Does a Separate Accounting Accreditation Matter?

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Abstract

Schools accredited by the Association to Advance Collegiate Schools of Business (AACSB International) must provide evidence of continuous quality improvement in three vital areas: innovation, impact, and engagement. There have been a number of studies related to the impact of AACSB accreditation on the quality of business and accounting programs since the 1980s. The purpose of this study is to reexamine the benefits of AACSB accounting accreditation by evaluating performance on the CPA exam as a proxy of quality and value of AACSB accounting accreditation.

Introduction

This study addresses the importance of specialized accounting accreditation by the Association to Advance Collegiate Schools of Business (AACSB International). We believe this study will contribute to the accounting profession by examining the attributes of accounting accreditation in preparation of students for the profession. In the introduction to the accounting accreditation standards, AACSB states (p.1):

> AACSB advances quality management and accounting education worldwide through accreditation, thought leadership, and value-added services. Through its business and accounting accreditation standards and processes, AACSB recognizes institutions, business schools, and accounting academic units that uphold its mission and core values, advance the interests of management and accounting education, and participate in AACSB's global community of leading business schools and accounting programs. In this context, AACSB focuses on continuous quality improvement in management and accounting education through innovation, engagement, and impact.

Currently, there are 716 AACSB accredited institutions in 48 countries and territories. Of these, 181 have separate accounting accreditation (AACSB.edu/accredited members, February 2015). The purpose of this study is to examine the attributes of business schools with accounting accreditation and the impact of these attributes on the accounting profession. In addition, we intend to examine the value of AACSB accounting accreditation by evaluating alumni performance on the CPA exam.

Literature Review

According to the Preamble to the 2013 Accounting Accreditation Standards, "Accounting professionals are playing increasingly critical roles in the collection, analysis, recording, reporting, interpretation, and verification of financial and non-financial information." Their support is critical to efficient allocation of resources within a firm and an economy. Also stated in the Preamble are goals of providing relevant quality accounting education and of improving accounting practice through research and impactful scholarship. Although the accounting profession does not require that entry-level accountants graduate from an AACSB accredited accounting academic unit, "it is appropriate that accounting academic units aspire to develop in their graduates' strong foundational skills, thorough and relevant knowledge, and a sense of integrity in the practice of accounting" (p.4).

Based on these statements by the AACSB, separate accounting accreditation should yield significant benefits to accounting programs. On the other hand, as noted above, only about 25% of currently accredited business schools have separate accreditation for their accounting units. Clearly, if we consider all accounting programs in schools across the country, the percentage is much smaller. The implication for many schools is that the costs may outweigh the perceived benefits.

Marts, Baker, and Garris (1988) conducted one of the earlier studies to assess the benefits of accreditation. They used CPA exam pass rates as a proxy for quality of the accounting program and compared pass rates between candidates from AACSB accounting accredited schools, candidates from schools with only business accreditation, and candidates from non-accredited schools. Using pass rates of first-time candidates without advanced degrees for four testing dates in 1985 and 1986, they found that candidates from accounting accredited schools had higher success rates than those from non-accredited schools. On the other hand, when they compared pass rates for candidates from accounting accredited schools with candidates from business only accredited schools, they found no significant difference. The authors did not compare pass rates between candidates from schools with only business accreditation and those from non-accredited schools.

Two decades later, Barilla, Jackson, and Mooney (2008) conducted a similar study, adding accreditation credentials from the Association of Collegiate Business Schools and Programs (ACBSP) and the International Assembly for Collegiate Business Education (IACBE). They examined first-time candidate pass rates on the bi-annual exams administered from May 1985 through November 2003[1]. Their results for separate AACSB accounting accreditation parallel those of Marts et al.; that is, they found that the coefficient for accounting accreditation was positive and significant. They concluded that separate AACSB accounting accreditation contributes to success rates, stating "it is likely that most administrators would consider accreditation costs a small sacrifice to achieve a higher CPA exam pass rate, which is an important variable in models that researchers use to rank accounting programs."

[1] Prior to 2004, first-time candidates had to take all parts of the exam at one of the bi-annual sittings. Since then, candidates may take the exam one part at a time at various intervals throughout the year.

In a similar vein, Boone, Legoria, Seifert, and Stammerjohan (2006) examined the association between pass rates and level of AACSB accreditation, business only or business with separate accounting. Their expanded model also incorporated whether the school was located in a state with the 150-hour requirement during the entire period of May 1998 – November 1999, a measure of student selectivity, the presence of advanced degrees, and faculty research productivity. After considering the effect of all explanatory variables in their model, the authors concluded that there is only weak evidence of a relationship between CPA exam pass rates and level of AACSB accreditation.

