

## **Does the International Masters of Business Administration (MBA) Employment Market Value Awareness of Social Responsibility and Environmental Sustainability?**

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### **Abstract**

*Stakeholder theory posits that corporations invest in Corporate Social Responsibility (CSR) initiatives to gain competitive advantage. To implement CSR, corporations need employees committed to, and knowledgeable about, corporate citizenship. Our research explores the extent that the International Masters of Business Administration (MBA) marketplace values MBA graduate commitment to, and awareness of, corporate social responsibility and environmental sustainability. We study the effects of MBA program characteristics and student attributes, including CSR awareness, on alumni salary, which served as a proxy measure of market value. Surprisingly, corporate recruiters' assessment of student awareness of corporate social responsibility and environmental sustainability was negatively related with alumni salary. This unique finding may indicate that the MBA marketplace does not value awareness of green management issues with respect to MBA graduate compensation, despite the fact that corporations' publically advocate CSR.*

**Key words:** corporate social responsibility, MBA market value

### **1.0 Introduction**

Stakeholder theory posits that corporations gain competitive advantage by addressing important stakeholder demands (Freeman, 1982). MBA programs strive to build knowledge and competencies that meet marketplace needs. Understanding how stakeholders evaluate MBA programs has important implications for business school strategy and decision-making. Matching program and student characteristics with opportunities in the market is critical to MBA program strategy, differentiation, and competitiveness. Responding to perceived stakeholder demands, organizations spend considerable resources to implement and communicate their corporate social responsibility and environmental sustainability initiatives (Chatterji, Levine & Toffel, 2009; McWilliams & Siegel, 2001). Our research contributes to the literature by exploring the extent that corporations value awareness of corporate social responsibility and environmental sustainability. Consistent with previous research, we use alumni salaries as a proxy measure of market value (Safón, 2007; Tracy & Waldfogel, 1997).

Little research exists on the market value of an MBA education that addresses corporate social responsibility and environmental sustainability issues. Aiman-Smith, Bauer, & Cable (2001) found that MBA graduates are attracted to organizations that they perceive have environmentally friendly practices. Schools such as the Thunderbird School of Management, Switzerland's IMD (International Institute for Management Development), University of California's Davis, and the MIT Sloan School of Management have incorporated green concepts and sustainable management into their curriculums (Murray, 2008). Several programs have embraced the idea of "Three Bottom Lines: People, Planet and Profit" (Ellin, 2006). Furthermore, The Aspen Institute (2007) ranks MBA programs based on how well MBA programs incorporate social responsibility and environmental issues into the training of future business leaders.

Although green issues are not mainstream there appears to be a growing trend toward incorporating environmental concepts into MBA programs. Concurrently, expectations that corporations be socially responsible have increased. We are not aware of a study that addresses the value and marketability of MBA programs that incorporate social responsibility and environmental concepts into the curriculum. Of course, increased student marketability is not the only basis on which to build an MBA curriculum. In the following sections, we review the literature, describe methods, report results, and explore study implications.

## **2.0 Theoretical Framework**

Stakeholder theory states that corporations will engage in CSR initiatives if they believe such investment will result in a competitive advantage (Freeman, 1984). Stakeholders are defined by Freeman (1984, p. 49) as “those groups who can affect or are affected by the achievement of an organization’s purpose.” Key MBA program stakeholders include corporations that hire MBA program graduates. Donaldson & Preston (1995) advocate that organizations use stakeholder theory to guide their organizational structure and operations. Russo & Perrini (2010) state that CSR is currently accepted within a stakeholder theoretical perspective and organizations should consider CSR strategically to satisfy stakeholder demands. Jensen (2010) argues that organizations must balance the interests of all corporate stakeholders, but more specificity regarding how to accomplish this balance is needed in order for managers to incorporate diverse stakeholder interests. Research that tests the linkage between CSR investment and corporation financial results is mixed (Artiach *et al.*, 2010). Previous research has shown the relationship between CSR and financial performance to be positive (Barnett, 2005; Herremans *et al.*, 1993) or neutral (Lee, 2006; Becchetti *et al.*, 2005). In his review of this research, Artiach *et al.* (2010) suggested that the mixed findings may be due to different methodologies and CSR measures across studies. Despite the inconclusive research regarding the CSR-financial linkage, Artiach *et al.* (2010) state that corporations behave as if CSR investments satisfy stakeholder demands and competitive advantages will result. Porter & Kramer (2006) suggest that the increasing number of CSR related resolutions filed by shareholders signify the saliency of CSR to important stakeholders. If corporations behave rationally, they will therefore seek individuals during the employment process that are committed to, and knowledgeable about, corporate citizenship issues such as CSR and environmental sustainability. In addition, corporations may pay a premium for these applicant competencies. The next section addresses CSR in more detail.

