A STUDY OF DIFFERENCES IN STUDENTS' PERCEPTIONS OF THE MARKET SYSTEM AND THE ROLE OF THE FEDERAL GOVERNMENT

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ABSTRACT

This study examines data gathered in an anonymous in-class survey of first-year university students regarding their perception of markets in the United States economy. The study employs a survey instrument developed by Lephardt and Breeden (2005). The purpose of the study is two-fold. First, the study investigated the existence of differences in the perception of the role of markets along gender lines. Although this study found male students generally had a more favorable impression of markets, only token statistical evidence was found for the existence of these differences. Second, the study investigated the existence of differences in the perception of the role of markets by major field of study. This study found the existence of statistically significant mean differences in the responses of Business and Non-Business majors in the perception of markets to be noteworthy.

THE SURVEY INSTRUMENT AND ASSOCIATED MATERIAL

This study uses the Market Attitude Inventory (MAI) survey instrument developed by Breeden and Lephardt (2002) and Lephardt and Breeden (2005). The 2002 paper was an empirical study that used a survey instrument first developed by the authors in 1992 and refined over the next decade. The 2002 study involved 406 student responses in three different economics courses during two time periods (1992 and 1999). The authors found "significant differences in attitudes between demographic subcategories and between classes of students, as well as changes in attitudes over the time elapsed" (Breeden and Lephardt 2002, 154). The 2005 study relates the development and underpinnings of the survey instrument used in the 2002 paper. In many ways, the methodology set forth in the Lephardt and Breeden study of 2005 preceded the 2002 study. The authors noted two factors that motivated them to develop the MAI. One factor was a long-term research agenda involving "the evaluation of the relationship between an individual's attitudes toward the market system and achievement of economic success within that system" (Lephardt and Breeden 2005, 63). The second factor was the absence

of any valid survey instrument "that measured the values and attitudes people hold toward the market system" (Lephardt and Breeden 2005, 63).

The survey instrument has two sections. The first section of the survey requested demographic data from the individual respondent. Specific questions pertained to the respondent's gender, age, ethnicity, and major field of study.

The second section of the survey instrument was a slightly modified version of the MAI developed by Lephardt and Breeden (2005). The original MAI had 22 statements that measured attitudes towards the market system. For each of the 22 statements, students were asked on the survey instrument to "indicate your level of agreement to each statement by writing a number between '0%' and '100%' for the statement, with '0' indicating "strong disagreement" with the statement and '100%' indicating "strong agreement" with the statement. Some of the MAI statements portray a positive perspective towards a market economy while others portray a negative slant towards a market economy (Thomas and Campbell 2006, 33-34). The 22 statements in the MAI are prefaced with the clause "In my opinion, the market system in the U.S." (Lephardt and Breeden 2005, 68). Breeden and Lephardt found "students in more advanced business classes having the most pro-market attitudes" (Breeden and Lephardt 2002, 169). However, since this study focused on first-year students, and first-year students, with minimal exposure to either business or economics in the high school curriculum, might focus on the word "market" in the introductory clause and lose sight of the study's emphasis. Consequently, it was decided that the introductory clause be massaged to read "In my opinion, the economic system in the United States:" (emphasis added). The wording of the 22 statements, however, did not change from the original MAI. Five additional statements that relate to the role of the federal government in a market-based economy were introduced. Hence, the wording of the introductory clause to these five statements (Statements 23-27, inclusive) was revised to read "In my opinion, the federal government of the United States should: ".

SURVEY RESULTS

The expanded version of the MAI was administered anonymously during the second week of the semester to students in eight sections of a freshman-level "Introduction to Business" course. This course is required of all Business majors and is a prerequisite to all other College of Business courses. The course also serves as a popular elective for Non-Business majors so a wide range of majors are represented in the survey. The sections ranged in size from 18 to 25 students.

A total of 186 survey instruments were returned but one survey was discarded for incomplete responses. Of the 185 viable surveys, 84 were from young women and 101 returned from young men. Approximately 90 percent (164) of the respondents self-identified themselves as Caucasian while seven respondents self-identified themselves as African-American and seven

more self-reported themselves as Hispanic (or Latino/Latina). Over 55 percent of the students (102) indicated they were planning to major in an area within the College of Business.

