

■ KRISHNA S. DHIR, Feature Editor, Campbell School of Business, Berry College

A review of corporate productivity expressed as a ratio of annual revenues to total workforce reveals that firms with former business school professors in executive positions perform better than those that do not have such executives. Also, researchers have found that this effect is more reliable in small companies than in the large ones, perhaps because the influence of individual executives is less diluted in small organizations. In the following essay, Bin Jiang of DePaul University explores the reasons for this effect. [Krishna S. Dhir, kdhir@berry.edu]

Business Professors Do Create Value for Tomorrow's Managers

by Bin Jiang, DePaul University

Those who can, do; those who can't, teach, is a long-lived adage. And probably no group has come to be more sensitive about it than the faculties of schools of business. Lately we have heard it a lot.

As business school professors, we would like to think that our academic expertise should generate value in the business world. However, in recent years the relevance of these academic institutions to the real world of business has been called into question repeatedly, not only by managers and the public but by some of the world's most respected business professors. Most telling, perhaps, has been criticism that business faculties are so intent on scholarly rigor that we have lost touch with what is important to the performance of actual companies. Yet, despite the attention, no empirical inquiries go beyond the educational product of business schools to focus on the "producers" with the benefit of data. Thus, there are no defensible findings pertaining to the familiar stereotype that business school professors cannot make it in the real world. Formally evaluating how well business professors who teach students to manage businesses could actually manage businesses themselves is one way to examine relevant evidence.

An Unprecedented Research

When my research team and I put that "familiar stereotype" to a test in a way

never done before, we found that this stereotype turned out to have little validity! The findings derive from an analysis of data drawn from Dun & Bradstreet's Million Dollar Database (MDD), a vast compilation of information on North American public and private companies that have more than 20 employees or more than \$1 million in annual revenues. To identify companies with former business-school professors in top management, my team searched executive biographies for such words as "professor" and business disciplines (accounting, business administration, finance, management, marketing, and economics), and then examined each search result individually to ascertain that the individual had the title "Dr." and was from a business school rather than another part of a university. We then created a control group that matched the sample in terms of industry, size, and location but had no former professors in executive ranks. The final sample consisted of 215 matched pairs of companies.

The professors assessed company performance by dividing annual revenues by total workforce, a common way of measuring productivity. We found that firms with former business-school professors in executive positions had a mean productivity index of about \$217,000, compared to about \$178,000 for firms without professors at a statistically significant level (p -value is less than



Bin Jiang

is an assistant professor of management at DePaul University. His research focuses on outsourcing and supply chain management. He has authored over 20 research articles in such journals as *Decision Sciences*, *Journal*

of *Operations Management*, *International Journal of Operations and Production Management*, *Supply Chain Management Review*, *Omega*, *Academy of Management Perspectives*, among others. He won the *Emerald/EFMD Outstanding Doctoral Research Award* and was the *Runner Up of the POMS' Wickham Skinner Best Unpublished Paper Award*. His cases have received honorable mention three times in a row at the *DSI's Best Case Competitions* (2004, 2005, and 2006) and are published in textbooks.

bjiang@depaul.edu

0.049). We also found that the result was more reliable for small companies than big ones, further evidence of individual professors' effectiveness, since it is in small companies that a single person is likely to have the greatest impact.

What accounts for the superior performance of companies that have former professors in their top management? We concede the possibility that professors who migrate to the business world might be a special breed, to be distinguished as a group from the great majority that remains in academe. Yet, the two groups have much in common, we believe. Almost all doctorate-holding business professors go through similar hiring processes based on academic selection criteria. It is reasonable that the former professors would then share some of those criteria with current business-school professors. We then examined companies run by former professors from university areas other than the business school. This auxiliary analysis investigated whether business school expertise accounted for performance and not merely the personological factors (e.g., intelligence, conscientiousness) associated with completing a doctoral-level

education or high academic proficiency. We accessed and searched the MDD again and constructed 27 paired observations based on the same controls. Due to the small sample size, we executed Wilcoxon signed rank and quantile tests for median differences between former professors from business schools versus their counterparts from other university areas. The results show that companies with former business school professors as executives perform better than those with ones from other university areas as executives. We also allow for the possibility that the better-performing companies in our sample preferred to hire professors to be executives. Yet, the widespread stereotyping of academics as a breed remote from the realities of the business world leads us to doubt this is the case.

