

# **AN ASSESSMENT OF THE RELATIONSHIP BETWEEN ACCOUNTING INTERNSHIPS AND FIRST-TIME PERMANENT ACCOUNTING JOBS**

## **Abstract**

With relatively few internship studies in the literature, it is not surprising that some basic and very important questions regarding career outcomes have yet to be addressed. We investigated the determinants, for example GPA, school activities, and family background (e.g., parent education and career), of whether an accounting student seeks and obtains an internship. Second, we investigate whether students who take internships have an advantage in number of job offers over students who continue straight through school. Finally, we evaluate the effect of job search skills and leadership skills on the number of job offers.

We found that parent career makes a difference in whether a student experiences an internship. . We also found that participation in on-campus activities makes a difference in whether a student experiences an internship.

Experiencing an internship, by itself, does not result in more job offers. However, the study did find that students who rejected an internship offer or who did not receive an offer from the internship firm received more job offers than students who did not intern.

Finally, while students who self-reported job search skills had no impact on number of job offers, students who self-reported higher leadership skills received more job offers than those with lower leadership skills.

## **AN ASSESSMENT OF THE RELATIONSHIP BETWEEN ACCOUNTING INTERNSHIPS AND FIRST-TIME PERMANENT ACCOUNTING JOBS**

### **Introduction**

An internship in accounting is not a new phenomenon. Students have taken semesters or summers off from school to work in CPA firms and corporations for many years. Many accounting faculty and professionals believe that through internships students are able to gain an insight into the “real world” of business and experience situations that cannot be duplicated in the classroom.<sup>1</sup> In addition, it is thought that an internship is also a significant avenue for students to obtain permanent jobs (Snyder, 1999). Gault et al. (2000) found some support that internships help with permanent employment. Yet, research has not found that firms derive personnel benefits from having an internship program (Marabello, 1991). That is, the internship program did not provide an advantage in hiring permanent employees. In addition, some research found that accounting students who take internships do not gain an advantage in obtaining permanent employment (Ricks et al. 1993). A failure to provide an employment advantage would be important information to students contemplating an internship since securing permanent employment is thought to be a major reason for students to accept internships.

Students who take internships interrupt their education and incur actual and psychic costs compared to students that continue straight through their accounting program. In addition, Eyster (1992, p. 41) indicated that faculty are “dubious about the value of internship programs that displace significant amounts of coursework, questioning whether the educational opportunity cost are offset by what is learned in the field.” If taking an internship does not provide a competitive advantage in obtaining a permanent

job, students and others have a misperception about the benefits of an internship.

Students might prefer to remain in school and participate in school activities (e.g., Beta Alpha Psi) and focus on improving their GPA in preparation for permanent job interviews if the internship does not provide them a competitive advantage.

We first investigate the determinants, for example GPA, school activities, and family background (e.g., parent education and career), of whether a student seeks and obtains an internship. Second, controlling for the selection bias in obtaining an internship, we investigate whether students who take internships have an advantage in number of job offers over students who continue straight through school. With so few internship studies in the literature, it is not surprising that some basic and very important questions regarding career outcomes have yet to be addressed (Gault et al. 2000). The results will provide students and accounting program administrators more information about the perceived benefits of an internship.

### **Trends in Internships**

College-endorsed employment programs date back to 1906 with University of Cincinnati's Cooperative Education Program (Thiel and Hartley, 1997). According to Tooley (1997), internships have become more widespread in recent years due to two trends. The increased cost of higher education forces parents and students to survey the job market earlier to make sure a job is available at the end of the education. In addition, corporate downsizing in the 1990s caused a change in hiring practices of employers. More companies use the internship to screen and assess the value of future employees before making a fulltime commitment. Tooley (1997) found that nine out of ten colleges offer some type of internship opportunity for their students. Nelson et al. (2002)

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<sup>1</sup> Dennis (1996), Healy and Mourtou (1987), Kane et. al (1992), and Taylor (1988).

performed a study that compared changes in accounting student characteristics between 1995 and 2000. One change found was a substantial increase in accounting students completing internships. In 1995, only 39 percent of seniors had already completed, were currently completing, or had definite plans for an internship. In 2000, this percent had increased to 60 percent. For masters students the percent increased from 34 percent in 1995 to 63 percent in 2000.

The increasing trend and visibility of internships has caused students to expect an internship opportunity before graduation. Some schools require an internship before students can complete the program (e.g., Alverno College and Keuka College). More frequently, however, schools work as intermediaries between the employer and student to assist the process, but they do not require an internship to graduate. Students interview with potential employers and make all arrangements (e.g., salary, living arrangements, etc.) independent of the school.

### **Description of a Typical Accounting Internship Program**

DiLorenzo-Aiss and Mathisen (1996) identified a typical internship program as having four characteristics: (1) work is for a specified number of work hours, (2) the work may be paid or unpaid, (3) credit is awarded, and (4) oversight of the program is provided by a faculty coordinator or other university representative along with a corporate counterpart.

An academic *accounting* internship program usually requires students to be involved in normal accounting functions as opposed to routine clerical tasks. In many respects an intern performs the same duties as a staff accountant. They work on audits that require them to conduct tests in accordance with the audit plan, perform tax compliance for a

variety of taxpayers, conduct tax research for managers and partners, and work on systems implementation projects. In general, interns are expected to be professionals who sit in on meetings and in some instances meet with clients.

To receive academic credit for an internship experience, a student must generally fulfill some academic requirement in addition to simply working for a specified number of weeks. Such requirement may be in the form of a term paper at the conclusion of the internship, a daily log of experiences and duties performed, an examination on specific skills or knowledge expected from the internship, or simply an oral interview after the internship. Most accounting programs grant three semester credit hours for qualifying internships.

### **Prior Research**

#### *Internship Benefits*

Gault et al. (2000) studied the relationship between undergraduate business internships and career success. Data was gathered by surveying 144 alumni (98 interns and 46 non-interns) of a northeastern U.S. public university. Career success was measured using 13 skills in four categories; academic skills, communication skills, interpersonal skills, and job acquisition skills.

The results indicate that alumni with internship experience reported a significantly higher level of extrinsic success than their non-intern counterparts. Interns reported higher entry-level compensation than non-interns and interns had a reduced time to obtain employment. The authors suggest that the higher salary may be the result of starting work sooner. Interns' time to obtain their first position was significantly shorter (1.98 months) than for non-interns (4.34 months). As a result of starting work sooner, interns

likely reached their periodic evaluation and salary review sooner, causing them to have a higher salary. The reduced time to obtain employment may be explained, according to the authors, by the interns having better preparation in job acquisition skills. Interns rated their experience for job interviewing and job networking provided by the internship higher than the preparation provided them in these areas by the university. The authors note that the reduced search time might be explained by the fact that interns have direct industry experience. Interns with permanent job offers from their internship are able to use this fact when interviewing with other employers and thereby speed up the search process.

