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Abstract

Accounting and management practice as well as accounting research would benefit by shifting more of the scholarly attention towards external matters — solving problems of practice — while retaining its emphasis on rigor and validity of research claims.

The scope of natural sciences extends beyond the boundaries of time or space, but social sciences are contingent on both. Compared with the laws of mechanics, electricity or sound, any regularities we observe in social domains tend to have limited, and noisier predictive power and practical applicability. Moreover, regularities observed in social data are often unstable because of the reflexivity of such phenomena: once human beings recognize a pattern in past data, they tend to adjust their behavior so the pattern in the data changes. In other words, many social phenomena tend not to be robust to their own discovery.

Accounting as a Professional Practice

Accounting, a professional practice, rests on elements of various natural and social sciences and addresses the practical problems of business, government and not-for-profit

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organizations. These problems may have some common elements, but they are also characterized by time- and context-specific circumstances of societies, industries, businesses, and organizations. For this reason, attempts to build general theories of accounting can be admirable exercises in abstraction, but their explanatory and predictive powers are necessarily constrained.

A cursory glance at the sister professional practices of engineering and medicine can help us gain a better perspective on accounting. Various systems of medicine — western, Chinese, Indian *Aryurveda* and *Yunani*, and many others — were based mostly on experience, not science until a century ago. Surgery, rooted in anatomy, did better, but was hampered by infections until an improved understanding of microbes was gained in the late 19th century. While the traditional systems of medicine were supported by people's belief in their efficacy combined with centuries of experience, modern medicine is hardly free of mistakes, belief and tradition. The popularity of the surgical removal of tonsils to prevent infection for example has seen its ups and downs over three millennia.[2] The placebo effect is a well-established fact in medicine -- a patient's trust in their physician helps to determine their healthcare outcome.

Similarly, while little of modern engineering can work without its scientific underpinnings, the early human makers of stone, bronze or iron tools, weapons, shelters, and bridges had little knowledge of the principles involved. The science of mechanics arose as generalized inference from observation, and it was combined with accumulated practical

[2] In his review of history of tonsillectomy, McNeill (1960) concludes: "Like many other operations, tonsillectomy waxes and wanes in popularity. The eagerness with which the lay public advocate tonsillectomy for all manner of complaints has undoubtedly led to unnecessary operating. Also from time to time some prominent person undergoes tonsillectomy, and the consequent publicity leads to a spate of operations on tonsils. However, this operation, like most others, when performed on selected cases gives excellent results." (p. 63).

experience to develop the mechanics of machines and other engineering principles. Thus, observation, experience, inference and experimentation helped machines evolve through successive designs which make much of modern life possible.

Research and Practice

In both medicine and engineering research, a sense of purpose and progress toward solving practical problems is visible to experts as well as non-experts. Research — including university-based research — in these practical matters has remained in the vanguard of innovation with well-known contributions to human welfare. Governments, taxpayers and philanthropists in many countries generously support research as a method of generating knowledge in the form of public goods. Valuable knowledge has been gained through research into, for example, agriculture, dairy farming, human diseases, airplanes, computers, and cell phones.

Few would claim that accounting research compares well with the contributions of research to its sister professional practices. What could be the reasons? Lack of funding, ideas and imagination, direction and purpose, interest and ability, are some possibilities that come to mind.

Internal and External Issues

Research efforts in all disciplines are allocated between internal and external issues. The former set includes attention and development of research methods, intellectual history of the discipline, data sources, collection and structures, quality control, and dissemination of findings, etc. Academic research distinguishes itself from consulting by giving careful attention

to developing research methods, and examining the validity of research claims. This is an essential part of creating a discipline.

The external aspect of a discipline is addressing and solving the problems of the world. The former component helps support accuracy, consistency and replicability of findings, and in spite of its critical importance is not well-known to non-experts. The latter is what the larger world of non-experts sees and cares about. The former is evaluated by easier-to-validate internal criteria, while evaluating the latter can be messier, take a long time and remain contested, sometimes for generations.

For example, it is easier to determine whether Model A or Model B yields a higher explanatory power for variation in dependent variables in a dataset from a given sample. In contrast, assessing the consequences of implementing Policy A versus Policy B on the welfare of society is harder to do, especially when the potential implementation of the chosen policy lies in the future, as it almost always does. Randomized controlled trials are feasible in managerial and auditing but impractical in financial reporting. Inference from quasi-experiments using structural and reduced form estimation from field data gathered after a chosen policy has been implemented are beset by factors that may have led choice of the policy (endogeneity), cross-sectional heterogeneity, and by uncontrolled changes in environment during the period of data collection. Thought experiments and computer simulations can yield some insights into consequence of a decision, but they also depend on the assumptions built into the model. Unfortunately, there are no perfect methods of addressing the external issues because they call for inference — a leap of faith, so to speak — and are difficult to derive from internal logic of the model on which a research project is based.

Given this difficulty, perhaps it is not surprising that a large part of accounting research concerns itself with the internal issues—mostly methods and data. The external concerns receive less attention, and are even neglected, or abandoned. It is not unusual to see occasional caveats that the results of the research are not meant for private or public decisions. It is almost as if medical researchers focused on developing methods of keeping their laboratories cleaner, instead of using clean laboratories as an important prerequisite to find cures for Covid-19. Engineers need to develop sufficiently accurate instruments to measure dimensions of car components but are judged by the quality of the vehicles they make. Neither medical nor engineering nor accounting research can advance without developing satisfactory research methods and instrumentation, but the world judges them by the effectiveness of solutions to its problems. While individuals may focus their attention on internal or external issues, for the discipline as a whole, efforts devoted to the two concerns must be balanced. I am inclined to think that accounting research has tilted too far towards the former.

Rebalancing

Accounting and management practice as well as accounting research would benefit by shifting more of the scholarly attention towards external matters — solving problems of practice — while retaining its emphasis on rigor and validity. William W. Cooper, Yuji Ijiri, and Robert S. Kaplan, for example, addressed scores of important problems of practice, and as joint or byproducts, made landmark methodological contributions to accounting, management and many other disciplines. I recommend reading in full what Professor Cooper said in accepting his induction into the Accounting Hall of Fame (Cooper 1996, pp. 131-3), and quote a few lines from his remarks:

> This "practice oriented" research, however, lacked the rigor that is needed to provide a foundation for scientific generalization and testing to determine how far and in what manner extensions might be affected beyond the realm of particular problems and practices. The contemporary research literature now supplies this kind of rigor, but in a way that often seems remote from practice. One way to summarize what is happening is to say that much of this contemporary research is pointed toward "pure science" whereas an "applied science" orientation is what is (or should be) wanted if our research is to interact with practice in a mutually beneficial way.
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> Indeed, an ability to formulate problems as well as solutions in general and rigorous terms is needed to obtain this type of inter-science cross-fertilization. This is what is intended by "applications driven theory". The application is driven by problems of actual practice with a solution that is also extended and stated with sufficient rigor and generality to be understood by others (including persons in other disciplines. … . Evidently, it is possible to be basic as well as applied in such research (depending on how it is conducted) and the impact on other disciplines provides one test of whether its achievements are fundamental.

I once asked Prof. Cooper, over a dinner conversation: What do you do about consulting? “It’s simple,” he said. “When someone comes to me with a problem, I ask myself: Do I know how to solve this problem? If the answer is yes, I give them the phone number of one of my students, because I have taught everything I know in my classes. If the answer is no, I accept the project; it is consulting for them and research for me.”

References

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