

“What Economics Students Think of the Economics Major”

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What Economics Students Think of the Economics Major

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Students have a unique perspective on the economics major, and in some ways are in the best position to judge it. This chapter tries to tap into their collective mindset. It reports the results of two surveys of economics majors at various undergraduate institutions across the country.² Combined, the surveys give a good sense of what students think of the economics major.

The organization of the chapter is as follows: For each aspect of the economics major, we first discuss the overall results from the survey; then we contrast responses of subgroups of the survey where they seemed sufficiently different to warrant discussion, or did not differ where we expected them to differ. These subgroups include state schools, liberal arts schools, schools with or without business programs, schools with restricted-entry or unrestricted-entry business programs, and males and females. Finally, we consider the responses from the research liberal arts school survey to questions which are not present in the larger survey.

How is the Economics Major Performing Overall?

To find out how the economics major is succeeding, we asked students how satisfied they were with the major. Overall, the economics major is succeeding reasonably well as can be seen in Chart 1. In response to the question, “How satisfied are you with the economics major?”, overall 78.6% of students responded that they were highly satisfied or satisfied with the major.

¹ Steven Jones compiled and wrote the report as part of his CAJ Research Assistant position at Middlebury College. Eric Hoest and Richie Fuld together with David Colander created and administered the two surveys as a project for Professor Colander’s History of Economic Thought seminar. Together with Mahesh Dahal, they began analysis of the survey responses. David Colander oversaw the administration of the surveys and guided the writing and editing of the report.

² One survey was a randomized survey of economics majors at all types of undergraduate institutions. Every eighth undergraduate instructional program generated by Carnegie Classifications was selected, and e-mails were sent to economics department chairs requesting that they forward the electronic survey on to their majors. For those schools that did not respond, a second and third e-mail was sent, but economics majors from some schools nonetheless did not participate. From those institutions that did forward the electronic survey to their majors, a total of 1072 students participated. The second survey was a more directed survey of economics majors at eleven top research liberal arts schools. This second survey included the questions in the larger survey, but also a number of other questions; 666 students participated in this survey. The electronic survey was sent to thirteen schools, but two did not participate. We combine the results of the two surveys unless otherwise noted. We do not combine the two surveys when research liberal arts schools provide a large enough discrepancy that they would substantially change the results.

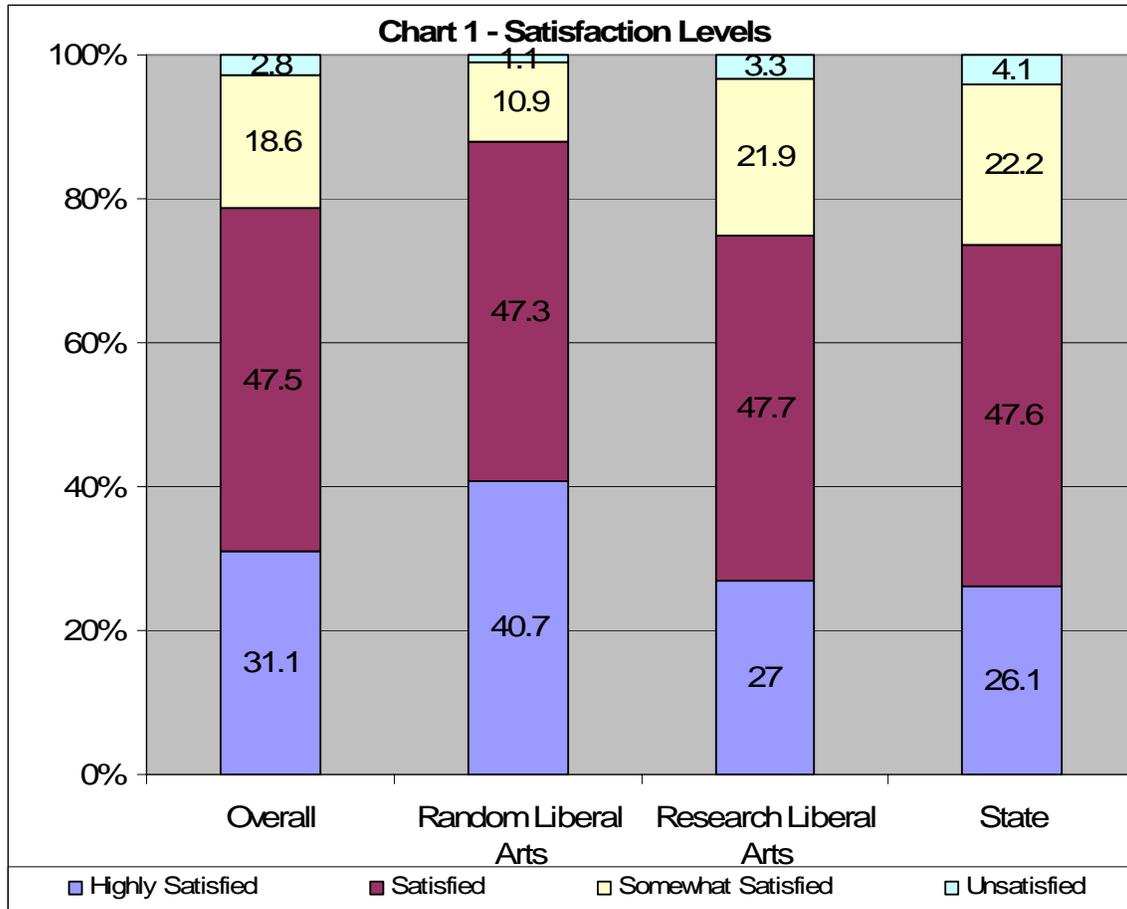


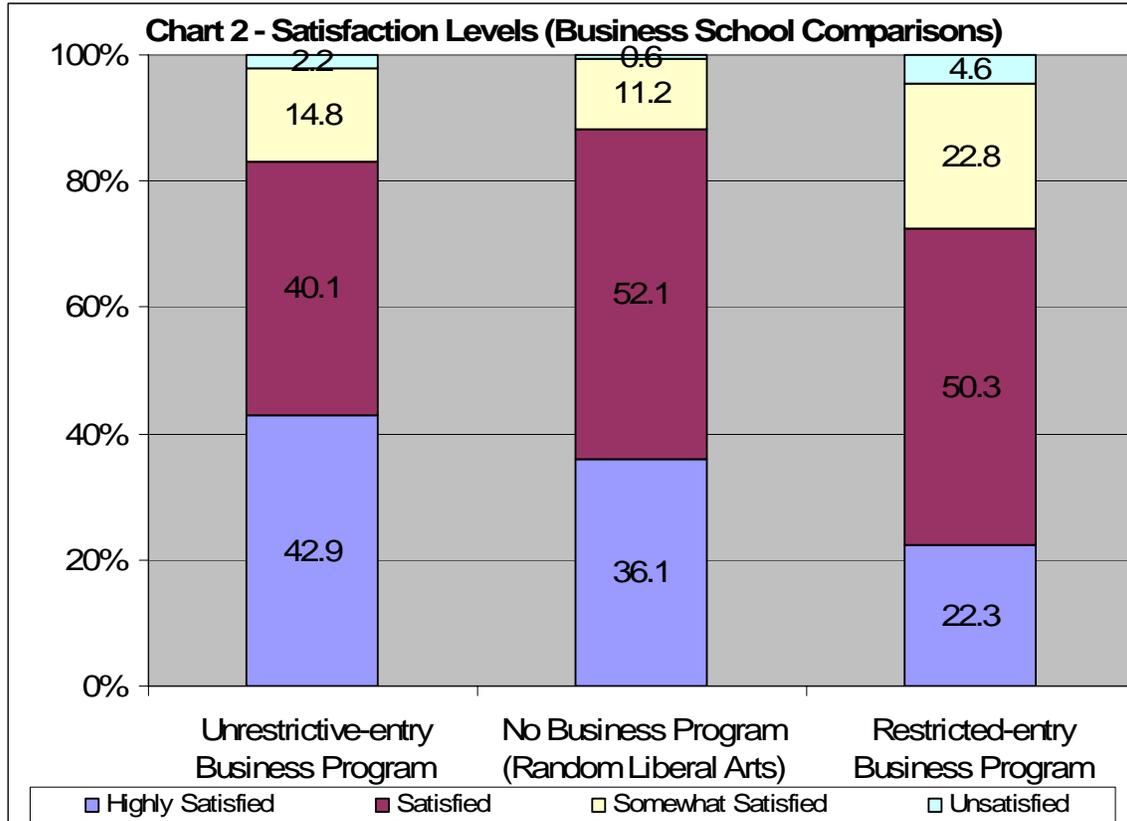
Chart 1 also shows satisfaction levels broken down into state schools, random liberal arts school and research liberal arts schools. As you can see, students at random liberal arts schools were significantly more satisfied than students at both state and research liberal arts schools.