## **2.1 The Market Value of Corporate Social Responsibility**

Corporate Social Responsibility (CRS) describes a company’s ethical behavior with regard to all stakeholders. Stakeholders include customers, employees, suppliers and communities (Trudel & Cotte, 2009). Some researchers view CRS as a pyramid that includes economic, legal, ethical and philanthropic responsibilities (Carroll, 1991). The construct has evolved since the 1950’s (Carroll, 1999). However, with corporate fraud such as the Enron scandal, public trust in unregulated capitalism is waning and interest in CRS is on the rise (Handy, 2002). Consequently, managers will have to make difficult choices about which CRS practices to adopt in order to maintain a positive CRS image with stakeholders (O’Riordan & Fairbrass, 2008). Research suggests that customers may be willing to pay a premium for ethically produced goods and they will discount products produced by companies with an inferior CRS image. The relationship between CSR and corporate financial performance is unconvincing, even though some customers may be willing to pay a premium for products made with CSR (Schuler & Cording 2006). More specifically, Aupperle, Carroll & Hatfield (1985) found no relationship between CRS and profitability. Using Fortune magazine’s ratings of corporate reputations, McGuire, Sundgren & Schneeweis (1988) found that a firm’s prior performance (stock-market returns and accounting-based measures) is more closely related to CRS than is subsequent financial performance.

## **2.2 MBA Program Evaluation**

Previous research explored ways that MBA programs and their students are evaluated by stakeholders, as well as the market forces that shape MBA employment, compensation, and careers (Baruch & Leeming, 2001; Davies & Cline, 2005; Kane, 1993; Safón, 2007). Research has focused on two primary methods for judging MBA programs: graduate salary data and stakeholder perceptions. MBA programs are often evaluated based on the earnings of their graduates. Salaries based studies measure the financial difference between pre and post MBA salaries (Tracy & Waldfoegel, 1997; Davis & Cline, 2005).

The criticism of salary data is that it may not reflect the value of the skills graduates received during their education, but instead reflects the rank or reputation of the school (Pfeffer & Fong, 2002; Dugan *et al.*, 1999; Curtin & Gassman, 2003). Tracy & Waldfogel (1997) posited that starting salary is a more objective measure than the subjective perception based surveys used by other studies, and represents an overall assessment of the value added by MBA programs and student quality (i.e., market value). . Aiman-Smith, Bauer, & Cable (2001) found that pay predicts students' job pursuit intentions. In the present study, salary (alumni salary) over three years after graduation serves as a proxy measure of the market value of an MBA degree (Safón, 2007). The market price estimates the economic value of skills, products, and services that are bought and sold in a free market economy. Changes in market prices can be used to value changes in either the quantity or quality of skills, goods, or services being offered for sale. The market uses supply and demand for measuring the economic benefits from goods and services, based on the quantity supplied at different prices, and the quantity demanded at those various prices. Therefore, market value is an important consideration because it is a reflection of society's willingness to allocate resources toward skills that are demanded by the marketplace. If an MBA program ignores market forces it may reduce the value of its graduates and reduce the demand for the program. CSR concepts are important and should be taught in MBA programs especially if these concepts keep recruiters satisfied. However, if too much class time is spent on CSR the opportunity cost maybe high. CSR should augment important functional value added concepts but not replace them.

