The Current State of Accounting Ph.D. Programs in the United States

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ABSTRACT: The primary purpose of this study is to provide evidence about current practices in accounting Ph.D. programs in the United States. Plumlee et al. (2006) investigated the shortage of Ph.D. qualified accounting faculty and made recommendations toward addressing this shortage. We assess the extent to which these recommendations have been followed and areas where additional progress might be needed. We gather data from Ph.D. program websites, a survey of doctoral students in accounting Ph.D. programs in the United States, and interviews with Ph.D. program coordinators. Key findings, following Plumlee et al. (2006) indicate: (1) on average, university Ph.D. program websites do not provide all of the specific information about admission and program requirements that would be useful for potential students; (2) increases in the level of financial support for Ph.D. students; (3) considerable variability with respect to reduction in costs to Ph.D. students; (4) Ph.D. programs may reduce the number of students accepted in response to constrained resources; and (5) increases in students pursuing audit and tax specialties that are attributable, at least in part, to the Accounting Doctoral Scholars program. Based on our data, we also identify a number of additional findings, and then discuss the larger context within which this complex problem (the supply of Ph.D. students) is situated. Our findings and discussion should be of interest to potential Ph.D. candidates, Ph.D. program directors/ advisors, business school deans, and accounting department chairs, as well as the larger accounting-professional community.

Keywords: accounting Ph.D. programs; accounting Ph.D. students; Ph.D. program directors.

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INTRODUCTION

In recent years, a severe shortage of accounting professors holding doctoral degrees has been documented (Beyer et al. 2010; Fogarty and Markarian 2007; Demski and Zimmerman 2000).¹ This shortage has several important implications for accounting education. Foremost, academically qualified accounting faculties are instrumental in the education of future accounting professionals. While many talented professionally qualified educators provide valuable classroom instruction, accreditation boards such as the Association to Advance Collegiate Schools of Business (AACSB) require certain percentages of academically qualified faculty. Thus, the shortage of academically qualified faculty may threaten some schools' ability to maintain accreditation standards. Further, academically qualified faculties at doctoral granting institutions are responsible for the education of future Ph.D. qualified accounting faculty. In addition, academically qualified faculties are instrumental in advancing accounting research and in providing other valuable service to the profession.

In April 2004, the American Accounting Association (AAA) appointed an *ad hoc* Committee (hereafter, the Committee) to investigate the shortage of new Ph.D. qualified accounting faculty.² The Committee surveyed accounting department chairs and Ph.D. program directors regarding the expected supply and demand for accounting faculty holding doctoral degrees. Results from these surveys indicated that there was an overall shortage of new accounting faculty and deficiencies in audit and tax specialties were especially acute. In response to these findings, the Committee made the following recommendations: (1) more academic career information should be made available to potential doctoral students, (2) doctoral student financial support should be increased, (3) costs for doctoral students should be reduced, (4) the costs of providing doctoral programs should be reduced, and (5) programs should find creative ways to diversify training across teaching specialties.

The Committee's first recommendation was that more *information* about doctoral programs should be made available to potential doctoral students and their advisors. However, very few studies provide information regarding the various aspects of doctoral programs. As a result, information for potential doctoral students in accounting must be obtained by searching through a wide variety of resources (Beyer et al. 2010), and such a fragmented search might not lead to a well-informed decision. The statistics seem to bear this out. For example, a prior study indicates that accounting doctoral program attrition rates can be as high as 33 percent at some institutions (Behn et al. 2008).

Pursuing a doctorate in accounting requires a significant time commitment (Chewing and DeBerg 1991; Beard and Elfrink 1990) as well as substantial opportunity costs (Carcello et al. 1994). Accordingly, potential doctoral students need to carefully evaluate the doctoral programs to which they apply (Stammerjohan and Hall 2002). For example, it is helpful to know the history of placements of prior graduates, length of the program, successful completion rates, teaching loads, and funding opportunities.

Recommendations from the Committee and other demands for more research on this topic of accounting faculty shortages (Fogarty and Markarian 2007) motivated the present study. We gather data from three sources: (1) Ph.D. program websites, (2) a survey of doctoral students in accounting Ph.D. programs in the United States, and (3) interviews with Ph.D. program coordinators. Our data yield valuable Ph.D. student demographic characteristics and backgrounds, the characteristics and requirements of accounting doctoral programs, as well as Ph.D. student teaching and research

² Plumlee et al. (2006).



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¹ Compounding this shortfall, recent evidence documents the fact that the majority of accounting faculty across the United States are nearing retirement age. Recently, the AICPA (2008) reported a mean accounting-faculty age of approximately 55 years.

interests. With these data, we update prior literature on accounting Ph.D. programs and provide information on program characteristics not described by the prior literature. Thus, we provide a more comprehensive picture of the features of accounting doctoral programs in the United States than is currently available from any other single source. In particular, we respond to the first recommendation from the Committee to provide increased information for potential doctoral students. In addition, we discuss progress being made toward each of the Committee's recommendations. Where possible, we compare results from the data we collected to results presented in prior research. Such comparisons are primarily made to assess trends and changes related to Recommendations 2 and 5. Where prior research is not available as a baseline, we provide information related to the current state of the factors of importance identified by the Committee.

Our findings indicate several areas where changes have occurred. For example, websites and survey respondents indicate an average of ten students per program, which is an increase from the average of eight students per program reported by Behn et al. (2008). In addition, websites and survey respondents indicate that mean Ph.D. student stipends exceed \$20,000, which is a significant increase over the mean stipend of \$16,000 reported by the Committee based on the 2005 survey (Plumlee et al. 2006). Further, survey respondents and Ph.D. coordinators indicate that it has become common practice for Ph.D. programs to provide research-related travel support for students. We also find evidence indicating that the number of students pursuing audit and tax specialties has increased. Specifically, 26 and 11 percent of our respondents indicate an interest in audit and tax research, respectively. This is a substantial increase from the results of the 2007 survey reported by Behn et al. (2008), which indicated that 12 and 9 percent of students were interested in audit and tax research, respectively. However, we also find that there are several areas where practices across doctoral programs vary widely and improvement could be made. For example, the information about Ph.D. programs on university websites, on average, lacks much of the specific information that prospective students might find useful when evaluating Ph.D. programs. Further, there is significant variation in doctoral student teaching responsibilities with some programs giving students large teaching loads and multiple preparations. Specifically, survey respondents indicate teaching a mean of 4.69 courses over the course of their programs, and individual responses range from 0 to 28 courses. In addition, the average number of course preparations is 2.08 with a range of 0 to 8 preparations.

Interviews with Ph.D. program coordinators indicate a desire for additional information so that they can benchmark best practices. These coordinators indicate that recent changes in Ph.D. programs are not driven by the shortage of academically qualified faculty. Rather, such changes are motivated by a trade-off between constrained resources and the desire to admit high-quality students.

Our findings are useful for several reasons. First, we assess the progress being made toward addressing the recommendations made by the Committee. We identify current trends and changes occurring in accounting Ph.D. programs in the United States and identify areas where improvement is still needed if we are to address the shortage of Ph.D. graduates. Second, the data presented in this study will enable potential doctoral students to have more realistic and informed expectations regarding Ph.D. programs and the requirements of these programs. Third, the information presented in this study is a valuable resource for Ph.D. program coordinators and advisors, as well as deans and department chairs who must deal with funding issues and accreditation requirements in the future.

METHODOLOGY

We gather data from three sources. First, we perform an analysis of the websites of doctoral granting accounting programs to gather data on program requirements and the ease of accessing this





information from these websites. Second, we survey current doctoral students to obtain information about their demographic characteristics, doctoral program characteristics, and their interests and expectations regarding their research, teaching, and future careers. Third, we interview a sample of Ph.D. program coordinators to obtain information on trends and challenges in accounting Ph.D. programs. Table 1 lists the Ph.D. programs whose websites are included in our analyses and the number of survey respondents from each university.

Websites

The 2011 *Hasselback Accounting Directory* identifies 88 universities in the United States with active accounting doctoral programs (Hasselback 2011).³ From the websites of these universities, we gather data on accounting Ph.D. program requirements and the ease of finding this information.

