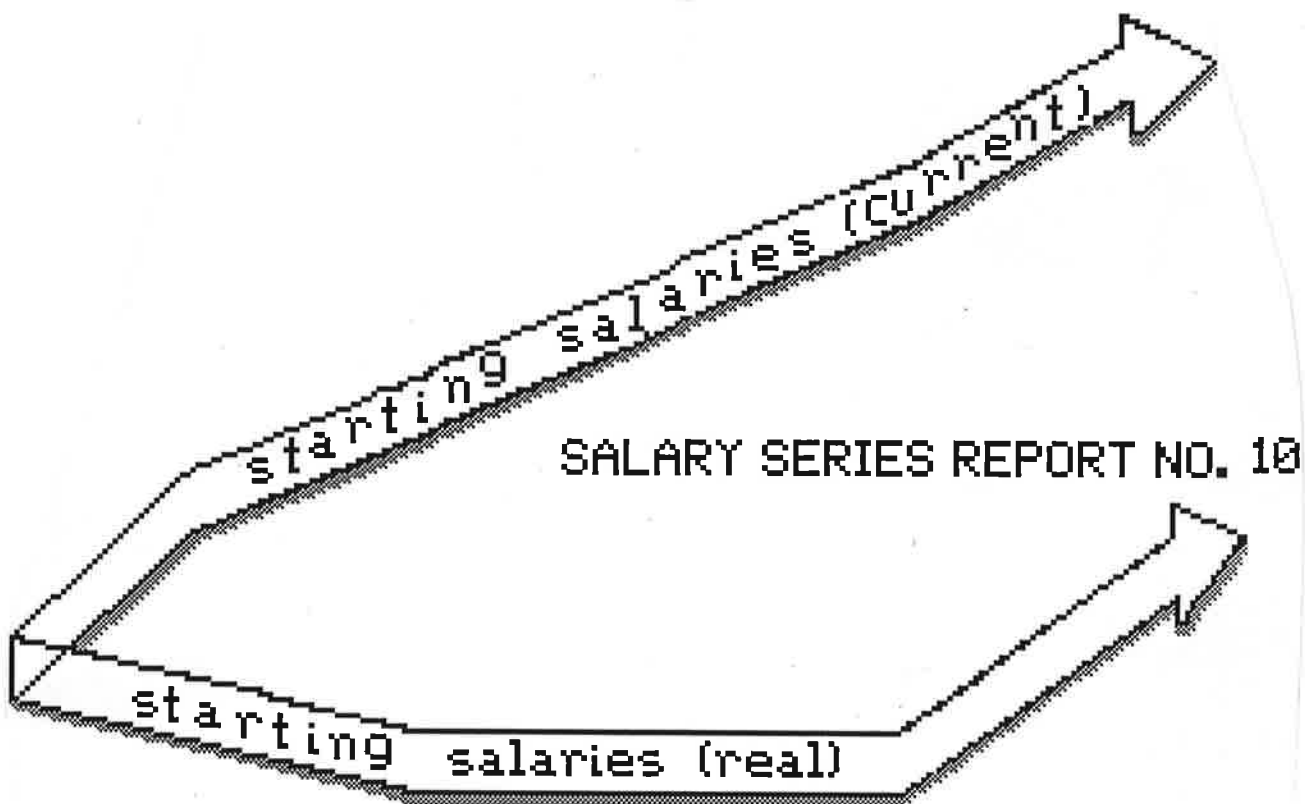


STARTING SALARY TRENDS:  
COLLEGE OF BUSINESS, 1978-1985

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Over the past decade, both the national and Michigan economies have performed poorly, at times, which has affected the starting salaries of college graduates. Inflation has eroded the earning power of new labor force participants, especially during the early 1980's. In an investigation of starting salaries of recent graduates from Michigan State University, inflation and economic conditions were shown to have affected starting salary performance over a seven year period (see report no. 2). However, the magnitude of the impact varied by college and sometimes between academic programs within a college. This report reviews recent starting salary trends for bachelor degree recipients of the College of Business from August, 1978, to June, 1985. This analysis also compares salaries by gender, race, and job location.

## OVERVIEW

The results presented in this study are based upon starting salary information reported by 4,780 graduates of the College of Business (1978-1985). The major findings in this analysis of starting salaries include:

1. Starting salaries have increased annually at an average of 7% since 1978. The average starting salary in 1984-85 was \$20,114 as compared to \$13,498 in 1978-79 (current dollars that have not been adjusted for inflation).

2. The high inflation experienced from 1980 to 1983 and the slowdown in the growth within some corporations during the early 1980's, eroded the salary position of graduates who received degrees in this period. After accounting for inflation, the 1984-85 average was \$13,128 (real), approximately 3% below the 1978 average.

3. Real starting salary averages for materials and logistics management (\$13,966) and accounting (\$13,144) were significantly higher than averages for the other majors. Departments also displayed variations in response to inflation and economic conditions: some experienced cyclical conditions (e.g. marketing) while others went through several years of decreases before showing modest yet steady improvement (e.g. financial administration).

4. Starting salaries offered by manufacturing organizations were higher than all other types of employers. Starting salaries in manufacturing averaged \$13,896 (real), followed by government (\$12,745). Average salary within the service sector where the majority of graduates were employed was \$12,012.

5. Location played a role in starting salary offers with out-of-state positions paying \$108 (real) more than in-state positions. When all variables, except location, were controlled in the regression model, the location differential was larger and statistically significant. Economics graduates found job markets very similar regardless of location. Travel and tourism graduates, on-the-other hand, earned approximately \$1,103 (real) more when accepting jobs out-of-state.

6. The average starting salary for men was \$13,870 (real) as compared to the \$12,279 (real) average for women. Accounting was the one discipline where salaries were comparable between genders. Women reported slightly higher salaries in economics and travel and tourism, but in all other majors men held a decided starting salary advantage.

7. A positive correlation between grades and salaries existed. As grades increased, average salaries improved noticeably. For graduates with GPA below 2.5, the starting salary average was \$12,168, as compared to \$13,406 for graduates with grades above 3.5.
8. The average starting salary for non-whites was \$12,957 (real), as compared to \$12,624 for Whites.

#### GENERAL DESCRIPTION OF THE POPULATION

During the period from August, 1978, to June, 1985, 9,330 bachelor's degrees were conferred in the College of Business at Michigan State University. Approximately 72% (6,764) of these graduates responded to a follow-up questionnaire sent by Placement Services. Of the respondents, 71% (4,780) were working and reported their starting salary, 13% (877) were working but failed to report a starting salary, 6% (421) reported continuing their education in graduate school, and 10% (686) were still unemployed six months after graduation. These figures reflect 51%, 9%, 4%, and 7% of the total graduate population, respectively.

The number of students graduating in business fields had steadily increased until 1982-83 when the number of graduates reached 1,465. Since then the number of graduates has gradually tapered off to 1,322 in 1984-85. The number of 1984-85 graduates was still higher than the number graduating in 1978-79 (1,129).