### 2.3 Stakeholder Perceptions

Stakeholder perceptions are based on feedback from decision-makers such as corporate recruiters, company officers, graduates, and school administrators. Researchers have conceptualized MBA degree value along a number of dimensions, including program attributes, student skills, decision-maker perceptions, and financial market value. These studies search for curriculum content or student competencies that add value to an MBA education, and satisfy stakeholder demands. Based on these studies, there is considerable debate about what should be taught in MBA programs. Tanyel *et al.* (1999) studied the perceptions of what skills business school graduate students should learn. They found that prospective employers and university professors disagree on the skill set. Five hundred and five ( $N = 505$ ) human resource managers surveyed by Eberhardt, Moser & McGee (1997) indicated that MBA graduates lacked leadership training and business experience. The respondents also indicated that oral and written communication skills as well as interpersonal skills were critical for MBA job candidates. However, Rynes, Lawson, & Ilies (2003) found that recruiters gave the same employability ratings to students who focused on primarily functional courses (e.g. finance, accounting) as to those who took a balance of both functional and behavioral courses. Ghoshal (2005) argues that by making business research follow the scientific model, professors have denied any moral or ethical considerations in their theories, which resulted in cases such as Enron, Global Crossing, WorldCom, and Tyco. Just as medicine and law have articulated professional values, business education could commit to a set of ethical standards to serve the public interest. Seers & Krug (2007) examined data from the Graduate Management Admissions Council's (GMAC) Corporate Recruiters Survey. They specifically analyzed the MBA starting salaries as a function of recruiter perceptions and school characteristics, and reported that MBA program starting salaries are significantly and positively associated with MBA program rankings.

MBA graduates' awareness of corporate social responsibility and environmental sustainability is one of several program and student attributes that have been studied. Safón (2007) used secondary data collected from *Business Week*, *U.S. News and World Report*, *The Financial Times*, and the *Wall Street Journal*. The independent variables in their study were student characteristics, program value added, media rankings, and research performance while the dependent variable was recruiter assessment. Safón (2007) found that recruiter perceptions were guided by student characteristics and media rankings, and that research performance and public versus private college was not associated with recruiter assessment. Kane (1993) sent questionnaires to 464 recruiters in Fortune 500 companies with a response rate of 20% (Kane, 1993). Recruiters indicated that they valued strong interpersonal skills, strong communication skills, and team-oriented skills. The results were a ranking of means with no further statistical tests performed. Kane (1993) concluded that recruiters based their preference on soft skills rather than analytical or job related functional skills. Research that investigates stakeholder perceptions and assessments of MBA programs do not conclusively determine what MBA programs should teach students.

The criticism of recruiter perceptions is that they may not be related to financial impact and do not measure the economic value-added of the MBA degree (Tracy & Waldfogel, 1997).

However, past research suggests numerous MBA program attributes and student competencies that may have value to stakeholders, and the present research seeks to relate corporate recruiter MBA assessments to salary.

## **2.4 Contribution to Theory and the Literature**

In summary, our research uses stakeholder theory as a framework in which organizations identify key stakeholders and act to meet their demands in order to gain competitive advantage. Ignoring CSR may result in public relations nightmares such as those experienced by Enron, British Petroleum, and Arthur Anderson. This can significantly decrease a company's market value or result in the elimination of the company. Awareness of CSR issues may reduce fraud, environmental damage, or financial mismanagement. These unethical activities could materially reduce shareholder wealth through a bad public image or governmental penalties. Hence, CSR awareness can provide value to the shareholders. In addition to reducing the chance of fraud, environmental damage, or financial mismanagement, management awareness of CSR can add pricing power to the company's products. Since managers have a fiduciary responsibility to the shareholders to protect and increase their investment, ignoring CSR issues is a risky strategy. While the relationship between CSR investment and financial results is unclear, corporations behave as if they believe the link exists, as many organizations communicate their intentions to practice CSR. Similarly, MBA program decision-makers corporate recruiters may consider corporate recruiters as key stakeholders, and may base MBA program content, including CSR, in part on what corporate recruiters value.