Interviews

We conducted structured phone interviews with a sample of 14 Ph.D. program coordinators. In selecting program coordinators to interview, we specifically requested interviews from several of the schools for which we had no student survey responses. We asked coordinators about the characteristics of their students and programs, and about changes or planned changes to the structures of their programs. A list of the interview questions appears in Appendix B.⁴

Survey

After developing an initial questionnaire for current doctoral students, we conducted a series of pilot tests. The survey items were adjusted for clarity and conciseness based on responses from those students who participated in the pilot tests. The final questionnaire consisted of 50 questions (see Appendix B).⁵ The survey was administered in 2011 using an online survey service provider that allows researchers to create questions in various forms. Participants took 15 minutes on average to complete the survey.

Email addresses of current accounting doctoral students were hand collected from the websites of 88 universities with active accounting Ph.D. programs in the United States. These individuals were contacted by email and directed to the survey site. If the Ph.D. program listed student names but not email addresses, we tried to determine the most likely email address based upon the address protocol used for faculty email addresses.

Approximately one week after the initial contact, follow-up requests were sent to participants. About two weeks after follow-up requests had been sent, universities for which there were no responses were identified. For schools where email addresses were unavailable, undeliverable, or for which we had no responses, we next contacted the accounting department chair and/or Ph.D. program advisor and requested that the link to our survey be distributed to all current Ph.D. students. This three-tiered approach increased the likelihood that all Ph.D. students had the ability to respond to our survey.

In Table 2, we summarize the responses gathered from doctoral students. In total, 260 responses were received from the 441 accounting Ph.D. students contacted, resulting in a 58.96 percent response rate. One or more responses were obtained from students at 67 of the 88 active

⁵ The Institutional Review Board (IRB) at the authors' university granted approval for this study.



³ We do not include Executive Ph.D. programs or for-profit Ph.D. programs in our analyses.

⁴ No inconsistencies were observed in responses for schools with both Ph.D. coordinators interviews and student survey respondents.

		Ph.D. Programs and Nu	mber	Ph.D. Programs and Number of Student Survey Responses	es		
Institution	# I	Institution	# I	Institution	# I	Institution	#
Alabama, The Univ. of	0	Florida State Univ.	4	North Texas, Univ. of	ю	Stanford Univ.	1
Arizona State	0	Florida, Univ. of	4	Northwestern Univ.	0	SUNY, Binghamton	0
Arizona, The Univ. of	4	George Washington Univ., The	0	Ohio State Univ., The	б	SUNY, Univ. at Buffalo	0
Arkansas, Univ. of	0	Georgia Institute of Technology	б	Oklahoma State Univ.	6	Syracuse Univ.	б
Baruch College-CUNY	6	Georgia State Univ.	С	Oklahoma, The Univ. of	0	Temple Univ.	8
Bentley Univ.	6	Georgia, The Univ. of	٢	Oregon, Univ. of	0	Tennessee, The Univ. of	0
Boston Univ.	0	Harvard Univ.	0	Pennsylvania State Univ.	З	Texas A&M Univ.	8
California, Univ. of, Berkeley	0	Hawaii, Univ. of, Manoa	С	Minnesota, Univ. of	4	Texas Tech Univ.	5
California, Univ. of, Irvine	0	Houston, Univ. of	С	Mississippi State Univ.	8	Texas, The Univ. of, Arlington	9
California, Univ. of, L.A.	0	Illinois, Univ. of	9	Mississippi, The Univ. of	8	Texas, The Univ. of, Austin	б
Carnegie Mellon Univ.	1	Indiana Univ.	С	Missouri, Univ. of	9	Texas, The Univ. of, Dallas	1
Central Florida, Univ. of	5	Iowa, Univ. of	С	Nebraska, Univ. of	4	Texas, Univ. of, San Antonio	5
Chicago, The Univ. of	5	Kansas, The Univ. of	0	New York Univ.	0	Utah, The Univ. of	0
Cincinnati, Univ. of	0	Kent State Univ.	ю	North Carolina, The Univ. of	0	Virginia Commonwealth Univ.	5
Colorado, Univ. of, Boulder	0	Kentucky, Univ. of	2	Pennsylvania, Univ. of	З	Virginia Tech	5
Columbia Univ.	4	Louisiana State Univ.	4	Pittsburgh, Univ. of	1	Washington State Univ.	0
Connecticut, Univ. of	0	Louisiana Tech Univ.	0	Purdue Univ.	Э	Washington Univ., St. Louis	1
Cornell Univ.	0	Maryland, Univ. of	0	Rochester, Univ. of	0	Washington, Univ. of, Seattle	0
Drexel Univ.	0	Massachusetts Inst. of Tech.	0	Rutgers Univ.	9	Wisconsin, Univ. of	0
Duke Univ.	0	Massachusetts, Univ. of	0	South Carolina, Univ. of	S		
Emory Univ.	4	Memphis, Univ. of	S	South Florida, Univ. of	4	Total Institutions	88
Florida Atlantic Univ.	-	Michigan State Univ.	9	Southern California, Univ. of	S	Total Survey Responses	260
Florida International Univ.	0	Michigan, Univ. of	0	Southern Illinois Univ.	0		
Data were aathered from the wehsi	tes of t	Data were outhered from the websites of the 88 Ph.D. proorgans listed above. In addition surveys were sent to the students from each of these universities. The number of students	ldition	surveys were cent to the students from	m each	of these universities The number of str	Idents

Data were gathered from the websites of the 88 Ph.D. programs listed above. In addition, surveys were sent to the students from each of these universities. The number of students responding to the survey from each university is indicated.

American Accounting Association

TABLE 1

88

60

7

67

76.14%

TABLE 2

Response Rates

Panel A: Ph.D. Student Response Rate

Denominator:	
Total email addresses	484
Less: Unusable email addresses	39
Subtotal	445
Less: Nonaccounting Ph.D.	4
Total viable emails	441
Numerator:	
Student responses from original population	238
Student responses resulting from chair/advisor email	22
Total usable responses	260
Ph.D. Student Response Rate	58.96%
Panel B: Ph.D. Program Response Rate	
Denominator:	
Ph.D. programs	91
Less: Inactive or no current students	3

doctoral programs in the United States. Thus, 76.14 percent of the active doctoral programs in the United States are represented in our sample. These response rates compare favorably with the response rates obtained by the 2005 AAA survey which reported response rates of 28.9 percent, 59.0 percent, and 42.3 percent from accounting program leaders, doctoral program directors, and the doctoral students, respectively (Plumlee et al. 2006). No significant response bias was detected in our tests.

RESULTS

Using the data gathered from these three sources, we provide an update to the literature on the current state of Ph.D. programs. First, we present characteristics of current accounting doctoral students and Ph.D. programs. We then discuss the progress that is being made to address each of the following five recommendations made by the Committee: (1) increase information available to potential students, (2) increase financial support for Ph.D. students, (3) reduce costs to Ph.D. students, (4) reduce costs to Ph.D. programs, and (5) diversify training across teaching specialties.



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Total programs Numerator:

Ph.D. programs from initial email

Programs with 1 or more responses

Ph.D. Program Response Rate

Student(s) responding from email to chair

923

TABLE 3

Characteristics of Accounting Doctoral Students

Panel A: Survey Data on Student Characteristics (n = 260)

Variable	Frequency
Gender (Male)	56.10%
Marital status (Single)	58.50%
Children at home	33.60%
International student	27.80%
Master's degree	93.10%
M.Acc., M.P.A., M.S.A., or M. Tax	49.60%
M.B.A.	20.40%
Professional certification	62.30%
CPA	50.00%
Prior teaching experience	43.80%

Panel B: Website and Survey Data on GMAT Scores

	Average Student GMAT Website Information (n = 57)	GMAT Scores Survey Responses (n = 260)
Range	600–762	530-790
Mean	678	692.85
Median	695	700
Mode	700	710

Characteristics of Doctoral Students

Table 3 summarizes the data from the student survey and the websites pertaining to characteristics of current doctoral students. Survey respondents include students in all stages of their programs (mean 2.77 years completed, range of 1 to 8 years). Of our respondents, 56.1 percent are male, 58.5 percent are single, and 33.6 percent have children at home. International students constitute 27.8 percent of our respondents. Ph.D. program coordinators estimated that Ph.D. students are about 30 years of age on average.

