JOURNAL OF MANAGEMENT ACCOUNTING RESEARCH Volume Twenty-One 2009 pp. 3–18

The Case for Post-Modern Management Accounting: Thinking Outside the Box

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ABSTRACT: I argue that the time has come for management accounting researchers to again consider the orientation of our research. Over the past several decades, the focus of research in management accounting has evolved. Initially, research was heavily influenced by the needs of practice. After the Ford Foundation's initiative to professionalize business education, research became more and more theoretical and inward-facing. At a time when practice is in need of assistance, our current focus has led to research that is primarily intended to enhance current models rather than assist in solving the problems of practice. After arguing that there is a need for a change, I offer several examples of new research areas where management accounting research could assist practice.

THE PRE-INTRODUCTION: THE THANK-YOUS

et me begin by thanking Leslie Eldenburg (whose phone call took me by surprise), the members of the committee, Ramji Balakrishnan, Ken Euske, and Dipanker Ghosh, and the Management Accounting Section for this honor.

As always, there are many others whom one should thank for their help along the way. Given my "years of experience" the number is legion, and I will mention only a few. I would not have become an academic without the mentoring of Carl Nelson at Minnesota. The group at Chicago—Chuck Horngren, Nick Dopuch, and Joel Demski—helped me realize that management accounting was my interest. When I moved in the direction of human behavior, Bill Cooper provided support, as did Lou Pondy and Anthony Hopwood, who were colleagues when they were much fewer in number. More recently, there are the doctoral students in my Control Systems seminar—Mike Shields, Mark Young, and Ari Mukherji, to mention three—and my colleagues in the accounting group at the University of Pittsburgh, who keep the environment stimulating. And, of course a special debt is owed to my wife, Stephanie, who has been a sounding board, co-author and, too often, a correct critic. To all of you, a heartfelt thanks.

INTRODUCTION

Why we usually may not think of it that way, research in management accounting can be viewed as one of our "products," along with the educational materials that we produce for "consumption" by others. It therefore is important to reflect on the history of our

This paper is an extended (and more formal) version of the acceptance talk delivered at the Midyear Meeting of the Management Accounting Section in St. Petersburg, Florida, on January 9, 2009, upon receiving the Section's 2009 Lifetime Contribution Award. It benefited from discussions with S. Birnberg, Anthony Hopwood, Marc Epstein, and Larry Gordon.



research to better understand the current state of our product and possible direction(s) for future management accounting research.

I will identify three periods in North American management accounting research. They are the pre-World War II period, the post-World War II period, and the modern period. As is true whenever we attempt to define a period when a particular mode was in vogue, at the margins the periods overlap. The end of the pre-World War II period, despite the obvious contradiction, did not end for most management accounting academics until the mid- to late 1950s. The post-World War II period lasted from the late 1950s until the late 1970s or early 1980s, when the current, modern period began. For a review of the development in cost/management accounting through the end of the post-war period, see *Kaplan* (1984).¹

Each of the three periods has its particular theme(s), dominant model(s), and, most importantly, target market for the "product." For the prewar period, the dominant market was practice. The question asked was: "Is this research relevant to the problems of management?" Often you could add: "on which I am consulting?" The central theme was solving real-world problems with traditional and sometimes innovative accounting tools. The post-war period was a transitional period and can be characterized as one reflecting the professionalizing of management education as encouraged by the Ford Foundation (Maher 2000). Its market still reflected the concerns of practice to a significant degree, but the importance of practice was declining, and publishing more formal research clearly was on the ascent. The modern period is the one with which you are most familiar—perhaps the only one with which most of you have experience. It reflects a product that predominately is interested in using our new tools to contribute to the literature, i.e., research for research's own sake, and to a far lesser degree with the concerns of practice.

This leaves open the questions of if and when we might enter a new, post-modern period; what factors might lead to or inhibit the changes; and what the nature of the next period may be. After briefly discussing the three periods noted above in the second and third sections, I will explore the forces that could lead to the next period in the fourth section, and the possible characteristics of the product and the market in the fifth section. The final section will summarize the arguments.