Horowitz (1996) found different results. He surveyed 233 graduates from the School of Journalism at the University of Wisconsin-Madison to test the hypothesis that having an internship is a predictor of a greater number of job offers. The results did not support the hypothesis, nor did the results support the hypothesis that having an internship predicts higher starting salaries. Results from recruitment practices in journalism may not generalize to recruitment practices in accountancy.

Bernstein (1976) found students with internship experience reported positive changes in feelings of personal and social efficacy. According to Bernstein, an academically sound internship can be a vital part of a student's education. Proper planning, including appropriate assignments such as writing a paper or conducting research, is essential to assure a high quality academic experience. Students can obtain an awareness of the professional skills needed to succeed in business and focus on learning these skills when they return to school. Internships help students gain confidence about their ability to

perform outside a classroom setting and often perform specific job assignments that help them understand how their academic training prepares them for the job.

Some students do get permanent offers and in some cases receive signing bonuses at the conclusion of their internship. An internship reduces the chances that individuals might accept permanent employment without really understanding the company's mission. Through an internship, a student can see if a company's philosophy and direction matches their career goals. There appears to be definite benefits of an internship related to obtaining a permanent job.

Sathe (2000) found that internships enhanced the social interaction component of students entering the accounting profession. In addition students learned certain contractual dimensions of the profession and the internship was viewed as a "rite of passage" into the profession. Thus, an internship was thought to be an avenue to a permanent job.

Students that choose not to take internships often think educational courses provide them training and knowledge that substitute for the internship experience. Ferguson et al. (2000) examined work experience and formal studies to determine if internships can be an alternative means to audit education and training. Their results found that pre-scores of students with co-op (i.e., internship) experience but without an auditing course are closer to practicing auditors than the pre-scores of non co-op students. After completing their first undergraduate audit course, non co-op students' post-scores were closer to those of practicing auditors relative to pre-scores. The pre-post change referred to above is muted for co-op students, and co-op students had post-scores that were marginally closer to practicing auditors relative to the post-scores of non co-op students. The results

provide some support that internships help students compensate for low performance in auditing courses (or no course at all) and thus gain them some advantage in the employment process.

### *Perspectives of Internships*

According to Beard (1993), insights and opinions of students who accept internships have been under-utilized. As such, Beard conducted a study to capture the meaning and value of the internship experience from the perspective of the interns. Results of the study show that prior to their internships, (1) students had little understanding of what accountants do, (2) interns preferred experiential learning as opposed to schoolwork, and (3) a minority of the accounting interns expected to remain in public accounting after five years. This implies that the interns fully expected to receive job offers and be employed in public accounting as their first job.

CPA firms derive benefits from internship programs as well as the students. Marabello (1991) performed a study that focused on the CPA firms and the benefits they derive from the internships. One conclusion drawn from the study is that firms derive benefits for the entire firm by participating in accounting internship programs. This supports the argument that internships provide students an advantage in finding permanent employment. Firms that benefit from internship programs tend to be satisfied with the intern and thus are willing to extend them permanent job offers.

However, as noted earlier, the study provided no evidence that the firms derived *personnel* benefits. This implies that the firms did not show an advantage in hiring personnel over what they would have had if they had not participated in the internship program. While this second result does not appear completely consistent with the first



conclusion (i.e., the firm as a whole benefited from the internship), it does show that hiring permanent employees from an internship may not be as important to the firms as students and faculty think. This may be particularly true for smaller firms that need help during busy season but do not necessarily need or want permanent employees.

Consistent with this line of thought, another conclusion of the study was that practitioner involvement was not based on the number of personnel employed in the CPA offices.

Thus, small firms participated in internships as well as large firms.

A permanent job-offer/acceptance as a result of an internship is contingent on how well the interns'/firms' expectations matched reality. Fredrickson (1999) investigated the work-value congruence between the intern and the intern's immediate supervisor. Work-value congruence is the degree of match between the work values of an individual and those of another individual, a work group, or the organization. Fredrickson found that the student-supervisor congruence indexes were not correlated with student satisfaction or performance. Thus, a permanent job expectation or desire was not affected by the intern's work relationship with his/her supervisor.

However, the study found that the student-organization culture indexes were significantly correlated to several student performance indicators. The accuracy of students' perception of the corporate culture appeared to be a better predictor of a successful internship than work-value congruence. Thus, the internship helped students evaluate corporate culture, which affects permanent job likelihood.

### *Gaining Employment*

Groves et al. (1977) found that students perceived that internships provided them with increased business contacts and better knowledge of the job market. Stenhouse (1999)

studied whether college students who accept internships can enhance their likelihood of subsequent employment by (1) adopting a professional role identity within an organization, (2) developing professional and organizational commitment through the enactment of that role, and (3) being validated in that role by their work associates. The finding resulted in a more precise understanding of the job search process for interns seeking entrance into the workforce and provided students with strategies to enhance their employability prospects as a result of the internship. Clearly, one goal for interns in this study was to gain permanent employment upon graduation.

Buckhoff (1995) surveyed student interns to obtain their perception concerning the importance of certain job attributes before and after the internship experience. The result provided evidence that accounting students' perceptions concerning the importance of various job attributes did change significantly as a result of the internship. In other words, the internship provided students insights into what a permanent job would provide and whether they would like it. The two most important factors that contributed to a change in perceptions were (1) the amount of corporate job experience possessed before the internship and (2) the type of work performed during the internship. This research lends support to the notion that students use internships to pursue permanent jobs.

#### *Successful Internship Programs*

The structure and operation of internship programs vary from one university to another. Goad (1998) investigated what specific components are needed to have a successful internship program in a college of business environment. In this study, Goad concludes that many corporate recruiters prefer to hire business students who have participated in an internship experience. At least one component of a successful

internship program is perceived to be attainment of permanent employment as a result of the internship. Snyder (1999) also studied the characteristics of successful internship programs. Snyder argues that an internship is likely to produce not only positive intellectual results but also enhanced and expanded employment opportunities as well. This is consistent with Devine et al. (1997) who state that recruiters often indicate that internships and co-op programs give students a clear advantage in finding employment.

## **Hypotheses**

### *Determinants of an internship*

Accounting programs have provided internships for many years and administrators and faculty have promoted internship programs by stating that the internships improve a student's ability to get a job. Yet, many students do not pursue an internship and appear to find employment upon graduation. Internships are provided for many reasons, such as giving students practical experience to apply in classes or letting students experience the type of work they will be performing. However, job placement is often the top reason given by administrators, faculty, and parents, for taking an internship. We developed two sets of variables that we believe differentiate those students who obtained an internship from those who did not. These sets of variables are family background and student attributes.

Our first research question is whether family background matters in deciding to take an internship. Family background is important in determining social and economic success in adulthood (Korenman and Winship, 1995). Even if there are changes over time in the relation between parent characteristics and income, the relation still persists (Harding et al. 2004). On the hiring side, employers search for persons with professional

knowledge, personal engagement, and social competence (Behrenz, 2001). We argue that family background provides exogenous endowments of social competence and professional knowledge.