Educational History, Professional Certifications, and Work Experience

Characteristics that may influence admission decisions of applicants to Ph.D. programs include prior degrees, professional certifications, and work experience. Forty percent of schools responding to the AAA/FSA/APLG survey in 2007 prefer applicants with a master's degree (Behn et al. 2008). This preference is reflected in our survey responses (93.1 percent hold a master's degree). However, only 49.6 percent of those individuals have a master's degree in an accounting area (i.e., Master of Accountancy, Master of Public Accounting, Master of Science in Accounting, or Master of Taxation). Sixty-two percent of respondents hold a professional certification and 130 (50 percent) have the CPA designation.

Respondents report work experience by category, with the following untabulated results: 28 percent have no work experience; 43 percent report 1 to 5 years experience; 19 percent have 5 to 10 years experience; 5 percent have 10 to 15 years of work experience; and another 5 percent report more than 15 years experience. Thus, over 71 percent of the Ph.D. students responding to this



survey have 5 or fewer years of work experience prior to entering their Ph.D. program. Overall, 43.8 percent of respondents indicate they had teaching experience prior to entering the Ph.D. program. One of the primary changes noted in the Ph.D. coordinator interviews was an increased emphasis on work experience as an admission criterion.

GMAT Scores

GMAT scores heavily influence Ph.D. program admission offers. When asked about changes in admission criteria, nearly all of the Ph.D. coordinators interviewed indicated that the GMAT score necessary for admission has increased in the past five years. Panel B of Table 3 provides information about GMAT scores reported on websites and by survey respondents. Of the 88 websites, 57 provide information about the average GMAT scores of Ph.D. students. Across these institutions the mean reported average GMAT is 678 (range of 600 to 762), the median is 695, and the modal reported score is 700. The GMAT scores reported by survey respondents range from 530 to 790, with a mean of 692.85 (standard deviation of 50.005), a median of 700, and a modal response of 710.

Ph.D. Program Characteristics and Requirements

Program Admission, Duration, and Completion Rates

Program admission and completion rates have been a concern in recent years due to the shortage of individuals graduating with doctoral degrees in accounting (Beyer et al. 2010; Plumlee et al. 2006). Table 4 presents website and survey data on the admission, duration, and completion rates currently experienced by students in accounting Ph.D. programs. Eighty-five percent of programs represented in our survey admit Ph.D. students annually, while the remaining 15 percent admit bi-annually. Only four Ph.D. program websites specifically mention that part-time students are admitted.

The 63 websites that provide information about the number of students enrolled in their program indicate a mean of 9.62 Ph.D. students with a range of 1 to 30 students. The websites almost uniformly state that the expected program length is 4 to 5 years. If so, this would indicate that roughly 2 to 3 students are admitted each year. We supplement these statistics with the student survey data. Overall, survey respondents indicate that 2.81 students are admitted on average for each Ph.D. class and there are 10 students on average in various stages of completion in their accounting programs. On average, survey respondents indicate that 82.18 percent of students are able to complete the program (range of 35 to 100 percent, standard deviation of 15.09), and programs are expected to last approximately 4.69 years (range of 3.5 to 6 years, standard deviation of 0.524). Both the website and the survey data indicate an increase in Ph.D. program size when compared to the results reported by Behn et al. (2008) who report an average of 8 students per program in all stages of completion in 2007.

In the next sections, we discuss the progress being made to address each of the five recommendations made by the Committee.

Recommendation 1: Increase Information to Potential Students

The first recommendation by the Committee is that there should be an increase in the information available to potential students. In response, the American Accounting Association, the Federation of Schools of Accountancy, and the Accounting Programs Leadership Group (AAA/FSA/APLG) appointed a study group with the objective of gathering and disseminating information to potential students and their advisors (Behn et al. 2008). This study group surveyed Ph.D. program coordinators in 2007 in an effort to capture information that would be useful to future



TABLE 4

Program Admission, Duration, Completion, and Financial Support

Panel A: Website Data

Variable	n ^a	Mean	S.D.	Median	Mode	Range
Part-time students admitted	4					
4-5 Year program length	72					
Tuition waiver available	66					
Information about additional funding	42					
Total students in program	63	9.62	5.58	9	9	1 to 30
Cash stipend per school	34	\$23,431	\$8,431	\$21,750	\$25,000	\$12,000-\$65,000

Panel B: Survey Reponses Grouped by School $(n = 67)^{b}$

Variable	Percent	Mean	S.D.	Median	Mode	Range
Annual student admission	85					
Biannual student admission	15					
Students admitted per class		2.81	1.07	2.55	2	1 to 8
Total students in program		10	4.78	9.5	9	3 to 34
Completion rate		82.20%	15.10%	87.30%	90%	35% to 100%
Expected years in program		4.69	0.524	4.75	5	3.5 to 6
Cash stipend		\$20,517	\$6,031	\$20,000	\$20,000	\$7,000 to \$50,500
Other assistance		\$7,944	\$10,136	\$6,000	\$0	\$0 to \$60,000

^a For the website data, n represents the number of websites that provided data on this topic of the 88 total websites for Ph.D.-granting programs in the United States.

^b Survey respondent data are grouped by school. One average response for each school was entered for the 67 schools with student respondents.

applicants to Ph.D. programs. Those authors report the results of that survey and provide descriptive information about features of doctoral programs in the U.S. including enrollment, planned admissions, desired applicant characteristics, funding, teaching requirements, and program research focus. The authors stated an intention to update the survey annually. However, to the best of our knowledge, only data from the 2007 survey were collected and made available to the public.

Informative Websites

As part of the recommendation to increase the information available to potential students, the Committee suggested that the AAA create a website to provide information for potential doctoral students. While the AAA website currently includes some informative links for future and current doctoral students (e.g., a list of links to doctoral granting universities, links to information about the Accounting Doctoral Scholars program), it does not maintain a dedicated website for potential doctoral students. However, such a website is maintained by Brigham Young University (www.byuaccounting.net). This website fulfills many of the suggestions made by the Committee. Specifically, it provides information about preparing for a doctoral program, the Ph.D. application process, life as a doctoral student, and life as a professor. One potential caveat is that this website is relatively new and the extent to which prospective doctoral students (particularly those outside of BYU) are aware of this resource is unknown. The Committee suggested that in addition to creating an informative website, the AAA should make an effort to share the website with outlets such as **public accounting firms, Beta Alpha Psi** chapters, accounting master's programs, and college





placement offices. A similar form of marketing would be beneficial to ensure that prospective students are aware of the BYU website.

Individual universities' websites could also be a valuable source of information for potential students. As pursuing a doctorate requires significant time commitment and opportunity costs, detailed information about the program's history of placements of prior graduates, program length, successful completion rates, and funding opportunities would help potential applicants weigh the costs and benefits of pursuing a doctoral degree at that university. In our analysis of the 88 websites for accounting doctoral programs in the United States, we note that the information provided varies greatly between universities. On average, program websites do not include many of the specific details that a potential student may find useful in evaluating programs. In addition, the clarity and ease of navigation on many websites could be improved. For example, the application process often involves several steps and these steps vary across universities. Thus, clear, easy-to-locate information about the application process would be a valuable feature on each program website. In addition, potential students would benefit from a clear presentation of specific program requirements including required course work, prerequisites, teaching responsibilities, and expectations for doctoral student research. Clear presentation of these specific program requirements would assist potential applicants to assess their preparedness for the program, and would help them have more realistic expectations of the effort necessary to complete the program successfully.

Recommendation 2: Increase Financial Support for Ph.D. Students

The second recommendation of the Committee is to increase the financial support available to Ph.D. students. Such financial support may come in the form of stipends, tuition waivers, fellowships, and through health and insurance benefits. The degree of financial support can impact the duration of a doctoral student's degree program and the ability to successfully complete the program (Carcello et al. 2009; Ehrenberg and Mavros 1992). In response to questions regarding the changes to Ph.D. programs over the past five years, several of the Ph.D. coordinators report increased financial support for students through increased stipends and tuition waivers.