More Insights

We executed a logistic regression analysis to examine specific aspects of companies in the sample. Table 1 summarizes the results. Due to turbulent variable scores, we operationalized performance as a dummy variable indicating whether a company performed better or worse

than its control. Results ($\beta = .644$; $p = .058$) show companies with former business school professors in VP positions performed the best of all. Results ($\beta = .249$; $p = .039$) also show companies led by executives who exited academic careers early performed best.

Facing the significant result that executives who exited academic careers earlier managed better performing companies, we believe that recency of expertise and greater knowledge of current scholarship make for better performance as an executive in a specific business area. We can offer several alternative explanations for this finding. First, younger faculty members may have not yet become accustomed to being a professor in a business school. Thus, once they entered a company, it required less adjustment in terms of orientation and inertia. Second, early career exits may have been more likely to discover that work in a university did not suit them. Thus, their performance as an executive may have been better because the career was more attractive to them, and they were willing to develop new skills and competencies. Third, younger faculty members are sometimes more recently from the business world (i.e., before undertaking their doctoral program). For example, one may have chosen to go back to school to earn a Ph.D. from a college of business, and then become a professor, but ultimately recognized that he or she was more competent in a business organization. Fourth, early career faculty members are pre-tenure. The early academic career exits may have sought positions in industry for reasons related to the pursuit of tenure. For instance, they may have been denied tenure and thus pursued a career in industry, or perhaps they made a personal choice not to undertake the process of earning tenure. Finally, it is reasonable to ask whether being *trained* as a professor versus actually *being* a professor adds unique value to performance as an executive.

To analyze the data more fully and illustratively, we undertook a correspondence analysis to help assess expectations

		SE	Wald (z-value)	df	p
Academic area				6	
	Accounting	-.317	1.043	-.304	.761
	Economics	.528	1.826	.031	.975
	Finance	.007	1.128	.006	.995
	Management	1.527	1.435	1.064	.287
	Marketing	1.027	1.135	.761	.447
Academic career stage				2	
	Early	.249	.148	2.063	.039
	Middle	.153	.214	1.303	.193
Executive title				2	
	CEO	-1.070	1.169	-.406	.760
	VP	.644	1.200	1.889	.058
Ownership		.736	1.011	.728	.467
School ranking		-.415	.809	-.513	.608
Constant		1.021	1.456	.702	.483

Table 1: Summary of logistic regression analysis examining specific aspects of companies in the sample.

for academic specialization and executive position (see Figure 1).

Figure 1 shows relations between academic area of specialization and executive position. Coordinates representing former professors with general backgrounds in business administration plot closest to the point representing CEO, whereas points representing more specialized areas are more proximal to the point indicating VP, indicating correspondence based on competence breadth, and consistent with study expectations.

Although intellectual prowess is thought to occupy a narrow sort of expertise, it is arguable that a business school professor could manage a functional business area well because its specialization reflects that of his or her academic area. In fact, the areas of executive management in organizations reflect the departments in business schools and the editorial boards of academic journals. Whereas professors lack the generalist orientation of a CEO, the logistic regression and correspondence analyses in our study both supported the notion that VPs

and professors are similarly specialized. It is worth noting that in practice, VPs frequently guide and counsel CEOs. They serve as sounding boards, give focused insights, and help CEOs make better management decisions. Indeed, not only did companies with professors as VPs perform the best in our sample, but professors also tended toward VP positions in the correspondence analysis. This result is particularly strong as such an effect is generally difficult to discern statistically. We believe dimensional correspondence between academic expertise and VP position requirements helps account for this finding and holds promise for future research on the importance of business academia to practice.

Implications for Doctoral Education

How could those former professors become good managers? We believe the fundamental reason is that their knowledge can help them resolve complex and uncertain business issues when common sense is unreliable. It has been noted explicitly that no amount of experience

will ever prepare a rising manager for all of the challenges he or she will face as an executive. The business world is wrought with uncertainties and requires personal interpretations that can, and often do, lead to colossal mistakes. Theory or knowledge enables one to parse cause and effect from intricate arrays of information. When a theory is germane to the phenomenon in question, it is instrumental for sorting out the causal linkages.

