

A STUDY OF SHORTAGE OF ACCOUNTING PH.D. CANDIDATES AND ITS EFFECT ON UNIVERSITIES

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ABSTRACT

According to The Pathways Commission's (sponsored by the American Accounting Association (AAA) and the American Institute of Certified Public Accountants (AICPA)) July 2012 report, the shortage in tenure-track accounting faculty continues to be well documented and has become a concern. Based on various studies conducted, there is substantial evidence that a shortage of Ph.D. faculty does exist and that this shortage may continue to increase. In addition, authors Ruff, Thibodeau, Bedard, and The Pathways Commission report, document that, as a result of the average full-time faculty members' age, rate of retirements has been increasing while the accounting Ph.D. graduates is moving at a slower pace. Due to the low supply of potential faculty members, studies show that there has been a substantial increase in salary. Given these conditions, why is there is a shortage and is this shortage really considered an opportunity or predicament for potential accounting Ph.D. candidates? The incentives, benefits, difficulties, and students' perception of obtaining a Ph.D. in accounting and the various uncertainties Ph.D. candidates in an accounting program face will be the focus of this paper. In addition, this paper will examine costs to both universities as well as potential Ph.D. candidates. Proposals and recommendations addressing these challenges will also be addressed.

INTRODUCTION

Over several years, various sources have conducted statistical analysis and have concluded that there is a shortage in obtaining a Ph.D. in accounting. Understanding the extensive criteria for obtaining a Ph.D. in accounting and the various reasons why there is a shortage in this particular area will help put more emphasis on both the need and ways to help alleviate this ongoing problem. Appreciating what the program can offer should be given more emphasis by the institutions offering it and also understood by potential candidates. Although the path may be long, the end result is high in both self and monetary reward based on anecdotal evidence. Self-reward is often linked to the degree of intellectual satisfaction obtained by the Ph.D. candidate.

BACKGROUND

The pace of faculty member retirements has been moving at a much faster rate when compared to Ph.D. in accounting concentration graduates. According to the statistics analyzed by the AICPA and AAA, “between 500 and 700 accounting faculty per year will retire over the next 10 years, while accounting Ph.D. programs are averaging 140 per year” (Ruff et al., 2009). Due to this evidence,

coupled with an increased demand for accounting graduates at the undergraduate and masters levels (Riegle 2008), raise deep concerns about the future of accounting education programs and their ability to meet the human resource needs of the profession, to effectively continue to advance knowledge through research across the full ranges of the discipline, and to support management education in its broader context (Trapnell, Mero, Williams & Krull, 2009).

As many may be aware, “not every school offers a Ph.D. in accounting” (Noland, et al., 2007). In addition, the degree requirements may also vary among universities. The lack of accounting Ph.D. programs is certainly a contribution to the accounting shortage. The Doctor of Philosophy (Ph.D.) degree is considered the highest level of education to most areas of study. “Corresponding to the predominant model in the university, the accounting Ph.D. is a research degree awarded for original contribution to knowledge, critical to continuing to build understanding of accounting foundations, theory, practice, and education” (The Pathways Commission, 2012). For every degree of concentration, one must fulfill different requirements. This paper focuses only on those required in the area of accounting. “A typical program will consist of Ph.D. research seminars (three to five classes, additional graduate work in accounting (four to six classes), a minor field of study in another business discipline such as finance, information systems, or economics (three to five classes), and several courses in statistics and quantitative research (four to six classes)” (Noland, et al., 2007). In addition, upon completion of the courses above and, depending on the university, the candidate has to pass a comprehensive exam in the area of accounting. The student then must fulfill the last requirement, which is the dissertation (thesis) research and then defend his/her dissertation. It is important to understand how most Ph.D. programs evaluate potential candidates to enter their program. In order to be considered for a Ph.D. program, the following criteria, discussed by Noland, et al., are taken into account:

1. Student’s undergraduate and graduate transcripts are reviewed, that is with exceptional grade point average presentation,
2. Recommendation letters,
3. Graduate Management Admissions Test (GMAT) score - “median GMAT score for private universities was 685 (out of 800), whereas the median GMAT score for public universities was 730,” (Noland, et al., 2007),
4. Certifications such as CPA, CMA, CFE, CIA are also taken into consideration, and lastly,
5. Professional work experience.