The response rate has varied from a low of 70% (1981-82) to a high of 75% (1978-79). The response rate appeared to fluctuate with the unemployment rate: the highest unemployment rate which was in 1981-82 corresponded to the period of highest non-response.

Women comprised approximately 40% of the total graduating population. Over the last several years the gender composition of those graduating from the college has changed (Figure 1). In 1979, women represented approximately 36% of the students graduating. This figure increased to 40% in 1981-82 and by 1984-85, 45% of business graduates were women. Interestingly, more women responded to the survey than projected based upon the proportion of women graduating. The high response by women may reflect both the change in gender composition of the business school and the success women have enjoyed finding employment in business fields.

Women, however, are not represented proportionally across business majors (Table 2). Women dominated in travel and tourism (90%), personnel and human relations (63%), and the "other" group (55%)<sup>1</sup>. The number of women graduating in financial administration and economics were substantially lower, only 27% and 29% respectively. Summarizing for other majors, the number of women in marketing (43%) was slightly higher than the overall proportion of men and women while lower percentages were found in general business administration (35%) and HRI (37%). Accounting and MLM's gender distribution was consistent with the overall breakdown of 40% women.

Response rates by various business majors are reported in Table 1. Hotel, restaurant and institutional management (HRI),

<sup>1</sup>The "other" category is composed of graduates from food systems economics and management, business education, and distributive education.

accounting, and materials and logistic management (MLM) graduates reporting salary were represented in slightly higher numbers than a priori expectations that are based upon each major's proportion of the total graduating population. General business and economics (reporting salary) were underrepresented when using the same criteria. Economics graduates, however, were more likely to enter graduate school; approximately 20% did so. Personnel, MLM, and marketing majors reported the highest unemployment rates while HRI and travel and tourism enjoyed the lowest rates.

Over the seven year period, 45% of the business graduates who reported salaries worked outside Michigan. In 1975-79, only 33% of these graduates worked out-of-state. By 1981-82, nearly 50% of the business majors reported their job location as outside Michigan. Over the next three years, this figure decreased to 41%. The exodus from Michigan closely corresponded to the period when Michigan's economy was performing most poorly. In the case of business majors, job markets appear to be sensitive to local and regional economic conditions.

Graduates (reporting salary) who are more likely to stay in Michigan were from accounting, financial administration, general business administration, and personnel and human relations. Graduates from materials and logistics management, economics, and hotel and restaurant management, take more positions outside the state. For travel and tourism, marketing and the "other" group, the distribution of positions was nearly equal.

The racial composition of the College of Business was predominantly White (96%) with Blacks and Asian-Americans comprising 2% and .6%, respectively. The remaining business graduates included Hispanic, Native Americans and foreign students. All Hispanics who graduated responded to the survey, while the response rate for Blacks and Whites was approximately 74% and 73%, respectively. Hispanics reported the highest average unemployment rate of 13.5%. Asian Americans were more likely to pursue graduate studies.

Grade point average also aided in differentiating between response groups and majors. The mean grade point for all business graduates was 2.95. The graduates continuing their education had the highest grade point average, 3.22. Those reporting a salary had a grade point average of 3.00 while those not reporting a salary had an average of 2.88. The lowest grade points were earned by those indicating they were unemployed and non-respondents.

In summary, the sample population to be used in the analysis of starting salary is representative of the general business population at Michigan State University. The very small populations of Hispanics (37) and Native American (10) raise statistical questions when comparing starting salaries across racial groups because of sample size restrictions.

#### SALARY TRENDS AND COMPARISONS

In 1978-79, the average starting salary (current dollars not adjusted for inflation) for all business graduates was \$13,498 (Table 3). Starting salaries have increased steadily at approximately 7% per year. By 1984-85, the average starting salary had reached \$20,114.

When salary figures were adjusted for inflation (1978-79=100), the impact of inflation on current salary trends can be measured. Between 1978-79 and 1981-82 current salary increases failed to keep up with inflation as indicated by the negative percentage change figures in the real (dollars adjusted for inflation) column of Table 2. These negative figures also reflect economic conditions that may have further suppressed starting salary increases, especially between 1979 and 1982.

Beginning in 1982-83, the situation improved as current salary increases over the next several years exceeded the rate of inflation by healthy margins (3% to 9%). These increases point to a stronger economy and a better labor market for College of Business graduates. Still, in 1984-85, starting salaries had not quite returned to their 1978-79 level. The buying power of salaries for 1984-85 graduates remained below that of graduates from 1978-79, but still stronger than three years previous.

The "years" variable was found to be an important explanatory factor of starting salary ( $F = 27.53$ ,  $p \leq .001$ ). Means test for the yearly averages identified several significant differences that are listed at the bottom of Table 3. Years 1978-79, 1979-80 and 1984-85 when salaries (real) were the highest, generally differed from the other years.

### Majors

Graduates from different business programs may have experienced different job markets which are often reflected in starting salary offers. The average starting salaries for each major are listed in Table 4. For completeness, the "other" category and travel and tourism have been presented despite small sample sizes.

When comparing average salaries by major, several differences prove to be significant. Major also had a strong direct effect on starting salary ( $F = 62.41$ ,  $p < .001$ ). The average salary for general business administration, \$12,398, serves as a convenient break between the high and low salary majors (Table 4). Materials and logistics management (MLM) majors received the highest salaries at \$13,966, followed by accounting (\$13,144), financial administration (\$12,731), economics (\$12,692), and marketing (\$12,628). Personnel/human relations (\$11,886), hotel, restaurant, and institutional management (\$11,189), travel and tourism (\$9,983), and "other" majors (\$11,313) were at the lower end of the salary range. MLM's average salary was significantly different from all the averages of the other programs. Other significant differences are listed at the end of Table 4.

Each program fared differently against inflation. Financial administration, for example, faced a common situation where inflation exceeded annual salary increases for the years between August, 1978, and June, 1982, and then annual salary increases exceeded inflation. The average starting salary (real) in 1984-85 was slightly below the average salary level obtained in 1978-79. HRI, personnel/human relations, and general business administration, generally followed this pattern (Table 4).

Graduates from MLM, accounting, marketing, economics, and the "other" group have faced a cyclical trend with salaries showing some improvement after a period of decline and then declining again. MLM

graduates saw salary levels decline by 8% over two years, rebound slightly, fall off again in 1983-84, before increasing by 5% in 1984-85. Interestingly, economics graduates' starting salaries increased from 1978 to 1980 before starting salary levels dropped sharply between 1980-81 and 1982-83. A 9% increase after inflation in 1983-84 was partially negated by a 3% drop in 1984-85. Salary level for graduates from these departments, as of 1984-85, still have not regained the purchasing power enjoyed by graduates in 1978-79.