Because internships are thought to be a mechanism for economic success, we expect family background to provide the knowledge of and encourage the use of internships. As a result, we were interested in the background of respondents. Our two hypotheses to operationalize family background are as follows:

H1: Students with parents having professional education backgrounds will be more likely to experience internships.

H2: Students with parents who have management careers will be more likely to experience internships.

We also consider the impact of student attributes on the internship experience. We consider grades and participation in business honoraries as student attributes that indicate whether students are likely to have an internship experience. Grades are included because employers use them as selection criteria. To represent participation in other business activities, we selected induction into Beta Gamma Sigma. Beta Gamma Sigma is distant, but related to, accounting. It is distant in the sense of not being specifically accounting. Students in Beta Gamma Sigma have extended some effort beyond being an accounting major. As a result, we have the following two hypotheses (all hypotheses are stated in the alternative):

H3: Students with higher GPAs will be more likely to experience internships.

H4: Students with membership in Beta Gamma Sigma will be more likely to experience internships.

### *Internships and number of job offers*

We also hypothesized a series of outcomes as a result of the internship experience that we believe will differentiate among the number of job offers students receive. At least in theory students might experience differences in starting salaries. However, because we deal with respondents from large accounting firms, there was not much variation in salaries. As a result, we restrict our outcomes to describing the number of job offers.

Internships are part of an intensive job search behavior. Many students who intern typically gain employment from internships, and therefore, do not need to re-enter the job market. As a result, these students have fewer job offers than those students who do not intern. The following hypothesis will test for this result:

H5: Students who experience an internship have fewer job offers than other students.

Students with internships do not necessarily take a full-time position with the internship firm. Reasons for this are at least the following: (1) the firm does not extend an offer because the student was not a desirable fit for their needs, or (2) the firm extended an offer but the student rejected it because he/she did not perceive a desirable fit with the firm. In both cases, the students pursue other job alternatives. If an internship is a positive net benefit for students on their resume, both students in (1) and (2) above will have more job offers than if the student had not experienced an internship. As a result, the following hypotheses will be tested:

H6: Students with internships who do not have offers from the internship firm have more offers than students who do not intern.

H7: Students with internships who received and declined an offer from the internship firm have more offers than students who do not intern.

We also include control factors that potentially explain the number of job offers, independently of the internship experience. Two factors we include here are (1) the self-reported quality of job search skills, and (2) the self-reported quality of leadership skills. A third factor is the lambda self-selectivity factor (Green 780), derived from the full model presented in Table 2.

H8: Students with higher quality of job search skills have more offers than students who do not.

H9: Students with higher quality of leadership skills have more offers than students who do not.

### **Data Collection**

We surveyed staff accountants below manager level in offices of three of the big four accounting firms and an office of a large regional accounting firm. Respondents filled out the survey reported in Appendix A. A total of 96 surveys were completed. After reducing for missing responses, we had 82 usable responses. Usable responses mean that we had responses for all questions used. Figure 1 describes the frequency of internships and the sequence of decision nodes and outcomes in the sample. Fifty out of a total of 82 respondents had experienced an internship.

Near the end of the internship period, or perhaps some time after the internship has been completed, the firm decides whether to offer the intern a permanent position. Most respondents who had experienced internships received offers. Out of a total of 50 respondents with an internship, 36 received offers of permanent employment (72 percent). This left 14 respondents who did not have an offer of permanent employment.

## **Analysis**

### *Determinants of an internship*

Table 1 presents the variables that will be used to test hypotheses one through four. We include family education, family career background, the respondent's undergraduate GPA, and the respondent's participation in Beta Gamma Sigma (BGS). The means are described separately for respondents who experienced internships and respondents who did not.

Parent education is the first family background variable. The Census 2000 categories list PhD and professional degrees (MD or JD) as the two highest levels of professional education. As a result, we split the parent education variable into a category variable describing whether the parents had a PhD or MD/JD (coded one) or not (coded zero). About 10 percent of respondents who experienced internships had parents with either a PhD or MD/JD. Because there were 50 respondents who experienced an internship, the 10 percent figure implies 5 respondents had parents with a PhD or MD/JD. About 16 percent of respondents who had not experienced internships had parents with either a PhD or JD. The difference between the 10 percent and 16 percent is not significant, having a  $t$  value of  $-0.72$ . Just considering this univariate test, without controlling for other variables, our results do not support H1. However, we also present the multivariate tests later.<sup>2</sup>

Parent career describes whether the respondent's parents' primary career was in the cluster of Management, Business, and Financial Workers (MBFW) occupations as

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<sup>2</sup> The level of parent education was not significant in explaining whether respondents experienced an internship. Significance did not vary whether we used a simple two-category variable or used indicator variables for each education level. The only effect of using finer levels of indicator variables was that the

defined by the EEO Occupational Groups for Census 2000.<sup>3</sup> Seventy-four percent (0.74) of respondents who had internships had parents who were in the Management, Business, and Financial Workers group. In contrast, 50 percent of students without the experience of internships had parents in the MBFW group. The t value comparing the 50 percent and the 74 percent is 2.19, which is significant, so we conclude the 50 percent is significantly lower than the 74 percent. As a result, considering just the univariate test, our results support H2 and we conclude that students who had parents with management careers were more likely to experience internships than those who did not.

The undergraduate GPA for respondents is a self-reported GPA for the respondent's undergraduate career. The scoring system used numerals 1 through 4 to represent categories of GPAs. For example, the numeral 4 represents the category of undergraduate grades between 3.60 and 4.00. The numeral 3 represents the category of undergraduate grades between 3.20 and 3.59, and so on. The average of the codings is 3.35 for respondents who experienced an internship. The average is lower for respondents who had experienced internships than respondents who had not experienced internships (opposite than expected), but the t value, -1.16, is not significant. As a result, considering only this univariate test, our results do not support H3, and we conclude that there was no difference in GPA between students who experienced internships and students who did not.

For the later multivariate test we split this into a two-level category variable, the highest two levels (numeral categories 3 and 4 are coded one) and the lowest two levels

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finer levels provided better controls, raising the significance level of parent career. Since parent career is already significant, we leave the parent education as a two-category variable.



(numeral categories 1 and 2 are coded zero). Breaking the categories into two levels allows us to use a single indicator variable and makes the estimated equation a little more parsimonious than using three indicator variables to represent the original four levels. It is obvious that GPA is important to employers as they interview students for jobs. Therefore, this variable was likely not significant because the respondents probably had good GPA's whether they interned or not in order to receive the job that they have.