Other researchers conducted similar studies of business-only accreditation with mixed results. Grant, Ciccotello, and Dickie (2002) reported that the average first-time pass rate was 7.65% higher for candidates from AACSB accredited schools. In a preliminary study, Lindsay and Campbell (2003) hypothesized a positive relationship between a school's accreditation status and the CPA exam performance of that school. They examined first-time candidate performance on two sittings in 1997 and found that the accreditation variable in their model was not significant for any of the four sections of the exam. In a correlative study, Morgan, Bergin, and Sallee (2008) found that candidates from AACSB accredited business schools demonstrated a 6% to 8% higher CPA exam success rate on each of the four parts of the computerized exam in use since 2004. Finally, Morgan (2011) evaluated CPA exam performance of candidates from newly accredited schools of business. Employing a matched-pair design, he examined performance of 56 newly accredited business schools relative to a group of comparably sized and randomly selected non-accredited business schools. For a time period beginning several years before and ending one year after accreditation was achieved, he found that the newly accredited business schools demonstrated higher average increases in success rates. One limitation of his study pertains to the time period of 1998-2006. There were changes in the format of the exam in 2004, such that the pass rates before the changes are not comparable to pass rates after the changes.[2]

A different approach to using CPA exam performance as a proxy for program quality was employed by Howell and Heshizer (2006). Their study focused on the number of attempts to pass the exam, the assumption being that "persons who passed the CPA exam in fewer attempts were better trained than those that required more attempts." Using a regression analysis of results from an on-line survey sent to a sample of CPAs employed at accounting firms, the authors found that the average GPA and AACSB business school accreditation were significant and lowered the number of attempts.

While results of the research discussed above are mixed, the underlying premise is that candidates from AASCB accredited schools – business only and business with separate accounting – should outperform candidates from non-accredited schools. A smaller number of studies have examined other proposed benefits. Hardin and Stocks (1995) surveyed recruiters of entry-level accountants and found that graduates from AACSB accredited schools of business were more favorably evaluated than were graduates from non-accredited schools. Saunders and

[2] Howell and Heshizer (2006) note: "According to the Association of State Boards of Accountancy the four parts of the exam may now be taken, and credit received for passing, one part at a time. The old format required all four parts of the exam to be taken at one of the exam's bi-annual sittings, with at least two parts passed." This would seem to imply higher pass rates in general after 2004.

Stivason (2010) surveyed 1,026 graduates to address two issues identified in Section 33 of the 2003 Accounting Accreditation Standards:

- *Placement of students within three months of graduation*
- *Career success of graduates at an appropriate later time (e.g., 5 or 10 years)*

Responses to the survey demonstrated success attributable to AACSB accounting accreditation.

The study by Saunders and Stivason (2010) demonstrates that AACSB accreditation benefits may also be measured by stakeholder perception. AACSB accreditation provides stakeholders with certification that a program meets or exceeds minimum standard of excellence. An earlier study (Posey and Parker, 1989) found that AACSB accreditation has a positive influence on employment prospects of accounting graduates. Roller, Andrews, and Bovee (2003) examined the costs and benefits of specialized accreditation relative to program goals, program competitiveness and student learning. Their research showed significant differences across accredited and non-accredited schools as to the reasons for the selection of one of three business accrediting associations (AACSB, ACBPS, or IACSB). Gaharan, Chiasson, Foust, and Mauldin (2007) surveyed administrators of accounting departments that had achieved or were in candidacy for accounting accreditation as of July 2003 with the goal of identifying benefits and challenges of the accreditation process. Their results showed differences between programs with primarily teaching missions and programs with primarily research missions.

While the research points to the need for multiple measures of accounting program quality, success on the CPA exam continues to be a widely used measure. As Morgan (2011) points out, "CPA exam pass rates have long been recognized as a critical assessment of accounting skills and business knowledge necessary for entering the accounting profession." While we recognize the limitations of using this single measure of quality, the research methods described below investigate the relationship between CPA exam pass rates as a proxy for quality and separate AACSB accounting accreditation.

Methodology and Data

In order to evaluate the relationship between AACSB accreditation and candidate passing rate, we hypothesized the following:
H0: AACSB Accounting Accreditation has no influence on Candidate passing rate;
HA: AACSB Accounting Accreditation influences Candidates performance on the CPA exam.
We hypothesized the following equation to explain the dependent variable
$yij = f(x1j, \dots, xkj) + \varepsilon i\text{j}$
Where yij is the dependent variable measuring CPA first-time candidate passing rate for school i at period j, $x_{1j}, \dots x_{kj}$ are independent variables, which may influence the candidate passing rate at the j^{th} time period, and ε_{ij} is the error term. The format of Eq. (1) fits cross-sectional data.

In addition to dependency of candidate passing rate to AACSB accreditation, the CPA passing rate may also be related to other real data[3] such as the number of candidates per school, AACSB accreditation, the number of sections taken per school, first-time CPA exam takers passing rate, average score, age of exam taker, type of institution (public/private), and highest degree offered. It is reasonable to assume that first-time CPA exam passing rate is influenced by variables included in our model.