THE INITIAL TWO PERIODS

As noted above, North American management accounting in both the pre- and post-World War II periods can be characterized as reflecting a significant level of interaction with practicing managers in both the private and public sectors. *Anthony* (2003), in describing his career, offers one example of the intellectual interactions among academics, managers, and consultants during these two periods. In the interactions Anthony describes, the problem (the need for our product) typically emerged from practice. Academic accountants served as consultants and offered their insights into the "client's/consumer's" problems. Their product was attuned to and heavily influenced by the needs of practice.

What led to this interaction between academia and practice during these two periods is something with which I have the least experience. However, given the level of academic salaries during those two periods, serving as a consultant to a firm was not an undesirable activity. It was not uncommon for a faculty member to have an ongoing relationship with a particular firm. This relationship could take the form of consulting, i.e., solving certain of the organization's problems, or participating in training programs for its managers. The

¹ I have italicized the names of prior winners of this award the first time their name is mentioned. My intention is to highlight their contribution to where we are.

former led to a clearer understanding of the problems managers faced, while the latter provided access to and understanding of the organization. There also was an interest on the part of the professional organizations to turn to academics for insight into current issues, e.g., the (then) Controllership Foundation's sponsoring of research projects by Argyris (1952) and Simon et al. (1954).

The pre- and post-war periods differed on two important dimensions: the breadth of the disciplines incorporated into management accounting, and the likelihood of a publication of some type resulting from the relationship. Following the efforts of the Ford Foundation to broaden the discipline base of management education (Maher 2000), management accounting faculty incorporated economics, operations research, and behavioral sciences (primarily psychology) into courses and seminars (*Feltham* 2005), as well as textbooks (*Horngren* 1962) and research (Charnes and *Cooper* 1967; Birnberg and Nath 1967; Feltham 1968).

The post-war period was one of increasing emphasis on publishing in business schools. This likely is the result of the interaction with the other disciplines (e.g., economics and psychology) where there already was a norm of publishing theoretical research. This norm affected the expectations for the faculty of business schools, including accounting. Thus, while some published research still was facilitated by the researcher's interaction with practice, a significant proportion of the research in the post-war period presaged the trend toward the type of model building that would characterize the modern period. For a discussion, see Feltham (2005).

The question of whether the interaction between an academic and an organization during the pre- and post-war periods would ultimately lead to published research depended on the individual, the issue, and the organization where the consulting took place. Consulting did not always lead directly to publishable research. Rather, it could provide access at a later date to data or individuals for future research. In much the same manner that Peat Marwick's Research on Auditing initiative provided researchers with access to auditors, interacting with corporate managers provided researchers with access to professional managers and workers as participants in their studies (e.g., Churchill and Cooper 1964; Stedry and Kay 1966).

An interesting example of how the accounting practices affected the discussion of academics at the end of the prewar period is direct (variable) costing, which was first discussed by practitioners. During the 1950s and beyond, many firms, e.g., Westinghouse, utilized direct costing for internal reporting and evaluating at the divisional level. They then appended an adjustment to the division's report to report the profit as measured by absorption costing, which was used for financial statements. This raised the issue noted by *Ferrara* (2007) of the integration of financial and managerial accounting issues: Was direct costing appropriated for financial statements? See the exchange between Fess and Ferrara (1961) and Horngren and Sorter (1961); Sorter and Horngren (1962).

During the post-war period, many academics continued to maintain relationships with various organizations. While the tools they used may have become more sophisticated and the need to publish clearly was increasing, their interests continued to be influenced by problems in practice. As the post-war period progressed, the more "applied" management accounting researchers and the more theoretically oriented did not usually communicate. Each group's behavior reflected its own norms and agenda.

The post-war period should be seen as a transitional period in which management accounting researchers were exploring their new tools and the boundaries and complexities of their new domain. A series of committees was formed in the late 1960s and early 1970s



under the auspices of the American Accounting Association to explore and publish reports on various aspects of management accounting. The 1965 Management Accounting Committee's activities and report led to the presentation of two papers at the plenary session at the AAA's annual meeting in 1966. The papers discussed the analytical (Charnes and Cooper 1967) and behavioral (Birnberg and Nath 1967) approaches to management accounting research.

As part of its sponsorship of the new management education, the Ford Foundation also sponsored interdisciplinary conferences focusing specifically on management control (Bonini et al. 1964) or related to issues of control in an organizational context (Cooper et al. 1964). These conferences were significant because they brought together scholars across a wide array of disciplines, e.g., economics, operations research, sociology, psychology, and organizational behavior, as well as accounting. They reflected a stream of interdisciplinary research that would be the joint product of accountants and researchers from other disciplines (e.g., Boland and Pondy 1983).

