose credibility if subject to frequent change. They act as a corporate glue to bind participants into a semi-contractual coalition, based on perceived fairness and common subjugation to agreed standards. As with a national constitution, it is not only the specific terms that matter, but also the mutual understanding that they apply to all participants, and in all circumstances.

The constitutional role of management accounting originates in the need for organisations in certain settings to utilise incomplete employment contracts to encourage co-operative behaviour on the part of members. Contingency theory suggests that organisational structure depends in complex but predictable ways on the firm's technology and environment. Processes such as management accounting and control are contingent on this structure. The simplicity and stability of the technology and the environment will determine how formalised the structure and control of the organisation can be. In more complex settings, direct observation of measures suitable for management control will become more difficult, even as authority is likely to be decentralised to cope with greater uncertainty. One would expect variations in management accounting systems, both across organisations and across time, as technologies and environments change. However, great similarities are seen in management accounting systems across organisations, and they prove to be relatively stable over time.

The management accounting system is an integral part of the internal labour market and is affected by the requirements of that internal market. In particular, in cases of high environmental uncertainty, information becomes highly impacted and prone to opportunistic use by individuals. It is also highly valuable to the organisation, which requires its disclosure. The management accounting system must encourage individuals to co-operate in the release of information. The individuals must expect that other participants will co-operate also. Rules of the accounting game which encourage co-operation — for example, by being perceived as fair and equitable — are most appropriate, even if they may be rigid and arbitrary in action. Rules that are frequently changed may lack credibility even if the changes represent technical improvements.

In addition, measures will be used to develop performance histories over time, which may be used in such matters as employee evaluation and promotion. Here again, there is a need for consistency in the measures used to measure performance. Further examples arise in the case of joint outputs, such as transfer pricing schemes where co-operation suggests the need for agreement of all parties to any change. Again, a fairly rigid measurement system is desirable. The management accounting system must serve the needs of social as well as economic processes. In particular, management accounting systems must gain a high level of legitimacy where objective measures of efficiency and effectiveness are unavailable because of uncertainty caused by environmental turbulence and technological change. Thus, the accounting system may become part of the constitution governing the relationship between organisational participants. While this role provides a powerful argument for the conservation of existing accounting systems where they impact on performance measures, it also points to the need for diversity within accounting systems, as the optimal information for operating decisions and strategic planning may differ from that required to support the most appropriate performance measures.

Political and Social Implications

The conservative forces within accounting cannot be seen solely as economically rational (as in the cases identified by Zimmerman, 1979), or protecting long-term strategic objectives (for example, Morgan and Weerakoon, 1989). The accounting function may also develop its own

agenda, either deliberately, or through historical accident or system design leading to selective visibility. Hopwood (1987) examines case studies of accounting change. These illustrated how accounting systems were part of the culture of the firm and helped to determine the agenda of issues facing the firm, as well as being a channel for the implementation of policies. Accounting is both a creator of, and a product of, its own environment.

The isomorphism of the organisation and its accounting system, with each dependent on, and reflective of, the other, may result in powerful forces for conservation which may be dysfunctional in a period of significant environmental change. Too much emphasis may be placed on the measurement of the normal rather than the irregular. As accounting is forged in the experiences of the organisation, it must reflect the history of that organisation. It is *ab initio* better suited to the solution of yesterday's problems than those of today.

However, as Hopwood (1987) points out in the cases, the influence of accounting is stronger than the residual pressures of past experience. Embedded accountings form an integral part of the being of an organisation, and of its strengths and weaknesses. The options open to a firm in response to new environmental factors will be influenced by its current accounting systems and staff. The choices among options will also be so influenced.

Examples occur in utilities and retailing. The billing systems of such organisations are a major asset in diversification strategies, marketing initiatives, customer retention programmes on privatisation or deregulation (for example, UK electricity and gas-supply monopolies), and in market segmentation (for example, banking and retailing). In many service industries in particular, the accounting system has become incorporated into the product. Even where no direct link exists to the product, accounting people and procedures have a powerful hold on strategy for a more mundane reason. As Hopwood suggests (1987, p. 224):

It is only with great difficulty that people can start to conceive of doing anything differently.

Accounting change is, in Hopwood's view, the very particular product of specific circumstances. These include the social and political content of existing systems (p. 230):

It is as if organisational transformations deposit sediments which not only interact with the organisational past but also modify the possibilities for the organisational present, and its future.

This view of the position of accounting gives it, and the managers who use it, a vested interest in preserving its position and structure. It does not preclude the adaptation of the system to new environmental circumstances, provided that changes are deemed to protect the interests of powerful parties. Rather, it suggests a trade-off between the interests of the conservation of the political structures within an organisation and the need to respond to new environmental challenges by enriching and diversifying systems.

Other studies (Otley, 1990, Berry, Laughton and Otley, 1991) would suggest that the degree to which existing systems are preserved is partly a function of continuity of managerial staff. If the same people remain in control, the system is more likely to remain unchanged, even if it used in different ways. This applies despite at least some significant levels of change in the environment of the firm. New leaders and managerial staff are more likely to act as agents of change and introduce new systems. Further, if system change is initiated from above, or from outside a particular operating segment, it requires the understanding of local managers to work as intended. This understanding would be at several levels. It includes technical knowledge and an understanding of the intentions behind new systems and the environmental forces that are being responded to. These prerequisites to system change suggest some reasons why existing systems may endure and be conserved for relatively long periods. It is also congruent with observations that system changes resulting from improved technologies merely automate existing procedures even when radically new operating procedures become feasible.

CONCLUSION

When we consider management accounting, we are looking at an activity that has no apparent justification in its own right. It is in fact a 'purposeful' activity. This is not to reject either the complexity of the activity or to argue that everything that happens in the domain is explicable in terms of its stated purposes. However, the stated purposes

do exist, and these functions are likely to have considerable explanatory power in studying the activity and the way in which it develops. This extends to understanding apparent deficiencies in the practice of management accounting.

This paper concurs with the view that accounting system change is more than a process of technical elaboration and improvement. The pressures (and rational reasons) to conserve existing practices may be just as appealing as forces supporting the enrichment of accounting information. Hopwood (1987) suggests that the abstract image of what constitutes good accounting is derived from other fields. He identifies the need for a greater understanding of the pressures that impinge on accounting in practice. One of these factors is the way in which existing accounting practices influence the direction of accounting change. Hopwood argues that (1987, p. 210):

By drawing on bodies of knowledge from such more autonomous discourses as economics, political theory, public administration and psychology or emerging notions of strategic management, as well as by abstracting from the practice and functioning of the craft itself, accounting can be evaluated in terms of what it is not. Specific practices can be appraised on the basis of their conformity to more general notions of management and the manageable.

The contribution of this paper lies in providing some tangible examples of how the forces moulding accounting practice are not linearly progressive, but are influenced by constraints within the functions of accounting. It supports the case that what accounting is, is a significant determinant of what accounting will become. The forces moulding accounting are internal as well as external. In the case of external forces, we cannot assume their effects to be predictable and unproblematic. Rather, they must interact with each other, with internal forces and with the consequences of their own prior forms.

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