We suspected that a key reason for the differences in satisfaction levels across schools was the presence or lack of business programs of differing degrees of selectivity.³ In Chart 2, we compare satisfaction levels at schools with different types of business programs, and without any business programs, in order to identify the effect of business programs. A much higher percentage of students were very satisfied with the economics major at schools with unrestricted-entry business programs as compared with schools with a restricted-entry business program. This is logical because many students at restricted-entry business program schools may have taken the economics major as an alternative to the business program they could not get into, and therefore would not be as

³ Restricted-entry business programs are only present at state schools, and this may provide a bias for some results because it will be difficult to tell if the difference occurs due to differences between state and liberal arts schools or between restricted-entry and unrestricted-entry business programs. Similarly, some random liberal arts schools have unrestricted-entry business programs while no business programs are present at research liberal arts schools.

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satisfied because it is not the track they would have chosen ideally. As the business program increases in selectivity, more students will become economics majors who actually do not want to be economics majors. At schools with unrestricted-entry business programs, students who want to study business, but choose to take economics because it is the closest to business, shouldn't be present, and thus these schools have the highest percentage of highly satisfied students.



It should be noted that the percentage of very satisfied students at schools with unrestricted-entry business programs was also higher than the percentage for all students, and more specifically for schools with no business programs and research liberal arts schools. This data suggests that the presence of an unrestricted-entry business program has a positive impact on the satisfaction levels of economics majors. When such programs exist, the economics major is not forced to balance both the goals of students who would rather be in business programs with the goals of students who would study economics either way; therefore the economics major can more easily suit all of its students' demands. We also suspect that the presence of business majors accounts for some of the difference between the random liberal arts schools and research liberal arts schools, since no business programs are present at the research liberal arts schools in the survey but some random liberal schools do have business programs. However, satisfaction levels at research liberal arts schools are still lower than other schools without business programs.⁴

⁴ Charts 1 and 2 show all data referred to in this paragraph.

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An additional measure of the success of the major can be obtained by looking at student satisfaction levels by class. An increase in student satisfaction levels as students progress from freshman to senior year may indicate that the economics major is exceeding their expectations. Constant satisfaction levels may indicate that students are achieving exactly what they expected from the major. The results point to the third possibility, indicating that the major is not meeting student's expectations. The differences, however, are relatively small. 0.7% of sophomores were unsatisfied compared to 2.7% for juniors and 4.3% for seniors. This increase in dissatisfaction levels may be due to student's expectations being too high. Also, sophomores usually have the option to change majors and/or they have only just declared their major. Hence, it would be expected that declared sophomore economics majors would have higher satisfaction levels because they would not have declared their major yet otherwise.

The Relevance of the Major to Future Careers

Another question on the survey asked students how relevant they felt the skills and information they learned in the economics major were to their likely career. As can be seen in Chart 3, 27.7% of students feel the skills and information in the economics major are highly relevant to their careers and the majority of students feel the skills and information they learn in the economics major are somewhat relevant to their careers. Additionally, 19.2% of students responded that the job-training aspect of the economics major was very important, and 55.1% of students said that the job-training aspect of the economics major was somewhat important.

As can be seen in Chart 3, fewer students at research liberal arts school feel that the skills and information they learn in the economics major are relevant to their career. 18.9% of students at research liberal arts school reported that the skills they learned in the economics major were not very relevant, or almost irrelevant, to their likely careers compared to 8.7% at random liberal arts schools without business programs.⁵ The reasons for this discrepancy are unclear, but may simply be due to higher demands and expectations of students at research liberal arts schools.

⁵ Liberal arts schools with business programs are not included because they distort the comparison of research liberal arts schools and random liberal arts schools. Differences arising from the presence of business programs are discussed, where notable, in separate sections from comparisons of liberal arts schools.

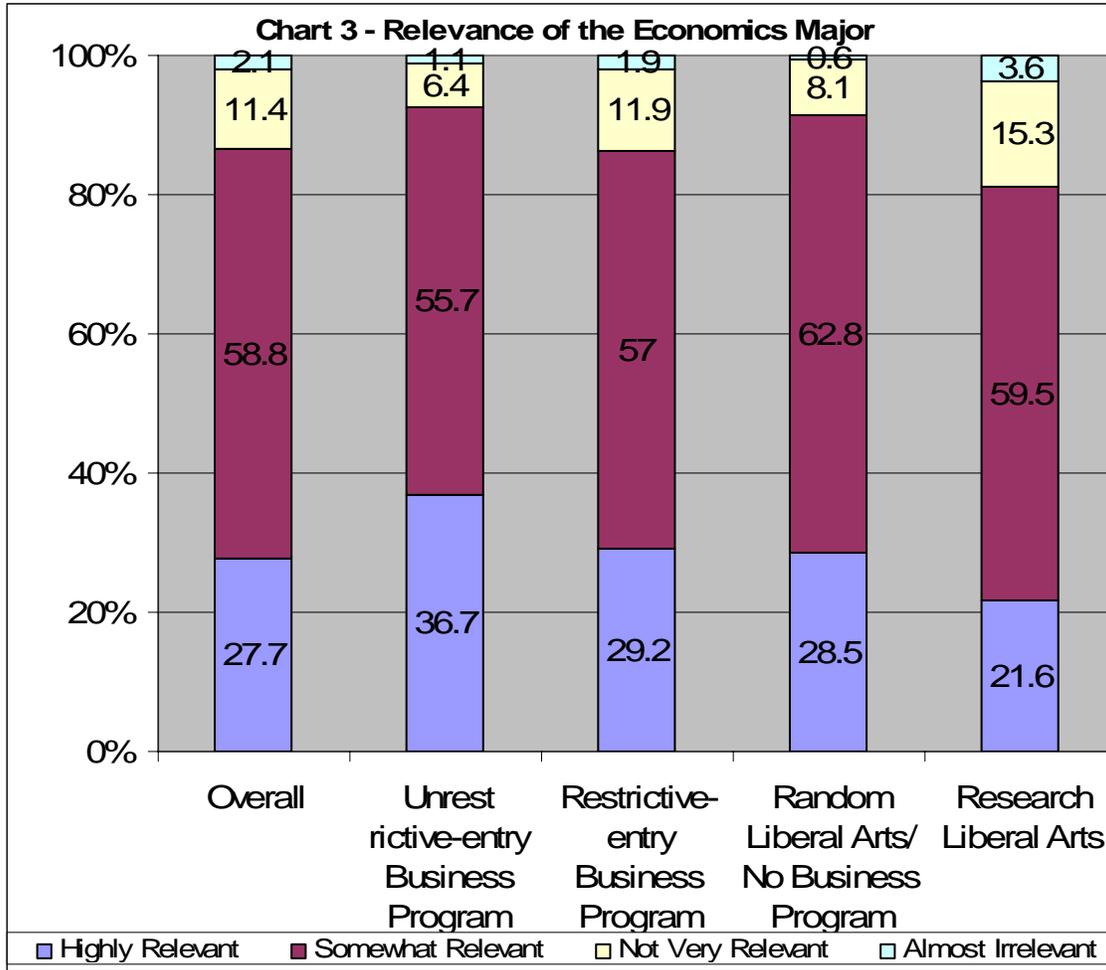
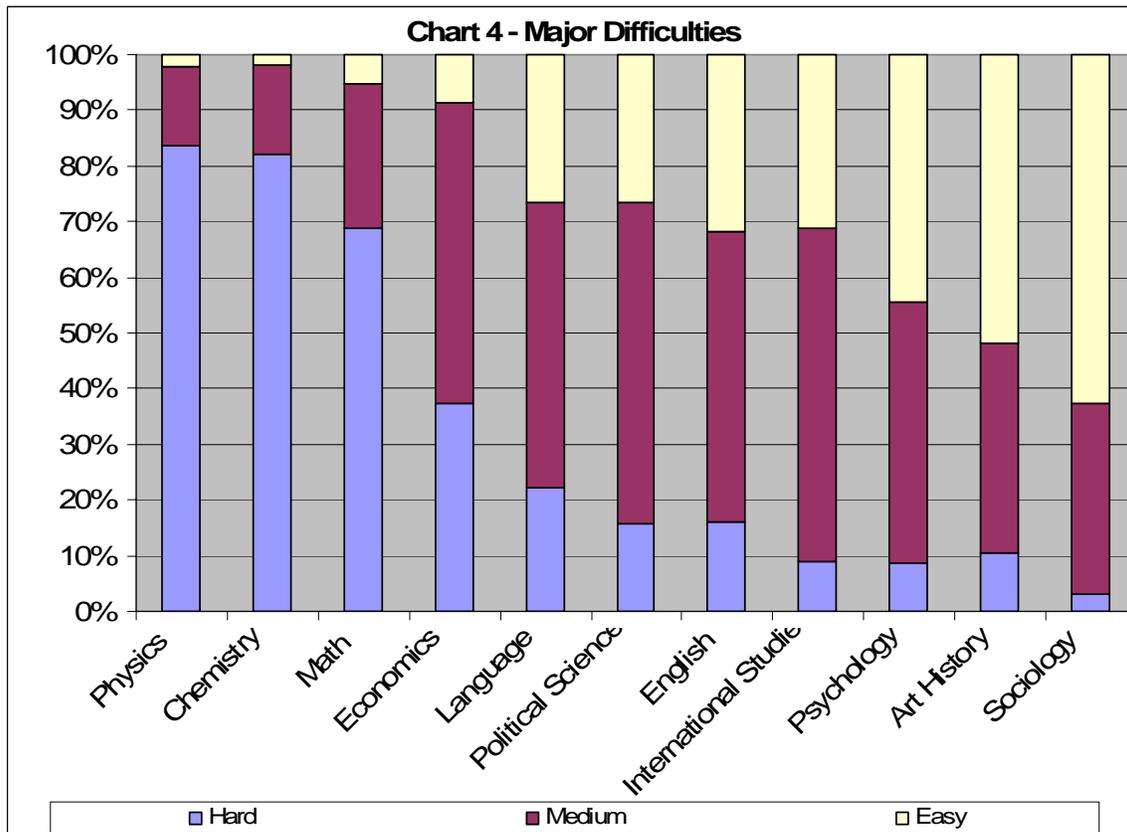