To further elaborate on professional work experience, surveys have been conducted by AAA and Accounting Programs Leadership Group (APLG) from May 2004 to December 2005. As a result of the research, the percentage reflecting the number of years of full-time work experience obtained by Ph.D. candidates varied (See Table 1).

| | <u>Number</u> | <u>Percent</u> |
|---------------|---------------|----------------|
| Zero | 37 | 16.1 |
| One to five | 105 | 45.7 |
| Five to ten | 50 | 21.7 |
| More than ten | 38 | 16.5 |

* *Source: Report of the AAA/AAPLG Ad Hoc Committee to Assess the Supply and Demand for Accounting Ph.Ds. (2005), p. 26*

Those who had zero experience reflected a 16.1% experience and those with one to five year work experience reflected the highest percentage of 45.7%, among those surveyed. The GMAT as a requirement is considered the “gold standard when evaluating future PhD students” (Noland, et al., 2007). Thus is due to difficulties faced when comparing grades between universities.

LITERATURE REVIEW

Potential candidates at this point may be overwhelmed by the overall requirements for a Ph.D. in accounting. This might be contributing to the shortage of accounting Ph.D. candidates accounting. According to examined resources, various factors take part as to the reasons of the shortage existence.

1. **Program is Not Offered at Every School:** As discussed by Noland, et al, one of the reasons can be said that not every school has a Ph.D. in accounting program to offer to interested candidates. Due to that reason, “there are so few PhD programs in accounting and that acceptance into any program is not guaranteed, potential candidates may have to relocate to pursue their degree” (Noland, et al., 2007). As a result, not everyone is willing to travel and/or relocate possibly. Potential candidates may have friends, family, and an established comfortable environment that they may not willing or able to part.
2. **Enrollment Criteria Requirements:** Taking into account the fact that a potential candidate must meet a high GMAT test score (as mentioned in the background section of this paper), have work experience and other criteria, these are all time consuming and challenging factors that must be completed to fulfill the requirements.
3. **Time:** Time certainly plays a major factor in the shortage. According to the statistics presented in Table 2, 58.8% represents the highest number of anticipated Ph.D. program candidates who would take five years to complete the degree. In addition to the time factor, “universities require their Ph.D. students to teach one or two classes per semester or work as a research assistant in addition to their own coursework” (Noland et al., 2007). Therefore, the time that it takes to research and defend one’s thesis topic may be prolonged due to other imposed requirements.

| | <u>Number</u> | <u>Percent</u> |
|-----------------------|---------------|----------------|
| Less than three years | 1 | 0.4 |
| Three years | 2 | 0.9 |
| Four years | 70 | 30.0 |
| Five years | 137 | 58.8 |
| Six years | 16 | 6.9 |
| More than six years | 7 | 3.0 |

* Source: Report of the AAA/AAPLG Ad Hoc Committee to Assess the Supply and Demand for Accounting Ph.Ds. (2005), p. 36

4. **Age:** The AAA/AAPLG 2005 report does indicate that age becomes a factor when considering the pursuit of a Ph.D. Every person goes through different lifestyles. Family, money and the overall environment have a lot to do with decision making, including the pursuit of a doctoral degree in accounting. Since all these factors come into play, everyone continuing their education may be at a different stage in life, or rather at a different age. Each person completes his or her undergraduate and/or graduate degree at different ages.

For that reason, the graduate may consider that the time it took them to complete the previous degree was already time consuming and, thus, it is time to recover that money in the form of an income producing job.

5. **Future Uncertainties:** To further elaborate the above-mentioned point, those who have completed their undergraduate and/or graduate degree are seeking a job immediately. Given the current economic status, one does have difficulty finding a job and therefore may be hesitant to pursue a Ph.D. in accounting with the knowledge that the economy may bring uncertainty as to what the future may hold.
6. **Costs:** Costs associated with obtaining a Ph.D. in accounting is another factor. “In addition, it is likely that a significant portion of *potential* doctoral students find the current level of financial support inadequate...it is difficult to attract prospective students by offering them \$16,000 when they may have previously been earning \$50,000 to \$75,000 per year” (AAA/AAPLG Report, 2005) (Table 3).

| | |
|----------------------------------|--|
| Tuition | Normally a full tuition waiver |
| Salary (nine months) | \$16,000 (average) |
| Health Insurance | Limited to select universities |
| Summer teaching/research stipend | Depends on the needs of the university; median of \$3,000, per AAA/AAPLG |

* Source: Pursuing a PhD in Accounting: What to Expect, p.68.