An interdisciplinary research focus was replacing the problems-of-practice orientation among the younger scholars in management accounting. Behavioral researchers (e.g., *Hopwood* 1972, 1974) and modelers (Demski 1967) still were interested in real-world problems; but more often, when researchers investigated problems that *could* be of potential relevance to managers, they did so in their offices rather than in consort with (or with an awareness of issues facing) managers (Kaplan 1977).

The end of the post-war period was characterized by the ascendancy of the new faculty whose training reflected the "new management education" advocated by the Ford Foundation and the decline of the role of the faculty trained during the prewar period. With the passing of leadership to the new generation, the norms of North American management accounting researchers changed and the relative emphasis on research-for-research-sake increased, while the undertaking of research-for-practice-sake experienced a significant decline. The result would be, as is discussed in more detail in the next section, a profound change in the nature of management accounting and management accounting research in North America.

THE MODERN PERIOD

While the influence of economics was present during the post-war period (e.g., Feltham 1968; Demski and Feltham 1976), the publication of the principal-agent model (Ross 1973) and Stiglitz's (1974) sharecropper paper provided specific models researchers could use to describe the issues central to management accounting (Feltham 2005). These papers affected not only our research, but also our courses and textbooks (e.g., Dopuch et al. 1982). It is important to note, as is discussed later, that the predominance of the research orientation did not exclude practice-motivated research by some management accounting researchers during the modern period.

Reasonable papers to use as a rough benchmark for the beginning of the modern period are Demski and Feltham's (1978) budgeting paper using Stiglitz's (1974) sharecropper model to describe different budgeting situations and Baiman's (1982) exposition of the nature of agency theory for accountants. It is clear that by the time the Conference on Research and Current Issues in Management Accounting was held in 1984 (Hopwood and Bromwich 1986), the issues raised by the economic models of contracting behavior were central to management accounting research regardless of the research method utilized.

The role of economic models during the modern period is significant for three reasons. First, they created an appealing world on which researchers could reflect while in their



offices. As the result the real world's problems were, typically, outside their domain. The models became their "world" and the focus of their research. Second, having a common language of discourse facilitated communication among researchers and, thereby, their research. Finally, the models appealed to a wide variety of researchers. Not only did analytical management accounting researchers such as Demski (Demski and Feltham 1978) utilize the framework, but behavioral researchers such as Chow (1983) and archival researchers (Banker et al. 2000) also utilized elements of the paradigm to motivate their management accounting research.

What has resulted is a rich vein of research that is as diverse in the issues covered as it is in the methods used to investigate them. Covaleski et al. (2003) illustrated this in their survey of budgeting research. As specific as their paper's focus sounds, it can be viewed as an attempt to discuss control systems in a cross-disciplinary manner. For example, their use of the term "budgeting" without an adjective such as "operating" or "capital" already suggests a certain degree of generalizability to their discussion. Whether we view the research currently being produced by any research method—e.g., analytical, laboratory, archival, or by topic (e.g., budgeting, incentive contracting, norms)—the bulk of our research is classifiable as research-for-research-sake (and to impress our colleagues and our deans!).²

This should not suggest that there has not been significant management accounting research that has been intended to benefit practice. This research can be divided into two broad categories. One is the research concerned with how the accounting system and the organization function in practice, i.e., field research. These studies are intended to offer insight into how management accounting affects the organization and *vice versa* (e.g., Merchant 1981, 1984; Simons 1987; Ansari and Euske 1987). Ideally, these studies *of* practice will assist in determining how we *inform* practice, i.e., a practice-research-practice cycle.

The other line of practice-oriented research is more concerned with providing new techniques to assist management in adapting to changing economic environments, i.e., research to assist practice. Kaplan (2006) outlined the role of the balanced scorecard as a link between strategy and management accounting. The inclusion of nonfinancial measures provides the opportunity for management to integrate its strategic goals more explicitly with management and operating control. Kaplan (2006) also discussed the role of accounting measurement in managing a unit's activities. New approaches to costing such as ABC (e.g., Anderson 1995; Cooper and Kaplan 1992) and strategic costing (Shank 1989)³ were intended to aid managers in making their decisions and remaining competitive.