The salary trend for accounting graduates, often considered a high demand discipline, offers an interesting observation. Annual increases fell approximately 5% below the inflation rate over the first four years of the study. A modest 1% increase between 1981-82 and 1982-83 was negated the next year by a 2% decline. The general experience in high demand fields, such as in engineering, found salary increases keeping pace with inflation. However, it appeared that through this period at least, firms hiring accountants were reluctant to match salary increases to inflationary conditions. This situation may have reflected some underlying concerns about general conditions within the economy that mitigated large annual increases in salary. Some new accountants, like other business majors, may have initially served in probationary/training positions at lower salaries, which are reported here, that would be augmented upon successful completion of the training program or probationary period.

#### Employer

Business graduates are employed by a variety of different employers, primarily from the service sector of the economy. The distribution of business graduates across different types of employers according to academic major is presented in Table 5. The largest number of business graduates were employed with accounting firms (940), followed by hotels, motels, and restaurants (641), banking and finance institutions (521), and merchandising firms (520).

Except in several cases where graduates are highly concentrated, graduates from the various majors were also found in a wide variety of different organizations. Marketing graduates, for example, can be found in the military, as well as with research and consulting, merchandising, agricultural, and art and drama organizations. Even though the largest number of accountants are employed with accounting firms, accounting graduates work for every type of major employer.

The average starting salary (real), as reported in Table 6, offered by manufacturing firms was significantly higher than the other sectors, at \$13,896. Government and service companies, including banks and financial institutions, followed at \$12,745 and \$12,012, respectively. Average starting salaries paid by the other group which is composed of consulting firms, volunteer organizations, and self-employment and education were at the lower end, \$11,959 and \$10,739 respectively.

When sorted by year of graduation, the sample sizes in education were very small, restricting the interpretation of salary trends. For completeness, all yearly salary averages have been included in Table 5. Graduates working in the manufacturing sector have fared better against inflation than other graduates. Salaries dropped sharply between 1979-80 and 1980-81. Several years of

improvement have placed 1984-85 salary levels slightly below 1984-85. Service sector employees, on the other hand, were buffeted by the economic recession and inflation, as salaries fell nearly 13% over four years. The recovery in salary has not been as strong. Government, education, and the other group have experienced patterns that are more cyclical.

### Job Location

The decision to accept a position within or outside Michigan may be linked to the starting salary offered. The average starting salary outside of Michigan was \$12,633 (real) while positions inside Michigan paid \$12,525, a difference of \$108. Such a small difference suggests that location did not have a significant impact on starting salary.

Comparison of yearly averages revealed that the difference can be traced to the several years when the state's economy was not performing well. Once the economy began to perform better the difference dropped from a high of \$804 in 1981-82 to only \$32 in 1984-85 (Table 7). In fact, Michigan starting salaries have shown a healthier net increase over the last three years than positions outside the state, 11% as compared to 4%.

Starting salaries for certain academic programs were, however, influenced by location (Table 8). Differences ranged from \$172 to \$1,142. The largest differences occurred in the "other" group (\$1,142) and travel and tourism (\$1,103). Salary levels for economists, HRI, and MLM were generally similar irrespective of location, even though more of these graduates (reporting salary) elected to live outside Michigan.

Location does influence the starting salaries for graduates finding employment with certain organizations. Government and educational organizations in Michigan paid higher starting salaries than those outside the state, \$683 and \$745, respectively (Table 9). The difference was very small for manufacturing, accounting, and medical services organizations. For the remaining organizations, the salary advantage leaned heavily toward out-of-state positions. Particularly important in this latter group were banking services (\$490), hotels and motels (\$657), merchandising firms (\$472), and art, printing and advertising (\$1,224).

### Gender

The average starting salary for men was \$12,870 (real) as compared to the \$12,279 average for women; a difference of \$591. This difference proved to be statistically significant ( $F = 65.72$ ,  $p < .001$ ), other factors not held constant.

Inflation and general economic conditions had a negative impact on both men's and women's starting salaries, particularly between 1978-79 and 1981-82 (Table 10). During this period women's salary levels dropped by approximately 15%, from \$13,475 (real) to \$11,585 (real). Over the same period, men experienced a 9% decline. Salary increases above the inflation rate began one year earlier for women than men with women gaining approximately 9% compared to the men's 7% (actually 6% if the 1% decline between 1982-83 and 1981-82 is included) over the last three years.

The salary gap between genders has been influenced by these trends. In 1978-79 the gap was only \$36, but the difference increased dramatically the following year to \$717 (Table 10). The largest difference was in 1980-81 where male salaries were \$957 higher than female salaries. When women's salaries began to improve the gap was reduced, but recent improvement in men's salaries has left the gap at approximately \$600. Women would need a 5% increase above the annual increase in men's salaries in 1985-86 to reach parity, if other factors such as major are not taken into consideration.

Across academic majors, the salary position of men and women varied (Table 11). Men generally had the higher salaries. For accounting, the difference was approximately \$100, but in the other areas differences ranged from \$327 (financial administration) to \$955 (marketing). The largest differences were in personnel/human relations (\$1,377 real) and the "other" group (\$2,367 real): two areas where women had a higher representation than men. Only in economics and travel and tourism did women enjoy slightly higher salaries than men. The interaction term for gender and major was significant ( $F = 4.54$ ,  $p < .001$ ), indicating that these differences within major were important.

When starting salaries were viewed from the perspective of the sector of employment, men earned higher salaries in all areas except medical services. The difference in accounting favored women by \$69; a difference not significantly different from zero (Table 12). The largest differences favoring men occurred in merchandising (\$1,292), education (\$1,112), and the other group (\$1,933). Other sectors with sizeable differences included banking (\$497) and government (\$473). In the remaining sectors, differences ranged from \$144 to \$270.

For women remaining in Michigan after graduation, the average starting salary was \$795 lower than the men's average salary (Table 13). For graduates accepting positions outside of the state, female salaries were \$336 less than male salaries. An interesting comparison found that men working in Michigan received slightly higher salaries than out-of-state male respondents. Women, on the other hand, received higher salaries outside Michigan.

#### Grade Point Average

Grade point average introduced some interesting comparisons across selected characteristics. The general trend pictured salaries increasing as grade point increased: at below 2.5, \$12,092, between 2.5 and 3.0, \$12,323, between 3.0 and 3.5, \$12,812, and above 3.5, \$13,389 (Table 14). In materials and logistics management, accounting, and finance, for example, the increments between GPA groups were evident, merely by the monetary size of the step. Economics and marketing, on the other hand, had very little difference in average salary between 2.5 and 3.5; the end groups provided the variation. For several majors, HRI and personnel and human resources, for example, salaries did not progress positively with GPA, but changed between groups.

Inflation and economic conditions played havoc with salaries within each GPA group during the early 1980's (Table 15). Each group saw adjusted salary levels fall 9% to 15% between 1979 and 1982. After 1982 salaries began to improve with regards to inflation,

particularly the below 2.5 group. The below 2.5's 1984-85 average salary was nearly the same as the 1978-79 average while other groups still lagged considerably behind.