Furthermore, referencing to Table 4, the AAA/AAPLG Ad Hoc Committee reports an anticipated 43.3% of accounting Ph.D. students incurring zero dollars in program-related debt. Nevertheless, 9.4% of expected accounting Ph.D. students reflected a \$60,000+ program-related debt.

| | <u>Students</u> | |
|-------------------|-----------------|----------------|
| | <u>Number</u> | <u>Percent</u> |
| None | 101 | 43.3 |
| \$1-\$10,000 | 33 | 14.2 |
| \$10,001-\$20,000 | 18 | 7.7 |
| \$20,001-\$30,000 | 22 | 9.4 |
| \$30,001-\$40,000 | 15 | 6.4 |
| \$40,001-\$50,000 | 14 | 6.0 |
| \$50,001-\$60,000 | 8 | 3.4 |
| Over \$60,000 | 22 | 9.4 |

* Source: Report of the AAA/AAPLG Ad Hoc Committee to Assess the Supply and Demand for Accounting Ph.Ds. (2005), p. 27

7. **Only Teaching Perception:** Other factors, such as the perception of teaching as the only available option for a Ph.D. degree holder. Many students automatically associate the role of a Ph.D. with teaching. That perception certainly further influences the reason as to why many candidates may not be as willing to enroll in the program.
8. **Limited Exposure:** “All too frequently, students in accounting classes are exposed to technical material in a vocation-focused way, disconnected from the complex real-world settings to which students are bound and from the research focused on understanding the setting (Rutherford 2011)” (The Pathways Commission, 2012). The need for students to be exposed to the research opportunities available is of relevance. Lack of student exposure to potential benefits of pursuing a Ph.D. in accounting can also result in the shortage of faculty members.
9. **Opportunity Cost:** In general, when applicants evaluate a Ph.D. program, “the opportunity cost of obtaining a Ph.D. is extremely salient to potential Ph.D. students, as they are likely to be established in a career that provides them with income and stability” (Gary, Denison & Bouillon, 2011). Even a question as, “What kind of financial support is available while pursuing a doctoral degree?” (Noland, et al., 2007) is taken into account. Further emphasis is made “...that the opportunity cost of pursuing a Ph.D. degree is too high for individuals who are already employed in the business world, where salaries are rising” (Gary et al., 2011). Consequently, a potential accounting Ph.D. candidate takes many factors into consideration.

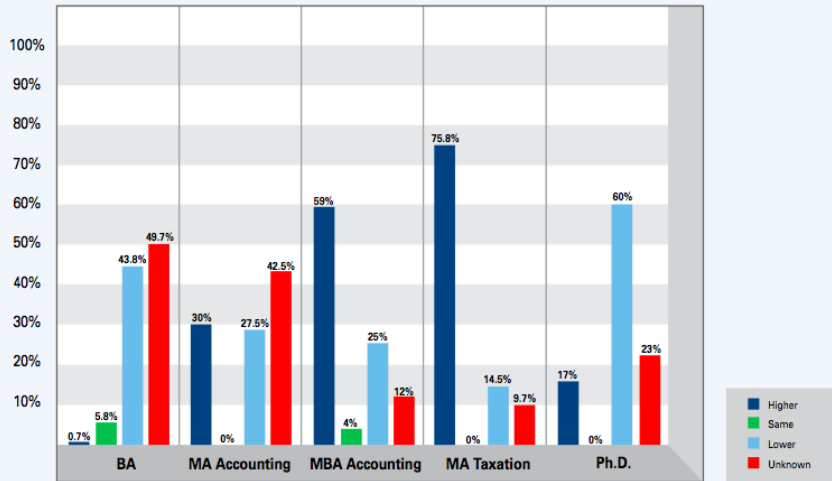
To leave the stability of one’s current employment, which may involve foregoing significant leadership and income opportunities, and enter an academic program that realistically is five years, followed by joining a university faculty at the bottom rung on the academic ladder discourages many from making the transition (The Pathways Commission, 2012).

When looking at the future enrollment predictions (Graph 1), a survey question has been conducted by the AICPA asking each institution as to the trend of future enrollments. Particularly, looking at the Ph.D. enrollments we can see institutions predicted a 60% lower than their current enrollment in their program at the time.

Graph 1

Future Enrollment Predictions in Accounting Programs — 2009-10

Survey Question: For each of the following accounting programs listed, please indicate whether you expect enrollment at your institution two years from now to be higher, lower or the same as current enrollment.



**Source: 2011 Trends In the Supply of Accounting Graduates and the Demand for Public Accounting Recruits. AICPA, p. 20*

Consequently, is this shortage really considered an opportunity to potential Ph.D. candidates or is it seen as a dilemma? Every student goes through the cost versus benefit analysis when continuing education at an undergraduate and graduate level. The same can be said at a doctoral level. This is where we believe it requires a lot more analysis than the other two as the years spent to complete a doctoral degree as well as the overall workload of the degree varies greatly. It can also be noted that one must go through per se “the scrutinizing” process before being accepted into the desired school’s Ph.D. in accounting program.