Respondents who had experienced internships were significantly more likely to have participated in Beta Gamma Sigma (BGS), the honorary at the college level for accredited colleges of business. Twenty-three percent of respondents who had experienced internships had joined BGS, which translates to 12 respondents. This compares to only 3 percent of respondents who had not experienced internships. The t value, -2.59 is significant, so these numbers (0.23 and 0.03) are different between respondents who experienced internships and those who did not. Therefore, considering only the univariate test, our results support H4 and we conclude that students who were members of BGS were more likely to experience internships than those who were not. BGS probably illustrates more 'reaching out' or 'initiative' by respondents. Internship firms would like this quality and therefore would more likely have students with this quality as interns.<sup>4</sup>

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<sup>3</sup> We break the categories here, because the Management, Business, and Financial Workers category was empirically the largest category. Results do not vary if we set out other categories separately in addition to the MBFW.

<sup>4</sup> We have not included Beta Alpha Psi (BAP). We considered using BAP, but we rejected the inclusion for two reasons. First, BAP is related to the GPA variable. Beta Alpha Psi is an honorary organization, and academically highly successful respondents like our respondents tended to be in Beta Alpha Psi. We did not have much variation in undergraduate GPA and we had even less variation in BAP. As a result, BAP was not useful in distinguishing between having the experience of an internship and not. Second, while both BAP and BGS are honoraries, BAP is sponsored within accountancy and BGS is sponsored at the college level. A student who joins Beta Gamma Sigma has a vision beyond the immediacy of accountancy.

Table 2 describes the multivariate results for testing the same four hypotheses. The dependent variable is whether the respondents experienced an internship or not. The independent variables are (1) parent education, (2) parent career, (3) undergraduate GPA, and (4) membership in BGS. We used a probit regression to estimate the relation between the dependent and independent variables. The regression results describe the probability of experiencing an internship.

As with the univariate comparisons described above, only two of the four variables were significant; parent career and membership in BGS. The level of parent education is not a significant determinant, while the type of career the parent had is. If the parent was in the Management, Business, and Financial Worker (MBFW) career area, then the respondent was more likely to experience an internship. The coefficient on parent career is 0.67 and the t value is 2.19, which is significant. For example, using the point estimates in Table 2, suppose the parent had an undergraduate degree, did not work in the MBFW career area, the student had a GPA above 3.20, and did not participate in BGS. The probability of experiencing an internship would be 0.39. If instead, the parent worked in the MBFW career area, the probability of experiencing an internship would be 0.65, an increase of 26 percentage points in probability. As a result, the parent career background made a difference in whether the respondent experienced an internship or not.

We notice that while the point estimate for the coefficient of the undergraduate GPA is negative, the t value is not significant. As a result, the undergraduate GPA does not distinguish between respondents who experienced an internship and those who did not. As stated earlier, one explanation is that there is not much variation in GPA at this

level, because all the respondents are academically successful in order to obtain employment with these firms. While we had hypothesized that students with lower GPAs would attempt to supplement their vita with an internship, or attempt to demonstrate their ability to do the work by offering themselves as interns, in fact, we found no relation.

We also found that participation in Beta Gamma Sigma was associated with experiencing an internship. The coefficient is 1.26, and with a t value of 2.14, it is significant. Once again, suppose the parent had an undergraduate degree, did not work in the MBFW career area, had a GPA > 3.20, and participated in the BGS. Using the point estimates in Table 2, the probability of experiencing an internship would be 0.84. If instead, the student did not participate in Beta Gamma Sigma, the probability of experiencing an internship would drop to 0.39, a decrease of 45 percentage points in probability. As a result, participation in Beta Gamma Sigma was associated with the student being more likely to experience an internship. It is likely that Beta Gamma Sigma proxied for a student who was more participative than the average student. To have joined Beta Gamma Sigma required an effort beyond Beta Alpha Psi, and may illustrate a higher level of interest and initiative on the part of the student in moving into the business community compared to Beta Alpha Psi.

There are no obvious signs of model misspecification. The coefficients on the variables do not change signs or drift in and out of significance when variables are dropped. While there might not be a single accepted measure of model fit, we present the model log likelihood measures in Table 2, along with the L ratio (Greene 683).

Table 3 provides an additional description of the overall model fit. Using the coefficients from Table 2 and knowledge of the individual respondents, we can describe

the probability of experiencing an internship conditional on the values of the independent variables. For respondents who experienced an internship, the model produces an average probability of 0.66, and for respondents who did not experience an internship, the model produces an average probability of .53. This average of 0.66 is significantly higher than the average of .53 with a t-value of 3.53. As a result, the independent variables plus coefficients tend to assign significantly higher probabilities to respondents who actually did experience internships than respondents who did not.

The question could reasonably be raised whether a 0.66 average estimated probability is significantly higher than the prior probability in the group of 0.61. After all, there were 50 respondents who experienced internships in the sample out of a total of 82 respondents. As a result, knowing nothing about any individual respondent, we would expect a 61 percent probability that an individual would have experienced an internship. An average estimated probability of 0.66 may not be significantly different from the overall proportion in the sample of 0.61.

It turns out that the model probability of 0.66 is significantly higher than the 0.61 prior probability with a t-value of 2.03. As a result, we conclude that the average probabilities from the model of respondents who experienced internships are significantly higher than the prior probability.

On the opposite side, the 0.53 may, or may not, be lower than the prior probability of 0.61. However, it turns out that the average probability of the respondents who did not experience an internship is significantly lower at 0.53, from the prior probability of 0.61, with a t value of 2.91. In summary, the average of 0.66 is significantly higher than the prior probability, and the average of 0.53 is significantly lower than the prior probability,

suggesting that the model discriminates among respondents. The model places higher probabilities of experiencing an internship on those respondents who actually did experience an internship and lower probabilities on those respondents who did not. As a result, we conclude that the model reasonably captures precursors to experiencing an internship.

#### *Internships and number of job offers*

As illustrated in Table 4, out of 82 respondents, the following groups are apparent: 29 applied for and received an internship, and accepted a permanent job offer; 7 applied for and received an internship, but rejected a permanent job offer; 14 applied for and received an internship, but received no permanent job offer; and 32 did not apply for nor receive an internship.

We had no respondents who stated that they applied for internships and did not receive them. There are several possibilities. We were not dealing with a random sample, but rather with a set of successful students. Because the sample was a look-back sample of students with jobs in major public accounting firms, students who looked for internships and did not get them may not be present in the sample. However, it is still possible that some respondents did not want to suggest that they applied for, and did not have, an internship. The event of trying for an internship and not getting it suggests failure. Respondents may have been reluctant to indicate failure, even though the responses were assured to be anonymous. If this latter is the case, then that group of respondents are probably in the 32 respondents who did not experience internships.

The dependent variable for this model is the number of job offers. Specifically, we coded whether the respondent had a single job offer, or whether the respondent had

more than a single job offer. There were 25 respondents with a single offer and 57 respondents with more than one offer.