In summary, the modern period has been one of rapid growth in research. This has been accompanied by the introduction during the period of several new journals, including the *Journal of Management Accounting Research*, as outlets for this research. However, the two research orientations have become even more distinct. Research-for-research-sake is the dominant orientation in our journals. Contracting models appear to have strongly influenced this research activity. New studies have built on prior research, turning more and more "inward" as we have attempted to improve our models. While the research-forpractice sake line of research still is present, in North America it clearly is in the minority. To a significant degree, this practice-oriented research reflects a need for organizations to

³ John Shank received the Distinguished Contribution to Management Accounting Award in 2008 in posthumous recognition of his contributions to our disciplines.



² North American researchers also undertook some field based research during this period. However, nearly all of it was published in European-based journals (Merchant and Van de Stede 2006).

adapt to new and greater levels of competition. It reflects the practice determining research cycle found in the earlier periods. As such, it develops new techniques to solve new problems rather than transferring theoretical advances to practice as was the case in the postwar period, e.g., discounted cash flows.

DO WE NEED A POST-MODERN PERIOD?⁴

There are at least three reasons why I believe the time has come for us to explicitly consider a change in the characteristics of our research product. The first is external to accounting research. As I describe below, other disciplines with which we interact have undergone or are undergoing a change in the direction their research is taking. This change is a mixture of modern period research and contemporary problems. The second comes from within management accounting. As I read the remarks of previous recipients of this award, I see some support for the need for a change in the direction we take in the coming decade(s). It is alluded to in my discussion of North American management accounting research. To rephrase the line from *Hello Dolly*, "There is a big world outside North America, Barnaby." There are European researchers and journals whose research is different from the North American modern period I described above. This is the world to which Anthony Hopwood alluded in his remarks last year (Hopwood 2008). This world, viewed through the eves of Hopwood and the contents of European journals such as Accounting, Organizations and Society (AOS) and Management Accounting Research (MAR), is much more concerned with joining our new tools of analysis with the world of practice. Their contents reflect the view that researchers should identify problems of consequence affecting organizations and ascertain our role in solving them. Finally, there are a variety of papers being presented at this conference that reflect what I have labeled "post-modern management accounting." Together these reasons lead me to argue that there is a need for us to at least consider an evolutionary change in our research.

The Problem as I See It

While management accounting research has thrived during the modern period by the usual metrics, and while its quality as demonstrated by the content of our journals is rigorous, this has resulted in our becoming, as I noted earlier, more "inward-facing." By that I mean we have viewed with favor papers whose contribution is the presentation of a model or the enhancement of an existing model or tests of (usually existing) models. Rarely does even our field-based research suggest that its contribution is in identifying actions for practice! Rather, our field research typically justifies its publication because it offers a model and documents it with empirical support, e.g., Rowe et al. (2008). The contribution takes the form of testing researchable hypotheses derived from the model.

In addition, our definition of interdisciplinary research emphasizes importing models and methods from other disciplines rather than undertaking joint research where the output of our effort is co-authored with a colleague(s) from another discipline. This "go it alone" attitude diminishes our research in two important ways. First, colleagues from another discipline not only bring a different knowledge base, but also likely bring a different perspective to the problem at hand. Second, they provide access to a different audience for our research—an audience to whom the "wonders of accounting" truly do provide new and previous unknown benefits/insights.

This is not to suggest that using accounting and accounting research tools to help solve non-accounting problems is something foreign to accounting researchers. We have a long

⁴ Post-modern is the term that has become generally accepted in other disciplines for such a period.