Some of the reasons a potential Ph.D. in accounting candidate considers as of importance in pursuing the program is the benefit of mounting personal growth and development in addition to being intellectually challenged (See Table 6) (AAA/AAPLG Report, 2005). Of the seven benefits listed in the survey, the two previously mentioned represent the highest percentage of motivation, reflecting 76.5% and 66.5%, respectively. Other factors such as career in teaching, work/family balance, career in academic research, potential salary earnings, and being professionally recognized ranked as other important benefits or rather motivators in pursuing a doctoral in accounting.

Table 6

| Factor | Number (Percentage) of Students Indicating Factor to Be: | | | | | Weighted Composite Score |
|---|--|----------------------|------------|--------------------|-------------|--------------------------|
| | Unimportant | Somewhat Unimportant | Neither | Somewhat Important | Important | |
| Personal growth and development | 1 (0.4%) | 1 (0.4%) | 5 (2.1%) | 49 (20.6%) | 182 (76.5%) | +1.72 |
| Intellectual challenge | 6 (2.5%) | 4 (1.7%) | 10 (4.2%) | 60 (25.1%) | 159 (66.5%) | +1.51 |
| Ability to pursue a career in teaching | 5 (2.1%) | 9 (3.8%) | 22 (9.3%) | 65 (27.5%) | 135 (57.2%) | +1.34 |
| Work/family balance | 10 (4.3%) | 13 (5.5%) | 20 (8.5%) | 62 (26.4%) | 130 (55.3%) | +1.23 |
| Ability to pursue a career in academic research | 7 (3.0%) | 14 (5.9%) | 21 (8.9%) | 90 (38.1%) | 104 (44.1%) | +1.14 |
| Earning potential | 11 (4.6%) | 13 (5.5%) | 23 (9.7%) | 96 (40.3%) | 95 (39.9%) | +1.05 |
| Professional recognition | 8 (3.3%) | 21 (8.8%) | 29 (12.1%) | 89 (37.2%) | 92 (38.5%) | +0.99 |

* Source: Report of the AAA/AAPLG Ad Hoc Committee to Assess the Supply and Demand for Accounting Ph.Ds. (2005), p.31

Another reason for pursuing a Ph.D. in accounting is the long-term benefit. That is not to say that everything should come easy. The same goes for obtaining this degree in that one must contribute to the society, meet all the program requirements, and essentially give the best they’ve got so that award is high when it arrives. Consequently, when a person pursues a Ph.D. in accounting concentration, benefits as schedule flexibility, option to do research in the interested topic of choice or participating in academia are, as noted, some of the advantages. The picture potential Ph.D. candidates have painted is one that is short-term. “They are likely to look only to the short-term and to the prospect of living on a graduate student’s income for as long as it takes to earn their Ph.D.” (Gary et al., 2011). Gary et al. further emphasize that “the long-term potential benefits of obtaining a Ph.D. might not be as salient to them.”

As a result of the Ph.D. shortage in Accounting, “salaries have continued to outpace inflation” (Noland, et al., 2007). Table 7 lists an Average Nine-Month Salary for Accounting Faculty, a survey conducted by AACSB International (2011-2012) beginning with professor to new doctorate salary.

| Table 7: Average Nine-Month Salary for Accounting Faculty 2011-2012 | | | | |
|---|---------------------|---------------------|------------|---------------|
| Professor | Associate Professor | Assistant Professor | Instructor | New Doctorate |
| \$143,800 | \$121,500 | \$127,600 | \$69,700 | \$135,500 |

*Source: AACSB International 2011-2012 Salary Survey, p. 8-11

As seen in Table 7, a new doctorate salary is almost as much as a professor salary. We can also note that the new doctorate surpasses those salaries of an associate professor, assistant professor, and is almost double that of an instructor salary. Due to the increased salary of a new doctorate, we believe it is an excellent opportunity to seize. A question one may ask is, “If salaries are so high, why is there even a shortage?” This can be attributed to the various reasons discussed in points 1-9 above. However, one can see from the numbers above that, in the long run, the payback is high on the time invested for a Ph.D.