Table 1 provides the 27 survey statements. The table is arranged in such a manner as to provide sample characteristics (mean and standard deviation) for each statement for five different cohorts (specifically, Overall, Females, Males, Business, and Non-Business). The cohorts are arranged in such a manner that it allows a test of the differences in the mean responses for both gender and major field of study (specifically, Business and Non-Business).

EXAMINING DIFFERENCES IN MEAN RESPONSES BY GENDER

Breeden and Lephardt (2002) examined a number of sub-categories among the respondents. One of their findings is that male students tended to be more pro-market than females. King and King (2007) also used the MAI and found "females had less favorable views of free markets than males, although neither group reported particularly strong beliefs" (King and King 2007, 168).

Table 1 allows for the examination of the mean responses along gender lines. In general, for the original 22 MAI statements, the mean responses by males were generally more favorable to the role of markets than were the mean female responses. This was true for statements that held either a positive perspective or a negative perspective towards the role of markets. For 16 of the 22 statements, males viewed the role of markets more favorably than females. However, in only two of the original 22 MAI statements (Statements 19 and 21) is the difference in the mean responses statistically significant at the ten percent (10%) level. For all five statements regarding the role of the federal government, females felt that the government should be more active in social and business issues, although none of the comparisons were statistically significant.

This study added five statements (Statements 23-27, inclusive) that pertained to the role of the federal government in the United States economy. For all five statements, the mean responses by males were more pro-market than were the mean responses for females. However, for only one of the five statements was the difference between the means found to be statistically significant at the ten percent level.

EXAMINING DIFFERENCES IN MEAN RESPONSES BY MAJOR

Breeden and Lephardt found one of "the most notable subgroup categories was the Business Major comparison between the 1992 and 1999 sample" (Breeden and Lephardt 2002, 160). Breeden and Lephardt found nine of the differences in means to be statistically significant at the one percent level. Moreover, the authors found that in eight of those instances "the means indicate there is a pervasive decline in positive attitudes towards the market" (Breeden and Lephardt 2002, 160) among Business majors.

Table 1 allows for the examination of the mean responses by major college of study (that is, Business and Non-Business). In general, for the original 22 MAI statements, the mean responses by Business majors were generally more favorable to the market than were the mean responses by Non-Business majors. For 17 of the statements, Business majors expressed a more positive view of the role of the market than Non-Business majors. For five of the statements (Statements 5, 6, 9, 15, and 18), the responses of the Non-Business majors were more favorable in their perception of the role of the market, although none of the five differences were found to be statistically significant. For four of the five statements regarding the role of the federal government in a market economy, Non-Business majors felt that the government should play a more active role in addressing social and business issues. This was true for statements that held either a positive perspective or a negative perspective towards the role of markets.

For six of the original 22 MAI statements, the differences in the mean responses were statistically significant at the ten percent (10%) level. One interesting finding is that among the statements with statistically significant outcomes, four had a negative slant towards markets while two had a positive slant towards markets. Statements 1, 3, 7 and 11 have a negative slant towards the role of markets in the functioning of the economy. Specifically, Statement 1 pertained to markets promoting an unfair distribution of income, Statement 3 commented upon markets encouraging unethical business behavior, Statement 7 addressed markets promoting greed and excessive materialism, and Statement 11 referenced the attempts by business to use markets in the pursuit of monopoly power. The two positive statements with a positive perspective of markets pertained to markets providing employment opportunities for all who desire to work (Statement 19) and the role markets play in encouraging innovation and developing new businesses (Statement 20). None of the five statements that addressed the role of the federal government in the United States economy were found to be statistically significant at even the 20 percent (20%) level.

The differences in mean responses, including a more favorable view of the role and efficiency of markets by Business majors, may be explained by the background and interests of new Business majors, as well as, learning experiences in typical programs. When deciding on a major, students understand they will be gaining knowledge and skills transferable to both forprofit and not-for-profit organizations. Students obtain these critical tools through learning experiences found in general management degree programs. AACSB International specifies undergraduate degree programs include experiences in management-specific knowledge and skill areas, including domestic and global economic environments of organizations, as well as ethical and legal responsibilities in organizations and society. To address these requirements, Business schools typically provide direct, applied knowledge and learning experiences in macroeconomics. In a typical macroeconomics course, students analyze the public sector of the economy, while focusing on the decision-making process of government. Included in this experience are analysis and discussions of areas such as the role of government in solving problems – such as market failure, poor information, lack of competition in markets, and

economic instability. As a result, Business majors (including first-year students) may be expected to have a more thorough, balanced, and in-depth understanding of the role and limits of the economic system and the role of government in the United States.