The manufacturing sector paid the highest salary for all GPA categories (Table 16). Salaries for manufacturing employees ranged from \$13,389 for under a 2.5 GPA to \$14,527 for those with a GPA greater than 3.5. The education sector was the lowest paying employer for all graduates, irrespective of GPA. In government and education, graduates with higher GPA/s generally received lower salaries.

In a comparison of grade point by gender, men had the higher salaries across all GPA groups (Table 17), even though women have the higher overall grade point average. The gender difference decreases from \$1,061 at below 2.5 to \$418 for GPA's above 3.5.

A final comparison examined GPA groups by location (Table 18). In all except one case, out-of-state positions paid slightly higher than Michigan positions. The exception was the below 2.5 group where Michigan positions paid approximately \$200 more than non-Michigan positions.

### Race

The analysis of racial differences faced the problem of very small sample sizes for minorities. By collapsing the minority groups, Blacks, Hispanics, Native Americans, and Asian-Americans, into one category, the trend in minority starting salaries can be compared to White salaries. The average starting salary for non-white was \$12,957 (real), as compared to \$12,624 for Whites (Table 14).

Over time, the two groups have experienced different salary adjustments with regards to inflation and economic conditions. White graduates faced three years where average starting salaries declined when measured against inflation. The non-white trend has been very cyclical with major declines (12% and 9%) followed by increases (5% and 7%). This pattern reflects the small sample problem which annually introduces wide variations in starting salaries. In general minority starting salaries (for those who reported) appear to be comparable to White salaries; at least there is no indication that they are below White salaries.

### STARTING SALARY DETERMINANTS

The salary comparisons made above indicate that several factors are important in determining starting salary levels: academic major (department), year of graduation, gender, and job location. Because of confounding effects caused by the relationship between independent variables, the unique contribution of a single factor cannot be specifically determined. A final analytical exercise, using hierarchical regression analysis, was performed to identify the key determinants of starting salaries for business graduates (real salaries were employed in the analysis).

In order to measure a particular effect, class variables were created for major, year of graduation, grade point average, industry of employment, and race. The dummy variables for gender and job location (in or out of Michigan) were also treated as class variables.

Each independent class variable was then regressed separately (alone) onto the dependent variable, starting salary. The  $R^2$  was obtained for each variable, as well as the regression coefficient for each member of the class. These measures reflect the causal relationship between the independent and dependent variables with all other effects uncontrolled. The next step was to regress the entire set of explanatory variables whose causal priority (order of entry) had been pre-specified onto starting salary. For example, to test the hypothesis that year of graduation did not have a unique effect on starting salary, the explanatory variables were entered in the following order: major, industry, gender, grade point average, job location, race and finally year of graduation. The incremental  $R^2$  for the last variable entered (in example, year of graduation) was calculated by subtracting the final  $R^2$  from the  $R^2$  for the model obtained prior to the entry of the last variable. Similar tests were performed for the other independent variables.

The statistical inference assumed the null hypothesis that in the population, there was no increment in starting salary variance accounted for when year, for example, was added to the model. The null hypothesis or incremental  $R^2$ 's significance was tested by using the F-test as described by Cohen and Cohen (1983).

## Results

Approximately 32% of the College of Business starting salary variance was accounted for by specifying a model that included all the independent variables. Upon examining the regression coefficients (Table 20), year of graduation, major, gender, grade point average, and job location stand out as the most important explanatory factors after holding all other possible effects constant. The coefficients for the final model represent values when the variable was entered last.

Using a significant criterion of  $p \leq .01$ , several variables, year of graduation, major, grade point average, and employment in the manufacturing and service sectors, had significant incremental  $R^2$ 's (Table 21). The contribution of each variable is presented in Table 21 where the  $R^2$ 's for each variable alone are listed in column one and the unique  $R^2$ 's in column two. The general F-tests for each incremental  $R^2$  are included in column three.

Year of graduation has the largest impact on starting salary with an incremental  $R^2$  of .045; year of graduation uniquely explains 4.5% of salary variance. Major, grade point average, and employment in manufacturing and service contribute modest increment between 1% and 2%. The remaining variables did not make significant incremental contributions. Gender and location had large F's which suggest some importance, but because of the large sample size, and the overall  $R^2$ , they were not statistically and uniquely significant.

Year of Graduation. When confounding effects are partialled out, the proportion of starting salary variance assigned to each variable decreases, except for year of graduation. The unpartialled effect ( $R^2 = .033$ ) was smaller than the direct effect ( $R^2 = .045$ ) indicating that the year variable was suppressed. Suppression suggests that year is correlated with other independent variables, hiding its real relationship with starting salary. Once the effects

of the other variables are partialled out, year of graduation's true relationship can be revealed.

An examination of the regression coefficients from the two models further illustrates the suppression effect before controlling for the other variables. The size of the coefficients in the alone model were moderate in size and only one year, 1979-80, was not significantly different from 1984-85, which had been omitted to avoid collinearity. After controlling for the other variables, the size and, in one case, the direction of the sign of the coefficients changed. Particularly large changes occurred in 1978-79 and 1979-80: The size of the 1980-81 coefficient was smaller and not significantly different from 1984-85. In other words, salaries in 1978-79 and 1979-80 were significantly higher than 1984-85 and years after 1980-81 were significantly lower than in 1984-85. Salaries in 1984-85 were comparable to salaries reported in 1980-81.

The interactions between year of graduation and selected variables were tested. Only the year/gender interaction produced a moderately significant result ( $F = 2.40$ ,  $p < .03$ ). This interaction would indicate that men and women experienced significantly different salary offers in several years of the study (see Table 10). Since no other significant interactions were found, there was nothing peculiar about a year or set of years where adjustments would have to be made in the analysis. Except for the gender effect, year variable best reflected the economic conditions prevalent at that time.

Major. Without controlling for spurious relationships, major explained 11% of salary variance. After controlling for all other variables, the portion of starting salaries explained by major was approximately 2%. This incremental  $R^2$  was highly significant but not the most important explanatory variable, as was often the case in other colleges.

The importance of major is best captured in the magnitude of the regression coefficients. All majors had significantly higher salaries than travel and tourism which has been omitted to avoid collinearity. Materials and logistics management had the highest salaries in both models. MLM was followed by accounting, finance and marketing. Grouped close together in the middle were economics, administration and personnel/human relations. The salaries for hotel, restaurant and institutional management and "other" category grouped lowest but still significantly higher than travel and tourism. The magnitude of the regression coefficients changed slightly for some majors between models; overall, the relationships between majors were not altered.

Gender. Even though gender did not make a significant incremental (unique) contribution to starting salary, the significant, negative sign for the gender regression coefficient illustrates the lower salary levels of women within the college. The size of the coefficient remained relatively unchanged between models reflecting the strength of the gender variable. From the primary results, gender appeared to be an important variable in the description of starting salary.