Chart 3 also shows that fewer students at schools with restricted-entry business programs view the skills and information they learn in the economics major as relevant to their career. 13.8% of economics majors responded that the skills and information learned in the economics major are not very relevant or almost irrelevant to their likely careers as compared with 7.5% at schools with unrestricted-entry business programs. This percentage was 8.7% at schools without business programs.⁶ The likely reason for this difference is the presence of students who would rather be in a business program at schools with restricted-entry business programs, and therefore do not find the economics major to be very relevant, at least compared to the business program.

⁶ This is the same data as liberal arts schools without business programs because no state schools in the survey lacked a business program. Research liberal arts schools were not included in this statistic because, as the preceding paragraph demonstrated, other factors besides the presence or lack of business programs are affecting student responses from research liberal arts schools.

How Hard is the Economics Major?

Another question asked of students was “What is your perception of the difficulty of the following majors?”⁷ The economics major was considered hard by over 1/3 of students, 37.3%, and medium by the majority of students, 54.1%. Only 8.6% of students considered the major easy. Chart 4 contrasts these views with the economics majors’ views of the other majors. The social sciences and the humanities were considered significantly easier, and the natural sciences and math were considered significantly harder. This suggests to us that the economics major has found a balance in terms of analytic difficulty and general understanding, which is about right for an undergraduate liberal education.



Students generally considered the majors more difficult at liberal arts schools than at state schools. The difference is most pronounced in economics, considered hard by 25.4% of state school students compared to 40.2% of students at liberal arts schools. At research liberal arts school, the major was considered even harder; 44.2% of students considered the economics major hard.

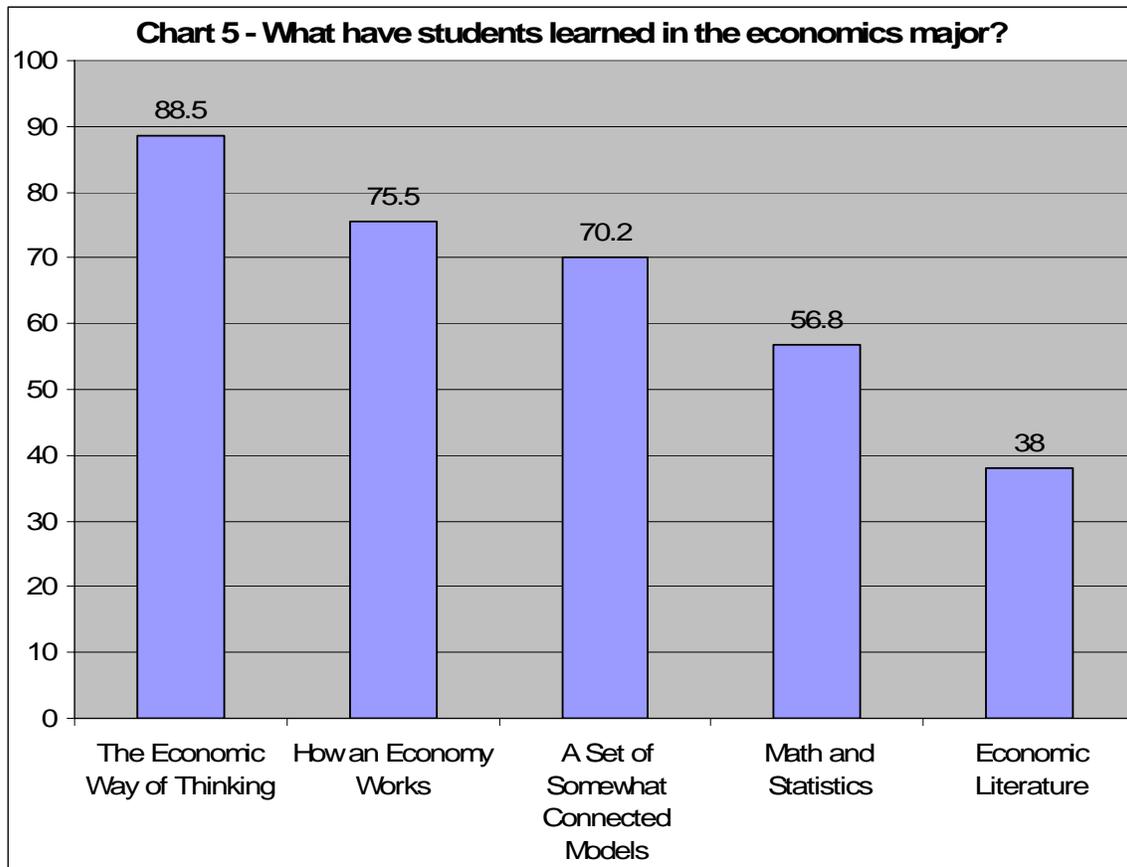
⁷ These are the perceptions of economics majors. A survey of all students may yield different results, but we cannot be sure how the results would differ. On one hand, students may view their own major as easier because it is their strength. On the other hand, students may view their own major as more difficult due to a sense of pride they have for their own major.

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Part of this discrepancy may be attributed to business programs, especially restricted-entry business programs, which are only present at state schools in this survey. At schools with restricted-entry business programs, only 23% of students rated the economics major hard, whereas at schools with unrestricted-entry business programs, 36.6% of students rated the economics major hard. The percentages for unrestricted-entry business schools are almost completely equal to that of students overall. The reduction in perception of difficulty found at schools with restricted-entry business programs may be due to the existence of a business program that is considered more difficult because it is harder to get in to, or the economics major may actually be easier at these schools because it has to accommodate extra students who did not get in to the business program.

What Do Students See Themselves as Learning in the Major?

One of the questions gave students a list of the five skills and knowledge categories from the chart below and asked them to state whether or not they had learned each of them in the economics major.⁸ As can be seen in Chart 5, the highest percentage of students felt that they have learned the economic way of thinking, while economic literature appears to receive the least focus in the major.



⁸ The specific question was “Which of the following describe what you have learned in your economics major?” Students could choose multiple responses.

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Chart 6 compares responses across different types of schools. As you can see, students report learning less in general at state schools than they reported at liberal arts schools. Economic literature is the most lacking at state schools, 28.3%, compared to 41% at random liberal arts schools and 42.9% at research liberal arts schools.

