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*Where Are Economics Departments Housed?* 

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While economics is firmly ensconced in the social sciences, it is also a core subject of the business major. Reflecting this dual personality, U.S. economics departments are housed both in colleges of business and in colleges of arts and sciences. While this is common knowledge to any economist, to our knowledge the administrative location of economics departments has never before been quantified. Section I of this paper will tabulate the administrative location of economics departments by several institutional characteristics. In addition, the section will explore whether these characteristics can explain the administrative location of economics departments. Section II will examine the effect of departmental administrative location on the number of economics majors.

## I. The Administrative Location of Economics Department

The National Center of Education Statistics reports that 1,876 institutions of higher education granted bachelor's degrees in the U.S. and its territories in the year 2000. In order to minimize the task of identifying institutions with both economics departments and multiple undergraduate colleges, we examined only research, doctorate and comprehensive universities, using the 1994 Carnegie classification of institutions of higher education. We thus exclude from our analysis liberal arts colleges, the vast majority of which do not have multiple undergraduate colleges, as well as specialized institutions in the arts. This list is pared further by including only institutions that offer a major in either economics or business economics. This left a total of 597 institutions, 498 of which had multiple undergraduate colleges, schools or other types of administrative intermediaries between the department and university. We included in our sample only those institutions which had a free standing department of economics. A total of 173 schools either did not have departments, or had departments in which economics was combined with one or more other disciplines, leaving a final sample of 325 schools. These schools accounted for 72 percent of all economics majors conferred in the U.S. during the 1993-97 period.<sup>i</sup>

Table 1 shows the college location of the institutions in our sample. A few schools had multiple economics departments. These schools were classified according to the location of the department administering the undergraduate economics program. Departments housed in arts and sciences outnumber those housed in business, 197 to 121, or 61 percent to 37 percent. A handful of departments were housed in other types of colleges, including agriculture, public affairs and amalgams of business and the social sciences. Forty-three schools in our sample do not have a separate undergraduate business college. If these schools are excluded from the sample, colleges of arts and sciences are still favored by 57 percent of the schools with both undergraduate business and arts and sciences colleges.

Table 1 also shows the distribution of departments by college location according to Carnegie institutional classification, region, public versus private status, undergraduate admission selectivity, institutional size and highest economics degree conferred. Admission selectivity is taken from on Barron's <u>Profiles of American Colleges</u>. Three main features stand out. First, research universities are much more likely to place economics within the college of arts and sciences while comprehensive universities are more likely to place economics in the business college. Eighty percent of all Research I schools and 76 percent of all economics departments with economics Ph.D. programs are located in colleges of arts and sciences.<sup>ii</sup> A second and

possibly related feature is the strong correlation between the administrative location of the economics department and the school's undergraduate admissions selectivity. Sixty percent of the least selective schools house economics in business whereas 88 percent of the most selective schools house economics in arts and sciences. Finally there are pronounced regional differences, with Southern, and to a lesser extent Midwestern schools, much more likely to place economics within the business college, whereas arts and sciences is the norm for Northeastern and Western economics departments. The distribution of departments by college is largely unchanged when schools are weighted according to total the number of bachelor's degrees conferred.

A total of 173 schools do not have free standing economics departments but otherwise meet all our selection criteria. These schools usually have departments comprised of economics and one or more other disciplines (hereafter termed joint departments). The most common combination is economics and finance, used by 62 schools, followed by economics and business, which is used by another 26 schools. There are 11 other disciplines that are combined with economics to form departments, while 25 schools form departments by combining economics with two or more other disciplines. Thirty-eight schools either do not have any departments or subsume economics under departments of business or social sciences. All but 25 of the 135 schools with joint economics departments are located in business colleges. Including these schools in our sample, but excluding as before liberal arts colleges and schools without an economics major or without multiple undergraduate colleges, tips the overall balance towards business. Slightly more than half of all economics departments defined in this manner are housed in business colleges, compared to 45 percent in arts and sciences and 3 percent in other colleges. The aforementioned patterns of college location by region, Carnegie classification and undergraduate admission selectivity are strengthened by including schools with joint economics departments.