Additional evidence of the importance of gender was found upon examination of the interaction effects. Besides the year of graduation interaction mentioned above, gender significantly interacted with major ( $F = 4.54$ ,  $p \leq .01$ ), job location ( $F = 9.79$ ,

$p < .01$ ), and industry ( $F = 6.93$ ,  $p \leq .01$ ). Certain majors, job locations and employers favor men over women in terms of starting salary. These relationships were noted in the previous section. Gender appear to be a key factor in influencing starting salaries within the College of Business.

Grade Point Average. A commonly held assumption positively relates grades to salaries: as grade point averages increase salaries increase. This assumption proves correct in some colleges (e.g. engineering) but not in others (e.g. education). For business a consistent pattern is revealed in both models, higher grades command higher salaries. Graduates with grades below 2.50, for example receive \$986 less than those above 3.50, all other factors held constant. Each regression coefficient was found to be significant.

The importance of grades in determining salary is further evidenced by the significant unique contribution to the explanation of salary variance ( $F = 19.90$ ,  $p \leq .01$ ). Grades contributed slightly over 1% in unique variance. In the field of business, grades can be important in determining initial salaries.

Location. Job location, like gender, had a large F ratio when measuring the importance of the incremental  $R^2$ , that proved to be statistically insignificant. However, job location was slightly suppressed, indicating that the role of location may be more important than initially realized. In the final model the regression coefficient became significantly important with out-of-state positions paying higher salaries (\$519, all other factors held constant). The interaction of location and gender further demonstrates the importance of location in determining salary levels for men and women.

Employer. Industry failed to explain a significant unique portion of the starting salary variance. In the final model, however, two sectors manufacturing and education had significant coefficients: manufacturing being positive and education negative.

Separating firms by sector and examining salary levels within sectors produced two important variables: manufacturing and service. Both variables contribute significantly to the explanation of starting salary. Within the manufacturing sector, automotive firms and electronics companies/public utilities have the highest salaries as indicated by their significant and positive regression coefficients. In the service sector, accounting firms paid the highest salaries.

Other Factors. Other class variables did not prove to be significant in terms of uniquely explaining the variance of starting salary. Only one variable, state government, had a significant regression coefficient.

## CONCLUSIONS

After comparing starting salary means by available characteristics for College of Business graduates and employing regression analysis, several variables were found to be important when determining salary levels: year of graduation, major, gender, job location, and grade point average. Specific employers, especially automotive and electronics companies, public utilities, and accounting firms, also influenced salaries.

Year of graduation captures the economic conditions prevailing at the time of graduation. From 1978 to 1983, conditions in the economy depressed salary levels, such that yearly salary increases (current terms) did not keep pace with inflation. Graduates actually lost ground in terms of their salaries' purchasing power during these years. Improvement has been observed over the last several years with current salary increases equalling or slightly ahead of inflation.

Graduates from certain departments consistently received higher salaries. Materials and logistics management and accounting graduates had the highest salary averages. Lower salaries for other graduates may reflect an oversupply of graduates in relation to the number of available jobs, training programs which lead to subsequent salary increase, or historically low remuneration for a particular field.

A significant finding was the gap in initial earnings between men and women. While women have become increasingly involved in the business fields, as measured by the increasing number of female graduates, their salaries have not equalled men's, except in accounting. This earnings gap at graduation suggests that labor market discrimination may be evident in some fields. Further investigation into these patterns is warranted.

Job location also influenced salary levels with positions in Michigan paying less than out-of-state positions. This is particularly true in the service sector for accounting, banking and finance, merchandising, and hotels and restaurants.

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Table 1. Response rate by category of response for each department in the College of Business

Business Major	Total	% Total	Working: Salary			Working: No Salary			Graduate School		
			n	% This category	% Major	n	% This category	% Major	n	% This category	% Major
Materials and Logistics Management	635	7	362	8	57	62	7	10	7	2	1
Accounting	2,211	25	1,364	30	62	151	17	7	69	17	3
Economics	316	4	99	2	31	32	4	10	60	15	19
Financial Administration	754	8	333	7	44	80	9	11	45	11	6
Marketing	1,657	18	824	18	50	153	18	99	54	13	3
General Business Administration	1,674	19	654	14	39	194	23	12	129	31	8
Personnel/Human Relations	447	5	161	4	36	75	9	17	28	7	6
Other Business Majors*	139	2	66	1	47	19	2	14	2	1	1
Hotel, Restaurant, and Institutional Management	1,022	11	662	14	65	64	8	6	14	3	1
Travel and Tourism	149	2	64	1	43	16	2	11	2	1	1

\*Other category includes Food Systems Economics and Management, Business Education, and Distributive Education.

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 1. (continued)

Business Major	Unemployed			Non-response		
	n	% This category	% Major	n	% This category	% Major
Materials and Logistics Management	59	9	9	145	6	23
Accounting	137	21	6	490	20	22
Economics	22	3	7	103	4	33
Financial Administration	64	10	8	232	9	30
Marketing	151	23	9	475	19	29
General Business Administration	130	20	8	567	23	34
Personnel/Human Relations	56	8	13	127	5	28
Other Business Majors*	10	2	7	42	2	30
Hotel, Restaurant, and Institutional Management	26	4	3	256	10	25
Travel and Tourism	6	1	4	61	2	41

\*Other category includes Food Systems Economics and Management, Business Education, and Distributive Education.

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 2. Women's Involvement Measured by Graduation Rate from Academic Program in the College of Business.

Business Major	Women			Men			Total %
	n	This category	% Major	n	This category	% Major	
Materials and Logistics Management	255	7	40	380	7	60	7
Accounting	882	24	40	1329	25	60	25
Economics	91	2	29	225	4	71	3
Financial Administration	203	6	27	551	10	73	8
Marketing	720	20	43	937	17	57	18
Administration	589	16	35	1085	20	65	19
Personnel\Human Relations	281	8	63	166	3	37	5
Other*	76	2	55	63	1	45	2
Hotel, Restaurant, and Institutional Management	378	10	37	644	12	63	11
Travel and Tourism	134	4	90	15	0.3	10	2

\*Other includes food systems economics management, business education, and distributive education.

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 3. Average Starting Salary, Current and Real, For Business Graduates from August, 1978 through June, 1985.

Year	n	Average (Current) (\$)	% Change	Average (Real) (\$)	% Change
1978-79	643	13,498		13,498	
1979-80	695	14,485	7	12,819	-5
1980-81	687	15,749	7	12,499	-2
1981-82	695	16,512	5	12,053	-4
1982-83	656	17,272	5	12,163	0
1983-84	695	18,452	7	12,468	3
1984-85	709	20,114	9	13,146	5

Deflated comparisons significant at the 0.5 level:

1978-79, 1979-80; 1978-79, 1980-81; 1978-79, 1981-82; 1978-79, 1982-83; 1978-79, 1983-84; 1978-79, 1984-85; 1980-81, 1984-85; 1979-80, 1982-83; 1979-80, 1981-82; 1980-81, 1981-82; 1981-82, 1984-85; 1982-83, 1984-85; 1983-84, 1984-85.

Source: Follow-up report data for 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 4. Average Starting Salary (real) for Academic Programs in the College of Business for 1978-79 to 1984-85.