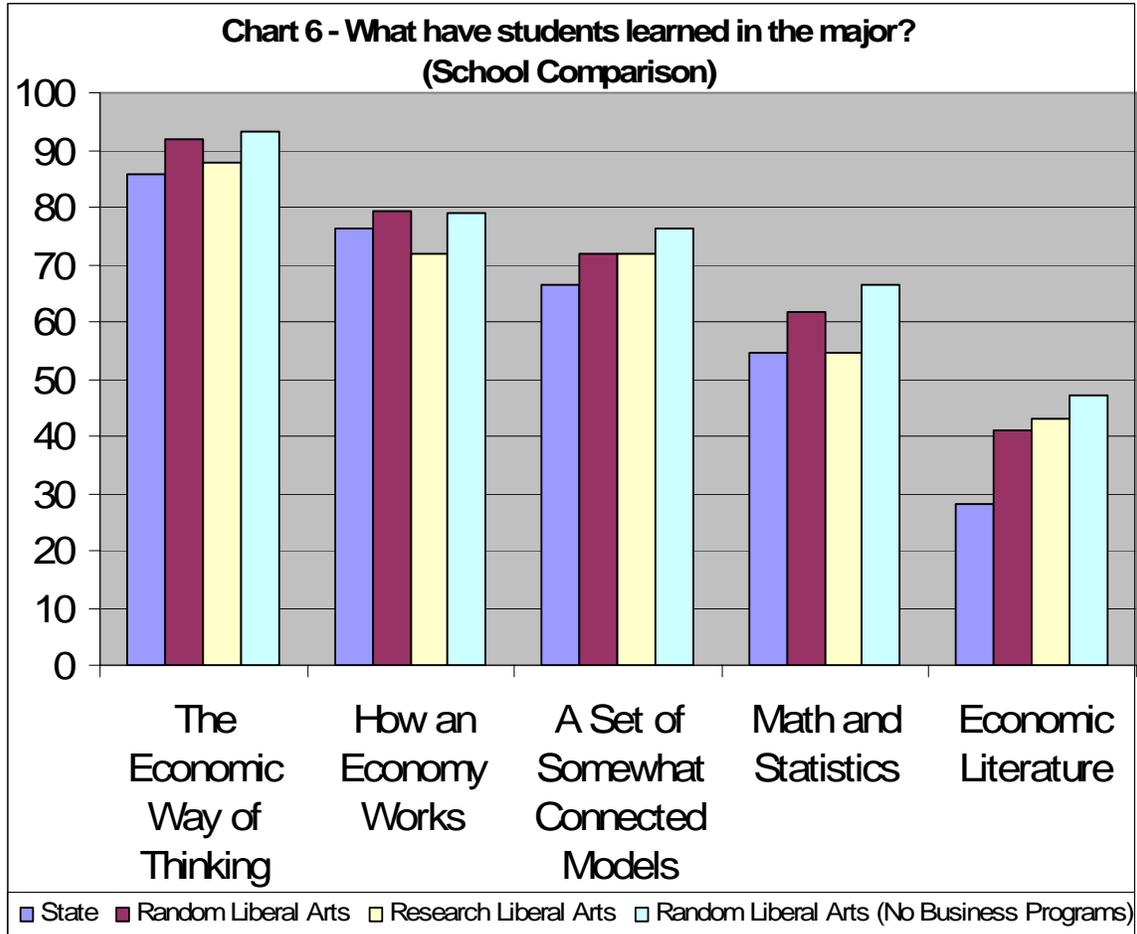


Chart 6 also shows that students at random liberal arts schools from the larger survey felt that the major was more successful than did students at research liberal arts schools at teaching all the specific economic skills except for economic literature. Interestingly, if liberal arts schools with business programs are factored out, the random liberal arts schools in the larger survey score higher than research liberal arts schools in all categories including economic literature. Chart 6 illustrates these discrepancies.

When asked what changes they would make to the economics major if they could, 63% of students responded that they want more discussion of real world issues; 53.2% of students wanted more discussion of business relevant courses.⁹ A higher percentage of students who picked more discussion of business relevant courses also picked more discussion of real world issues, 67.2%, and vice-versa, 56.7%. Although the increase is

⁹ The specific question was “If you could change the economics major, which changes would you make in it?” Students could choose multiple responses.

relatively small, it demonstrates that some students may view business related courses as dealing with the real world.

Why Do Students Become Economics Majors? ¹⁰

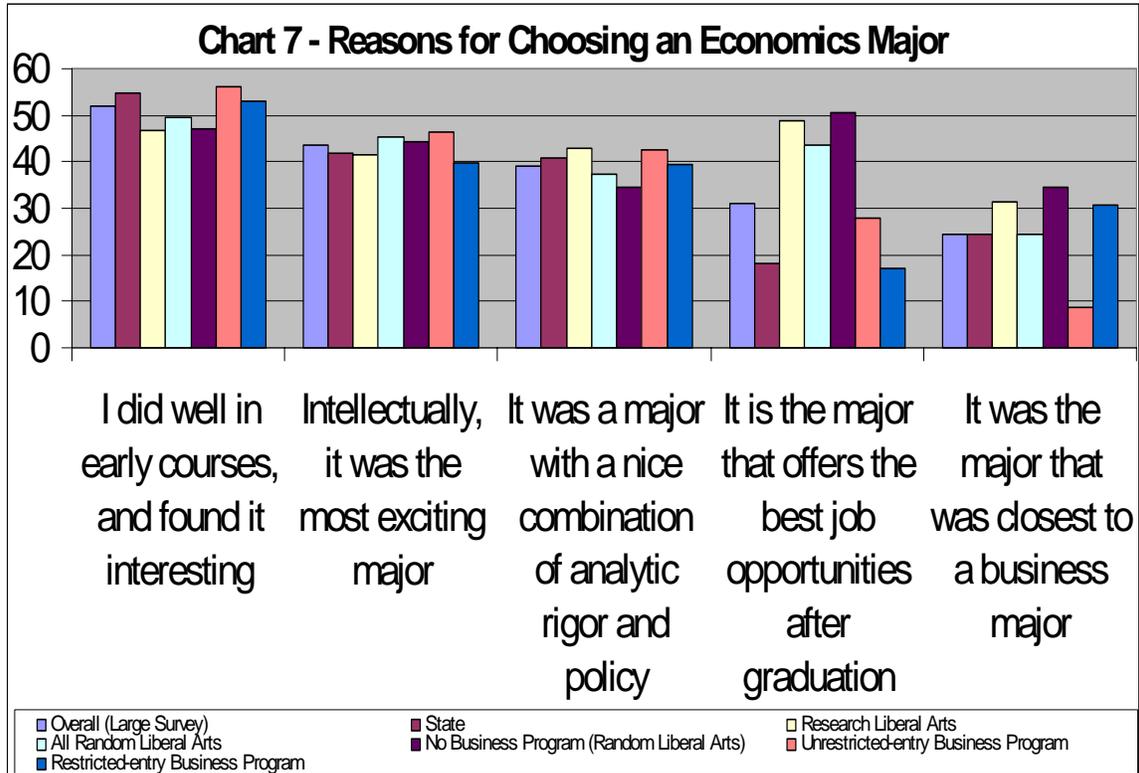
The majority of students, 52.1%, became economics majors because they did well in early courses and found it interesting. The least selected reason was that the economics major was the closest to a business major; 24.5% of students stated this reason. The overall responses are presented in Chart 7.¹¹

In general, students at both state schools and liberal arts schools chose to become economics majors for the same reasons. However, there is one glaring exception. 46.5% of students at liberal arts schools chose the economics major because it offers the best job opportunities, while only 18.1% of state school students chose the economics major for the same reason. This is most likely due to the fact that state schools offer business programs that are viewed as better for getting a job than economics. In fact all the state schools in this survey have a business program. Liberal arts schools, on the other hand, often have no other track which students feel logically connects to business.

Chart 7 also shows that students' reasons for becoming economics majors are different at research liberal arts schools than at the random liberal arts schools in the large survey. Students at research liberal arts schools chose the economics major most often because it provides the best job opportunities, and relative to students at liberal arts schools in the larger survey, more students chose the economics major because it was closest to a business major. In this instance, the discrepancy between research liberal arts schools and random liberal arts schools is attributed to the presence of business programs at some of the random liberal arts schools.

¹⁰ The question on the survey was, "Which of the following describes your reason for choosing to become an economics major?" Respondents could select more than one response.

¹¹ Research liberal arts schools are not represented in the overall statistics here.



As can be seen in Chart 7, only 8.7% of students at schools with unrestricted-entry business programs chose the economics major because of its closeness to business compared to 30.6% at schools with restricted-entry business programs. Students at schools with unrestricted-entry business programs would not be expected to take economics if they wanted to study business because they could simply attend the business school. At restricted-entry business program schools, students may not be able to get into the business program, and hence economics can become a backup major.