Website and survey data regarding the level of financial support are reported in Table 4. Only limited information about the financial support for programs is available through their websites. While 66 of the 88 websites indicate that a tuition waiver is available, only 34 websites provide specific stipend information, and only 42 provide additional information about other sources of funding (e.g., links to or information about internal or external fellowships or grants). The websites reporting stipend information indicate a mean stipend of \$23,431 (range of \$12,000 to \$65,000, standard deviation of \$8,431).

The data from the student surveys supplement the website data. Survey data are analyzed on a per school basis.⁶ The survey results indicate a mean stipend of \$20,517 (range of \$7,000 to \$50,500) per program with additional financial assistance of \$7,944 on average (range of \$0 to \$60,000) per program.⁷ Thus, the survey respondents report a somewhat lower mean stipend than the websites providing this information, and the ranges reported by the survey respondents are more extreme. This is most likely due to the fact that only 34 websites provide stipend information while the survey responses come from 67 universities.

⁷ Additional financial assistance includes student loans, grants, fellowships, scholarships, residencies, and any other funding opportunities separate from the stipend.



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⁶ In other words, for programs with multiple survey respondents, an average was obtained for the program. Thus, the results presented include only one overall observation for each of the 67 schools represented by our survey respondents. In this manner, the averages presented are not biased by schools for which we had multiple respondents.

Taken together, survey respondents and the websites provide information indicating increases in Ph.D. student stipends and other forms of financial support when compared to prior literature. The 2005 AAA survey respondents (Plumlee et al. 2006) indicated that the average nine-month assistantship for doctoral students was just over \$16,000 (\$8,000 to \$25,000 range with a median of \$15,000). In 2007, the AAA/FSA/APLG survey found that 80 percent of programs indicated that they waived tuition for Ph.D. students and pay cash stipends (Behn et al. 2008). Programs reported stipend by funding level including: 13 percent below \$15,000; 34 percent between \$15,000 and \$19,999; 26 percent between \$20,000 and \$24,999; 15 percent \$25,000 and above. Slightly lower stipends were reported in the Deloitte (2007) survey of Doctoral Consortium attendees: 27.8 percent below \$15,000; 39.8 percent in the \$15,001 to \$20,000 range; 15.7 percent in the \$20,001 to \$25,000 range; 10.2 percent in the \$25,001 and above range. Of these respondents, 83.7 percent indicated that they receive a tuition waiver. In comparison to these prior surveys, the mean stipends reported on websites and by our respondents indicate an increase in financial support.

While the increase in average stipend is encouraging, the results also reveal that there are a wide range of support packages offered to accounting Ph.D. students. Further increases may still be necessary to attract the most qualified Ph.D. students. As Carcello et al. (2009) note, many prospective students simply cannot get past the notion of experiencing four to six years of \$20,000 annual compensation.

Recommendation 3: Reduce the Costs to Ph.D. Students

The Committee's third recommendation is to reduce the costs to Ph.D. students so that it is feasible for more individuals to enter Ph.D. programs. One potential way costs could be reduced is to make efficient use of time so that program lengths are shortened. For example, programs can consider streamlining course loads to ensure that students are adequately prepared and are not taking unnecessary courses. Programs can design teaching loads that are sufficient for training students without providing an impediment to finishing the program in an efficient manner. Master's-level Ph.D. tracks might prepare prospective students and also shorten the time spent in a Ph.D. program. The Committee also suggested that efforts could be made to reduce stress-related costs through the provision of peer support programs. Finally, they encouraged schools to provide travel-related support to allow students to network and better understand the academic environment. Related to these suggestions, we gather data on current Ph.D. program practices regarding coursework, teaching requirements, and travel support.

Ph.D. Program Paper, Comprehensive Examinations, and Coursework Requirements

Table 5 presents data on current requirements for paper, comprehensive examinations, and coursework requirements. Panel A presents data from Ph.D. program websites. Forty-nine websites specifically mention a summer or second-year paper requirement. While 68 programs indicate that comprehensive examinations are required, only 17 indicate a requirement for support area comprehensive examinations. Fifty-eight websites provide information about required accounting seminars. The mean and modal number of required accounting seminars is 3.55 and 4, respectively (range of 1 to 7 seminars, standard deviation of 1.2). However, the level of detail reported on the websites for required coursework varies. Very few schools report information that would permit a prospective Ph.D. student to evaluate the types of courses they would be required to take. Ph.D. program websites may wish to consider providing a list of the required coursework with brief descriptions of the content of each course. In addition, if websites were to provide a list of suggested prerequisites, it would enable prospective students to evaluate whether they need to take such courses in order to better prepare themselves for the Ph.D. program.





TABLE 5

Ph.D. Program Coursework, Paper, and Examination Requirements

Panel A: Website Data

Variable	n ^a	Required	Mean	S.D.	Median	Mode	Range
Summer/second-year paper required	49	49					
Comprehensive exams required	69	68					
Support area comps required	17	17					
Required accounting seminars	58		3.55	1.2	4	4	1 to 7

Panel B: Survey Reponses Grouped by School $(n = 67)^{b}$

Variable	Required	Mean	S.D.	Median	Mode	Range
Summer/second-year paper required	83.6%					
Support area comps required	25.0%					
Required accounting seminars		4.37	1.21	4.25	4	1 to 8
Planned tool courses		5.98	2.05	5.5	5	3 to 15
Required tool courses		4.85	1.75	4.5	4	2 to 10

Panel C: Specific Seminar Requirements (n = 67)

AIS seminar	10%
Analytical seminar	58%
Auditing seminar	43%
Behavioral/JDM seminar	58%
Financial seminar	87%
International seminar	5%
Introductory seminar	25%
Managerial seminar	60%
Tax seminar	18%

^a For the website data, n represents the number of websites that provided data on this topic of the 88 total websites for Ph.D.-granting programs in the United States.

^b Survey respondent data are grouped by school. One average response for each school was entered for the 67 schools with student respondents.

We supplement the website data with information from our survey of doctoral students (Table 5, Panel B). These data are presented on a per-school basis (see footnote 6). We ask students about summer or second-year paper requirements and comprehensive examination requirements in their Ph.D. programs. A summer or second-year paper is a program requirement for 83.6 percent of our respondents. Only 25 percent of respondents indicate that they are required to take a comprehensive examination in their minor area, and only 2.3 percent are required to take a comprehensive examination in two minor areas. A decreased emphasis on minor area comprehensive examinations was also mentioned by all of the Ph.D. coordinators interviewed.

The number of required seminars reported by our respondents is similar to that observed from the websites. Ph.D. programs require 4.37 accounting seminars on average (range of 1 to 8 seminars, standard deviation 1.21). This is an increase over the required coursework reported by Kinney (2003) whose respondents reported taking an average of 3.7 Ph.D. seminars in accounting (range of 2 to 6 seminars, standard deviation of 0.9).



Skills in statistics and quantitative data analysis methods are essential for success in empirical research. Several of the Ph.D. coordinators interviewed indicate an increased emphasis on quantitative skills in both the admissions process and in coursework requirements. Given this importance, it is interesting that very little information is available on the types of statistical-tools courses required by doctoral programs either in prior literature or on course websites. In the survey, we ask students about the tools courses required by their doctoral programs and if they planned to take additional tools courses. When respondent data are analyzed by school, we find that Ph.D. programs require five tools courses on average (range of 2 to 10; standard deviation of 1.75). However, students plan to take an average of six statistical-tools courses during their program (range of 3 to 15; standard deviation of 2.05), indicating that heavy emphasis is placed on skills in statistics and quantitative data analysis methods in many accounting Ph.D. programs. Details about the specific types of required seminars are shown in Table 5.

Teaching Responsibilities

The Committee also suggested that programs design teaching loads so that students receive adequate training, but are not overburdened with teaching responsibilities to the extent that it prevents them from finishing their program in an efficient manner. The majority of universities (80 percent) responding to the AAA/FSA/APLG survey in 2007 required students to teach at least once during their Ph.D. program (Behn et al. 2008). However, few data are available in prior research regarding specific teaching requirements.

Table 6 presents data on teaching responsibilities from websites and from the student survey respondents. Thirty of 88 websites provide information about teaching responsibilities. However, this information often provides few details of what is included in these teaching responsibilities. For example, five websites indicate that teaching is required but provide no additional details on what those requirements are. Other descriptions include general statements such as "students teach at least two courses." Table 6, Panel A summarizes the specific requirements indicated by the 30 websites providing some information on teaching responsibilities.