Year	Materials and Logistics Management			Accounting		
	n	Average Salary \$	% Change	n	Average Salary \$	% Change
1978-79	17	14,648	-3	195	14,435	-5
1979-80	21	14,254	-5	181	13,677	-4
1980-81	27	13,572	2	223	13,109	-4
1981-82	45	13,828	0	207	12,632	1
1982-83	59	13,815	-2	191	12,818	-2
1983-84	81	13,600	5	192	12,567	2
1984-85	112	14,292		175	12,792	
Total\Ave	362	13,966		1364	13,144	

Year	Economics			Financial Administration		
	n	Average Salary \$	% Change	n	Average Salary \$	% Change
1978-79	17	13,014	2	36	13,298	-2
1979-80	20	13,285	1	45	13,035	-1
1980-81	15	13,393	-9	37	12,914	-7
1981-82	12	12,140	-5	43	12,055	.3
1982-83	14	11,585	9	55	12,086	5
1983-84	8	12,643	-3	48	12,699	3
1984-85	13	12,278		69	13,098	
Total\Ave	99	12,692		333	12,731	

Year	Marketing			General Business Administration		
	n	Average Salary \$	% Change	n	Average Salary \$	% Change
1978-79	98	13,419	-4	120	13,812	-7
1979-80	112	12,923	1	124	12,866	-7
1980-81	129	12,999	-8	116	12,010	-4
1981-82	125	11,943	-.3	113	11,565	-1
1982-83	119	11,900	6	66	11,498	1
1983-84	129	12,555	2	70	11,738	11
1984-85	112	12,837		45	12,928	
Total\Ave	824	12,628		654	12,398	

Table 4. (continued)

Year	Personnel/Human Relations			Other Business Majors		
	n	Average Salary \$	% Change	n	Average Salary \$	% Change
1978-79	30	13,044	-8	17	12,153	1
1979-80	31	11,972	-7	22	12,252	-24
1980-81	29	11,172	.7	11	9,343	6
1981-82	29	11,250	2	5	9,883	4
1982-83	10	11,504	.2	6	10,232	25
1983-84	14	11,532	8	2	12,773	-18
1984-85	18	12,466		3	13,458	
Total\Ave	161	11,886		66	11,313	

Year	Hotel, Restaurant, and Institutional Management			Travel and Tourism		
	n	Average Salary \$	% Change	n	Average Salary \$	% Change
1978-79	96	12,108	-4	17	10,755	-4
1979-80	125	11,637	-5	14	10,280	-13
1980-81	83	11,086	-7	9	8,995	11
1981-82	78	10,350	3	8	9,945	-6
1982-83	89	10,619	4	6	9,369	-8
1983-84	92	10,994	2	6	8,615	27
1984-85	99	11,172		4	10,931	
Total\Ave	662	11,189		64	9,983	

Source: Follow-up report data for 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Comparison of average salary significant at the 0.05 level

MLM: All other majors.

Accounting: MLM, marketing, general business, personnel/human relations, HRI, travel and tourism, and other.

Economics: MLM, HRI, travel and tourism, and other.

Financial

Administration: MLM, personnel/human relations, HRI, travel and tourism, and other.

Marketing: MLM, accounting, personnel/human relations, HRI, travel and tourism, and other.

General Business

Administration: MLM, accounting, HRI, travel and tourism, and other.

Personnel: MLM, accounting, finance, marketing, HRI, and travel and tourism.

Table 5. Distribution of Business Graduates by Sector of Employment According to Major.

Business Major	Aerospace/Petroleum			Automotive			Electronics and Public Utilities			Chemicals, Electrical Metals and Tire			Construction, Food, Glass and Packaging			Government and State			Hotels, and Motels		
	n	%	Row	n	%	Row	n	%	Row	n	%	Row	n	%	Row	n	%	Row	n	%	Row
Materials and Logistics Management	39	34	11	68	23	19	52	22	14	68	18	19	36	11	10	2	3	.6	5	1	1
Accounting	21	18	2	57	20	4	41	17	3	53	14	4	44	14	3	27	45	2	21	3	2
Economics	3	3	3	3	1	3	13	5	13	5	1	5	6	2	6	5	8	5	2	-.3	2
Financial Administration	8	7	2	25	9	8	15	6	5	28	7	8	15	5	5	4	7	1	9	1	3
Marketing	15	13	2	62	21	8	69	29	8	146	38	18	100	31	12	4	7	-.5	29	5	4
General Business Admin.	19	17	3	59	20	9	34	14	5	58	15	9	62	19	9	13	22	2	26	4	4
Administration																					
Personnel/Human Relations	8	7	5	12	4	7	10	4	6	14	4	9	8	5	5	5	8	3	9	1	6
Other Business Majors	1	.8	2	1	.3	2	3	1	5	8	2	12	8	5	12	0	0	0	3	35	5
Hotel, Restaurant, and Institutional Management	0	0	0	3	1	.5	4	2	.6	4	1	1	41	13	6	0	0	0	510	80	77
Travel and Tourism	0	0	0	1	.3	2	0	0	0	0	0	0	2	.6	3	0	0	0	27	4	42
Total	114	2	291	6	241	5	384	8	322	7	60	1	641	14							

Business Major	Accounting			Research and Consulting			Banking, Finance, Insurance, and Real Estate			Transportation			Merchandising and Related Services			Art, Drama, Printing, and Publishing		
	n	%	Row	n	%	Row	n	%	Row	n	%	Row	n	%	Row	n	%	Row
Materials and Logistics Management	2	.2	.6	12	7	3	5	1	1	22	33	6	41	8	11	4	5	1
Accounting	881	94	65	27	16	2	86	17	6	7	10	.5	36	7	3	10	13	.7
Economics	5	.5	5	5	3	5	28	5	28	3	4	3	10	2	10	2	3	2
Financial Administration	10	1	3	13	8	4	167	32	50	2	3	.6	18	3	5	3	4	1
Marketing	5	.5	.6	43	26	5	65	12	8	6	9	.7	216	41	26	38	48	5
General Business Admin.	18	2	3	30	18	5	132	25	20	9	13	1	127	24	19	16	20	2
Administration																		
Personnel/Human Relations	1	.1	.6	8	5	5	23	4	14	1	1	.6	36	7	22	3	4	2
Other Business Majors	1	.1	2	3	2	5	6	1	9	2	3	3	9	2	14	1	1	2
Hotel, Restaurant, and Institutional Management	16	2	2	22	13	3	3	.5	.5	2	3	.3	24	5	4	2	3	.3
Travel and Tourism	1	.1	2	4	6	6	6	1	9	13	19	20	4	.7	6	1	1	2
Total	940	20	167	4	521	11	67	1	520	11	80	2						

\*Category also includes Self-Employed.

Source: Follow-up report data base for 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 6. Average Starting Salary (real) by Economic Sector for the College of Business, 1978-1985.

