The Value of a CoB Degree

Over the past few weeks, we have been drawn to the Gender Equity question several times (see reports by others at usmpride.com). While examining some raw data, we ran across an interesting point, one that seems to have financial and management impacts. The table immediately below presents female faculty, along with their salaries, relevant AACSB Median Salaries, salary as a percentage of the relevant AACSB Median Salary, as well as rankings based on total salary and percentage of AACSB. The final column entry is one if the faculty member has a USM degree of any kind.

Name[1]	Acad Rank[2]	Salary[3]	AACSB[4]	% of AACSB[5]	Abs Rank[6]	Rel Rank[7]	USM Degree[8]
Fennell	Instructor	$46,750.00	$ 45,000.00	103.89%	12	1	1
Munn	Instructor	$50,289.00	$ 50,300.00	99.98%	10	2	1
Loyd	Instructor	$48,969.00	$ 49,100.00	99.73%	11	3	1
Sevier	Instructor	$42,405.00	$ 45,000.00	94.23%	13	4	1
Yang	Assistant	$73,355.00	$ 80,000.00	91.69%	9	5	0
Sequeira	Assistant	$81,000.00	$ 88,900.00	91.11%	6	6	0
Pate	Associate	$83,669.00	$ 92,500.00	90.45%	5	7	1
LaFleur	Full	$90,000.00	$100,500.00	89.55%	1	8	1
Topping	Full	$85,489.00	$ 95,500.00	89.52%	4	9	0
Lopez	Assistant	$79,262.00	$ 88,900.00	89.16%	7	10	0
Davis	Full	$89,264.00	$103,000.00	86.66%	2	11	0
BabinL	Full	$86,223.00	$100,500.00	85.79%	3	12	0
Chen	Assistant	$78,770.00	$ 92,000.00	85.62%	8	13	0

We perceived some potential clustering in the relative rankings by those with USM degrees. We investigated further by conducting the following OLS regression:

$$\%AACSB = b_0 + b_1 AbsRank + b_2 USMDegree + b_3 AcadRank + error$$

The results appear below. Academic Rank is coded appropriately.

Regression Statistics	
Multiple R	0.859444581
R Square	0.738644988
Adjusted R Square	0.65152665
Standard Error	0.034117419
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	0.029607365	0.009869122	8.47863962	0.005469417
Residual	9	0.010475984	0.001163998		
Total	12	0.04008335			

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	0.891287171	0.09173619	9.715763956	4.54651E-06
Abs Rank	0.003644462	0.008136771	0.447900233	0.664812321
USM Degree	0.05208537	0.020948393	2.48636587	0.034627869
Acad Rank	-0.014271927	0.025245908	-0.565316438	0.585673083

The model has an R^2 of about 73.86%. The model seems to be a good fit. As you can see, having a USM Degree increases the % of relevant AACSB Median Salary significantly. Interpolating these results gives us the table below which shows the value of a USM Degree, if they had one, to

Name	**Hypothetical USM Degree Value**
Chen	$9,389.58
Lopez	$5,602.99
BabinL	$5,381.76
Davis	$4,244.11
Yang	$3,597.06
Sequeira	$3,541.00
Topping	$1,906.36

Looks like Chen should pick up a USM MBA ASAP. They still offer tuition breaks for faculty who take classes, don't they?

[1] Source: http://www.usm.edu/colleges/cbed
[2] Source: 2005-2006 USM Undergraduate Bulletin
[3] Source: 2005-2006 USM Budget
[4] Source: 2005-2006 AACSB Salary Survey
[5] = Salary / AACSB
[6] Ranked from highest Salary (#1) to lowest Salary (#13).
[7] Ranked from highest % of AACSB (#1) to lowest % of AACSB (#13).
[8] = 1 if the individual has a USM degree, else = 0