To provide more detail on Ph.D. student teaching responsibilities, we ask survey respondents to indicate the number of courses and course preparations they expect to have responsibility for during their programs (see Table 6, Panel B). Results indicate that Ph.D. students teach a total of 4.69 courses (range of 0 to 28 courses; standard deviation of 5.03) and have 2.08 course preparations on average in their programs. The vast majority of Ph.D. students indicate that they expect to teach more than once during their Ph.D. program. Only 14 respondents indicate that they will teach only once during their Ph.D. program and 10 report that they will not be required to teach. Panel B of Table 6 also presents detailed data summarizing the reported annual teaching loads for each year of a student's program.

In the interviews, most Ph.D. coordinators indicate that changes are being made in Ph.D. student teaching requirements. Coordinators report a variety of teaching requirements, reflecting the variation in teaching responsibilities indicated by websites and survey responses. However, the majority of the coordinators specifically mention that efforts are being made to reduce doctoral student teaching loads as suggested by the Committee. Nevertheless, teaching responsibilities still vary greatly among Ph.D. programs and there appears to be little consensus in the number or types of courses assigned to doctoral students.



__a

TABLE 6

Doctoral Student Teaching Responsibilities

Panel A: Website Data on Teaching Requirements

	<u>II</u>
Websites providing information about teaching requirements	30
Specific Requirements	
Teaching not required	1
Teaching required/no detail provided	5
One course	10
Two or more courses	14

Panel B: Survey Respondent Data on Teaching Load (n = 260)

	Mean	S.D.	Median	Mode	Range	1st Year	2nd Year	3rd Year	4th Year	5th Year
Course preparations ^c	2.08	1.38	2	2	0 to 8					
Total courses taught	4.69	5.03	4	0	0 to 28					
Annual Teaching Load ^b										
None						36.9%	28.5%	16.2%	15.8%	16.9%
One course						11.5%	13.5%	21.9%	20.4%	7.7%
Two courses						11.5%	15.8%	24.6%	22.3%	14.2%
Three courses						1.5%	2.7%	4.2%	4.6%	3.1%
Four courses						5.8%	6.5%	6.9%	9.6%	5.8%
More than four courses						0.4%	0.8%	1.5%	0.8%	0.8%

^a For the website data, n represents the number of websites that provided data on this topic of the 88 total websites for Ph.D.-granting programs in the United States.

^b Survey participants were asked to indicate the number of courses they would teach each year of their doctoral program. The frequency of responses is displayed.

^c Survey participants were asked to indicate the number of different courses they would teach during their doctoral programs.

Research-Related Travel Funding and Facilitation of Research Portfolios

Table 7 presents survey data on Ph.D. student research support, dissertation requirements, and research projects. Almost 89 percent of respondents indicate that they receive funding to cover the cost of paper submissions and travel for research presentations. Of the 67 schools represented in our survey, 95.5 percent provide funding for paper submissions, and 91 percent provide funding for travel for research presentations. Thus, it appears that it has become common practice for schools to fund doctoral student paper submissions and research-related travel.

Although not specifically mentioned by the Committee, a related question is the extent to which programs are encouraging students to produce research while in their programs. Such requirements would help to ensure that students are entering the marketplace with a portfolio that makes them an attractive candidate. In order to increase the number of working papers doctoral students have in their research portfolios, some accounting doctoral programs have adopted a model requiring three separate publishable papers in lieu of a traditional dissertation (Beyer et al. 2010). While traditional dissertations are still the modal requirement in accounting **Ph.D. programs, our survey data indicate t**hat about a third of programs are allowing the use of



TABLE 7

Ph.D. Student Research Support, Dissertation Requirements, and Research Projects^a

Variable	n	%	Mean	S.D.	Median	Mode	Range
Survey Respondents $(n = 260)$							
Students receive funding for paper submissions and research-related travel	231	88.8					
Are expected to have a paper under review prior to graduation	159	61.2					
Schools $(n = 67)$							
Provide funding for paper submissions	64	95.5					
Provide funding for travel for research presentations	61	91.0					
Three-paper dissertation required	4	6.0					
Three-paper dissertation permitted	21	31.3					
Survey Respondents $(n = 260)$							
Current sole-authored projects			1.31	0.9	1	1	0 to 6
Current projects with another Ph.D. student			0.72	0.8	1	1	0 to 4
Current projects with faculty			1.79	1.4	1	1	0 to 12
Current projects with both			0.62	0.7	1	0	0 to 3
Total projects			3.17	2.0	3	3	0 to 12
^a Ph.D. student survey respondents indicated the number	of sole	e- and c	o-authore	d resea	rch projects		

a three-paper dissertation model. Specifically, 6 percent of programs require a three-paper model while 31.3 percent allow either a traditional or a three-paper model. Further evidence of an effort to increase doctoral student research portfolios is that 61.2 percent of our respondents indicate that having a paper submitted for review is expected prior to graduation from their program. Participants report an average of three on-going research projects. Table 7 presents more detail about the number of Ph.D. student research projects.

Recommendation 4: Reduce the Costs to Ph.D. Programs

The Committee's fourth recommendation is to find effective ways of lowering the costs of Ph.D. programs. One way this might be achieved is if universities in the same geographical region share doctoral seminars, or if schools specialize in the training they provide to Ph.D. students. Based on the interviews conducted with Ph.D. program advisors, it does not appear such practices are being implemented or even considered at many institutions.

Monetary costs are undeniably influencing the changes that Ph.D. programs are able to make. In our interviews with Ph.D. coordinators, we asked whether changes made in their programs were driven by concerns over the shortage of academically qualified faculty. The response was unanimously negative. Rather, coordinators indicate that most changes are motivated by reputational, quality concerns. Programs wish to admit students who are able to communicate clearly, complete the program in an efficient manner, conduct quality research, and are competitive in the job market. Due to constrained resources, coordinators are focusing on quality over quantity. For example, in order to offer more competitive stipends, one university decreased the number of students admitted yearly from three to two. In so doing, the program was able to increase the stipend available for the admitted students by 50 percent. In addition, all of the program coordinators





selective in their admission requirements. Higher standards for GMAT scores, communication skills, and significant, relevant work experience are being implemented at many universities. Thus, rather than increasing the number of students in programs, the focus is on admitting higher-quality students who Ph.D. coordinators believe will be able to complete the program successfully.

The only change related to the shortage of Ph.D. faculty mentioned by the Ph.D. coordinators is admission of additional students through the Accounting Doctoral Scholars (ADS) program. Motivated by the shortage of faculty in the areas of audit and tax, the ADS program was founded in 2008 to provide funding for a select number of individuals committed to teaching and research in the auditing and tax areas. Specifically, the ADS program provides a stipend of \$30,000 per year for up to four years of enrollment in a Ph.D. program. Monetary support for this program is provided by over 65 accounting firms and 48 state CPA societies. The ADS program will support its fourth and final class of scholars in the Fall of 2012 (ADS 2012). Several Ph.D. coordinators indicate that there is a need for more programs like ADS.

Recommendation 5: Diversify Training across Teaching Specialties

The final recommendation of the Committee is for Ph.D. programs to diversify training across teaching specialties. This recommendation was prompted by the shortages of Ph.D. students specializing in audit and tax. The Committee suggested that Ph.D. programs consider offering targeted audit and tax tracks, and that Master's schools consider developing doctoral programs that support audit and tax specialties.

Research Interests

In our survey, we ask current Ph.D. students about their research interests. Table 8 presents data on research areas and methods. Similar to prior studies, we find that the largest percent of respondents (45 percent) are interested in financial accounting research. However, this is a decrease from two earlier surveys which found that 52 and 61.7 percent of students, respectively, had an interest in financial research (Behn et al. 2008; Deloitte 2007). Twenty-six percent of our respondents report an interest in audit research. This is a significant increase from the 2007 surveys that found only 12 and 15.9 percent of students, respectively, had an interest in audit research (Behn et al. 2008; Deloitte 2007). This result is encouraging because there has been a shortage of new accounting faculty focused on audit research in recent years. Our data also indicate a slight increase in the percentage of students interested in managerial accounting (15 percent for our respondents compared to 9 percent in the 2007 survey) and tax (11 percent for our respondents compared to 9 percent in the 2007 survey). However, only 2 percent of our respondents indicate an interest in systems research, which is less than the 4 percent reported in the 2007 survey. Overall, our findings are encouraging based on an increase in the percentage of financial accounting.