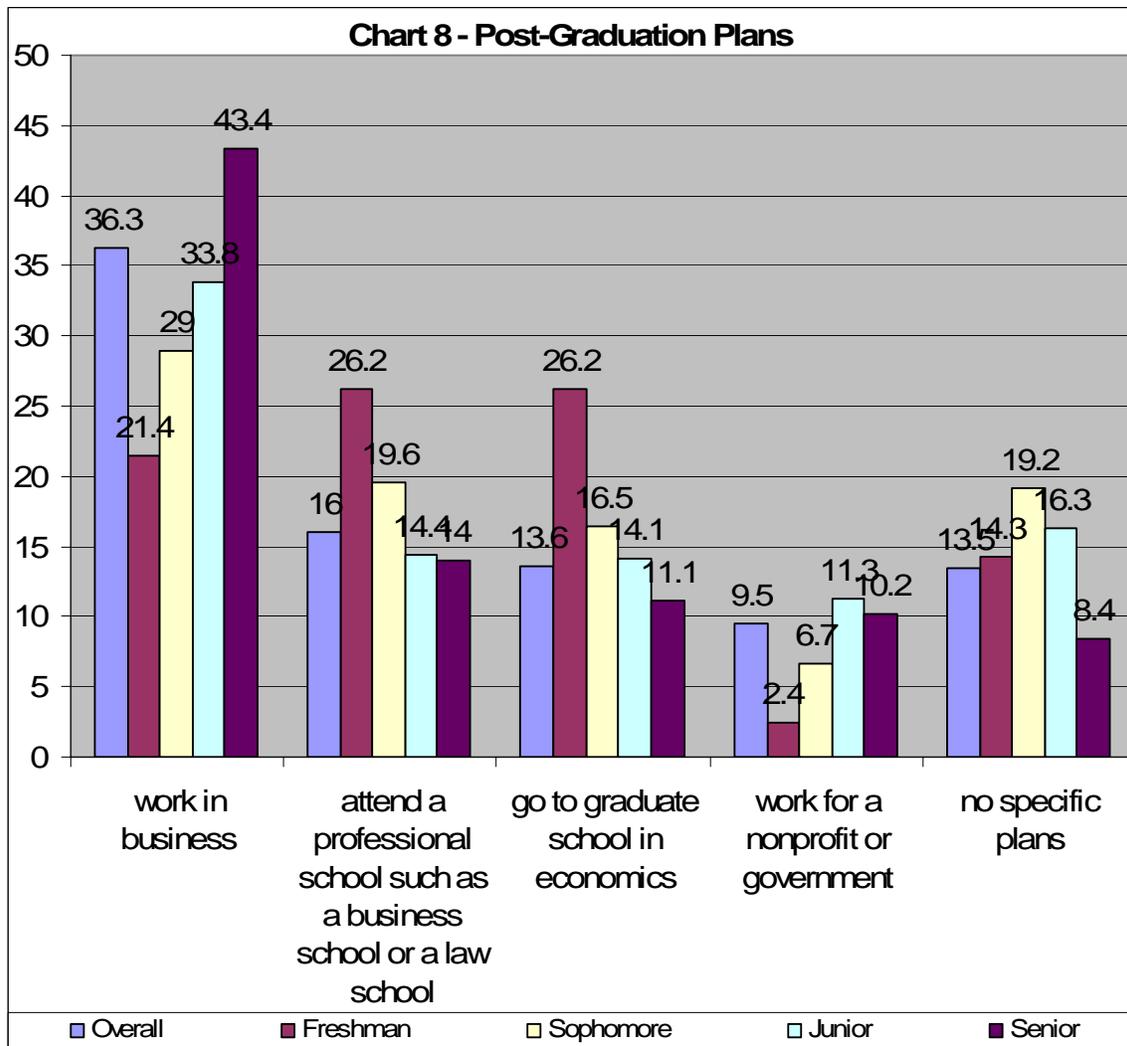
It should be noted that when comparing unrestricted-entry business program schools to restricted-entry business program schools, all of the percentages for reasons for becoming an economics major decline, except for the business major reason which increases. This decline reinforces the conjecture that students are taking economics as a backup to the business programs they could not get into rather than because of other reasons. In fact, several students even stated under “other” reasons that they majored in economics because they did not get into the business program.

Additionally, schools without any business program had a relatively high percentage of students who took economics because of its closeness to business, 34.6%, and the highest percentage of respondents became economics majors because it offers the best job opportunities, 50.7%.¹² The other three reasons were less common among students at schools without business programs.

¹² Research liberal arts schools are not included in this data.

What are Economics Majors Plans after Graduation?

In the larger survey, the highest percentage of students plans to work in business after graduation. What is more interesting than the overall results is how student plans change as they progress through the major. Chart 8 illustrates how students increasingly plan to work in business as they progress through the major, while other plans, especially graduate school and professional schools, diminish. The percentage of students planning to go into business increases from 21.4% freshman year to 43.4% senior year, while the percentage of students planning to go to graduate school decreases from 26.2% to 11.1% and the percentage of students planning to go to professional school decreases from 26.2% to 14%.¹³ In fact only about 2% of economics majors actually go on to graduate school, so even in their senior year five times as many students are considering graduate schools than actually go.



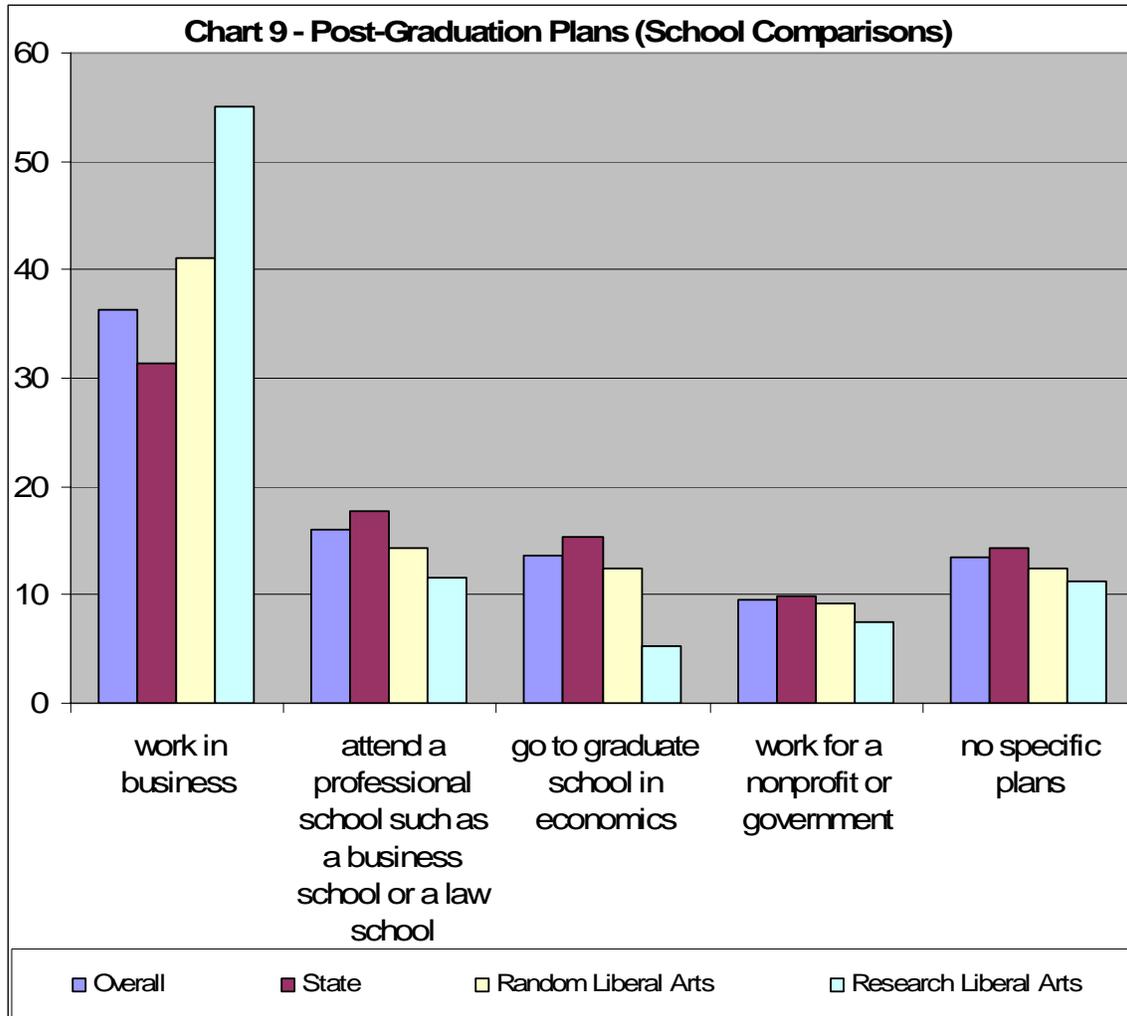
¹³ Only 42 freshmen participated in the survey. Most students do not have to declare a major freshman year, which explains the low number of freshman respondents.