Our research therefore explores the extent that the MBA marketplace values MBA graduate commitment to, and awareness of, corporate social responsibility and environmental sustainability. We study the effects of MBA program characteristics and student attributes, including CSR awareness, on alumni salary, which served as a proxy measure of market value. Some authors have published studies that have found evidence that customers will pay a premium price for product made with CSR as part of the production process (Trudel & Cotte, 2009). The research is not as convincing that CSR is associated with increases in company stock price or accounting profits (Aupperle, Carroll & Hatfield, 1985). However, large profitable companies tend to invest more in CSR (Artiach, *et al.*, 2010), and this investment may include new hires that have a commitment to and awareness of corporate citizenship issues. Our contribution is to search for the payoff to graduates of MBA programs where CSR awareness is demonstrated. We believe this piece to the puzzle is conspicuously absent from the literature. We predict that corporate recruiters' assessment that MBA programs graduate students are committed to and aware of CSR is positively related the graduates' market value, as measured by alumni salaries. In addition, we predict that corporate recruiters' assessment of MBA program attributes (e.g., faculty expertise and curriculum) and student attributes (e.g. analytical ability and teamwork skills) are positively related to alumni salaries.

## **3.0 Method**

### **3.1 Sample**

Harris Interactive, in conjunction with the *Wall Street Journal* has surveyed MBA corporate recruiters for seven years (Harris Interactive, 2008). From December 20, 2006 to March 23, 2007, Harris Interactive surveyed via the Internet 4,430 MBA corporate recruiters that hire full time business school graduates regarding their perceptions of the schools at which they had recently recruited. One thousand, one hundred and thirty ( $n = 1,130$ ) recruiters completed the full survey representing a 25% response rate. Recruiters recommended for hiring MBA students nearing the completion of their degree. Recruiters establish relationships with faculty and the school career services office, interview students, arrange interviews at corporate locations, and typically have input into selection decisions. To qualify for the survey, recruiters needed to have recruited at the school 18 months or more. Eighty-nine percent of the recruiters were corporate employees or managers, and 9% were corporate human resource professionals. Respondents' job titles included department or product manager/supervisor (20%), executive (18%), or division manager (15%). Recruiters fill positions in a wide diversity of companies including financial services (24%), management consulting (20%), consumer products and services (8%), and technology (7%). Seventy-three percent (73%) were male, and 81% had an MBA. Fifty-two percent (52%) worked for organizations with revenues of more than \$10 billion (USD), and only 4% worked for organizations with revenue of \$10 million or less. The mode number of employees in the recruiters' organization was between 10,000 and 49,999 (25%). The schools in the United States had full time programs accredited by the Association for the Advancement of Schools of Business (AACSB).

Schools outside the United States were identified through discussions with recruiting experts (Harris Interactive, 2007). The recruiters rated 91 schools, 61 (67%) of which were based in the United States.

### 3.2 Variables and Analysis

Salary is an important indicator of the market worth of MBA students that graduate and seek employment. The *Financial Times* maintains a database of AACSB accredited MBA program graduate salaries. In this database are adjusted by industry sector, as salaries may differ by industry sector (e.g., energy versus retail). The average MBA program alumni salary included the current year and the previous two years when available (*Financial Times*, 2007). We refer to this variable as “alumni salary”. Based on the sum of their experiences with a specific school (e.g., faculty, career services, students they recruited, and past graduates), each recruiter rated a specific school along 21 attributes. Ten attributes measured recruiters’ assessment of school characteristics (e.g., the content of the core curriculum and faculty expertise). Eleven attributes measured recruiters’ assessment of graduates of the school (e.g., awareness of social responsibility commitment, analytical and problem-solving skills, and strategic thinking). The attributes are listed in Table 1. Recruiters rated the 21 attributes using a ten point Likert scale, where “1” was “poor performance/does not meet your needs”, and “10” was “excellent performance/meets your needs very well”. Complete data (recruiter survey responses and alumni salary) was available for 88 schools. Thirty-four percent of the schools were outside the United States (e.g. China, England, Ireland, and France). A list of schools may be obtained from the firstauthor. To increase reliability, reduce multicollinearity (reduce the number of highly intercorrelated independent variables), and increase parsimony, indices were developed consisting of conceptually related attributes. For example, a “Student Cultural Fit” index was computed by summing two ratings (“fit with corporate culture” and “student chemistry”), and dividing by the number of attributes in the index. Six indices were created: Student Past Effectiveness, School Curriculum, Student Cultural Fit, Student Ethics, Student Strategic and Analytical Skills, and Student Leadership and Team Skills. The internal reliability (Cronbach’s alpha) of each index was then computed.