CONCLUSIONS

The objective of this study was to investigate the existence of differences in the perception of markets along both gender lines and major field of study. This study found male students generally had a more favorable view of markets than female students but that this difference was not particular strong in a statistical framework. This study also found a pronounced difference in the perception of markets along major fields of study.

The differences in the views of the role of markets and the federal government may bear some relationship to the manner in how a major was selected by a student. Students who selected a business discipline as their major may inherently believe that markets work well and choose their major as one that offers higher economic benefits for their future. Alternatively, students who major in areas in which they have a passion for study, but are less likely to lead to higher salaries and security, may feel that markets are unfair as to salaries, benefits, and the distribution of income and feel that the role of the federal government should make up for this deficit by providing a sense of equality to all individuals.

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TABLE 1 RESPONSE SUMMARIES AND TESTS OF HYPOTHESES						
	Situation/Scenario		Characteristic: Mean St. dev.		$H_1: \mu_x - \mu_y \neq 0$ $Pr > t $	
		Cohort	Mican	St. ucv.	117 [1]	
	ny opinion, the economic system in the United States:	I _			1	
1.	leads to an unfair distribution of income.	Overall	53.45	24.26		
		Females	56.31	22.05		
		Males	51.17	26.34	0.149	
		Business	48.75	23.70		
		Non-Bus	59.22	24.51	0.004	
2.	rewards people fairly for their productivity and hard	Overall	54.95	23.94		
	work.	Females	52.12	22.46		
		Males	57.30	24.97	0.143	
		Business	56.18	24.10		
		Non-Bus	53.43	23.80	0.440	
3.	encourages unethical business behavior.	Overall	44.76	22.56		
		Females	46.25	21.23		
		Males	43.51	23.65	0.413	
		Business	41.27	23.26		
		Non-Bus	49.04	21.03	0.020	
4.	leads to quality and technological advancement in	Overall	74.34	18.14		
	products and services.	Females	73.21	19.32		
		Males	75.27	17.31	0.445	
		Business	74.36	17.32		
		Non-Bus	74.30	19.20	0.982	
5.	leads to inadequate amounts of important public services	Overall	44.46	21.70		
	(like police, roads, and fire protection).	Females	44.43	21.82		
		Males	44.49	21.70	0.987	
		Business	44.48	21.76		
		Non-Bus	44.43	21.76	0.988	
6.	provides opportunities and incentives for success.	Overall	71.25	21.58		
		Females	70.17	20.09		
		Males	72.16	22.81	0.534	
		Business	71.21	22.18		
		Non-Bus	71.31	20.96	0.973	
7.	encourages greed and excessive materialism.	Overall	67.11	24.15		
		Females	65.50	25.63		
		Males	68.38	22.90	0.437	
		Business	64.46	24.46		
		Non-Bus	70.57	23.50	0.098	
8.	allows equal access to work opportunities.	Overall	46.48	22.11		
	1	Females	43.81	22.27		
		Males	48.70	21.83	0.134	
		Business	47.37	21.85		
		Non-Bus	45.39	22.51	0.545	

TABLE 1 (Continued) RESPONSE SUMMARIES AND TESTS OF HYPOTHESES					
	Situation/Scenario	Cohort		cteristic: St. dev.	$H_1: \mu_x - \mu_y \neq 0$ $Pr > t $
In m	y opinion, the economic system in the United States:				
9.	leads to erratic cycles of growth and then decline in	Overall	59.77	20.92	
٠.	economic activity.	Females	60.12	22.05	
	continue don'try.	Males	59.49	20.04	0.838
		Business	59.98	20.61	0.050
		Non-Bus	59.52	21.42	0.882
10.	raises the living standards for most people.	Overall	58.56	19.78	
	The state of the s	Females	58.07	19.32	
		Males	58.96	20.24	0.665
	leads to monopoly power among businesses leads to an efficient use of resources.	Business	58.87	18.53	
		Non-Bus	58.17	21.32	0.811
11.	leads to monopoly power among businesses.	Overall	53.91	22.92	
		Females	56.00	23.00	
		Males	52.18	22.83	0.260
		Business	50.25	22.49	
		Non-Bus	58.42	22.78	0.015
12.	leads to an efficient use of resources.	Overall	44.64	22.79	
		Females	45.33	22.71	
		Males	44.06	23.36	0.706
		Business	49.76	22.71	
		Non-Bus	42.01	22.76	0.160
13.	encourages the abuse of the environment.	Overall	53.63	24.88	
		Females	51.13	26.86	
		Males	55.70	23.03	0.214
		Business	51.75	23.68	
		Non-Bus	55.93	26.23	0.258
14.	leads to unemployment and worker insecurity.	Overall	50.03	22.27	
		Females	52.07	23.15	
		Males	48.34	21.49	0.257
		Business	48.21	21.66	
		Non-Bus	52.28	22.93	0.583
15.	leads to excessive risk of business failure.	Overall	50.76	22.13	
		Females	49.35	23.02	
		Males	51.93	21.41	0.434
		Business	50.15	23.36	0.570
1.0		Non-Bus	51.51	20.86	0.679
16.	requires a lot of government control to work well.	Overall	46.04	25.41	
		Females	45.44	23.91	0.550
		Males	46.53	26.71	0.772
		Business	44.26	25.11	0.001
		Non-Bus	48.22	25.77	0.294