Throughout the years, we’ve seen the rising importance of obtaining a master’s degree (See Graph 1). Shall we see the same happen for a Ph.D.? Could the new standard be a Ph.D. or, should there be “flexibility around characteristics and requirements of doctoral programs?” (The

Pathways Commission, 2012). Effectively, there are recommendations the Ad Hoc Committee and The Pathways Commission reported in order to help address the supply and demand issue.

1. Ad Hoc Committee suggests that an informative website should be created specifically for potential Ph.D. candidates in addition to exposing students to the degree at early stages in education;
2. It also suggests that more financial support should be provided;
3. The need of reducing costs that are other than monetary;
4. Both Ad Hoc Committee and The Pathways Commission discuss the need to reduce the actual costs associated to the program;
5. Lastly, The Pathways Commission suggests that expansion on teaching specialty programs in addition to the need of “increasing reward, recognition, and support for high-quality teaching” (The Pathways Commission, 2012).

As recommended by the Ad Hoc Committee, in order to address the problem associated with the shortage, it would require many sources to be involved but particularly the AAA. The belief that students should be more informed about the potential benefits of obtaining a Ph.D. in accounting is an excellent strategy. Not many people speak about the pursuit of a Ph.D. in accounting degree. A majority of students speak about meeting the 150 credit hours to obtain the CPA licensure, and that is where it stops for many. Having a website that informs potential candidates of all the positive returns such as salary, job requirements, and the overall application process helps better enlighten the idea that the new standard should be a Ph.D. in accounting. The Pathways Commission further emphasizes the need for students to be exposed to the research world of accounting in accounting courses and programs. For instance, “Part of Brigham Young University’s master’s of accountancy program, the Ph.D. prep track is designed to prepare students to enroll in doctoral programs in accounting after finishing their master’s. The program centers around Ph.D.–style seminars designed to help interested students learn about research and academic work as well as course work in math, econometrics, and statistics” (The Pathways Commission, 2012). Having students exposed to a Ph.D. in accounting program in accounting courses and programs at a master’s level, or better yet at an undergraduate level, is a great way for students to be informed of the long-term opportunities the degree can bring and also emphasize the needed gap of the shortage to be filled.

Having financial support provided to Ph.D. students would certainly help enlighten the idea further and thus can help address the shortage problem. As reported by the Ad Hoc Committee, in general, there is a satisfaction of financial support as denoted by students. Nevertheless, as noted in the report, students look at the short-term returns and focus on the potential salary they could be receiving in comparison to what the school is offering while enrolled in the program. The Ad Hoc Committee states that schools should “increase stipends where possible” (AAA/AAPLG Report, 2005). In addition, having health and life insurance benefits where affordable can also help alleviate the shortage problem.

Reduction of costs can certainly help attract Ph.D. in accounting candidates. Costs such as a student’s dedication to complete a five-year program, as believed by the Ad Hoc Committee can be reduced by shortening the amount of time spent on a doctoral program. Ultimately this is believed to attract potential Ph.D. entrants. The average years it takes to complete the Ph.D. in accounting program can be said to represent a sufficient time. It helps build character; your patience will increase; you’ll be intellectually challenged; overall your knowledge of the field will be more thorough and you’ll be able to either research the areas of interest to you and/or teach once completed. Nevertheless, as reported in the July 2012 report of The Pathways Commission, “the time required to complete a Ph.D. is problematic.” It is emphasized that time spent on obtaining a Ph.D., on average, is longer than four years. As a result, this increases the

opportunity cost of earning a Ph.D. and discourages potential candidates to pursue the degree. Due to the time factor, “applications to traditional education are restricted to a narrow set of candidates” (The Pathways Commission, 2012). To “allow flexible content and structure of doctoral programs” is needed to be taken into action according to The Pathways Commission. The Pathways Commission highlights the importance of finding alternative ways, such as “unlocking doctoral education via flexible pedagogies in existing programs and by exploring alternative pathways to terminal degrees that align with institutional missions and accounting education and research goals,” in order to meet the much-needed demand of accounting Ph.D.’s (The Pathways Commission, 2012).

Another cost associated with obtaining a Ph.D. in accounting would be relating to tuition and other expenses incurred. The “costs of programs are high” as discussed by The Pathways Commission. The way the Ad Hoc Committee suggests the costs schools incur in the process of students obtaining a Ph.D. in accounting could be lowered if those duplicate costs present at every schools are reduced. Potential Ph.D. students must also consider that schools incur costs for having them in their program and thus one can say there is a 50/50 relationship. The sacrifice schools take to help enroll Ph.D. in accounting students is great. Therefore, based on the report from the Ad Hoc Committee, such a suggestion as having a group of schools in the same geographic region coming together and offer classes on similar topics is an excellent idea. It not only gives students the accessibility to network with other schools but also “it would be cheaper to pay for the airfare and housing costs for attending these types of group seminars than to offer Ph.D. seminars that are essentially redundant at each individual institution” (AAA/AAPLG Report, 2005).