We selected the MBA program (school) as the level of analysis, as the study aims to offer improvement recommendations for MBA programs. In addition, ratings of the same school by different recruiters are not independent. Recruiter ratings for each school were therefore aggregated<sup>1</sup>. An additional variable, “United States school”, was included to control for school location (dummy variable where 1 = school located in the United States, 0 = school located outside the United States). Alumni salary was then regressed on the aggregated recruiter ratings (independent variables) and the school location (control variable). Multicollinearity statistics (item tolerances and the Durbin-Watson statistic) were calculated.

### 4.0 Results

Table 1 contains descriptive statistics, Cronbach’s alphas for indices, and correlations among alumni salary (dependent variable), school attributes and student attributes (independent variables), and the school location control variable. In general, the recruiters rated the MBA programs positively with respect to school and student attributes. Among the school attributes, recruiters rated faculty expertise slightly higher than school curriculum and career services. Among the student attributes, recruiters rated personal ethics and integrity, work ethic, ability to work within teams, and analytical/problem solving skills the highest, and students’ awareness of corporate citizenship issues and environmental issues the lowest. The six indices exhibited adequate levels of internal consistency, ranging from .90 (Student Past Effectiveness) to .96 (Student Cultural Fit).

**Table 1: Dependent and independent variable item and scale means, standard deviations and Cronbach Alphas (N = 91)**

Variable	Mean	Std. Deviation
Alumni salary	\$109,076.02	\$20,513.86
Awareness of corporate citizenship issues such as social and environmental responsibility	7.48	1.25
Strong international perspective	7.01	1.52
Students' average number of years of work experience	6.89	1.51
Faculty expertise	7.59	1.29
Career services office	7.23	1.46
Student Past Effectiveness ( $\alpha = .90^{***}$ )	7.53	1.29
Success with past hires	7.72	1.45
Likelihood of recruiting 'stars'	7.21	1.57
School Curriculum ( $\alpha = .90^{***}$ )	7.50	1.19
Content of the core curriculum	7.49	1.31
Incorporates experiential learning	7.45	1.25
Student Cultural Fit ( $\alpha = .96^{***}$ )	7.61	1.32
Fit with the corporate culture	7.63	1.32
Student 'chemistry'	7.57	1.39
Student Ethics ( $\alpha = .90$ )	8.00	1.15
Personal ethics and integrity	7.99	1.21
Work ethic	8.01	1.21
Student Strategic and Analytical Skills ( $\alpha = .94^{***}$ )	7.49	1.36
Strategic thinking	7.33	1.43
Analytical and problem-solving skills	7.65	1.37
Student Leadership and Team Skills ( $\alpha = .96^{***}$ )	7.62	1.27
Leadership potential	7.48	1.42
Ability to work well within a team	7.84	1.26
Communication and interpersonal skills	7.54	1.30
Student willingness to relocate	7.66	1.33
Overall value for the recruitment investment	7.46	1.49
United States school	.72	.41

\*\*\*  $p \leq .001$

Table 2 contains a correlation matrix of alumni salary and recruiter ratings. Aggregated recruiter ratings were generally highly intercorrelated, ranging from .54 to .95.

**Table 2: Correlation among starting alumni salary and recruiter ratings of MBA program and student characteristics (N = 91)**

	Variables														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Alumni salary	1	-.15	.20*	.15	-.15	-.09	-.03	-.01	.01	.10	.05	-.03	-.05	.01	
2 Awareness of corporate citizenship issues such as corporate social responsibility and environmental sustainability		1	.73***	.63***	.81***	.64***	.78***	.85***	.85***	.86***	.84***	.86***	.61***	.74***	.20**
3 Strong international perspective			1	.59***	.76***	.56***	.65***	.69***	.65***	.63***	.84***	.67***	.59***	.60***	.10
4 Students' years of work experience				1	.61***	.64***	.72***	.75***	.73***	.70***	.74***	.76***	.59***	.69***	.10
5 Faculty expertise					1	.75***	.81***	.85***	.76***	.76***	.70***	.79***	.58***	.69***	.10
6 Career services office						1	.82***	.79***	.72***	.68***	.85***	.76***	.54***	.72***	.17**
7 Student Past Effectiveness							1	.88***	.86***	.85***	.71***	.87***	.74***	.71***	.07
8 School Curriculum								1	.79***	.81***	.82***	.83***	.68***	.83***	.18**
9 Student Cultural Fit									1	.91***	.82***	.95***	.63***	.83***	.18**
10 Student Ethics										1	.89***	.90***	.70***	.75***	.15*
11 Student Strategic and Analytical Skills											1	.87***	.68***	.77***	.15*
12 Student Leadership and Team Skills												1	.62***	.78***	.14*
13 Student willingness to relocate													1	.76***	.06
14 Overall value for the recruitment investment														1	.18**
15 United States school															1