TABLE 1 RESPONSE SUMMARIES AND TESTS OF HYPOTHESES						
Situation/Scenario			Characteristic: Mean St. dev.		$H_1: \mu_x - \mu_y \neq 0$ $Pr > t $	
In m	y opinion, the economic system in the United States:					
17.	allows too much foreign competition.	Overall	48.60	24.14		
		Females	51.23	24.31		
		Males	46.42	23.74	0.178	
		Business	48.26	24.90		
		Non-Bus	49.01	23.33	0.835	
18	provides consumers the goods and services they want.	Overall	71.68	22.65		
		Females	68.93	25.19		
		Males	73.96	20.15	0.133	
		Business	71.18	23.91		
		Non-Bus	72.29	21.19	0.741	
19.	provides employment opportunities for all who desire	Overall	50.76	27.21	0.741	
	to work.	Females	46.26	27.03		
		Males	54.51	26.92	0.040	
		Business	54.79	25.88		
		Non-Bus	45.81	28.11	0.025	
20.	encourages innovation and the development of new	opment of new Overall 65.24	22.08			
	businesses.	Females	63.20	22.07		
		Males	54.51	22.07	0.254	
		Business	54.79	22.29		
		Non-Bus	45.81	21.53	0.074	
21.	provide goods and services at an affordable price.	Overall	44.64	21.03		
		Females	51.19	22.81		
		Males	57.51	19.08	0.041	
		Business	56.67	21.68		
		Non-Bus	52.16	20.05	0.147	
22.	"Overall, I believe that the economic system in the United	Overall	57.44	23.29		
	States is a fair and ethical system."	Females	56.37	22.12		
		Males	58.33	24.30	0.107	
		Business	59.31	22.11		
		Non-Bus	55.13	24.62	0.226	

TABLE 1 RESPONSE SUMMARIES AND TESTS OF HYPOTHESES						
Situation/Scenario		Cohort	Characteristic: Mean St. dev.		$H_1: \mu_x - \mu_y \neq 0$ $Pr > t $	
In m	y opinion, the federal government of the United States shoul	d:				
23.	take a greater responsibility for solving the problems in	Overall	59.43	27.21		
	society.	Females	61.21	25.34		
	•	Males	57.94	28.71	0.409	
		Business	58.19	26.33		
		Non-Bus	60.95	28.33	0.493	
24.	balance the budget every year.	Overall	72.22	23.18		
		Females	75.36	22.29		
		Males	69.60	23.68	0.093	
		Business	72.06	23.20		
		Non-Bus	72.41	23.29	0.919	
25.	limit the importation of foreign products to protect the	Overall	53.92	24.43		
	American economy.	Females	55.06	23.56		
		Males	52.97	25.20	0.564	
		Business	54.51	23.54		
		Non-Bus	53.19	25.60	0.716	
26.	use tax policies to promote a more equal distribution of	Overall	50.24	28.37		
	income.	Females	50.89	28.71		
		Males	49.69	28.21	0.863	
		Business	48.45	25.84		
		Non-Bus	52.43	31.22	0.344	
27.	provide a job to anyone who wants one.	Overall	60.49	30.00		
		Females	63.21	30.79		
		Males	58.23	29.29	0.261	
		Business	58.58	31.14		
		Non-Bus	62.84	28.55	0.338	

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