In addition to carrying out extensive statistical analysis, we solicited the views of executives in the sample about the study's findings, and several of their comments suggest that their mastery of a corpus of knowledge and their ability to create new knowledge helped them in the real business world. One participant said: "The year in academia exposed me to different ways of thinking about business problems; especially I have the capability of research when I face a complex problem." The scientific method, academia's basic paradigm for developing theory or knowledge, is emphatically more than experiments and trials and er-

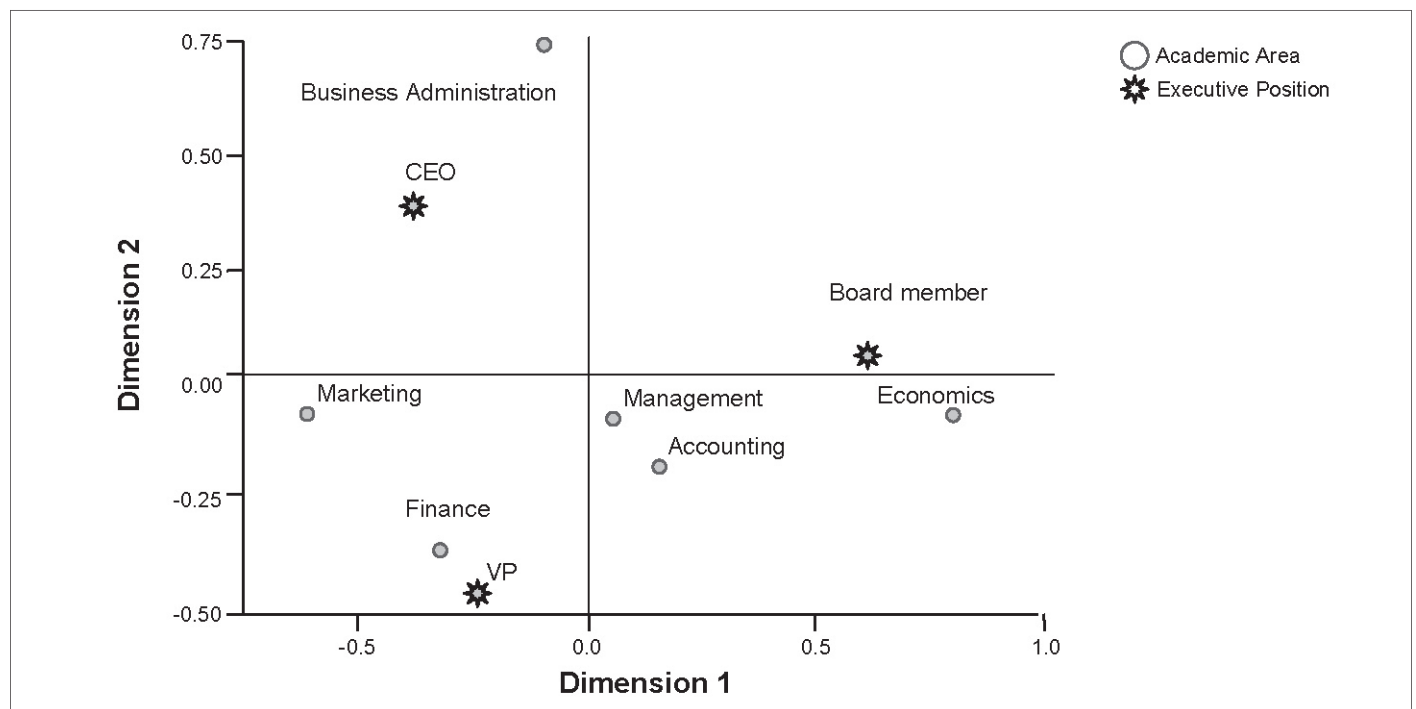


Figure 1: Correspondence analysis to help assess expectations for academic specialization and executive position.

rors. In addition, existing literature thus enables those former professors to work in a way that is exceptionally smart.