Table 2 presents probit estimates of the marginal probability that an economics department is located in a college of arts and sciences, evaluated at the median value of the discrete variables and at the mean value of the continuous variables. We include only schools with undergraduate business schools so that there exists a choice of colleges in which to place their economics department. We also exclude departments housed in the "other" category of colleges. We assume that Carnegie classification, control, bachelor's degrees conferred (DEGREES) and undergraduate admissions selectivity are exogenous to the segment of the institution choosing the economics department's location. Undergraduate admissions selectivity is entered as a discrete variable ranging from one for the least selective schools to six for the most selective schools.

The results in column one parallel the cross tabulations of Table 1. An additional level of admissions selectivity increases the likelihood that an economics department will be housed in a college of arts and sciences by 7.8 percentage points, implying a 37.5 percentage point difference between the most and least selective categories. Research universities are 17 percent more likely to house their economics department in their college of arts and sciences than are comprehensive universities. All else equal, the chances that an economics departments will be located in a business college is 36 percentage points higher in the South than in the Northeast. All three coefficients are significant at the five percent level.

Column two of Table 2 includes the ratio of social science to business majors (SSBUSRAT) as an independent variable measuring the relative strength of the two main constituencies of economics departments.<sup>iii</sup> The demand for economics courses comes primarily from these two groups. It is reasonable to hypothesize that the likelihood of a business college location increases as an economics department serves more business students. The ratio is highly significant. A one standard deviation increase in this variable (.74) increases the likelihood of an arts and sciences college location by about 14 percentage points.

The admissions selectivity and Carnegie classification variables lose significance with the inclusion of the SSBUSRAT variable, suggesting that these variables effect college location primarily indirectly through their effect on the distribution of student majors. Highly selective institutions tend to have more social science majors relative to business majors than less selective institutions, thereby increasing the fraction of economics courses taken by social science students and thus increasing the likelihood that an economics department will housed in the college of arts and sciences.<sup>iv</sup> The South dummy continues to be highly significant, highlighting the pronounced regional differences in the administrative location of economics departments.

## II. College Location and the Number of Economics Majors

Does the administrative location of an economics department have any real consequences? This question could be addressed at several levels, including the effect on the size and quality of the faculty, the level of faculty salaries, the existence and quality of a graduate program, research productivity, and the like. This section will examine only one possible consequence of college location, namely the number of economics majors.

The dependent variable is the log of the average number of economics plus business economics majors during the 1993-97 period. Independent variables include the log of the average number of bachelor's level graduates between 1993 and 1997, Carnegie classification, undergraduate admissions selectivity, private or public control and region. The sample is the same as in Table 2, and thus includes only schools with an undergraduate business college, all of which offer a general business or management major. The menu of other competing majors varies by school. We include a dummy variable for the presence of a finance major, which is perhaps the closest competing major to economics. Finally we include a dummy variable for the college location of the economics department.

The results are shown in column one of Table 3. The number of economics majors is strongly related to the two measures of institutional quality, undergraduate admissions selectivity and research classification. Research schools have about 55 percent more majors than comprehensive schools, holding admissions selectivity and other factors constant. Similarly, each additional increment in admissions selectivity increases the number of economics majors by 17 percent. As expected, the presence of a competing finance major has a significant negative effect on the number of economics majors. There is weak evidence that private schools have a higher proportion of economics majors. On the other hand, we find no evidence of any regional effects on the number of economics majors.

The main variable of interest is the college location of the economics department. Economics departments housed in business colleges have nearly 30 percent fewer majors than departments housed in colleges of arts and sciences. One possible reason for this result is that arts and sciences economics departments benefit from a discouraged business major effect (Salemi and Eubanks 1996). If business colleges have higher undergraduate admissions standards than colleges of arts and sciences, then some students unable to meet the business college standards may choose economics as the next best alternative. However, many business college economics departments offer a major to arts and sciences students, and thus would also benefit from a discouraged business major effect.

In order to test this hypothesis we separated business colleges according to whether they offered a major to arts and sciences students. Only about one-third of business college economics departments restrict their major to business college students. As shown in column two of Table 3, these departments have about 30 percent fewer majors then other business college departments, an estimate which is significant at the five percent level. Thus there is strong evidence of a discouraged business major effect. However even after controlling for this effect, business college economics departments have significantly fewer majors than

departments in arts and sciences colleges. Even business college economics departments that offer a major to arts and sciences students have about twenty percent fewer majors than an otherwise equivalent economics department housed in an arts and sciences college.