Journal of Management Accounting Research, 2009

history of researching issues of interest to a much broader audience than management accounting, such as those involving social responsibility (e.g., Epstein and Freedman 1994; Epstein and Wisner 2001) and program evaluation (e.g., Birnberg 1976; Birnberg and Gandhi 1977). Moreover, these papers often appear in non-accounting journals in order to

reach the appropriate user audience. It is important to note a significant characteristic of interdisciplinary research being performed in other disciplines, e.g., law or medicine, during the 21st century that is not often found in accounting research. This is the tendency to look outside the boundaries of one's discipline and join with researchers from other areas to solve problems of mutual interest.⁵ In many instances the problem is an issue for one area, and the possible solution is within the expertise of the collaborator. For example, Udel et al. (2005) reported the results of collaboration between medical researchers and social decision theorists to study the ability of patients ex ante to anticipate how bad they would feel after experiencing necessary but debilitating surgery. The cooperation was beneficial to both groups participating in the research. It gave the members of the medical profession better insight into the patient's post-operative response: The patients were not as depressed by the outcome as the patients had anticipated they would be. It gave the social decision theorists a chance to utilize their research tools on a significant real-world problem and to contribute to knowledge on both an interesting (research-for-research-sake) and practical (research-for-practicesake) project.

Projects like these and others have become a source for stories in the national and local media. Leonhardt (2008) went so far as to discuss the potential role of what he labeled "behavioral economics" researchers to assist the Obama administration. He observed, "Should Mr. Obama add a new kind of advisor to his team, one specifically charged with translating the lessons of behavioral revolution into real-world policies?" (Leonhardt 2008, B1). In truth, I find it hard to believe that many of the potential candidates for the role he envisages are any more qualified than some of my more creative colleagues in this section (also see Lotterman 2008).

When Leonhardt's (2008) observation is viewed in the context of the discussion of Frey and Benz (2008), it is of even greater interest to us. Frey and Benz (2008) argue that in the post-war period, economics turned inward in a neoclassical phase not unlike what I have labeled our modern period. However, they point out that sometime around the turn of this century, a significant and influential portion of the economics profession recognized (as many management accounting researchers have as well) that the traditional model of human behavior found in neoclassical theory did not explain the anomalies that were being observed in human behavior. As a result, not only were models developed that incorporated concepts from psychology (e.g., Rabin 1998), but researchers went on to apply these models and the results of their experiments to real-world problems and use real-world data to test them. For example, Roth and Oxenfels (2002) used data from auctions on eBay to study bidding behavior.

In essence then, it would appear that changes are taking place all around us in the mix of research being undertaken. That research differs from the current, modern period research in management accounting in two significant ways. First, this new research is less inwardfacing in how it defines its "contribution." Relevance to practice is an acceptable reason for its being undertaken (and published). This may be the absence of the "clinical" aspect

⁵ A project unrelated to management accounting but reflecting such an interaction between an accountant and a non-accountant is Pinsky and Young (2009).



of our research to which Hopwood (2008) referred. Second, it is proactively involved with researchers from other disciplines. One characteristic of a segment of the new research in economics to which Frey and Benz (2008) refer involves interdisciplinary teams rather than researchers from one discipline utilizing models and/or tools from another.

There are studies taking place in management accounting reflecting what I would label as post-modernist, albeit at present much of it is taking place "under our academic radar"; i.e., it is being published primarily in non-accounting journals. What appears to be missing at the present time is the presence of an identifiable force to promote or stimulate our interest in change. Though there clearly are organizations like the IMA and, more recently, the AICPA that have evidenced their interest in assisting us should we wish to change, there is no Ford Foundation-like organization explicitly committed to change on a grand scale the way the foundation was in the late 1950s and early 1960s. Nor does there appear to be, as yet, seminal papers such as Ross (1973) or Stiglitz (1974) that so enamor us that they lead to a reorienting of our research. Thus, I believe the change initially will/must take the form of a series of independent appearing areas of research. These research topics differ in substance but share a research-for-practice orientation. In the next section, I offer some potential issues relevant to the new, post-modernist period.

WHAT CHANGES MIGHT BE PRESENT IN A POST-MODERNIST PERIOD?

It is important to remember that, regardless of the period, the central thrust of management accounting education and research has been what could be called control in the larger sense of the term. I use control in the sense that includes not only the obvious elements of the control cycle of goal setting, performance measurement, reporting, and evaluation, but also the activities subsumed in planning, i.e., system design and resource allocation decisions. I will refer to this broad definition as "control in the large," or CIL. What I believe are central to the various aspects of CIL are the development of metrics appropriate for the purpose at hand and the development of systems to support the use of the metric(s). These are skills with value beyond the operation of for-profit or not-for-profit enterprises.