Year	Manufacturing			Service			Government			Education			Other		
	n	Average Salary (\$)	% change	n	Average Salary (\$)	% change	n	Average Salary (\$)	% change	n	Average Salary (\$)	% change	n	Average Salary (\$)	% change
1978-1979	194	14,479	-0.7	390	13,119	-6	25	13,706	-7	13	11,247	-8	21	12,630	-4
1979-1980	180	14,371		428	12,311		37	12,722		12	10,302		38	12,082	
1980-1981	245	13,547	-6	374	11,948	-3	10	12,041	-5	13	10,925	6	45	11,929	-1
1981-1982	206	13,412	-1	436	11,502	-4	13	12,252	2	8	9,803	-10	32	11,277	-5
1982-1983	202	13,424	0	413	11,642	1	10	12,024	-2	7	10,280	5	24	11,124	-1
1983-1984	266	13,699	2	376	11,646	0	13	11,945	-0.7	4	12,018	17	36	12,196	10
1984-1985	271	14,393	5	375	11,951	3	15	13,273	11	3	11,351	-5	43	12,329	1
Total/Avg	1,564	13,896		2,792	12,012		123	12,745		60	10,739		239	11,959	

Source: Follow-up report data base for 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 7. Average Starting Salary (Real) for Employment in and outside of Michigan, College of Business, 1978-1985.

Year	Outside Michigan			Inside Michigan			Difference (\$) (O-M)
	n	Salary (\$)	% Change	n	Salary (\$)	% Change	
1978-79	214	\$13,725	-7	429	13,385	-4	215
1979-80	324	12,788	-1	371	12,846	-3	58
1980-81	321	12,615	-1	366	12,397	-6	218
1981-82	336	12,468	-2	359	11,664	4	804
1982-83	312	12,195	2	344	12,134	3	61
1983-84	346	12,495	4	349	12,441	4	54
1984-85	239	12,976		416	12,944		32
Average		12,633			12,525		108

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 8. Average Starting Salaries (real) for Majors by Location for 1978-1985.

Academic Programs	Outside Michigan		Michigan		Difference (\$) (O-M)	% Staying in Michigan
	n	Salary (\$)	n	Salary (\$)		
Materials and Logistics Management	215	14,083	148	13,797	286	41
Accounting	428	13,390	936	13,031	359	69
Economics	51	12,775	48	12,603	172	48
Financial Administration	123	13,157	210	12,482	675	63
Marketing	377	12,912	447	12,383	536	54
General Business Administration	233	12,666	421	12,249	417	64
Personnel\Human Relations	50	12,144	111	11,769	375	67
Other	33	11,884	33	10,742	1,142	50
Hotel, Restaurant, and Institutional Management	510	11,250	152	10,985	265	23
Travel and Tourism	32	10,534	32	9,431	1,103	50

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 9. Average Starting Salary (real) for Major Employers In and Out of Michigan, College of Business, 1978-1985.

Major Industry	OUTSIDE MICHIGAN		MICHIGAN		Difference (\$) (O-M)
	n	Salary(\$)	n	Salary(\$)	
Manufacturing	785	\$13,892	780	\$13,915	-23
Government	34	\$12,251	89	\$12,934	-683
Service	1211	\$11,996	1581	\$12,024	-28
Accounting	296	\$13,493	648	\$13,003	490
Banking	149	\$12,333	382	\$11,676	657
Hotels and Motels	477	\$11,045	166	\$10,641	404
Medical Services	11	\$11,247	38	\$11,390	-143
Merchandizing	243	\$11,820	297	\$11,348	472
Art/Drama/Printing	35	\$12,314	50	\$11,090	1,224
Education	11	\$10,131	49	\$10,876	-745
Other	104	\$12,239	135	\$11,743	496

Source: Follow-up report data base, 1978-79, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 10. Average Starting Salary (Real) Trends for Male and Female Business Graduates.

Year	Female			Male			Difference (\$) (M-F)
	n	Salary(\$)	% Change	n	Salary(\$)	% Change	
1978-79	229	13,475	-8	414	13,511	-3	36
1979-80	261	12,371	-4	434	13,088	-2	717
1980-81	249	11,889	-3	438	12,846	-4	957
1981-82	292	11,585	3	403	12,391	-1	806
1982-83	265	11,929	2	391	12,322	3	393
1983-84	300	12,193	4	395	12,672	4	479
1984-85	330	12,646		380	13,226		580

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 11. Average Starting Salary (Real) for Males and Females Compared by Academic Program 1978 to 1985.

Academic Programs	Female		Male		Difference (\$) (M-F)	% Women
	n	Salary(\$)	n	Salary(\$)		
Materials and Logistics Management	159	13,702	203	14,167	465	44
Accounting	572	13,080	792	13,190	110	42
Economics	33	12,950	66	12,562	-388	33
Financial Administration	84	12,487	249	12,814	327	25
Marketing	345	12,073	479	13,028	955	42
General Business Administration	238	11,885	416	12,691	806	36
Personnel\Human Relations	97	11,338	64	12,715	1,377	60
Other*	35	10,201	31	12,568	2,367	57
Hotel, Restaurant, and Institutional Management	248	10,825	414	11,407	582	37
Travel and Tourism	58	10,037	6	9,457	-580	91

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 12. Male-Female Average Starting Salary (Real) Comparison by Employment Sector, College of Business, 1978-1985.

Industry	Female		Male		Difference (\$) (M-F)
	n	Salary(\$)	n	Salary(\$)	
Manufacturing	609	\$13,739	956	\$14,009	270
Service	1,112	\$11,661	1,680	\$12,244	583
Accounting	371	\$17,138	573	\$17,069	-69
Banking	197	\$15,041	336	\$15,538	497
Hotel and Motel	252	\$14,209	391	\$14,419	210
Medical Service	29	\$14,786	20	\$14,475	-311
Merchandise	226	\$14,394	314	\$15,686	1,292
Art and Drama	38	\$15,732	47	\$15,876	144
Government	66	\$12,526	57	\$12,999	473
Education	36	\$10,295	24	\$11,407	1,112
Other	102	\$10,851	137	\$12,784	1,933

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 13. Average Starting Salary (Real) Comparison for Male and Female Business Graduates by Location, 1978-1985.

Location	Female		Male		Difference
	n	Salary (\$)	n	Salary (\$)	(\$) (M-O)
Michigan	1,072	12,108	1,562	12,903	795
Outside Michigan	853	12,495	1,293	12,831	336
Difference (O-M)		387		-72	

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 14. Average Starting Salaries (real) for Business Academic Programs According to Grade Point Average Levels, 1978-1985.