Lastly, the Ad Hoc Committee suggests for schools to create new tracks such as those in tax and audit areas as the shortage exists in these two areas. Having schools focus on these specialized areas will present potential Ph.D. candidates a bigger picture of areas of research than what is just known. It is further emphasized by the Ad Hoc Committee, that students should have the opportunity to specialize in one area of accounting while still gaining the fundamental publicity to other relevant accounting areas. Moreover, The Pathways Commission highlights the need for increasing incentives for those who teach. Incentives that are both monetary and non-monetary. Again, as mentioned by The Pathways Commission, by providing increased support for high-quality teaching, rewarding and recognizing those who are in the academia world, can outline to potential candidates the benefits of pursuing a Ph.D. in accounting degree.

PROBLEM STATEMENT

There has been a critical shortage of tenure-track faculty holding Ph.D. degrees in accounting that have raised a concern as to how this will impact the future of accounting education and research. The Association to Advance Collegiate Schools of Business (AACSB) has shown that there is a steep decline in the number of Ph.Ds. being awarded in these subject areas, while the need for holders of business and accounting Ph.Ds. is increasing. “The Doctoral Faculty Commission noted a 19% decline in the number of business research doctorates awarded between 1994-95 (1327) and 1999-2000 (1071)” (AACSB Explores Global Trends in Doctoral Education-Management Education News from AACSB International).

This shortage is having significant immediate and long-term impacts on both the quality and viability of accounting education and accounting research (e.g. reduced capacity to educate doctoral students, reduced research capacity, reduced terminally prepared faculty teaching master’s and undergraduate students, and ultimately fewer faculty members in the future. (The Pathways Commission, 2012)

This shortage is being promulgated by several factors. The costs, future uncertainties, and time required for a Ph.D. in Accounting can be costly for candidates. Furthermore, most programs are full-time, which presents a problem for those who cannot economically afford to be without a source of income while completing the requirements.

The purpose of this research is to gain an understanding from potential candidates their perspective on: how long they believe it takes to obtain a Ph.D. in accounting; the starting salary for those obtaining a Ph.D. in accounting; and a comparison between obtaining a Ph.D. in accounting as compared to other practice areas based on a better quality of life. We expect the answers to these questions to give a better understanding as to this shortage as well as lead to further study on possible remedies.

RESEARCH QUESTIONS

- Q1. How long do students perceive the Ph.D. in accounting program takes to complete?
- Q2. How much of a starting salary does a Ph.D. in accounting earn?
- Q3. What practice area, based on personal opinion, would bring a better quality of life?
- Q4. If a student would not wish to pursue a Ph.D. Degree, what reasons would be holding them back?

Due to the fact that this research is exploratory in nature, we have not formed any hypotheses.

RESEARCH METHODS

This proposed research uses the survey method. A survey instrument was prepared using the methods described by Dillman and Salant. The survey was prepared to capture students' views of Ph.D. in accounting and was distributed to all students in accounting courses during the fall 2012 term. Our sample is limited to accountancy students in a large urban public college.