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Comparing different types of schools shows that state school economics majors have a lower percentage of students who plan to go into business, 31.3%, compared to 41% for random liberal arts schools. Research liberal arts schools have an even higher percentage, 55%. For all other post-graduation plans, the order is reversed as can be seen in Chart 9. Because all of the state schools have a business program, it is to be expected that many students who want to go into business will be directed towards the business programs leaving a higher percentage of students focused on other plans such as graduate school. However, the percentage of students planning to go into business at state schools is still high showing that business programs do not take all business-oriented students from the economics major. Also, if the business programs are restricted-entry at state schools and limit enrollment, some students interested in business may still have taken economics because they could not get in to the business program.

Interestingly, the presence of business programs does not appear to have a demonstrable influence on post-graduation plans for students at random liberal arts schools, since little change occurred when liberal arts schools with business programs were removed.¹⁴ Compared to random liberal arts school students, research liberal arts students have a greater focus on business and a lesser focus on graduate studies and all other post-graduation plans whether or not schools with business programs are eliminated from the random liberal arts schools. The difference therefore must have something to do with the nature of research liberal arts schools and the random liberal arts schools rather than the effect of business programs. The results are shown in Chart 9.

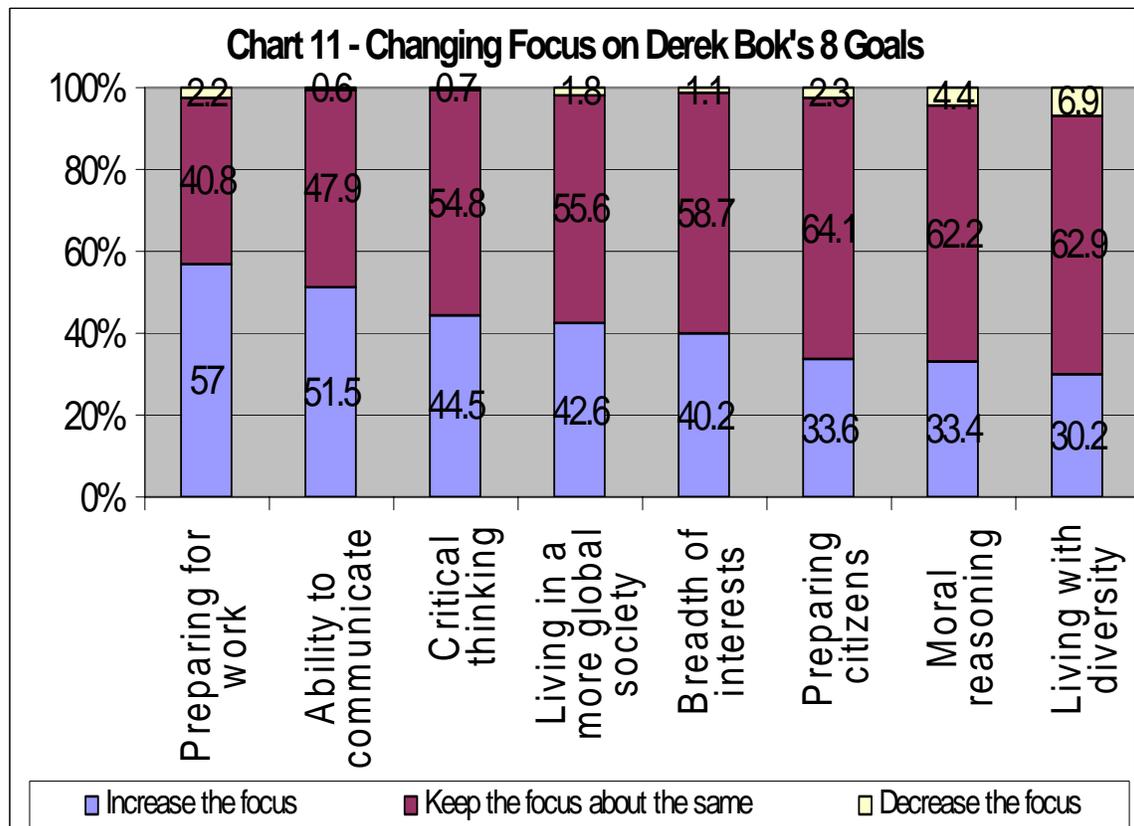
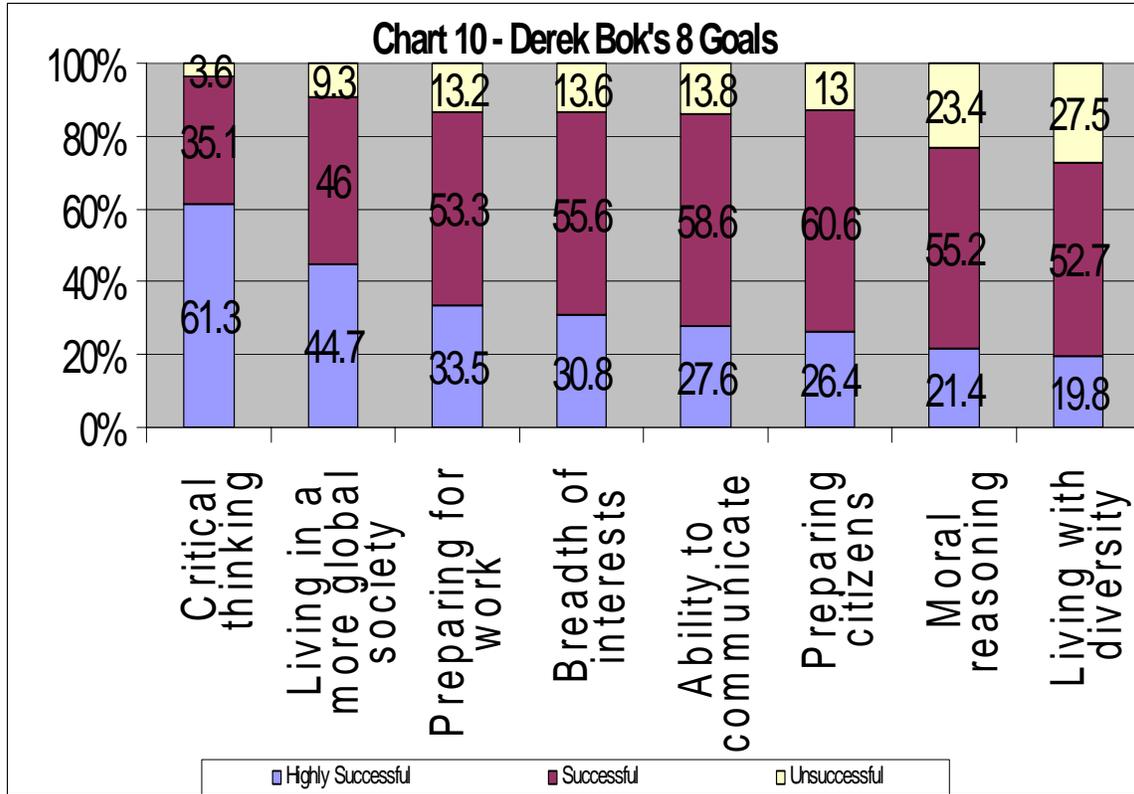
¹⁴ Since all state schools in the survey have some sort of business program, it is impossible to perform a similar comparison for state schools.



How is the Major Contributing to the Goals of a Liberal Education?

In his book, *Our Underachieving Colleges*, Derek Bok discusses eight goals that students should be achieving in their four years at college. Chart 10 shows how well students felt the economics major is achieving those goals.¹⁵ As you can see, the economics major is most successful at achieving the goals of critical thinking and living in a more global society, and least successful at achieving the goals of moral reasoning and living with diversity.

¹⁵ The survey question simply stated “How successful do you believe the economics major at your school is in achieving the following goals?” Students could rate the achievement of each goal as highly successful, successful or unsuccessful.