\*  $p \leq .05$ ,  $p \leq .01$  \*\*,  $p \leq .001$  \*\*\*

On univariate level, student commitment to and awareness of corporate citizenship issues was not significantly related to alumni salary ( $r = -.05$ ). Alumni salary was marginally related to faculty expertise ( $r = .15$ ,  $p \leq .06$ ), and the school's career service office ( $r = -.15$ ,  $p \leq .07$ ). Alumni salary was significantly related to students' years of work experience ( $r = .20$ ,  $p \leq .05$ ) and marginally related to students' strong international perspective ( $r = .15$ ,  $p \leq .06$ ). School location was not related to alumni salary, but was significantly related to a number of the recruiter ratings (e.g., awareness of corporate citizenship issues,  $r = .20$ ,  $p \leq .05$ , and the school curriculum,  $r = .18$ ,  $p \leq .01$ ). MBA programs located in the United States were generally rated higher than those located outside the United States.

Table 3 contains the results of the regression analysis where alumni salary was regressed on the aggregated recruiter ratings and school location. Awareness of corporate citizenship issues, students' number of years of work experience, faculty expertise, career services, student past effectiveness, and student leadership and team skills significantly predicted alumni salary ( $R^2 = .61$ ,  $p \leq .001$ ). As expected, the high intercorrelations among the aggregated recruiter ratings resulted in low tolerances for a subset of independent variables, indicating the presence of an unacceptable level of multicollinearity. To reduce multicollinearity, we omitted attributes that highly correlated with other independent variables (i.e., low tolerance). In addition, the Durbin-Watson statistic was computed to ascertain the degree of autocorrelation in the residuals in the regression analyses. Two subsequent regression analyses were conducted until a set of independent variables was identified that exhibited acceptable tolerances (i.e., tolerances  $\geq .20$ ).

**Table 3: Starting alumni salary regressed on recruiter ratings of MBA program and student characteristics (N = 91)**

	Beta	t		Tolerance
Awareness of corporate citizenship issues such as corporate social responsibility and environmental sustainability	-1.08	-4.82	***	.10
Strong international perspective	.11	.87		.30
Students' years of work experience	.43	3.22	**	.29
Faculty expertise	1.01	5.28	***	.14
Career services office	-.70	-4.83	***	.25
Student Past Effectiveness	-1.09	-3.55	***	.05
School Curriculum	-.03	.13		.09
Student Cultural Fit	-.46	-1.67		.07
Student Ethics	.12	.56		.10
Student Strategic and Analytical Skills	.34	1.46		.10
Student Leadership and Team Skills	1.10	3.69	***	.06
Student willingness to relocate	.01	.05		.30
Overall value for the recruitment investment	.29	1.45		.12
United States school	.02	.25		.89

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ ,  $R^2 = .61$ ,  $F_{(14, 73)} = 8.42$ ,  $p \leq .001$

Attributes retained in the final regression analysis were awareness of corporate citizenship issues, strong international perspective, students' years of work experience, career services office, and students' strategic and analytical skills. School location was retained as a control variable. Table 4 contains the results of the final regression analysis. Thirty-one percent (31%) of the variance of the alumni salary dependent variable was accounted for using these school and student attributes ( $R^2 = .31$ ,  $F_{(6, 81)} = 6.15$ ,  $p \leq .001$ ). All independent variables exhibited acceptable tolerance levels and the Durbin-Watson statistic was acceptable ( $d = 1.68$ ), indicating that multicollinearity was reduced to acceptable levels.