Table 4 describes the distribution of job offers and internship experience. For example, 32 respondents had no internship. Of the 32 respondents, 7 had just a single job offer, and 25 had more than a single job offer. There were 29 respondents who accepted the offer after the internship. Of the 29 respondents, 16 had a single job offer, and 13 had more than a single offer.

In Table 5 we report the result of having asked the respondents to look back on their experience during the interview process and describe the quality of their skill set as they interviewed. Table 5 describes the respondents' self-ratings. Of the fourteen respondents who categorized themselves as possessing excellent job search skills, 4 had one offer and 10 had more than one offer. Of the 13 respondents who described themselves as having excellent leadership skills, 2 had one offer and eleven had more than one offer.

Table 6 reports the probit regression of number of offers on independent variables. Students with internships have fewer offers (-0.94 coefficient and a t-statistic of -2.40 which is significant). Therefore, our results support H5 and we conclude that students who intern have fewer job offers than those who do not. As stated earlier, this is probably due to the fact that many students who intern accept an offer from the internship firm and therefore do not interview anymore for jobs.

If a student interns but receives no offer from that firm, we hypothesize that the internship experience will add value to the student's record providing them with more job offers than a student who has no internship. The coefficient for this hypothesis is 1.75

with a t-statistic of 2.73 which is significant. These results support H6 and we conclude that students that intern but do not receive offers from that firm will receive more job offers than students who do not intern.

H7 states that a student who declines an offer from an internship firm will also have more job offers than a student who does not intern due to the value placed on the internship. Table 6 indicates a coefficient of 1.43 with a t-statistic of 2.10 which is significant. Therefore, we conclude that students that decline an offer from the internship firm will have more job offers than students who do not intern.

Job search skills (H8) and leadership skills (H9) should affect the number of job offers. We consolidated the five levels from Excellent to Poor into a 2-level category variable; 0 is good, fair, or poor; 1 is excellent, or very good. This variable did not affect the number of job offers.<sup>5</sup> The coefficient in Table 6 is 0.10 with a t statistic of 0.26 which is not significant. It's possible that the recruiting process for employees of an accounting firm is standardized enough that job search skills are not a major determinant of being hired. As a result, the respondents recognize that cultivating job search skills is not a good use of their time. The key to being hired by a public accounting firm is to fit the mold for the firms, rather than to possess excellent job search skills.

Similarly for leadership skills, we consolidated this variable into a 2-level category variable; 0 is good, fair, or poor; 1 is excellent, or very good. This variable did affect the probability of receiving more than a single job offer. The coefficient was 0.77 with a t statistic of 1.92 which is significant. Our results support H9 and we conclude that the higher the self-reported quality of leadership skills, the more likely the respondent was to receive more than a single job offer. For example, suppose a

respondent had an internship, did not receive an offer, had low job search skills, low leadership skills, and a lambda selectivity value of 0.02. Using the point estimates in Table 6, the probability of more than one job is 34 percent. If instead the respondent had high leadership skills, the probability of more than one job is 64 percent.

We also include a lambda selectivity variable estimated from Table 2 (Greene 782), which is not significant, in part because, except for internship showing up as a dependent variable in Table 2 and an independent variable in Table 6, there is little overlap in the models. Excluding lambda has no appreciable impact on the model.

There is no obvious sign of model misspecification in Table 6. Coefficients tend to remain significant, other than leadership skills, when other variables are individually dropped, and the coefficients do not tend to change sign when other variables are individually dropped. The L ratio is also reported in Table 6.

Table 7 describes the probabilities resulting from the coefficients in Table 6. Using the coefficients from Table 6 and knowledge of the individual respondents, the model produces an average probability of 0.76 for the respondents with more than one job offer. This average is significantly higher than the average (0.54) for the respondents who had a single offer. The t value for the null hypothesis that there is no difference is 4.36, which is unlikely to happen by chance. Were the probabilities to be randomly assigned between groups, it is unlikely that the averages would be as different as 0.76 is from 0.54.

The question could reasonably be raised whether 0.76 is significantly different from the prior probability in the group of 0.69. There were 57 respondents who had more than one job offer out of a total of 82 respondents. As a result, knowing nothing about

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<sup>5</sup> This variable was not significant, whether we split this variable into indicators for each level or not.



any individual respondent, we would expect a 69 percent probability that the individual would have experienced an internship. In fact, the t value for the hypothesis that 0.76 is about the same as 0.69 is 2.63. As a result, we conclude that the average probability from the model of respondents who had more than one job offer is higher than the prior probability. Correspondingly, the average probability for respondents with a single job offer is 0.54. The t value for the null hypothesis that the 0.54 is not different from 0.69 is 3.51, which is unlikely to happen by chance. As a result, this suggests that the model assigns high probabilities of more than one job offer on those respondents who actually did have more than one job offer and low probabilities of more than one job offer on those respondents who actually had a single job offer. We conclude that the model reasonably captures the number of offers for respondents experiencing an internship.

### **Summary**

With relatively few internship studies in the literature, it is not surprising that some basic and very important questions regarding career outcomes have yet to be addressed. We investigated the determinants, for example GPA, school activities, and family background (e.g., parent education and career), of whether an accounting student seeks and obtains an internship. Second, controlling for the selection bias in obtaining an internship, we investigate whether students who take internships have an advantage in number of job offers over students who continue straight through school.

The major determinants of experiencing an internship include some aspects of the family background and aspects of the students' effort on campus. We found that parent career makes a difference in whether a student experiences an internship. When the parent was in Management, Business, or Financial Occupations, the student was more

likely to experience an internship. We also found that participation on-campus makes a difference in whether a student experiences an internship. When the student joined Beta Gamma Sigma, the student was more likely to experience an internship.

The experience of an internship affects the number of job offers a student receives, but in very odd ways. There is not a simple relation between experiencing an internship and number of job offers. The entire experience should be considered. Simply experiencing an internship, by itself, does not result in more job offers. This is likely due to the fact that many students who intern accept job offers from the internship firm and therefore remove themselves from the job market, resulting in fewer job offers. However, the study did find that students who rejected an internship offer or who did not receive an offer from the internship firm received more job offers than students who did not intern.

Finally, while students who self-reported job search skills had no impact on number of job offers, students who self-reported higher leadership skills received more job offers than those with lower leadership skills.