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We also asked students whether they felt the economics major's focus on these goals should be changed.¹⁶ Chart 11 illustrates that students did not view moral reasoning and living with diversity as important since they had the two lowest percentages of students who wanted to increase the focus on these two goals and the two highest percentages of students who wanted to decrease the focus. According to students, preparing for work and the ability to communicate require the greatest increase in focus.

By compiling the information from Charts 10 and 11, we can see that critical thinking and living in a more global society are in student's opinions the most successful and possibly important goals. Although these two goals were considered the most successful, a relatively large number of students still want to increase focus on both goals. Students feel that the economics major is struggling to achieve the ability to communicate goal, and that this goal needs to receive a much stronger focus.

Looking at the breadth of schools, the economics major is generally considered less successful by students at achieving the eight basic goals of an undergraduate education at state schools than it is at random liberal arts schools.¹⁷ Living with diversity, which was the least important goal, is the only exception. 22.1% of students considered it unsuccessful at state schools as compared to 27.6% at random liberal arts schools. Students at state schools also want to increase the focus on all eight goals more than students at random liberal arts schools. When compared to responses of students at schools with an unrestricted-entry business program, a larger percentage of students at schools with a restricted-entry business program report the economics major to be unsuccessful at achieving all eight goals.¹⁸

Gender Differences

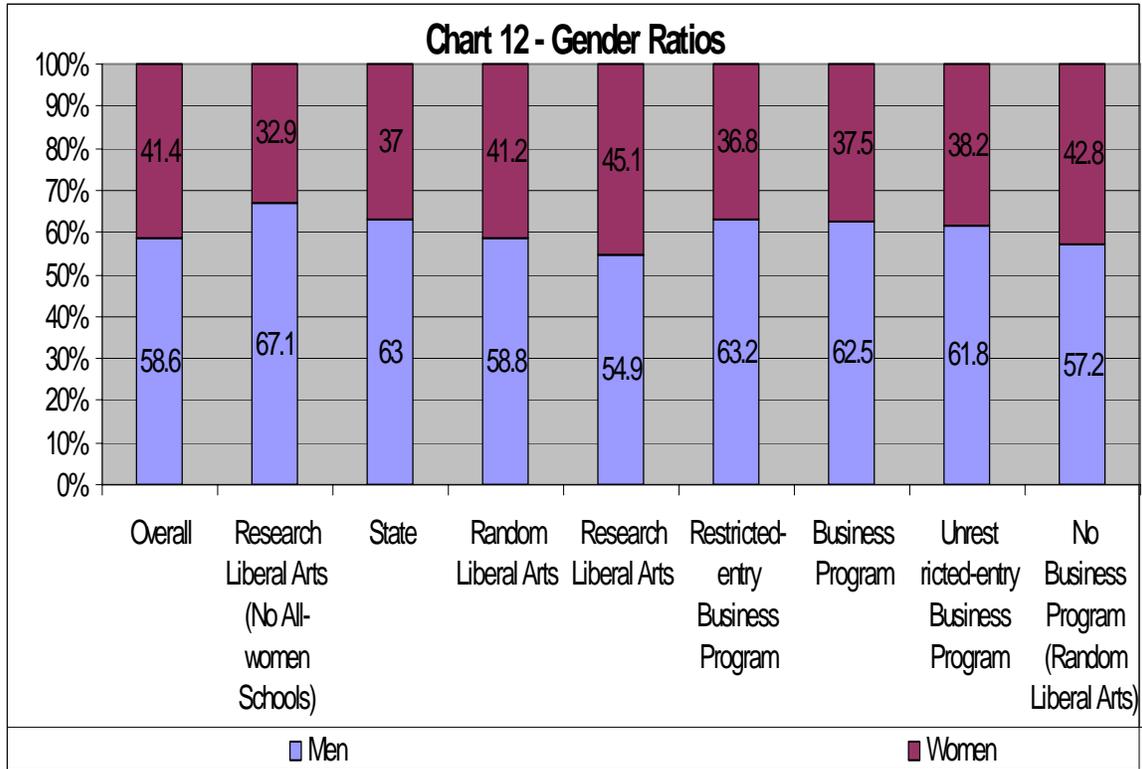
Chart 12 shows the overall ratio of men to women as well a breakdown of the data by school type and types of business program. As you can see, state schools have a higher percentage of men than random liberal arts schools, but research liberal arts schools actually have the highest percentage of men when all-women schools are removed. Schools with business programs have a higher percentage of men, and of those schools, schools with restricted-entry business programs have an even higher percentage of men.

¹⁶ The survey question was "Which of the following skills would you suggest that the economics major increase or decrease focus on?" Students were expected to indicate increase the focus, decrease the focus or keep the focus about the same for all eight skills.

¹⁷ Data from research liberal arts schools are not mentioned due to a difference in surveys, which is discussed in the last section.

¹⁸ Only state schools are used here because the differences between state schools and liberal arts schools would provide an additional bias.

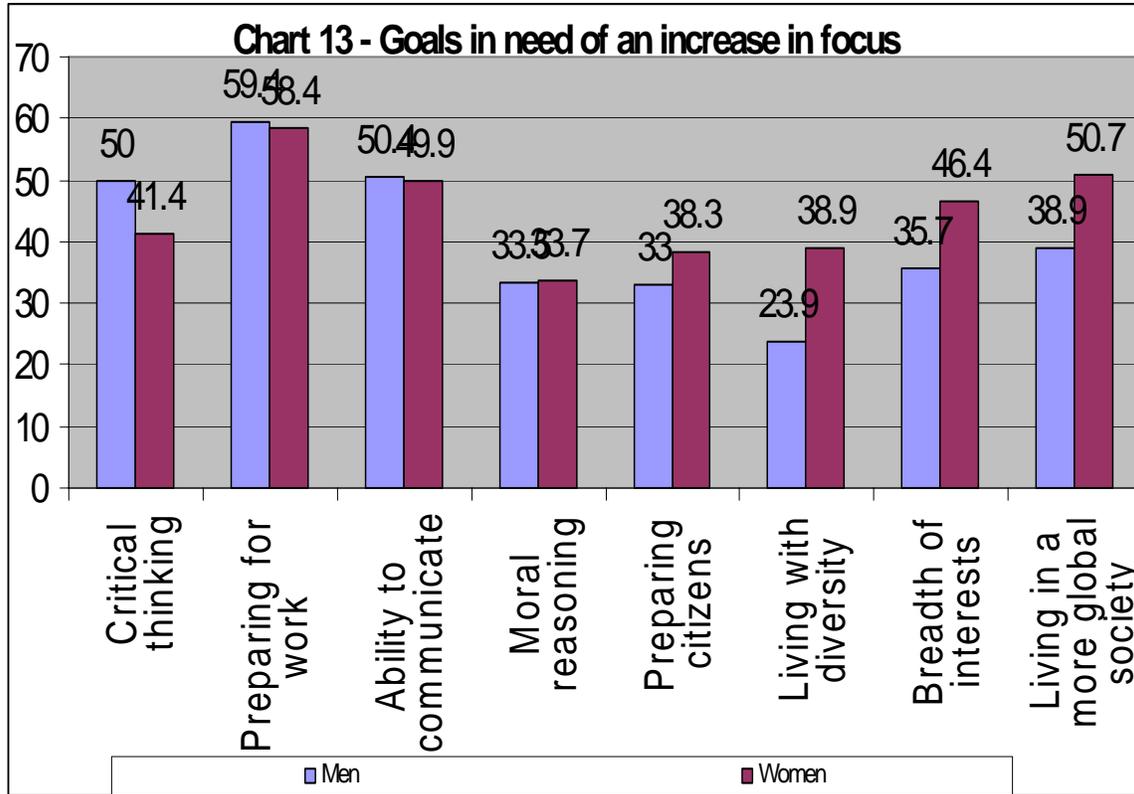
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Relative to men, women feel that they have learned less economic literature and more math and statistics. 31.4% of women report learning economic literature and 61.2% report learning math and statistics while the numbers are 37.1% and 56.3% for men respectively.¹⁹ The fact that a larger ratio of the women are at liberal arts schools may help to explain the difference for math and statistics, but this possibility fails to address the discrepancy in economic literature learning, which has a higher percentage at liberal arts schools.

Additionally, we found that while men and women were in general agreement on what goals the economics major is achieving, they disagree on what goals the major should achieve. While preparing for work and ability to communicate are considered important to both sexes, men tend to favor a stronger focus on critical thinking while women favor a stronger focus on living in a global society, breadth of interests and living with diversity. Chart 13 shows the data for men and women.