**Table 4: Starting alumni salary regressed on recruiter ratings of MBA program and student characteristics (N = 91)**

	Beta	t		Tolerance
Awareness of corporate citizenship issues such as corporate social responsibility and environmental sustainability	-.61	-3.35	***	.25
Strong international perspective	.29	2.03	*	.40
Students' years of work experience	.42	3.07	**	.45
Career services office	-.57	-4.15	***	.44
Student Strategic and Analytical Skills	.51	2.47	**	.20
United States school	.05	.58		.94

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$ ,  $R^2 = .31$ ,  $F_{(6, 81)} = 6.15$ ,  $p \leq .001$

Each of the final school or student attributes in the final regression analysis had significant beta weights. A surprising finding was that students' awareness of corporate citizenship issues was negatively and significantly related to alumni salaries ( $\beta = -.61$ ,  $p \leq .001$ ). Recruiters' perception that a school's students are aware of corporate citizenship issues appears to be associated with lower salaries. It was also surprising that the corporate recruiters' assessment of a school's career office was associated with lower salaries ( $\beta = -.57$ ,  $p \leq .001$ ). Corporate recruiters' assessments of students' years of work experience, strong international perspective, and strategic and analytical skills are positively related to alumni salaries. These findings were present after controlling for school location.



## **5.0 Discussion**

The results suggest that corporate recruiters do not reward students from MBA programs that instill in their graduates a commitment to corporate citizenship issues such as CSR and environmental sustainability. On the contrary, as an important stakeholder, corporations place a salary penalty on such MBA programs. Additionally, corporate recruiters value MBA programs that stress strong international perspectives, students' previous years of work experiences, and student strategic and analytical skills.

With respect to the hiring process, corporate recruiters are typically line managers but often not the hiring managers. In the present study, the recruiters were predominantly line managers. Line managers are often assigned to recruit at schools for a number of reasons, such as technical expertise or affinity (i.e., they earned their degree at the school and know the professors). Recruiters then identify and present a short list of students to the hiring organization for current or anticipated employment opportunities. Students then progress through the hiring process (e.g., interviews by managers, including the human resources manager, employment tests, references, and background checks). Compensation is subsequently determined using information that the recruiter may not have considered when rating the school and students for recruiting purposes. For example, supply and demand and the compatibility between certain managers and the student work styles may weigh more heavily in compensation decisions than recruiter satisfaction.

Perhaps the most surprising finding is that students' awareness of corporate social responsibility and commitment to such areas as community service and environmental protection is negatively related to alumni salaries. The business market may not value the attributes that organizations claim to value in their corporation and public relations communications. Opportunity costs may help understand this surprising finding. When assigning worth to students (i.e., making compensation decisions), the organization and those involved in setting starting salaries may not value CSR and other "soft skills" relative to "hard skills" such as analytical thinking. In fact, hiring managers may assign less weight to students from schools that emphasize "soft skills" as corporate social responsibility, teamwork, and constructs that are difficult to measure (e.g., fit with corporate culture). The hiring manager may assume that there are opportunity costs involved in stressing "soft skills"; that is, resources should be expended teaching students "hard" business skills (e.g., finance and accounting) rather than "soft skills". Additionally, the market for MBAs may be driven by other factors such as profits and stock value.

Accordingly, during tough economic times the market may value hard skills over soft skills. Another possible explanation for the negative relationship between alumni salary and CSR concerns business on the uniqueness by which corporations interpret CSR. Depending on its business mission and strategy, organizations differ with respect to how they interpret and operationalize social responsibility and environment sustainability. For example, Xerox Corporation views corporate social responsibility and environmental sustainability as compliance with environmental, health, and safety regulations, reduced energy consumption, and the reduction of paper use in order to preserve the world's forests (Xerox, 2009). On the other hand, ExxonMobil defines sustainability as balancing economic growth, social development and environmental protection (ExxonMobil, 2009). ExxonMobil emphasizes meeting the world's growing energy demand while working to reduce environmental impact. Individuals ultimately involved in hiring and compensation decisions may view general environmental issues awareness as something troublesome to be replaced by the organization's specific brand of environmental awareness. The business market may believe it is not the role of an MBA to educate students about social responsibility and environmental issues. While recruiters value students' awareness of such issues, the organization does not when making compensation decisions.

A third possible explanation of our finding is a self-selection bias among MBA students. Students strongly committed to CSR may select MBA programs that stress citizenship issues, even at the expense of lower starting salaries. Similarly, students with strong CSR commitments may accept offers from corporations that they perceive to value citizenship issues even when coupled with lower starting salaries.