Figure 1  
Distribution of the sample

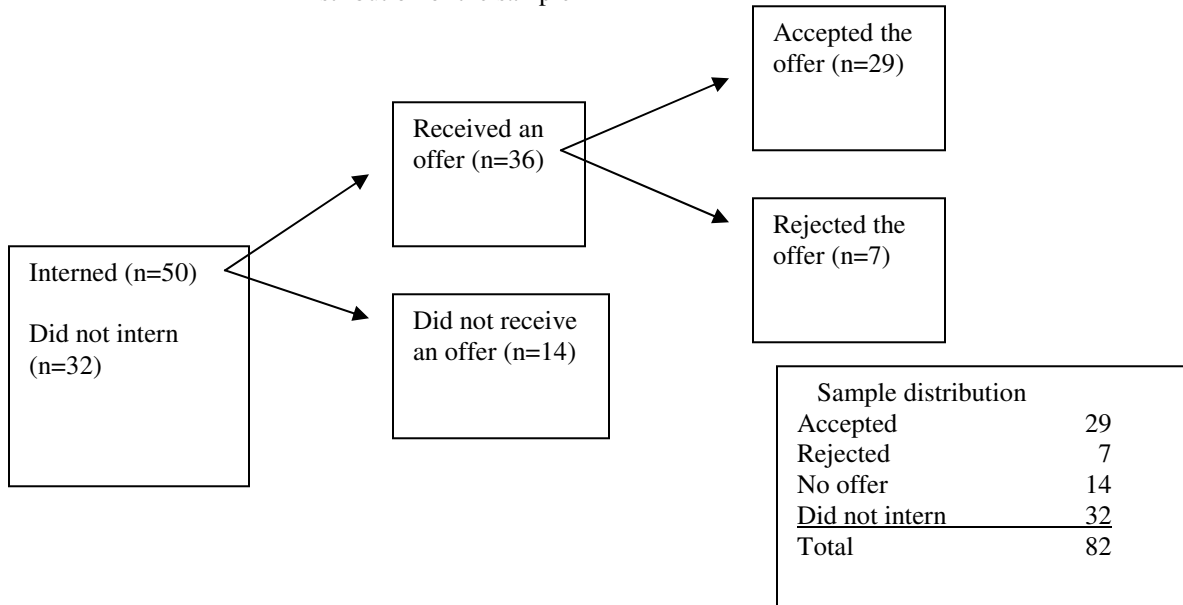


Table 1 Descriptive statistics for internships			
a	b	c	d
Variable	Students with internships (n=50)	Students without internships (n=32)	T value for b-c
Parent education	0.10	0.16	-0.72
Parent career	0.74	0.50	2.19 *
Undergraduate GPA	3.35	3.56	-1.16
Participation in BGS	0.23	0.03	-2.59 *

**Parent education** is a zero/one variable, assigned the value one if the parent had a Doctorate or JD degree, zero otherwise.

**Parent career** is a zero/one variable, assigned the value of one if the parent's career was in the US census category, Management, Business, and Financial Occupations, zero otherwise.

**Undergraduate GPA** is self-reported in categories coded: 1 for <2.80; 2 for 2.80-3.19; 3 for 3.20-3.59; and 4 for 3.60-4.00.

**Participation in BGS** is whether the student joined Beta Gamma Sigma, zero otherwise

\*—Indicates significance at the .05 p-value level.

Variable	Full model	Dropping a variable at a time			
		BGS	GPA	Career	Education
Intercept (t value)	0.57 (0.83)	0.58 (0.84)	-0.21 (-0.85)	0.90 (1.41)	0.52 (0.74)
Parent education	-0.30 (-0.65)	-0.32 (-0.73)	-0.27 (-0.59)	-0.32 (-0.73)	
Parent career	0.67 (2.19) *	0.66 (2.22) *	0.65 (2.14) *		0.67 (2.21) *
Undergraduate GPA	-0.85 (-1.22)	-0.72 (-1.04)		-0.75 (-1.14)	-0.84 (1.19)
Participation in BGS	1.26 (2.14) *		1.20 (2.06) *	1.21 (2.20) *	1.27 (2.15) *
Model log likelihood	-48.62	-51.58	-49.45	-51.06	-48.83
L ratio#	0.11	0.06	0.10	0.07	0.11

\* Indicates significance at the .05 p-value level.

# The log likelihood for the intercept alone is -54.85,  $L_0$ . The L ratio is one minus the ratio of the model log likelihood and  $L_0$ .

The dependent variable is coded zero/one; one if the student had an internship. The distribution is 52 respondents with internships and 34 respondents without internships for a total of 86 versus 82 with the data in Table 1.

**Parent education** is a zero/one variable, assigned the value one if the parent had a Doctorate or JD degree, zero otherwise.

**Parent career** is a zero/one variable, assigned the value of one if the parent's career was in the US census category, Management, Business, and Financial Occupations, zero otherwise.

**Undergraduate GPA** is self-reported in categories coded: 1 for <2.80; 2 for 2.80-3.19; 3 for 3.20-3.59; and 4 for 3.60-4.00. For the probit regression, the categories are consolidated into two categories: zero for GPA less than 3.20 and one for GPA equal to or greater than 3.20.

**Participation in BGS** is whether the student joined Beta Gamma Sigma, zero otherwise

Table 3 Separation in model probabilities between respondents who experienced internships and respondents who did not.			
	Respondents who experienced internships	Respondents who did not	T value for difference
Prior probability of an internship	*0.61	*0.61	
Model probability of an internship	0.66	0.53	3.53
T value for difference	2.03	2.95	

\*50 out of 82 is 0.61.

This is a comparison of the model probabilities between the respondents who experienced internships and respondents who did not. Using the estimated coefficients from Table 2, we estimated the probability of having an internship.

Variable	n	One offer	More than one offer
Accepted the offer after the internship	29	16	13
Rejected the offer from the internship	7	1	6
No offer from the internship	14	1	13
No internship	32	7	25
Total	82	25	57

**Student had an internship** is coded zero/one; one if the student did have an internship.

**Rejected an offer from the internship** is coded zero/one; one if the student rejected the offer made during the internship.

**No offer from the internship** is coded zero/one; one if the student did not have an offer at the end of the internship.

Level	Job search skills		Leadership skills	
	One offer	More than one offer	One offer	More than one offer
Excellent	4	10	2	11
Very good	11	26	13	32
Good	10	18	10	12
Fair	0	3	0	2
Poor	0	0	0	0
Total	25	57	25	57

Variable	Dropping a variable at a time					
	Full Model	Lambda	Leadership	Job Search	Decl Offer	No Offer
Intercept (t value)	0.54 (0.90)	0.23 (0.53)	1.23 (2.57)	0.63 (1.32)	0.78 (1.36)	0.87 (1.51)
Student had an internship	-0.94 (-2.40)	-1.06 (-2.89)	-0.79 (-2.09)	-0.94 (-2.40)	-0.64 (-1.76)	-0.46 (-1.30)
No offer from the internship	1.75 (2.73)	1.77 (2.88)	1.55 (2.67)	1.73 (2.73)	1.46 (2.37)	
Rejected an offer from the internship	1.43 (2.10)	1.49 (2.18)	1.17 (1.82)	1.42 (2.08)		0.97 (1.48)
Quality of job search skills	0.10 (0.26)	0.15 (0.41)	-0.22 (-0.67)		0.02 (0.05)	0.01 (0.00)
Quality of leadership skills	0.77 (1.92)	0.80 (2.03)		0.73 (2.02)	0.57 (1.52)	0.60 (1.58)
Lambda	-0.30 (-0.74)		-0.40 (-1.00)	-0.32 (-0.80)	-0.41 (-1.02)	-0.52 (-1.33)
Model log likelihood	-40.69	-40.95	-42.59	-40.72	-43.34	-45.86
L ratio #	0.19	0.19	0.16	0.19	0.14	0.09

\* Indicates significance at the .05 p-value level.