Why do business college economics departments have fewer majors than arts and sciences economics departments? A definitive answer is not possible here but we can offer two hypotheses. First, it is possible that the causation is reversed: economics departments that are relatively poor at attracting majors are more likely to be housed in a business college. If economics majors are comprised mostly of social science students, then a decrease in majors will decrease primarily the number of arts and sciences students that an economics department serves, increasing the likelihood that the department will be housed in business. On the other hand, if business students take mostly only required economics courses, their numbers will be relatively unaffected by a drop in majors. However, one argument against this hypothesis is that many factors effecting the number of economics majors, such as the quality of faculty instruction, are relatively transitory but changes in administrative location are relatively rare.<sup>v</sup> Thus while it is possible that a department's ability to attract majors may have determined it's initial college location, it is less clear why these factors should persist many years later.

A second hypothesis is that business colleges reward economics departments less for arts and sciences student enrollment than for business college student enrollment. In response, business college economics departments do not devote as many resources to arts and sciences students. If economics majors are drawn mostly from arts and sciences students, this will result in fewer majors. A similar argument regarding relative rewards may be true for arts and sciences economics departments. These departments may spend relatively more resources on arts and sciences students, which would result in a higher number of majors than if all student enrollment was rewarded equally. One could argue that optimizing economics departments choose the college that is best for them. Thus if there are some disadvantages to belonging to a business college, such as fewer majors, there must exist some compensating advantage, at least on the margin, in order to induce departments to belong. However economics departments are not likely to have complete freedom to choose their college. Higher level administrators are likely to have at least some input into the decision. Assuming rational decision makers, they will choose college location according to what is best for the institution, not what is best for the department. These two choices will not necessarily coincide.

## III. Conclusion

Roughly sixty percent of all economics departments at universities with multiple undergraduate colleges are located in colleges of arts and sciences. The likelihood of that a department will be located in a college of arts and sciences is highest for highly selective, research universities located in the Northeast or West. One explanation for the former two relationships is that the likelihood an arts and sciences location rises when economics departments teach more social science students relative to business students. Since the relative number of social science majors rises with admission selectivity and research classification, there exists a correlation between these two variables and college location.

Departments located in business colleges have thirty percent fewer economics majors than arts and sciences departments, even after controlling for other variables. In part this is due to a discouraged business major effect; some economics majors at arts and sciences colleges are students who are unable to meet the higher business college admission standards. However, even business colleges offering an economics major to arts and sciences students have twenty percent fewer majors than an otherwise equivalent department located in a College of Arts and Sciences. Thus it is likely that a department's administrative location has real consequences. <sup>i.</sup> Liberal arts colleges accounted for 18 percent of all U.S. economics majors between 1993 and 1997. Research, doctorate or comprehensive universities without multiple undergraduate colleges account for another five percent of economics majors, and non-liberal arts colleges without economics departments accounted for the remaining five percent.

<sup>ii.</sup> There is considerable overlap between the Carnegie institutional classifications and the highest degree awarded in economics. All but two of the 91 research universities offer a Ph.D. degree in economics. All but three of the remaining schools offering doctoral degrees in economics are classified as doctoral I.

<sup>iii.</sup> The social science total includes economics majors. It will be shown in the next section that college location affects the number of economics majors, possibly affecting the exogeneity of this variable. However, economics accounts for only about 15 percent of all social science majors so this effect is likely small. In addition, it is arguable that students are predisposed towards a general field of study so that any economics majors that are displaced by locating economics within business choose another social science major instead. Our results are essentially unchanged if economics majors are excluded from the social science total.

<sup>iv.</sup> Technological or technical universities are the exception to this pattern. Nearly all of these schools have very few social science majors, even relative to business, regardless of their admissions selectivity. Despite having few social science majors, economics is often located in their College of Arts and Sciences. It is possible that this is done in order to provide some critical mass to the College of Arts and Sciences.

 $^{v}$ . We counted eight changes in college location among the 325 schools in our sample during the 1996-2002 period.