I see the benefits from any shift in the emphasis of our activities, i.e., a post-modernist period, to be one that not only enriches our activities and literature, but also affords greater visibility to them. Our audience shifts from solely *JMAR* or *JAR*, *TAR*, *CAR*, *AOS*, or *MAR*, to a broader one that includes non-accountants. We might even see columnists such as Leonhardt suggesting that management accountants could be of assistance in some future crisis! If that is expecting too much, perhaps the local papers where our meetings are being held might find a presentation or two at our meetings of interest to their readers, as is the case with economics' and psychology's annual meetings.

What, then, might we consider as potential post-modern avenues of research? I will suggest four. What they have in common is that they involve, to varying degrees, the potential for interaction with non-accountants. Some could involve researchers in other departments of the business school. Others could require interacting with faculty in other schools, e.g., engineering, arts, and science. However, in each case an *accountant(s)* already has undertaken research on the question; thus these are not totally new and unexplored areas for management accounting research. This is important because it means each has at least a rudimentary literature that can be accessed and can serve as an introduction to the topic. They also share a certain degree of relevance and urgency to the events at hand.

Cyber Security⁶

As our society turns more and more to computerization of records in an effort to become more efficient and effective, and as the use of the Internet and intranets for completing transactions and communicating and transferring data becomes the norm, cyber security has become an important issue. The relevant questions include how to allocate funds for cyber security against outside interventions. Gordon and Loeb (2002) apply the principal-agent model to the problem. Gordon et al. (2008) and Boss et al. (2009) consider which activities enhance the effectiveness of the control procedures in place. Each of these papers draws on management accounting tools already used in the modern period to analyze traditional management accounting issues. Where they differ from research in the modern period is in the nature of the issue addressed and in their addressing their work to practitioners, e.g., chief information officers, in addition to an academic audience.

Gordon and Loeb (2002) and Gordon (2006) discuss the decision to invest in cyber security. One issue is whether cyber security decisions should be made using an internal rate of return (IRR) or net present value (NPV). While it is tempting to consider the issue using one of the traditional models, it is clear that when an organization is concerned with security—and the ramifications of a breach of cyber security—it may be undesirable to fail to invest in a cost-effective investment (NPV) because its return fails to meet a hurdle rate that is in excess of the organization's cost of capital (IRR). Another relates to the size of the potential, as opposed to the expected, loss. Does one select a scheme that is best at avoiding large losses but may fail to detect smaller problems, or one that is less effective overall but is modestly effective in preventing a wide range of different security threats?

Boss et al. (forthcoming) are concerned with security implementation. They stress the importance of maintaining intra-organizational cyber security through the use of behavioral controls, i.e., enforcing the organization's policies. These would include, for example, rules that restrict the classes of data that can be downloaded to personal computers, the sharing of passwords, and leaving machines unattended. The reports of lost laptops underscore the importance of the behavioral controls.

Medical Area

The medical area is a "nontraditional industry" to which management accountants have applied their tools (e.g., Covaleski and Dirsmith 1983; Birnberg 1976). The potential usefulness of CIL is readily apparent. While the "output" may be more difficult to measure in some cases, the level of expenditures in the area makes the introduction of controls appealing. One issue that occurs is the problem of determining the "output" of a professional when the tasks performed vary both across time periods for an individual and among individuals in a given time period. The solution to this for surgeons was the "standard hernia." Operating on a hernia was viewed as a fairly standard and well-defined procedure, and one that all surgeons understood. Using it as a point of reference, the difficulty of other diagnostic groups, i.e., surgical procedures, was rated relative to the hernia (Hughes et al. 1972). In this way a surgeon's activity was measured and reported in terms of standard hernias. Using this measure, the workload of surgeons could be measured, evaluated, etc.

Evans et al. (1995) studied the impact on physicians of benchmarking their behavior. They took advantage of the significant amounts of data that a hospital, of necessity, must collect and utilized it to ascertain the effect of announcing a benchmark to physicians about patients' length of stay on the physicians' subsequent behavior. As we might anticipate,

⁶ While the discussion here focuses on issues related to the organization, it is clear that these problems do transcend firm boundaries. See Markoff (2009).



they reported that announcing the existence of a benchmark/standard had the greatest effect on the behavior of doctors whose patients previously were staying longer, on average, than the benchmark suggested was appropriate and on the length of stay of patients whose problems were not life-threatening.