#The log likelihood ratio for the intercept alone is  $-50.43$ ,  $L_0$ . The L ratio is one minus the ratio of the model log likelihood and  $L_0$ .

The dependent variable is whether the student had more than one job offer, coded one, or just one job offer, coded zero. The distribution is 59 respondents with more than one job offer and 25 with one job offer.

**Student had an internship** is coded zero/one; one if the student did have an internship.

**No offer from the internship** is coded zero/one; one if the student did not have an offer at the end of the internship.

**Rejected an offer from the internship** is coded zero/one; one if the student rejected the offer made during the internship.

**Quality of job search skills** is self-reported and coded on a five point scale; 1 is excellent, 5 is poor. For the probit regression, the categories are consolidated into two levels: zero for poor, fair, or good; one for very good or excellent.

**Quality of leadership skills** is self-reported and coded on a five point scale; 1 is excellent, 5 is poor. For the probit regression, the categories are consolidated into two levels: zero for poor, fair, or good; one for very good or excellent.



Table 7 Separation in model probabilities between respondents who had more than one job offer respondents who had one job offer.			
	Respondents with one job offer	Respondents with more than one job offer	T value for difference
Prior probability	*0.69	*0.69	
Model probability	0.54	0.76	4.36
T value for difference	3.51	2.63	

\*57 out of 82 is 0.69.

This is a comparison of the model probabilities between the respondents who had one job offer and respondents who had more than one job offer. Using the estimated coefficients from Table 6, we estimated the probability of having more than one job offer.

**Appendix A**

**Internships and First-time Jobs**

**Demographic information**

1. **Gender**

Male

Female

2. **Age**

3. **Family background- work**

Check all of the categories below that apply to best describe the professions represented by your parents or family in which you were raised.

- |                                                          |                          |
|----------------------------------------------------------|--------------------------|
| Management, Business and Financial Occupations           | <input type="checkbox"/> |
| Science, Engineering and Computer Professionals          | <input type="checkbox"/> |
| Healthcare Practitioner Professionals                    | <input type="checkbox"/> |
| Other Professional Occupations                           | <input type="checkbox"/> |
| Technologists and Technicians                            | <input type="checkbox"/> |
| Sales Occupations                                        | <input type="checkbox"/> |
| Clerical and Related Administrative Occupations          | <input type="checkbox"/> |
| Protective Service Occupations                           | <input type="checkbox"/> |
| Service Occupations, except Protective                   | <input type="checkbox"/> |
| Construction and Extractive Craft Occupations            | <input type="checkbox"/> |
| Installation, Maintenance and Repair Craft Occupations   | <input type="checkbox"/> |
| Production Operative Occupations                         | <input type="checkbox"/> |
| Transportation and Material Moving Operative Occupations | <input type="checkbox"/> |
| Laborers, Helpers and Material Handler Occupations       | <input type="checkbox"/> |
| Other, _____                                             | <input type="checkbox"/> |

4. **Family background- ethnic**

Check all that apply.

- |                                    |                          |
|------------------------------------|--------------------------|
| Asian American or Pacific Islander | <input type="checkbox"/> |
| African American or Black          | <input type="checkbox"/> |
| Caucasian or White                 | <input type="checkbox"/> |
| Native American or Indian          | <input type="checkbox"/> |
| Mexican American or Hispanic       | <input type="checkbox"/> |
| Other American Ethnic Group        | <input type="checkbox"/> |
| Non-U.S. Citizen/ Foreign          | <input type="checkbox"/> |

5. **Family education**

What is the highest level of education for one or both parents?

- |                                  |                          |
|----------------------------------|--------------------------|
| Doctorate (Ph.D., Medical, etc.) | <input type="checkbox"/> |
| Law Degree (J.D.)                | <input type="checkbox"/> |
| Educational Specialist           | <input type="checkbox"/> |
| Masters                          | <input type="checkbox"/> |
| Bachelors                        | <input type="checkbox"/> |
| Associates                       | <input type="checkbox"/> |
| High School Diploma              | <input type="checkbox"/> |
| Completed Junior High            | <input type="checkbox"/> |
| Less than eight years            | <input type="checkbox"/> |

**School Background**

6. **High School grade point average**

- 3.60- 4.00
- 3.20- 3.59
- 2.80- 3.19
- < 2.80

7. **SAT or ACT score**

- 1360- 1600  30- 36
- 1160- 1350  26-29
- 960- 1150  22-25
- <960  <22

8. **Overall undergraduate grade point average**

- 3.60- 4.00
- 3.20- 3.59
- 2.80- 3.19
- <2.80

9. **Undergraduate major and grade point average. Check all that apply.**

- Accounting  \_\_\_\_\_ GPA
- Economics  \_\_\_\_\_ GPA
- Finance  \_\_\_\_\_ GPA
- Information Systems  \_\_\_\_\_ GPA
- Marketing  \_\_\_\_\_ GPA
- Management  \_\_\_\_\_ GPA
- Other Business  \_\_\_\_\_ GPA
- Non-Business  \_\_\_\_\_ GPA

10. **Masters degree**

- MPA
- MTX
- MBA
- Other \_\_\_\_\_

11. **GMAT Score**

- 600 or above
- 550- 590
- 500- 540
- 450- 490
- <450
- Not applicable

12. **Overall graduate grade point average**

- 3.60- 4.00
- 3.20- 3.59
- 2.80- 3.19
- <2.80
- Not Applicable

13. **Graduate grade point average in your major or concentration**

- 3.60- 4.00
- 3.20- 3.59
- 2.80- 3.19
- <2.80
- Not Applicable

14. **Extra Curricular Involvement- check all that apply**

- Beta Alpha Psi
- Beta Gamma Sigma
- Accounting Society/  
or Accounting Club
- Other academic student  
organization
- \_\_\_\_\_
- \_\_\_\_\_
- Other social student  
organization
- \_\_\_\_\_
- \_\_\_\_\_
- Part-time work

**Employment**

15. **Internships (check all that apply)**

- Yes, I applied for an internship in college
- I had an internship during college
- I did not have an internship  
during college

If you checked this answer, go directly to Item 20



16. **Length of internships (cumulative if more than one)**

- Over 12 months
- 7- 12 months
- 3- 6 months
- <3 months

17. **Internship area (check all that apply)**

- I had an internship in audit
- I had an internship in tax
- I had an internship in industry
- I had an internship in another area
- \_\_\_\_\_

18. **Offer for permanent employment by internship company**

- I had an offer for permanent  
employment
- I did not have an offer for  
permanent employment

19. **Permanent employment by internship company**

- I accepted the offer
- I did not accept the offer

20. **Permanent employment  
(including internship employer)**

Number of permanent job offers prior to graduation \_\_\_\_\_

- I accepted one of these offers
- I interviewed, but did not have an offer at graduation.
- Date of first permanent job after graduation:

\_\_\_\_\_

I planned to continue school (e.g., law)

21. **My starting salary for my permanent job was:**

(Note: If you have multiple degrees that were achieved several years apart, then report your starting salary after your second degree.)