One possible explanation for the observed increases in individuals pursuing auditing and tax research is the previously mentioned ADS program. In 2008, the ADS program started providing funding for Ph.D. students committed to teaching and research in auditing and tax. Of the 53 respondents who indicate that audit is their primary research interest, 33 (62.3 percent) are from one of the universities participating in the ADS program. Of the 23 who indicate an interest in tax, 19 (82.7 percent) are from one of the universities participating in the ADS program. While we do not know if these respondents are recipients of ADS fellowships, it does appear that the schools participating in the ADS program are providing the majority of the tax graduates and over half of the auditing graduates.



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TABLE 8

Student Research Areas

Panel A: Research Interests by Area

Area	Frequency (n = 260)
Financial	45%
Audit	26%
Managerial	15%
Tax	11%
Information Systems	2%
Undecided	1%

Panel B: Research Interests by Method

Method	Frequency (n = 260)
Archival	53%
Behavioral	16%
Experimental	12%
Analytical	4%
Math Modeling	1%
Undecided	14%

Panel C: Minor Support Areas

Minor Area	Frequency $(n = 260)$
Finance	16%
Economics	8%
Psychology	8%
Statistics	5%
Econometrics	2%
Management	2%
Information Systems	1%
None	58%

As for research methodologies, 53 percent of our respondents indicate an interest in archival research, 16 percent behavioral, 12 percent experimental, 4 percent analytical, and 1 percent in math modeling. These percentages are somewhat different from those reported by Deloitte's 2007 survey, which indicated that 64 percent of students were interested in archival research, 19 percent behavioral, 8 percent experimental, and 3 percent analytical.

The minor or support areas selected by doctoral students also provide information about their future research interests. We find that 16 percent of respondents have a minor in finance, 8 percent in economics, 8 percent in psychology, 5 percent in statistics, 2 percent in econometrics, 2 percent in management, and 1 percent in management information systems.





DISCUSSION

The primary purpose of this study was to provide evidence about current practices in accounting Ph.D. programs in the United States, based upon the recommendations cited in Plumlee et al. (2006). We collected data from Ph.D. program websites, a survey of doctoral students in accounting Ph.D. programs in the United States, and interviews with Ph.D. program coordinators. Based on our data, we presented a more comprehensive picture of the features of accounting doctoral programs in the United States than was available in the literature. Our findings highlight several areas where there has been progress toward addressing the recommendations made in Plumlee et al. (2006) and other areas where further progress could occur. Overall, the enrollment in Ph.D. programs has increased and so has student funding. Although average completion rates are high, average class sizes are small, and teaching requirements vary widely across Ph.D. programs. In addition, we note that many Ph.D. program websites do not provide many of the details about admission or program requirements, and expectations that would assist prospective students in their decision to apply to specific Ph.D. programs.

Interviews with Ph.D. program coordinators revealed that the majority of changes occurring in Ph.D. programs in recent years are not driven by the shortage of academically qualified faculty. Rather, changes in programs are driven by a desire for higher-quality students and higher-quality programs.

While we believe our findings will be helpful to potential Ph.D. candidates, Ph.D. program directors/advisors, business school deans, and accounting department chairs, as well as the larger accounting professional community, we would be remiss not to discuss the more complex structure of tensions that surround the topic of Ph.D. students and doctoral programs in the United States. We will attempt to describe these systemic pressures by group: students, faculty, and administrators (deans and department chairs).

Exactly which group of individuals do we hope to attract as students in our doctoral programs? Typically, traditional-age college students are weary of formal education and are eager to become full-time employees. Mid-career professionals view the opportunity cost of four to five years in a Ph.D. program as prohibitive due to the realities of marriage, family, mortgage, and college expenses. The veracity of the situation is that a targeted approach to recruitment is necessary. Early professionals and retired executives (e.g., public accounting partners, CFOs, controllers) should be the most fruitful group from which to obtain potential accounting Ph.D. students. For example, public accounting turnover rates have remained rather stable at 25 percent (Brundage and Koziel 2010). These individuals are from the millennial generation and, generally speaking, they value a flexible lifestyle that allows them to balance their job with family, friends, and leisure activities (Daniels et al. 2004; Howe and Strauss 2000). Accordingly, for these young professionals, targeted marketing could focus on the flexibility and autonomy they could enjoy as an accounting professor.

The Ph.D. Project, established by The KPMG Foundation in 1994, specifically targets young, minority business professionals to inform them of all aspects of accounting doctoral programs, and if they are accepted into the program, students receive a \$10,000 scholarship from The Foundation each year that they are in the doctoral program (up to five years). Another program, which we mentioned earlier in our paper, the Accounting Doctoral Scholars (ADS), was created in 2008 to target young professionals with at least three years of work experience in either audit or tax. Applicants who were accepted in ADS were required to commit to teach and research in audit or tax when they finished their doctoral program. In exchange, the sponsors would fund each student for four years at \$30,000 per year. Unfortunately, ADS is no longer accepting applicants past the fall of 2012.

Retired executives have typically experienced a demanding, relentless work schedule where they missed the opportunity to participate in the activities of their children as they grew up. Although there are



Issues in Accounting Education Volume 27, No. 4, 2012 no formal programs for retired partners to encourage them to move into academics, they have a wealth of knowledge and real-world examples to share with undergraduate students. Retired executives who are interested in giving back are usually not facing the same monetary concerns as young professionals.

The shortage of Ph.D. accounting students, viewed from the perspective of accounting faculty, represents a very different perspective. Tenure and tenure-track faculty already have a full measure of responsibilities for research, teaching, and service. Adding the additional responsibility of mentoring Ph.D. students (i.e., chairing dissertations and serving on dissertation committees) does not result in a "release" of any established responsibilities; it is simply an add-on responsibility. As an example, in the accounting department of the authors, Ph.D. students are admitted every other year and the norm is to admit five to six students, notwithstanding the fact that there are only four tenured faculties who have the research record to be eligible to carry this responsibility successfully. As a result, starting with the class of 2012, the faculty determined that no more than four Ph.D. students would be admitted per class in the future. As with the Ph.D. coordinators who were interviewed, we opted for fewer, higher-quality students in order to move to a higher-quality program.

Deans of business schools and accounting department chairs face an entirely different set of frictions. Clearly, public universities are receiving less state funding support than in the past, and Ph.D. programs are very expensive. Not only do Ph.D. students not pay tuition, universities are under escalating pressure to pay stipends that are competitive so that they can attract the better students (e.g., students with very high GMAT scores, appropriate work experience, and high-quality communications skills). Accounting chairs must also deal with the increasing salary demands of new accounting faculty, frequently offering as many nonmonetary benefits as possible to secure the person for a tenure-track position.

Administrators are also confronted with the difficulty of maintaining AACSB Accreditation, specifically the ratio of academically qualified (AQ) to professionally qualified (PQ) faculty. While there are no set standards, the minimum requirement is at least 50 percent of the accounting faculty in a department must be AQ. However, for doctoral-granting universities, the bar is expected to be much higher. In addition, AACSB expects at least 90 percent of all accounting faculty in a department to be qualified (combination of AQ and PQ faculty). The tension here is that most accounting-department chairs can easily find PQ faculty from the accounting-professional community near the university, but the AACSB requirements limit the chairs in the number of these faculty who can be hired. On the other hand, as noted earlier, AQ faculty (those with Ph.D.s who just graduated) are expensive and the supply is very limited. The compounding tension here is that the majority of AQ faculties in most accounting departments are retirement eligible.

As noted in a number of the studies we already cited, Ph.D. students are in short supply, costs of maintaining Ph.D. programs continue to increase, and there are no easy answers. However, with the joint interest and support of all stakeholders, we will continue to seek new and innovative ways to mitigate these problems so that we ensure the quantity and quality of accounting professors that are needed in the future.