It is interesting to note the difference between the two sets of studies. Covaleski and Dirsmith (1983) and Birnberg (1976) performed traditional accounting research in a non-traditional setting, i.e., medicine. Evans et al. (1995) used their research skills to evaluate the effects of the hospital's efforts to use these control techniques to reduce its unnecessary costs. The latter type of study, an archival study, is more likely to reflect the type of research that potentially can be undertaken in this area. This research not only would assist medical facilities in understanding which control techniques are effective and which are not, but also would provide us with a chance to observe how our tools work in a nonstandard setting.

Whistle-Blowing

Whistle-blowing is the act of reporting an action that should not have been performed (because it is illegal, contravenes organization policy, or is unethical) or of reporting the failure to perform an act required by law or organizational policy. The public was made aware of it through discussions in the press of the actions of individuals such as Sherron Watkins in the Enron case or the unidentified whistle-blower in the Northrup case (Drew 2009). Whistle-blowers can be motivated by the possibility of a reward (or of avoiding being part of a potentially unfavorable outcome) or for ethical/moral reasons. Whatever the motivation, it would appear that, absent an active policy that encourages/rewards whistle-blowers, it is part of the informal rather than the formal control system of the organization.

Whistle-blowing existed and was studied long before Enron. In their extensive review of the whistle-blowing literature Miceli et al. (2008) argue that its origins go back to studies of (with apologies to Sir Arthur Conan Doyle), the whistle that was not blown, e.g., the Kitty Genovese case (Darley and Latane 1968), where numerous residents in nearby apartments failed to report the attack on Genovese as it was occurring and, as a result, indirectly contributed to her death. Darley and Latane (1968) attributed the reluctance to report the event as it was occurring (i.e., to whistle-blow) to a diffusion of responsibility. Miceli et al. (2008) argue that once we understand why people do not report inappropriate acts, we are in a better position to understand why people do or do not blow the whistle are inclined to do so. They offer a model to explain why people do or do not blow the whistle (Miceli et al. 2008, 38).

Unfortunately, as Mesmer-Magnus and Viswesvaran (2005) reported in their metaanalysis of the whistle-blowing studies, different research methods yielded different results. As one might expect, questionnaires that asked, "Would you report the act described above?" yielded much higher rates of likely whistle-blowing than studies where the participant had to perform the act. This raises questions of how best to undertake research in this area.

In accounting, there has been little research that has been done on whistle-blowing per se. However, see Hunton and Rose (2008). More may be forthcoming because of Sarbanes-Oxley. There are, however, two sets of studies in management accounting that could inform us about whistle-blowing and could assist anyone interested in the area. One set deals with the willingness of individuals to inform the principal of team members who are free riding (Towry 2003) or to inform on a member of another group with whom they interact who is

not reporting truthfully to the principal (Zhang 2008). These studies suggest that whistleblowing may be inhibited by a strong identification with the group within which the inappropriate behavior is occurring (Towry 2003) or the perceived unfairness of the boss/ principal who is being cheated (Zhang 2008). The studies suggest the possibility that a wide range of variables may inhibit the willingness of the individual to blow the whistle. It may be that the most likely whistle-blowers are individuals who perceive themselves to be isolated from the group or organization and/or may feel a responsibility to a group outside the organization.

The other line of whistle-blowing research is concerned with individual ethical characteristics and how they affect an individual's job-related behavior. This research primarily is concerned with how individuals' level of ethical development affects behavior when they are performing their job. For discussions of these papers, see Lowers et al. (1997) and Birnberg (2009). The link that is missing from this literature is the one between the degree of ethical development and the presence of sufficient moral indignation to incur the costs of becoming a whistle-blower. Fehr and Gächter (2000) reported that individuals who observed instances of noncooperation that did not affect them were willing to punish the offender. However, the whistle-blower's decision is a more complex one. The act of reporting this behavior to a third party who makes the decision whether to punish the offender means the whistle-blower is a party to the activity, and not an outsider as in Fehr and Gächter (2000). Not only has the whistle-blower given up decision rights vis- \dot{a} -vis the participants in Fehr and Gächter's (2000) study, but the whistle-blower now is subject to judgment by the third party. Thus the insertion of a third party changes the relationship of the whistle-blower relative to the participants in Fehr and Gächter (2000). The whistleblower now is being evaluated and is subject to the risk of rejection. The costs are more complex than those used in the experiment.