The above arguments reflect that there is nothing wrong in pursuing academic rigorousness in our doctoral education. By focusing on academic rigorousness, our doctoral programs certify that the recipient has not only mastered a body of knowledge (usually demonstrated by the passing of qualifying examinations), but that he or she has also contributed to that body of knowledge (usually demonstrated by the writing of a dissertation). Of course, academic rigorousness may turn to focus very narrowly. Someone might question that since a manager should span a broad scope of a company's operation, how could a narrowly focused professor coach tomorrow's managers? Nevertheless, the neglected fact is that our MBA students are taught by different professors from different disciplines rather than one. If we treat an MBA student as a CEO and his/her professors as VPs, then we would see a typical management scenario in reality: whereas specialized expertise may run the risk of neglecting certain organizational areas as a CEO, where breadth is important, the depth of such expertise may lead to exceptionally effective management decisions as a VP in the appropriate functional area. Poor dimensional fit between executive position and expertise based on depth and area can result in poorer performance for a whole company.

In our follow-up interviews, some executives also believed that "apart from

expertise in a content area, business-school professors seem to have a unique sort of communication competence." As one of the participants, a female vice president of finance at a middle-sized company, said: "It's challenging to be a business school professor. I was nervous when I started teaching because when I was younger I was introverted. So I prepared a lot for my classes When I became a manager in the finance organization I had already learned how to effectively communicate finance and accounting concepts in understandable ways in MBA classrooms. So I was a natural at making presentations to large groups and communicating with clients, the executive team, employees, and staff. It's not just finance expertise from my academic experience that made me an executive. It's communication skill—the ability to make complex concepts understandable."

While there has been a great deal of misguided rhetoric on the tensions between research and teaching, through which PhD students quickly learn that one does not get tenure by teaching well, the above interview results confirm that preparation for teaching should be an essential part of the doctoral experience. If business schools are truly committed to offering professional education of excellence, our preparation of management educators ought to reflect that commitment more fully and in ways that train our doctoral students to impart their knowledge base to tomorrow's managers in our MBA classroom. ■

13th Annual Asian-Pacific Decision Sciences Conference Brisbane, Australia July 2-5, 2008

Are you looking for an opportunity to attend a meeting with other experts in decision sciences? The 13th Annual Asian-Pacific Decision Sciences Conference is being held in sunny Brisbane, Queensland from the 2nd to the 5th July 2008. Papers on decision making are being presented in a variety of disciplines. (Submission deadline was March 31, 2008.)

Full conference registrants will be provided dinner and entertainment at the Australian Outback Spectacular and a trip to the Lone Pine Koala Sanctuary.

On the Saturday after the conference, a trip to the Sunshine Coast is planned. On this trip delegates have the option of a free tour of the Sunshine Coast including a visit to the University of the Sunshine Coast (a major sponsor of the conference) or being dropped off to spend some time at Steve Irwin's Australia Zoo (cost \$49 per person) or the local Ginger Beer factory (cost \$10.95 per person for the tour).

As well as the refereed conference proceedings, relevant papers from the conference will be considered for further publication in highly ranked international journals including the *Australasian Journal of Information Systems*, the *Journal of Electronic Commerce* and the *Artificial Intelligence Review*. Other refereed journal outlets are also possible in various specialised areas. In addition, papers submitted in the area of digital security will be considered for a book chapter scheduled for publication with IGI Global. To learn more about the conference or to submit a paper or book chapter visit:

<http://www.cit.gu.edu.au/conferences/apdsi08/index.html>

ANNOUNCEMENTS, from page 26

Human Resource Management seeks papers for a special issue on "Human Resource Management and Supply Chain Management." Examples of topics include cross-cultural management challenges in the supply chain and the management of co-located employees. Guest editors are Mary Graham, Clarkson University (graham@clarkson.edu); Sandra Fisher, Clarkson University

(sfisher@clarkson.edu); Stephan Vachon, HEC Montreal (stephane.vachon@hec.ca), and Ann Vereecke, Leuven Gent Management School and Ghent University (ann.vereecke@vlerick.be). Submission deadline is **November 30, 2008**.

http://www.hec.ca/gop/Call_for_papers_Human_Resource_Management.pdf