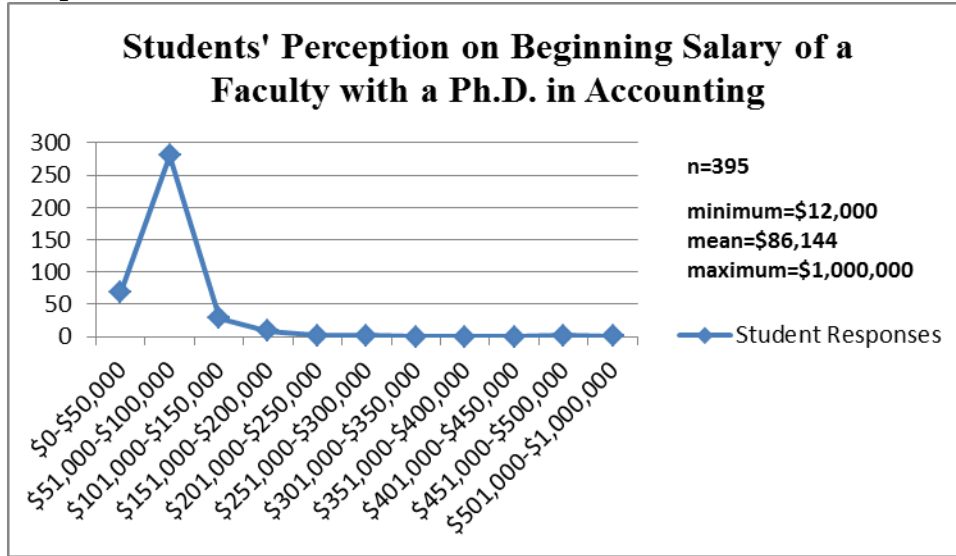
RESULTS

Surveys were distributed at a large (approximately 16,000 full time equivalents) urban public college. There are approximately 1,200 declared accounting majors in three different programs. The survey was distributed in various accounting classes, both undergraduate and graduate. 472 usable surveys were returned. The data was treated and analyzed using the SPSS statistical software package. Descriptive statistics follow:

1. **Descriptive Demographic Data:** 43.6% (n=206) of the respondents were male and 55.9% (n=264) were female. Their average age was 25.74 (n=456, s.d. = 7.031). 84.5% (n=399) were undergraduate students and 15.5% (n=73) were graduate students. On average students had completed 80.65 credits (n=434, s.d.= 43.987). 67.4% (n=318) plan to get a CPA license and 26.9% (n=127) plan to get a master's degree in accounting. 5.7% (n=27) plan to get a master's in other than accounting. 1.7% (n=8) plan to pursue a Ph.D. in accounting and 0.6% (n= 3) plan to pursue a Ph.D. in another field.
2. **Descriptive Statistics Regarding Perceptions of the Ph.D:** Several questions were included to determine the students' perceptions about getting a Ph.D. in accounting and being a Ph.D. in accounting degree holder.
 - a. First, we asked if they ever heard about Ph.D. programs from their faculty. 63.1% (n=298) said they never heard anything, 33.9% (n=160) said they sometimes hear about Ph.D. programs and 2.1% (n=10) said they often hear anything about Ph.D. programs.

- b. When asked how long they think it takes to get a Ph.D., the mean response was 5.22 years (n=443, min = 1, max = 30, s.d. = 2.688).
- c. When students were asked how much they thought the beginning salary was for faculty with a Ph.D. in accounting, the mean response was \$86,144 (n=395, min = 12,000, max = 1,000,000) (See Graph 2)

Graph 2:



- d. Students were asked to rank how much they think accountants in various sectors earned. Public accounting/audit ranked the highest (n=210), accounting/audit in industry ranked second (n=152), accounting/audit for government ranked third (n=77) and teaching/research in a university was last (n=39).
- e. Students were also asked to rank which area had the best quality of life. Public accounting/audit ranked first (n=179), teaching/researching at a university ranked second (n=107), accounting/audit for government was third (n=96) and accounting/audit in industry ranked last (n=87). The results for this one are rather surprising. Anecdotal evidence would often suggest that public accounting/audit has the worst quality of life due to the enormous amount of stress and hours being worked.
- f. When asked why students would not pursue a Ph.D., most simply had no interest (n=155). The second most popular reason was the perceived cost (n=104). Only 14 ranked expected salary as their top reason for not pursuing a Ph.D. 64 cited family responsibilities.

CONCLUSION AND SUMMARY

The purpose of this study was to determine why there is a shortage of accounting Ph.D. candidates and is this shortage really considered an opportunity or predicament for potential accounting Ph.D. candidates and universities. The incentives, benefits, difficulties, and students' perception of obtaining a Ph.D. in accounting and the various uncertainties Ph.D. candidates in an accounting program face were also addressed. In addition, this paper also examined costs to both universities as well as potential Ph.D. candidates.

This study revealed that most students have no real perception of the Ph.D. degree nor do they have the desire to pursue the degree. It is apparent that not many of them have heard about it from their professors nor have they done any outside research of their own. This is shown in the responses from students which show the range of salaries going from a minimum of \$12,000 to a maximum of \$1,000,000. Furthermore, when students were asked why they would not pursue the Ph.D. in accounting, they said they were not interested as the primary response. The next category of responses is in line with the discussion of opportunity cost noted earlier in that students see both tuition cost as well as time spent as being too costly when compared against the anticipated benefits.

The response to salary expectations is not in alignment with statistical data published in the profession. Starting Ph.D.s are making \$130,000+ and the respondents have a mean response of \$86,000. Typically, those working in public accounting/audit tend to have higher salaries.