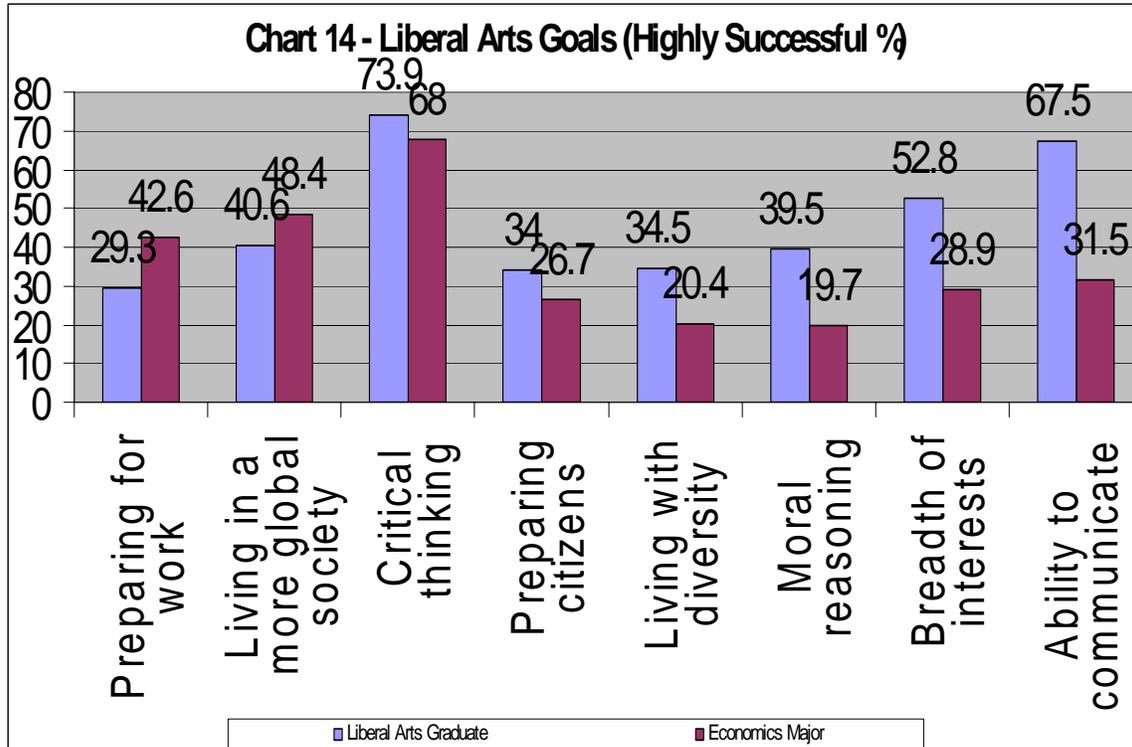
¹⁹ The percentages are from the larger survey because the smaller survey contained women's schools which would bias results.



How is the Economics Major Performing at Our Nation’s Top Research Liberal Arts Schools? : Questions from the Smaller Survey

The survey of research liberal arts schools contained some questions not present in the larger survey. The additional questions provide deeper insight into the economic major’s situation at research liberal arts schools.

One of those questions was how successful liberal arts graduates (rather than just economics majors) are at achieving Derek Bok’s eight goals. A comparison of student responses to this question and the question regarding the economics major’s success in achieving these goals shows where the economics major contributes to a liberal arts education. The economics major makes its strongest contribution to the goals of preparing for work and living in a global society. It makes the weakest contribution to the goals of moral reasoning, ability to communicate and breadth of interests. The comparisons are shown in Chart 14.



Because research liberal arts schools do not offer a business program, a number of their majors see the economics major as the closest to a business major, and take it as an ersatz major, not as a true choice. To discern the size of this group, we asked a couple of questions.

The first question explored how students who were interested in business ended up at these schools that have no business major.²⁰ 49.9% of research liberal arts students responded that before they choose to attend a school, they did not think about whether or not the school offered business-related courses, and 33.9% of students responded that a school’s offerings or lack of offerings of business-related courses were not a significant factor in their choice of school. These numbers indicate that most students picked their school based other criteria than the match of the courses it offered to their interests.

Only 36.9% of students indicated that they choose their particular school because it was a liberal arts school and they were not especially interested in business-related courses. These students are most likely to be those who became economics majors because of an interest in economics rather than business. The 27.2% of students, who responded that if they had thought about it, they would have preferred a school that offered more business-related courses, are the ones who are most likely to be taking economics as an ersatz business major.

²⁰ The specific question was “Which of the following describes your reasoning in choosing to come to your school?” Students could choose multiple responses.

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Another question asked students if they would have been interested in a business-friendly math or science major if it existed.²¹ 38.1% of students who considered the natural sciences stated that they would be interested in such a major, and 32.4% of students stated that they might be interested.²² Only 29.6% of students who considered natural sciences responded that they would not consider such a major.

Another question directed at the same issue asked students if they would be interested in a “leadership” major designed to give students a broad liberal background in a variety of fields.²³ 31.1% of students said they would be interested in such a “leadership” major, while 41.3% of students said they would not be interested.

The last question on the smaller survey asked students if they would still be economics majors if they found out that employers preferred the aforementioned leadership major. 25% of students responded that they would not remain economics majors. This percentage captures the students who are most likely taking economics as an ersatz business major. 33.3% of respondents stated that they would remain economics majors even if they found out that employers preferred leadership majors. This percentage probably represents majors who have a genuine interest in economics.

Combined, the preceding responses show that at research liberal arts schools between a quarter and a third of students are taking economics as an ersatz business major, and about a third of economics majors are strongly interested in economics for its own sake. Additionally, students in the middle group probably lean towards business since 65% of students responded that they want an increase in the number of business-oriented courses.²⁴ This number shows that even students who do not want an entire business major still want more preparation for the world of business.

Concluding Remarks

There are a number of general conclusions that can be drawn from these surveys. The first is a positive one: Overall, the economics major is succeeding. Most students are generally satisfied with the major. They perceive the major to be relatively challenging, and they see the economics major as generally relevant to their future careers. For the most part economics majors are gaining the proficiencies that are expected of economics

²¹ The survey question was “If other majors, such as math, chemistry or biology had business-friendly majors that would prepare you for business and other type real world jobs rather than majors designed to prepare students to go to graduate school in the science would you have been interested in such a major?” Students could select “yes”, “no” or “maybe” as their response.

²² Students who considered a major in the natural sciences are used rather than all students because students who did not consider a major in the natural sciences would most likely not be interested in any sort of science major, and therefore their inclusion would only bias the results.

²³ The specific question was “If your school had had a “leadership” major that was composed of sequences of courses in science, economics, math, social science and history that were centered around giving you a broad liberal arts background in a variety of fields, would you have been interested in such a major?” Students could once again select “yes”, “no” or “maybe”.

²⁴ The survey question asked students, “Should the economics major increase or decrease the number of business oriented courses in its curriculum?” Students could choose “increase”, “decrease” or “keep focus about the same”.

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majors, and the economics major is making contributions to the broader liberal education agenda, primarily in the areas of critical thinking, living in a more global society and preparing for work.

The economics major does, however face challenges and questions about its contribution to a broader liberal education. Its contribution to a knowledge of its own literature is smaller than one might expect from a major, and its contribution to achieving a proficiency in communication skills was small. Programs may want to reflect on that result and modify the major to provide better training in that area.

How well the major is satisfying students depends on the nature of the school. Students at liberal arts schools perceive the economics major to be more successful and challenging than students at state schools; they report learning more than do students at state schools. Additionally, students at random liberal arts schools report being more satisfied with the major than do students at research liberal arts schools. Research liberal arts school students find the major more challenging, but not in a way that they feel contributes to their learning, since they report learning less than do students at random liberal arts school. These differences likely reflect the tension between the more technical research interests of the faculty and the broader business and real-world relevant interests of over half their majors.

Students in programs that had an alternative business-oriented option that students could choose were more satisfied with the economics major. At these schools students felt the major was more relevant and challenging, and that they were learning more. The problem that research liberal arts school face in meeting the desires of two different groups of students is even more pronounced for state schools with a restricted-entry business program. Satisfaction levels at these schools were lower than at all other schools, and students felt that they were learning less than students at the other schools.

These programs without a viable business-oriented alternative for students may want to consider institutional changes, such as creating multiple tracks within the major, or having other majors besides economics become more business-friendly. Such changes might create a better match between what that portion of students are looking for in a major, and what they are getting.