- \$55,000 - \$60,000
- \$50,000 - \$54,999
- \$45,000 - \$49,999
- \$40,000 - \$44,999
- \$35,000 - \$39,999
- \$30,000 - \$34,999
- \$25,000 - \$29,999
- Below \$25,000
- Not Applicable

22. **I would describe my job search skills during the interview process as:**

- Excellent
- Very good
- Good
- Fair
- Poor

23. **I would describe my leadership skills during the interview process as**

- Excellent
- Very good
- Good
- Fair
- Poor

24. **I would describe my conversation skills during the interview process as**

- Excellent
- Very good
- Good
- Fair
- Poor

## Appendix B Definition of Variables

Gender	Dummy variable: 1 if male
Ethnic background	
Caucasian/White	Dummy variable: 1 if White
African American/Black	Dummy variable: 1 if Black
Native American/Indian	Dummy variable: 1 if Indian
Mexican American/Hispanic	Dummy variable: 1 if Hispanic
Asian American/Pacific Island	Dummy variable: 1 if Pacific Island
Other American Ethnic Group	Dummy variable: 1 if Other
Non-U.S. Citizen/Foreign	Dummy variable: 1 if Foreign
Age	Raw score on age of respondent. Continuous variable, nonrespondents assigned mean
Job at the time of graduation	Dummy variable: 1 if yes
Time to obtain first full-time position	Raw score on months to obtain job. Continuous variable, nonrespondents assigned mean.
Number of job offers	Raw score on number of offers. Continuous variable, nonrespondents assigned mean
Starting income	Log of earnings on first job after finishing school.
Months of prior professional work experience	Raw score of months experience. Continuous variable, nonrespondents assigned mean
High School	
grade point average	
3.6-4.0	Dummy variable: 1 if yes
3.2-3.5	Dummy variable: 1 if yes
2.8-3.1	Dummy variable: 1 if yes
<2.8	Dummy variable: 1 if yes
SAT or ACT score	
1360-1600   30-36	Dummy variable: 1 if yes
1160-1350   26-29	Dummy variable: 1 if yes
960-1150    22-25	Dummy variable: 1 if yes
<960        <22	Dummy variable: 1 if yes
Undergraduate major	
Accounting	Dummy variable: 1 if accounting
Finance	Dummy variable: 1 if finance
Economics	Dummy variable: 1 if economics
Information Systems	Dummy variable: 1 if information systems
Marketing	Dummy variable: 1 if marketing
Management	Dummy variable: 1 if management
Other Business	Dummy variable: 1 if other business
Other Non-Business	Dummy variable: 1 if non-business
Double major	Dummy variable: 1 if respondent had double major

Undergraduate	
grade point average	
3.6-4.0	Dummy variable: 1 if 3.6 to 4.0
3.2-3.5	Dummy variable: 1 if 3.2 to 3.5
2.8-3.1	Dummy variable: 1 if 2.8 to 3.1
<2.8	Dummy variable: 1 if below 2.8
Undergraduate accounting	
grade point average	
3.6-4.0	Dummy variable: 1 if 3.6 to 4.0
3.2-3.5	Dummy variable: 1 if 3.2 to 3.5
2.8-3.1	Dummy variable: 1 if 2.8 to 3.1
<2.8	Dummy variable: 1 if below 2.8
Type masters degree	
MPA	Dummy variable: 1 if MPA
MTX	Dummy variable: 1 if MTX
MBA	Dummy variable: 1 if MBA
Other	Dummy variable: 1 if Other
GMAT score	
Below 450	Dummy variable: 1 if GMAT below 450
450 – 500	Dummy variable: 1 if GMAT 450 to 500
501 – 550	Dummy variable: 1 if GMAT 501 to 550
551 – 600	Dummy variable: 1 if GMAT 551 to 600
Above 600	Dummy variable: 1 if GMAT above 600
Graduate GPA	
3.6-4.0	Dummy variable: 1 if 3.6 to 4.0
3.2-3.5	Dummy variable: 1 if 3.2 to 3.5
2.8-3.1	Dummy variable: 1 if 2.8 to 3.1
<2.8	Dummy variable: 1 if below 2.8
Graduate Accounting GPA	
3.6-4.0	Dummy variable: 1 if 3.6 to 4.0
3.2-3.5	Dummy variable: 1 if 3.2 to 3.5
2.8-3.1	Dummy variable: 1 if 2.8 to 3.1
<2.8	Dummy variable: 1 if below 2.8
Extra Curricula Involvement	
Beta Alpha Psi	Dummy variable: 1 if respondent member of Beta Alphas Psi
Accounting Society	Dummy variable: 1 if respondent member of Accounting Society
Other academic student Organization	Dummy variable: 1 if respondent member of other academic student organization
Internship Experience	
Completed-Employer	Dummy variable: 1 if respondent completed an internship with current employer
Completed-Other	Dummy variable: 1 if respondent completed an internship with another employer

Months Internship	
Less than 3 months	Dummy variable: 1 if less than 3 months internship
3 – 6 months	Dummy variable: 1 if 3 - 6 months internship
7-12 months	Dummy variable: 1 if 1 -12 months internship
over 12 months	Dummy variable: 1 if over 12 months internship
Choice of accounting employment area	
Auditing	Dummy variable: 1 if respondent completed audit internship
Tax	Dummy variable: 1 if respondent completed tax internship
Industry	Dummy variable: 1 if respondent completed industry internship
Other	Dummy variable: 1 if respondent completed other internship
Job acquisition skills	
Poor	Dummy variable: 1 if student selected poor
Fair	Dummy variable: 1 if student selected fair
Good	Dummy variable: 1 if student selected good
Very Good	Dummy variable: 1 if student selected very good
Excellent	Dummy variable: 1 if student selected excellent
Interpersonal skills	
Poor	Dummy variable: 1 if student selected poor
Fair	Dummy variable: 1 if student selected fair
Good	Dummy variable: 1 if student selected good
Very Good	Dummy variable: 1 if student selected very good
Excellent	Dummy variable: 1 if student selected excellent
Communication skills	
Poor	Dummy variable: 1 if student selected poor
Fair	Dummy variable: 1 if student selected fair
Good	Dummy variable: 1 if student selected good
Very Good	Dummy variable: 1 if student selected very good
Excellent	Dummy variable: 1 if student selected excellent



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