Results

Applying multiple regression analysis, we obtained the following results. Two multiple regression models resulted in showing a significant relationship between AACSB accounting accreditation and the candidate passing rates. The average score is not included since it is highly correlated to passing rate. The first regression model is based on a linear relationship.

1. Linear Multiple Regression Model:

Percent Pass = 0.496 - 0.0286 AACSB - 0.00272 Candidates + 0.00134 Sections
+ 0.0480 PRIVATE + 0.0772 Degree

Predictor	Coefficient	SE Coefficient	T	P
Constant	.49551	.01471	33.68	.0000
AACSB	-.02864	.01363	-2.10	.036
Candidates	-.0027199	.0003099	-8.78	.0000
Sections	.0013441	.0001396	9.63	.0000
Private	.04802	.01293	3.71	.0000
Degree	.07718	.01341	5.76	.0000

S = 0.127707 R-Sq = 30.9% R-Sq(adj) = 30.1%

2. ln(rate) is the logarithm of "Success Rate"

The second regression model is a natural logarithm where the dependent variable "Success Rate" is expressed in natural logarithm format. The regression equation is specified as follows:

Ln(rate) = - 0.748 - 0.0631 AACSB - 0.00465 Candidates + 0.00239 Sections
+ 0.107 PRIVATE + 0.126 Degree
The result of the log function is illustrated below.

[3]Data source: The first data base is NASBA – National Association of State Board of Accountancy, Candidate Performance on the Uniform CPA Exam, 2013 Edition. This edition lists the programmatic performance on the CPA examination for U.S. colleges and universities. The lists of AACSB accredited business and accounting units are available on the AACSB website. In this study, we included 168 AACSB accounting accredited and 302 AACSB business accredited schools.

Predictor	Coefficient	SE Coefficient	T	P
Constant	-.74774	.03461	-21.60	.0000
AACSB	-.06309	.03207	-1.97	.050
Candidates	-.0046502	.0007288	-6.38	.0000
Sections	.0023863	.0003283	7.27	.0000
Private	.10702	.03055	3.50	.001
Degree	.12568	.03155	3.98	.0000

S = 0.300277 R-Sq = 22.3% R-Sq(adj) = 21.4%

Both models show there is a positive relationship between AACSB accounting accreditation (here coded as 0) and Passing Rate. However, the linear model shows a stronger relationship.

In addition to multiple regression analysis, the authors also considered a third model of two-sample equivalence test for success rate in passing the CPA examination.

3. Two-Sample Equivalence Test: The passing rate for first time takers of the Uniform CPA examination for 2013 illustrates the followings:

Using the 2013 Uniform CPA Examination, the mean percent passing rate for candidates from AACSB Accounting accredited schools and those from only business accredited schools, we tested the following hypotheses:

Null hypothesis: Mean (ACCT) – Mean (Business) ≤ 0
Alternative hypothesis: Mean (ACCT) – Mean (Business) > 0

α level: 0.05

Descriptive Statistics

Variable	N	Mean	StDev	SE Mean
Accounting	168	57.80%	13.14	1%
Business	302	50.09	15.84	.9%

DF T-Value P-Value
400 5.0893 0.000

Since the statistical P-Value is less than 0.05, our results lend support to the regression models that demonstrate a strong relationship between AACSB accreditation of accounting programs and candidate performance of the CPA exam. The result is significant with type one error of less than .05.

Conclusions

The results indicate a positive association between CPA exam success rates and schools with AACSB accounting accreditation. Assuming success rates on the uniform CPA exam proxy accounting program quality, results suggest separate AACSB accounting accreditation has a positive impact on the quality of the programs. These results are consistent with the beliefs of proponents of AACSB accreditation who contend that business and accounting accreditation is positively associated, overall, with higher quality business and accounting education.

In conclusion, the goal of this research has been to reexamine the benefits of AACSB accounting accreditation by using CPA exam pass rates as a proxy of quality and value of AACSB accounting accreditation. Given, the results of this study, we conclude that in general, the average success rate of taking the CPA examination is generally higher for schools with AACSB accounting accreditation than those with only business accreditation.

Data from NASBA 2013 reveal that there is a statistically significant difference in average success rate of candidates from AACSB accounting accredited schools than those with only business accreditation. The data also reveal the followings:

- There is an inverse relationship between passing rates and age of candidates. Candidates who take the test at the age of 25 to 30 have a higher passing rate that those who take it at age of 35 to 40;
- Universities offering doctorate programs in business tend to have higher success rates those offering Master's degree or BSBA/BBA degree;
- Candidates from private and public business schools have similar success rates; and
- Candidates who take more sections first time testing have higher passing rates than others.

The research result presented here is one step in attempting to better understand the relationship between AACSB business school accreditation and quality in business education, in this particular case, accounting education. Results reported here support the contention that AACSB accounting accreditation is, within the context tested, and associated with higher quality accounting education.

The study has not considered costs, stakeholder perceptions, and alumni success of those schools with AACSB accounting accreditation. In the next step of our research, we would consider factors other than success rate on the CPA examination.

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