This study found that a mix of school and student characteristics was related to the value the market places on MBA graduates. This is a different result than Safón (2007) found where only student characters predicted alumni salary.

When compared with other studies, our finding that a schools' student average years of work experience is related to alumni salaries is consistent with previous research (Seers & Krug, 2007; Kane, 1993), but not consistent with Dreher & Ryan (2004). Our finding that faculty expertise did not significantly predict alumni salary was not consistent with previous research (Mittra&Golger, 2008; Armstrong & Sperry, 1994). For student characteristics, communication skills, ability to well within a team, and interpersonal skills did not significantly add to our understanding of the dependent variables in this study, which is not consistent with Kane's (1993) finding that found these two variables highly valued by recruiters and their organizations.

### **5.1 Study Limitations**

Two study limitations are the secondary data used and the response rate. The data used in the present study was collected by Harris Interactive, Inc. and is a secondary data source. Despite being secondary data, the data is unique and serves to complement other data sources (e.g., *Business Week* and *U.S. News and World Report*). Additionally, some survey items are general and require greater specificity. For example, specific elements that recruiters consider when assessing the ROI on recruiting efforts can be explored. Future research could control for the recruiters' nationality and firm location. Ethical and green issues may be more salient in some locations than others. For example, Danish recruiters may value green issues more than recruiters based in the United States may. The present sample is predominantly of recruiters whose company headquarters was based in the United States (92%). An adequate testing of the impact of recruiter nationality and location is therefore a focus of future research. Although the 25% response rate appears to be low, it is considered acceptable for online surveys (Thompson, Foster, & Surface, 2007). The authors feel that efforts are needed to increase response rate. Considering the many advantages of online surveys (e.g., Dommeyer& Moriarty, 2000; Falletta & Combs, 2002), future research should explore ways of increasing online survey response rate. For example, cover letters from individuals who are significant to the respondent and shorter survey length have been shown to increase online survey response rates (Wright & Schwager, 2008).

### **5.2 Future Research**

Future research should examine how specific student and program characteristics influence stakeholder impressions. For example, the survey can be expanded to include specific definitions of "stars" ("likelihood of recruiting stars") such as "individuals that make significant organizational changes", "individuals that can influence others in a positive direction", and "individuals that change the way organizations do business". Along those same lines, research is needed to better define "overall value for recruiting effort" and how recruiters determine value. Greater specificity would result in a more comprehensive understanding of how recruiters value MBA programs and their students.

Corporations represent one of several stakeholders that assess MBA program market value. Other stakeholders include students, faculty, administrators, corporations, and society. Future research should investigate similarities and differences among these constituencies with respect to how they value and assess MBA programs. The inter-rater reliability among different constituencies for MBA programs and their graduates has yet to be investigated. A 360-degree MBA program assessment that incorporates a "balanced scorecard" approach when assessing MBA program market value may be a productive research direction. The balanced scorecard approach would list critical MBA program stakeholders, specific measures for each stakeholder, and specific goals for meeting stakeholder expectations (Kaplan & Norton, 1996). Another question that should be addressed is the extent to which MBA programs and education should respond and contribute to changing market value expectations. Universities generally respond very slowly to changing market conditions. Curriculum committees and administrators may take years to make significant changes. Methods of recognizing and responding to changes should be investigated. Advisory boards composed of practitioners and recruiters may help MBA programs stay connected to current issues. Furthermore, research may contribute to driving change in the marketplace.

### **5.3 Conclusion**

Despite its limitations, this study extends the literature related to the market value of MBA graduates. Recruiters and market salaries recognize many of the standard attributes identified in previous research (e.g., work experience and teamwork ability), but green management issues do not appear to receive a pay premium. Corporations that are embarking on green and sustainability projects should specifically communicate with their human resources staff and make them aware of this need so that recruiters can identify students with the proper training.

Without a specific focus on social responsibility and environmental sustainability, MBA graduates may be penalized for their awareness in this area. We hope this research will provide guidance for student advisement, administrators (e.g., MBA curriculum), students (e.g., course selection), and faculty (e.g., subject matter taught) who are interested in MBA program strategy and the market for MBA graduates.

## 6.0 References

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