The response to the quality of life question is somewhat surprising. Anecdotal evidence would often suggest that public accounting/audit has the worst quality of life due to the enormous amount of stress and hours being worked. This could give rise to possible future research studies.

This study definitely confirms that the shortage of Ph.D.'s in accounting is only going to increase and create a problem in the academic community in future years. The severity and long term consequences of the Ph.D. shortage would suggest that more study is needed to determine causes and possible curative interventions.

REFERENCES

- 2011 Trends *In the Supply of Accounting Graduates and the Demand for Public Accounting Recruits*. AICPA, 1-60. Retrieved on June 21, 2012, from http://www.cpa2biz.com/AST/Main/CPA2BIZ_Primary/CareerPersonalDevelopment/PRDOVR~PC-FREE/PC-FREE.jsp
- AACSB International, *2011-2012 US Salary Survey Report*. Retrieved on June 24, 2012, from <http://www.aacsb.edu/publications/datareports/salariesurvey/2011-12.pdf>
- Dillman, D. A. *Mail and internet surveys: The tailored design method*. (pp. 464). New York: John Wiley & Sons, Inc. 2000
- eNEWSLINE. (2010) *Management Education News from AACSB International. AACSB Explores Global Trends in Doctoral Education*. Retrieved November 1, 2012, from <http://www.aacsb.edu/publications/enewslines/archives/2010/vol9-issue4-doctoral-global-trends.pdf>
- Gary, R.F., Denison, C.A., & Bouillon, M.L. (2011). *Can Obtaining an Accounting Ph.D. Provide a Positive Financial Return?* American Accounting Association: Issues in Accounting Education, Vol. 26, No. 1, 23-24. Retrieved June 12, 2012, from <http://ehis.ebscohost.com.ez-proxy.brooklyn.cuny.edu:2048/ehost/detail?vid=5&hid=101&sid=c59aa082-4376-4d96-88aa-af949818fccf%40sessionmgr112&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#db=bt&AN=59156529>

- Noland, T.G., Francisco, B., & Sinclair, D. (2007). *Pursuing a PhD in Accounting: What to Expect*. The CPA Journal, 66-68. Retrieved on June 12, 2012, from <http://ehis.ebscohost.com.ez-proxy.brooklyn.cuny.edu:2048/ehost/detail?vid=9&hid=101&sid=c59aa082-4376-4d96-88aa-af949818fccf%40sessionmgr112&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=24310865>
- Plumlee, R.D., Kachelmeier, S.J., Madeo, S.A., Pratt, J.H., & Krull, G. (2006). *Assessing the Shortage of Accounting Faculty*. Issues in Accounting Education, Vol. 21, No. 2, 113. Retrieved on June 12, 2012, from <http://ehis.ebscohost.com.ez-proxy.brooklyn.cuny.edu:2048/ehost/detail?vid=13&hid=101&sid=c59aa082-4376-4d96-88aa-af949818fccf%40sessionmgr112&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=20989015>
- Report of the AAA/AAPLG Ad Hoc Committee to *Assess the Supply and Demand for Accounting Ph.D.s* (2005). Retrieved on June 22, 2012, from: <http://faculty.fuqua.duke.edu/areas/accounting/phd/AAA%20Report.pdf>
- Ruff, M., Thibodeau, J.C., & Bedard, J.C. (2009). *A Profession's Response to a Looming Shortage: Closing the Gap in the Supply of Accounting Faculty*. Journal of Accountancy, 37. Retrieved June 12, 2012, from <http://ehis.ebscohost.com.ez-proxy.brooklyn.cuny.edu:2048/ehost/detail?vid=3&hid=101&sid=c59aa082-4376-4d96-88aa-af949818fccf%40sessionmgr112&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=36844859>
- The Pathways Commission. (2012) *The Pathways Commission: Charting a National Strategy for the Next Generation of Accountants*. Retrieved November 1, 2012, from [http://commons.aahq.org/files/0b14318188/Pathways Commission Final Report Complete.pdf](http://commons.aahq.org/files/0b14318188/Pathways%20Commission%20Final%20Report%20Complete.pdf)
- Trapnell, J.E., Mero, N., Williams, J.R., & Krull, Jr. G.W. (2009). *The Accounting Doctoral Shortage: Time for a New Model*. Issues in Accounting Education, Vol. 24, No. 4, 427. Retrieved June 12, 2012, from <http://ehis.ebscohost.com.ez-proxy.brooklyn.cuny.edu:2048/ehost/detail?vid=7&hid=101&sid=c59aa082-4376-4d96-88aa-af949818fccf%40sessionmgr112&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=52725015>