As in all studies of this type, our study has limitations. For example, we collect data from only a small sample of Ph.D. program coordinators in order to supplement survey and website data. Thus, while we attempt to gather responses from a variety of programs, we do not have responses from every coordinator in the United States. However, we find that the coordinators interviewed for this study exhibit a high degree of consensus regarding the program trends and changes in recent years. A second limitation is the inability to acquire some of the data necessary to determine trends in several of the factors included in the study. For example, prior research on doctoral student teaching loads and preparations is limited. Thus, while we are able to provide current data on teaching responsibilities, our ability to evaluate how these responsibilities have changed over time is limited. Our hope is that the data provided in this study for some of these aspects will provide a **baseline for future studies that wish to examine** such trends and changes. In addition, we only





collect descriptive data on the current characteristics of accounting doctoral students and programs. As such, we are not able to determine causality. However, experiments might be developed to explore whether the practices described in this study impact the success of doctoral students. In addition, periodic reviews of the nature of accounting doctoral programs should be a priority.

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	Key	Characteri	stics of Do	Key Characteristics of Doctoral Programs	ams			
Institution	Admission Frequency	Average GMAT	Percent Male	Average Class Size	Total Enrolled	Master's Degree ^a	Average Stipend	Teaching Load ^b
 Arizona State		675			10 to 15		\$18,000	H
Arizona, The University of	Every Year	710	100%	ŝ	10 to 15	preferred/100%	\$30,000	3 courses
Arkansas, University of	x				10	Required	\$27,000	
Baruch College- CUNY	Every Year	720	44%	\mathcal{O}	6	preferred/89%	\$22,000	В
Bentley University	Every Other Year	650	56%	4	0I	preferred/100%	\$21,500	В
Boston University					11	Required	\$25,000	
California, University of, Berkeley		720			6			
California, University of, Irvine					8			
California, University of, L.A.	Every Year	740	67%	2	7	preferred/50%	\$22,500	6 courses
Camegie Mellon University	Every Year	740	0%0	2	8	preferred/100%	\$30,000	11 courses
Central Florida, University of	Every Other Year	640	80%	4	10	preferred/100%	\$20,000	4 courses
Chicago, The University of	Every Year	762	71%	ŝ	15	preferred/100%	\$20,500	3 courses
Cincinnati, University of		650	50%	S	4	preferred/100%	\$14,000	3 courses
Colorado, University of, Boulder		700			11		\$19,054	J
Columbia University	Every Year	720	75%	ŝ	14	preferred/100%	\$25,333	5.5 courses
Connecticut, University of	Every Year	711	50%	7	10	preferred/100%	\$20,396	Н
Cornell University							\$30,000	
Drexel University					12			
Duke University	Every Year	755	50%	2	12	preferred/100%	\$25,500	В
Emory University	Every Year	715	50%	ŝ	8	preferred/100%	\$24,250	В
Florida Atlantic University	Every Year	680	0%	S	13	preferred/100%	\$10,800	13 courses
Florida International University	Every Other Year	600	0%0	4	8	preferred/100%	\$20,000	6 courses
Florida State University	Every Year	650	25%	2	8	preferred/100%	\$22,500	4 courses
Florida, University of	Every Year	069	25%	ŝ	6	preferred/100%	\$25,000	Е
George Washington University, The								
Georgia Institute of Technology	Every Year	730	33%	2	9	preferred/100%	\$24,000	5 courses
Georgia State University	Every Year	700	0%0	7	11	preferred/100%	\$19,000	15 courses
Georgia, The University of	Every Year	710	43%	2	9	preferred/100%	\$19,971	3 courses
Harvard University					2			
Hawaii, University of, Manoa	Every Other Year	665	67%	2	5	preferred/100%	\$17,496	8 courses
							(continued c	(continued on next page)

American Accounting Association

APPENDIX A

1,1			APPENDIX A (continued)	A (contin	(pər				
	Institution	Admission Frequency	Average GMAT	Percent Male	Average Class Size	Total Enrolled	Master's Degree ^a	Average Stipend	Teaching Load ^b
nerica coun isocia	Houston, University of		697	67%	4	13	preferred/67%	\$25,200	В
an ting tion	Illinois, University of		717	67%	5	25	preferred/100%	\$36,300	3 courses
2	Indiana University	Every Year	733	100%	2	9	preferred/100%	\$24,000	В
i	Iowa, The University of		high 600s	33%	2	12	preferred/100%	\$12,000	8 courses
1	Kansas, The University of		680	0%0	2	7	preferred/50%		F
	Kent State University	Every Year	610	100%	ŝ	6	preferred/100%	\$17,000	7 courses
	Kentucky, University of	Every Year	650		ŝ	11	Required	\$20,000	7 courses
	Louisiana State University	Every Year	692	100%	ŝ	11	preferred/100%	\$21,000	5 courses
ì	Louisiana Tech University	Every Year	650	0%0	2	5	preferred/100%	\$12,500	Η
	Maryland, University of	Every Year	700	0%0	2	8	preferred/100%	\$24,500	3 courses
	Massachusetts Institute of Technology					ŝ		\$31,499	
	Massachusetts, University of	Every Year	069	100%	S	S	preferred/100%	\$25,000	5 courses
	Memphis, The University of	Every Year	632	60%	4	8	preferred/80%	\$12,000	9 courses
	Michigan State University	Every Year	upper 600s	50%	4	12	preferred/100%	\$24,000	3 courses
	Michigan, University of		715				4		Ш
	North Texas, University of	Every Year	680	33%	4	6	preferred/67%	\$20,000	I
	Northwestern University		770	50%	ŝ	13	preferred/100%	\$30,000	0 courses
	Ohio State University, The	Every Year	680	33%	ŝ	11	preferred/100%	\$27,167	2 courses
	Oklahoma State University	Every Year	650	67%	ŝ	12	required/100%	\$20,500	Ũ
	Oklahoma, The University of		700	0%0	2	9	preferred/100%	\$23,000	2 courses
	Oregon, University of		728						Н
	Pennsylvania State University, The	Every Year	700	67%	ŝ	14	preferred/100%	\$19,500	В
Is	Minnesota, University of		700	25%	2	6	preferred/50%	\$25,000	2 courses
sue	Mississippi State University	Every Year	630	43%	4	S	preferred/100%	\$19,350	D
	Mississippi, The University of	Every Year	655	75%	7	10	preferred/100%	\$15,829	10 courses
	Missouri, University of	Every Year	650	67%	7	9	preferred/100%	\$21,001	В
	Nebraska, University of		650	0%0	4	7	preferred/100%	\$15,000	3 courses
	New York University	Every Year	746	100%	2	01	preferred/100%	\$26,000	1 course
	North Carolina, The University of		90th percentile						Е
g E No	Pennsylvania, University of	Every Year	743	67%	ŝ	9	preferred/100%	\$30,000	1 course
	Pittsburgh, University of	Every Year	700	100%	0	8	preferred/0%	\$19,005	В
	Purdue University		680	67%		б	preferred/100%		0 courses
ion)12	Rochester, University of		680			1			
	Rutgers, The State University of New Jersey		654	17%	8	30	preferred/67%	\$22,246	Е
							C	(continued on next page)	ı next page)