Thus, an attempt to study the behavior of whistle-blowers may not offer straightforward research models. It also will be difficult to research because of the difficulty of simulating the same reactions in participants as those they would have in the natural setting. That said, insight into the factors that encourage or inhibit whistle-blowing should be useful.

Social Responsibility, Green Issues, and Sustainability

Social responsibility/accountability is not a new topic to accounting in general or management accounting in particular. It was actively researched in the early 1970s with a particular emphasis on affirmative action and equal opportunity (e.g., Churchill and Shank 1975; Epstein et al. 1976). It spawned a series of papers that attempted to develop social metrics under the rubric of "social accounting" both for researchers and for the classroom (e.g., Seidler and Seidler 1975). However, much of the impetus was generated by the robustness of the economy, and when profits fell, so did interest in social accounting. What remained was the question of a link between a corporation's socially responsible behavior and the shareholders' perception of the corporation (e.g., Epstein and Freedman 1994).

Recently, apparently stimulated by concerns over the environment and long-run issues of viability such as the supply of crude oil, the issue again has become a topic for research linking socially responsible behavior, particularly energy efficiency, to those actions that enhance long-run sustainability. At present, among accounting researchers, Marc Epstein continues his long-term interest in the area (e.g., Epstein 1996; Epstein et al. 2006). Significantly, nearly all of the papers are not in accounting journals, and those that are appear in European journals.

Perhaps the simplest manner in which the issue of sustainability can be linked to management accounting is found in Epstein and Wisner (2001). In an approach remindful



of the advocates of social accounting some 30 years ago, they argue for the identification of those activities of the organization that would enhance the organization's environmentally sensitive actions and the organization's sustainability. Once these activities have been identified, they are no different than other objectives that contribute to the long-run viability of the organization, e.g., customer satisfaction. They can become part of the organization's sustainability balanced scorecard and, in turn, the organization's control system. For an experiment in this area, see Martin (2009).

Some Other, Somewhat Random Ideas

Let me conclude with two rather tentative suggestions. One reflects the application of what we do as accountants generically. The other is an idea that falls outside management accounting but draws on ideas that are central to some of our research.

Datar, Epstein, and Yuthas have embarked on a project intended to identify the metrics that are the drivers of successful microfinance operations. These clearly are enterprises whose success or failure is important and whose greater success also should be encouraged. In their initial study (Datar et al. (2008), they argue that an institutional focus reports how well the lender is doing but could obscure the performance of the recipients. Since the recipients are the intended beneficiaries of the activities, they argue, our metric must measure how the recipients are doing as well. Their current project is to develop a set of business techniques and metrics that will assist the micro-entrepreneurs in managing their activities (personal conversation, Epstein 2008). We only can await their results.

The second topic comes out of the recent headlines. How can any meeting not mention Bernie Madoff? From reading the popular press, it is apparent that Madoff attempted to create an impression of exclusivity. Those who were permitted to invest had to meet certain criteria. It would appear that once they "joined," they never doubted their leader. This is remindful of Aronson and Mills' (1959) study of 50 years ago: Participants who were required to say what were then naughty words as part of an initiation into a group believed the group to be much more desirable than those who did not experience the "initiation." Some commentators have suggested that those who invested with Madoff placed unusual trust in him (e.g., Nocera 2009). In short, initiation worked, as Madoff knew or found out it did. The question is: Did this initiation test lead the members to place greater trust in the group leader who initiated them? Would it, in turn, lead them to be less critical in evaluating the leader and/or data about his performance?

CONCLUSION

What I have advocated is not a revolution, but evolution. Perhaps what I am doing is simply jumping in front of a post-modernist parade that already is under way. If that is the case, it is all the better. My primary concern is that we do not become so inward-facing that we lose track of the world from which we came and into which we send our students. Not only do we need to concern ourselves with the internal validity of our research, i.e., its rigor, but we need to enhance our external validity, i.e., the aspect of our research that makes our efforts relevant to practice as well.

In this regard I am not alone. The IMA has worked to encourage relevance in both our research and our education materials. More recently, the AICPA has also joined in this effort. What is important is that we begin to see the benefits of this type of research and not merely the costs which Hopwood (2008) acknowledged last year.



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