Major	<2.5		2.5-3.0		3.0-3.5		>3.5	
	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)
Materials and Logistics Management	44	13,172	189	13,759	99	14,381	31	14,991
Accounting	76	12,435	410	12,605	595	13,379	283	13,620
Economics	7	11,866	36	12,583	40	12,608	16	13,507
Financial Administration	49	12,381	141	12,454	106	12,844	37	13,924
Marketing	130	12,414	373	12,614	261	12,637	60	13,141
General Business Admin.	169	12,197	293	12,300	160	12,554	31	13,382
Personnel/Human Relations	32	11,929	74	11,944	44	12,037	10	9,837
Other	13	11,888	34	11,337	17	10,796	2	11,550
Hotel and Restaurant	144	11,244	314	11,058	168	11,288	36	11,645
Travel and Tourism	5	8,962	22	9,673	30	10,245	7	10,563
Total/Average	699	12,092	1,886	12,323	1,520	12,812	513	13,389

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 15. Average Starting Salary Trends (real) for Business Graduates According to Selected Grade Point Average Levels, 1978-1985.

Year	<2.5			2.5-3.0			3.0-3.5			>3.5	
	n	Average Salary (\$)	% Change	n	Average Salary (\$)	% Change	n	Average Salary (\$)	% Change	n	Average Salary (\$)
1978-79	113	13,110	-7	266	13,092	-4	201	13,938	-5	63	14,509
1979-80	133	12,233	-2	279	12,269	-2	209	13,270	-5	74	13,317
1980-81	97	11,947	-6	293	12,346	-3	226	12,655	-2	71	13,389
1981-82	106	11,199	3	272	11,918	-2	235	12,379	0	82	12,669
1982-83	92	11,578	5	260	11,892	4	223	12,363	1	81	13,148
1983-84	79	12,165	7	302	12,320	2	237	12,511	5	77	13,225
1984-85	79	12,972		300	12,529		251	13,130		77	13,841
Total/Avg	643	12,168		1,972	12,392		1,582	12,871		525	13,406

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 16. Business Graduates' Average Starting Salaries (real) for Major Employment Sector According to Grade Point Average Levels, 1978-1985.

Grade Point Average	Manufacturing		Service		Government		Education		Other	
	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)
<2.5	220	13,389	406	11,509	24	12,072	7	11,412	42	12,318
2.5-3.0	690	13,723	1,088	11,615	52	12,960	28	10,871	11	11,862
3.0-3.5	509	14,171	950	12,306	35	12,570	19	10,571	6	11,836
>3.5	145	14,527	348	13,036	12	13,672	6	9,872	1	12,277

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 17. Average Starting Salaries for Men and Women From the College of Business According to Grade Point Average, 1978-1985.

Gender	<2.5		2.5-3.0		3.0-3.5		>3.5	
	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)
Women	164	11,356	743	11,843	726	12,550	292	13,220
Men	535	12,417	1,230	12,726	856	13,143	233	13,638
Difference (W-M)		-1,061		-883		-593		-418

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 18. Average Starting Salaries (real) for Business Graduates by Various Grade Point Groups as Compared to In and Out-of-State Job Locations, 1978-1985.

Location	<2.5		2.5-3.0		3.0-3.5		>3.5	
	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)	n	Average Salary (\$)
Outside Michigan	288	12,047	914	12,522	734	12,934	210	13,501
Michigan	411	12,252	1,059	12,282	848	12,816	315	13,342
\$ Difference (O-M)		-205		240		118		159

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 19. Average Starting Salary (real) by Racial Groups in the College of Business for Years 1978 to 1985.

Year	Whites			Non-whites			Difference (\$) (Non-w-w)
	n	Salary (\$)	% Change	n	Salary (\$)	% Change	
1978-79	623	13,478		17	14,283		805
1979-80	675	12,825	-5	20	12,627	-12	198
1980-81	665	12,469	-3	21	13,300	5	831
1981-82	669	12,042	-3	24	12,080	-9	38
1982-83	638	12,144	1	17	12,915	7	771
1983-84	678	12,490	3	21	12,870	-.3	380
1984-85	683	12,498	4	30	12,974	1	26
Average		12,674			12,957		

Source: Follow-up report data base, 1978-1985, Placement Services, Michigan State University, East Lansing, Michigan 48824.

Table 20. Regression Coefficients for Selected Variables  
from First Step and Final Models for College  
of Business Starting Salary.

	B alone	B final
Intercept		10,627 *
Year		
1978-79	541 *	1014 *
1979-80	-138	451 *
1980-81	-458 *	-191
1981-82	-905 *	-561 *
1982-83	-794 *	-533 *
1983-84	-489 *	-448 *
1984-85 (intercept)	12,957 *	
MAJOR		
Materials and Logistics Management	3,980 *	2789 *
Accounting	3,161 *	2356 *
Economics	2,709 *	1879 *
Finance	2,748 *	2263
Marketing	2,645 *	2052 *
Administration	2,404 *	1884 *
Personnel/Human Relations	1,853 *	1538 *
Other	1,303 *	1100 *
Hotel, Restaurant and Institutional Management	1,206 *	1385 *
Travel and Tourism	9,983 *	
GENDER		
Women	-591 *	-581 *
Men	12,870 *	
G.P.A		
<250	-1,238 *	-986 *
2.51-3.00	-1,012 *	-832 *
3.01-3.5	-535 *	-444 *
3.51-4.00	13,406 *	
RACE		
White	885	-94
Black	1,713 **	503
Hispanic	490	-302
Native American	1962	671
Asian American	266	-5
Foreigner(intercept)	11,731 *	

Table 20. (continued)

## JOB LOCATION

Out-of-State	119	519 *
Michigan(intercept)	12,579 *	

## INDUSTRY

Manufacturing	1,937 *	930 **
Service	53	-26
Government	786 *	-465
Education	-1219 *	-1269 **
Others(intecept)	11,959 *	

## Industry:Manufacturing

Aerospace/Petroleum	1,849 *	687 **
Automotive	2,980 *	2008 *
Electronics/Public Utilities	1,990 *	937 *
Chemical/Electrical	1,674 *	590 **
Construction	1,238 *	323
Other	12,027 *	

## Industry:Service

Medical Services	-2,067 *	-113
Accounting	-268 *	858 *
Banking/Finance	-1,564 *	53
Merchandising	-1,864 *	-184
Hotels/Restaurants	-2,483 *	-413
Other	13,424 *	

## Industry:Government

State	1,085 *	2069 *
Military	-652	135
Foreign,City,Federal	-780 **	364
County	12,626 *	

## Industry:Education

Post Secondary	-1,353 *	1,111
Elementary/Secondary	12,640 *	

\* significant at the .01 level

\*\* significant at the .05 level

Table 21.  $R^2$  (alone) and  $R^2$  (unique) for Variables in Regression Model with Corresponding F-test, College of Business.

Variable	$R^2$ (a)	$R^2$ (u)	F (u)
Year	.033	.045	49.74 *
Major	.109	.018	13.27 *
Gender	.014	.012	79.59
G.P.A	.023	.012	19.90 *
Race	.003	.001	1.33
Job Location	.001	.009	59.69
Industry	.133	.003	4.97
Industry:Manufacturing	.149	.019	25.20 *
Industry:Service	.149	.011	14.59 *
Industry:Government	.003	.003	6.63
Industry:Education	.002	.000	0.00