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Institution	Admission Frequency	Average GMAT	Percent Male	Average Class Size	Total Enrolled	Master's Degree ^a	Average Stipend	Teaching Load ^b
South Carolina, University of	Every Year	740	0%0	2	11	preferred/100%	\$25,250	6 courses
South Florida, University of	Every Year	698	50%	2	10	preferred/75%	\$20,000	Е
Southern California, University of	Every Year	740	40%	2	13	preferred/80%	\$25,433	C
Southern Illinois University	Every Year	600	50%	ŝ	12	preferred/100%	\$7,000	13 courses
Stanford University	Every Year	720	100%	ŝ	15	preferred/0%	\$32,000	0 courses
SUNY, Binghamton University		630				Preferred	\$17,000	K
SUNY, University at Buffalo		725	100%	Ι	9	preferred/100%	\$16,000	Ш
Syracuse University		700	33%	ŝ	5	preferred/100%		I course
Temple University		700	50%	ŝ	18	preferred/88%	\$13,414	4 courses
Tennessee, The University of	Every Year	695	50%	2	10	preferred/100%	\$21,500	4 courses
Texas A&M University	Every Year	722	74%	4	19	preferred/88%	\$23,250	I course
Texas Tech University	Every Year	660	40%	7	9	preferred/100%	\$15,980	4 courses
Texas, The University of, at Arlington	Every Other Year	654	17%	5	14	preferred/100%	\$16,866	3 courses
Texas, The University of, at Austin	Every Year	740	33%	4	18	preferred/100%	\$17,500	Е
Texas, The University of, at Dallas	Every Year	700	100%	ŝ	19	preferred/100%	\$14,400	3 courses
Texas, The University of, at San Antonio		650	40%	ŝ	13	preferred/100%	\$22,000	Е
Utah, The University of		700			2		\$20,000	
Virginia Commonwealth University	Every Other Year	616	40%	5	11	preferred/100%	\$16,000	4 courses
Virginia Tech	Every Year	692	40%	4	16	preferred/80%	\$25,000	11 courses
Washington State University		600						
Washington University, St. Louis	Every Year	710	100%	Ι	4	preferred/100%	\$25,000	0 courses
Washington, University of, Seattle					6			Е
Wisconsin, University of						Required		
We collected data from each university's program website and from a survey of Ph.D. students in the United States. Italicized data are from survey responses.	am website and from a s	survey of Ph.]	D. students in	the United Sta	tes. Italicized	lata are from survey	responses.	

APPENDIX A (continued)

Issues in Accounting Education Volume 27, No. 4, 2012 American Accounting Association

we conceted data from each university's program website and from a survey of ratio. Suddents in the Officed data are from survey responses. ^a We report whether program websites indicate that a Master's degree is preferred or required and the percent of survey respondents from each school holding a Master's degree. we collected data from each university's program website and from a survey of Ph.D. students in the

^b The following codes are used for teaching requirements reported on program websites:

A = Teaching not required;

B = Students teach one class in each semester in third and fourth year;

C = Students co-teach with faculty in fourth year;

D = Students may teach up to two classes each semester. Year starting not specified;

E = Students teach one course;

F = Students teach at least two courses;

G = Students teach one course each semester in the first and last year;

H = Students have to teach but no detail given;

I=Students teach one class each semester after the first semester;

J = Students teach one class every semester all four years; and

K = Students teach at least four classes.

APPENDIX B

PH.D. STUDENT SURVEY QUESTIONS

Page 1

- 1. At which institution are you currently enrolled?
- 2. How many years of full-time work experience in accounting did you have before you entered the Ph.D. program?
- 3. What professional certifications do you hold: CPA, CMA, CIA, CISA, CFE, other, none? (select all that apply)

Page 2

We would like to know about your background.

- 1. What was your GMAT score?
- 2. If you hold a master's degree, please indicate the degree you have: Masters of Taxation, M.P.A., M.S.A., Masters in Accountancy, I do not have a master's degree, other (please specify).
- 3. Have you had teaching experience prior to enrolling in the Ph.D. program?
- 4. What is your gender?
- 5. What is your marital status?
- 6. Do you have children at home?

Page 3

- 1. Are you an international student?
- 2. If you answered "Yes" to the preceding question, what is your home country?
- 3. How many total accounting Ph.D. students are in various stages of completion (course work, preparing for comprehensive exams, preparing to propose or defend, etc.) at your institution?
- 4. In what year did you begin the Ph.D. program?
- 5. Which of the following best describes your stage of completion in the program: in coursework, preparing for comprehensive examinations, preparing to defend my proposal, proposal defended, preparing for my final defense?
- 6. How many total years do you expect it will take to complete your Ph.D. program?
- 7. Are you a part-time student?
- 8. In the typical semester week, how many hours do you spend in your office at school?

Page 4

- 1. Please indicate the cash stipend you receive.
- 2. Please indicate the level of any other financial assistance (e.g., fellowships, scholarships).
- 3. Do you currently teach class(es)?
- 4. Please indicate below the number of classes that you anticipate teaching in each year of your program (e.g., a 2-2 load is four classes in a year).
- 5. How many different courses (i.e., number of course preps) do you expect to teach in total during your program?
- 6. Does your institution provide funding for paper submissions at academic conferences?
- 7. Does your institution provide funding for travel to the AAA conference for purposes of interviewing for academic positions?



Page 5

- 1. What is your principal area of research interest: auditing, accounting information systems, financial accounting, managerial accounting, taxation, other?
- 2. What research methodology do you prefer? (analytical, archival empirical, behavioral, experimental, mathematical modeling)
- 3. If you are familiar with your school's journal ranking list, provide the top six journals on that list (or fewer if there are less than six on the list).

Page 6

We would like to know about the program of study at your institution.

- 1. Does your institution admit a class of Ph.D. students every year or every other year?
- 2. On average, how many students are admitted to the Ph.D. program in any given class?
- 3. On average, what percentage of admitted students successfully completes the Ph.D. program at your institution?
- 4. Does your school use a traditional dissertation model?
- 5. Does your school use a three-paper dissertation model?
- 6. Does your school require a second year (or summer) paper?
- 7. Are you expected to have a paper submitted for publication consideration while you are in the program?
- 8. Does your institution allow part-time students in the program?

Page 7

- 1. How many Ph.D. seminars in accounting are required in your program?
- 2. Please indicate which of the following accounting Ph.D. courses you have taken (or plan to take) in your program (please check all that apply). [capital markets, behavioral, analytic, managerial, financial, auditing, tax, systems, other seminars (please specify)]
- 3. What are your minor areas of study?
- 4. How many of your minor areas require comprehensive examinations?
- 5. How many total "tools" courses (statistics courses, econometrics, etc.) do you plan to take in your program?
- 6. How many total "tools" courses (statistics courses, econometrics, etc.) are required in your program?

Page 8

1. Please rank order the following journals from 1 to 16 where 1 is your perception of the "top" journal in our field: *The Accounting Review; Journal of Accounting Research; Journal of Accounting and Economics; Contemporary Accounting Research; Review of Accounting Studies; Accounting, Organizations and Society; Issues in Accounting Education; Accounting Horizons; Auditing: A Journal of Practice Journal of Management Accounting Research; Journal of the American Taxation Association; Journal of International Accounting Research; Journal of Accounting and Public Policy; Journal of Accounting, Auditing and Finance.*





Page 9

We would like to know about current projects on which you are working.

- 1. Please indicate which of the following statistics software packages you regularly use (check all that apply): SAS (including LISREL), SPSS (including AMOS), STATA, EQS, Limdep, other (please specify).
- 2. Please indicate the number of studies you are currently working on: with another Ph.D. student; with a faculty member; with a student and a faculty member; sole-authored; total studies.

Page 10

Some information about your current work:

- 1. Do you intend to work at a teaching or research school after graduation?
- 2. At a teaching school, how many publications would you expect would be required for promotion to associate professor?
- 3. At a research school, how many publications would you expect would be required for promotion to associate professor?
- 4. What do you expect starting compensation is at a teaching school?
- 5. What do you expect starting compensation is at a research school?
- 6. If you could choose the school where you take your first tenure-track position, what would your first three choices be?

Would you like to receive a copy of the results of this study? If so, please provide an address (or email address) below.

Thank you for your participation. If you have any thoughts you would like to share, please provide them below.

Ph.D. Program Coordinator Interview Protocol

- 1. Name
- 2. School
- 3. Average age of Ph.D. students?
- 4. Average age of tenured/tenure-track faculty?
- 5. What changes (if any) has your university made in the Ph.D. program in the past five years in regard to:
 - a. Funding?
 - b. Admission criteria?
 - c Program structure (e.g., coursework requirements, examination requirements, paper requirements, program length, or dissertation format)?
 - d. Teaching responsibilities?
 - e. Other changes?
- 6. Are any of these changes driven by the shortage of Ph.D. faculty?
- 7. Have you observed any changes in the characteristics of applicants to our program (e.g., changes in GMAT scores, age, or nationality)?
- 8. Have you observed any changes in the characteristics of the admitted students in your program (e.g., teaching/research interests)?
- 9. What changes (if any) do you feel *should* be made in Ph.D. programs in the United States?
- 10. What would you like to know about other Ph.D. programs?



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